

10. Place, design, and movement

10.1 Existing environment and background

This chapter draws on information from Appendix I (Place and urban design assessment). Construction and operation impacts associated with access to public space, facilities, public transport, and movement throughout the Sydney Terminal Building are discussed in Chapter 9 (Traffic, transport and access) and Chapter 13 (Socio-economic).

10.1.1 Overview

The incorporation of Connection to Country outcomes, good urban design principles, community and stakeholder feedback, and connection to place has been a key component to the development of the project. Specifically:

- 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
- 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
- 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.

These improvements seek to rejuvenate and activate the Sydney Terminal Building to integrate it with the surrounding urban precinct.

There are several challenges currently experienced by users of the Sydney Terminal Building due to the way in which the station has developed over time. These challenges include difficulty navigating the site and a disconnect between the Sydney Terminal Building and the surrounding urban environment due to the different levels of public space within the building. These issues, and how the project responds to them, is summarised within this chapter.

10.1.2 Policy and planning setting

The assessment considered the following relevant policies and guidelines:

- [Better Placed: An integrated design policy for built environment of NSW](#) (Government Architect NSW (GANSW), 2017)
- [Sydney Green Grid – Spatial Framework and Project Opportunities](#) (Tyrrell Studio and Office of the GANSW, 2017)
- [Creating Walkable Neighbourhoods](#) (Active Living NSW, 2018)
- [Sydney Innovation and Technology Precinct Panel Report](#) (NSW Government, 2018)
- [Aligning Movement and Place – Outline for understanding places in relation to movement infrastructure](#) (GANSW, 2019)
- [Beyond the Pavement](#) (Transport for NSW, 2020a)
- [Designing with Country](#) (GANSW, 2020a)
- [Draft Connecting with Country](#) (GANSW, 2020b)
- [Greener Places: An urban green infrastructure design framework for NSW](#) (GANSW, 2020c)
- [Movement and Place Framework](#) relevant guidance including the [Walking Space Guide: Towards Pedestrian Comfort and Safety](#) (Transport for NSW, 2020g) and the [Cycleway Design Toolbox: Designing for Cycling and Micromobility](#) (Transport for NSW, 2020b)
- [Practitioner’s Guide to Movement and Place](#) (GANSW, 2020d)
- [Central Precinct Strategic Framework](#) (Transport for NSW, 2021b)
- [Central Precinct Place Strategy](#) (Transport for NSW, 2022c)
- [Central Precinct Renewal Program Connecting with Country Framework](#) (Balarinji & Transport for NSW, 2022)
- [Central Precinct Renewal Program Green Infrastructure Strategy](#) (Transport for NSW, 2022k)
- [Central Precinct Renewal Program Public Art Strategy](#) (Transport for NSW, 2022m)
- [Central Precinct Renewal Program Public Domain Strategy](#) (Transport for NSW, 2022l)
- [Central Precinct Renewal Program Safety and Security Strategy](#) (Transport for NSW, 2022n)

- [Central Precinct Urban Design Framework](#) (Transport for NSW, 2022b)
- [Design Guide: Central Precinct – State Significant Precinct](#) (Transport for NSW, 2022s).

The project design has been informed and influenced by the outcomes and strategic objectives outlined in the [State Significant Precinct Study – Central State Significant Precinct document](#) (Transport for NSW, 2022u). Specifically:

- Improving pedestrian circulation through and around the precinct through legible entrances, exits and vertical transportation points. This includes improved north-south connectivity by introducing new entry points along Eddy Avenue that will connect the Eddy Avenue to the Grand Concourse
- The renewal of the Grand Concourse with increased daylight, planting opportunities, and new and enhanced retail uses to serve commuters and visitors to the building to activate the building beyond peak commuter periods
- The inclusion of cultural and event spaces within the building (former Booking Hall and Electrical Department) to establish the Sydney Terminal Building as a destination within the southern Central Business District (CBD)
- The renewal of Eddy Avenue Plaza through retail activation, public domain upgrades, increased landscape amenity, and a direct pedestrian connection between the plaza and the Grand Concourse
- The introduction of an east-west link within the Lower Concourse (street level) including opportunities for the adaptive reuse of underutilised areas (such as the loading dock and other back of house spaces) for a range of uses including cultural, event, retail and hospitality.

The design has been informed by a detailed understanding of the [Central Precinct Draft Strategic Vision 2019](#), [Central Precinct Strategic Framework 2021](#), [Central Precinct Place Strategy 2022](#), [Central Precinct Public Domain Strategy 2022](#), and the [Central Precinct Urban Design Framework 2022](#). Key observations from these documents are included separately in the in Appendix I (Place and urban design assessment).

10.1.3 Existing place design

Table 10-1 below summarises the current built form, place, access, connectivity, public space, views, and vistas in the project area as it relates to the place design outcomes.

Table 10-1: Existing place design

Place design outcomes	How the existing environment currently reflects the place design outcomes
Built form and place	<ul style="list-style-type: none"> • Context: Central Station is a barrier between George Street, Belmore Park, Surry Hills, and the broader Central Precinct area. This has disrupted the way the station operates and connects with its the surrounding area, where the elevated position above ground level and vehicle-dominated street environment has resulted in a poorly activated precinct that is disconnected with the surrounding public areas and suburbs and predominantly used as an interchange point for commuters rather than a destination. <p>The Sydney Terminal Building has also evolved in stages over the years. This has resulted in it becoming a barrier to movement across the project area. Specifically, the:</p> <ul style="list-style-type: none"> – Extension of the track alignment north of Devonshire Street in 1906 resulted in a disconnect with the surrounding areas by establishing a raised platform and series of bridges and ramps that significantly altered and reduced the network of streets and connections within and across the precinct, and established a station that was raised above the street level with a limited number of entries from the public domain to the Sydney Terminal Building that lacked legibility and amenity for pedestrians. – Construction of the City Circle Line in 1930 has resulted in a further disconnect between Central Station and the surrounding areas with the introduction of the rail viaduct parallel to Elizabeth Street which reduced opportunities for physical and visual connectivity between Surry Hills and the station precinct including Belmore Park and Eddy Avenue Plaza. The completion of the City Circle Line also eliminated the need for passengers to interchange at Central Station between suburban lines and the CBD light rail system, which resulted in a shift of retail and activation to the central CBD (Market Street) impacting the vibrancy and character of the station and the surrounding area. – Repossession of the retail spaces on the lower levels of the Sydney Terminal Building by the 1920's for use as station support functions de-activated the station's street interfaces and reduced its capacity for integration with the surrounding street network.

Place design outcomes	How the existing environment currently reflects the place design outcomes
	<ul style="list-style-type: none"> • Site characteristics: The key site characteristics in terms of place and urban design are: <ul style="list-style-type: none"> – Sydney Terminal Building: <ul style="list-style-type: none"> ○ The raised platform of the Station and the City Circle viaduct have created significant challenges for the urban precinct by separating the Sydney Terminal Building from the surrounding street network and impacting urban connectivity across the southern Sydney CBD. This raised platform required an extensive series of ramps and bridges to connect the Sydney Terminal Building with the surrounding street network further impacting connectivity between the surrounding streets, Belmore Park, Eddy Avenue and the Grand Concourse. ○ The major entrance to the Sydney Terminal Building was located on the Western Forecourt which was reinforced with the completion of the clock tower in 1921. This remains a significant entrance and exit point to the Station for regional and interstate passengers but has limited use for metropolitan commuters and pedestrians entering the station from the surrounding streets. ○ The clock tower was originally designed to be visible from key locations and streets within the City (including Broadway, George Street, Harris Street, Regent Street, Elizabeth Street, Foveaux Street); it remains an important historic and urban landmark in Sydney. ○ The former Booking Hall that is located between the Grand Concourse and the Porte Cochere was one of the most significant spaces in the Sydney Terminal Building and was substantially altered in the 1930s with the introduction of a mezzanine infill at the upper gallery level to support an expansion of station functions. This alteration has concealed the ornate ceiling and plaster details which are considered to be of ‘exceptional’ significance as discussed in Appendix G1 (Non-Aboriginal heritage assessment). ○ The street-level pedestrian entrances in the northwest and northeast corners of the Sydney Terminal Building lack clarity and definition for passengers on how they should move through and navigate the building. This reinforces the sense of disconnection between the surrounding streets and the station facilities located at the upper level. ○ The lower level of the Sydney Terminal Building is heavily constrained by the extent and density of the structural load-bearing walls, room layouts and servicing requirements with many spaces not originally designed for public access. ○ There is a significant offset in the plan alignments of the Sydney Terminal Building with the upper levels setback from the alignment of the lower levels which define the surrounding streets and Eddy Avenue Plaza. This creates significant obstacles in improving the legibility and amenity of the existing entries or introducing new entries from the surrounding public domain (for example, lift, escalator and stair locations), and creates significant challenges in upgrading the servicing of the lower levels and linking ductwork to vertical risers within the upper levels. – Western Forecourt: <ul style="list-style-type: none"> ○ The Western Forecourt provided the main point for people arriving or departing via taxi or car with the western ramp linking north and south to Pitt Street. This requirement decreased with the introduction of the Circle Line with many passengers interchanging at the station between city and regional lines. The Western Forecourt is still configured for vehicles including cars, taxis and coaches. – Grand Concourse: <ul style="list-style-type: none"> ○ The Grand Concourse is one of Sydney’s great urban rooms. While it has lost its grandeur, activation, and vibrancy over time with a reduction in public seating, kiosk activation, the quality and range of hospitality/retail offerings, and a reduction in natural light with the reconfiguration of the skylight, it is still a major arrival point for people travelling to Sydney by train.

Place design outcomes	How the existing environment currently reflects the place design outcomes
	<ul style="list-style-type: none"> – Eddy Avenue and Eddy Avenue Plaza: <ul style="list-style-type: none"> ○ Eddy Avenue Plaza is mainly used by customers walking from Eddy Avenue to the Central Electric Building entry point which remains a major entry for the suburban platforms. The existing vehicle ramp to the east of Eddy Avenue Plaza significantly reduces the width of public space and is no longer required for service access to the platforms. The current configuration of Eddy Avenue Plaza with retaining walls, scattered kiosks and hydrant booster cabinets results in a disjointed and cluttered space with a lack of landscape amenity or activation opportunities. ○ The Eddy Avenue and Pitt Street colonnades are located along the western and northern edges of the lower level of the Sydney Terminal Building. Many of these spaces have been used for station functions since the 1920's and have resulted in an un-activated public domain frontage. The lighting, materiality of the public domain, and the fenced interface with the Eddy Avenue light rail has further decreased the amenity and character of these spaces. • Character of the area: The character of the project area is defined by the significant Aboriginal and non-Aboriginal heritage significance and historical use of the site. This includes Platform 1, which, while outside the project area, is of cultural significance to the Stolen Generations and survivors and is therefore an important consideration in the design of the project. The character of the project area is described in more detail in Chapter 7 (Aboriginal Heritage), Chapter 8 (Non-Aboriginal heritage) and Chapter 11 (Landscape and visual amenity). • Amenity: The amenity of the area is discussed in the following chapters: <ul style="list-style-type: none"> – Visual amenity: Chapter 11 (Landscape and visual amenity) – Noise and vibration: Chapter 12 (Noise and vibration) – Social amenity: Chapter 13 (Socio-economic) – Air quality: Chapter 17 (Air quality).
Access and connectivity	<p>Access to and within the Sydney Terminal Building is available through the following modes:</p> <ul style="list-style-type: none"> • Walking: The Sydney Terminal Building is accessible for pedestrians and people with reduced mobility. However, people have found it hard to find their way around and into the Station via the surrounding street network, a term called wayfinding. Efforts have been made to improve wayfinding over time with a series of renovation projects but it remains a significant obstacle in the integration of the station with the surrounding urban area and street network. The existing entry access points at the northwest corner (intersection of Pitt Street and Eddy Avenue) and access between the Grand Concourse and Eddy Avenue Plaza lack legibility, amenity and are confusing for people using the station. • Mobility: Accessible entry points have been provided into the station at the northwest corner with a recently completed lift linking the lower level to the upper level Porte Cochere. The location and form of this lift are an improvement on the previous lift access which was located deeper within the building via a curved ramp. An accessible entry point between the public domain and the platforms is also provided via the Central Electric Building entry into the recently completed Sydney Metro works but the station lacks clear and legible lift access from Eddy Avenue Plaza and Eddy Avenue to the Grand Concourse. • Cycling: This is discussed in further detail in Chapter 9 (Traffic, transport and access). The closest bicycle path runs along Elizabeth Street and past Eddy Avenue Plaza towards Belmore Park. A minor cycle path is identified on the western ramp system and western forecourt. A limited number of bicycle parking spots are located around the Sydney Terminal Building. • Public Transport: The Sydney Terminal Building provides customers with access to, and interchange with, rail (suburban and regional), light rail, bus (local and regional), Coach (regional), drop-off zones, short-term parking, and metro (starting 2025).
Public space	<p>There are six existing public space areas within the project area:</p> <ul style="list-style-type: none"> • The Grand Concourse: This is the major public hall within the Sydney Terminal Building and provides the principal covered arrival area for passengers, particularly those arriving or departing on regional, interstate or intercity services. It is the

Place design outcomes	How the existing environment currently reflects the place design outcomes
	<p>largest and most significant space within the Central Station precinct and is naturally lit and ventilated.</p> <ul style="list-style-type: none"> • The Porte Cochere: This north-facing covered space is significant in size and looks over Eddy Avenue and Belmore Park from the upper level of the Sydney Terminal Building. It accommodates the light rail platforms, a small number of carparks for service and emergency vehicles, and forms the arrival point for people entering the Sydney Terminal Building from the northwest entry. • Eddy Avenue Plaza: This is the major public space on the eastern side of the Sydney Terminal Building and provides an important station entry location for both the Grand Concourse and the Central Electric Building. There are significant view lines through the plaza between Belmore Park, Eddy Avenue and the Central Electric Building station entry. • Eddy Avenue Colonnade: This north-facing colonnade addresses Eddy Avenue and is significant in scale and materiality (sandstone). It forms an important pedestrian link between Surry Hills and Haymarket as the footpath to Eddy Avenue is located within the colonnade. The southern edge of the colonnade is defined by a series of retail spaces, an entry to the office accommodation on the upper levels of the Sydney Terminal Building and blank sandstone walls for station service areas. The northern edge of the colonnade is defined by a series of sandstone columns and an infill of palisade steel fencing that forms a safety barrier to the light rail along Eddy Avenue. • Pitt Street Colonnade: This west-facing colonnade addresses Pitt Street and is secondary in scale to the Eddy Avenue colonnade with a reduced width. A number of the former retail spaces that define this edge of the station building have been reconfigured for station services or transport functions including coach booking offices. The footpath along this edge of the station extends past the alignment of the colonnade. The colonnade is currently predominantly used as a waiting area for coach passengers. • Western Forecourt: The Western Forecourt provided the main point for people arriving or departing via taxi or car with the ramp system linking north and south to Pitt Street. This requirement decreased with the introduction of the Circle Line with many passengers interchanging at the station between city and regional lines. The Western Forecourt is still configured for vehicles including cars, taxis and coaches. The original extent of landscaping and trees remains to the south of the forecourt.
Views and vistas	Given the prominence of the Central Station Clocktower, there are a wide range of significant views to and from the Sydney Terminal Building. The views that are relevant for this project are discussed in Chapter 11 (Landscape and visual amenity).

10.1.4 Movement and place

The existing movement around and through the Sydney Terminal Building is maintained and improved with the upgrade of the existing entries at the northwest corner and between Eddy Avenue Plaza and the Grand Concourse and the introduction of two further entries on Eddy Avenue. Increased connectivity is proposed for the lower level with the introduction of an east-west link. These changes are described in detail in Section 10.3.5.

The project does not extend into platform or concourse areas beyond the paid gate line of Central Station.

Broader movement patterns around the Sydney Terminal Building are not affected by the project including pedestrian, cycle, vehicular and public transport. Access and Connectivity diagrams are included in Section 8 of Appendix I (Place and urban design assessment).

10.2 Design process

The design process has been an informed, collaborative, and iterative one, involving multiple meetings and workshops with a multidisciplinary team. This has had a positive impact on the design by allowing each design element, options and strategies to be reviewed and assessed collectively, especially in terms of heritage, urban, architecture, transport and servicing constraints and opportunities, to generate integrated, sensitive and efficient design solutions. This is particularly important for a building as complex as the Sydney Terminal Building.

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. These benefits include:

- Identifying project cost savings through less invasive and structurally efficient solutions that offset the recovery, restoration or completion of significant heritage elements that were not initially in the design brief

such as the former Booking Hall, the completion of the eastern awning, and the restoration of the Central Electric Building

- Introducing new station entrances between the Grand Concourse and Eddy Avenue and Eddy Avenue Plaza within existing entry portals that worked with the architectural and structural logic of the building resulting in the removal of less original heritage fabric and a more sympathetic design and structural solution
- Establishing an east/west retail link through the lower level of the building that worked largely with the existing pattern of openings and the series of levels across the site to reduce the extent of original fabric requiring removal while still achieving the urban connectivity and activation proposed in the brief
- Establishing retail servicing strategies that began with identifying the building constraints including the offset in building alignments, the location of major structural walls, and the locations of existing penetrations 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.

The project has been designed collaboratively across multiple disciplines, including:

- Architecture
- Urban design
- Heritage
- Connecting with Country
- Engineering services
- Wayfinding specialists
- Landscape architecture
- Building codes consultant
- Mobility design consultant
- Fire engineer
- Constructability services.

A series of questions relating to the following topics were considered throughout the design process:

- Designing with Country
- Acknowledging history
- Rethinking stations
- Architecture
- Precinct considerations.

These questions are outlined in Section 6.2 of Appendix I (Place and urban design assessment).

Given the complexities of this project, and the requirement to develop guidelines that are applicable to the entire design (including Architecture, Urban Design, Heritage, Connecting with Country, Engineering Services and Wayfinding) the design has collectively developed a series of questions that are specific to Central Station to inform this design process. These questions reflect and align with the design objectives in [Better Placed](#) (GANSW, 2017) but are more detailed, specific and relevant to a project as complex as this, and will continue to evolve through design development to address issues and challenges as they emerge.

The outcome of outlining these questions during the early stages of the design has allowed both the questions and the design proposal to evolve as more detailed advice, analysis and feedback is received and developed. This series of questions has been well received by stakeholders including the State Design Review Panel (SDRP).

10.2.1 State Design Review Panel

The design was also reviewed by the SDRP, who are [independent qualified professionals](#) that offer advice on State-significant projects in NSW to ensure they provide consistent design quality against guidelines set by the Government Architect NSW (GANSW) including [Better Placed](#) (GANSW, 2017) and [Draft Connecting with Country Framework](#) (GANSW, 2020b). There have been three review panel sessions held to date (7 July 2022, 29 September 2022, and 17 November 2022), with observers from:

- NSW Heritage Council
- Department of Planning and the Environment
- City of Sydney
- Transport for NSW (various departments)
- Greater Cities Commission
- GANSW.

Two more SDRP sessions are scheduled for 2023 as the design progresses through design development.

A full summary of the feedback provided and Transport's response to this feedback during the last three sessions is provided in Section 9 of Appendix I (Place and urban design assessment) including commentary on the adoption or status of feedback. A summary of adopted SDRP recommendations include:

- Increasing the extent of intervention at the northwest corner street level entry with the removal of the northern tenancy and associated masonry structure to improve wayfinding, legibility, view lines and amenity for people arriving and departing the Sydney Terminal Building

- Enclosing the eastern colonnade along Eddy Avenue Plaza and reconfiguring this edge as a façade to provide strong spatial clarity and reinforce the northeast corner
- Reducing the width of the recessed entry along the eastern colonnade that provides access to the east-west retail link to reinforce the prominence and hierarchy of the station entrance
- Using exposed steelwork for the new kiosk building on Eddy Avenue Plaza to offset the masonry expression of the adjoining buildings
- Enclosing the recess between the Central Electric Building and the Sydney Terminal Building to remove safety concerns
- Retaining a central Passenger Information Display in the centre of the Grand Concourse Hall (as per the original location) to best serve passenger wayfinding
- Reducing the density of proposed trees in Eddy Avenue Plaza to declutter the plaza to support its role as a pedestrian thoroughfare and exploring alternative indigenous species to increase shade coverage
- Exploring options for the realignment of the light rail and platforms within the Porte Cochere to improve circulation and passenger amenity.

10.3 Design principles, outcomes, and actions

This section details the principles, outcomes, actions that reflect how the project is consistent with the design guidelines set for the Central Precinct Renewal Program (CPRP) (see above), demonstrates improvements to the built environment and place, delivers access and connectivity, and includes green infrastructure.

10.3.1 Connection to Country

As discussed in Chapter 6 (Stakeholder and community engagement), consultation has been carried out, and will continue to be carried out, with the local Aboriginal community. This has included input into the design process. Balarinji is an Indigenous design and strategy studio who have been engaged to embed the [Connecting with Country Framework](#) developed for the wider CPRP (Balarinji & Transport for NSW, 2022) into this project which was developed through engagement with the local Aboriginal community. This framework includes thirteen themes that are being integrated in various ways and forms across the Precinct (see Figure 10-1).



Figure 10-1: Connection to Country themes (Balarinji)

Balarinji identified seven of these themes as the most relevant for integration with the project (marked with an asterisk above). The remaining themes that were not selected by Balarinji were considered more relevant for future stages of the precinct renewal.

The project responds to the themes in the following ways and has identified specific areas for further investigation, consultation and the commissioning of artworks and interpretative elements as the design develops:

- **A Connection to Sky Country and cosmology** through the design of the Grand Concourse roof to allow for a direct view of the sky during the day and evening

- **A meeting place** provided thorough the development of a multi-purpose event spaces within the Grand Concourse area to provide areas for people to connect in both the former Booking Hall and the Electrical Department
- **Connecting to Country through layers of sandstone** through the design of Eddy Avenue Plaza and entries within Eddy Avenue Colonnade
- **The legacy of Sydney Trains** through an interpretative element within the Interstate Booking Office which responds to the existing Terrazzo floor with a map of Australia
- **Six seasons planting** through the selection of indigenous planting within Eddy Avenue Plaza and the Grand Concourse that has been identified within the [Connecting with Country Framework](#)
- **Opportunity to integrate Welcome to Country** design elements with the entrances to the Sydney Terminal Building and within the Grand Concourse floor (major artwork commission).

Acknowledging and healing will be addressed through ongoing consultation and working groups established by Transport to address the association of Platform 1 and Central Station with the Stolen Generations (see Chapter 7 (Aboriginal Heritage)). This project does not propose or assume what the outcome of this process will be but has taken particular care to not impact Platform 1 or to assume what form the response will take. How this project will respond to this process is a sensitive and ongoing discussion, and will be carried out with Balarinji throughout this process. Indicative locations within this project could include Platform 1, the Grand Concourse, and the Interstate Booking Office. Balarinji have presented the [Connecting with Country Framework](#) to the SDRP with representatives from GANSW to inform them of this ongoing process.

10.3.2 Place principles

The [Better Placed](#) principles for design have been adopted as objectives within the design. The way in which the design has been developed to address these objectives is summarised in Table 10-2. For more detail, refer to Section 6 of Appendix I (Place and urban design assessment).

Table 10-2: Better Placed principles reflected in the design

Better Placed principles	How the design responds to these
Fit (contextually, culturally, local and of its place)	<p>Contextually</p> <ul style="list-style-type: none"> • The project has been designed with a detailed understanding of the historic context including the development and evolution of Central Station. This includes the transport functions the station provides as well as the adverse impacts of the raised platform on the surrounding context in terms of urban connectivity, activation and wayfinding. • The project has been designed with an understanding of the future development context of the Central Station Precinct to support future renewal opportunities (including Tech Central and Central Walk West) but is not contingent on these works. This includes establishing greater north-south connectivity with the introduction of two new entries from Eddy Avenue Colonnade that could eventually support broader precinct links. <p>Culturally</p> <ul style="list-style-type: none"> • The design has considered the cultural role the station has played in Sydney historically, in the present day, and how this can evolve to extend the use, activation and operation of Central Station. This is demonstrated in a number of ways including the recovery, restoration and completion of a number of significant heritage elements including the former Booking Hall, the Central Electric Building and the eastern awning. The project seeks to re-activate the Grand Concourse as a major public room in Sydney and the retail spaces around the station as described in heritage documentation including photography. The project also seeks to understand how stations are evolving internationally beyond their commuter transport functions to provide retail, cultural and event spaces to become important community destinations beyond peak commuter times. • Understanding the significance of Central Station to Aboriginal people, particularly in regards to the legacy of Sydney Trains and the significance of Platform 1 to the Stolen Generations has informed the design proposal. Balarinji have identified seven themes from their Connecting with Country Framework for implementation in this project with areas identified for integration pending further consultation and design development. See Section 10.3.1. <p>Locally</p>

Better Placed principles	How the design responds to these
	<ul style="list-style-type: none"> The project has been designed to upgrade the public domain within and around the station – Eddy Avenue Plaza, the Eddy Avenue Colonnade and the Pitt Street Colonnade – including an increase in planting, tree canopy, public seating and improvements the character and amenity of spaces. These upgrades are described in detail in Section 10.3.5. The restoration and re-opening of the existing shops and the creation of new retail, food/beverage, cultural and event spaces will benefit the local area and assist in re-integrating the station in the southern CBD. The upgrade and introduction of new entrances will improve wayfinding, access and circulation for local users of the station. These upgrades are described in Section 10.3.5. The project has been designed to be sympathetic to the existing Sydney Terminal Building, the surrounding local area with any additions designed to minimise impact of important local views. <p>Place</p> <ul style="list-style-type: none"> One of the primary drivers for the project is to re-establish Central Station as a place and destination within Sydney that can attract visitors beyond its existing transport functions. This will be achieved in a number of ways including the restoration and rejuvenation of the Grand Concourse including the former Booking Hall, the reconfiguration and upgrade of Eddy Avenue Plaza, and the re-activation and expansion of retail, hospitality and cultural spaces within the Sydney Terminal Building. Most importantly, the project has been designed to be sympathetic to the existing place and to restore and enhance its existing and historic character.
Performance (sustainable, adaptable, and durable)	<p>Sustainable</p> <p>Sustainability has been addressed in a number of ways for this project by:</p> <ul style="list-style-type: none"> Reinstating the original extent of glazing within the Grand Concourse to improve natural daylighting. Extensive environmental testing was carried out to ensure that the resulting heat loads and light levels would not adversely impact the amenity and comfort of the space. Opportunities to improve natural ventilation have been considered and will be developed during detailed design. Re-storing and adaptively re-using the existing building and reducing any new building or additions to a minimum reducing building material usage and waste. Increasing canopy coverage in Eddy Avenue Plaza, including a green roof on the new building to reduce urban heat impacts. Increasing the number of bicycle parking spots around the Sydney Terminal Building to promote active transport. Photovoltaic cells on the Porte Cochere roof have been added to assist in offsetting energy consumption across the precinct. <p>Adaptable</p> <ul style="list-style-type: none"> The project is delivering a series of large multi-function spaces that have the potential to support a range of uses and adaption over time. These spaces include the Central Electric Building, the former Booking Hall and the Electrical Department. Elements within the marketplace food hall are intended to be free-standing pods that can be shifted and changed depending on requirements. This will also allow this space to extend southwards in the future with the completion of the Third Square and Central Walk West. The retail spaces in the lower levels will designed to support a range of tenancy types and sizes with varying levels of servicing and exhaust depending on location and building constraints. These retail tenancies will be considered as smaller pods within a larger space allowing for future churn, adaptation, and reduced heritage impact. The public seating in the Grand Concourse will be designed to be movable (by facility managers) to support special events and large crowds – for example, Easter Show train crowds. <p>Durable</p> <ul style="list-style-type: none"> The project has been designed to retain as much of the existing building fabric as possible with only targeted removal or the removal of unsympathetic non-original

Better Placed principles	How the design responds to these
	<p>elements. The original materials have proven to be very durable given the age of the building and the extent of uses it supports. The extent of new materials will be relatively minor such as the new terrazzo floor in the Grand Concourse, new paving within Eddy Avenue Plaza and the Eddy Avenue Colonnade, and the new building in Eddy Avenue Plaza. These materials have been selected for their durability and to be sympathetic to the original building.</p>
<p>Community (inclusive, welcoming, connected, accessible and diverse)</p>	<p>The project has been designed to address community in a number of ways that are outlined below. One of the key objectives for the project has been to integrate the Sydney Terminal Building and the public spaces around it with the surrounding communities of Surry Hills and Haymarket as the station is currently isolated as a piece of transport infrastructure that is unintegrated with the surrounding urban areas.</p> <p>Inclusive</p> <ul style="list-style-type: none"> • The inclusion of a wider range of cultural, event, retail and food/beverage facilities will make Central Station an attractive destination for people beyond its transport functions. • The reconfiguration and refurbishment of Eddy Avenue Plaza will help to re-establish this plaza as a major public space and urban destination in the southern CBD and it can act as a gathering place for members of the community with public seating, landscaped areas, bike parking and outdoor eating areas. • A wide range of retail/food/beverage tenancies are being considered that will cover a diversity of offerings to a wide cross section of the community. <p>Welcoming</p> <ul style="list-style-type: none"> • The design includes a Welcome to Gadigal Country area through the implementation of art and cultural pieces throughout the Sydney Building Terminal including Aboriginal artwork that is incorporated into floor to the Grand Concourse (see Section 10.3.1). <p>Connected</p> <ul style="list-style-type: none"> • Improving access and connectivity are key objectives of this project including the upgrading or reconfiguration of existing entrances and the introduction of new entrances on Eddy Avenue (see Section 10.3.5). <p>Accessible</p> <ul style="list-style-type: none"> • New accessible toilets will be installed in four locations on the upper and lower levels including a change facility. View lines to the existing lift entry at the northwest corner from the corner of Pitt Street and Eddy Avenue will be improved with the targeted removal of existing building fabric. • A new lift will be included with the new entry between Eddy Avenue Plaza and the Grand Concourse. • A new public lift entry will be provided from Eddy Avenue linking all levels of the building. • Eddy Avenue Plaza will be configured as a large accessible ramped space with level seating areas. • The signage and wayfinding strategy is currently being considered and will be designed in the next stage to support accessible requirements. • All interventions are being considered to improve access and connectivity for people arriving or departing the terminal. These initiatives are described in Section 10.3.5. <p>Diverse</p> <ul style="list-style-type: none"> • The project is deliberately seeking to increase the diversity of activities and functions within the Sydney Terminal Building to establish a destination for the wider community. This includes a wide range of retail, food/beverage, cultural and event spaces distributed across the station including the new marketplace/food hall, the east-west retail link and the Electrical Department multi-purpose space, Eddy Avenue Plaza, and the Grand Concourse. • The recovery and restoration of significant heritage elements including the former Booking Hall and the Central Electric Building, and the adaptive re-use of the lower level, will create a destination of tourists interested in the history of Central Station.

Better Placed principles	How the design responds to these
	<ul style="list-style-type: none"> The implementation of key themes within the <u>Connecting with Country Framework</u> (as outlined in Section 10.3.1) will create a place of welcome, interpretation, meeting and healing for Aboriginal people.
People (safe, comfortable, liveable, and healthy)	<p>Safe</p> <ul style="list-style-type: none"> Crime Prevention Through Environmental Design principles have been applied to the renewal of the Sydney Terminal Building, specifically in the improvement of wayfinding and legibility. This has been substantially improved with this project through the refurbishment, replacement or creation of new entrance locations around the terminal. This is outlined in Section 10.3.4. The relocation of the information kiosk within the Grand Concourse supports clear surveillance lines. <p>Comfortable</p> <ul style="list-style-type: none"> The Grand Concourse upgrades have been designed to improve comfort with an increase in the provision of public seating, the introduction of planting to improve the amenity and character of the space, and the reinstatement of the original glazed skylight to increase natural daylighting without adverse heat impacts. Opportunities to improve airflow and natural cooling are currently under review and will be investigated during detailed design. Upgrades to Eddy Avenue Plaza have been designed to improve amenity through an increase in tree canopy and landscape planting to improve the character and reduce urban heat loads, an increase in the extent of public seating, the completion of the eastern awning to the upper level terrace to provide shade and shelter to support outdoor dining. The provision and design of new toilet facilities on the upper and lower levels will be designed to meet current Transport standards and will improve comfort for all visitors to the Sydney Terminal Building. <p>Liveable</p> <ul style="list-style-type: none"> Not relevant as no housing or accommodation is proposed for this project. <p>Healthy</p> <ul style="list-style-type: none"> The project encourages pedestrian activity with the upgrade and activation of key pedestrian routes including the Eddy Avenue Colonnade and Pitt Street. The project encourages active transport use with the provision of new bicycling parking areas to accommodate a minimum total of 50 bicycles to serve the new uses in the Sydney Terminal Building within the project area, with locations to be confirmed during detailed design. Additional bicycle parking areas will be provided in the broader precinct for new uses and commuters in the future as part of the CPRP.
Working (functional, efficient, and fit for purpose)	<p>Functional and Fit for Purpose</p> <ul style="list-style-type: none"> A key objective for the project team has been to retain and enhance the transport functions of the Sydney Terminal Building by understanding its principal role as a station, and that supplementary retail, hospitality and cultural uses should enrich and activate the environment of Central Station without impacting its core transport functions. This has been achieved by working with stakeholder teams to understand their current and evolving needs and to arrive at design solutions that are sympathetic to the station and its functions. The proposed works are located outside the paid gate line of the station and do not interrupt platform movements. The extent of the proposed marketplace allows for loading dock functions to continue to service the station. Storage and servicing areas for the proposed retail spaces have been provisioned within the lower levels of the building without impacting transport functions. The new public lift and stairs allows public access through all levels without interrupting restricted Transport and Transit Police circulation or functions that are currently being relocated to the eastern wing of the Sydney Terminal Building. The new information kiosk within the Grand Concourse will provide a visible and central location, particularly for visitors using the country and intercity platforms, assisting in wayfinding, orientation and passenger assistance.

Better Placed principles	How the design responds to these
	<ul style="list-style-type: none"> • The reconfiguration of the toilet facilities will improve the amenity, function and accessibility of these spaces. • New works are being designed to comply with current Transport standards where appropriate. This also needs to take into account the heritage significance of the building and specific elements described in the Conservation Management Plan (Transport for NSW, 2022d). <p>Efficient</p> <ul style="list-style-type: none"> • A key objective for the project has been to add as few new elements as possible, and to rely where possible on the recovery, restoration, and adaptive re-use of existing spaces within the Sydney Terminal Building. This has required the team to develop efficient design solutions that seek to de-clutter spaces rather than adding new elements. • The upgrade and introduction of new entries will improve wayfinding and connectivity within the Sydney Terminal Building leading to more efficient circulation. Two existing entries will be reconfigured, and two new entries will be added to Eddy Avenue (see Section 10.3.5). • The transport and concierge functions have been combined to provide a better customer service experience for those travelling to, from and within the project area. • The light rail track will be realigned under the Porte Cochere to provide more room for passengers and to help activate the area.
Value (creating and adding value)	<p>Creating and adding value</p> <ul style="list-style-type: none"> • The project seeks to rejuvenate one of Sydney's most significant heritage buildings. Value has been created and added by recovering and restoring a number of significant heritage elements including the former Booking Hall and the Central Electric Building. The completion of the eastern awning (which was never realised in the original staged construction due to cost constraints) significantly improves the eastern facades and the amenity of the eastern terrace. These elements were not in the original scope for this project but were identified by the project team as important elements and the inclusion of these elements has been achieved largely by identifying cost savings and more efficient solutions with less structural impact elsewhere across the project. • The project creates rejuvenated publicly accessible spaces and uses areas of the building that were previously not accessible by the public. These spaces will house retail, food/beverage and event/cultural spaces that will create a destination within the southern CBD and assist in integrating the project within the surrounding areas. • The project seeks to extend the range of uses within the existing building and extend the hours of operation of the station beyond peak commuter times, thereby generating additional revenue from the facilities.
Look and feel (engaging, inviting and attractive)	<ul style="list-style-type: none"> • Making attractive, engaging and inviting spaces is a key objective for this project in the rejuvenation of the Sydney Terminal Building as a destination within the southern CBD and as a place passengers like to dwell rather than simply pass through. This has informed the design of all areas including the station entrances, public domain, public spaces and internal areas within the Grand Concourse and lower level. • A key strategy is restoring and showcasing the character of the existing buildings and spaces which are some of the most historically significant in Sydney. • New built elements and landscaped spaces have been designed to be sympathetic to the styles and characters of the existing buildings but to be secondary in scale and complimentary in materiality without mimicry. This reduces visual impacts on the existing buildings and creates a more harmonious and unified urban environment. • The proposed new elements are to be designed in steel to complement the existing steel structure of the Sydney Terminal Building and to be understood as a legible, contemporary and unified layer of intervention within Central Station rather than a series of ad-hoc interventions.

Better Placed principles	How the design responds to these
	<ul style="list-style-type: none"> • The proposed colours within the Sydney Terminal Building will be informed by historical research and paint studies. The colour of new elements will be considered in this context. • The re-opening of the existing shopfronts will substantially improve the character and activation of Eddy Avenue, Pitt Street and the Grand Concourse, and the introduction of new retail spaces will further activate these spaces to create an engaging and inviting urban environment. • The proposed improvements to the Grand Concourse including the terrazzo floor, the reinstatement of the glazed skylight and the introduction of planting will substantially improve the attractiveness and amenity of this space as a place to dwell rather than pass through. • The refurbishment of Eddy Avenue Plaza will improve the look and feel of this public space, which is currently uninviting as it lacks landscape amenity and does not have sufficient quality retail activation. The project increases the width of the plaza, increases planting and tree canopy, includes public seating areas, café seating areas, and upper-level seating in the new building and the existing eastern terrace, and creates clearer sight lines to the Central Electric Building.

10.3.3 Safety and security principles

Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach of crime prevention that uses urban and architectural design and the management of built and natural environments. CPTED strategies aim to reduce victimisation, deter offender decisions that precede criminal acts, and build a sense of community among inhabitants so they can gain territorial control of areas, reduce crime, and minimise fear of crime.

CPTED principles have been applied to the renewal of the Sydney Terminal Building, specifically:

- **Wayfinding and Urban Legibility:** This has been substantially improved through the refurbishment, replacement or creation of new entrance locations around the Sydney Terminal Building. See Section 10.3.5 for detailed descriptions of these entries. The proposed works at the northwest entry include the removal of building fabric to create direct view lines between the existing vertical transportation and the adjoining public streets or spaces to provide a more legible and direct entry sequence for people arriving or departing Central Station. Removing columns and wall elements in this area also create a safer environment with less potential for people to hide or conceal themselves.
- **Reconfiguring Eddy Avenue Plaza:** The upgrade of Eddy Avenue Plaza includes the infill of the colonnade to better define the western edge of this public space and to create less areas for concealment.
- **Increasing urban activation:** A major driver for the project is the intention to increase urban activation around and within the Sydney Terminal Building including retail, hospitality, cultural and event spaces to compliment the existing transport functions. This specifically includes the public domain around the Sydney Terminal Building including the Eddy Avenue Colonnade and Eddy Avenue Plaza. A mix of uses are being considered that will extend the activation of Central Station beyond peak commuter times to create a destination within the southern CBD for the surrounding communities and visitors. A major component of this strategy is the re-opening of the retail shops that address Eddy Avenue and Pitt Street and the introduction of new food and beverage spaces within Eddy Avenue Plaza.
- **Increasing Pedestrian Activity on Eddy Avenue:** The two new escalators between the Grand Concourse and Eddy Avenue create a direct and clear public link between the hall and the public domain, and additional circulation and movements resulting from this entry location will support greater activation of Eddy Avenue to support a safer urban environment.

10.3.4 Built environment and place

The following section describes the design, outcomes, and actions taken to protect and improve the built environment and place.

Built form

As discussed earlier in Table 10-2, the project responds to, and respects, the existing built form by protecting and enhancing the heritage values of the Sydney Terminal Building. For example, the mezzanine floor within the Former Booking Hall, which is currently blocking the ornate ceiling and plasterwork from view, will be removed to better showcase and celebrate the historical architecture. The reinstatement of the glazing on the Grand Concourse roof will also help to better reflect the original design and amenity of the building and will restore views of the clocktower from within the Grand Concourse. The sensitive adaptive re-use of the lower levels and the former Electrical Department as a multi-purpose event space will reveal areas within Central Station to the public that have not been accessible previously. Table 10-3 shows a comparison between the key existing spaces and the proposed design.

Access and connectivity

Improving access and connectivity is one of the major objectives for this project to support the transport functions of the station, and to integrate the Sydney Terminal Building more successfully with the surrounding area. This is considered and achieved in a number of ways including:

- Improving the legibility and wayfinding at existing entrance locations including the northwest corner and Eddy Avenue Plaza:
 - The existing entry at the northwest corner will be substantially improved with the removal of the northern shop and associated structure to create direct view lines between the existing escalators, lift and stair, to Pitt Street and Eddy Avenue. This creates a more legible and direct entry sequence for people arriving or departing Central Station and removes columns and wall elements to create a safer environment with less potential for people to hide or conceal themselves.
 - The new entry between the Grand Concourse and Eddy Avenue Plaza is more direct and legible than the current configuration with two escalators, a lift and stair, and allows clear view lines between the hall and the public domain. The infill of the colonnade along the eastern edge of Eddy Avenue Plaza creates a better defined public space with less places for concealment.
- Introducing two new entries from Eddy Avenue to the Grand Concourse – the eastern entry locates two escalators to create a clear and direct connection between the Grand Concourse and the surrounding street network, and the western entry locates a stairwell and two lifts that connect the Grand Concourse with Eddy Avenue and the upper levels of the building to establish a clear and accessible circulation sequence throughout the building.
- Clarifying and rationalising circulation through Eddy Avenue Plaza between Eddy Avenue and the Central Electric Building to improve wayfinding. The extent of landscape planting, and food/beverage activation within Eddy Avenue Plaza is also increased to improve experience and amenity for commuters and visitors.
- Rationalising the alignment of the gate line at the southern edge of the Grand Concourse to improve legibility, create an interface that is more sympathetic to the existing heritage building, and to increase the amount of usable area within the Grand Concourse.
- Increasing the amount of natural light entering the Grand Concourse by re-instating the glazed skylights, and introducing planting to improve passenger amenity and the character of the space.
- The proposed east-west retail link increases urban activation and connectivity at the lower level and creates a precinct destination to complement the existing station uses.

Public spaces

Upgrading and activating the following public spaces within and around the Sydney Terminal Building are integral to the success of this project.

Eddy Avenue Plaza

The plaza is increased in width by removing the existing vehicle ramp along the eastern edge and the levels across the plaza are consolidated to create a single accessible ramp with clear and direct view lines and circulation paths between Eddy Avenue and the station entrances within the Central Electric Building and the Sydney Terminal Building. The plaza is decluttered by removing the series of fire booster cabinets and retaining walls to support clearer view lines and circulation paths. A new two-storey building replaces the existing series of ad-hoc kiosks and provides indoor and outdoor café seating. The two-storey form has been designed to allow clear view lines from Eddy Avenue to the façade of the Central Electric Building. Planting has been consolidated within a series of planter beds that run parallel to the ramp that will be designed to support six seasons planting. The tree layout is informed by circulation paths through the site and the symmetry established by the Central Electric Building. The former colonnade that ran along the western edge of the plaza has been reconfigured as a retail zone to define this plaza edge. A new canopy has been added to the eastern terrace that overlooks the plaza to complete an unrealised heritage element and to improve the amenity and character of the public domain.

The Grand Concourse

The hall of the Grand Concourse is the most significant public space within Central Station. A number of strategies have been included to improve its amenity, character and vibrancy including reinstating the glazed skylights to the roof to increase natural light, the introduction of planting, the refurbishment of the former Booking Hall, the realignment of the gate line to increase usable area, relocating the information kiosk into a more accessible and visible location, substantially increasing the extent of public seating, reinstating the original colour scheme, relocating the toilets to reduce their impacts, increasing the amount of retail and food/beverage tenancies within and around the hall, and replacing the existing floor with an artwork integrated with a new terrazzo floor to form a Welcome to Country. All of these strategies have been developed to be sympathetic to the original building.







Views and vistas

Views and vistas within the Sydney Terminal Building will be retained or enhanced. Improvements to view lines at the existing and proposed station entries have been described in previous sections. The proposed reconfiguration of the

Passenger Information Display within the Grand Concourse increases sightlines across the space by removing the large black box that currently sits on top of the sandstone walls to the stairwell within the space.

Chapter 11 (Landscape and visual amenity) provides further detail on how views and vistas, particularly those external to the Sydney Terminal Building, have been protected and enhanced.

Table 10-3: Design visualisations for key areas

Existing state	Proposed visualisation
Grand Concourse	
	
Former Booking Hall	
	
Eddy Avenue Plaza	
	

Northwest Entrance (corner of Pitt St and Eddy Avenue)



10.3.5 Access and connectivity

The following section describes the principles, outcomes, and actions that have been included in the design to help improve movement, access, and connectivity. It also shows how the project will change access to public spaces, community facilities, and active and public transport.

Movement, access, and connectivity improvements

Access will be improved throughout the Sydney Terminal Building by providing new and/or improved entrance points between Eddy Avenue, Eddy Avenue Plaza, and the Grand Concourse to help people move between the Sydney Terminal Building and these public spaces.

While the project would not change the surrounding street network, footpaths or public transport services, which is a key focus of the Movement and Place Framework, it will help to create equitable, accessible, safe, and enjoyable places by:

- Improving permeability through the Sydney Terminal Building by increasing the number of access points and routes to reach a destination, including access to different levels of the building
- Improving the amenity of Eddy Avenue Plaza and Eddy Avenue Colonnade through upgraded lighting, landscaping, paving, and activation
- Upgrading and expanding the retail floorspace within the project area which would help to increase the amount of passive surveillance of public areas (that is, by increasing the number of people within a space an environment is created where people can see and be seen by others which acts as a deterrent to antisocial behaviour)
- Installing additional bicycle parking within Eddy Avenue Plaza to connect with the existing cycle networks surrounding the Sydney Terminal Building.

Further detail on how the project responds to movement and place is provided in Section 8 of Appendix I (Place and urban design assessment).

Public space and community facilities

The project will improve access to, and amenity of, Eddy Avenue Plaza, the Grand Concourse, and the reconfigured Porte Cochere.

A key element will be the creation of a new food hall ‘marketplace’ within the loading dock under the Western Forecourt. This will provide a rejuvenated publicly accessible space with a range of food and beverage outlets with clear and direct access from Pitt Street and the northwest entry to the Station. This marketplace will be lit from above via the existing daylight slots within the Western Forecourt. This marketplace will provide an urban anchor to the west of the station to balance the upgraded Eddy Avenue Plaza to the east.

These rejuvenated public spaces, along with improvements to the existing public spaces and surrounding community facilities, will help to better integrate the Sydney Terminal Building with the surrounding public domain by establishing it as a destination and place of activation and amenity for local residents, rather than as just a train station that people quickly pass through. They will also help integrate the Sydney Terminal Building with the future strategic direction of the wider CPRP by acting as meeting places for the different communities within the surrounding area. This is discussed in further detail in Chapter 13 (Socio-economic).

Active and public transport

The proposed design aims to improve access to public transport through the strategies described above.

Fifty bicycle parking spaces are proposed around the Sydney Terminal Building distributed across Eddy Avenue Plaza, Pitt Street, and the Western Forecourt adjacent to the clocktower. These spaces will support visitors to the new retail, hospitality, cultural and event spaces.

Access to public transport services will be improved once the project is operational. This is due to the elements of the design providing new and attractive entry points into the Sydney Terminal Building and consolidating gate lines at the Grand Concourse to better direct people to the platforms. This will be achieved by removing walls, improving lighting, installing signs, creating sight lines and new information kiosk.

Modal conflicts

The project has been designed to mitigate the potential conflicts between different modes of transport (for example, walking, rail, light rail, and vehicles) that may be caused by the proposed changes to the way people move through and access the project area. This includes:

- Reconfiguration of the northwest entry point to the Sydney Terminal Building to allow more space for people to wait within and reduce the risk of overcrowding at this intersection from people interchanging between the light rail service and the rest of the station
- Reconfiguration of the loading dock on Pitt Street to remove one of the driveway crossing points to minimise conflicts between vehicles and pedestrians accessing the proposed marketplace
- Retain or upgrade the existing fencing along Eddy Avenue Colonnade to separate pedestrians and the light rail service
- Widen the footpath along Eddy Avenue Colonnade to the maximum width possible to accommodate outdoor dining between the existing sandstone columns and while still allowing for pedestrians to walk past easily
- Provide bicycle parking in the northern section of Eddy Avenue Plaza to connect with the existing cycle network that runs along Chalmers Street and reduce the movement of cyclists through the rest of the plaza which may conflict with pedestrians
- Create a more direct and legible access point to the light rail station from the Sydney Terminal Building to reduce the number of people accessing this service by crossing Pitt Street and minimise the potential conflict between pedestrians and vehicles.

As the design progresses, the following items would also be considered to help reduce potential modal conflicts:

- Relocate the light rail stop for the Dulwich Hill light rail line north slightly to allow for a dedicated platform for the light rail service and a separate footpath along the edge of the Sydney Terminal Building to minimise conflicts between pedestrians accessing the Sydney Terminal Building and those using the light rail service
- Relocate some loading dock functions from Pitt Street to the Sydney Trains Yard which is accessed from Regent Street south of the project area and would help reduce conflicts between pedestrians and vehicles.

10.3.6 Green infrastructure design

The following section identifies the principles, outcomes, and actions that have been included in the design to introduce green infrastructure.

Greener Places

The Green Infrastructure for Better Places framework ([Greener Places](#)) was considered in the development of this design. This included the following key principles:

Integration: Combine green infrastructure with urban development and grey infrastructure

- Eddy Avenue Plaza and Grand Concourse implement wider environmental, social, and economic benefits from green-grey integration of the wider Belmore Park and the cities open spaces
- The design is a balance between recreational and functional requirements of open spaces with greening objectives
- Eddy Avenue Plaza has enabled use of publicly owned assets such as disused railway access to increase the public benefit.

Connectivity: Create an interconnected network of open space

- Eddy Avenue Plaza is enhanced by planting alongside all available footpath locations, including trees where appropriate
- Eddy Avenue Plaza connects the green space networks at multiple scales – Belmore Park, wider Surry Hills, and Haymarket open spaces
- The design enhances physical and functional connections between different green spaces to create an interlinked system.

Multifunctionality: Deliver multiple ecosystem services simultaneously

- Eddy Avenue Plaza, Eddy Avenue and Grand Concourse has multifunctional landscapes that offer ecological, socio-cultural, and economic benefits
- The design has spaces that foster interaction and stewardship, community identity, sense of connectedness and community capacity

- Eddy Avenue Plaza ensures that the parks within our cities contribute to the value and understanding of place
- The opportunity is to create open space as part of urban renewal that connects and enhances the new project through high quality, high-performing green space.

Participation: Involve stakeholders in development and implementation.

- Through the design the engagement with stakeholders has occurred and will continue to occur during detailed design
- Eddy Avenue Plaza, Eddy Avenue improves equity of access to green infrastructure
- Eddy Avenue Plaza widening and new design has encouraged the use of currently underutilised open space corridors for local community use.

Sydney Green Grid

The Sydney Green Grid is relevant to the project as it falls within the 'Harbor City' area and 'Central Spatial Framework'. The southern CBD area has very few connected open space corridors with only small remnant ecological patches.

The project has been designed to:

- Increase access to open space
- Provide cycle parking to help promote healthy and active living
- Create a new high quality public realm
- Add to the Ecological Grid, Hydrological Grid and Recreation Grid.

Green Infrastructure

Green infrastructure involves the inclusion of natural elements such as vegetation and trees into design features (for example, green roofs, living walls, open spaces, canopy cover, and urban forests). The design for this 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. This planting will also help to reduce the urban heat island effect, an effect where the built environment causes the surrounding ground level temperature to be warmer than it naturally would be, by reducing the number of sealed surfaces within the project area. Planting is also indicated within the Grand Concourse itself which is a form of biophilic design and is a type of green infrastructure.

The understory planting in Eddy Avenue Plaza also aims to improve the microclimate. This will create comfortable spaces for people to remain outdoors all year round, and it will help create green spaces.

Tree numbers and canopy cover

The project would help contribute to the Premier's Priority 12 (Greening our city: expand urban tree canopy and green cover across Greater Sydney by planting one million trees by 2022).

Construction of the project would require the removal of the six London Plane trees and two Tuckeroo trees in Eddy Avenue Plaza. However, the project will increase 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 (see Figure 10-2). The Eddy Avenue Plaza and Streetscape and Grand Concourse all contribute to the tree canopy cover.

The tree canopy captures rainwater, water is absorbed into the tree, and can be returned to the air through transpiration. Some of this water will also percolate through the soil and return to the water table. Tree roots also keep soil porous so that surface water can be easily absorbed. Trees produce oxygen, intercept airborne particulates, and reduce smog, enhancing a community's respiratory health. Finally, urban tree canopy provides shade and allow light through depending on the species, offering a home for fauna and providing a sense of relief from the busy civic environment. Dappled light, unique smells, seeds and flowers are all benefits of trees in urban environments.

The plant species proposed for Eddy Avenue Plaza will be selected from the remnant ecologies of the Dry Sclerophyll Forest: Coastal Dune Dry Sclerophyll Forests and Sydney Coastal Sandstone Foreshores Forest to reflect the natural environment of the area.

Eddy Plaza - Canopy Comparison

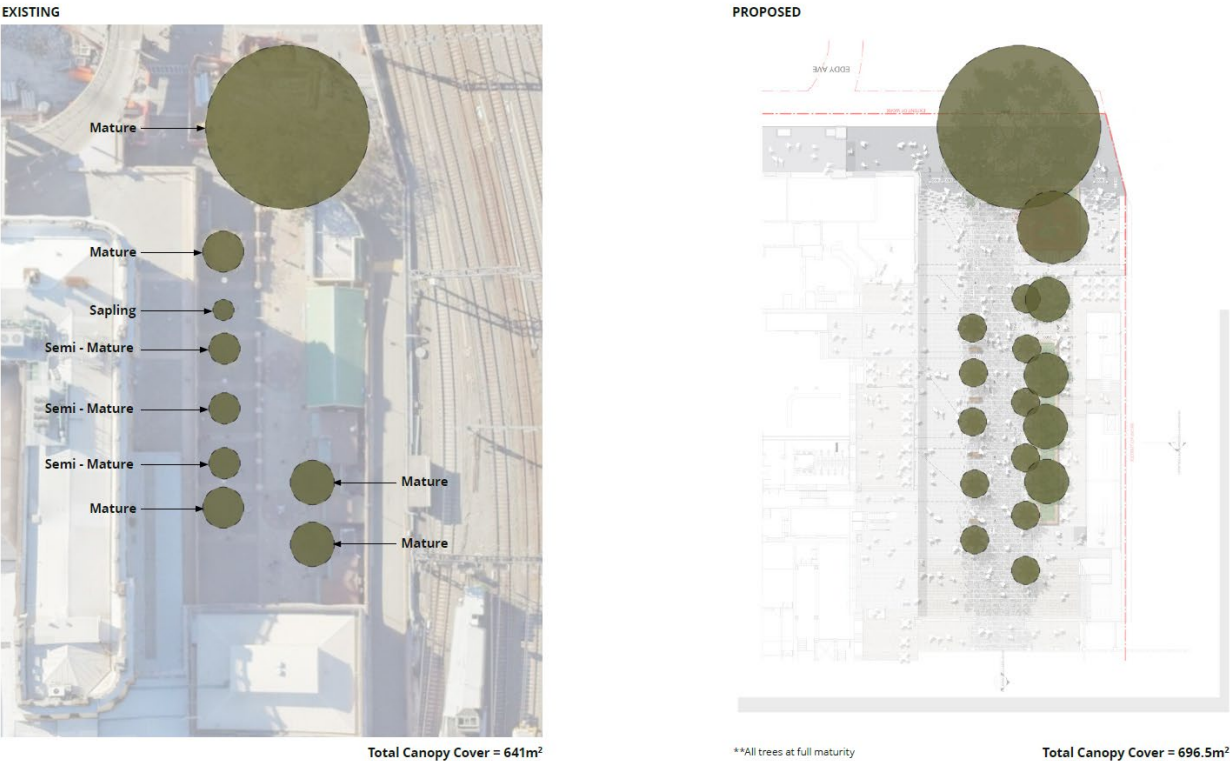


Figure 10-2: Change in tree canopy cover

10.4 Environmental management measures

Place, design and movement impacts will be addressed in the form of management measures. Measures to minimise impacts relating to Aboriginal and non-Aboriginal heritage, traffic, landscape and visual amenity, biodiversity and socio-economic impacts are addressed in other impacts chapters and have not been included here. Table 10-4 lists the measures to manage place, design and movement impacts specifically.

Table 10-4: Environmental management measures – place, design and movement

Ref	Impact / Uncertainty	Environmental management measure	Timing
PDM01	Impact Connecting with Country	The design will continue to be developed and guided with the cultural custodians to help develop the detailed design of the seven Connecting with Country themes in consultation with the local Aboriginal community.	Detailed design
PDM02	Impact Public space and landscape	As the marketplace zone is developed, a retail strategy for Pitt Street will be produced to prioritise activation and consider how the space will interface with the southern servicing zone and develop entry and level transitions.	Detailed design
PDM03	Impact Public space and landscape	Native landscape species will be considered as part of the landscaping strategy for Eddy Avenue Plaza.	Detailed design
PDM04	Impact Public space and landscape	Reflectivity of materials will be considered as part of the selection process for Eddy Avenue Plaza.	Detailed design
PDM05	Impact Public space and landscape	The quality and the sustainability of a material for the new building in Eddy Avenue Plaza will be considered in further detail as the design progresses.	Detailed design
PDM06	Impact Connecting with Country	Acknowledgement of Platform 1 and its significance and history will be incorporated into the future stages of the design process.	Detailed design