

## 23 Cumulative impacts

This chapter provides an assessment of the potential cumulative impacts of the Project with other projects in the surrounding area, in accordance with the SEARs.

### 23.1 Introduction

Impacts from a project may be considered minor when considered in isolation, however when impacts from multiple developments/activities are considered together, the impacts may be more substantial. These are referred to as cumulative impacts. For example, where more than one project is occurring in an area, this could result in cumulative construction traffic impacts on the local road network or cumulative construction noise impacts on a sensitive receptor.

**Table 23-1** provides the SEARs relating to cumulative impacts and where these requirements are addressed in this chapter.

**Table 23-1 SEARs**

SEARs	Where addressed in the EIS
<b>Environmental impact statement</b>	
The EIS must include, but not necessarily be limited to, the following:  (n) an assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed, consistent with the commitments made in Chapter 10 of the Scoping Report.	<b>Section 23.2 and Section 23.3</b>

In line with the SEARs, potential cumulative impacts can be determined by an assessment of developments in the surrounding area that have been approved (but not yet under construction), those that have commenced construction, and/or those that would be constructed or operating at the same time as the planning, construction or operation of the Project.

Impacts can be either adverse or beneficial. Mitigation and/or management measures would be implemented to avoid or reduce identified adverse impacts. This chapter has been informed by the environmental assessments undertaken for the Project as presented in Chapters 8 to 22 of this EIS. This chapter assumes that specific mitigation and management measures proposed for the Project (as summarised in **Chapter 23**) will be applied and therefore focuses on strategic measures that may be implemented in coordination with other relevant developments.

### 23.2 Method of assessment

The following tasks were undertaken to assess the potential for cumulative impacts:

- identifying existing projects (approved or under construction) and proposed projects in the vicinity of the Project, based on information available in the public domain. Searches included:
  - a review of the DPIE Major Projects website (<http://majorprojects.planning.nsw.gov.au>)
  - a review of other government agency websites (such as Department of Health and Sydney Water)
  - a search of City of Sydney Council's development application register (<https://www.cityofsydney.nsw.gov.au/development/development-applications>)
  - a search and review of media releases relating to major projects
- screening identified projects for their potential to interact with the Project. If an identified development was not assessed as a result of the screening, it was excluded from further consideration in the cumulative impact assessment. The approach to screening is described in **Section 23.2.1**



- identifying and assessing the significance of potential cumulative impacts by:
  - considering project-specific impacts from the projects with the potential for cumulative impacts (when combined with the construction and/or operation of the Project)
  - undertaking an issue-specific cumulative assessment for the key environmental issues listed in the SEARs, taking into account major projects being undertaken close to the Project area.

### 23.2.1 Screening of identified surrounding projects

The approach to screening was based on understanding the residual impacts of the Project (i.e. those that exist after application of management and mitigation measures), which are summarised at the conclusion to each assessment chapter (refer Chapters 8 to 22 of the EIS). Projects in the surrounding area that may affect the same receptors where residual impacts have been identified for the Project and/or have an impact on the effectiveness of the other projects' mitigation and management measures were then identified. This was achieved by taking into account the following:

- the project location – projects in proximity to the Project area where there is potential for impacts to spatially overlap (e.g. shared use of roads for construction access) (note that this includes consideration of the 'study areas' identified for the environmental issues assessed for the Project, which can be wider than the Project area itself)
- the project timeframe and planning approval – only projects likely to be built concurrently with the Project were assessed. This includes projects currently under construction and/or projects that have received planning approval (as at the time of preparing this EIS). Projects at a conceptual or pre-approval stage were generally not able to be considered due to an absence of project and/or environmental impact details or development timeframes
- the project scale/size – projects requiring consideration are typically larger scale projects identified on the DPIE's Major Projects website and City of Sydney Council's development application register.

A list of projects within the surrounding area and an initial screening in line with the SEARs is provided in **Table 23-2**. A rationale for why the project was included or excluded in the assessment, is also outlined.



Table 23-2 Screening of other projects within the vicinity of the Project

Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Mirvac Projects Pty Ltd	South Eveleigh (formerly the Australian Technology Park) (SSD-7317)	Large-scale commercial development at South Eveleigh that would consist of nine commercial buildings surrounded by shared public spaces and a mix of retailers including a supermarket, hairdresser, gym and cafes. It will be home to 18,000 workers.	Approximately 80metres south of the Project area; bounded by the suburbs of Darlington, Redfern, Alexandria, Erskineville and Newtown.	Construction scheduled to be completed in 2020.	The South Eveleigh project is due to be completed by 2020 and has the potential to contribute to cumulative impacts.
Mirvac Projects Pty Ltd	Australian Technology Park (ATP) South Eveleigh Locomotive Workshop (Bays 1 - 4a) (SSD-8517)	Locomotive workshop refurbishment and reuse.	Located at 2 Locomotive Street, South Eveleigh, Eveleigh, adjacent to the Project area.	Approved by DPIE on 22 February 2019, and subsequently modified. Works commenced in 2019 and are proposed to be completed by early 2021.	Construction is underway and therefore has potential to contribute to cumulative impacts in conjunction with the Project.
Mirvac Projects Pty Ltd	ATP South Eveleigh Locomotive Workshop (Bays 5 - 15) (SSD-8449)	Locomotive workshop refurbishment and reuse.	Located at 2 Locomotive Street, South Eveleigh, Eveleigh, adjacent to the Project area.	Approved by DPIE on 22 February 2019, and subsequently modified. Works commenced in early 2019 and are proposed to be completed by early 2021.	Construction is underway and therefore has potential to contribute to cumulative impacts in conjunction with the Project.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Sydney Metro	Sydney Metro City & Southwest: Waterloo Over Station Development (SSD-9393)	Construction of an over station development comprising mixed use buildings integrated with the future Waterloo Station. Waterloo Station is part of the new standalone Sydney Metro rail network.	Approximately 310 metres south-east of the Project area; bounded by Raglan Street, Cope Street, Wellington Street and Botany Road in Waterloo (excluding the church at 105 Botany Road).	<p>Concept development application was approved by DPIE on 10 December 2019. Construction of the Sydney Metro City &amp; Southwest: Waterloo Over Station Development would be subject to a separate SSD approval.</p> <p>Current timing is for construction to be completed close to when Sydney Metro services commence in 2024. The NSW Government intends for the residential development to be finished by about 2025.</p>	Concept approval has been granted, and although the development is subject to future approval applications (with reference to condition A5 of the development consent), this development has been considered for potential cumulative impacts based on the proposed timeframe of construction finishing in 2024.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Aboriginal Housing Company	Pemulwuy Student Accommodation (SSD-8135)	Mixed-use site will include affordable housing for 62 Aboriginal and Torres Strait Islander families, a gymnasium, commercial and retail space, a gallery, student accommodation, and childcare centre.	Approximately adjacent to the Project area; located at Eveleigh Street/Vine Street/Louis Street/Caroline Street and Lawson Street in Redfern.	Construction commenced in March 2019. Construction on the Pemulwuy Project is expected to be completed by 2021, with the student accommodation expected to be opened in 2022.	Construction is underway and therefore has potential to contribute to cumulative impacts in conjunction with the Project.
Wee Hur Capital Pty Ltd	90-102 Regent Street, Redfern - Student Accommodation (SSD-10382)	Proposed mixed use development (18-storey building) comprising retail premises and student accommodation with ancillary facilities and works at 90-102 Regent Street, Redfern.	Located at 90-102 Regent Street in Redfern and is within 60 metres east of the Project area.	SEARs were issued on 27 November 2019, and the applicant is currently preparing an EIS. Construction timing unknown.	The student accommodation development is not approved and therefore not assessed in accordance with the SEARs.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
TP HOLDINGS Pty Ltd	The Regent Hotel, 56-58 Regent Street, Redfern (SSD-9516)	Redevelopment of the site to build a 21-storey hotel.	Located at 56-58 Regent Street, Redfern, and is approximately 50 metres east of the Project area.	SEARs issued 29 August 2018, and the applicant is currently preparing an EIS.	This development is not yet approved and therefore not assessed in accordance with the SEARs.
Lawson Square Pty Ltd	Alterations and additions to the existing commercial towers at 1 Lawson Square, Redfern (SSD-5249-Mod-9)	Alterations and additions to two existing commercial towers at 1 Lawson Square, Redfern. The application has been through several modifications with the latest application (Mod 9) under assessment by DPIE to amend the existing mixed use Tower 1 on the site, including minor adjustments to the commercial floorplates, enhancements to apartment layouts on Levels 15 to 18, and the provision of new private open space for Tower 1.	Located at 1 Lawson Square, Redfern, and is located adjacent to the Project area.	Currently under construction. Construction is proposed to be completed around 2022.	Construction is underway and therefore has potential to contribute to cumulative impacts in conjunction with the Project.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Surry Hills Project Pty Ltd	Integrated mixed use development at 2-38 Baptist Street and 397-399 Cleveland Street, Redfern (D/2018/1128)	Redevelopment of the site, including the adaptive reuse of the heritage listed former Bank of NSW building (397-399 Cleveland Street) for retail purposes, demolition of all other existing structures on site, site remediation, excavation and construction of a mixed use development (157 residential units, retail and commercial) comprising eight buildings in total, with a public through-site link from Baptist Street to Marriott Street, a public park with associated landscaping and public domain works.	Located at 2-38 Baptist Street and 397-399 Cleveland Street, Redfern, and is over one kilometre east of the Project area.	Development application approved by City of Sydney Council on 14 November 2019.  Construction works are expected to commence in August 2020 and finish in mid-2023.	This development has been approved and the construction works are likely to coincide with the Project. Therefore, this development has potential to contribute to cumulative impacts in conjunction with the Project.
St George Community Housing	Social housing, 11 Gibbons Street, Redfern (SSD-7749)	The proposed development is for an 18-storey building comprising: <ul style="list-style-type: none"> <li>• demolition of existing buildings and fill</li> <li>• 160 social and affordable housing units</li> <li>• retail/commercial space including office space</li> <li>• communal open space area</li> <li>• bicycle parking</li> <li>• public domain works</li> <li>• signage</li> <li>• lot consolidation.</li> </ul>	Located at 11 Gibbons Street, Redfern, and is adjacent to the Project area (on the opposite side of Gibbons Street).	Development application was approved by DPIE on 10 September 2019.  It is under construction and scheduled for completion by mid-2021.	Construction is underway and this housing development has potential to contribute to cumulative impacts in conjunction with the Project.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Austringer/ Seeca Partnership	Mixed use development (including retail and residential) at No. 48 Regent Street, Redfern	The proposed development is for a six-storey building with retail on the ground floor and 27 boarding rooms, including one bedroom for a boarding house manager, and communal living areas.	Located at 48 Regent Street, Redfern, and is approximately 50 metres east of the Project area.	The development application has been through modifications with the latest application (Reference: D/2013/121/C) approved 21 March 2019 to include enlargement of the basement level. Currently under construction.	This mixed use development is currently being constructed and is anticipated to be complete prior to the construction of the Project. As such, no cumulative impacts are anticipated.
Milestone (Aust) Pty Ltd	Craft brewery at 158 Regent Street, Redfern (D/2019/645/B)	Change of use and fit-out of the existing building as a craft brewery with associated licensed restaurant and bar areas with external facade alterations.	Located at 158 Regent Street, Redfern, and is approximately 100 metres south-east of the Project area.	Approved by City of Sydney Council on 08 November 2019. Construction has commenced and is anticipated to finish in 2020.	This development is approved, and construction has commenced. Construction of this development is unlikely to overlap with the Project.
Private residence	Alterations and additions to a single dwelling at 124 Little Eveleigh Street, Redfern (D/2019/101)	Alterations and additions to existing dwelling house including demolition of rear ground floor area, internal walls, stair, and rear structures, and construction of a new two storey rear addition and associated landscaping, tree removal and tree pruning.	Located at 124 Little Eveleigh Street, Redfern, and is adjacent to the Project area.	Approved by City of Sydney Council on 07 August 2019. No Construction Certificate issued for the development application to date.	This development is approved and therefore has potential to contribute to cumulative impacts in conjunction with the Project.



Proponent	Project	Project details	Approximate distance to the Project area	Construction timeframe (known or proposed)	Initial screening
Iglu No. 209 Pty Ltd	Student accommodation at 80-88 Regent Street, Redfern (SSD-9275)	Demolition of existing structures and construction of an 18-storey mixed-use student accommodation building comprising 265 student accommodation beds within 185 units, ground level retail and business premises.	Located at 80-88 Regent Street, Redfern, and is approximately 60 metres east of the Project area.	Approved by DPIE on 4 October 2019. Construction has commenced and is anticipated to finish in early 2021.	Construction is underway and therefore has potential to contribute to cumulative impacts in conjunction with the Project.
CW Strategic Planning Services	13-23 Gibbons Street Redfern student accommodation (SSD-9194)	Demolition of existing structures and construction of an 18-storey mixed-use student accommodation development with basement, comprising 488 student accommodation rooms and ground level retail.	Located along Gibbons Street, adjacent to the Project area (on the opposite side of Gibbons Street).	DPIE has requested further information from the applicant for this development.	This development is not yet approved and therefore not assessed in accordance with the SEARs.
Pearce & Co. Constructions Pty Ltd	Mixed use development at 172 Redfern Street, Redfern (D/2020/51)	Partial demolition of existing buildings, and construction of a four- storey mixed use development with basement parking, ground floor retail space and 13 residential dwellings.	Located at 172 Redfern Street, Redfern, and is approximately 140 metres east of the Project area.	The proposal was lodged with the City of Sydney Council on 23 January 2020. The exhibition of this application concluded 06 March 2020.	This development is not yet approved and therefore not assessed in accordance with the SEARs.
Suncom Property Developments Pty Ltd	5-11 Botany Road Waterloo (D/2019/1201)	Demolition of existing structures on site and construction of a new five storey boarding house (138 rooms), ground floor retail tenancy and basement car parking.	Located at 5-11 Botany Road, Waterloo and is approximately 160 metres south-east of the Project area.	The proposal was lodged with the City of Sydney Council on 20 October 2019. The exhibition of this application concluded 6 December 2019.	This development is not yet approved and therefore not assessed in accordance with the SEARs.



It is noted that there are a number of masterplans and strategic plans in various stages surrounding the Project area including:

- the Redfern and North Eveleigh Precinct and the wider Sydney Innovation and Technology Precinct (described further in **Chapter 2** of this EIS)
- Redevelopment of the Waterloo Estate – a masterplan is to be developed over the next 15-20 years to provide more social housing, delivering affordable housing as well as private housing to create a new mixed community.

These plans are likely to facilitate individual projects in future, that when approved, could contribute to a higher population, increased population density and other effects (e.g. increased traffic). These masterplans are in various stages of development, and as such have not been considered in the cumulative assessment for the Project. When projects within these precincts are going through the planning approval process, they will need to consider the Project as part of their cumulative assessment, if relevant.

## 23.3 Potential for cumulative impacts

### 23.3.1 Overview

Of the projects identified in **Table 23-2**, there were 11 projects that were considered to have potential to result in cumulative impacts with the Project. These projects are listed in **Table 23-3**.

**Table 23-3 Surrounding projects with the potential to result in cumulative impacts**

Proponent	Project
Mirvac Projects Pty Ltd	South Eveleigh (formerly the Australian Technology Park) (SSD-7317)
Mirvac Projects Pty Ltd	South Eveleigh Locomotive Workshop (Bays 1-4a)
Mirvac Projects Pty Ltd	South Eveleigh Locomotive Workshop (Bays 5-15)
Sydney Metro	Sydney Metro City & Southwest: Waterloo Over Station Development
Aboriginal Housing Company	Pemulwuy Student Accommodation
Lawson Square Pty Ltd	Alterations and additions to the existing commercial towers at 1 Lawson Square, Redfern
Surry Hills Project Pty Ltd	Integrated mixed use development at 2-38 Baptist Street and 397-399 Cleveland Street, Redfern
St George Community Housing	Social housing development at 11 Gibbons Street, Redfern
Milestone (Aust) Pty Ltd	Craft brewery at 158 Regent Street, Redfern
Private owner	Alterations and additions to a single dwelling at 124 Little Eveleigh Street, Redfern
Iglu Pty Ltd	Student accommodation at 80-88 Regent Street, Redfern

These projects were considered to have the potential to contribute to cumulative impacts in conjunction with the Project given their approval status, distance to the Project area, their size (e.g. most are commercial developments) and/or construction timeframe.

The consideration of cumulative impacts is based on the residual impacts identified for the Project for both construction and operation. Residual impacts are described in the assessment chapters (refer Chapters 8 to 22 of the EIS) and are summarised in Table 25-3 in **Chapter 25** of the EIS. Where the assessment of an environmental issue found that there were no residual impacts, it is concluded that



the Project would not contribute to any potential cumulative impacts for that issue, and these environmental issues have not been considered in the following sections.

### 23.3.2 Construction

It is anticipated that the Project would be undertaken over an approximate period of 18 months commencing late 2020/early 2021, once all necessary approvals are obtained. **Table 23-4** provides the indicative construction period for the Project as well as the projects identified to have potential cumulative impacts.

**Table 23-4 Indicative construction timeframe for the Project against projects identified with the potential to contribute to cumulative impacts**

Project	Construction timeframe (known or proposed)						
	2018	2019	2020	2021	2022	2023	2024
Redfern Station Upgrade - New Southern Concourse (the Project)							
South Eveleigh (formerly the Australian Technology Park) (SSD-7317)							
South Eveleigh Locomotive Workshop (Bays 1-4a)							
South Eveleigh Locomotive Workshop (Bays 5-15)							
Sydney Metro City & Southwest: Waterloo Over Station Development							
Pemulwuy Student Accommodation							
Alterations and additions to the existing commercial towers at 1 Lawson Square, Redfern							
Integrated mixed use development at 2-38 Baptist Street and 397-399 Cleveland Street, Redfern							
Social housing development at 11 Gibbons Street, Redfern							
Mixed use development at 48 Regent Street, Redfern							
Alterations and additions to a single dwelling at 124 Little Eveleigh Street, Redfern Construction timing unknown. No Construction Certificate issued for the development application to date	-	-	Un-known	Un-known	Un-known	Un-known	Un-known
Student accommodation at 80-88 Regent Street, Redfern							

Potential cumulative impacts during construction of the Project that may arise in conjunction with the other projects identified are summarised below.

#### Landscape character and visual amenity

During construction of the Project, visual impacts can result from the presence of construction works, plant, and disturbance. Construction of other projects in close proximity (e.g. Pemulwuy Student Accommodation, construction at 1 Lawson Square, Social housing development at 11 Gibbons Street)



could potentially result in cumulative visual impacts for the area. The impacts from the Project would be primarily low or moderate, although high in the case of the area immediately surrounding the rail corridor/Station (refer Section 9.4.1 of **Chapter 9**). However, their temporary nature and spatial extent (limited to within the Project area) would limit the degree of cumulative visual amenity impact where other construction works are occurring adjacent or near to them. The Project is therefore not expected to cause significant cumulative visual impacts.

### Land use and property

Construction of the Project would require the temporary (and permanent) use of NSW Government owned land, including 125-127 Little Eveleigh Street. Consultation with the current tenants is underway and they would be required to relocate prior to construction commencing. The use of this NSW Government owned property is not expected to contribute to any potential cumulative impacts to land use or property in the area during construction of the Project.

Some areas of land would need to be temporarily occupied for construction ancillary facilities and other construction work sites within the Project area (including Gibbons Street Reserve). This would result in a reduction in available public space and on-street parking. If other projects in the vicinity also use public space and on-street areas, there is the potential for a cumulative temporary loss of these types of land uses. However, due to the temporary nature of these activities and their locations mostly being within Government owned land and road reserves, the Project is not expected to cause significant cumulative impacts. Gibbons Street reserve would be returned to its existing land use after its use as a construction ancillary facility for the Project.

### Traffic, transport and access

Cumulative impacts on the existing pedestrian, cycle, public transport and surrounding road networks could occur during construction of the Project. Specifically, this could involve the following:

- increased construction traffic could potentially increase congestion and delays on the local road network, however as the Project would generate a relatively small number of construction vehicles (up to 20 heavy vehicles and 40 light vehicles per day), its contribution towards cumulative impacts is expected to be minimal
- the presence of work sites within/adjacent to roads could contribute to traffic/pedestrian/cyclist delays and/or detours as a result of lane/road closures and movement of construction vehicles. The risk to the safety of pedestrians, cyclists and other motorists may also increase as a result. Coordination with other project proponents would need to occur to manage potential impacts from construction activities on other projects within or adjacent to the Project area
- the loss of street parking during construction of the Project along with other projects could contribute to a greater demand for parking in the surrounding area. In the context of existing known parking available in the wider area, the Project's contribution to this potential cumulative impact is also expected to be small.

### Noise and vibration

Construction of the Project in combination with the construction of other project(s) could result in noise sensitive receiver/s experiencing higher noise levels than those predicted in **Chapter 13** of this EIS. The noise and vibration assessment provided in **Technical report 4 – Noise and vibration** found that if the noisiest stages of other construction projects were to coincide with the construction of this Project, the greatest increase in noise levels from either project would be a maximum of 3 dB(A). This finding is based upon the levels presented in **Chapter 13**, where this Project is the dominant source of construction noise.

Where receivers are impacted to a greater extent by other construction projects, then overall construction noise levels at any receiver could be increased by as much as 3 dB(A) from another projects' noise levels. In the case of construction traffic, a maximum noise level increase of 3 dB(A) is also predicted. For context, an increase in noise levels of around 3dB(A) is low (barely noticeable). The decibel scale is explained further in the Definitions section of **Technical Report 4 – Noise and Vibration**.

The Project has the potential to combine with noise emissions from the projects identified in **Table 23-4** where the construction periods crossover. The Project stages with the largest number of



predicted exceedances above applicable criteria, were Stage 5 – Roadworks, Stage 4 – Main Construction works and Stage 3 – Utility and overhead wiring relocations/adjustments, which are proposed to be carried out during Period 2 OOHW (i.e. Weekdays 10:00 pm to 7:00 am, Saturday 10:00 pm to 8:00 am and Sunday/Public holiday 6:00 pm to 7:00 am).

Management of the timing of these stages are particularly critical in managing potential cumulative impacts. In consultation with other project proponents, the potential noise contributions from overlapping projects would be reviewed during detailed design of the Project, and the construction program and scheduling of activities for the Project would be amended where practicable to avoid and/or minimise cumulative noise impacts identified. Otherwise the applicable mitigation measure/s at relevant receivers would be reviewed for appropriateness, in line with the *Interim Construction Noise Guideline* (DECC, 2009) (refer **Chapter 13** of this EIS for noise mitigation measures).

### Social impacts

As outlined in **Table 23-4**, there are a number of other projects whose construction would coincide with the construction of the Project. These include the South Eveleigh Locomotive Workshop, Sydney Metro City & Southwest at Waterloo, Pemulwuy Student Accommodation and the development at 1 Lawson Square, Redfern. There is the potential that these concurrent construction activities may lead to cumulative social impacts on the local and regional community. These impacts may arise through direct amenity factors such as cumulative noise, air quality, traffic or visual impacts, or from cumulative changes to business operations (e.g. visibility, passing trade, access) or community connectivity (e.g. accessibility of social infrastructure).

It is also recognised that these collective changes may affect less tangible social factors such as levels of stress and anxiety, the community's sense of place, cultural identity or community cohesiveness.

Noting the differing scales of other projects proposed nearby, and their separation from this Project, the potential for cumulative impacts to arise, directly or indirectly is considered to be low. This is reinforced by the relatively local scale of the Project and the suite of measures proposed to manage impacts upon the social environment.

However, in addition to these impacts there is the possibility that the Project may induce a degree of construction fatigue and/or consultation fatigue within the community.

Construction fatigue refers to the cumulative impact of direct impacts, such as noise, arising from concurrent or consecutive (i.e. 'back-to-back') construction activities from multiple projects over an extended period. Construction fatigue can be experienced by local receivers where construction impacts overlap, where people move between areas subject to project impacts, and/or where receivers have minimal respite between activities.

In the case of the Project, there are a number of nearby developments that commence construction earlier or complete construction later than the Project. These include the South Eveleigh project (commenced in 2019), and the Sydney Metro City & Southwest (due to commence in 2021 and be completed by 2025). Construction fatigue is less likely to be an issue for this latter project based upon the physical separation from the Project, though the South Eveleigh Project may result in construction fatigue impacts for some receptors on the northern side of the rail line. In this case construction fatigue impacts are likely to relate to issues such as noise, traffic and visual impact, with the potential for follow on impacts to community identity or community cohesiveness. Community connectivity is not expected to be substantially affected.

Transport would seek to undertake coordination with other nearby projects to understand their construction schedules and avoid construction fatigue where possible.

Consultation fatigue refers to a decline in community engagement over time due to people being overwhelmed with requests to consult or discuss individual or multiple projects. This disengagement may lead to people missing relevant details of a proposed project, or missing the opportunity to have their say on an important aspect of the development.

It is recognised that the relatively large number of nearby projects has the potential to result in consultation fatigue for local residents. This has been managed in this Project through judicious timing and design of consultation activities, with view to balancing the desire to obtain community feedback on the Project with potentially 'overloading' consultees.



Overall, TfNSW would seek to minimise cumulative social impacts arising from the Project through the coordination of construction and consultation with other major projects nearby.

### 23.3.3 Operation

Potential cumulative impacts during operation of the Project that may arise in conjunction with the other projects identified are summarised below.

#### Land use and property

The Project would result in the permanent use of 125-127 Little Eveleigh Street. As this is NSW Government owned land, and the existing tenant would be relocated prior to construction of the Project, this permanent use is not anticipated to contribute to any potential cumulative impacts to land use or property in the area during operation of the Project.

#### Social impacts

The cumulative benefit of the Project with other projects during operation is anticipated to result in a net benefit for the community. Considered together with these other projects, the Project would provide:

- improved accessibility and safety at Redfern Station and connectivity with the public transport network overall
- improved access to employment areas and housing in the surrounding area
- a potential increase in economic activity, businesses and employment opportunities, particularly around Redfern Station.

This Project and others currently occurring in Sydney are anticipated to complement strategic urban development and renewal opportunities being undertaken and investigated in the surrounding area. The Project would support new development in the area and enable further opportunities for renewal by providing improved public transport and efficient pedestrian linkages to surrounding areas. The Project would support population growth and increases to the supply of housing along the corridor, promoting transit-oriented development.

The construction activity at and immediately surrounding Redfern Station would result in residual (negative) social construction impacts, post mitigation. However, these changes would be temporary. Following the implementation of the mitigation measures, there would be a moderate (positive) level of residual social operational impacts from the Project, such as changes to community values, including changes to the existing amenity and character.

#### Traffic, transport and access

Residual impacts during operation of the Project include the relocation of 20 car parking spaces from Little Eveleigh Street to a new car parking area. Although this would represent a change in the parking arrangement along Little Eveleigh Street, it would be replaced 'like for like' and is not expected to contribute to cumulative impacts in the area. The Project would also result in a loss of existing street parking on Marian Street/Cornwallis Street/Rosehill Street, Lawson Street and Gibbons Street. There is potential for this loss of parking to contribute to a cumulative impact in parking demand where other projects either temporarily or permanently use or remove parking spaces. In the context of the available street parking in the area surrounding the Project area, the Project is not expected to contribute to a significant loss of parking in the area.

The Project would also introduce a shared zone on Little Eveleigh Street and upgrades to the shared zone on Marian Street/Cornwallis Street/Rosehill Street, including an associated reduction in the speed limit of the shared zones to 10 kilometres per hour, and potentially higher pedestrian/cyclist interactions. Overall however, the Station entrances and shared zones are expected to bring about positive benefits for the Station (refer Section 12.4.2 of **Chapter 12** of this EIS) and interact positively with the other projects proposed in the area.

The Mitigation Measures identified in Chapter 12 of this EIS are considered adequate to mitigate these residual impacts.



## Non-Aboriginal heritage

Overall there would be adverse residual impacts as a result of the Project on Non-Aboriginal heritage. These residual impacts include:

- 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, aesthetic and rarity values of the Redfern Station Railway Group (including the relocation of 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 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.

In regard to the residual impacts of the Project on the Railway station group, the Pemulwuy Project also has the potential to have an indirect impact on the Redfern Railway Station Group. The assessment (NBRSPartners, 2017) notes 'Views to the item would change but significant views would not be unacceptably and adversely impacted upon'. It is considered that this conclusion means there is the potential for a minor adverse impact of this project on the aesthetic significance of the Redfern Station Group, as such a minor cumulative impact from the interaction of the two projects is considered likely.

With regard to the residual impacts of the Project on the aesthetic and technical values of the Eveleigh Railway workshops, the projects at South Eveleigh have the potential to result in a cumulative impact with the Project. The heritage assessments for South Eveleigh do not identify impacts to the aesthetic and technical values of the Eveleigh Railway workshops) (Curio Projects, 2015, Curio Projects 2017a, Curio Projects, 2017b). View loss 'reducing the readability of the heritage fabric of ATP (South Eveleigh) from the streetscape' was identified but not considered a major heritage impact. It is considered that this conclusion means there is the potential for a minor adverse impact of this project on the aesthetic significance of the Eveleigh Railway Workshops, as such a minor cumulative impact from the interaction of the two projects is considered likely.

Taking into account the residual impacts of the project on the Darlington and Golden Grove Heritage Conservation Areas, it is considered none of the identified projects have the potential to result in a cumulative impact with the Project.

The mitigation measures identified in **Chapter 14** of this EIS are considered adequate to mitigate these residual impacts.

## 23.4 Management and mitigation

### 23.4.1 Overview

A CEMF (**Appendix D** of this 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 CEMP and other supporting documentation.

This chapter describes the performance outcomes and mitigation measures related to cumulative impacts, including those that would be included in the CEMP.

#### 23.4.2 Performance outcomes

The performance outcome for the Project in relation to cumulative impacts is:

- the Project is coordinated with other projects being constructed in the area to minimise cumulative impacts.

Opportunities to further minimise construction impacts from the Project beyond those considered in this EIS would be undertaken during detailed design and construction planning, through the



application of appropriate management and mitigation measures and through consultation with affected stakeholders.

### 23.4.3 Mitigation measures

The management and mitigation measures that would be implemented to minimise potential cumulative impacts resulting from the Project are listed in **Table 23-5**.

**Table 23-5 Environmental management measures**

ID	Mitigation measure	Applicable location(s)
<b>Construction</b>		
CI1	<p>TfNSW would co-ordinate with other project developers with projects under construction at the same time in regard to potential cumulative impacts (including potential cumulative noise and traffic impacts). Co-ordination and consultation with relevant stakeholders would also occur when necessary (e.g. DPIE, Sydney Trains, State Transit Authority, City of Sydney Council, utility providers, emergency service providers).</p> <p>These stakeholders would be kept informed of construction progress and scheduling, in an effort to minimise community impacts. Co-ordination and consultation with these stakeholders would also include development of mitigation strategies to manage conflicts such as adjustments to the construction program and work activities, co-ordination of traffic management arrangements between projects and coordination of consultation activities to minimise the potential for consultation fatigue.</p>	All
CI2	Noise mitigation measures (refer <b>Chapter 13</b> of the EIS) would be reviewed for their appropriateness in line with the <i>Interim Construction Noise Guideline</i> (DECC, 2009) where cumulative noise impacts on a receiver are expected and the Project is the dominant source.	All