



IRIS Visual Planning + Design



Transport Access Program

Beecroft Station

Visual Impact Assessment

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Beecroft Station Transport Access Program Visual Impact Assessment

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Abbreviations

Term	Meaning
CBD	Central Business District
CCTV	Closed Circuit TV
CPTED	Crime Prevention Through Environmental Design
DSAPT	<i>Disability Standards for Accessible Public Transport (2002)</i>
OHLE	Overhead line equipment
TGSI	Tactile tiles or Tactile Ground Surface Indicators

Definitions

Term	Meaning
Concept design	The concept design is the preliminary design presented in this REF, which would be refined by the Contractor (should the Proposal proceed) to a design suitable for construction (subject to TfNSW acceptance).
Detailed design	Detailed design broadly refers to the process that the Contractor undertakes (should the Proposal proceed) to refine the concept design to a design suitable for construction (subject to TfNSW acceptance).
Disability Standards for Accessible Public Transport	The Commonwealth <i>Disability Standards for Accessible Public Transport 2002</i> (“Transport Standards”) (as amended) are a set of legally enforceable standards, authorised under the Commonwealth <i>Disability Discrimination Act 1992</i> (DDA) for the purpose of removing discrimination ‘as far as possible’ against people with disabilities. The Transport Standards cover premises, infrastructure and conveyances, and apply to public transport operators and premises providers.
Out of hours works	Defined as works outside standard construction hours (i.e. outside of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and no work on Sundays/public holidays).
Overhead line equipment	A system of masts and overhead wires used to supply electricity to trains and light rail vehicles.
Rail possession	Possession is the term used by railway building/maintenance contractors to indicate that they have taken possession of the track (usually a block of track) for a specified period, so that no trains operate for a specified time. This is necessary to ensure the safety of workers and rail users.
Sensitive receivers	Land uses which are sensitive to potential noise, air and visual impacts, such as residential dwellings, schools and hospitals.
Sydney Trains	From 1 July 2013, Sydney Trains replaced CityRail as the provider of metropolitan train services for Sydney.
The Proposal	The construction and operation of the Beecroft Station upgrade project.
Zincalume	Aluminium-Zinc coated sheet steel

1.0 Introduction

IRIS Visual Planning + Design were commissioned by Transport for NSW to undertake an assessment of the visual impact of a proposed accessibility upgrade at Beecroft Station. Beecroft Station is on the Main Northern Line (T1 service), about twenty kilometres north west of Sydney CBD. This visual impact assessment has been prepared to inform the Review of Environmental Factors (REF) for the Proposal.

Beecroft Station has been identified for inclusion in the Transport Access Program for a precinct accessibility upgrade as it currently does not accommodate mobility impaired access to rail services, or meet key requirements of the Disability Standards for Accessible Public Transport (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

The proposed upgrade would include two new lifts, one at the island platform and one at the Wongala Crescent station entrance, connecting to an existing subway. Other proposed improvements include upgrades to the stairs, kiss and ride, taxi zone, signage and tactile indicators, and other associated public domain improvements.

Objectives of the Transport Access Program

The Transport Access Program is an initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure.

Key benefits include:

- Stations that are accessible to people with a disability, limited mobility and parents with prams
- Modern buildings and facilities for all modes that meet the needs of a growing population
- Modern interchanges that support an integrated network and allow seamless transfers between all modes for all customers.

2.0 Study scope

This visual impact assessment identifies the potential visual impacts of the Proposal on views to the station from surrounding areas. The study area for this Proposal extends from Wongala Crescent in the west to Sutherland Road in the east, Chapman Avenue in the north, and Copeland Road in the south.

This assessment is based upon a viewpoint assessment, identifying and assessing views that represent the range of publicly accessible views to the Proposal. This assessment includes views from surrounding commercial areas, footpaths and streets, parks, and the Beecroft Station and commuter car parks.

This assessment includes:

- the identification of the existing character of the station precinct
- a description of the visual character of the Proposal
- an individual viewpoint assessment.

The viewpoint assessment includes identifying the sensitivity of the view and the visual magnitude of change that is proposed. These factors are then combined to determine a level of impact.

The assessment has identified the impacts of the Proposal during the day and night, and throughout construction and operation. In particular, this assessment considers the visual impacts created by works as seen within the context of the local heritage listed buildings and adjacent bushland corridor from a landscape character perspective. Detailed consideration of the potential heritage impacts have been addressed separately as part of the REF in the *Statement of Heritage Impact Assessment – Beecroft Station* [Extent Heritage, 2018].

This assessment is based on Concept Drawings prepared by CCG Architects: Beecroft Station Upgrade TAP-150052-AR-001-0301, 12/02/2018, Architectural plans and sections.

3.0 Station location and description

Beecroft Station consists of two suburban lines, with an island platform. (refer Figure 3-1) A third line is located on the western side of the rail corridor. This line was recently constructed as part of the Epping to Thornleigh Third Track Project and is used for freight trains.

The station platform is currently accessed by a pedestrian tunnel to the north of the station. A stair and ramp arrangement connect the pedestrian tunnel to Wongala Crescent in the west, and a footpath leads from the tunnel to

Sutherland Road in the east. The platforms are accessed via stairs rising from the subway.

The station precinct includes two commuter car parks located on Wongala Crescent, to the northwest, and on Sutherland Road, to the southeast of the station.

A zebra crossing at Wongala Crescent links the station to the local shopping precinct and a taxi bay on Hannah Street. Similarly, a zebra crossing at the southern end of the car park on Sutherland Road provides access to the station from residential areas to the east.



Figure 3-1 Site location

4.0 The Proposal

Proposal components

The Beecroft Station Upgrade aims to provide improved integration and access to, within and around the station precinct for all users, including persons with impaired mobility.

The Proposal includes:

- construction of two new lifts between the existing pedestrian walkway and Beecroft Station's island platform, and raising of the existing canopy roof of the booking office by about three metres to accommodate the lift shaft
- modification to the existing non-compliant ramp from Wongala Crescent to provide an accessible path of travel from Wongala Crescent to the station platform. Modifications would include re-grading the existing walkway and stairs
- provision of an extension of the platform over the existing staircase, extension of the western platform (Platform 2) and movement of the existing platform fence/gate to the northern end of the platform to accommodate a waiting and circulation area in front of the new lift
- upgrades to accessible parking spaces within the Sutherland Street car park to allow for two accessible parking spaces
- upgrade of the existing footpaths including along the eastern side of Wongala Crescent and between the Sutherland Street car park and Beecroft Station
- provision of a new kiss-and-ride zone along Wongala Crescent
- relocation of taxi zone from Hannah Street to Wongala Crescent, adjacent to bus stop

- relocation of the communications room to the existing space adjacent to the family accessible toilet within the station building
- landscaping works around the western lift shaft and along eastern side of Wongala Crescent
- ancillary works including adjustments to lighting, electrical upgrades, minor drainage works, new seating, improvement to station communications systems (including CCTV cameras), hearing loops, wayfinding signage and installation of tactile ground surface indicators (TGSIs).

Subject to planning approval, construction is expected to commence in 2019 and take around 12 months to complete.

Two small trees on Wongala Crescent would be removed and all other trees within the station precinct would be retained. Some understorey planting and garden areas in the vicinity of the western station entry would also be impacted during construction. These garden areas would be reinstated with new planting upon completion of the works. The bushland to the east of the station would be not be altered.

Architectural design

The design of the lifts would be sympathetic to the heritage precinct. Whilst the design and finishes are indicative and are subject to detailed design, the following describes the key features of the architectural design:

Island platform lift

An additional storey would be added to the former booking office building to incorporate a lift. This would include:

- glazed walls to the north and south
- perforated screens to the east and west
- reinstatement of the existing heritage roof
- an extended platform to meet the lift entry, relocated platform end fence and gate

- reconfiguration of the platform around the lift and creation of a new lift lobby in front of the lift
- an extension to the platform awning to meet the new lift
- new mesh balustrade around stairs.

Western lift

A new lift, including:

- glazed walls to the north and south of the lift shaft and perforated metal screens to the top of the lift shaft for ventilation
- perforated metal screens to the east and west.



Figure 4-1 View from Wongala Crescent, Artists impression (Note: Designs and finishes are indicative and are subject to detailed design)

Construction

A separate construction site would be established for each lift and there would be construction support sites in adjacent areas.

A temporary construction compound would be required to accommodate a site office, amenities, laydown and storage area for materials. An area for a construction compound has been proposed adjacent to the rail corridor to the north of Beecroft Station, with access via Sutherland Drive (refer Figure 4-2). Further temporary laydown areas and construction car parking may be located at the southern end of the station car park on Wongala Crescent, or the northern end of the station car park on Sutherland Road.

The area nominated for the compound is on land owned by Sydney Trains. Impacts associated with utilising this area have been considered in this assessment.

The works would take approximately 12 months to complete. The station would remain operational for the duration of the works (outside of scheduled track possessions), with customer accessible areas maintained around the construction works throughout the duration of construction. While some footpath widths may be reduced, with the exception of scheduled track possessions, it is not expected that customer access to the pedestrian subway and station platform would be restricted / closed during construction. If any changes were required to pedestrian access, signage would be installed to notify pedestrians.

The construction sites would be enclosed in temporary security fencing and hoarding. The machinery and activities occurring on site would include excavators, cranes, heavy and light delivery vehicles, concrete trucks and pumps, and other typical construction equipment.

The majority of works required for the Proposal would be undertaken during standard (NSW) Environment Protection Authority (EPA) construction hours, which are as follows:

- 7.00 am to 6.00 pm Monday to Friday
- 8.00 am to 1.00 pm Saturdays
- no work on Sundays or public holidays.

Certain works may need to occur outside standard hours and would include night works and works during routine rail possessions which are scheduled closures that would occur regardless of the Proposal when part of the rail network is temporarily closed, and trains are not operating. Notification would be provided to the community in advance of any works scheduled to occur outside standard working hours.



Figure 4-2 Construction Plan

5.0 Planning context

There are several state and local government planning documents which provide relevant guidance in relation to the landscape character and visual values of the site.

State government guidance

Transport for NSW

The NSW Government is committed to the development of a customer focused transport network to help it achieve its economic, social and environmental objectives. Good urban design can help achieve the NSW Governments aims for the rail systems of NSW. The urban design principles contained in these documents explain how it applies to specific elements of rail infrastructure and the precincts around them.

These documents include:

- *Around the Tracks: Urban Design for Heavy and Light Rail*
- *Managing Heritage: issues in rail projects guidelines*
- *Creativity Guidelines: for transport systems*
- *Commuter Car Parks: urban design guidelines*
- *Sustainable design guidelines, Version 4.0*

The *Sustainable design guidelines* refers to eight principles, drawn from the Interim version of the Urban Design best practice guideline *Around the Tracks urban design for heavy and light rail*. These principles are:

1. *Draw on a comprehensive site and context analysis to inform the design direction.*
2. *Provide value-for-money design solutions that achieve high quality low maintenance architectural and urban design outcomes that have longevity.*
3. *Provide connectivity and permeability for pedestrians.*
4. *Principle 4 Integrate the project with the surrounding area.*

5. *Maximise the amenity of the public domain.*
6. *Protect and enhance heritage features and significant trees.*
7. *Maximise positive view opportunities.*
8. *Design an efficient and functional transport solution which enhances and contributes to local amenity and prosperity.*

Projects are required to outline how they have addressed each of these principles at a minimum as part of their project UDLP.

The office of the NSW State Government

The office of the NSW State Government Architect has prepared a suite of documents titled 'Better Placed' which aim to improve the urban design quality of places in NSW. These documents include:

- *Better Placed: An integrated design policy for the built environment of NSW (2017a)*
- *Better Placed: Draft Good Urban Design Strategies for realising Better Placed objectives in the design of the built environment (2017b)*
- *Better Methods: Evaluating Good Design, Implementing Better Placed design objectives into projects (2018)*

These documents are intended to inform the design, planning, and development of the built environment in NSW. The overriding policy establishes the objectives and expectations in relation to design and creating good places.

The policy includes seven distinct objectives for the design of the built environment. These objectives apply to the design of landscapes, buildings and our public domain and aims for design which is 'healthy, responsive, integrated, equitable.'

The objectives are:

- *Better fit – contextual, local and of its place*
- *Better performance – Sustainable, adaptable and durable*
- *Better for community – Inclusive, connected, and diverse*
- *Better for people – Safe, comfortable and liveable*
- *Better working – Functional, efficient and fit for purpose*
- *Better value – Creating and adding value*
- *Better look and feel – Engaging, inviting and attractive*

These objectives are expanded upon in the Strategy and Evaluation documents.

The '*Better methods*' draft working paper lists requirements that can be used as criteria for evaluating a project. These criteria are based upon the seven design objectives from the Better Placed policy.

The principles identified in the '*Better Methods, Evaluating good design*' paper have been used in this Proposal for the evaluation of the urban design impacts of the Proposal. (Refer Section 6 - Methodology)

Local Government guidance

The site is located within the Hornsby local government area. The *Hornsby Local Environmental Plan* (Hornsby Shire Council, 2013a) and the *Hornsby Development Control Plan* (Hornsby Shire Council, 2013b) provide some specific guidance for the site. Relevant clauses from these documents are summarised in the following sections.

Hornsby Local Environmental Plan (2013)

The *Hornsby Local Environmental Plan 2013* (LEP) includes land use zoning, identifies heritage areas and maximum heights for development. These are described in the following paragraphs.

Beecroft Station and the railway corridor is included in the Infrastructure (Railway) zone (SP2), the Beecroft local centre (B2) is located to the west of the station, and high density residential (R4) immediately north of Beecroft local centre. These land use zones do not include any objectives that are relevant to landscape and visual impact.

However, the Low Density Residential zone (R2), which covers the areas surrounding the Station, east of Sutherland Road, north of Chapman Road and west of Beecroft Road, is a part of the *Beecroft—Cheltenham Heritage Conservation Area*. This area includes several buildings and streetscapes listed on the local heritage register.

The LEP identifies and sets out the direction for heritage items in the study area. The *Beecroft Railway Station Group* (142) is identified in the LEP. This listing includes the Beecroft railway station building, subway and former booking office, platforms and platform shelters, overbridge, surrounding park and garden areas, and Beecroft-Pennant Hills bushland corridor (also listed as a local heritage item on the NSW OEH Heritage Register, and on the Railcorp Section 170 Register). The statement of significance identifies Beecroft railway station as having ... *a high degree of aesthetic significance and the station building is a good example of early twentieth century railway station design with fabric and details typical of this period throughout the Sydney region*'.

There are several areas of vegetation identified as local heritage items. These are the Bushland in railway land —Beecroft to Pennant Hills (139) and Bushland at Wongala Crescent road reserve (688). The Village Green, Boer War Memorial, World War I and II Memorials (54) are also located to the southwest of the station.

In addition, the following local heritage items are located in the vicinity of the station, and contribute to the character of the station precinct:

- ‘Treasure House’, 1–3 Wongala Crescent (150)
- Beecroft Community Centre, 111 Beecroft Road (53)
- Copeland Road (east) Road reserve
- Houses at no.1 and no.2 Wandeen Avenue (146, 147)
- House at no.2 Malton Road (115)
- Street trees and bushland in road reserve of Malton Road (114).

The objective for heritage, is to ... *‘to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views’* (clause 5.10).

The LEP sets out the maximum building heights allowable in the study. The maximum heights allowable in the areas surrounding the station are:

- 17.5 metres, applies to areas within the commercial precinct (B2) and high density residential (R4) immediately west of the Station
- 8.5 metres, applies to low density residential (R2) and recreation zones (RE1) surrounding the station.

Hornsby Development Control Plan (2013)

Council have prepared a Development Control Plan (DCP) to provide further support to the Hornsby LEP. This document has been adopted by Council.

A key objective of the DCP is to: ... *“protect and enhance the natural and built environment, and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from development”* ... and ... *“encourage high quality development that contributes to the*

existing or desired future character of the area, with particular emphasis on the integration of buildings with a landscaped setting” (clause 1A.3).

The study area includes natural features, heritage items, buildings and landscapes that contribute to the identity of Beecroft and the wider local government area of Hornsby.

The DCP has controls which apply to the Beecroft—Cheltenham Heritage Conservation Area, which includes the Beecroft Station. The character statement for the Beecroft - Cheltenham Heritage Conservation Area includes several provisions for contemporary design, including:

- *“be sympathetic to the characteristic built form of the conservation area, particularly in terms of bulk, scale, height, form or materials”* (clause 9.3.1).
- *“built form which responds to the site, locality and landscape and includes appropriate innovation to respond to technical, social, aesthetic, economic and environmental challenges”* (clause 9.6.2).
- *“new development which retains the historic relationship of the railway and shopping centre within the Beecroft/ Cheltenham Heritage Conservation Area”* (clause 9.6.3).

The DCP also states that ... *“the setting of Beecroft Village should be maintained through the retention of significant landscaping and major trees”* (clause 9.6).

6.0 Methodology

Guidance for visual assessment

While there are no specific legislative requirements for the methodology of an assessment such as this in New South Wales, the industry typically refers to the guidance offered by:

- Guidance note EIA-N04 Guidelines for Landscape Character and Visual Impact Assessment, NSW State Government, Roads and Maritime Services (2013)
- The Guidance Note for Landscape and Visual Assessment (GNVA), Australian Institute of Landscape Architects Queensland (2018).

The methodology used for this Proposal is described in Section 7 and conforms generally with the direction offered by these guidelines.

This Visual Impact Assessment has identified potential visual impacts during construction and operations of the Proposal, day and night.

The process involved the identification of:

- existing visual conditions
- visual sensitivity
- magnitude of change
- visual impact
- mitigation opportunities.

The potential visual impacts have been classified according to the impact significance criteria set out in this methodology.

Identification of existing visual conditions

The key landscape features of the site have been identified, described and located on a site plan.

A number of viewpoints have been selected to illustrate the visual influence of the site. These views represent publicly accessible viewpoints from a range of locations and viewing situations. Particular attention was paid to views from places where viewers are expected to congregate such as places parks, the station and commercial areas, as well as views to and from heritage items.

Visual sensitivity

Visual sensitivity refers to the nature and duration of views. Locations from which a view would potentially be seen for a longer duration, where there are higher numbers of potential viewers and where visual amenity is important to viewers can be regarded as having a higher visual sensitivity.

In order to ensure the assessment of impact is reasonable, the sensitivity of a viewpoint is considered in the broadest context of possible views. For this reason, the following terminology is used to describe the level of visual sensitivity, refer to Table 6-1.

In the study area, there are views of local and neighbourhood sensitivity. In particular, the views to Beecroft Station and bushland corridor are considered to be of local visual sensitivity due to the heritage values of the station, and the adjoining landscaped areas with native bushland, which provide an *'attractive setting for the station'* and *'visual backdrop to the Beecroft shopping centre and northern rail line'* (NSW OEH heritage register description for Beecroft Railway Station Group and Bushland Corridor, 2009).

Table 6-1 Visual sensitivity levels

Visual sensitivity	Description
National	Heavily experienced view to a national icon, e.g. view to Sydney Opera House from Circular Quay or Lady Macquarie’s Chair, view to Parliament House Canberra along Anzac Parade.
State	Heavily experienced view to a feature or landscape that is iconic to the State, e.g. view along the main avenue in Hyde Park.
Regional	Heavily experienced view to a feature or landscape that is iconic to a major portion of a city or a non-metropolitan region, or an important view from an area of regional open space, e.g. an identified view corridor to a state heritage listed item.
Local	High quality view experienced by concentrations of residents and/or local recreational users, local commercial areas, and/or large numbers of road or rail users, e.g. view to a local heritage listed item such as the views to Beecroft Station and bushland corridor.
Neighbourhood	Views where visual amenity is not particularly valued by the wider community such as views from local streets, pocket parks and small groups of residences.

Visual magnitude of change

Visual magnitude describes the extent of change resulting from the Proposal and the compatibility of these new elements with the surrounding landscape. There are some general principles which determine the level of visual magnitude; these include elements relating to the view itself such as distance, landform, backdrop, and contrast. There are also characteristics of the development itself which are: scale, form and line/alignment. Visual magnitude can result in an improvement or reduction in visual amenity.

A high degree of visual magnitude of change would result if the development contrasts strongly with the existing landscape. A low degree of visual magnitude of change occurs if there is minimal visual contrast and a high level of integration of form, line, shape, pattern, colour or texture values between the development and the environment in which it is located.

In some circumstances there may be a visible change to a view which does not alter the amenity of the view, this would be due to the visual absorption capacity of the surrounding landscape and / or the compatibility of the Proposal with the surrounding visual context. Table 6-2 lists the terminology used to describe the level of visual magnitude of change.

Table 6-2 Visual magnitude of change levels

Visual magnitude of change	Description
Considerable reduction or improvement in visual amenity.	Substantial part of the view is altered. The Proposal contrasts substantially with surrounding landscape.
Minor reduction or improvement in visual amenity.	Alteration to the view is clearly visible. The Proposal contrasts with surrounding landscape.
No reduction or improvement in visual amenity.	Either the view is unchanged or if it is, the change in the view is generally unlikely to result in a change in the amenity of the view. The Proposal is consistent with the character of the surrounding landscape.

Identifying night time visual impacts

The assessment of night time impacts has been undertaken with a similar methodology to the daytime assessment. However, rather than assessing particular viewpoints or landscape features, this assessment draws upon the guidance of the Institution of Lighting Engineers (UK), and their 'Guidance for the reduction of obtrusive light' (2011). This guidance note identifies environmental zones, useful for the categorising of night time landscape settings.

These zones are:

- **E0: Dark landscapes** – universally protected landscapes, UNESCO international dark sky reserves etc.
- E1: Intrinsically dark landscapes – national parks, state forests etc.
- E2: Low district brightness areas – rural, small village, or relatively dark urban locations
- E3: Medium district brightness areas – small town centres or urban locations
- E4: High district brightness areas – town/city centres with high levels of night-time activity.

Specific features of the lit landscape can be described in terms of:

- sky glow – the brightening of the night sky above our towns, cities and countryside
- glare – the uncomfortable brightness of a light source when viewed against a dark background
- light intrusion ('trespass') – the spilling of light beyond the boundary of the property or area being lit.

The level of impact on the precinct has been described according to the impact levels that are identified in Table 6-4.

The precinct is considered to be an area of medium district brightness, as the Beecroft Station and local centre are used at night and are brightly lit, surrounded by lights from residences, street lighting and vehicle headlights.

Assigning impact levels

An assessment of visual impact has been made on a range of representative viewpoints. An impact visual impact level has been determined by combining the sensitivity and visual magnitude level. The following criteria have been used, refer to Table 6-3 and Table 6-4.

Table 6-3 Visual impact levels

		Sensitivity				
		National sensitivity	State Sensitivity	Regional sensitivity	Local sensitivity	Neighbourhood sensitivity
Magnitude	Considerable reduction	Very high adverse	Very high adverse	High adverse	Moderate adverse	Minor adverse
	Minor reduction	Very high adverse	High adverse	Moderate adverse	Minor adverse	Negligible
	No change	Negligible	Negligible	Negligible	Negligible	Negligible
	Minor improvement	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial	Negligible
	Considerable improvement	Very high beneficial	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial

Similarly, for the assessment of visual impacts at night, the following criteria has been applied. (Table 6-4)

Table 6-4 Night time visual impact levels

		Sensitivity				
		E0: Dark landscapes	E1: Intrinsically dark landscapes	E2: Low district brightness	E3: Medium district brightness	E4: High district brightness
Magnitude of change	Considerable reduction	Very high adverse	Very high adverse	High adverse	Moderate adverse	Minor adverse
	Minor reduction	High adverse	High adverse	Moderate adverse	Minor adverse	Negligible
	No change	Negligible	Negligible	Negligible	Negligible	Negligible
	Minor improvement	High beneficial	High beneficial	Moderate beneficial	Minor beneficial	Negligible
	Considerable improvement	Very high beneficial	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial

Mitigation measures

Following the identification of potential landscape and visual impacts opportunities for mitigation were identified. Measures include opportunities to avoid, reduce and manage potential adverse impacts during construction and operation of the Proposal.

Photomontages

Photomontages have been prepared to illustrate the massing and scale of the Proposal. These combine images provided by the architect (created in 3D) with photo editing techniques to create an artist's impression of the project.

The photomontage locations were selected in consultation with TfNSW to represent typical viewpoint locations and illustrate massing and scale.

Assessment of Urban Design and Landscape Character Impacts

For the purposes of this assessment, impacts on urban design and landscape character will include:

- A discussion of the project's consistency with the design intent and strategies identified in the DCP
- An assessment of the impact of tree removal and overshadowing.

7.0 Assessment of visual impacts

Existing visual conditions

Beecroft Station is located between Wongala Crescent and Sutherland Road, Beecroft. The visual importance of the station is reflected in its listing as a local heritage item and on the NSW heritage register (s170 list) as an example of Railway station architecture from 1895 to 1914.

Within the study area, the landform is generally undulating. The landform surrounding the station rises to a small ridgeline in the west. The station is slightly elevated above the existing bushland and Sutherland Road in the east (Figure 7-3), and level with Wongala Crescent to the west (refer Figure 7-1 and Figure 7-2).

The landform rises to the north and south. The railway corridor goes into a cutting and passes beneath the Chapman Avenue overbridge in the north, and Copeland Road overbridge in the south. This cutting reduces as the line approaches the station and becomes an embankment. The cuttings and rail corridor are vegetated in parts, creating a leafy setting to the corridor.

Areas to the east and west of the rail corridor are characterised by a mix of heritage character and modern residential and commercial buildings. The visual conditions of the study area are described in the following paragraphs.



Figure 7-1 Site location plan



Key:

 North Not to scale	 Bushland listed under the RailCorp s170 listing	 Heritage platform
	 Heritage park, streetscape or bushland corridor (Hornsby LEP)	 Heritage platform building

Figure 7-2 Landscape and visual features of the site.

Beecroft Station precinct

Beecroft Station (c. 1895 to 1914) includes an island platform, station platform building with booking office, and subway. The station features a single-storey Victorian style red brickwork platform building, with gabled corrugated iron roof, curved cast iron brackets and decorative timber valances.



Figure 7-3 View to the station looking west from Wongala Crescent



Figure 7-4 View to the station subway entrance looking west from Wongala Crescent



Figure 7-5 View to the Sutherland Road subway entrance looking east from the existing footpath

There are two commuter car parks in the vicinity of the station, one to the northwest on Wongala Crescent (refer Figure 7-6) and one to the southeast of the station on Sutherland Road (refer Figure 7-5).



Figure 7-6 View of the southern commuter car park along Sutherland Road, looking south



Figure 7-7 View of the northern commuter car park along Wongala Crescent looking south

The rail corridor includes overhead wires and associated equipment, and corridor security fencing which create some visual clutter particularly to the north of the station, beside the commuter car park, where there is no planting along the rail corridor.

The station is surrounded by dense corridors of bushland and mature trees to the east and west. The adjoining landscaped areas and native bushland and cultural plantings ... “provide an attractive setting for the station and assist to maintain the historic character of the station, by providing a visual buffer from surrounding urban modernisation”. These trees are also considered to be ... “visually significant for rail passengers”. (NSW State Heritage Register, 2009)

Beecroft local centre and village green

To the west of the station, Wongala Crescent is aligned generally parallel to the railway corridor. Hannah Street extends west from Wongala Crescent and is the main street of the Beecroft village. It is characterised by early twentieth century single and two-storey commercial buildings with retail at street level.

Near the station the streetscape is characterised by mature street trees and a local park and playground located between the rail corridor and Wongala Crescent. The parkland trees include bunya and hoop pines, jacarandas, camphor laurels, London plane trees and brush box. This grouping of trees is a local visual feature associated with views to the station (Figure 7-7 and Figure 7-8).

These trees filter and frame views to the historic station platform buildings in views from Wongala Crescent and Hannah Street. Closer range views to the platform buildings are also partly obstructed by trees, the playground walls and fencing.



Figure 7-8 Station heritage platform building roof glimpsed through trees and over the playground looking northwest from Wongala Crescent



Figure 7-9 View looking west from the station platform

The Beecroft village green is located to the south of the station, between the rail corridor and Wongala Crescent. Upgrades to this park are currently under construction. This park includes a Boer War, WWI and WWII memorial (local heritage items), picnic areas, lawns and ornamental trees. There would be views to the station from this park in the future.

To the north of the station, as the landform rises towards the Chapman Avenue overbridge, there are four to five-storey modern brick residential units in Wongala Crescent. These residences have recently been constructed and would have views over Beecroft Station and the Proposal site.

Bushland corridor

A corridor of bushland, located to the north and east of the station, provides an attractive visual setting to the station and village centre (refer Figure 7-9). This includes a dense corridor of mature native trees in the rail reserve, including Blue Gums, Blackbutt and Grey Ironbark. The corridor also includes more recent plantings of Peppercorn and Silky oaks.

These trees are described in the local heritage listing as having ... *“aesthetic appeal”* which forms a ... *“pleasant backdrop to the train line”* (NSW OEH Heritage Register). The bushland corridor is listed as a local heritage item in the NSW OEH Heritage Register.



Figure 7-10 View looking north towards the bushland corridor, east of the station

Residential areas surrounding the station

The residential area surrounding Beecroft Station are part of the *Beecroft—Cheltenham Heritage Conservation Area* (refer Figure 7-10). To the east of the station, this area is characterised by detached federation style houses, set within treelined streets. Views to the station are generally filtered or blocked by the bushland vegetation along the rail reserve. Several bushland tracks provide informal access to and from the station through this vegetation.



Figure 7-11 View to Copeland Road within the Beecroft—Cheltenham Heritage Conservation Area

Assessment of representative viewpoints

The following viewpoints were selected as representative of the range of views to the site and the proposed development:

- Viewpoint 1 – View north from Beecroft Station platform
- Viewpoint 2 – View south from Wongala Crescent commuter car park
- Viewpoint 3 – View east along Hannah Street
- Viewpoint 4 – View north from Wongala Crescent
- Viewpoint 5 – View north from the Sutherland Road commuter car park.

The location of these viewpoints is shown in Figure 7-11, and an assessment of each viewpoint has been summarised below.



Viewpoint 1: View north from Beecroft Station platform



Figure 7-13 Viewpoint 1: View north from Beecroft Station platform

Existing view: This view along the platform and across the tracks includes the playground and gardens to the west (left), and the platform canopy and stairs to the east (right), in the middle ground of the view. There is a vegetated backdrop to the view including the bushland to the east of the corridor, and street trees along Wongala Street.

The former booking office building can be glimpsed though the intervening canopy structure and is not prominent in this view. The view includes lighting, fences and overhead wires and associated equipment along the rail corridor. Commuter and freight trains are regularly seen travelling across this view.

Visual sensitivity: This view is of local visual sensitivity as the station platform is a gathering place for large groups of people. The Beecroft Station has a local heritage listing.

Visual impact during construction: During construction, two visually separate construction sites would be established in the

middle ground of the view, one at the end of the island platform, and on to the west of the corridor. The works would include construction of the western entry lift and extending the platform and works to add an additional level to the heritage former booking office building. The character of this construction activity would contrast with the heritage and leafy character of the station and be seen in close proximity to commuters.

This would result in a considerable reduction in the visual amenity of this view and a **moderate adverse visual impact** during construction.

Visual impact during operation: To the north (right) of the view, the roof of the former booking office building would be raised to accommodate the new lift structure and the hipped and gabled roofline would be reinstated. The proposed addition to the roof of the former booking office would be a combination of glazing and louvres, contrasting with the heritage brickwork, and allowing views through to the lift. New

handrails and balustrade mesh would be seen around the stairs at the platform level. The existing platform canopy awnings would be retained and extended to meet the new storey of the heritage building, the platform would be extended to create a lift lobby.

To the west (left) of the view, a new lift would be visible between the playground and commuter car park, replacing the existing area of garden. This new structure would be a simple rectangular shape, with perforated metal ventilation panels to the upper section of the eastern elevation and glazing in the mid-section. The roof of the pavilion would rise one story above the rail corridor level. The lift lobby to the south of the lift would be covered by an awning, visible in front of the pavilion in this view. This lift would be viewed against the retained vegetation along Wongala Crescent.

The addition to the former booking office building would increase its visual prominence somewhat, which would improve the character of this view. The western lift structure would be seen in a developed context and be visually contained by the leafy backdrop of trees. The proposed works would be visually compatible with the existing character of the station and adjacent built elements in this view.

This would result in a minor reduction in the amenity of this view and a **minor adverse visual impact** during operation.

Viewpoint 2: View south from Wongala Crescent commuter car park



Figure 7-14 Viewpoint 2: View south from Wongala Crescent commuter car park

Existing view: This view across the commuter car park includes the heritage station platform building, former booking office building and platform canopy in the centre middle ground of the view. The platform canopy structure obstructs the view to the northern elevation of the heritage platform building.

The former booking office building is glimpsed through the intervening fencing and not prominent in this view. Freight and commuter trains are seen intermittently, travelling along the corridor. Light posts and overhead wires and associated equipment add clutter to the view.

Existing trees to the west (right), along Wongala Street, screen the playground. The ramps and stairs at the western entrance to the subway tunnel sits below the level of the car park and are not visible. There is a vegetated backdrop to the view including the bushland to the east (left) of the corridor, and street trees on Wongala Crescent.

Visual sensitivity: This view is of local visual sensitivity as it is located in the station precinct and used by many people throughout the day.

Visual impact during construction: Two visually separate construction sites with would be established in the middle ground of the view, one at the end of the island platform, and to the west of the corridor (right of view). The works would include some demolition for the construction of the lifts, extension the platforms and platform awning, and adjustments to the former booking office. This work would be seen through intervening elements including fences, overhead wires and associated equipment, light posts, and intermittent trains. The character of this construction activity would contrast somewhat with the heritage and leafy character of the station.

This would result in a minor reduction in visual amenity and a **moderate adverse visual impact** during construction.

Visual impact during operation: From this location, the new western lift pavilion would be visible in the middle ground of the view. The lift pavilion would be a rectangular shaped column, rising about one storey above street level. This lift would partly obstruct views to the heritage platform building in the background. The upper portion of the lift would have perforated metal ventilation louvres, with glazing in the mid-section and around the lift lobby, creating a visually light structure. The existing trees would be retained, and the gardens refreshed with planting to improve the Wongala Crescent station entrance.

The roof to the (current) former booking office building, at the northern end of the platform, would be raised to accommodate the new platform level lift. The roof of this lift would rise above the platform awning. A new hipped and gabled roofline would be reinstated, and the visible walls would be louvres (to the west) and glazing (to the north) above the existing brickwork.

Overall, there would be some obstruction of views to the platform station building, which reduces the amenity of the view, however, the visual prominence of the former booking office and station entrance would be increased, improving the heritage character of the view.

On balance, this would result in no change in visual amenity and a **negligible visual impact** during operation.

Viewpoint 3: View east along Hannah Street



Figure 7-15 Viewpoint 3: View east along Hannah Street

Existing view: This view along Hannah Street terminates with a view of the former booking office building (at the northern end of the central platform). The distinctive roofline of this building is a visual feature in this view, framed by mature trees along Hannah Street and Wongala Crescent, and seen against the bushland to the east of the rail corridor. The platform canopies and heritage platform building are screened by the intervening vegetation. The ramps and stairs at the western entrance to the subway tunnel sits below the level of the road and are not visible.

Visual sensitivity: This view is of **local** visual sensitivity as it is a busy retail street and used by many people throughout the day.

Visual impact during construction: Construction at the station would be seen in the background of the view. The works would include works to construct the western lift, reconfigured ramp and stair access and upgrading of the kerbside facilities on Wongala Crescent. Beyond this, there would be some

views to construction of the platform lift, works to extend the platform and platform awning. The view of the former booking office building would be temporarily removed.

The character of this construction activity would contrast with the heritage and leafy character of this view. However, the work would be somewhat screened by intervening vegetation, and viewed at a distance.

This would result in a minor reduction in visual amenity and a **minor adverse visual impact** during construction.

Visual impact during operation: The lift within the former booking office at the northern end of the station platform would be more prominent in the centre, background of this view which improves the view by enhancing this local focal point.

The western lift would be located closer to the viewer, and largely screened by existing street trees on Wongala Crescent and Hannah Street. This new lift would rise one storey above the

street level and be seen adjacent to the two storey commercial buildings on Hannah Street and Wongala Crescent, visible in the foreground of this view. Minor reconfigurations and the provision of a kiss and ride bay on the street would be absorbed into the middle ground of this view.

Overall, the proposed station works would be in character with the developed nature of the station precinct and increase the visual prominence of the former booking office.

On balance, this would result in no change to the amenity of this view, and a **negligible visual impact** during operation.

Viewpoint 4: View north from Wongala Crescent



Figure 7-16 Viewpoint 4: View north from Wongala Crescent

Existing view: This view from the retail street across the road includes the commuter car park in the centre of the view. The station is mostly screened by the dense corridor of trees along Wongala Crescent (right of view) and is not visually prominent. The former booking office, at the northern end of the station platform, is glimpsed over the playground and through the trees. The ramps and stairs at the western entrance to the subway tunnel are below the level of the road and are also screened by vegetation.

Visual sensitivity: This view is of local visual sensitivity as it is a busy retail street and used by many people throughout the day.

Impact during construction: The construction sites would be visible in the middle ground of this view, one at the end of the island platform, and one on Wongala Crescent. The works would include the removal of some understorey vegetation at the western station entry, demolition works and construction of a new lift pavilion. In the middle ground, the

reconfiguration of the ramp and stair access to the subway would be visible, as would works to upgrade the kerbside facilities on Wongala Crescent.

Works to construct the lift within the former booking office may be glimpsed beyond this work and through the existing trees. Whilst some of the work would be screened by intervening vegetation, the character of this construction activity would contrast with the leafy character of this view.

This would result in a minor reduction in visual amenity and a **minor adverse visual impact** during construction.

Impact during operation: The upgraded Wongala Crescent station entrance would be more prominent in this view, located to the east (right) of the zebra crossing. Much of the existing vegetation at the station entrance would be retained and there would be some modified understorey planting and station signage identifying the station entry. The new western lift pavilion would be set back from

the road, and partly screened by existing trees. The station entry would be reconfigured, opening up views to the station. Improved kerbside facilities including a new kiss and ride bay would be seen in the foreground of this view, to the south of the mail zone, in Wongala Crescent. The existing playground and perimeter security fencing would be retained (right of view).

The new platform lift structure at the northern end of the station would be glimpsed through streetscape vegetation. The hipped and gabled roofline of the existing former booking office would be raised to accommodate a lift and the original roof form would be reinstated.

The station buildings would not be prominent in this view, being largely screened by intervening vegetation. Where visible, these new built elements would be generally in character with the developed nature of station and improve the legibility of the station entrance.

This would result in no change in visual amenity and a **negligible visual impact** during operation.

Viewpoint 5: View south from footpath to the east of the station



Figure 7-17 Viewpoint 5: View south from footpath to the east of the station



Figure 7-18 Viewpoint 5: View south from footpath to the east of the station, artist's impression (Note: Designs and finishes are indicative and are subject to detailed design)

Existing view: This view includes the eastern station subway entry in the middle ground of the view, flanked by brick wing walls. The station is located on the top of the embankment, screened by brick walls on top of the embankment. Trains can be seen approaching the station, but the platforms and platform buildings are not visible above the wall. The embankments include some mature trees which also screen the station.

The Sutherland Road commuter car park can be seen in the background, framed by vegetation. The rail corridor overhead wires and associated equipment, lighting and CCTV

posts add visual clutter to this view. Views to surrounding residential areas are screened by the existing vegetation to the east of the corridor (left of view).

Visual sensitivity: This view is of local visual sensitivity as this footpath connects the busy commuter car park and is used throughout the day.

Visual impact during construction: A construction site would be established in the middle and background of the view, at the northern end of the station platform. Work to

construct the lift would be visible above the brick walls.

A construction support site is proposed to be established within the grassed area to the east of the rail corridor (left) and towards the northern end of the commuter car park (associated with proposed works at this location).

The character of this construction activity would contrast with the heritage and leafy character of the view and be seen in close proximity to the viewer.

This would result in a considerable reduction in the amenity of this view, and a **moderate adverse visual impact** during construction.

Visual impact during operation: The grassed area to the east of the station and the commuter car park, in the middle and background of this view, would be returned to its current condition. The extension to the former booking office building would be visible above the brick walls. This built form would be seen against the sky and would be prominent in this view.

The introduction of glazing and louvres to the extension of the former booking office, would reduce the visual mass of the building. The existing vegetation along the rail corridor would be retained and continue to provide screening to the station.

On balance, this new built form would be absorbed into the view, creating a new visual feature, consistent with a view to the entrance of a railway station. Therefore, there would be no change in the amenity of this view and a **negligible visual impact** during operation.

Viewpoint 6: View north from the Sutherland Road commuter car park



Figure 7-19 Viewpoint 6: View north from the Sutherland Road commuter car park

Existing view: This view along a footpath through the commuter car park includes the station in the background, framed by vegetation. The heritage platform building can be seen in the centre of the view, with the roofline and chimney rising above the surrounding fencing and vegetation. The rail corridor, overhead wires and associated equipment, as power lines, lighting and CCTV posts add visual clutter to the background of this view. The platform canopies are visible extending north from the heritage platform building, and the former booking office as the building sits below the canopy and is not prominent in the view.

Views to surrounding residential areas are screened by the existing vegetation to the east of the corridor (right of view).

Visual sensitivity: This view is of local visual sensitivity as this is a busy commuter car park used throughout the day and the station has a local heritage listing.

Visual impact during construction: A construction site would be established in the middle to background of the view, at the northern end of the island platform. A support site would be established within the grassed area to the east of the rail corridor and towards the northern end of the commuter car park (associated with proposed works at this location).

The western lift construction and works to the southern end of the heritage platform building would not be visible from this location. However, works to construct the western lift and adjustments to the former booking office building, and extending the platform and platform awning would be visible to the north of the main station platform building. The character of this construction activity would contrast with the heritage and leafy character of the view.

This would result in a minor reduction in visual amenity and a **minor adverse visual impact** during construction.

Visual impact during operation: The commuter car park, in the middle and foreground of this view, would be returned to its current condition. The heritage listed platform building and awnings would also be retained and remain as the focus of this view. The roofline of the former booking office building at the northern end of the platform would be raised to accommodate the new lift and become more prominent in this view as the reinstated hipped and gable roofline would be seen above the awning.

Whilst the new lift structure would be taller than the existing heritage platform building, it would be visually separated from the existing heritage platform building by the existing platform canopy, so that it would not obstruct the view to the platform building roofline. It would also increase the visual prominence of the former booking office building by reinstating the heritage building's roof form. This enlarged building would not overwhelm or dominate the character of the view.

The new western lift would be visible in the background, rising above the heritage station platform building, set back some 50 metres from the central platform. The existing vegetation along the rail corridor would be retained and continue to provide a leafy backdrop to the station. Due to the distance, and selection of materials to reduce the visual mass of the building, these changes would be absorbed into the character of the station in this view.

This would result in no change in visual amenity and a **negligible visual impact** during construction.

Summary of impacts

The following table, Table 7-1, summarises the impacts identified in the viewpoint assessment.

Table 7-1 Summary of Assessment

Viewpoint number and location		Visual Sensitivity	Construction		Operation	
			Magnitude	Visual Impact	Magnitude	Visual Impact
1	View north from Beecroft Station platform	Local	Considerable reduction	Moderate adverse	Minor reduction	Minor adverse
2	View south from Wongala Crescent commuter car park	Local	Considerable reduction	Moderate adverse	No change in amenity	Negligible
3	View east along Hannah Street	Local	Minor reduction	Minor adverse	No change in amenity	Negligible
4	View north from Wongala Crescent	Local	Minor reduction	Minor adverse	No change in amenity	Negligible
5	View south from the footpath to the east of the station	Local	Considerable reduction	Moderate adverse	Minor reduction	Negligible
6	View north from the Sutherland Road commuter car park	Local	Minor reduction	Minor adverse	No change in amenity	Negligible

The following summarises the findings of this viewpoint assessment.

Views from the within the Station

The Beecroft Station has a local heritage listing. The main platform building, in particular, has a high degree of aesthetic value. Views from within the station itself, particularly from the platforms are therefore considered to be of local visual sensitivity (refer to Viewpoint 1).

During construction, two visually separate construction sites would be visible from the station. This would include works at platform level and extending into the subway for construction of the new platform lift, and views across the rail corridor to construction at the western lift site. This work would be visible and in close proximity to customers, and result in a **moderate adverse visual impact** during construction.

During operation, two new lifts would be seen at the northern end of the station. Due to their location, the new platform lift would not be viewed in context with the other heritage buildings. Furthermore, the platform lift would be screened in part by the existing platform canopies and would not be prominent in views from the station platforms. The selection of the materials

for the lift would incorporate glazing, louvres and perforated metal screening reducing the visual mass of the structures. Whilst the increased visual prominence of the former booking office building would be beneficial, the addition of this built form would result in a **minor adverse visual impact** (refer to Viewpoint 1).

Views from areas to the west of the station

In views from Wongala Crescent, Hannah Street and the northwestern commuter car park, the station buildings have a varying level of visibility with the mature trees enclosing view to the station in some areas (refer to Viewpoints 2, 3 and 4). In particular, the distinctive hipped and gable roof of the former booking office building, on the northern end of the central platform, is a feature in views down Hannah Street, the main street of the Beecroft Village (refer to Viewpoint 3).

In views from the playground and open space directly opposite the station (to the west), the heritage platform building, and awnings are visible, and the former booking office building is less prominent in this view. New open space associated with the redevelopment of the park along Wongala Crescent would have elevated views over the station. The new built elements of

the Proposal would be in the background of these views, and visually separate to the heritage platform building.

During construction, the streetscape works would be seen from Hannah Street, along Wongala Crescent and from the playground and park areas. The western lift construction site would be partly screened by the retained mature street and park trees along Wongala Crescent. Due to the filtering effect of the retained existing vegetation, there would be a **minor to moderate adverse visual impact** construction.

During operation, the western lift and the lift within the former booking office would be visually prominent in views from the west and particularly from the northwestern commuter car park and adjacent residential and commercial properties, where both lift pavilions would be visible. In the view along Hannah Street, the increased visual prominence of the extended former booking office lift would increase the legibility of views to the station and increase the prominence of this modified heritage building as a local focal point.

Whilst the built form is increased in this view architectural treatment of the building as a simple form would allow it to recede in the vegetated setting, and not visually compete with the heritage elements of the station. The former booking office would also increase in prominence by reinstating the heritage building's roof form.

This would result in a **negligible visual impact** during operation.

Views from areas to the east of the station

A dense corridor of bushland visually separates the station from Sutherland Road and the residential areas to the east of the site. There are views from a footpath leading to the station from Chapman Street in the north, and views from the commuter car park to the southeast of the station (refer to Viewpoint 5 and 6).

During construction, there would be works visible in the fore and middle ground of views from the footpath to the east of the rail corridor, including work rising above the brick walls of the subway tunnel, adjacent to the path and within the commuter car park. In views from Sutherland Road, the works would be seen in the background but in the context of views to the heritage station platform building.

Due to the extent of construction activity that would be seen in close proximity to views from the footpath, and in view of the heritage station buildings, there would be a temporary **minor - moderate adverse visual impact** during construction.

During operation, whilst the platform lift would rise to a height that is taller than the heritage platform building, it would be visually separated from the existing heritage platform building by the existing platform canopy, so that it would not obstruct the view to the platform building roofline. It would also increase the visual prominence of the former booking office by reinstating the heritage building's roof form. On balance there would be a **negligible visual impact** during operation.

Views at night

At night, the study area is an area of moderate district brightness, with the existing commercial centre, roads, station and railway corridor creating a moderately well-lit at environment night.

During construction, the work sites and adjacent construction support areas would be lit for security, however, it is unlikely that the site would

be used on an ongoing basis for construction activity during evening hours (other than for specific activities or where works are undertaken during possession periods).

Generally, the character of the construction works and support sites at night would be visually absorbed into the surrounding brightly lit environment. The works would create a minor reduction in amenity and result in **negligible visual impact** during construction.

During operations, the upgraded station would continue to be brightly lit for security and safe use at night. The new platform lift pavilion would be seen in context with the existing station lighting, commercial buildings and street lights along Wongala Street and within the commuter car parks. It is expected that there would, however, be additional light visible at the western station entry and platform lift due to additional glazing and architectural finishes.

The station is likely to create minor additional sky glow above the site. However, this would be somewhat enclosed by surrounding vegetation and absorbed into the brightly lit commercial setting of the station in views from the east.

Existing vegetation to the east of the station would largely screen views to the addition lighting associated with the station from the residential areas to the east. Due to the separation of the station from surrounding residential and commercial areas however, there would be limited potential for any light trespass on residential properties to the east of the site.

Overall, this would result in no change in the amenity of views at night, resulting in a **negligible visual impact** at night during operation.

8.0 Urban design and landscape character assessment

The proposed station upgrade is generally consistent with the design intent and strategies identified in the Hornsby DCP (2013). Whilst the requirements of the DCP are not directly relevant to this approval, the following assessment uses the requirements of the DCP as a guide.

The Beecroft – Cheltenham Heritage Conservation area Character Statement, requires that development within this area:

- *“be sympathetic to the characteristic built form of the conservation area, particularly in terms of bulk, scale, height, form or materials”* (clause 9.3.1).
- *“built form which responds to the site, locality and landscape and includes appropriate innovation to respond to technical, social, aesthetic, economic and environmental challenges”* (clause 9.6.2).
- *“new development which retains the historic relationship of the railway and shopping centre within the Beecroft/Cheltenham Heritage Conservation Area”* (clause 9.6.3).

And other general provisions, including:

“the setting of Beecroft Village should be maintained through the retention of significant landscaping and major trees”

The bulk, scale, height, form and materials of the Proposal is sympathetic to the existing built form of the station, and characteristic of the surrounding conservation area.

Whilst the proposed lifts would be taller than the existing heritage platform building, the lifts are physically and visually separate from the platform building.

The repurposing of the former booking office building and the reinstatement of the heritage roof form would retain the character of the northern end of the station precinct.

The materials selected for the lift structures include glass, louvres and perforated metal screens, which will not visually dominate the heritage buildings.

The western lift and associated works to Wongala Crescent would enhance the streetscape and improve the prominence of the station entry when viewed along Wongala Crescent and Hannah Street.

There is a strong historic visual relationship between the station and commercial areas to the west of the site. This includes a framed view east along Hannah Street, towards the existing station entry which includes the former booking office, glimpsed through trees. This visual relationship is maintained and enhanced with the expansion of the former booking office to create a more visually prominent structure, which features the existing heritage roof form.

Whilst there would be two small trees removed on Wongala Crescent, the project does not impact on any existing mature trees within the station precinct, therefore maintaining the leafy setting of the station and the level of shading and comfort of the adjacent pedestrian footpaths. The gardens associated with the western station entry would be refreshed with new understorey planting within the reconfigured garden beds.

Overshadowing of adjacent properties would be limited during the winter months, due to:

- The separation of the station precinct from neighbouring commercial areas by Wongala Crescent in the west, and corridor of bushland to the east of the site.
- The distance between the station and nearby residential properties to the northwest and east.

Station access and legibility would be substantially improved by the Proposal. The increased visibility of the former booking office building from Wongala Crescent and Hannah Street, would improve legibility of the station and mark the entry to the station. Whilst the

introduction of lifts and improvements to the surrounding footpaths would provide compliant access to the station for all users.

Due to the potential reduction in station accessibility and legibility during construction, and removal of two small trees, there would be a temporary minor reduction in the urban design functionality of the station precinct and a **minor adverse urban design and landscape impact** during construction.

During operation, whilst the substantial improvements to accessibility created by the lifts and improved legibility of the station would result in a minor improvement in the urban design functionality of the station precinct and a **minor beneficial urban design and landscape impact** during operation.

9.0 Mitigation of impacts

The following mitigation measures would be implemented to reduce the visual impacts of the Proposal:

- An Urban Design Plan (UDP) would be prepared by the Contractor, in consultation with the relevant council, and submitted to TfNSW for endorsement by the Sustainability and Precincts and Urban Design team, prior to finalisation of the detailed design. The UDP, at a minimum, would address the following:
 - the appropriateness of the proposed design with respect to the existing surrounding landscape, built form, behaviours and use-patterns (including consideration of Crime Prevention Through Environmental Design principles). This is to include but not be limited to:
 - connectivity with surrounding local and regional movement networks including street networks, other transport modes and active transport networks. Existing and proposed paths of travel for pedestrians and bicycles should be shown
 - integration with surrounding local and regional open space and or landscape networks. Existing and proposed open space infrastructure/landscape elements should be shown
 - integration with surrounding streetscape including street wall height, active frontages, awnings, street trees, entries, vehicle cross overs etc
 - integration with surrounding built form (existing or desired future) including building height, scale, bulk, massing and land-use
 - design detail that is sensitive to the amenity and character of heritage items
 - materials, finishes, colour schemes and maintenance procedures including graffiti control for new walls, barriers and fences
 - location and design of pedestrian and bicycle pathways, street furniture including relocated bus and taxi facilities, bicycle storage (where relevant), telephones and lighting equipment
 - landscape treatments and street tree planting to integrate with surrounding streetscape
 - opportunities for public art created by local artists to be incorporated, where considered appropriate, into the Proposal
 - total water management principles to be integrated into the design where considered appropriate
 - design measures included to meet TfNSW's NSW Sustainable Design Guidelines -Version 4.0 (TfNSW, 2017), and any relevant Infrastructure Sustainability Rating Scheme - Version 2.0 (ISCA, 2018) requirements
 - identification of design and landscaping aspects that will be open for stakeholder input, as required.
- All permanent lighting would be designed and installed in accordance with the requirements of standards relevant to AS located within or adjacent to the Proposal site.
- A Public Domain Plan (PDP) would be prepared by the Contractor, in consultation with the relevant council, and submitted to TfNSW for endorsement by the Sustainability and Precincts and Urban Design team, prior to finalisation of the detailed design. The PDP, at a minimum, would address the following:
 - materials, finishes, colour schemes and maintenance procedures including graffiti control for new walls, barriers and fences
 - location and design of pedestrian and bicycle pathways, street furniture including relocated bus and taxi facilities, bicycle storage (where relevant), telephones and lighting equipment
 - landscape treatments and street tree planting to integrate with surrounding streetscape
 - opportunities for public art created by local artists to be incorporated, where considered appropriate, into the Proposal
 - total water management principles to be integrated into the design where considered appropriate
 - design measures included to meet TfNSW's NSW Sustainable Design Guidelines -Version 4.0 (TfNSW, 2017), and any relevant Infrastructure Sustainability Rating Scheme - Version 2.0 (ISCA, 2018) requirements
 - identification of design and landscaping aspects that will be open for stakeholder input, as required.

1158 Road Lighting and AS 4282 Controlling the Obtrusive Effects of Outdoor Lighting.

- The detailed design of the Proposal would comply with Crime Prevention Through Environmental Design principles.
- Worksite compounds would be screened with shade cloth (or similar material, where necessary) to minimise visual impacts from key viewing locations.
- Temporary hoardings, barriers, traffic management and signage would be removed when no longer required.
- During construction, graffiti would be removed in accordance with TfNSW's Standard Requirements.

In addition, the following mitigation measures should be considered.

During construction:

- All trees to be retained should be protected prior to the commencement of construction in accordance with AS4970 the Australian Standard for Protection of Trees on Development Sites and Adjoining Properties.
- Consolidate site equipment and facilities to maximise the area of useable public realm and maintain pedestrian permeability.
- Ensure the pedestrian access between Wongala Crescent and the western station entry is kept visually open, and materials and machinery does not visually enclose this pedestrian route.

During operation:

- A colour palette should be selected which is complementary to the heritage character of the station. The proposed finishes of the lift above the former booking office would be refined during detail design to complement the heritage building.

10.0 References

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