

## 23. Project justification and conclusion

### 23.1 Strategic context and statutory considerations

#### 23.1.1 Summary of strategic need

Over the coming years, Central Station will come under increasing pressure as daily passenger movements increase and technological innovations progress and investment in transport infrastructure increases.

Sydney Metro, Australia's biggest public transport project, will result in the delivery of a new generation of world-class, safe, and reliable trains enabling faster services across Sydney's rail network. In 2024, Sydney Metro's Central Station will open with daily passenger movements forecast to increase from 270,000 persons to 450,000 persons over the next 30 years.

In its current state, Central Station is yet to reach its full potential as Australia's major transport interchange, with the need to improve connectivity, activation, and quality public spaces.

The project would revitalise and transform this underutilised part of Sydney from a place that people simply move through to one where they want to visit, work, relax, connect, and socialise.

The project also presents an opportunity to deliver on the strategic intent and key policies of regional, district and local strategic plans identified in Chapter 3 (Strategic context and project need). The project would support the objectives of the key policies and strategic plans associated with the Future Transport Strategy (Transport for NSW, 2022t), Regional, District and Local plans by improving the reliability and efficiency of Central Station operating as a key transport interchange while improving its connection to the surrounding area. The project would also ensure that the Station and its historical elements are protected and preserved to cope with future growth and demand, therefore improving the resilience of this historic landmark. It is projected that around 100 jobs would be generated during construction, with the project also providing additional retail and commercial floorspace that supports economic growth and productivity in the project area.

The project sits within the Central Precinct Renewal Program (CPRP) Central Station sub-precinct. It meets the Central Precinct Strategic Framework's criteria for priority investment and accelerated planning and delivery by:

- Supporting job creation in the short-to-medium-term through the delivery of additional development opportunities
- Optimising and upgrading underutilised and highly significant heritage assets, focusing on the Sydney Terminal Building, and adjoining public realm
- Future-proofing the long-term vision for Central Precinct.

As such, the project (and the broader CPRP) is needed to revitalise the Sydney Terminal Building and improve customer experience, access, and wayfinding at Central Station. There is also an opportunity to improve the buildings safety and resilience, address existing amenity issues and support place making.

#### 23.1.2 Achieving the project objectives

The specific project objectives are detailed in Figure 23-1 below.

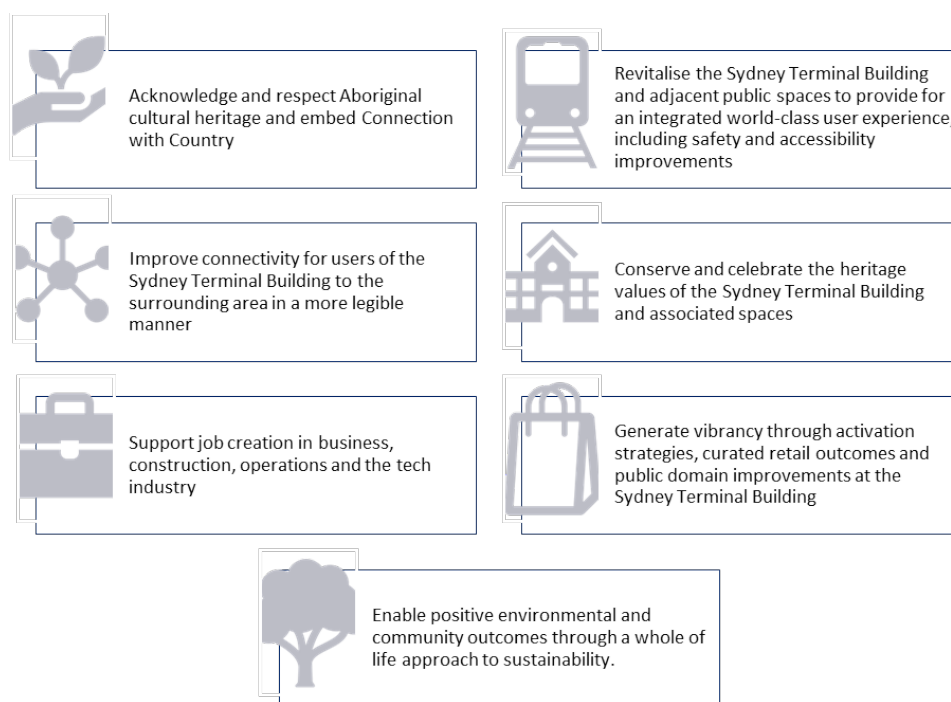


Figure 23-1: Project objectives

Details about how the project satisfies the project objectives are provided in Table 23-1.

Table 23-1: How the project satisfies the objectives and project need

Relevant project objectives	Description
<ul style="list-style-type: none"> <li>Acknowledge and respect Aboriginal cultural heritage</li> <li>Revitalise the Sydney Terminal Building, including safety and accessibility improvements</li> <li>Improve connectivity</li> <li>Enable positive environmental and community outcomes.</li> </ul>	<p>There is a perception among the local community and customers that Central Station is an unsafe environment with a lack of destinations and reasons to travel to/stay in the area. This causes people to tend to pass through the station as required (for example, to change trains) rather than view this area as a key destination. Not all of the existing infrastructure and assets within the Sydney Terminal Building provide efficient access including a lack of wayfinding measures. This has resulted in a poor customer experience and inefficient passenger movements and interchanging.</p> <p>The project would help to address these concerns by providing direct and passive (that is, indirect) safety measures (such as opening a space up more to allow people to see for a greater/wider distance and reduce the number of blind spots), improved access, and wayfinding strategies. These measures would help to distinguish Central Station as a key destination and improve the overall customer experience. The project would adopt Connecting with Country principles to ensure a consistent and cohesive approach to designing with Country across the wider Central Precinct.</p>
<ul style="list-style-type: none"> <li>Conserve and celebrate heritage values</li> <li>Enable positive environmental and community outcomes.</li> </ul>	<p>The Sydney Terminal Building is a heritage listed site dating back to the early 1900s. The building requires repairs, refurbishment, and restoration to maintain the heritage elements. This will ensure it remains functional into the future and fit for purpose for its users.</p> <p>The project would provide these necessary repairs to protect and restore this heritage listed building and ensure that it can continue to operate as desired into the future. These repairs include the preservation of the building's iconic roofs and façades. Sustainability initiatives including adaptive re-use would be incorporated to create flexible spaces that meet the wider project objectives.</p>
<ul style="list-style-type: none"> <li>Improve connectivity</li> <li>Enable positive environmental and community outcomes.</li> </ul>	<p>Central Station has presented as a barrier to pedestrians due to its poor interfaces with surrounding streets, neighbourhoods, and parks. The project would help to address some of these interface issues around the Sydney Terminal Building and better connect the building to its surrounding environment.</p>

Relevant project objectives	Description
<ul style="list-style-type: none"> <li>Improve connectivity.</li> </ul>	The wider plans for the CPRP, including Tech Central and Sydney Metro services, are predicted to increase demand of interchanges between transport modes at Central Station. The project would help facilitate this increased demand by improving safety and efficiency within the Sydney Terminal Building, allowing commuters to better flow and navigate through Central Station. This includes improvements to wayfinding, access, and connections.
<ul style="list-style-type: none"> <li>Support job creation</li> <li>Generate vibrancy.</li> </ul>	The COVID-19 pandemic and associated lockdowns have impacted the vibrancy of the City and stressed the resilience of businesses, communities, and people within the Central Precinct. The project provides the opportunity to help address these impacts by providing new opportunities for commerce and retail activation.

### 23.1.3 Compliance with statutory requirements

Transport is seeking to have the project declared to be specified development on specified land as State significant infrastructure (SSI) under section 5.12(4) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This would require amending Schedule 4 of the State Environmental Planning Policy (Planning Systems) 2021 to include the project as SSI. Under clause 2.14 and Schedule 4 of State Environmental Planning Policy (Planning Systems) 2021, the project would be subject to assessment and approval by the Minister for Planning under Part 5, Division 5.2 of the EP&A Act.

The EIS has been prepared to support an application for approval of the project in accordance with Division 5.2 of the EP&A Act. It addresses the Secretary's Environmental Assessment Requirements (SEARs) and the form and content requirements of Part 3 of Schedule 2 of the Regulation. It has been prepared with regard to the State Significant Infrastructure Guidelines (Department of Planning and Environment (DPE), 2022e), in particular State Significant Infrastructure Guidelines – Preparing an Environmental Impact Statement (DPE, 2022f), and other relevant technical guidelines.

A statutory compliance table, which identifies all the relevant statutory requirements for the project and indicates where they have been addressed in the EIS is provided in Appendix C (Statutory compliance table).

## 23.2 Environmental and social considerations

### 23.2.1 Consideration of stakeholder and community views

The stakeholder and community consultation process has played an integral role in informing the design and scoping investigations for this EIS and will continue to do so through detailed design and construction.

Ongoing consultation on the CPRP has been carried out since 2015 and has contributed to the planning and design approach for the project. It established the key design themes including culture and heritage, place and destination, mobility and access, social and environmental sustainability, and economy and innovation.

Project-specific consultation started with the publication of the Scoping Report by DPE in June 2022 and continued until December 2022. Consultation and engagement carried out to inform the EIS involved:

- Stakeholder meetings and briefings including community groups and special interest groups
- Meetings with key Government agencies
- Publication of a Transport webpage with project-specific information and frequently asked questions
- Project email address and phone number
- Newsletter issued to all properties within a 500-metre radius of the project area
- Digital community engagement via an online survey
- Business surveys, both doorknocking and online
- Stakeholder briefings
- Two community drop-in sessions at Central Station for community members to meet and speak with the project team.

Consultation feedback has been considered in the technical assessment prepared to support the EIS and ongoing design development. Key consultation themes were:

- Heritage recommendations, including requirements for detailed heritage investigations
- Retail opportunities, including the process for access to new retail tenancies and likely retail types
- Wayfinding and accessibility, including accessibility recommendations such as improved acoustics, increased wayfinding infrastructure, accessible toilets, location of lifts, and increased staff presence to support customers with disability

- Street furniture and amenities, including provision of recreational seating more bathrooms, lighting for safety/security, and finishes
- Cultural, art and event spaces, including the potential for provision of live music and events
- Connecting with Country development opportunities that acknowledge Country and Platform 1's role as a processing station for the Stolen Generation, such as opportunities for plaques and temporary/permanent exhibitions.

A stakeholder and community engagement table that identifies detailed findings/community views and issues raised and how they have been considered in the EIS and design is provided in Appendix D (Stakeholder and community engagement table).

### 23.2.2 Actions to avoid or minimise the impacts of the project

This design process has been carried out to avoid and minimise environmental and social impacts as much as possible, while also increasing the potential benefits that could be realised for all users. Key environmental aspects that have influenced the project, together with how the project has been refined to avoid, minimise or offset potential environmental impacts, are summarised in Table 23-2.

Table 23-2: Key strategies to avoid, minimise or offset impacts

Aspect	Design refinements to avoid, minimise or offset impacts
Non-Aboriginal heritage	<ul style="list-style-type: none"> <li>• Revitalisation of the Sydney Terminal Building, including elements such as facades, roofing, awnings, windows, paint palettes and flooring</li> <li>• Reinstating heritage fabric such as the double height ceilings in the Booking Hall and new awning on the eastern wing of the Sydney Terminal Building</li> <li>• Improving public access and revealing spaces not previously available that form part of the heritage identity of the Sydney Terminal Building.</li> </ul>
Aboriginal heritage and Connecting with Country	<ul style="list-style-type: none"> <li>• Aboriginal heritage and Aboriginal stakeholder' perspectives have been considered to underpin a Connecting with Country approach for Central Precinct. Connecting with Country themes are embedded within the design approach for the built form and public domain.</li> </ul>
Visual	<ul style="list-style-type: none"> <li>• Benefits of the revitalisation of heritage elements within the Sydney Terminal Building including the Grand Concourse roof and flooring</li> <li>• Reducing visual clutter within the Grand Concourse and Eddy Avenue Plaza to improve wayfinding.</li> </ul>
Biodiversity	<ul style="list-style-type: none"> <li>• Retention of mature trees on the Western Forecourt and large mature tree in Eddy Avenue Plaza</li> <li>• Avoidance of impacts to microbat habitat</li> <li>• The precinct-wide <a href="#">Green Infrastructure Strategy</a> will be applied to the project. This is particularly relevant to Eddy Avenue Plaza and Eddy Avenue, with the plaza having a 50% canopy cover and 50% green cover requirement.</li> </ul>
Traffic, transport and access	<ul style="list-style-type: none"> <li>• Accessibility and wayfinding improvements to improve access to the Sydney Terminal Building</li> <li>• Coinciding modification of the light rail realignment with planned and scheduled maintenance periods, where possible.</li> </ul>
Noise and vibration	<ul style="list-style-type: none"> <li>• Selection of plant and equipment to minimise potential noise and vibration impacts</li> <li>• Utilising hand tools where feasible to minimise vibration impacts.</li> </ul>
Cumulative impacts	<ul style="list-style-type: none"> <li>• Coordination across the projects proposed within the Central Precinct to minimise customer disruption and delivery timeframes.</li> </ul>

During future design development and construction, opportunities to avoid and/or further minimise project impacts would continue to be identified.

As a result, the project would provide the following benefits:

- Revitalising the Sydney Terminal Building with new and enhanced public open spaces and celebrating the heritage of this iconic location
- Planning for Country by incorporating Country-centred planning principles and actions that respect the surrounding diverse communities

- Economic benefits such as employment generation and improved economic activity through the life of the project
- Introducing new station entrances between the Grand Concourse, Eddy Avenue and Eddy Avenue Plaza within existing entry portals resulting in improved customer movements and the removal of less original heritage fabric
- Improved accessibility and wayfinding throughout the Sydney Terminal Building to aid navigation throughout Central Station and easier access to the Grand Concourse and platforms
- Improved safety with the implementation of additional lighting and security measures with reference to Crime Prevention Through Environmental Design principles
- Increase in tree canopy cover with the provision of green infrastructure in Eddy Avenue Plaza and the Grand Concourse
- Establishing an east/west retail link through the street level of the building that integrates with the existing openings to reduce the extent of original fabric requiring removal while still achieving the connectivity and activation
- Cost savings through less invasive and structurally efficient solutions that offset the recovery, restoration or completion of significant heritage elements such as the former Booking Hall, the completion of the eastern awning, and the restoration of the Central Electric Building
- Establishing retail servicing strategies that identified the building constraints including the offset in building alignments, the location of major structural walls to identify retail tenancies that can be fitted with kitchen exhaust systems reducing heritage impacts
- Reconfiguring the alignment of the gate line within the Grand Concourse to reduce the impacts on the heritage significance of the space and increasing the usable floor area of the Grand Concourse
- Identifying the most appropriate extent of glazing within the Grand Concourse roof by balancing environmental analysis, transport requirements, cost and structural constraints, and heritage considerations.

### 23.2.3 Summary of project impacts

Chapters 6 to 22 assess the potential impacts. The key potential impacts requiring mitigation and management are summarised below in Table 23-3.

Potential impacts would be mitigated by implementing comprehensive environmental management procedures and plans. A consolidated table of proposed environmental management measures is provided in Appendix E (Mitigation measure table).

Table 23-3: Summary of project impacts

Issue	Potential impact
Aboriginal heritage	<ul style="list-style-type: none"> <li>• Ground disturbance within the northern construction footprint may encounter Aboriginal cultural objects, however this is considered to be unlikely</li> <li>• There will be no adverse impacts on Aboriginal cultural heritage during operation.</li> </ul>
Non-Aboriginal heritage	<ul style="list-style-type: none"> <li>• Removal of original fabric to accommodate new entrances, escalators, lifts, and stairs. These changes would be minimised by focusing new works and interventions on non-original or modern fabric and modified spaces as much as possible</li> <li>• Potential vibration impacts to the Sydney Terminal Building and Central Railway Stations Group heritage listed area that could cause cosmetic damage, however this is considered to be unlikely.</li> </ul>
Traffic, transport and access	<ul style="list-style-type: none"> <li>• Realignment of the Dulwich Hill light rail service track</li> <li>• Some changes to pedestrian movement within the construction footprint due to the need to navigate through the Sydney Terminal Building to accommodate the construction activities. This would have a minimal impact on journey times</li> <li>• No impact to public, residential or kerbside parking or access</li> <li>• Potential for lanes next to the construction footprint to be closed on occasion during construction</li> <li>• Additional 20–30 heavy vehicles and 50 light vehicles arriving and leaving site every day during construction, equalling roughly a two per cent increase in traffic movements.</li> </ul>
Landscape and visual	<ul style="list-style-type: none"> <li>• Reduced visual amenity during construction from presence of large equipment and machinery (for example, cranes and loaders)</li> </ul>

Issue	Potential impact
	<ul style="list-style-type: none"> <li>Some changes to the external fabric of the building (for example, mechanical equipment installed on the roof and the addition of an easter awning) however, these are unlikely to be noticeable.</li> </ul>
Noise and vibration	<ul style="list-style-type: none"> <li>Potential for minor sleep disturbance impacts to 105 sensitive receivers when noise intensive work is being completed at night</li> <li>Potential for people within the commercial and commuter areas of Central Station to hear ground borne noise when vibration generating work is taking place</li> <li>Potential noise impacts on people in and around Central Station due to the use of noise intensive equipment such as concrete saws or jackhammers.</li> </ul>
Socio-economic	<ul style="list-style-type: none"> <li>Temporary amenity related impacts to members of the surrounding community (residents within Haymarket, Surry Hills, Chippendale and the wider City of Sydney Local Government Area), commuters (those that travel through the Station as part of their daily commute), and visitors (those that travel through the station occasionally such as tourists travelling from the Sydney International Airport) from noise and visual amenity impacts during construction</li> <li>Impacts to rough sleepers particularly from a reduction in amenity which would likely require them to find alternative shelter during construction</li> <li>Changes to the way people move through and navigate the space within the Sydney Terminal Building during construction could disrupt daily routines and cause undue stress (particularly for vulnerable groups such as people with a disability or long-term health condition, women and children, and people from culturally and linguistically diverse communities)</li> <li>Existing businesses within the project area would need to vacate during construction works (including one health facility). The seven existing businesses are currently on short-term lease agreements, with all but two expected to expire prior to construction works starting</li> <li>Temporary negative impacts to sense of place associated with changes to the building and disrupted visual amenity</li> <li>Temporary layout changes and construction work could limit access and opportunities for Aboriginal people to connect with Country</li> <li>Improved quality of the retail and commercial floorspace within the project area once operational, could raise rental prices and discourage existing businesses from applying for a lease.</li> </ul>
Other impacts	<ul style="list-style-type: none"> <li>Potential for water to back up in the stormwater system and pool and/or flood during heavy rainfall in certain areas during construction. These impacts would be small in scale and would not continue once operational</li> <li>Potential impact to water quality from stormwater flowing over earthworks and picking up loose soil and/or from accidental spills</li> <li>Potential for contaminated material to be encountered during construction</li> <li>Risk of construction works creating dust which could impact human health</li> <li>The additional retail facilities (including food and beverage facilities) would create some extra waste</li> <li>Some greenhouse gas emissions would be generated from the project (worst case scenario 498.7t CO<sub>2</sub>-e during construction and 6,044.2t CO<sub>2</sub>-e per year during operation)</li> <li>There are 18 climate risks for the project by 2090 (three low, ten medium and five high risks). High risks were associated with heat and rising temperatures including bushfire and drought</li> <li>The project would require the use, storage and transport of dangerous and/or hazardous material</li> <li>Some existing utility services would need to be adjusted and relocated. There is a risk that these services could be damaged during this time</li> <li>The project requires the demolition of some structures which has a typical risk of things like unplanned collapse and falling objects.</li> <li>Health and safety impacts associated with working within an operating transport station</li> <li>Potential cumulative impacts to traffic, noise and vibration, visual amenity, air quality, archaeological resources of non-Aboriginal heritage significance, and socio-economic factors due to a number of projects potentially being constructed at the same time.</li> </ul>



### 23.2.4 Compliance with environmental performance outcomes

The SEARs identified several desired performance outcomes for the each of the key environmental issues. Table 23-4 identifies the performance outcomes and outlines how each outcome would be achieved.

Table 23-4: Desired performance outcomes and project outcomes

Key issue and desired performance outcome	How performance outcomes would be achieved
<b>Design, Place and Movement</b>	
<p>The project is well-designed and enhances the environment where it is located, including improved accessibility and connectivity for communities and public spaces.</p> <p>The project helps to support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal peoples.</p> <p>The project contributes to greener places through the enhancement and provision of green infrastructure.</p>	<p>The incorporation of Connection to Country outcomes, good urban design principles, green infrastructure, community and stakeholder feedback, and connection to place have been a key component in developing the project. Specifically:</p> <ul style="list-style-type: none"> <li>• The improvements to wayfinding, legibility, and accessibility for the Sydney Terminal Building with new entrances from Eddy Avenue and Eddy Avenue Plaza to the Grand Concourse, and upgrades to the existing entry at the corner of Pitt Street and Eddy Avenue</li> <li>• Upgrades to public spaces around and within the Sydney Terminal Building including Eddy Avenue Plaza, the Eddy Avenue and Pitt Street colonnades, and the hall of the Grand Concourse</li> <li>• Renewal and activation of the ground floor and Western Loading Dock by providing public access through a network of new pedestrian links at street level to a series of retail, food and beverage, and multi-purpose event spaces</li> <li>• The design for the project includes green infrastructure through the implementation of 214 metres squared of understory planting (ground level vegetation such as shrubs), 110 metres squared of which would be green roofs</li> <li>• An increase to the overall tree canopy cover by 55.5 metres squared with a total of 696.5 metres squared of canopy coverage, all of which will be mature trees.</li> </ul> <p>These improvements seek to rejuvenate and activate the Sydney Terminal Building to integrate it with the surrounding urban precinct.</p> <p>Further details on design, place and movement are provided in Chapter 10 (Place, design and movement).</p>
<b>Economic</b>	
<p>The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings, and infrastructure.</p>	<p>The design has aimed to avoid or minimise potential business impacts for businesses within and surrounding the Sydney Terminal Building. The project also avoids to the need to acquire any land.</p> <p>Ongoing engagement with business owners within and surrounding the Sydney Terminal Building that may be adversely impacted by construction would continue prior to and during construction.</p> <p>Further details on business impacts and mitigation are provided in Chapter 13 (Socio-economic).</p>

Key issue and desired performance outcome	How performance outcomes would be achieved
<b>Heritage</b>	
<p>The design, construction and operation of the project facilitates, to the greatest extent possible, the long-term protection, conservation, and management of the heritage significance of items of environmental heritage and Aboriginal objects and places.</p> <p>The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.</p>	<p>The design, construction, and operation of the project has and will prioritise the long-term protection, conservation, and management of items of environmental heritage, Aboriginal objects, and places of cultural significance.</p> <p>Ensuring the preservation of these important cultural and environmental resources is crucial for maintaining their significance and value for future generations.</p> <p>The potential impacts on heritage objects and places have been considered in the design to minimise any impacts. The project has also sought to make a positive contribution to the preservation and ongoing significance of the Sydney Terminal Building such as reinstating the double height ceiling in the Booking Hall.</p> <p>Further details on heritage impacts and mitigation are provided in Chapter 7 (Aboriginal heritage) and Chapter 8 (Non-Aboriginal heritage).</p>
<b>Noise and vibration</b>	
<p>Construction noise and vibration (including airborne noise, ground-borne noise, and blasting) are effectively managed to minimise adverse impacts on acoustic amenity, and adverse impacts on the structural integrity of buildings and items including Aboriginal places and environmental heritage.</p> <p>Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.</p> <p>Increases in noise emissions and vibration affecting environmental heritage as defined in the <i>Heritage Act 1977</i> during operation of the project are effectively managed.</p>	<p>Noise and vibration intensive construction activities are planned for short periods, with long periods of inactivity or lower noise output on site. Some construction work will be carried out inside enclosed areas or in locations that are shielded from the surrounding environment, such as within the Sydney Terminal Building and Central Electric Building.</p> <p>Measures will be implemented to mitigate the potential construction noise and vibration impacts, such as implementing noise barriers and shielding around construction sites and equipment, limiting the use of certain equipment, and scheduling work during daytime hours when possible.</p> <p>Attended measurements will be carried out at the start of any proposed vibration intensive work to confirm the levels produced by the equipment will not adversely impact on the structural integrity of buildings or heritage items.</p> <p>The noise generated from operational mechanical plant is predicted to comply with the noise management levels at the closest sensitive receivers. No operational changes to noise or vibration would impact environmental heritage.</p> <p>Further details on noise and vibration impacts and mitigation are provided in Chapter 12 (Noise and vibration).</p>
<b>Social</b>	
<p>The project minimises adverse social impacts and capitalises on opportunities potentially available to affected communities.</p>	<p>Construction would result in some adverse social impacts associated with the disruptions caused by related work activities. However, planning and consultation with surrounding residents and businesses will seek to minimise these impacts.</p> <p>The project will provide increased employment opportunities.</p> <p>Consultation would be carried out with managers of social infrastructure and local event organisers to minimise potential impacts. Consultation would also be carried out with stakeholders to identify opportunities for public art to reflect community values, culture, and identity of the local community.</p> <p>Further details on social impacts and mitigation are provided in Chapter 13 (Socio-economic).</p>



Key issue and desired performance outcome	How performance outcomes would be achieved
<b>Transport and traffic</b>	
<p>Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts.</p> <p>The safety of transport system customers is maintained.</p> <p>Impacts on network capacity and the level of service are effectively managed.</p> <p>Access and connectivity for people walking and cycling or using public transport is maintained or improved relative to the existing situation.</p> <p>Works are compatible with existing infrastructure and future transport corridors.</p>	<p>The project will maintain network connectivity in the vicinity of the project, by minimising any potential disruptions to the road or public transport network with operators and develop strategies to minimise their impact. This could include measures such as rerouting traffic or providing alternative transportation options during construction.</p> <p>To ensure the safety of the transport system for customers, safety measures such as barriers, signage, and traffic control devices to direct traffic and pedestrians around construction areas will be implemented during construction.</p> <p>The project will minimise impacts on the efficiency of the transport system, by carefully planning the timing and location of construction activities to minimise disruptions to traffic flow. This would include coordinating with transport authorities to schedule work during off-peak hours or minimising construction traffic movements during the morning and afternoon peak.</p> <p>The project will maintain access and connectivity for people walking and cycling or using public transport during construction.</p> <p>Signage, escalators, lifts, and staircases would be installed to improve access and connectivity to the Sydney Terminal Building, the existing light rail, bus, and coach stops, and the new retail spaces. The new signage would help people interchange between transport modes more quickly and efficiently, while there would be bike parking provided to allow cyclists to make better use of the retail facilities introduced under the project. New street furniture, seating, and other urban improvements would be introduced (see Chapter 10 (Place, design and movement)) to encourage people to stop and enjoy the new facilities.</p> <p>The project has been designed to be compatible with existing infrastructure, to ensure that they do not interfere with existing transportation systems or negatively impact the ability of these systems to operate effectively.</p> <p>Further details on transport and traffic impacts and mitigation are provided in Chapter 9 (Traffic, transport and access).</p>

### 23.2.5 Objects of the EP&A Act

The objects are guiding principles that are considered by DPE when making planning decisions. Therefore, they provide a framework to help assess if the project is consistent with the Act's wider provisions. A summary of this assessment is provided in Table 23-5.

Table 23-5: Relevance of the objects of the EP&A Act to the project

EP&A Act objective	Comment
To promote the social and economic welfare of the community and a better environment by the proper management, development, and conservation of the State's natural and other resources.	<p>The project has been designed to avoid potential impacts on the environment and heritage aspects of the Sydney Terminal Building, and potential impacts on surrounding residents and businesses.</p> <p>During construction and operation, opportunities would be taken to reduce material use and maximise the use of materials with low embodied carbon, where practical.</p>
To facilitate ecologically sustainable development by integrating relevant economic, environmental, and social considerations in decision-making about environmental planning and assessment.	Ecologically sustainable development has been considered in Section 23.2.6.
To promote the orderly and economic use and development of land.	The project would help to provide a significant increase in connectivity, capacity, and amenity in and around the Sydney Terminal Building. This would boost the economic productivity of

EP&A Act objective	Comment
	<p>the southern CBD area and unlock future planned precincts and urban renewal areas associated with the CPRP.</p> <p>The project would enhance the existing public domain, hospitality and retail offering of Sydney Terminal Building and does not seek to provide new land uses within the project area; operational uses are considered to be indifferent to that of the existing context. Land uses would continue to be ancillary to the functional use of the railway, thus aligning with the existing land zoning requirements SP2 (Special Purpose Infrastructure) – Railways and B8 (Metropolitan Centre).</p>
To promote the delivery and maintenance of affordable housing.	<p>Connectivity and accessibility of the Sydney Terminal Building will be improved to provide more convenient and reliable access to public transportation at Central Station. This can make it easier for people to get to work, school, and other essential services, while also having economic benefits for the community, such as creating jobs and increasing foot traffic in the area.</p> <p>The project would also not acquire any land set aside for the delivery and/or maintenance of affordable housing.</p>
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities, and their habitats.	<p>The project is located within a highly urbanised area that does not possess large expanses of intact native vegetation with high biodiversity value.</p> <p>As such the project has largely avoided and/or minimised direct potential impacts to terrestrial biodiversity, biological diversity, ecological integrity, or threatened or native species. There are also various standard measures available that are proven in being effective to protect the environment during construction and operation. These are provided in Appendix E (Mitigation measure table).</p>
To promote the sustainable management of built and cultural heritage, including Aboriginal cultural heritage.	<p>The design development of the project has included a focus on conserving heritage values for future generations by avoiding or minimising potential Aboriginal and non-Aboriginal heritage impacts.</p> <p>Potential impacts on heritage items would be minimised during construction and works would be carried out in accordance with relevant management strategies for specific heritage items where impacts are unavoidable.</p>
To promote good design and amenity of the built environment	<p>The incorporation of Connection to Country outcomes, good urban design principles, green infrastructure, community and stakeholder feedback, and connection to place has been a key component of the project and has been implemented through several design outcomes identified in Table 23-4.</p>
To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.	<p>Construction of the project and the health and safety of customers, workers, and employees would be safeguarded through the implementation of the mitigation measures identified in Appendix E (Mitigation measure table) and be consistent with the applicable Australian and international safety standards.</p>
To provide increased opportunity for community participation in environmental planning and assessment.	<p>Consultation with the community and stakeholders (see Chapter 6 (Stakeholder and community engagement)) has been carried out as part of the development of the EIS.</p> <p>The community will also have the opportunity to provide comment on the EIS during exhibition.</p>

### 23.2.6 Principles of ecologically sustainable development

Ecologically sustainable development (ESD) improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The principles of ESD have been an integral consideration throughout the development of the project.

ESD requires the effective integration of social, economic, and environmental considerations in the decision-making processes. The principles supporting the achievement of ESD are discussed below.

### Precautionary principle

The precautionary principle deals with reconciling scientific uncertainty about environmental impacts with certainty in decision-making. It provides that where there is a threat of serious or irreversible environmental damage, the absence of full scientific certainty should not be used as a reason to postpone measures to prevent environmental degradation.

This principle was considered during the selection of the preferred project (refer to Chapter 4 (Selection of the preferred project)). The precautionary principle has guided the assessment of environmental impacts for this EIS and the development of environmental management measures. Significant environmental impacts have also been avoided or minimised throughout the development of the project (see Section 23.2.2).

The precautionary principle has continued to guide the assessment of environmental impacts for this EIS and the development of mitigation measures. The EIS was prepared using a conservative approach, which included assessing the worst-case impacts and scenarios. It has been carried out using the best available technical information and has adopted best practice environmental standards and measures to minimise environmental risks.

- Assessing a worst-case | The impact assessment has assessed a worst-case scenario
- Validating and verifying uncertainty | The mitigation commits to further investigate impacts during detailed design to validate mitigation. This includes additional testing and monitoring to check that the EIS' impact predictions are valid. The mitigation also commits to investigating and implementing additional controls if the outcomes are unexpected
- Applying mitigation by precaution | Various measures have been used to mitigate impacts even if there is not the scientific justification for it
- Revisiting the design | There is a commitment to review the final detailed design and construction and operational specifics to confirm the extent, duration, scale, and magnitude of impacts. If these change the effectiveness of the mitigation, additional assessment will be carried out to investigate and implement measures to reduce impacts to acceptable levels. Also, if the changes are material, it may require the consent to be modified before construction starts.

### Inter-generational equity

Social equity is concerned with the distribution of economic, social, and environmental costs and benefits. The focus of inter-generational equity that the present generation should ensure the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,

The project has been designed with future customer and community requirements in mind, taking into consideration how people will use and enjoy the Sydney Terminal Building and surrounds for future generations to come.

The project would provide increased accessibility to culturally significant places for both Aboriginal and non-Aboriginal history. This would benefit current and future generation's ability to share and understand important events of Australian history.

While some short-term negative impacts are identified, management measures to mitigate any adverse impacts have been considered and included in Appendix E (Mitigation measure table). The implementation of these measures would ensure the principles of inter-generational equity is met.

- Natural capital | The proposed landscaping has been developed within a native context, which will help provide some ecosystem services over time. This would improve the area's natural capital into the future and therefore inter-generationally.
- Social capital | The Sydney Terminal Building would continue to be a key transport interchange for generations to come. It also helps deliver wider economic and employment benefit regionally into the future, supporting a transition to high-end technology jobs through Tech Central and boosting the local night-time and retail economy.
- Cultural capital | There has been a recognised loss in Connection to Country over the area for the past two hundred years owing to European occupation. In response, consultation with the Traditional Custodians, and specifically the Elders, will be ongoing. They will inform the detailed design and delivery, and the ongoing operation of the project to improve its Connection to Country. This would help promote cultural capital intergenerationally.

### Conservation of biological diversity and ecological integrity

The principle of the conservation of biological diversity and ecological integrity is that both should be a fundamental consideration.

Conservation of biological diversity and ecological integrity has been considered throughout the development and design stages. The project would be located within a highly urbanised area that does not possess large expanses of intact native vegetation with high biodiversity value.

### Improved valuation, pricing, and incentive mechanisms of environmental resources

The principle of improved valuation, pricing and incentive mechanisms is that environmental factors should be included in the valuation of assets and services, such as the polluter pays, accounting for the full lifecycle costs of goods and services, including natural resource use and waste disposal, and establishing environmental goals.

The value placed on the environment was inherent in the development of the design. In addition, the costs associated with the planning and design of measures to avoid/minimise potential adverse environmental impacts and the costs to implement them have been built into the overall costs. Ongoing and detailed design together with specific issue-based management plans would represent further commitment to the recognition of the value of protecting environmental resources.

## 23.3 Uncertainties and resolution

The design presented in this EIS is subject to further design development and construction planning. The design as presented serves to:

- Confirm that the proposed performance and technical requirements can be achieved
- Confirm the feasibility and method of the required construction
- Identify key risks/constraints and anticipated environmental impacts.

The construction method has been developed to a level where environmental impacts can be appropriately identified. Aspects of the construction method that may be subject to further refinement, but which would be unlikely to substantially alter the predicted environmental impacts, are:

- Adjustments to utilities and associated infrastructure
- Alternative haulage routes, construction site access and/or traffic management arrangements to provide improved traffic safety and reduce potential impacts at these locations
- Sequencing of construction activities to improve safety and minimise impacts to residents and businesses.

All aspects of the construction method would be confirmed during the design development and construction planning processes.

A summary of the key uncertainties identified for the project and how they are proposed to be resolved is provided in Table 23-6.

Table 23-6: Key uncertainties

Key uncertainties I think	Comment
Lack of baseline data	Additional studies or monitoring will be carried out as identified in the mitigation measures for the project (see Appendix E (Mitigation measure table)) to verify the impacts identified in the assessment.
Effectiveness of the proposed environmental management measures	<p>A standard set of proven and effective measures has been included as part of the mitigation measures (see Appendix E (Mitigation measure table)).</p> <p>To address uncertainties associated with project-specific measures, the appropriateness of the proposed management measures will be assessed by monitoring the effectiveness of the measures, engaging with local stakeholders, and regularly reviewing and updating the management measures as needed.</p>
<p>Traffic and transport assumptions including:</p> <ul style="list-style-type: none"> <li>• Construction traffic numbers and haulage routes</li> <li>• Where the operation and emergency vehicles would relocate from the loading dock and Porte Cochere</li> <li>• Traffic control measures needed to accommodate oversized vehicles and to carry out high risk activities</li> <li>• Alternative travel arrangements for the Dulwich</li> </ul>	<p>Construction traffic numbers, haulage routes, oversized vehicle requirements, traffic management controls, relocation of emergency vehicle parking, alternative travel arrangements will be finalised during detailed design to confirm they are consistent with the assessment presented in the EIS.</p> <p>Final pedestrian and cyclist numbers will be confirmed to ensure pedestrian, bike parking, and street furniture provisions are sufficient. The urban design will be revised to increase the provisions where needed. The additional enhancement of pedestrian and cycle infrastructure in the Station will also be investigated in consultation with user-groups, Sydney Trains, City of Sydney Council, and Transport for NSW.</p> <p>These measures have been included in the traffic and transport mitigation measures (see Appendix E (Mitigation measure table)).</p>

Key uncertainties I think	Comment
<p>Hill service and Central Station stop when realigning the light rail track under the Porte Cochere</p> <ul style="list-style-type: none"> <li>The increase in pedestrian and cycle numbers due to the project.</li> </ul>	
Cumulative amenity impacts	Given the cumulative impacts have been assessed based on the available planning documents published online, further consultation and collaboration with nearby projects is needed to better understand the detailed construction planning schedule to determine specific overlaps and conflicts. Additional mitigation measures will also be investigated during detailed design to limit cumulative amenity impacts.

## 23.4 Conclusion

This EIS has addressed the SEARs issued under Part 5, Division 5.2 of the EP&A Act and the relevant provisions of Part 8, Division 5 of the EP&A Regulation.

A checklist showing where the SEARs are addressed in this EIS is provided in Appendix A (Secretary's environmental assessment requirements checklist). A checklist showing where the relevant requirements of Part 8, Division 5 of the EP&A Regulation are addressed is provided in Appendix B (EP&A Regulation).

Key environmental issues have been examined throughout the design development process. Consultation has been carried out with affected stakeholders during the assessment process so that key potential impacts of the project have been identified, and where possible, avoided, or appropriate mitigation measures developed. This has resulted in changes to design that have mitigated the identified potential impacts.

Notwithstanding, it is inevitable that a project of this scale and location in a heavily urbanised environment would have some potential unavoidable impacts during construction, namely:

- Aboriginal heritage
- Non-Aboriginal heritage
- Traffic, transport and access
- Landscape and visual
- Noise and vibration
- Socio-economic.

Potential impacts have been avoided or minimised in designing the project and preparing the EIS. The sections above describe how the project meets its objectives, and is supported under regional, district, and local policy. However, there would still be some temporary and permanent impacts. Measures detailed in this EIS would mitigate or minimise these to an acceptable level, with additional commitments made to manage, monitor, and communicate performance and investigate any revisions if there are unexpected outcomes. Any residual impacts are considered acceptable on balance with the project's benefits, it remains in the public interest for current and future generations.