



TAP 3 Banksia Railway Station

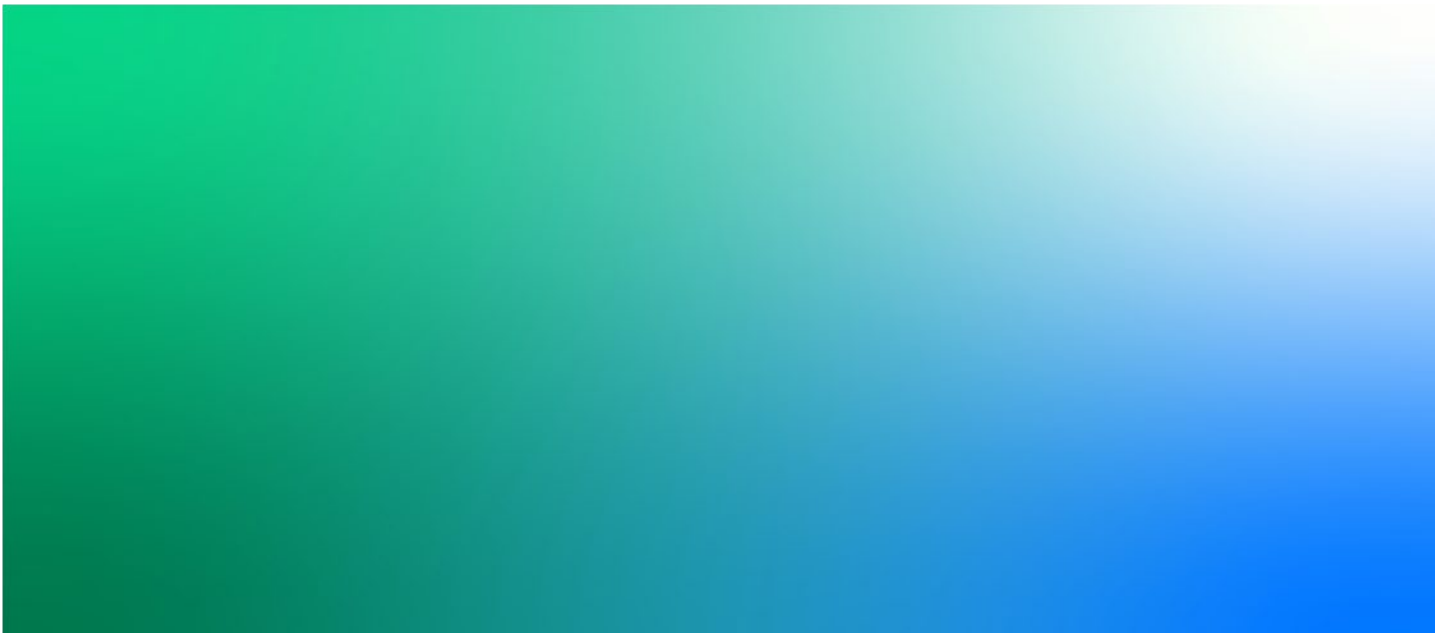
Statement of Heritage Impact

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Executive Summary

The New South Wales (NSW) Government is upgrading Banksia Station to improve accessibility and to prepare for service improvements on the T4 Illawarra Line and South Coast Line. The Banksia Station Upgrade (the Project) forms part of two NSW Government initiatives:

- The Transport Access Program (TAP) – which aims to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. Under this program, works are proposed to provide a station precinct at Banksia that is accessible to people with a disability, limited mobility, parents/carers with prams and customers with baggage.
- The More Trains, More Services Program (MTMS) – that over the next ten years will transform the rail network and provide customers with more reliable, high capacity 'turn up and go' services. This program includes a network reconfiguration strategy that will result in customers boarding and alighting trains at Banksia Station from Platforms 3 and 4 instead of Platforms 1 and 2.

Transport for NSW (TfNSW) is proposing to undertake the Project to improve accessibility at the station; the features of which are summarised as follows:

- Installation of three new lifts and landings to provide access between Railway Street, Hattersley Street, the existing underpass and the platforms;
- Construction of new platform canopies on Platform 1, Platforms 2/3 and Platform 4;
- Retaining wall modifications;
- Platform modifications:
 - Upgrade of the existing surfaces (re-grading/re-surfacing) of all platforms to provide compliant accessible paths to station amenities and between the new lifts and boarding assistance zones (BAZs);
 - Removal and replacement of existing balustrades, railings, lighting and fencing along the platforms 1 and 4;
- Upgrade of the existing stairs between Platform 1 (Railway Street) and Platform 4 (Hattersley Street) and the underpass to include new compliant handrails, Tactile Ground Surface Indicators (TGSIs) and nosings;
- Interior changes to the existing station building on Platforms 2/3 and 4:
 - Conversion of the existing men's bathroom to provide new Family Accessible Toilet (FAT) facilities with Disability Discrimination Act (DDA)-compliant access;
 - Demolition of the current women's bathroom;
 - Conversion of the existing cistern room into an ambulant toilet; and
 - Lowering of the existing flooring to the Platform 4 building to achieve DDA compliant access.
- Introduction of full height fencing to the existing subway entrances;
- Landscape and streetscape modifications:
 - Modifications to existing footpaths;
 - Introduction of a new bus stop on Railway Street; and
 - Removal of mature trees.
- Electrical upgrades; and
- Ancillary works.

There have been several alternative options considered during the development of the design of the proposed works for Banksia Station. Section 7 provides a summary of the options explored for the proposed works.

Banksia Station is listed on the RailCorp Section 170 register as Banksia Railway Station Group (SHI# 4801160). The item is locally significant due to its historic, aesthetic, and social values, along with its representativeness and rarity.

The proposed works represent both direct (physical) and indirect (visual) impacts to the Banksia Station heritage items (refer to Table 1), however the works represent a necessary upgrade to allow equitable access and full continued usage of the station as an operational heritage item.

Table 1: Summary of potential impacts of proposed works to Banksia Railway Station Group (ID# 4801160)

Proposed work	Type of impact	Degree of impact	Consequence of impact to heritage item
Installation of lifts on Platforms 1 and 4	Direct	Minor	Minor loss of contributory heritage fabric
	Indirect	Moderate	Reduction of aesthetic significance
Installation of lift on Platform 2/3	Direct	Major	Loss of integrity and intactness, reduction in heritage significance
	Indirect	Moderate	Reduction of aesthetic significance
Installation of platform canopies	Direct	Neutral	Minor impact to heritage fabric
	Indirect	Moderate to Major	Reduction of aesthetic significance
Retaining wall modifications	Direct	Minor	Minor loss of contributory heritage fabric
	Indirect	Neutral	No consequence to heritage item
Platform modifications	Direct	Minor - TBC	Potential for minor obscuring of elements
	Indirect	Neutral	No consequence to heritage item if like-for-like replacement
Modifications to Platform 2/3 station building	Direct	Moderate	Minor impact to heritage fabric and/or obscuring of heritage elements – change of use from public facing to back of house. Loss of understanding of historic station building arrangement.
	Indirect	Neutral to moderate	Reduction in aesthetic significance
Electrical upgrades	Direct	Neutral	No consequence to heritage item
	Indirect	Minor	Increased visual clutter along the platform edges
Landscape and streetscape modifications	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item
Ancillary works	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item
Temporary site facilities	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item

Banksia Station is listed on the RailCorp Section 170 register as an item of local heritage (Banksia Railway Station Group, SHI ID# 4801160), significant for its historical, aesthetic, and social values, as well as representativeness and rarity (rarity primarily relates to the pedestrian subway as the only such example along the Illawarra Line).

The proposed works would result in the following heritage impacts:

- The installation of new lifts on Platforms 1 and 4 will result in a minor direct (physical) and a moderate indirect (visual) impact to the heritage significance of the heritage item;
- The installation of a new lift on Platform 2/3 will result in a major direct (physical) and a moderate indirect (visual) impact to the heritage significance of the heritage item;

- The installation of platform canopies on all four platforms will result in a neutral direct (physical) and a major indirect (visual) impact to the heritage significance of the heritage item;
- Retaining wall modifications will result in a minor direct (physical) and a neutral indirect (visual) impact to the heritage significance of the heritage item;
- Platform modifications will result in a neutral to minor direct (physical) and neutral indirect (visual) impact to the heritage significance of the heritage item;
- Modifications to Platform 2/3 station building will result in a neutral to moderate direct (physical) and indirect (visual) impact to the heritage significance of the heritage item;
- Electrical upgrades will result in a neutral to minor direct (physical) and neutral indirect (visual) impact to the heritage significance of the heritage item; and
- The remaining proposed works (landscape and streetscape maintenance, ancillary works, and temporary site facilities) will have a neutral direct (physical) and indirect (visual) impact to the heritage item.

The proposed works represent both direct (physical) and indirect (visual) impacts to the Banksia Station heritage items, however the works represent a necessary upgrade to allow equitable access and full continued usage of the station as an operation heritage item.

The recommendations and mitigation measures include:

Recommendation 1 - Retention of heritage fabric

The Project must endeavour to retain the maximum amount of significant heritage fabric as possible, as follows:

- The Platform 2/3 station building currently has a high level of integrity, particularly the women's waiting room and bathroom. Detailed design must include retention and/or reuse of original/early fabric, including but not limited to, cornices, joinery, ceiling roses etc.;
- The Platform 2/3 northern waiting room and Platform 4 station building both retain original seating which is not currently DDA compliant with regard to armrests. Although currently proposed to be removed, options for alteration of the original seating must be explored in order to retain the original fabric while achieving compliance.
- The demolition of the northern subway lantern represents a significant removal of original fabric from the station complex. In order to mitigate this removal, Opportunities for retention of fabric must be further explored. It has been suggested that the four brick corner piers of the lantern would be a suitable element to investigate, as it would not significantly impact the proposed design and appropriately interpret the former extent of the existing structure. As part of retention works, consider material finish for corner piers in order to reinstate original brick facing/original state. Note: Removal and reconstruction of built heritage elements is not considered to qualify as retention;
- In order to comply with equitable access requirements, it is proposed that the floor of the Platform 4 station building be lowered to platform grade or close to. It is recommended that the existing building fabric be retained and reinstated at this new level, e.g. the stone threshold, timber framing, timber floor, seating, architraves, timber bench seating;
- Outside of the subway lantern and booking office demolition, there is no expected requirement for the removal of significant ceiling fabric i.e. corrugated iron ceilings and ceiling roses. The existing ceilings must be retained in situ; and
- Opportunities for the removal of intrusive fabric which overlies heritage elements (such as the current halogen lighting over ceiling plasterwork) should be explored in favour of fittings more sympathetic to the space.

Recommendation 2 - Further design development

Detailed design must be undertaken with input from a heritage advisor and include the following:

- Although the current design for the platform canopies allows for much greater visibility of the Platform 2/3 station building and is considered to be a considerable improvement from the original design iteration, it is recommended that further consideration be given to the interfaces and set-back of the canopies and the existing station buildings. If not properly considered, the interface between the two elements has the potential to be a visually intrusive junction within a highly visible public space;
 - Initial work has been done to this end through the use of L-shaped glazing panels to retain the visual division of Platform 2/3 into three distinct 'pavilions', however this should be viewed as the starting point for consideration, rather than an end product;
- Following the completion of relevant photomontages as part of the Visual Impact Assessment (VIA), if the proposed canopies substantially block any significant viewlines within the station complex, opportunities to break their visual bulk may be explored. As continual coverage of the platforms is one of the Project requirements, this may be done through the use of transparent roofing material;
- Minimisation of visual impacts through design must be given further consideration, including but not limited to, canopy column widths and column footings (there may be opportunity to hide the column footings below the wearing surface of the platform), the interface between the new platform level and the station buildings (original fabric such as ventilation grates should not be obscured or obstructed), and material choice and finishes; and
- New work should use finishes and materials sympathetic to the heritage context and form of the station.

Recommendation 3 - Interpretation of heritage fabric proposed to be altered or removed

At any location where original fabric or layout is being significantly changed, opportunities for interpretation shall be explored and implemented, as follows:

- Under the TfNSW *Heritage Interpretation Guidelines* (Sydney Trains Environment Division 2019) (hereafter referred to as the TfNSW Interpretation Guidelines), this project is considered to be a 'major project' due to the level of heritage impact proposed. Under the weighted scoring system, a minimum score of 100 (see Figure 2.1) is therefore required for interpretation works (existing fabric and material is not counted as part of the scoring system);
- Given that the installation of the central lift would result in the complete removal of the subway booking office and its associated fabric, it is recommended that opportunities for a high level of interpretation be explored in this area. Indicative markers may be utilised through wall and/or floor treatments, and the adaptive reuse of the original booking office window should be explored for this purpose. This should be designed in keeping with the TfNSW Interpretation Guidelines in order to ensure a sympathetic installation that also represents an effective interpretation of the space and its past history;
- Anywhere the Project proposes to significantly alter the layout of internal spaces, the original/early layout must be interpreted in order to retain evidence of original configurations, e.g. nib walls, material changes etc.; and
- The heritage storeroom is a potential location for interpretation and maintenance outcomes and the space should be considered an opportunity for conservation and public interpretation (see also Recommendation 5).

Recommendation 4 - Notification requirements

As the owner of the heritage asset and as per S3.56 of the State Agency guidelines, a description of the proposed works to Banksia Station should be submitted to Sydney Trains as part of a *Notification of intent to demolish under S170A of the Heritage Act* (S170A permit) for their landowner consent, including the following requirements:

- A copy of this report should be provided as part of the submission;
- This notice must be submitted to Sydney Trains a minimum 28 days prior to scheduled construction commencement for landowner consent; and

- This notice must be submitted to Heritage NSW a minimum 14 days prior to undertaking works.

As per clause 14(2) of the ISEPP, where harm is proposed to a local heritage item that is more than 'minor or inconsequential', written notice of the intent to carry out the works must be provided to the Bayside Council, as follows:

- A copy of this report should be provided as part of the submission; and
- Any response to the notice received from council within 21 days must be taken into consideration.

Recommendation 5 - Minimisation of impacts within the existing heritage store

Given the level of modification proposed to the majority of the Platform 2/3 station building spaces, it is recommended that the heritage store be retained at its current level of intactness with no modification, and the following considered:

- It is considered that this room would not be suitable for reuse as an active space for services such as communications equipment due to subsequent required ventilation modifications;
- Opportunities exist for the removal of intrusive fabric e.g. where windows have been blocked off; and
- The retention of heritage fabric and opportunities for interpretation within this space would also correspond with Recommendations 1 and 3;
- Incorporated as part of the interpretation works.

Recommendation 6 - Minimisation of impacts from installation of new fabric

- All ancillary works (CCTV, PA, communications, air-conditioning etc) should be undertaken in accordance with the relevant Sydney Trains heritage guidelines. Alternative solutions must be explored where any impacts to significant fabric are identified. Works should proceed with principle of avoiding fixing new services to the facade of the exterior building and should be contained/ concealed in new development areas. A complete services plan is to be reviewed and assessed by a qualified heritage advisor identifying alternative solutions and submitted to the ADEIA for endorsement prior to works commencing.
- The perimeter white loop-topped fencing colloquially known as 'pool-fencing' is generally considered to be intrusive fabric when installed in proximity to a heritage station. Following its removal, it should not be reinstated, and options for more sympathetic options should be explored and installed.

Recommendation 7 - Complete an archival recording of the works areas

A photographic archival recording of the area/s affected by the proposed works should be prepared which records the station prior to the commencement of works, during works and at the completion of works, as follows:

- This recording must be in accordance with the NSW Heritage Division publication *Photographic Recording of Heritage Items using Film or Digital Capture* (2006);
- The digital copy of the archival record must be provided to Sydney Trains, Rockdale local library and TfNSW;
- As part of this recording, opportunities for photogrammetry and/or 3D laser scanning may also be explored.

Recommendation 8 - If unexpected finds are located, the TfNSW Unexpected Finds Guideline should be implemented

Should any unexpected built heritage, heritage items or archaeology be uncovered during these works, the TfNSW *Unexpected Heritage Finds Guidelines* (Transport for NSW 2016) should be implemented.

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Acronyms

Acronyms	Meaning
ASA	Asset Standards Authority
BAZs	Boarding assistance zones
Burra Charter	<i>The Australia ICOMOS Charter for Places of Cultural Significance 2013</i>
CHL	Commonwealth Heritage List
CMP	Conservation Management Plan
DCP	Development Control Plans
DDR	Detailed Design Review
DDA	<i>Disability Discrimination Act 1992</i>
DEE	Department of Environment and Energy
DPIE	Department of Planning, Industry and Environment
DSAPT	Disability Standards for Accessible Public Transport
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EP&A Act	<i>Environmental Planning & Assessment Act 1979 (NSW)</i>
FAT	Family Accessible Toilet
Heritage Act	<i>Heritage Act 1977</i>
Heritage NSW	Heritage Division of the Department of Premier and Cabinet
ICT	Information and communication technology
IHO	Interim Heritage Order
IS	Infrastructure Sustainability
ISCA	Infrastructure Sustainability Council of Australia
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
Jacobs	Jacobs Group (Australia) Pty Ltd
LEP	Local Environment Plan
LGA	Local Government Area
NSW	New South Wales
NHL	National Heritage List
OHW	Existing overhead wiring
RNE	Register of the National Estate
SEPPs	State Environmental Planning Policies
SHI	State Heritage Inventory
SHR	State Heritage Register
SoHI	Statement of Heritage Impact
TAP	Transport Access Program

Acronyms	Meaning
TfNSW	Transport for New South Wales
TGSIs	Tactile Ground Surface Indicators
The Project	Banksia Station Upgrade
VIA	Visual Impact Assessment
WHL	World Heritage List

1. Introduction

1.1 Background

The New South Wales (NSW) Government is committed to facilitating and encouraging the use of public transport, such as trains, by upgrading stations to make them more accessible, and improving interchanges around stations with other modes of transport such as bicycles, buses and cars. The NSW Government is also committed to building a modern and up to date rail system that will play its part in making Sydney a more productive and liveable city.

The NSW Government is upgrading Banksia Station to improve accessibility and to prepare for service improvements on the T4 Illawarra Line and South Coast Line. The Banksia Station Upgrade (the Project) forms part of two NSW Government initiatives, the Transport Access Program (TAP) and More Trains, More Services Program (MTMS). The TAP upgrades are intended to provide Disability Discrimination Act (DDA) and Disability Standards for Accessible Public Transport (DSAPT) compliant access to railway stations across the NSW network, while the MTMS project (with regards to canopies) aims to improve customer amenities and weather protection on platforms.

Jacobs Group (Australia) Pty Ltd (Jacobs) was engaged by Transport for New South Wales (TfNSW) to prepare this Statement of Heritage Impact (SoHI) for the Project.

1.1.1 Transport Access Program

The TAP is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.

The TAP aims to provide:

- Stations that are accessible to people with disabilities, are less mobile and parents/carers with prams and customers with luggage;
- 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;
- Safety improvements including extra lighting, lift alarms, fences and security measures for car parks and interchanges, including stations, bus stops and wharves;
- Signage improvements so customers can more easily use public transport and transfer between modes at interchanges.

1.1.2 More Trains, More Services Program

Over the next ten years the MTMS Program will simplify and modernise the rail network, creating high capacity and turn up and go services for many customers. Customers will experience more frequent train services, with less wait times, less crowding and more seats on a simpler, more reliable network.

The MTMS program is about building a modern and up-to-date rail system that will play its part in making Sydney a more productive and liveable city. The NSW Government's Future Transport Strategy 2056 (Transport for NSW 2018) identifies MTMS as a priority initiative and is a commitment to the State's transport and infrastructure needs.

MTMS is key to enabling Greater Sydney Commission's vision for the Greater Sydney Region Plan, *A Metropolis of Three Cities*, where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

The program is already delivering better customer outcomes through timetable enhancements and the integration of the Sydney Metro Northwest with the existing heavy rail network. The current stage of MTMS will focus on delivering greater capacity, reliability and connectivity for customers on the T4 Eastern Suburbs & Illawarra Line, South Coast Line and T8 Airport & South Line.

These services will be enabled by upgrading and modernising signalling and control systems and using digital technology that, when combined with other infrastructure upgrades, will deliver major increases in the capacity and reliability of the network.

The MTMS Program will simplify and modernise the rail network, creating high capacity and turn up and go services for many customers. Customers will experience more frequent train services, with less wait times, less crowding and more seats on a simpler, more reliable network.

1.2 Site location

The Project area is located at Banksia Station within the suburb of Banksia, NSW and Bayside Council Local Government Area (LGA). The station is located in Lot 1/DP1213560. Banksia Station is located on the T4 Line, 9.60 kilometres south of Central Station between Arncliffe Station to the north and Rockdale Station to the south (see Figure 1.1). The Project area is generally bounded by Railway Street to the west and Hattersley Street to the east. Banksia local centre is located on the western side of the station and comprises a strip of shops along the western side of Railway Street.

1.3 Project summary

TfNSW is proposing to undertake the Project to improve accessibility at the station; the features of which are summarised as follows:

- Installation of three new lifts and landings to provide access between Railway Street, Hattersley Street, the existing underpass and the platforms;
- Construction of new platform canopies on Platform 1, Platforms 2/3 and Platform 4;
- Retaining wall modifications;
- Platform modifications:
 - Upgrade of the existing surfaces (re-grading/re-surfacing) of all platforms to provide compliant accessible paths to station amenities and between the new lifts and boarding assistance zones (BAZs);
 - Removal and replacement of existing balustrades, railings, lighting and fencing along the platforms 1 and 4;
- Upgrade of the existing stairs between Platform 1 (Railway Street) and Platform 4 (Hattersley Street) and the underpass to include new compliant handrails, Tactile Ground Surface Indicators (TGSIs) and nosing;
- Interior changes to the existing station building on Platforms 2/3 and 4:
 - Conversion of the existing men's bathroom to provide new Family Accessible Toilet (FAT) facilities with DDA-compliant access;
 - Demolition of the current women's bathroom;
 - Lowering of the existing waiting room floor;
 - Conversion of the existing cistern room into an ambulant toilet; and
 - Lowering of the existing flooring to the Platform 4 building to achieve DAA compliant access.
- Introduction of full height fencing to the existing subway entrances;
- Landscape and streetscape modifications:
 - Modifications to existing footpaths;

- Introduction of a new bus stop on Railway Street; and
- Removal of mature trees.
- Electrical upgrades; and
- Ancillary works.

1.3.1 Design standards

The Project has been designed having regard to the following design standards:

- Disability Standards for Accessible Public Transport (DSAPT) (issued under the Commonwealth *Disability Discrimination Act 1992* (DDA));
- National Construction Code;
- Relevant Australian Standards;
- Asset Standards Authority standards;
- Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability (IS) Rating Scheme (v1.2);
- *TfNSW Urban Design Guidelines*;
- *Guidelines for the Development of Public Transport Interchange Facilities* (Ministry of Transport, 2008);
- Crime Prevention Through Environmental Design principles;
- Standard for Fixed Guideway Transit and Passenger Rail Systems;
- *Work, Health and Safety Act 2011*;
- Disability (Access to Premises – Buildings) Standards 2010;
- *Designing for Pedestrians: A Level of Service Concept*, John J Fruin (1971);
- RailCorp Engineering standards;
- Other TfNSW policies and guidelines; and
- Relevant council standards.

1.3.2 Sustainability in design

TfNSW is committed to minimising the impact on the natural environment and supports ISCA and the IS rating tool. The IS rating tool was developed and is administered by ISCA. It is an independently verified and nationally recognised rating system for evaluating sustainability across design, construction and operation of infrastructure.

The Banksia Station Upgrade Project is one of a number of projects within the TAP that is using version 1.2 of the IS rating tool and targeting an 'Excellent' rating. This requires the achievement of between 50 and 75 points out of a possible 100. The rating scheme provides an independent and consistent methodology for the application and evaluation of sustainability outcomes in infrastructure projects.

An IS rating of 'Excellent' will support the environmental and cultural sustainability of the upgrade project. This will ensure that the upgrade will not only improve people's experience in using the station and minimise its environmental footprint but will allow it to retain its place and importance within the community, from a both a social and cultural perspective. This strengthening of cultural ties reflected in sensitively managed, necessary upgrades also reflects the evolving culture of the locality and will ensure the relevance of the station both functionally and emotionally.

The detailed design and construction of the Project will address the following key issues:

- Climate change adaptation and resilience;

- Renewable energy;
- Waste;
- Materials;
- Supply chain management;
- Community connection; and
- Social procurement and workforce.

1.4 Assessment methodology

The purpose of this heritage assessment is to assess the impact of the project on heritage significance of known and potential heritage items located within the project area. To establish this, the following methodology has been used:

- Brief historical research of the project area and potential heritage items through publicly available primary and secondary sources such as maps, plans, including from the State Library of NSW, and the NSW State Archives;
- Site inspection;
- Assessment of the heritage significance of the potential heritage items and their elements;
- Review of options development and iterative heritage advice provided through design development;
- Assessment of the impact of the project on the items of heritage significance;
- Mapping of areas of impact;
- Recommendations for the management and/or mitigation of any impacts; and
- Reference to the key documents reviewed during report preparation.

This assessment has been completed in accordance with the principles of the *Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013* (Burra Charter)(Australia ICOMOS 2013), the *Assessing Heritage Significance* (NSW Heritage Office 2001) and the *Statements of Heritage Impact* guidelines (NSW Heritage Office 2002).

1.5 Project limitations

As at the date of this report, there is no endorsed Conservation Management Plan (CMP) available for Banksia Stations. The conservation and management measures proposed as part of this assessment are specific to the impacts of the Project alone. These conservation and management measures may not be appropriate for other works planned for Banksia Station.

This assessment was completed on the basis of the current Concept Design (dated 01/07/2020) and its assessment and recommendations relate only to this design phase. The recommendations contained herein have been established to guide the subsequent detailed design and reduce assessed impacts. Design details have been drawn from a limited set of design drawings, three architectural elevations and a 3D model (file number: BKS-AR-M3D-00100_200626_Flat Roof.nwd).

1.6 Authorship and acknowledgments

This report has been prepared by Heritage Consultant, Clare Leever. Technical review was completed by Technical Director of Archaeology and Cultural Heritage, Dr Karen Murphy.

We would like to acknowledge the following individuals and organisations in the preparation of this report:

Table 1.1: Acknowledgements

Name	Organisation
Simon Cornell	Associate Environmental Planner, Jacobs
Vivian Tse	A/Environment and Planning Manager, TfNSW
Steven Barry	Environment Manager (Heritage), TfNSW



- Legend**
- Study area
 - Road
 - Existing railway track
 - Platform number
 - T Railway station



Data sources
 Jacobs 2020
 Ausimago 2018
 NSW Spatial Services 2019
 GDA94 MGA56



Figure 1.1 Study area

2. Statutory context

2.1 Commonwealth legislation

2.1.1 *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Australian Government's primary environment and heritage legislation. It is intended to allow the national government to coordinate with the states and territories to provide a national scheme of environmental and heritage protection and biodiversity conservation. It focuses the national interests on the protection of matters of national environmental significance, with the states and territories responsible for matters of state and local significance. Under the provision of the EPBC Act, the Commonwealth Department of Environment and Energy (DEE) maintains the World Heritage List (WHL), the Commonwealth Heritage List (CHL) and the National Heritage List (NHL).

2.1.1.1 Register of the National Estate

Originally established under the *Australian Heritage Commission Act 1975* (repealed), the former Australian Heritage Commission entered more than 13,000 places in the register of local, regional or state significance. Phased out as a statutory list between 1997 and 2003, a new system of heritage protection for nationally significant places and two new heritage lists were established under the EPBC Act in conjunction with the *Australian Heritage Council Act 2003* – the NHL and CHL. The Register of the National Estate (RNE) was officially closed in 2007 and is now retained as a non-statutory archive.

2.2 State legislation

2.2.1 *Environmental Planning and Assessment Act 1979*

The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) is administered by the Department of Planning, Industry and Environment (DPIE) and provides planning controls and requirements for environmental assessment in the development approval process. The act has three main parts of relevance to heritage: Part 3 which governs the preparation of planning instruments, Part 4 which relates to development assessment process for local government (consent) authorities, and Part 5 which relates to activity approvals by governing (determining) authorities. The applicable planning approvals pathway for a development under the EP&A Act is generally dependent on the development's size, environmental impact and capital cost, as well as relevant planning provisions under other pieces of NSW legislation, including State environmental planning policies (SEPPs) and local environmental plans (LEPs).

2.2.1.1 Part 5 of the EP&A Act

Part 5 of the EP&A Act (Part 5) applies to activities that are permissible without consent and are generally carried out by a public authority. Activities under Part 5 are assessed and determined by either a Minister or public authority (referred to as the determining authority).

Under Section 5.5 of the EP&A Act, TfNSW (both the proponent and determining authority for the purposes of Division 5.1 of Part 5) must:

- Examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity, in accordance with Section 5.5 of the EP&A Act;
- Determine whether or not the activity is likely to significantly affect the environment or threatened species, populations or ecological communities.

The factors which must be considered when determining if an activity under this part of the act has a significant impact on the environment is defined in Clause 228 of the Environmental Planning and Assessment Regulation 2000.

2.2.1.2 Local Environmental Plans

Items of local heritage significance are administered by the local council of each LGA. Each LGA is required to create and maintain an LEP that identifies and protects Aboriginal objects and historical heritage items, with the aim to conserve their heritage significance, including associated fabric, settings, views and archaeological potential. These items are protected under the EP&A Act. Heritage items within each LGA are generally listed in Schedule 5 of their LEP and are subject to the planning controls and provisions set out in Part 5 Clause 5.10 (Heritage Conservation).

Banksia Station is located within the LGA of Bayside Council (formed from the 2016 merger of the City of Botany Bay and Rockdale City) and subject to the conditions of the *Rockdale LEP 2011*.

2.2.1.3 Development Control Plans

Within an LGA, a Development Control Plan (DCP) is intended to complement the provisions laid out in an associated LEP, providing specific design restrictions relating to sympathetic development in proximity to heritage items listed in Schedule 5 of the LEP.

Banksia Station is included in the area covered by the *Rockdale DCP 2011*.

2.2.2 State Environmental Planning Policy (Infrastructure) 2007

The *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) aims to facilitate the effective delivery of infrastructure across NSW. Clause 79 of the ISEPP permits development on any land for the purpose of rail infrastructure facilities to be carried out by, or on behalf of, a public authority without consent. The Project will be assessed under Division 5.1 of the EP&A Act by TfNSW as both the proponent and the determining authority. Development consent from the relevant local council is not required.

Clause 14 of the ISEPP requires that if the proposed development 'is likely to affect the heritage significance of a local heritage item, or of a heritage conservation area, that is not also a State heritage item, in a way that is more than minor or inconsequential, and is a development that this Policy provides may be carried out without consent', the public authority (or one acting on their behalf) must prepare an assessment of the proposed impact, given written notice of the intention to carry out the development with a copy of the assessment to the relevant local council, and take into consideration any response received within 21 days of the notice.

Heritage Act 1977 (NSW)

The *Heritage Act 1977* (the Heritage Act) is a statutory tool designed to conserve environmental heritage in NSW and is used to regulate development impacts on the state's historical heritage assets. The act defines a heritage item as a 'place, building, work, relic, moveable object or precinct' and is designed to protect both listed non-Aboriginal heritage items and potential non-Aboriginal archaeological remains or relics. Currently, non-Aboriginal heritage is administered by the Heritage Division of the Department of Premier and Cabinet (Heritage NSW).

Items that are assessed as having State heritage significance (i.e. they meet one or more of the heritage significance criteria identified by the heritage Council of NSW) can be listed on the NSW State Heritage Register (SHR). Proposals to alter, damage, move or destroy heritage items listed on the SHR (or sites protected by an Interim Heritage Order [IHO]) require an approval permit from the Heritage NSW under section (s) 60 of the Heritage Act.

2.2.2.1 State Heritage Register

The SHR was established under s31 of the Heritage Act and lists places and objects of importance to the people of NSW (including archaeological sites). The SHR is administered by Heritage NSW and includes a wide range of items both publicly and privately owned.

Banksia Station is not listed on the SHR.

2.2.2.2 Archaeological relics

Part 6 Division 9 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. It applies to all land in NSW that is not included in the SHR. Under Section 4(1) of the Heritage Act, a relic is defined as:

'any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and is of State of local heritage significance'.

Land disturbance or excavation that will, or is likely to, result in a relic being discovered, exposed, moved, damaged or destroyed is prohibited under the provisions of the Heritage Act, unless carried out in accordance with a permit issued under Section 140 or Section 139 of the Heritage Act.

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage NSW (pursuant to Section 140), unless there is an applicable exception (pursuant to Section 139(4)). If there is an exception, an Excavation Permit Exception Notification Form must be submitted and endorsed by the Director of Heritage NSW for places not listed on the SHR.

In some circumstances a Section 140 permit may not be required when excavating land in NSW. In accordance with the NSW Government Gazette (no 110, 5 September 2008) Schedule of Exceptions to Sections 139 (1) and (2) of the Heritage Act, made under Section 139 (4):

Excavation or disturbance of land of the kind specified below does not require an excavation permit under s 139 of the Heritage Act, provided that the Director-General is satisfied that [certain criteria] have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director-General is satisfied that:

- c) a statement describing the proposed excavation demonstrates that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little or no archaeological research potential.*

An Excavation Permit Exception Notification Form is required to be submitted to the Heritage NSW with appropriate supporting information (such as this heritage assessment). If Heritage NSW is satisfied with the relevant matters relating to the proposed works, a copy of the form will be endorsed by the Heritage Council and returned to the applicant.

Section 146 of the Heritage Act requires any person who is aware or believes that they have discovered or located a relic to notify Heritage NSW providing details of the location and other information required.

2.2.2.3 Archaeological Works

The Heritage Act identified 'works' as a separate category to relics. Works refer to past evidence of infrastructure which may even be buried, and so therefore archaeological in nature, and with the potential to provide information that contributes to our body of knowledge. Exposure of a work does not trigger reporting obligations under the Heritage Act, however, good environmental practice recognises the archaeological potential of such discoveries and the need to balance these against the requirements of development; some government agencies have developed internal policies to manage the discovery of such items.

TfNSW uses its Unexpected Heritage Finds Guidelines (Transport for NSW 2019) to manage the discovery of such items. This provides guidance for the way such finds are to be managed when uncovered during construction and other activities.

2.2.2.4 Section 170 Heritage and Conservation Registers

Section 170 of the Heritage Act requires State Government agencies and NSW Government-owned corporations to identify, conserve and manage heritage assets owned, occupied, or managed by each entity. Section 170 also requires the creation and maintenance of a register of heritage items, which are known as a 'Section 170 Heritage and Conservation Register' or more commonly, a s170 Register. There are currently 23 s170 Registers maintained, which are required to be reviewed and if necessary, amended at least once per year.

The Heritage Act obliges these agencies and corporations to maintain their assets in accordance with State-Owned Heritage Management Principles and asset management guidelines endorsed by the NSW Heritage Council and notified by the Minister to government instrumentalities (NSW Heritage Office 2005). Items on s170 registers are listed on the NSW government's online database – the State Heritage Inventory (SHI) – along with SHR and local LEP items.

Under S3.56 of the State Agency guidelines, a *Notification of intent to demolish under S170A of the Heritage Act* (S170A permit) must be submitted to Sydney Trains for their landowner consent.

2.2.3 Relevant Heritage Policies

2.2.3.1 Office of Rail Heritage Conservation Guide: Station Platforms

The Conservation Guide for Station Platforms was prepared to provide best-practice conservation guidance for use by owners and managers of railway heritage places across NSW. It provides key information on identifying and conserving existing heritage station platforms, as well as guidance on designing new platform structures within a heritage context.

2.2.3.2 Office of Rail Heritage Conservation Guide: Access to Heritage Stations

The Access to Heritage Stations Conservation Guide was prepared to provide guidance to designers and planners when upgrading heritage stations to provide equitable access. Transport agencies are responsible for conserving heritage places under their stewardship, as well as providing equitable access under the DDA and relevant transport standards. Whilst many stations have been already upgraded for equitable access, other heritage-listed stations will be subject to future upgrades as part of ongoing transport access programs.

The conservation of heritage places sometimes constrains the design of access in a station environment. Information and guidance are provided by this guide to assist in ensuring equitable access outcomes are achieved in a way that conserves heritage values and minimises impacts on heritage significance.

2.2.3.3 Office of Rail Heritage Conservation Guide: Station Platform Furnishings

The Conservation Guide for Railway Platform Furnishings was prepared to provide best-practice conservation guidance and provides key information on identifying, recording, planning and conserving platform furnishings.

Due to the 'moveable' nature of platform furnishings, many original furnishings have been removed at historical station precincts as part of station upgrades. However, across the railway network in NSW a range of furnishings still remain at many stations, which are now recognised as important components of the heritage significance of that place.

2.2.3.4 Heritage Platforms Conservation Management Strategy

Australian Museum Consulting were commissioned by Sydney Trains to prepare a Conservation Management Strategy (CMS) (Australian Museum Consulting 2015) for heritage platforms managed and maintained by Sydney Trains within the NSW railway networks. It outlines a number of conservation strategies and requirements for the platforms of heritage stations.

2.2.3.5 Heritage Interpretation Guidelines

Sydney Trains produced the *Heritage Interpretation Guidelines* in 2019 (Sydney Trains Environment Division 2019), aiming to 'inspire and improve' heritage interpretation at railway places in NSW. As well as providing standard examples of interpretive works, the guidelines develop a weighted scoring system by which to measure heritage interpretation at a particular site (Figure 2.1). A site-specific Interpretation Plan should be used to guide the interpretive approach, techniques, constraints and opportunities; however, the weighted scoring can be used to evaluate and prioritise interpretation works as follows:

- Sydney Trains 'standard heritage signage' is to be prioritised for all future projects where it does not currently exist on site;
- For small, isolated heritage sites and other places not readily accessible to the public, the focus should be on off-site interpretation to maximise community engagement;
- For minor projects, beyond general routine maintenance or emergency, a minimum score of '30' should be achieved'
- For medium-sized projects, such as major periodic maintenance or site upgrades, a minimum score of '50' should be achieved; and
- For major projects that will have an impact on heritage values or for major upgrades to a place, a minimum score of '100' should be achieved.

Type of interpretation works		Score
Signage	Sydney Trains' standard heritage signage	30
	Other signage or commemorative plaques	5
Conservation works	Restoration and repair works	30
	Removal of intrusive additions	20
Place-making and public art	Public art and landscaping works	20
	Building fixtures and finishes with heritage content	15
	Permanent site or building-name signage	10
	Temporary signage and hoardings	5
Heritage fabric and object displays	Movable heritage and archaeological displays	25
	Revealing and interpreting heritage fabric	20
Research, recording and digital media	Oral history, video and/or digital recordings	20
	Online webpage content and digital tours	15
	Publications and management plans	10
Community engagement and tours	Public tours, pop-up exhibitions and open days	10
	Lectures and education programs	

Figure 2.1: Weighted scoring of interpretive works (Sydney Trains Environment Division 2019:38)

3. Heritage database search results

3.1 National/ Commonwealth heritage

A search of the Australian Heritage Database was undertaken on 2 July 2020 by Alexandra Seifertova (Graduate Archaeologist, Jacobs). This search included Australian World Heritage Areas, the NHL and CHL. No protected heritage items under the EPBC Act were listed within the Project area, and the proposed work would not require a referral under the EPBC Act with regards to heritage.

3.2 State heritage

A search of the SHR and State Heritage Inventory (SHI) was completed on 2 July 2020 by Alexandra Seifertova (Graduate Archaeologist, Jacobs). No items were identified within a 500-metre radius of the Project area.

3.3 Local heritage

A search of the Rockdale LEP 2011 was undertaken on 2 July 2020 by Alexandra Seifertova (Graduate Archaeologist, Jacobs). The search resulted in 15 heritage items located within a within a 500-metre radius of the Project area (refer to Table 3.1 and Figure 3.1). The Banksia Station is not listed on the Rockdale LEP.

Table 3.1: Local heritage items within a 500-metre radius of Banksia Station

Item name	Address	ID	Distance from project elements
"Gladstone" and "Wentworth"	134 and 136 Forest Road, Arncliffe	I25	500 metres
Sandstone Victorian Cottage	15 Bowmer Street, Banksia	I69	130 metres
House	15 Cameron Street, Banksia	I70	380 metres
Sandstone Victorian Cottage	1 Curtis Street, Banksia	I71	230 metres
Sandstone Victorian cottage	5 Curtis Street, Banksia	I72	230 metres
Sandstone Victorian Cottage	7 Curtis Street, Banksia	I73	230 metres
Part of single-storey terraced cottages known as Jackson's Row	11 Gibbes Street, Banksia	I74	470 metres
Part of single-storey terraced cottages known as Jackson's Row	18 Gibbes Street, Banksia	I75	520 metres
Stone house	7 Godfrey Street, Banksia	I76	140 metres
Stone Victorian House	29 Godfrey Street, Banksia	I77	140 metres
Stone house	19 Monahan Street, Banksia	I78	330 metres
Gardiner Park (part)	15A Wollie Creek Road, Banksia	I79	460 metres
Rock Lynn	58 Bestic Street, Rockdale	I207	540 metres
Palm trees on verge	Gloucester Street, Rockdale	I213	500 metres
Brick buildings on platforms, signal box and overhead booking office	Rockdale Railway Station and Yard Group	I222	500 metres

3.4 State agency heritage listings

A search of the Section 170 Heritage Registers was undertaken on 2 July 2020 by Alexandra Seifertova (Graduate Archaeologist, Jacobs), with one heritage identified within a 500-metre radius (Table 3.2, Figure 3.1).

Table 3.2: State Agency heritage items within a 500-metre radius of the Project area

Agency	Name	ID (SHI)	Distance from project elements
RailCorp	Banksia Railway Station Group	4801160	Intersecting

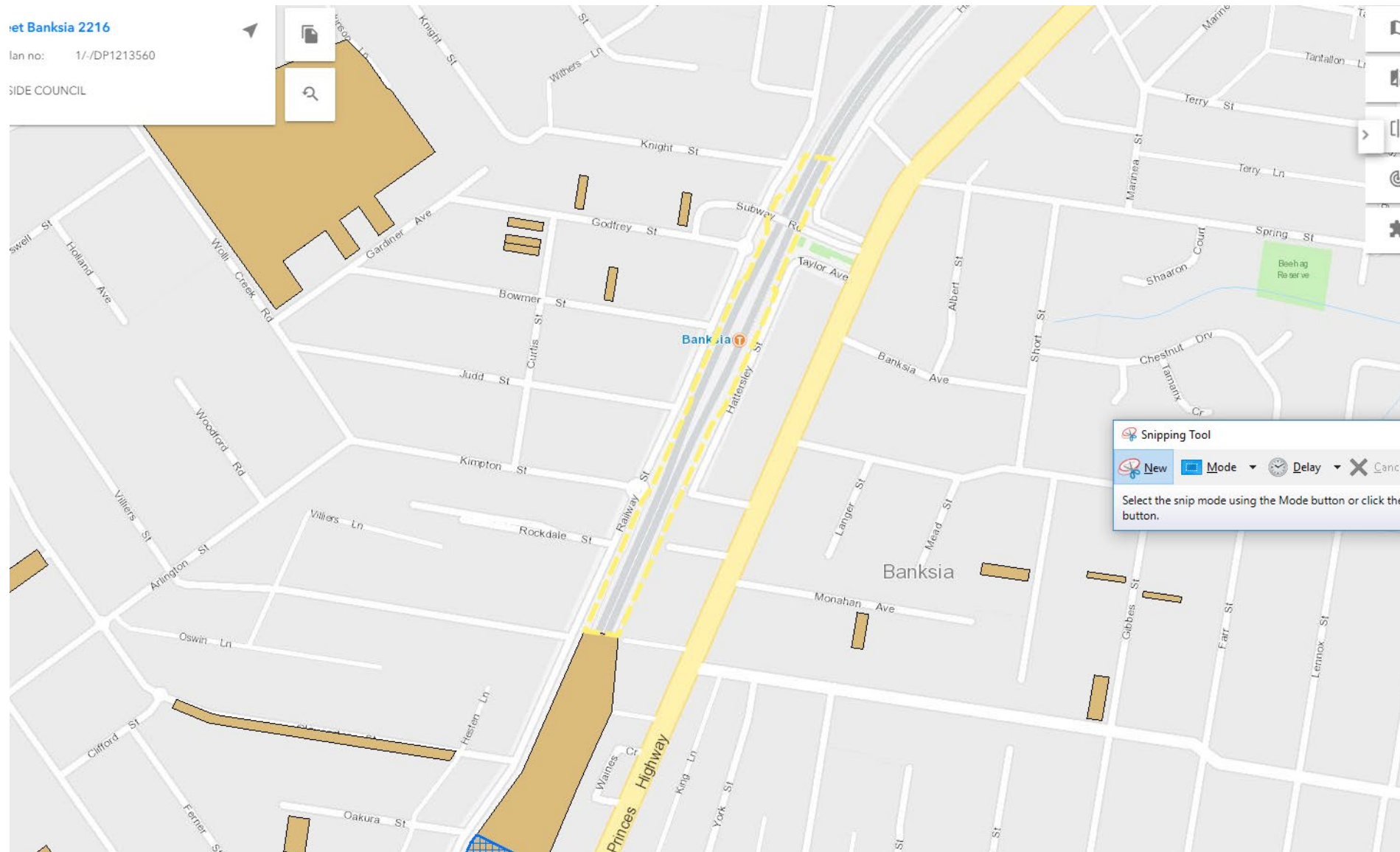
3.5 Non-statutory heritage listed items

A search of the RNE via the Australian Heritage Database was completed on 21 January 2020 by Alexandra Seifertova (Graduate Archaeologist, Jacobs). One RNE item was identified in a 500-metre radius of the Project area (refer to Table 3.3).

Table 3.3: RNE heritage listed items within a 500-metre radius of the Project area

Register	Item name	Class	Address	ID	Distance from project elements
Register of the National Estate	Banksia Urban Conservation Area	Historic	Banksia, NSW, Australia	102110	500 metres

Figure 3.1: Listed heritage items in proximity to the Project area



4. Historical background

4.1 Aboriginal occupation ¹

Historical and ethno-historic information about the lives of Aboriginal people within Sydney prior to and since the first encounters with European forces in the late 18th century are far from complete. Information, including illustrations, appear in early accounts from Captain Cook's first voyage and the subsequent colonisation of Australia following the arrival of the British First Fleet in 1788 by Captain Arthur Phillip. First documentation of the Aboriginal people in Sydney was in 1770 during Captain Cook's first voyage.

The Project area is located on Gadigal land which is part of the Eora Nation. The term 'Eora' is commonly used today to refer to the original inhabitants of the land between Port Jackson and Botany Bay. Gadigal land extends from Burrawara (South Head) through to Warrane (Sydney Cove), Gomora (Cockle Bay-Darling Harbour) possibly to Blackwattle Creek, taking in the wetland sand and dunes now known as Redfern, Erskineville, Surry Hills and Paddington, and then down to the Cook's River.

Cook's River would have been a valuable resource zone in the area. It would have supplied fresh water and food resources to local groups. Food resources included the roots of ferns and orchids, yams, figs, mistletoe, geebung, apple berries, native currants, native cherries, native raspberries and banksia flowers. These vegetation communities were also inhabited by fauna such as kangaroo, wallabies, possums, gliders, bandicoots, wombats, fruit bats and numerous bird species (Attenbrow 2010: 62-84).

Tools used to catch freshwater and marine animals included hooks, and spear fishing. Peter Cunningham (Attenbrow 2010: 84) describes how in the 1830s, local Aboriginal groups would spear fish from bark canoes on the Cook's River. Bark canoes were critical for access, hunting and fishing along water courses. This included at least the major waterways of the Cumberland Plain. Tench observed canoes on at least two excursions, the first in 1789 *'We also met with two old damaged canoes hauled up in the beach, which differed in no wise from those found on the sea coast'* (Flannery et al. 1996: 112; Tench 1789).

4.2 Brief History of the Illawarra Line

4.2.1 The Illawarra Rail Line

The fertile land of the Illawarra District was a major driver behind agricultural and industrial development in the region. A low-lying coastal strip, the Illawarra Range on the landward side presented a major obstacle to early travellers, with *"all hale passengers' expected to walk up Bulli Pass on the Wollongong – Campbelltown coaches"* (Singleton 1984:5). Although freight was primarily transported by sea, a lack of sheltered harbours made shipping and passenger services undependable (Singleton 1984:5).

Initially discouraged by the expense, the issue of a rail connection with Sydney was repeatedly raised through the early 1870s and John Whitton (Engineer-in-Chief for Railways) was eventually charged with locating a suitable route between Sydney and Kiama. This was not without its challenges, however, with right-of-way disputes, lobbying by real-estate brokers, and unstable shale measures all contributing to the enormity of the task. Once selected, the line left Waterfall through the Port Hacking River valley before turning seawards past the Garawarra Range, under Bald Hill (through the Otford Tunnel) before emerging into the Stanwell Park amphitheatre (lower than its present location) and continuing through the Clifton Tunnel under Coalcliff. From there the journey was considerably easier across the coastal plain to Kiama (Singleton 1984:6).

This Illawarra line from Sydney was not the first, or only, railway in the Illawarra. A number of local collieries operated private lines from various mines to jetties for shipment. These included:

- Osborne-Wallsend Colliery at Mount Keira (1859), a horse tramway to Bulli Road;

¹ There are ongoing conversations about the use of 'Aboriginal', 'Indigenous', and 'First Nations'. The term 'Aboriginal' has been elected for use in the report as the local groups within the Sydney region prefer this term.

- Bulli Coal Company (1861), a horse tramway between Bulli Colliery and Bulli Point, which was later replaced by the Illawarra's first steam locomotive (1867);
- Mount Pleasant Coal Company (1863), a horse tramway from Mount Pleasant Colliery to Belmore Basin, later partially converted to locomotive haulage (1884);
- Thomas Hale, a horse tramway between his colliery and a small Bellambi Point jetty; abandoned in 1863. It was later rebuilt by the Bellambi Coal Company (1887) to connect to a second jetty at Bellambi Point. The crossing of the new Illawarra line and this tramway was located at Woonona;
- Taylor and Walker (1861-1864), from their South Bulli mine to a third Bellambi Point jetty, a horse tramway later revived as a steam railway (in 1887). The crossing of this line and the Illawarra line was named Bellambi;
- North Illawarra No. 1 Colliery, from the mine down to Hicks Point; closed in or before 1882;
- North Illawarra No. 2 Colliery, from the mine to the high-level jetty at Hicks Point; and
- The Southern Coal Company (constructed after the Illawarra line), between their colliery to their Port Kembla jetty, crossing the main line at the Mount Kembla signal-box.

4.2.2 Railway development

In 1881 the NSW Government announced plans to construct a railway line from the Illawarra Junction (the location of the Erskineville Junction) to Hurstville. In September 1882 the tender for construction was awarded to an experienced Victorian company, Messrs C and E Miller, for £258,419 (Evening News 1882:3). The portion of the line between the Illawarra junction near Eveleigh and Hurstville was planned as a double line. The line beyond Hurstville to Wollongong and beyond was a single track (Singleton 1984:8).

Construction commenced in October 1882. There were several challenges in getting the railway opened on time, mostly relating to the crossing of the Cooks River. In June 1884, only a month prior to the official opening, it was reported that the crossing was being held up by the delay in the arrival of iron work required for the bridge. The NSW government had ordered 153 tons (138.7 tonnes) of steel girders for the upper portion of the bridge, but only 33 tons arrived (Sydney Morning Herald 1884:4). A temporary wooden bridge used during construction of the rail needed to be used until the permanent rail bridge was constructed in 1923. The Illawarra railway line opened in July 1884. The first station on the new line was Erskineville, located on the north eastern side of the Erskineville Road/Swanson Street overbridge. Hurstville Station was the original terminus until the opening of the line between Sydney and North Kiama in 1888 (Singleton 1984:10).

4.3 Suburb of Banksia

The land associated with the suburb of Banksia was originally part of Simeon Henry Pearce and James Pearce's property acquired in 1854. The original land grant extended from Rockdale to Brighton-le-Sands. Portions of the grant were subsequently sold off to prospective buyers, who utilised the heavily timbered area for tree-felling and timber-getting (Pollon and Healy 1988). The formation and growth of Banksia as a suburb heavily relied on the construction of the railway station in 1906. Prior to its official naming this area was referred to as the area 'between Arncliffe and Rockdale Stations'. Many names for the suburb were suggested but the final choice of Banksia came from Charles Stead, father of novelist Christina Stead. The construction of the station resulted from a local petition signed in May 1901. Signed by 480 local land owners, it called for the construction of a station platform as land owners were especially apprehensive in developing their allotments until a station was constructed (Pollon and Healy 1988).

4.4 Banksia Station

4.4.1 Early land grants

The Project area and the location of Banksia Station is located within part of the original land granted to the Pearce brothers in 1854. By 1882, William Frederick Jones, Esquire, acquired a substantial allotment within the original Pearce grant (Figure 4.1). The following year Jones transferred part of the land to the Commissioner for

Railways for the construction of the Illawarra Railway line as can be seen in Figure 4.2. The nearby allotments were subdivided by Thomas Saywell from 1886 onwards. His small allotments fronted recently named streets, such as Spring, Godfrey, Bowmer, Judd and Curtis Streets (Figure 4.3).

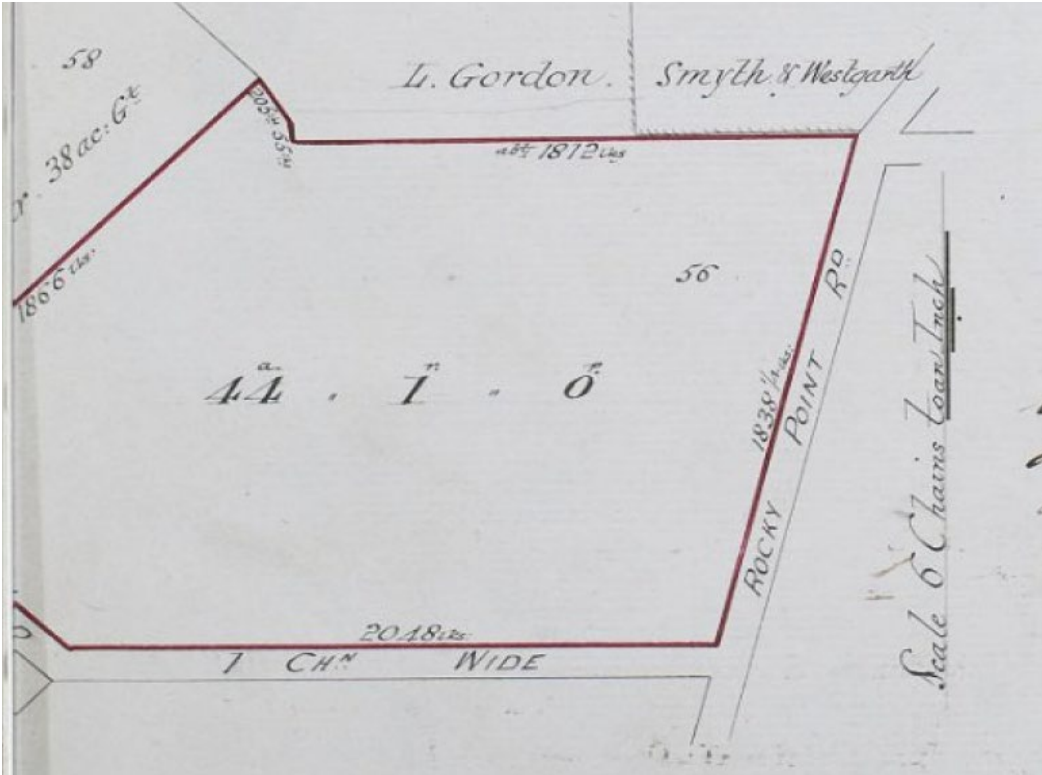


Figure 4.1: William Frederick Jones allotment 6 February 1882 (Source: NSW LRS 565-161)

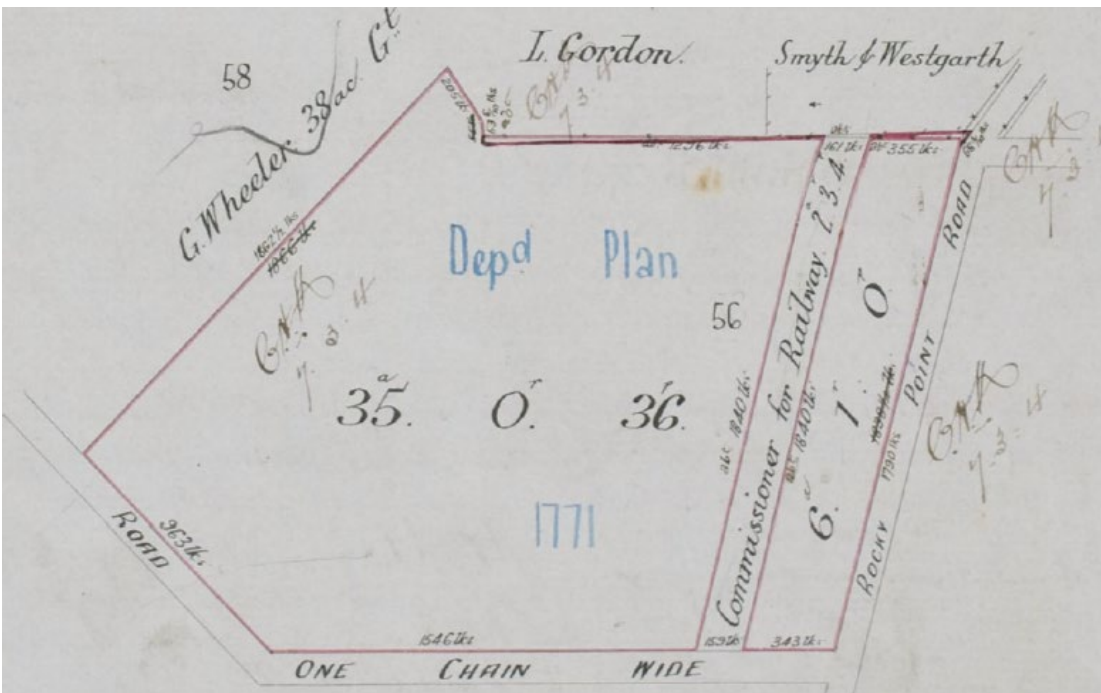


Figure 4.2: Allotment showing Commissioner for Railway (Source: NSW LRS 966-128)

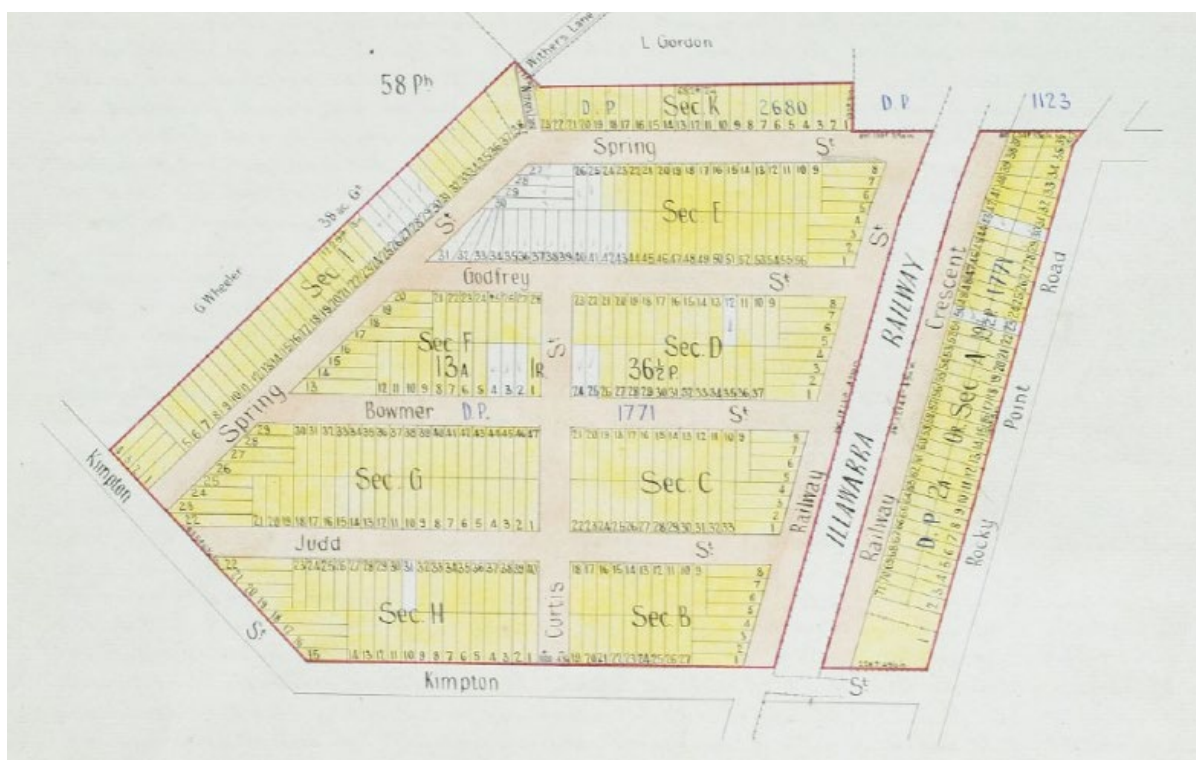


Figure 4.3: Thomas Saywell's subdivision plan showing the Illawarra Railway, 1904 (Source: LPI HLRV 1522-162)

4.4.2 First Railway Station

The contractors C. and E. Miller built the original double track line from Illawarra Junction to Hurstville in 1884 but it was not until 21 October 1906 that an island platform station at Banksia was completed. The station was named 'Banksia' by David Stead in March of 1906, in honour of Sir Joseph Banks. A renowned naturalist, the new name was presented by Stead as a form of '*...honouring the memory of that great man who had so much to do with the early history of this country ... by honouring ourselves in the use of the name of this brilliant man, we will assist in keeping alive perpetually, historical memories which should never be allowed to sleep*' (Rockdale Reports 1906).

The 1906 Banksia Station comprised a station platform, and a small station building (current Platform 2/3 building) sited to the south of the platform. The station pedestrian footbridge expanded from Railway Street to Hattersley Street with a small weatherboard ticket office located to the north of the footbridge (Figure 4.4 and Figure 4.5). The station platform featured several small garden beds along with a signal box located to the southwest of the original platform. A lamp room was originally sited to the southern boundary of the island platform (Figure 4.6).



Figure 4.5: Banksia Station looking north, 1910s (Source: SHD Banksia Station group)

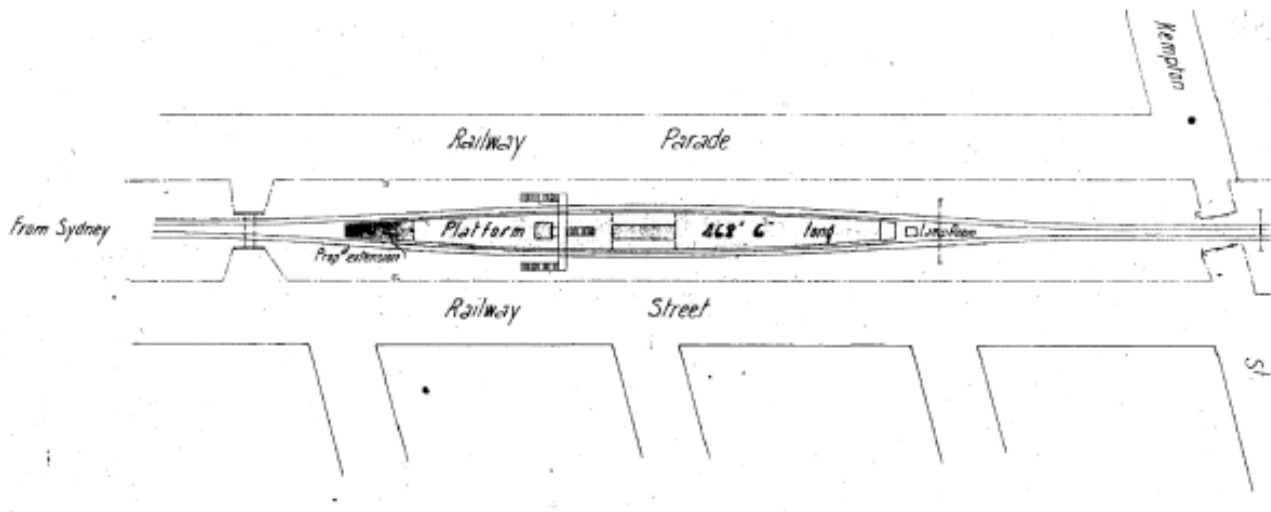


Figure 4.6: Plan of Banksia Station in 1906 (Source: Sydney Trains plan room)

4.4.3 Quadruplication and station upgrade

Banksia station was one of the many railway stations which experienced station upgrades following the quadruplication of the Illawarra line in the early 1920s. Early plans for the quadruplication were drafted in the late 1910s (Figure 4.7 and Figure 4.8) however the station precinct was only updated in 1923 -1924 (Figure 4.9, Figure 4.10, and Figure 4.11). The *St George Call* describes this transformation below:

'transformed what used to be a small island platform into a double track station ranking with any other station along the Illawarra line within the scope of improvements scheme. And, with the completion of the subway and the consequent disuse of the railway crossing, this will divert the vehicular and pedestrian traffic from the Rockdale overhead bridge to wards Banksia. Banksia should then come forward leaps and bounds

and real estate values immediately adjacent to the station will be considerably enhanced and all land round about Banksia Station will correspondingly improve in value. With the completion of the electrification scheme too, real estate around Banksia station should all have a very fine prospective value...' (The St George Call 1924).

The upgrades consisted of two new trackways and two side platform with small waiting rooms which were located approximately halfway along the platform (Figure 4.12). Toilets were added within the Platform 2/3 station building (Figure 4.13). The original 1906 platform was adapted to include an entry point to the pedestrian subway below (Figure 4.14 and Figure 4.15). To enable air circulation from the subway below, two large lanterns with boxed gabled roof forms were constructed on the northern portion of platform 2/3. The subway also included a booking office (Figure 4.16). The subway would at times be prone to flooding, as detailed in a 1933 newspaper article which reported that *'flood water damaged the line between Kingsgrove and Dumbleton (now Beverly Hills) and trains could not travel over that section. Water rose to a height of 6 ft. in the subway at Banksia Railway Station and train passengers had to climb through a fence to enter the carriages'* (Anon. 1933).

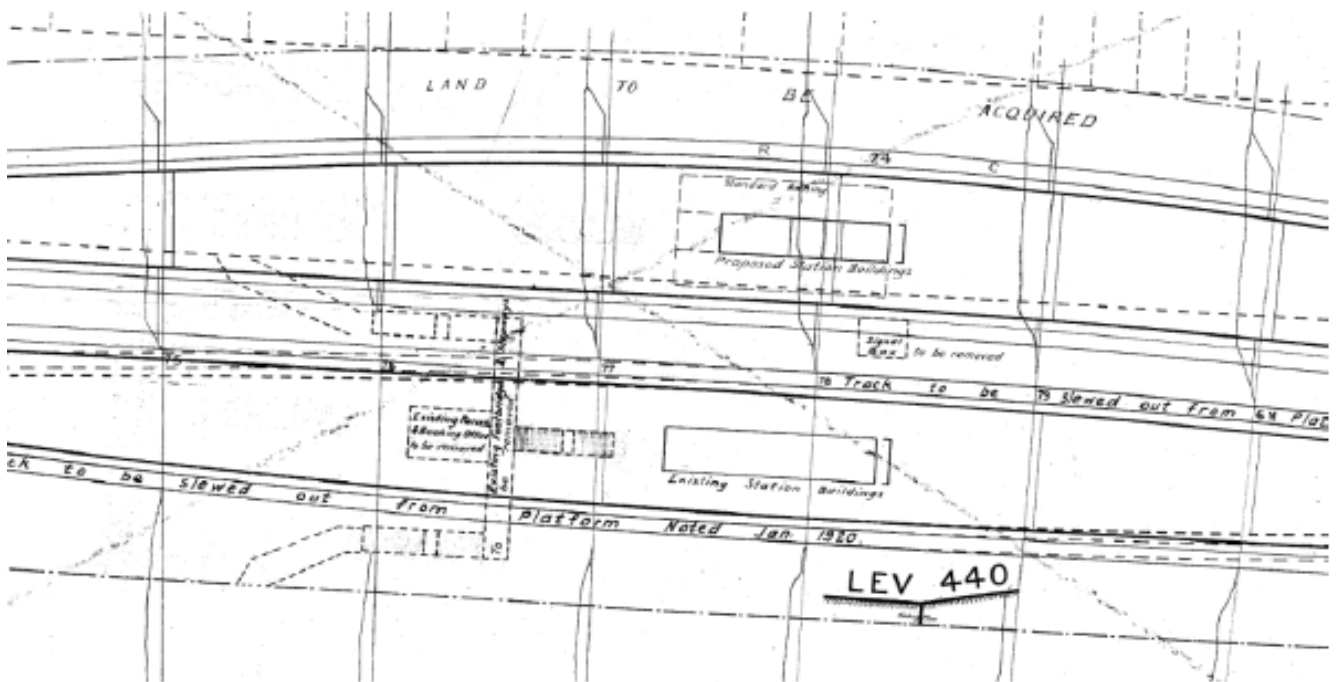


Figure 4.7: Banksia Station plan, 1917 (Source: Sydney Trains plan room)

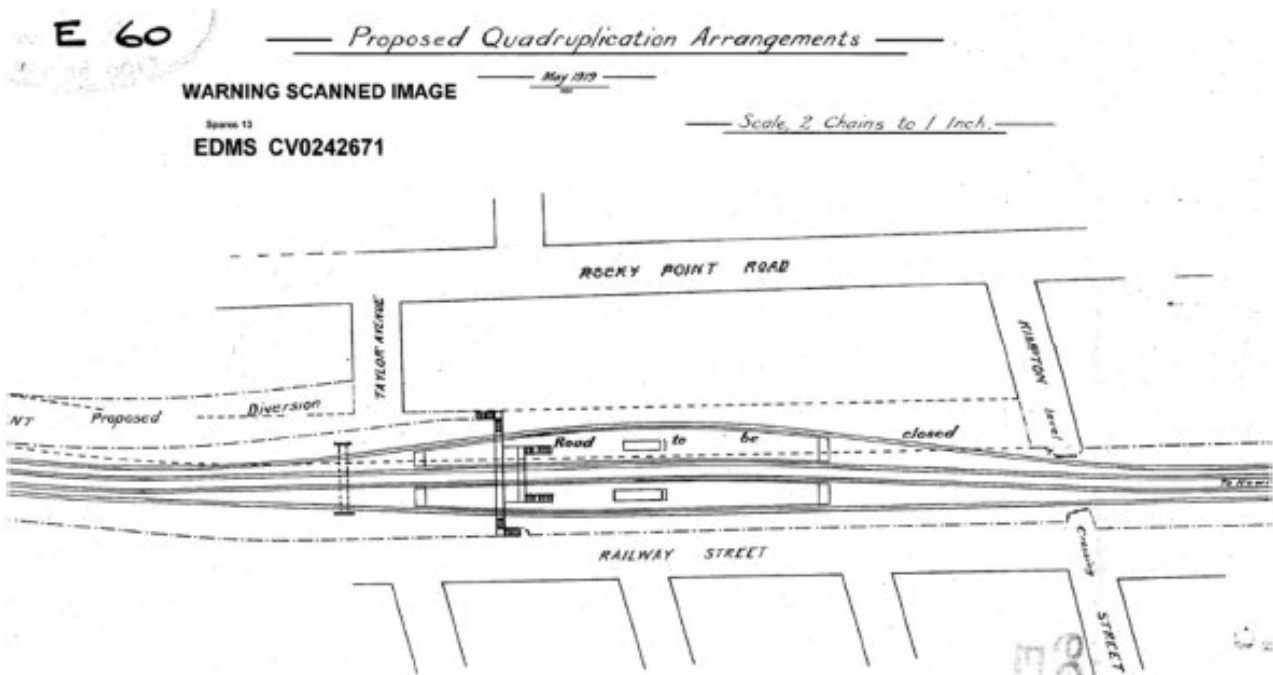


Figure 4.8: Banksia Station early plan for the quadruplication of the line, c.1919 (Source: Sydney Trains plan room)

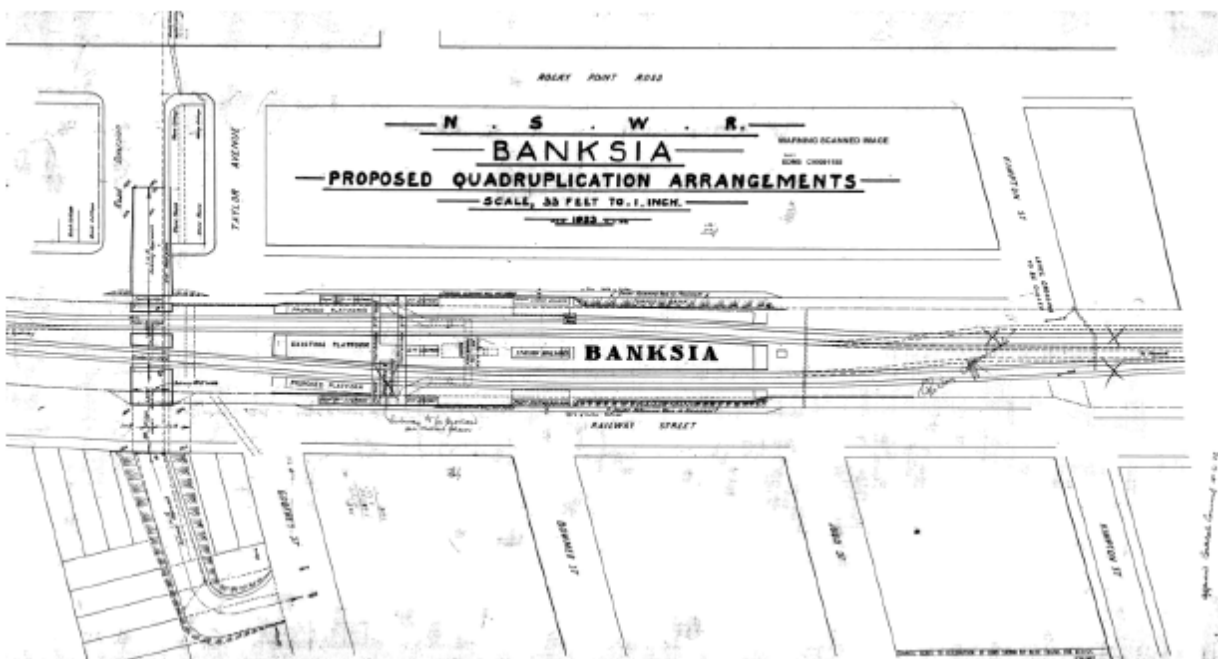


Figure 4.9: Banksia Station proposed quadruplication arrangements, c.1923 (Source: Source: Sydney Trains plan room)

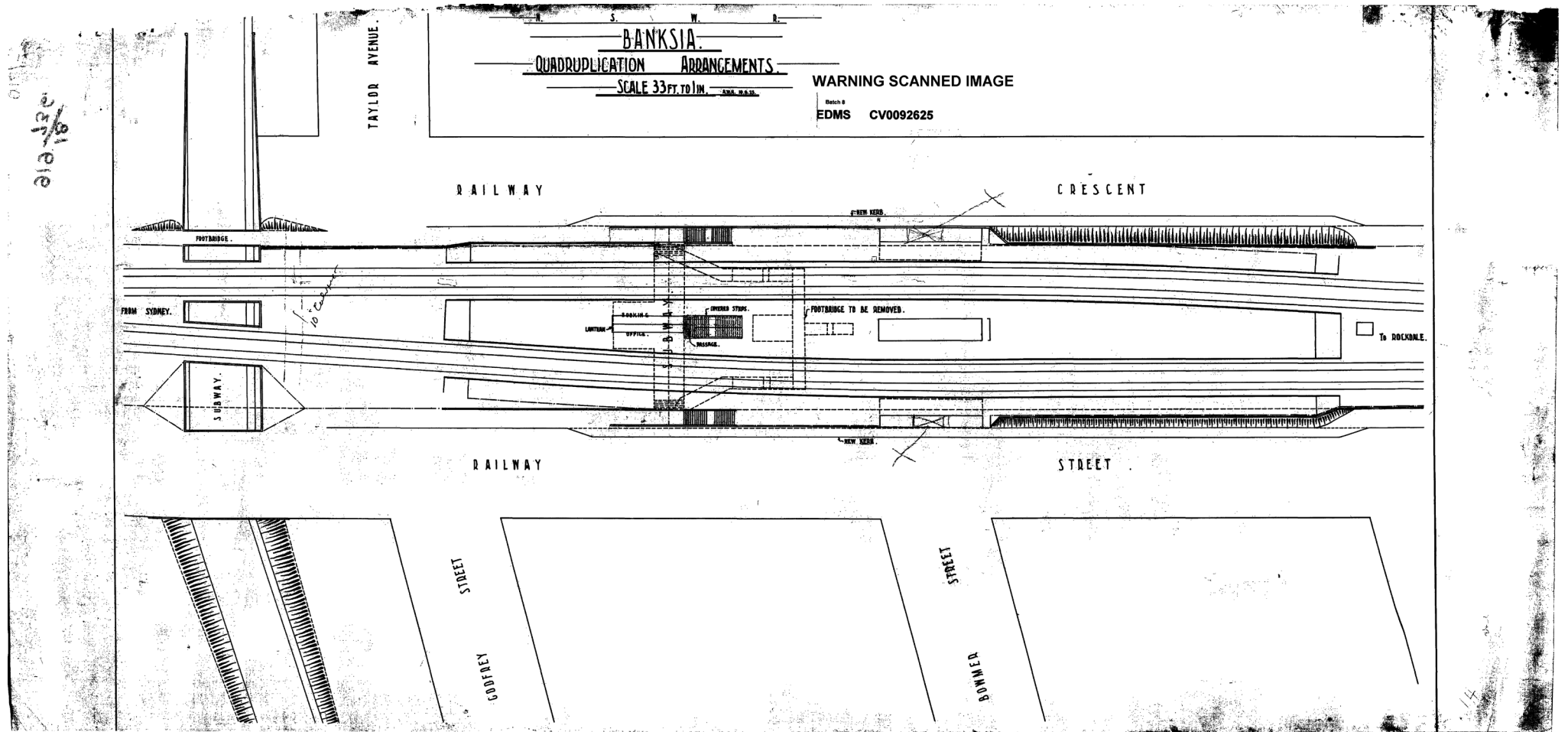


Figure 4.10: Banksia Station completed quadruplication arrangements, c. 1923 (Source: Source: Sydney Trains plan room)

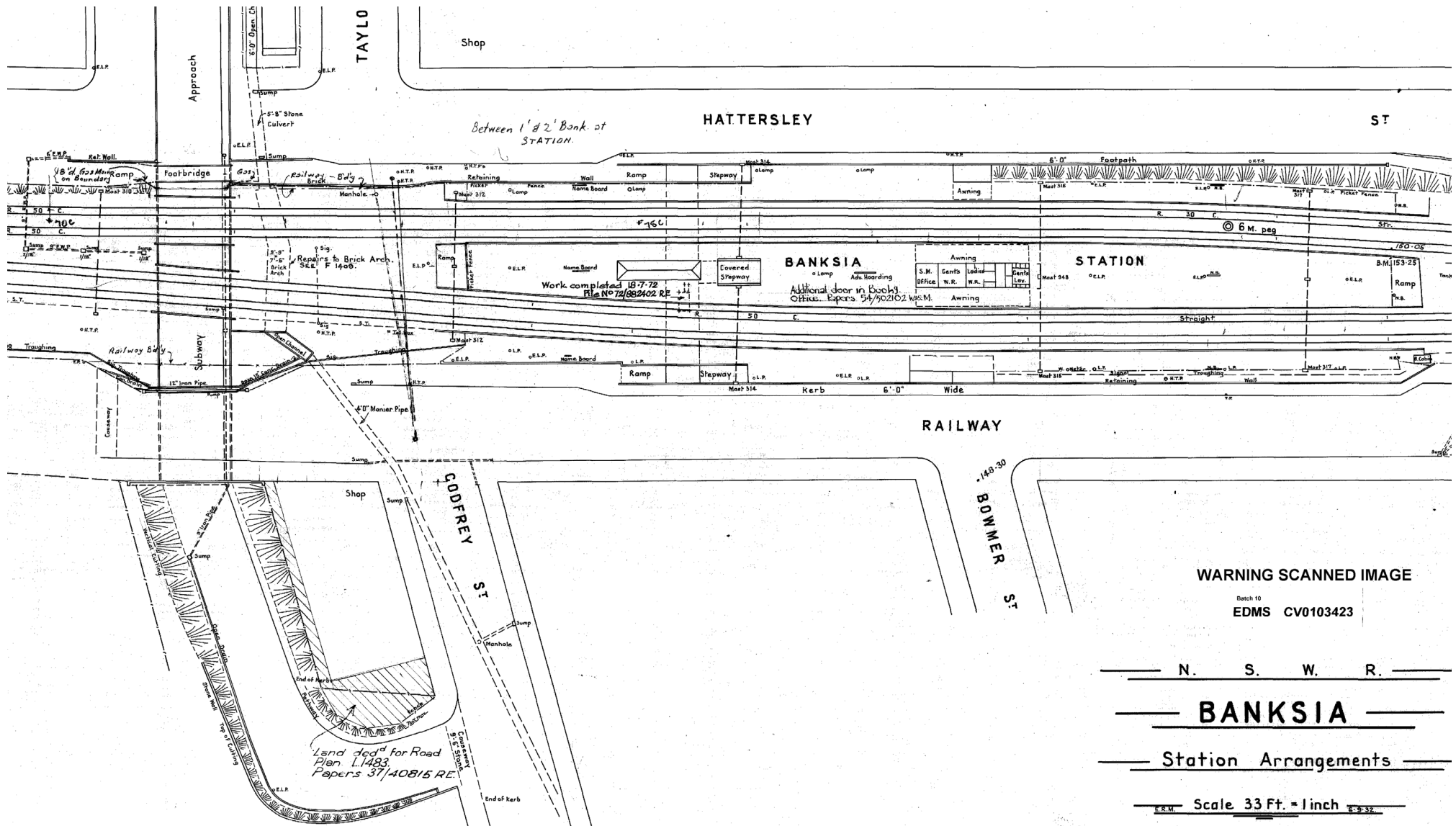


Figure 4.11: Banksia Station arrangement, c.1932 (Source: Source: Sydney Trains plan room)

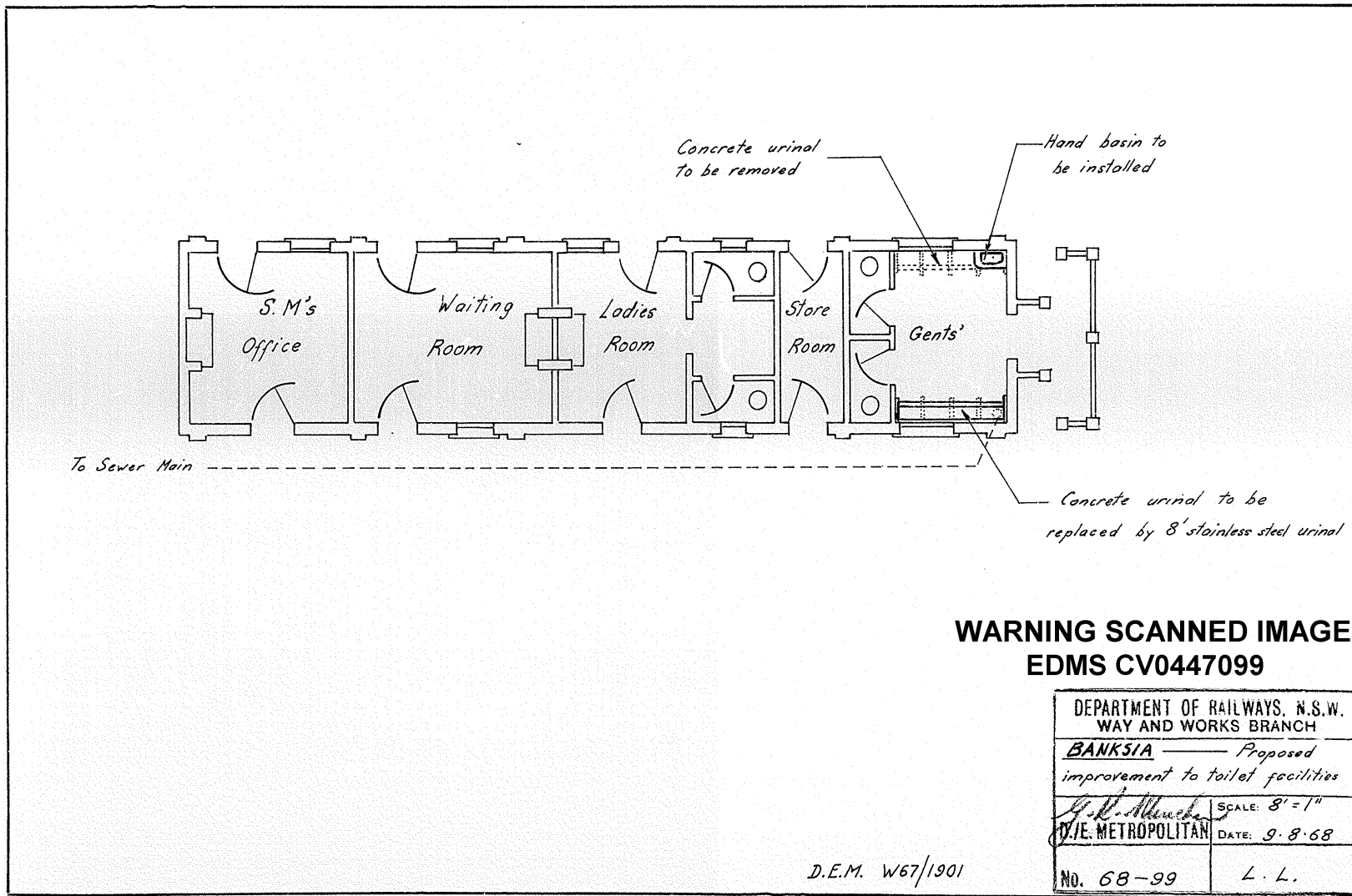


Figure 4.13: Banksia Station Male Toilets located in station building 2/3, c. 1968 (Source: Sydney Trains plan room)

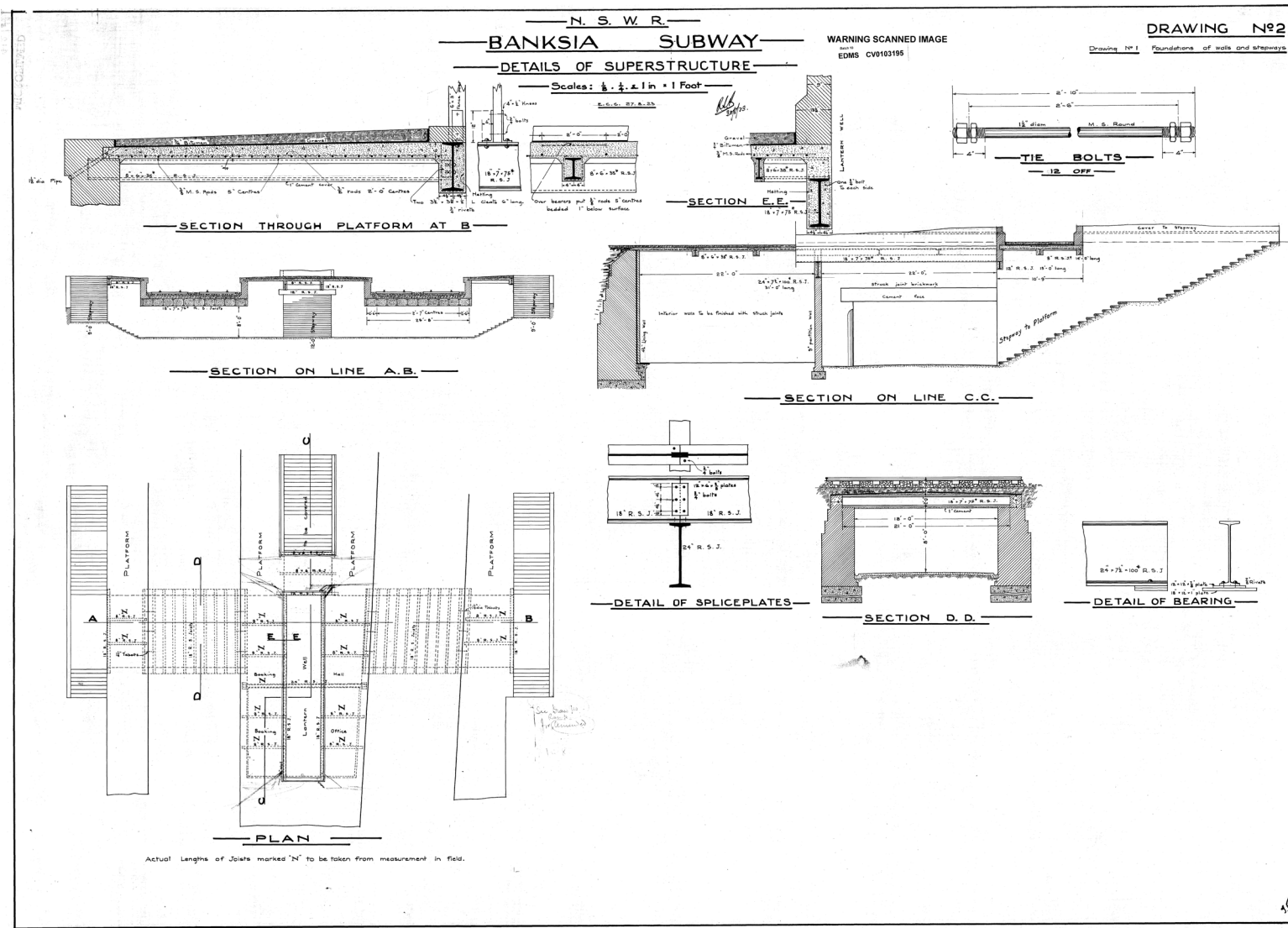


Figure 4.14: N.S.W.R Banksia subway – details of super structure (Source: Sydney Trains plan room)

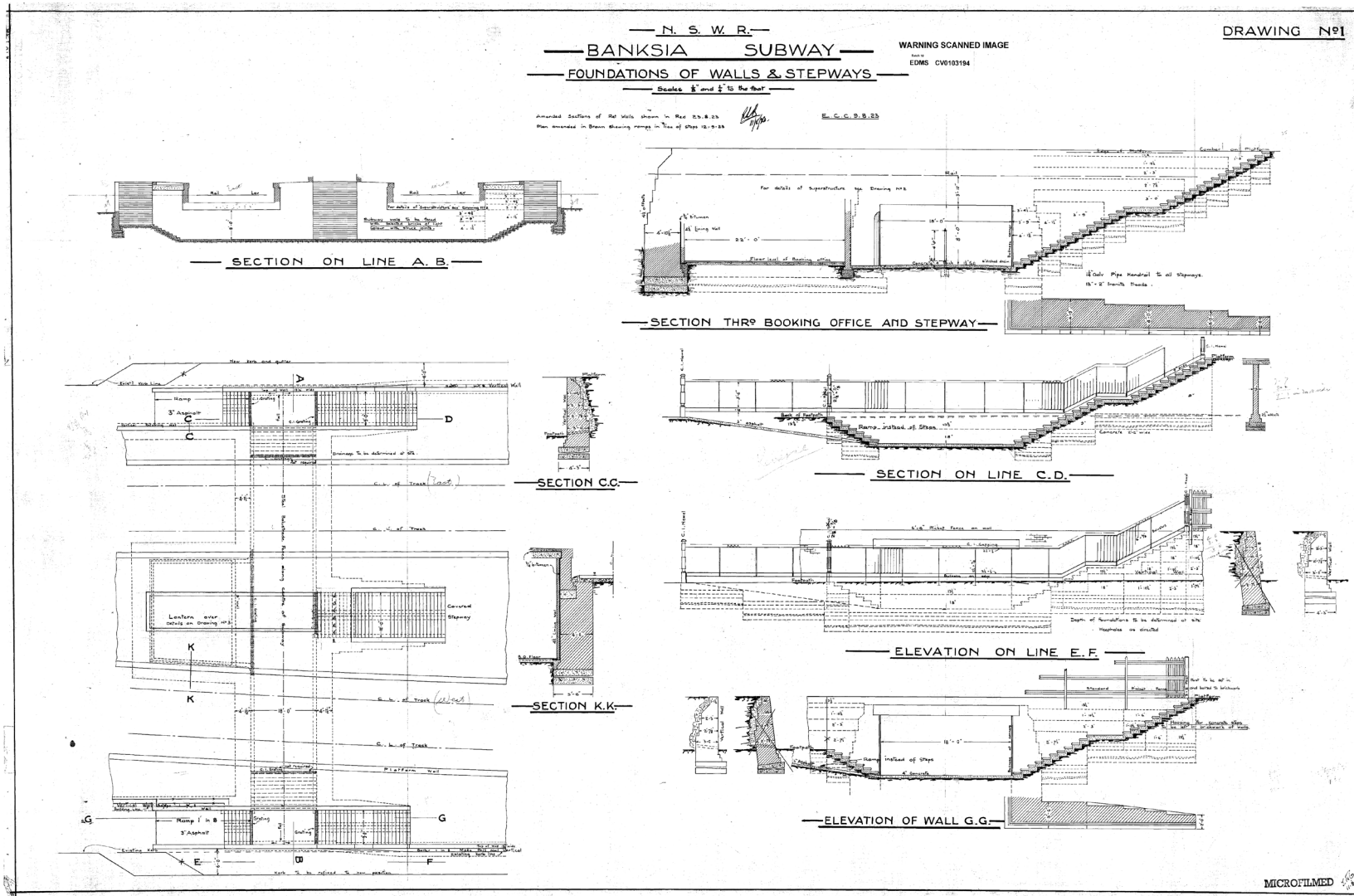


Figure 4.15: N.S.W.R Banksia Station foundations of walls and stepways, c. 1923 (Source: Sydney Trains plan room)

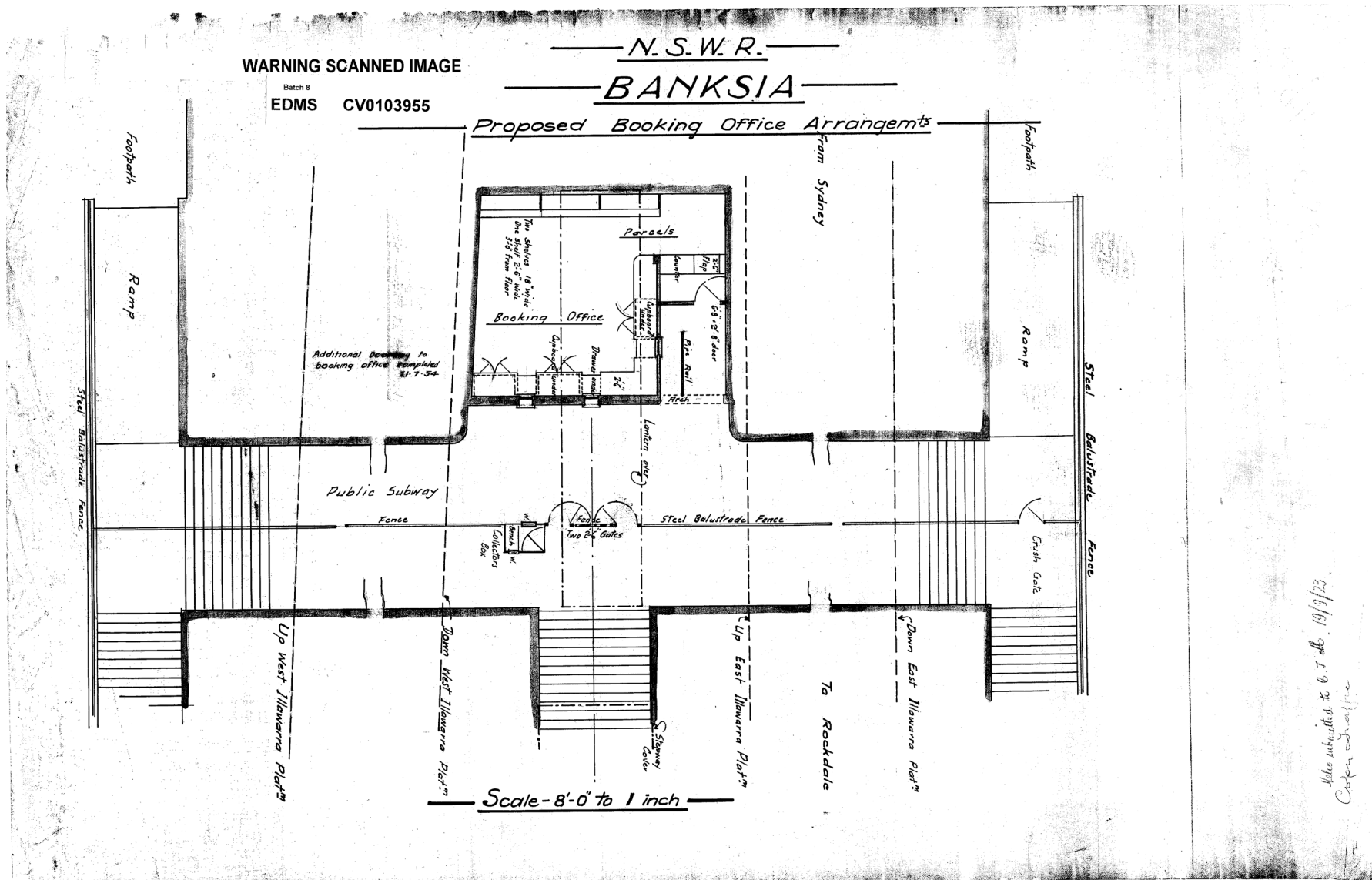


Figure 4.16: N.S.W.R Banksia – proposed booking office arrangements (subway level) (Source: Sydney Trains plan room)

4.4.4 1923- current

There have been no substantial modifications made to the station, its layout or its major fabric since the 1923 quadruplication. The arrangement of the station remains as it was at this time. Incremental changes have occurred across the staff offices, passenger facilities, brick facing and other station superstructure, primarily related to modernisation and/or amenity. The booking office contains a modern office fit-out which 'floats' within the original space, brickwork has been painted, toilets and other functional spaces have been upgraded over time, and some doorways and windows on platform buildings have been blocked off.

5. Description and physical evidence

5.1 Site visit

A site visit of Banksia Station was undertaken on 29 April 2020 by Jacobs Heritage Consultant, Clare Leever. The site visit aimed to identify whether any non-Aboriginal heritage was present within the project area and record physical details of such heritage in order to assess its significance. The condition of any heritage elements observed were photographed.

5.2 Site context

Banksia Station is located on the T4 Line, 9.6 kilometres south of Central Station between Arncliffe Station to the north and Rockdale Station to the south. The curtilage of the station (see Figure 3.1) is bounded in the north by a line across the railway tracks level with the northern side of Godfrey Street, to the east by the boundary of the railway property fronting Hattersley Street (incorporating the retaining wall); to the south by a line across the railway tracks level with the southern side of Judd Street, and to the west by the boundary of the railway property fronting Railway Street (incorporating the retaining wall).

The station is located between Railway Street (Figure 5.1 and Figure 5.2) and Hattersley Street (Figure 5.3 and Figure 5.4) and is entered from both streets via a pedestrian subway which accesses all platforms. Access to the station is also possible from stairs from both entrances. There are two side platforms and one island platform (Platforms 2/3).



Figure 5.1: Entrance to Banksia Station on Railway Street, facing east (Source: Jacobs 2020)



Figure 5.2: Entrance to Banksia Station on Railway Street, facing north east (Source: Jacobs 2020)



Figure 5.3: Entrance to Banksia Station on Hattersley Street, facing west (Source: Jacobs 2020)



Figure 5.4: Entrance to Banksia Station on Hattersley Street, facing south (Source: Jacobs 2020)

5.3 Pedestrian subway

The pedestrian subway provides access to all platforms along with the booking office. Entry to the subway on Railway Street is provided via sloped cement ramp (Figure 5.5). The ramp is adjacent to a brick retaining wall. A through stair at the ramp landing also provides access to Platform 1 (Figure 5.6 and Figure 5.7). At the lowest point of the ramp, a set of stairs provides access to the pedestrian subway (Figure 5.8 and Figure 5.9).

The entry to the subway has the sign 'Banksia' above it, indicating the train station entrance. There is evidence of earlier structures above the entrance, where metal brackets have been spaced above the concrete lintels. Timber fragments also remain in two of these brackets. Drawings indicate that it has always been steel fencing on the outer platforms.

The pedestrian subway is approximately 32 metres long (Figure 5.10). The interior of the subway is a combination of exposed face brick at the higher levels and rendered plaster walls at pedestrian level with integrated dado details and stop mouldings to verticals. The later plasterboard panels to conceal services and manage water ingress are likely fibre cement panelling. There are several areas which have no plasterboards however, the brickwork has been painted the same yellow cream colour. Halfway down the subway is a booking office, an electronic timetable and a stairwell which provides access to Platform 2/3 (Figure 5.11 and Figure 5.12).

The Hattersley Street entrance mirrors the entrance on Railway Street, wherein the subway leads to a set of stairs which leads up to street level (Figure 5.13 and Figure 5.14). A sloped cement ramp is located to the north, and a set of stairs leading to Platform 4 to the south (Figure 5.15).



Figure 5.5: Entrance to subway on Railway Street, facing south (Source: Jacobs 2020)



Figure 5.6: Detail of staircase to Platform 1 accessed from Railway Street, facing south) (Source: Jacobs 2020)



Figure 5.7: Entrance to subway on Railway Street, facing north (Source: Jacobs 2020)



Figure 5.8: Detail of subway entrance on Railway Street side, facing east (Source: Jacobs 2020)



Figure 5.9: Detail of subway entrance on Railway Street side, facing west (Source: Jacobs 2020)

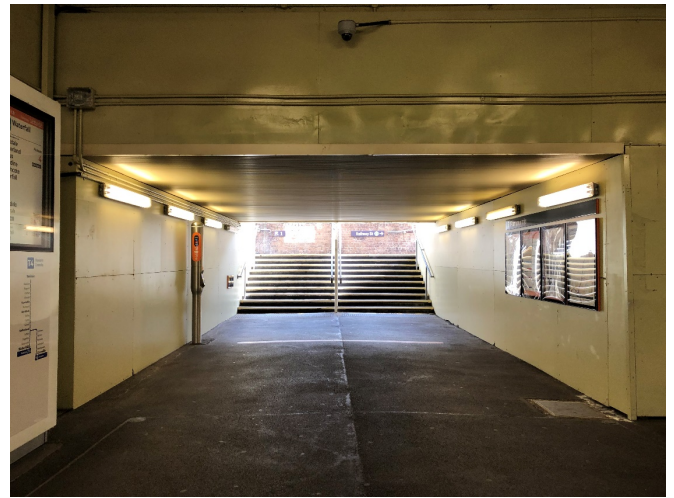


Figure 5.10: Subway looking towards Railway Street, facing west (Source: Jacobs 2020)



Figure 5.11: Electronic train timetable located in subway, facing south (Source: Jacobs 2020)



Figure 5.12: Stairs leading from subway to Platform 2/3, facing south (Source: Jacobs 2020)

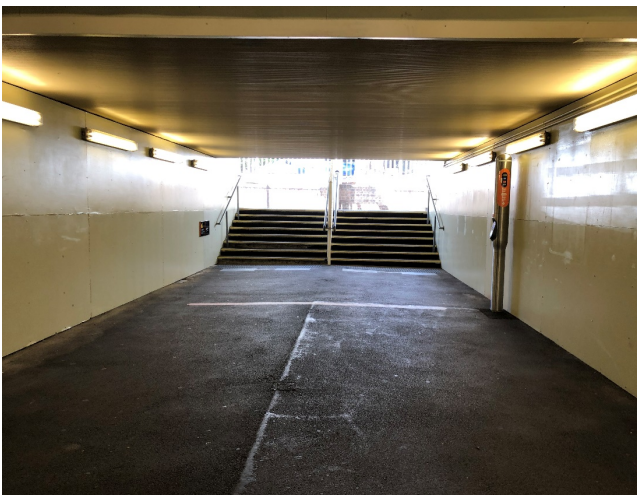


Figure 5.13: Subway looking towards Hattersley Street, facing east (Source: Jacobs 2020)



Figure 5.14: Detail of subway entrance on Hattersley Street, facing north (Source: Jacobs 2020)



Figure 5.15: Entrance to subway on Hattersley Street, facing south (Source: Jacobs 2020)

5.3.1 Subway booking office

The booking office located in the middle of the subway consists of a small room with a ticket window (Figure 5.16). The original ticket window has been infilled and is no longer visible. The booking office is entered through a modern doorway into a small storage area (Figure 5.17 and Figure 5.18). A former door would have been located to the north however, it has been subsequently bricked up. The walls and ceilings in the storage room consist of brick, support beams, and plasterboard, all of which have been coloured to a yellow cream (Figure 5.19 and Figure 5.20).

A small room is located northeast of the main booking office room. This room contains a tiled floor and houses office furniture and several filing cabinets (Figure 5.21 Figure 5.22). The storage room leads to the small booking office which contains a small kitchenette (Figure 5.23 and Figure 5.24). Adjacent to the kitchenette is a doorway which shows that the interior walls are offset from the original (Figure 5.25). This offset has meant the original booking office interior walls are intact (Figure 5.26 and Figure 5.27).

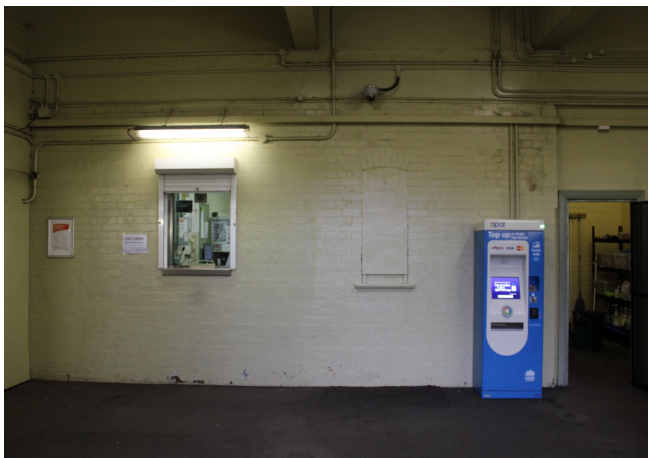


Figure 5.16: Booking office, facing north (source: Jacobs 2020)

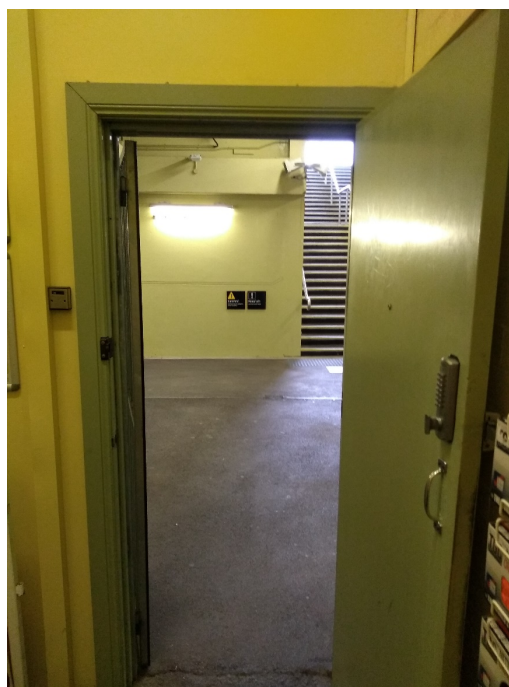


Figure 5.17: Doorway to booking office looking out to subway, facing south (Source: Jacobs 2020)



Figure 5.18: Entrance from subway to booking office, facing south west (Source: Jacobs 2020)



Figure 5.19: Detail of ceiling and brick walls in entry space for booking office (source: Jacobs 2020)



Figure 5.20: Detail of ceiling and brick walls in entry space for booking office (Source: Jacobs 2020)



Figure 5.21: Detail of tiling in front of entrance to booking office (Source: Jacobs 2020)



Figure 5.22: Small room housing office materials (Source: Jacobs 2020)



Figure 5.23: Interior booking office, facing south (Source: 2020)



Figure 5.24: Kitchenette in booking office (Source: Jacobs 2020)



Figure 5.25: Door inset which shows original booking office interior (Source Jacobs 2020)



Figure 5.26: Detail on inset and spacing from original interior (Source: Jacobs 2020)

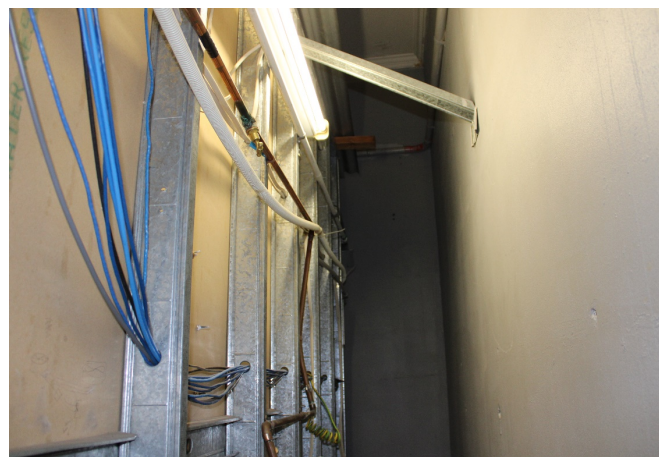


Figure 5.27: Detail on inset and spacing from original interior (Source: Jacobs 2020)

5.3.2 Subway Lantern Structure

To the north of the pedestrian subway is a narrow vaulted corrugated steel roof structure which shelters the booking office and subway below (Figure 5.28). The brown face brickwork is visible, along with several timber framed windows. These timber frames, along with the timber roof beams have been painted a yellow cream. The windows would have enabled natural light to entry into the subway. They have been subsequently filled in (Figure 5.29). The subway lantern structure is visible on the northern end of Platform 2/3. The exterior bricks have been painted a similar yellow cream colour as within the subway (Figure 5.30 and Figure 5.31).



Figure 5.28: Northern lantern vaulted roof viewed from subway (Source: Jacobs 2020)



Figure 5.29: Northern lantern vaulted roof viewed from subway (Source: Jacobs 2020)



Figure 5.30: Exterior of vaulted roof, located on Platform 2/3, facing north west (Source: Jacobs 2020)



Figure 5.31: Exterior of vaulted roof, located on Platform 2/3, facing south (Source: Jacobs 2020)

5.3.3 Platform 2/3 Stairwell Lantern Structure

The stairwell which provides access to Platform 2/3 is enclosed by a hipped corrugated steel roofed brick and timber structure above (Figure 5.32 and Figure 5.33). The structure has fixed timber framed windows each side which provide natural light into the stairwell and down into the subway (Figure 5.34). The roof timber beams have been painted a yellow cream, while the brickwork has been painted earthy brown (Figure 5.35).

The lantern structure is located on Platform 2/3 between the northern subway lantern and platform building. The brick and timber surfaces have been painted the same yellow cream as the timber beams. An emergency help point is located on the west side of the building (Figure 5.36). The row of frosted glass windows is visible along the east and west sides of the building (Figure 5.37). Both the stairwell lantern structure and the subway lantern structure (described in Section 5.3.1) are located in line with one another on Platform 2/3 (Figure 5.38).



Figure 5.32: Stairwell and roof leading to Platform 2/3, facing south (Source: Jacobs 2020)



Figure 5.33: Detail of roof covering over stairwell, facing north (Source: Jacobs 2020)



Figure 5.34: Detail of windows and brick work of the stairwell lantern structure, facing north east (Source: Jacobs 2020)



Figure 5.35: Detail of alterations in stairwell, facing north (Source: Jacobs 2020)



Figure 5.36: Entrance to stairwell lantern structure from Platform 2/3, facing north (Source: Jacobs 2020)



Figure 5.37: Detail of exterior windows of stairwell lantern structure, facing south east (Source: Jacobs 2020)



Figure 5.38: Exterior of both lantern structures, facing north west – taken from Platform 4 (Source: Jacobs 2020)

5.4 Platforms

Banksia Station comprises one island platform (Platform 2/3) which was built in 1906, and two perimeter platforms (Platform 1 and 4) built in 1923.

5.4.1 Platform 1

Platform 1 is a perimeter platform located adjacent to Railway Street. Built in 1923, the platform consists of an asphalted platform with concrete and brick coping (Figure 5.39). Seat benches are available on the length of the platform, along with lights and rubbish bins (Figure 5.40).



Figure 5.39: View of Platform 1 from Platform 2, facing west (Source: Jacobs 2020)



Figure 5.40: Platform 1, facing south (Source: Jacobs 2020)

5.4.2 Platform 2

Platform 2 forms part of the original island platform constructed in 1906. The platform consists of an asphalted layer with concrete and brick coping (Figure 5.41 and Figure 5.42). Bench seats are available on the length of the platform, along with lights and rubbish bins. The platform has been extended northward since its original construction.



Figure 5.41: Platform 2, facing south (Source: Jacobs 2020)



Figure 5.42: Platform 2, facing north (Source: Jacobs 2020)

5.4.3 Platform 3

Platform 3 forms part of the original island platform constructed in 1906. As with Platform 2, this platform has an asphalted layer with concrete and brick coping. Bench seats are available on the length of the platform, along with lights and rubbish bins. The platform has been extended northward since its original construction.



Figure 5.43: View of Platform 3 from Platform 4, facing north west (Source: Jacobs 2020)



Figure 5.44: Platform 3, facing south (Source: Jacobs 2020)

5.4.4 Platform 4

Platform 4 was constructed in 1923 and is a perimeter platform at Banksia Station. The platform is adjacent to Hattersley Street and is accessed by pedestrian steps located near the subway entrance (Figure 5.45 and Figure 5.46). The platform consists of an asphalted platform with concrete and brick coping. Bench seats are available on the length of the platform, along with lights and rubbish bins (Figure 5.47 and Figure 5.48).



Figure 5.45: Entrance to Platform 4 from Hattersley Street, facing north (Source: Jacobs 2020)



Figure 5.46: Detail of fencing on stairwell leading to Platform 4, facing north (Source: Jacobs 2020)



Figure 5.47: Entrance to Platform 4, facing north (Source: Jacobs 2020)



Figure 5.48: View of Platform 4 from Platform 3, facing south east (Source: Jacobs 2020)

5.5 Platform buildings

5.5.1 Platform 1 building (c. 1923)

Constructed in 1923, the building on Platform 1 is a small painted brick single storey building with an attached weatherboard waiting area (Figure 5.50) located towards the southern end of the platform (Figure 5.49). The building has a skillion corrugated steel roof with the overhanging awning cantilevered on steel brackets, mounted on rendered cement brackets (Figure 5.51). The brick section of the building has timber-framed double-hung windows, a 4-paned timber framed fanlight, and a modern timber flush door. The brick section of the building is decorated with stucco mouldings on the window and door heads. The window on the southern elevation of the building is covered over. The bottom sash of the window on the north elevation has a single horizontal glazing bar. Platform regrading has resulted in the original floor ventilation grates being covered over, however the original stone door threshold has been retained.

Internally, the brick waiting room retains the original timber floorboards, skirting boards and ceiling. The original bench seats have been removed.

The weatherboard waiting area is located north of the brick section of the building. It is open on the east side and faces the railway lines. It features a timber valance and contains modern seating.



Figure 5.49: View of Platform 1 building from Platform 2, facing west (Source: Jacobs 2020)



Figure 5.50: Platform 1 building, facing north (Source: Jacobs 2020)



Figure 5.51: Platform 1 building, facing north (Source: Jacobs 2020)

5.5.2 Platform 2/3 building (c. 1906)

Constructed in 1906, the Platform 2/3 building is an example of a standard Type 11 railway building design. It is a painted brick single storey building with a gabled corrugated steel roof with sloped awnings on both sides (Figure 5.52 and Figure 5.53). Gable ends to north and south feature rectangular timber louvred vents. The building features timber-framed double-hung windows (windows within the waiting area have been removed) and two 8-paned fanlights. All doors are modern timber flush doors. The exterior walls feature two decorative stucco mouldings, the upper being more elaborate, and windows have decorative stucco sills (Figure 5.54). Decorative stucco mouldings also surround the window and door heads (Figure 5.56). The awnings on both sides of this building are identical, with sloped corrugated steel roofs cantilevered on steel brackets mounted on rendered cement wall brackets. The awnings have timber valances to each end (north and south) (Figure 5.56). There is an original door opening to the male toilets at the southern end of the building, which also features a brick screen wall. One window has been bricked up, and a number of windows are missing. Although the timber window frames remain in situ, the openings have been filled with modern steel security screens. The doorways to the waiting room have modern metal security doors. The original roof has been replaced and the original chimney stacks have been removed.

Internally, the platform building consists of (from north to south); a small storage room, the platforms waiting room, a female waiting room and female bathrooms, a cistern room and the men's toilets, which are described in detail following.



Figure 5.52: View of Platform 2/3 building from Platform 4, facing south west (Source: Jacobs 2020)



Figure 5.53: Platform 2/3 building, facing south (Source: Jacobs 2020)



Figure 5.54: Platform 2/3 building, facing south (Source: Jacobs 2020)



Figure 5.55: Exterior of Platform 2/3 building, facing north (Source: Jacobs 2020)



Figure 5.56: Platform 2/3 building roof, facing north (Source: Jacobs 2020)

5.5.2.1 Storage room

The small storage room in the Platform 2/3 building remains predominately intact and was utilised as a station manager's office between 1906 and 1923. The original timber floorboards are present throughout the extent of the room (Figure 5.57 and Figure 5.58). The original fireplace, grates and hearth remain intact (Figure 5.59). The storage room contains several heritage objects, these include: early rare timber-framed noticeboard with timber backing board and covered with hessian, timber office desk (drawers missing) with timber pigeonhole shelving above, early timber ticket cabinet with steel ticket holders inside, timber tray holding series of rubber stamps, desk with turned legs and two drawers, and cast iron sleeper tongs (Figure 5.60 and Figure 5.61). Although the original ceiling of corrugated iron with metal ceiling roses is present, modern light fixtures have been inserted to the centre of the ceiling (Figure 5.62).



Figure 5.57: Original timber floorboards to storage room (Source: Jacobs 2020)



Figure 5.58: Original timber floorboards within storage room (Source: Jacobs 2020)



Figure 5.59: Original fireplace within storage room (Source: Jacobs 2020)



Figure 5.60: Heritage tray and stamps within storage room (Source: Jacobs 2020)



Figure 5.61: Heritage desk within storage room (Source: Jacobs 2020)



Figure 5.62: Original ceiling and rose within storage room (Source: Jacobs 2020)

5.5.2.2 Waiting room

The original waiting room in Platform 2/3 building is accessed from both sides of the platform. Original timber floorboards are present under the later laminated floor surface (Figure 5.63). On the northern interior wall is a large mural of coastal banksia flowers painted by Leonie Morrison (Figure 5.64). Original timber waiting room benches are present (Figure 5.65). The entry doors and windows have been removed and replaced with modern security bars. The original fireplace has been infilled, however the original hearth is likely to still be present, as the floor rises slightly in this location. The original cornices, corrugated iron ceiling and ceiling rose are intact (Figure 5.66). The waiting room remains open to the public.



Figure 5.63: Entrance to waiting room, facing west (Source: Jacobs 2020)



Figure 5.64: Northern interior wall of waiting room (Source: Jacobs 2020)



Figure 5.65: Southern interior wall of waiting room (Source: Jacobs 2020)



Figure 5.66: Original ceiling and rose within waiting room (Source: Jacobs 2020)

5.5.2.3 Women's waiting room and toilets

The women's waiting room and adjoining toilets in the Platform 2/3 building are accessed from both sides of the platform (Figure 5.67). Original timber floorboards may be intact below the modern flooring. Original corrugated iron ceiling, ceiling roses, cornices, and skirting boards remain intact within the waiting room (Figure 5.68). The original fireplace has been infilled.

The women's toilets contain two stalls which are separated by a small room containing a sink (Figure 5.69). Stall locations appear to be original and the stall timber four pane doors are consistent with the construction period (Figure 5.70 and Figure 5.71). Renovations in the toilets have resulted in new tiled floors and walls. However, the original corrugated iron ceilings and ceiling roses remain intact (Figure 5.72).



Figure 5.67: Women's waiting room (Source: Jacobs 2020)



Figure 5.68: Original ceiling and rose within women's waiting room (Source: Jacobs 2020)



Figure 5.69: Entrance to women's toilet stalls (Source: Jacobs 2020)



Figure 5.70: Entrance to women's toilet stalls (Source: Jacobs 2020)



Figure 5.71: Entrance to women's toilet stalls (Source: Jacobs 2020)



Figure 5.72: Original ceiling and rose within women's toilet stalls (Source: Jacobs 2020)

5.5.2.4 Cistern

The cistern room within the Platform 2/3 building was not accessible during site inspections. The following description has been sourced from the previous SoHI (Artefact Heritage 2020: 33).

'The former cistern room is currently utilised as a storage space (Figure 5.73). As the former use required little detailed attention, there is no ceiling and the roof structure is exposed. Brick walls have been painted and the concrete floor has been damaged and partially removed. The original coloured glass within the door transom remains intact. There is evidence of the original toilet openings along the southern wall of the room, which is a party wall to the men's toilet stalls (Figure 5.74). The locations of these openings depict that the original men's toilet stalls have been modified since construction.'



Figure 5.73: View of former cistern room (Source: Artefact Heritage (2020: 37))



Figure 5.74: View of infilled openings within the cistern room (Source: Artefact Heritage (2020: 37))

5.5.2.5 Men's toilets

The entrance to the men's toilets in the Platform 2/3 building is on the southern side of the building and is shielded by a brick privacy wall (Figure 5.75). The standard design from this period located the male toilets at the far end of the building and the room was accessed via a two-stage timber privacy screen. The opening in the end wall to provide access to the male toilets was typically a large opening with rendered mouldings – doors to the male toilets were not part of the standard design. Over time the timber privacy screens likely deteriorated given the unprotected vertical timber elements beyond the extent of the main roof. Subsequently many of the timber screens were replaced with brick screens as a more durable response. Many of the brick screens follow the historic two-stage alignment of the earlier timber screens (Pers. comms. Steven Barry 09/07/20). The original door has been removed and replaced with a modern security screen.

The surface of the interior toilets consists of tiles (Figure 5.76). There are two stalls next to one another, with a urinal located on the west interior wall (Figure 5.77). The partition walls feature a curved brick parapet and timber battens to the top of the stalls. Modern tiles cover the original brickwork in sections. Original window openings have been partially covered, while the ceiling has been replaced with perforated panels.



Figure 5.75: Entrance to men's toilet stalls (Source: Jacobs 2020)



Figure 5.76: Entrance to men's toilet stalls (Source: Jacobs 2020)



Figure 5.77: Interior of men's toilets (Source: Jacobs 2020)

5.5.3 Platform 4 building (c. 1923)

The building on Platform 4 is a small painted brick building (Figure 5.78) with a gabled corrugated steel roof and tongue-and-grooved timbered eaves (Figure 5.79). A corrugated steel sloped roof awning on the west side only is cantilevered on steel brackets mounted on rendered cement wall brackets, which are attached to a pair of pilasters either side of the central doorway. Original windows and the central door are missing, the openings filled with modern steel security door and screens. The walls of the building feature two stucco mouldings, the upper being more elaborate, and deep stucco mouldings around the fanlight opening above the central doorway. There are also decorative stucco sills to the window openings (Figure 5.80). There are rectangular timber-louvered vents with slightly arched heads to the gable ends.

The interior of the building is one single space which continues to function as a waiting room (Figure 5.81). The room consists of a timber-battened plaster ceiling with timber cornices, plastered walls, a slate threshold, and original timber seating. The original timber floorboards are evident below the modern floor surface.



Figure 5.78: View of Platform 4 building from Platform 3, facing south east (Source: Jacobs 2020)



Figure 5.79: Platform 4, facing south (Source: Jacobs 2020)



Figure 5.80: Platform 4, facing south (Source: Jacobs 2020)



Figure 5.81: Interior of Platform 4 building, facing south (Source: Jacobs 2020)

5.6 Brick retaining walls

Surrounding Banksia Station are brick retaining walls built in 1923. The walls are located on both Railway Street and Hattersley Street. The walls are made from face brickwork and have a bullnose capping course. They are approximately 1.5 to 2 metres in height, reducing in height to both north and south ends. Part of the retaining wall on Railway Street forms the base of the Platform 1 building (Figure 5.82). Along the Railway Street side of the station, the retaining wall extends from a point opposite the Godfrey Street intersection at the north end, to a point opposite the Judd Street intersection at the south end. On the Hattersley Street side of the railway station, the brick retaining wall extends from a point opposite the Taylor Street intersection at the north end to a point at the south end on Hattersley Street opposite the rear of 345 Princes Highway. Part of the retaining wall on Hattersley Street, forms a base for the Platform 4 building (Figure 5.83 and Figure 5.84).



Figure 5.82: Brick retaining wall on Railway Street, facing south (Source: Jacobs 2020)



Figure 5.83: Brick retaining wall on Hattersley Street, facing west (Source: Jacobs 2020)



Figure 5.84: Brick retaining wall on Hattersley Street, facing west (Source: Jacobs 2020)

6. Assessment of heritage significance

The concept of cultural heritage significance helps in estimating the heritage value of places. Those places which are likely to be significant are those which 'help an understanding of the past or enrich the present, and which will be of value to future generations' (Australia ICOMOS 2013). In Australia, the significance of a place is generally assessed according to the following values:

- Historic value;
- Associative value;
- Aesthetic value;
- Social value; and
- Scientific value.

The significance of a place and its associated values is guided by a system of assessment centred on the Burra Charter (Australia ICOMOS 2013). The assessment of heritage significance is defined through legislation in the Heritage Act, with its implementation guided by components of the *NSW Heritage Manual* (NSW Heritage Office 1996b) and the *Archaeological Assessment Guidelines* (NSW Heritage Office 1996a). These documents incorporate the aspects of heritage value identified in the Burra Charter into a framework currently accepted by the NSW Heritage Council and provide a detailed process for conducting assessments of heritage significance. The documents have been used in undertaking this significance assessment.

6.1 Heritage significance criteria

The NSW Heritage Council has adopted specific criteria for heritage assessment, which have been gazetted pursuant to the Heritage Act. The seven criteria upon which the following assessment of significance is based are outlined in Table 6.1. The following sections provide an assessment of the heritage significance of Banksia Railway Station Group in accordance with the guideline *Assessing Heritage Significance* (NSW Heritage Office, 2001).

Table 6.1: NSW heritage significance assessment criteria

Criteria	Description
(a) – Historical significance	An item is important in the course, or pattern, of NSW cultural or natural history
(b) – Associative significance	An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW cultural or natural history
(c) – Aesthetic significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW
(d) – Social significance	An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons
(e) – Research potential	An item has potential to yield information that will contribute to an understanding of NSW cultural or natural history
(f) – Rarity	An item possesses uncommon, rare or endangered aspects of NSW cultural or natural history
(g) – Representativeness	An item is important in demonstrating the principal characteristics of a class of NSW cultural or natural places or cultural or natural environments.

6.2 Significance assessment

The assessment of significance from the SHI listing for Banksia Railway Station Group² is reproduced in Table 6.2.

Table 6.2: Assessment of significance for Banksia Railway Station Group (SHI# 4801160)

Criterion	Assessment
Criterion a) [Historical significance]	Banksia Railway Station, constructed 1906, is of historical significance as part of the early 20th century upgrading of the Illawarra Line, its buildings illustrating the progress of this upgrading from 1906 to 1923. The station is also of historical significance for its role as a major transport hub for the suburb of Banksia since 1906, and its role in development of the suburb of Banksia.
Criterion b) [Associative significance]	This item was not listed under this criterion.
Criterion c) [Aesthetic significance]	Banksia Railway Station is of aesthetic significance for its 1906 Platforms 2 and 3 building, 1923 Platform 1 and 4 buildings, and 1923 pedestrian subway, ticket office and retaining walls, as intact representative railway station structures of their periods. The platform buildings illustrate the gradual change in style of station buildings in the early 20th century.
Criterion d) [Social significance]	The place has the potential to contribute to the local community's sense of place and can provide a connection to the local community's past.
Criterion e) [Research potential]	Banksia Railway Station is of research significance for its ability to demonstrate NSW Railways design and construction techniques of the early 20th century (1906-1923).
Criterion f) [Rarity]	The 1923 pedestrian subway at Banksia, with its retaining walls and painted signage, is rare on the Illawarra Line (only known example).
Criterion g) [Representativeness]	Banksia Railway Station is representative within the Illawarra Line context as a station which combines buildings from two periods - 1906 and 1923- and includes a pedestrian subway.

Integrity/Intactness

The station buildings are relatively intact. Alterations include modernisation of staff offices in the subway booking office, minor upgrades to passenger facilities, painting of brickwork, removal of windows and doors.

6.3 Statement of heritage significance

The following statement of significance has been reproduced from the Banksia Railway Station Group SHI listing.

Banksia Station, constructed in 1906 and extended in 1923 - inclusive of the platform buildings, platforms, pedestrian subway and brick retaining walls - is of local heritage significance. Banksia Station is of historical significance as part of the early 20th century upgrading of the Illawarra Line, its buildings illustrating the progress of this upgrading from 1906 to 1923. The station is also of historical significance for its role as a major transport hub for the suburb of Banksia since 1906, and for its role in the development of the suburb of Banksia.

Banksia Station is of aesthetic significance for its 1906 Platforms 2 and 3 building, 1923 Platform 1 and 4 buildings, and 1923 pedestrian subway, ticket office and retaining walls, as intact

² State Heritage Inventory listing for Banksia Railway Station Group (SHI ID# 4801160), accessed 29 June 2020 at <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4801160>

representative railway station structures of their periods. Banksia Station is of research significance for its ability to demonstrate design and construction techniques of the NSW Railways in the early 20th century (1906-1923). The 1923 pedestrian subway at Banksia, with its retaining walls and painted signage, is rare on the Illawarra Line. Banksia Station is representative within the Illawarra Line context as a station which combines buildings from two periods.

6.4 Significance of individual elements

As part of their assessment of the proposed works, Artefact Heritage produced a grading of significance for each of the major elements which comprise Banksia Station (Artefact Heritage 2020:51), these gradings have been assessed against the results of the recent site inspection to produce Table 6.3. In discussion with Steven Barry, and based on the site inspection, those gradings noted in bold in the table are modified from the Artefact assessment.

Table 6.3: Grading of significance for heritage elements of Banksia Railway Station Group (SHI# 4801160)

Element	Brief Description	Condition	Grading
Platforms and coping	One island platform (1906), two perimeter platforms (1923), all with asphalt surfaces and brick edges.	Good	Moderate - Heavily modified and cut back in places.
Platform station building, Platform 1 (1923) - External	A small, painted brick, single storey platform building with a skillion corrugated steel room and weatherboard waiting area at its northern end.	Moderate	High – The platform building is from the same time period as building Platform 4.
Platform station building, Platform 1 (1923) - Internal	Brick waiting room which retains its original floorboards, skirting boards and ceiling.	Moderate	Moderate - The platform building is from the same time period as building Platform 4.
Platform station building, Platform 2/3 (1906) - External	Painted, brick, single storey platform building with a gabled corrugated steel roof and skillion corrugated steel rooves over awnings on both sides. Gable ends to north and south.	Good	High
Platform station building, Platform 2/3 (1906) - Internal	Consists of a storage room, the platforms waiting room, a women's waiting room and adjacent bathrooms, a cistern room and the men's toilets.	Good	High

Element	Brief Description	Condition	Grading
Platform station building, Platform 4 (1923) - External	A small, painted, brick building with a gabled corrugated steel roof and tongue and groove timber eaves, a cantilever corrugated steel skillion rooved awning on its west side.	Good	High
Platform station building, Platform 4 (1923) - Internal	Timber battened plaster ceiling with timber cornices, plastered walls, a slate doorstep and original timber seating. Original timber floorboards beneath current flooring.	Good	High
Pedestrian subway, steps, booking office (1923)	<p>Of rare heritage significance, the brick subway is orientated on a southeast to northwest axis and located towards the northern end of the station precinct. It provides access to all platforms and is currently the only entry to Platform 2/3. Steps at either end provide access to the subway and exterior platforms. The original subway booking office is located on the northern subway wall, with light provided by two covered lanterns, one above the main thoroughfare of the subway, the other over the steps leading to Platform 2/3.</p> <p>The booking office is a small room with one ticket window, the current office fitout sits as a moveable shell within the original booking office space.</p>	Fair – condition of brickwork behind applied panelling unknown	Moderate – although a rare element, extensive alterations and additions have occurred as a result of water ingress issues.
Pedestrian subway lantern – Platform 2/3	Platform-level structure constructed in brick in an English Garden Wall Bond. Features a hipped roof clad with corrugated steel. Four windows along each side length would have original provided light into the subway.	Good	High
Pedestrian stairwell lantern – Platform 2/3	Brick structure over the Platform 2/3 access stairs, features brick piers capped with bullnose bricks. Laid in English Garden Wall Bond, the lantern features a hipped corrugated steel roof, supported on timber beams. Nine swept head windows along the east and west sides of the structure.	Good	High
Brick retaining walls (1923)	Brick retaining walls to both Railway Street and Hattersley Street; face brickwork with a bullnose capping course. Approximately 2 metres tall.	Good	High

7. Evaluation of alternative options

There have been several alternative options considered during the development of the design of the proposed works for Banksia Station. The following section provides a summary of the options explored for the proposed works.

All technical designs drawings and model renders, unless otherwise stated, have been sourced from pers. comms. with Vivian Tse, on 18 May 2020.

7.1 Platform lifts

7.1.1 AECOM, Sydney Trains Option Study, 2018

In 2018 Sydney Trains commissioned AECOM to prepare a concept design as part of the Banksia Station Transport Access Programme (TAP3) project. Two options were considered, either to install new lifts to support the existing underpass, or a to build new footbridge at the station. The two options are summarised in Table 7.1, and drawings shown in Figure 7.1 and Figure 7.2. Neither concept design was chosen for a final design, but rather further concept designs were proposed (as discussed below).

Table 7.1: AECOM 2018 design options for platform lifts and footbridge

Options	Pros	Cons
1 - Lifts to North of Underpass	<ul style="list-style-type: none"> ▪ Non-compliant ramp from both Railway Street and Hattersley Street will be removed; ▪ Reduces additional OPEX in comparison to Option 2; ▪ Intuitive and equitable access for all customers Remodelled stairs will replace half landing; ▪ Direct path of travel from Kiss N Ride and disabled parking space; ▪ Clear wayfinding if lift serves underpass and platforms above; and ▪ Lifts have less visual impact on context. 	<ul style="list-style-type: none"> ▪ Frequent flooding issue in the underpass during high rainfall event will make the lifts unusable and could damage the lift mechanism; ▪ Station may need to close as a result during these events; ▪ Regular maintenance of the lifts due to flooding concerns; ▪ Staging of the access works during lift installation where half of the underpass must be retained. Temporary footbridge may be required; ▪ Significant impact to the existing services in the underpass; and ▪ Removal of heritage fabric of the underpass structure. Potential impact to existing trees.
2 – New Footbridge	<ul style="list-style-type: none"> ▪ Avoidance of flooding risk allowing usage of lifts during high rainfall events; ▪ Lift mechanism will be protected from flooding, reduces ongoing repairs; ▪ All lifting for large items can be undertaken from the side of the corridor. Does not impact station operations during construction; ▪ Secondary access to the station via footbridge, especially useful in case of wet weather event; ▪ Better connectivity to bus stop and accessible street parking; 	<ul style="list-style-type: none"> ▪ Significant additional infrastructure requiring ongoing maintenance; ▪ Will require additional signage and CCTV cameras requiring maintenance; ▪ Road and footpath constraints around the site for the building of a new footbridge & lifts; ▪ Potential non-equitable access using the lift as the main station access is through the underpass;

Options	Pros	Cons
	<ul style="list-style-type: none"> ▪ Clear wayfinding achievable if Footbridge; and ▪ Minimal impact to heritage fabric of the underpass. 	<ul style="list-style-type: none"> ▪ Significant visual impact due to a new footbridge structure; and ▪ Less sustainable if underpass can be remediated.

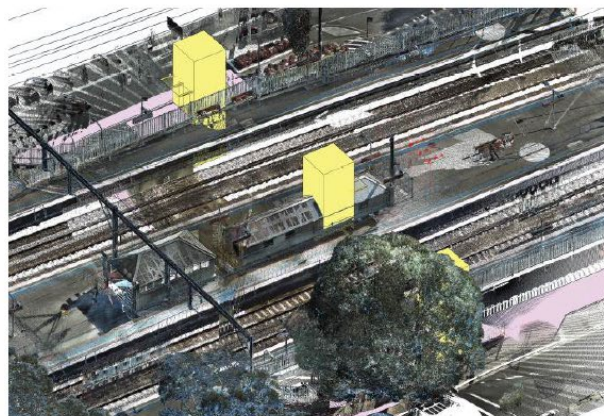
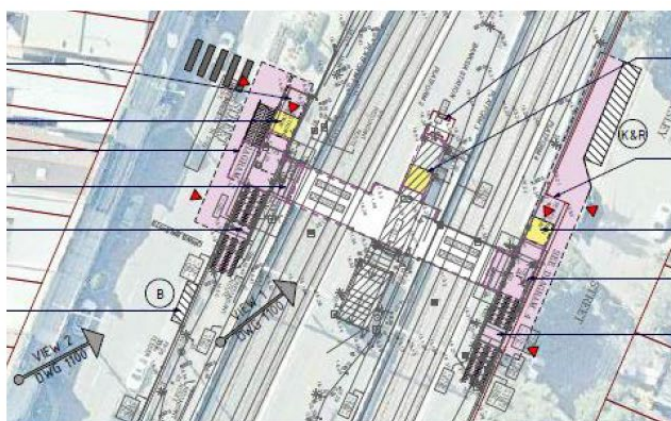


Figure 7.1: Option 1 – Lifts to north of underpass design drawings

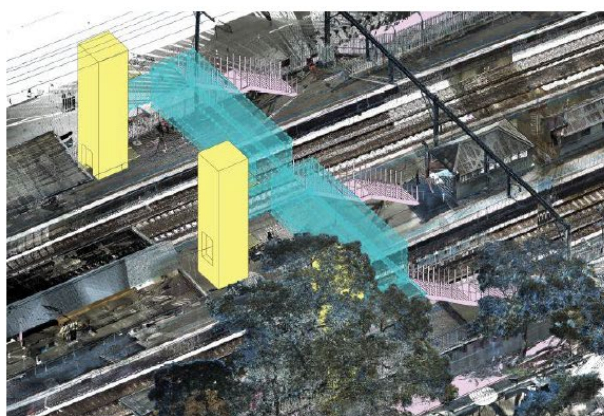
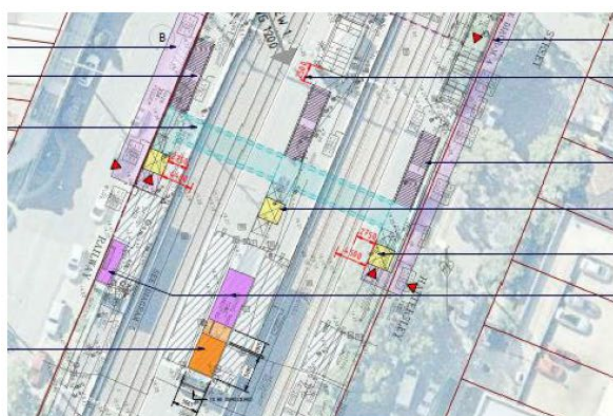


Figure 7.2: Option 2 – New footbridge design drawings

7.1.2 Transport for New South Wales, preferred Option 3C, 2018

TfNSW developed a further concept design option based on option 2 from the AECOM study. This option was known as option 3C. Option 3C was selected to continue developing, as it provided the best customer experience, with the provision of a pedestrian bridge and accessible lifts linking the three platforms. Option 3C also has minimal to nil impact to the heritage fabric of the underpass (Figure 7.3 and Figure 7.4).

Subsequent options were developed based upon Option 3C – identified as Options A, B, C and D - which considered the placement of the footbridge, the lifts and the impact of the new structure to the existing urban fabric and the customer experience. These four options - Options A to D - are summarised in Table 7.1. Design drawings for each of these options are shown in Figure 7.5 to Figure 7.8.

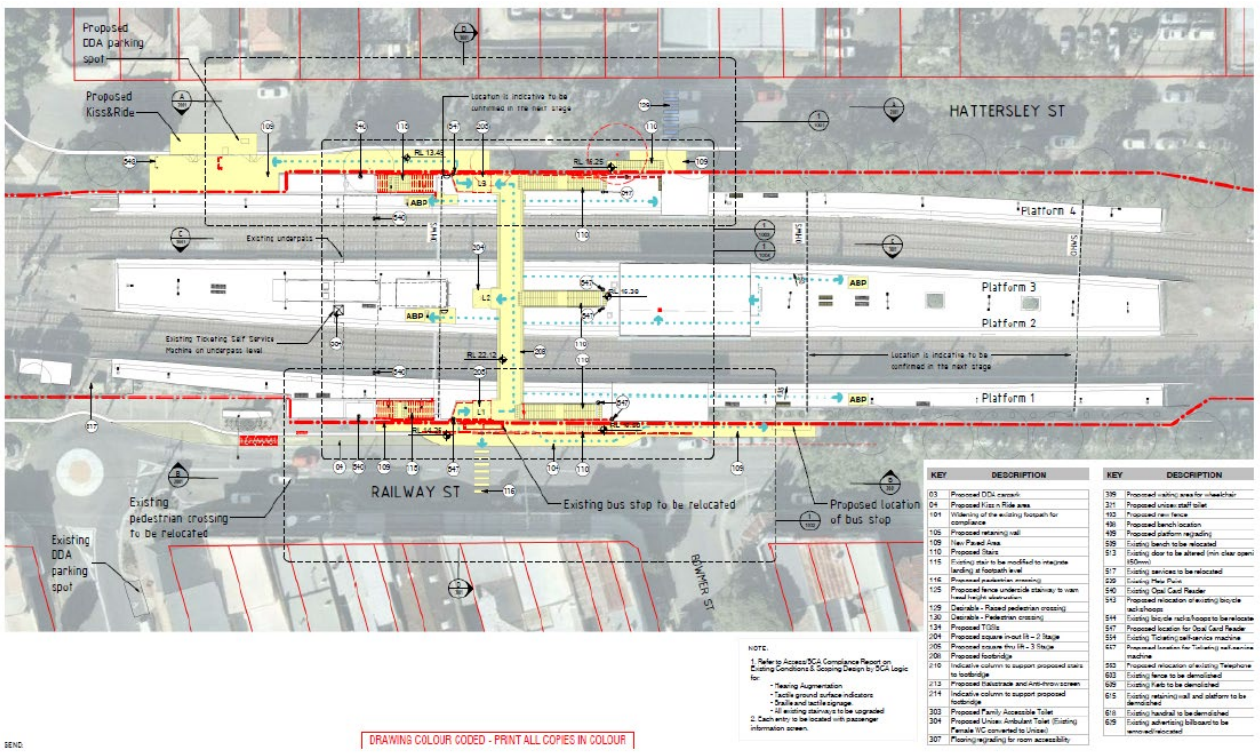


Figure 7.3: Banksia Station Option 3C Plan



Figure 7.4: Banksia Station 2018 Preferred Option 3C Aerial view and Urban Design Plan

Table 7.2: TfNSW 2018 design options Option A to Option D

Options	Description	Pros	Cons
A	<ul style="list-style-type: none"> All lifts to south of new footbridge and stairs to north connecting to existing stairs and existing under path; and Lift 1 & 3 located on the footpath. 	<ul style="list-style-type: none"> Existing station entries maintained; Existing station functions maintained; and New structure separated from existing stair to tunnel entry. 	<ul style="list-style-type: none"> Lift 2 located close to heritage building; Not enough clearance between new lifts and road on Railway and Hattersley streets; and New layout reduces available parking on Railway street.
B	<ul style="list-style-type: none"> Stairs 1, 2, 3 to south of new footbridge and lifts to north; Lift 1 & 3 located within station boundary lines; Existing station entries maintained; and New stairs to give direct access to Railway and Hattersley Streets from the side platforms. 	<ul style="list-style-type: none"> Stair 2 as a single flight from platform to bridge; and Lifts don't take area of the footpath. 	<ul style="list-style-type: none"> Stairs 1 & 2 located close to heritage building; Platform to be partially demolished where lift 1 and 3 is located; Stairs take area of the footpath; and New layout reduces available parking on Railway street.
C	<ul style="list-style-type: none"> Lift 2 to south of new footbridge and stairs and other lifts to north; Lift 1 & 3 located outside platforms on footpath; and Stair 2 returns. 	<ul style="list-style-type: none"> Direct access from street to side platforms. 	<ul style="list-style-type: none"> Lift 2 located close to heritage building; Platform to be partially demolished where lift 1 and 3 is located; Lifts take area of the footpath; and New layout reduces available parking on Railway street.
D	<ul style="list-style-type: none"> All lifts and stairs to north of new footbridge; Lift 1 & 3 mainly located outside platforms on footpath; Stair 2 returns; and Lift 2 located adjacent to stair 2. 	<ul style="list-style-type: none"> Direct access from street to side platforms; and Reduced impact on heritage buildings compared to previous options. 	<ul style="list-style-type: none"> Platform to be partially demolished where lift 1 and 3 is located; Lifts take area of the footpath; and New layout reduces available parking on Railway street.

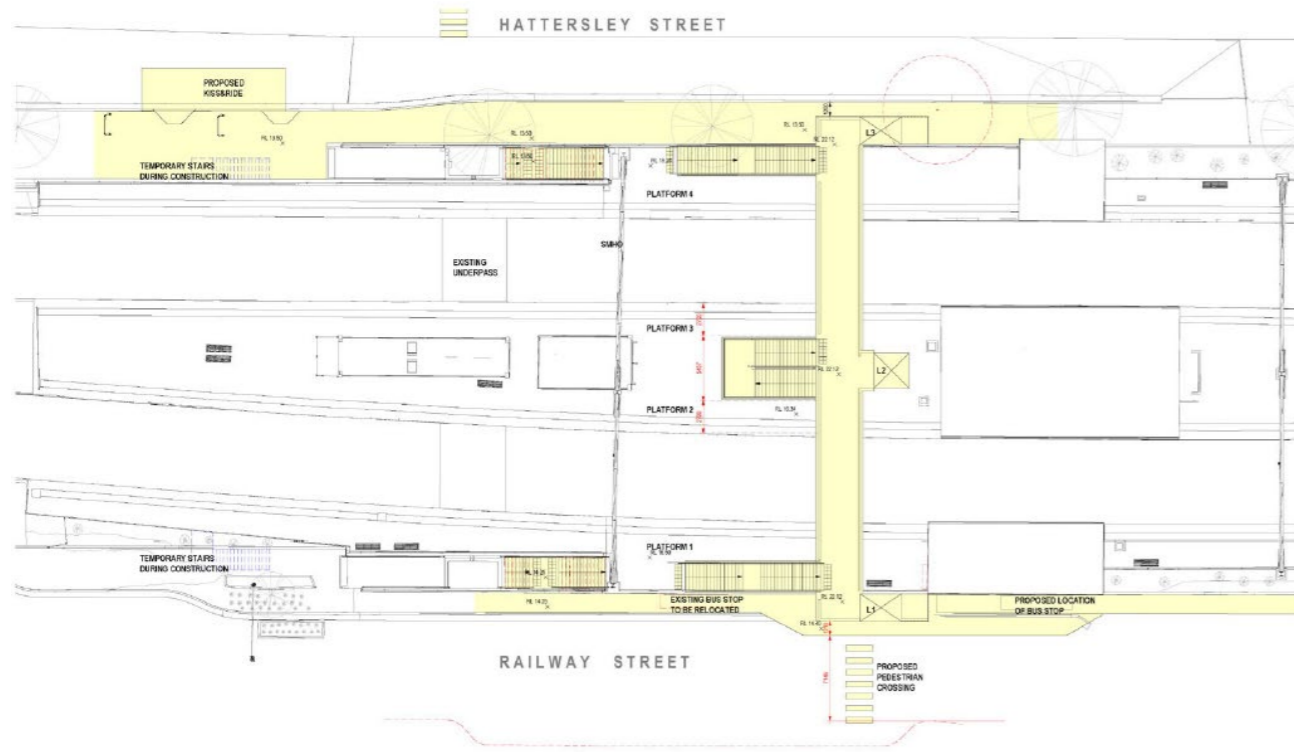


Figure 7.5: Option A

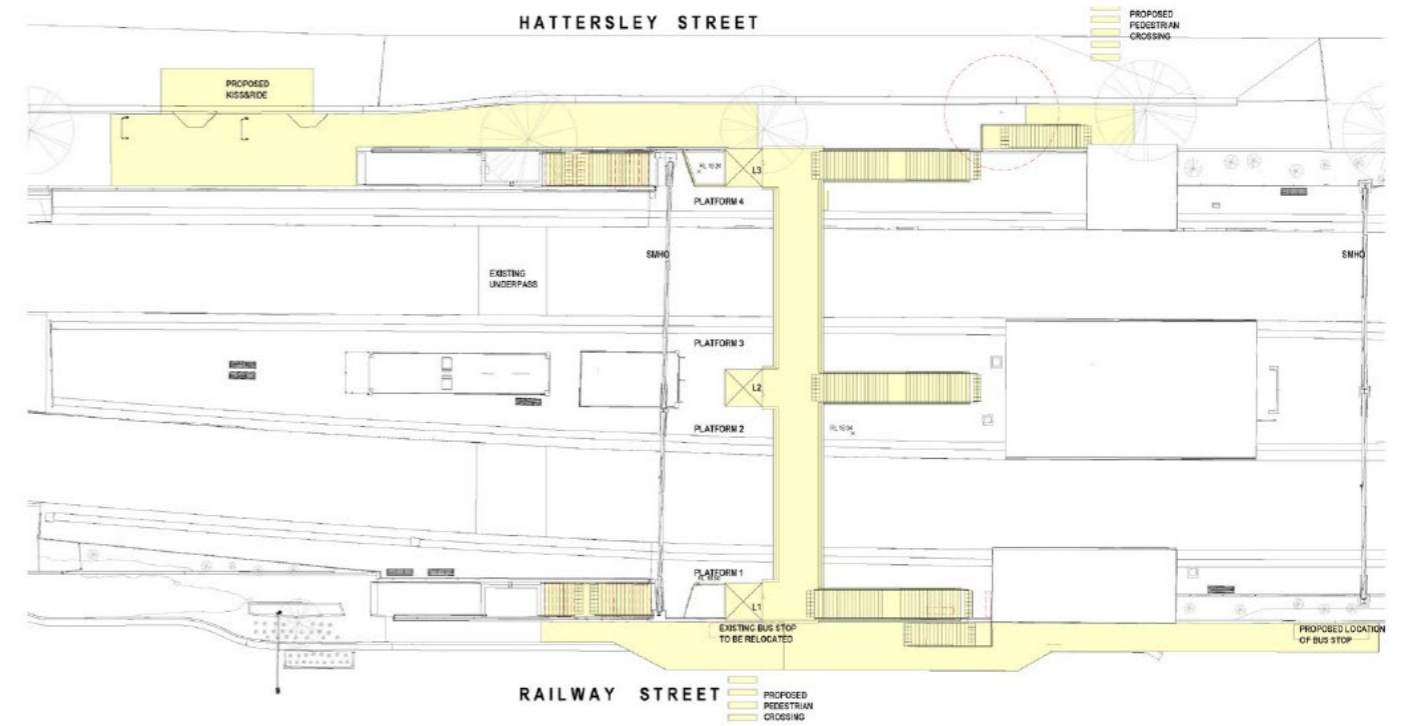


Figure 7.6: Option B

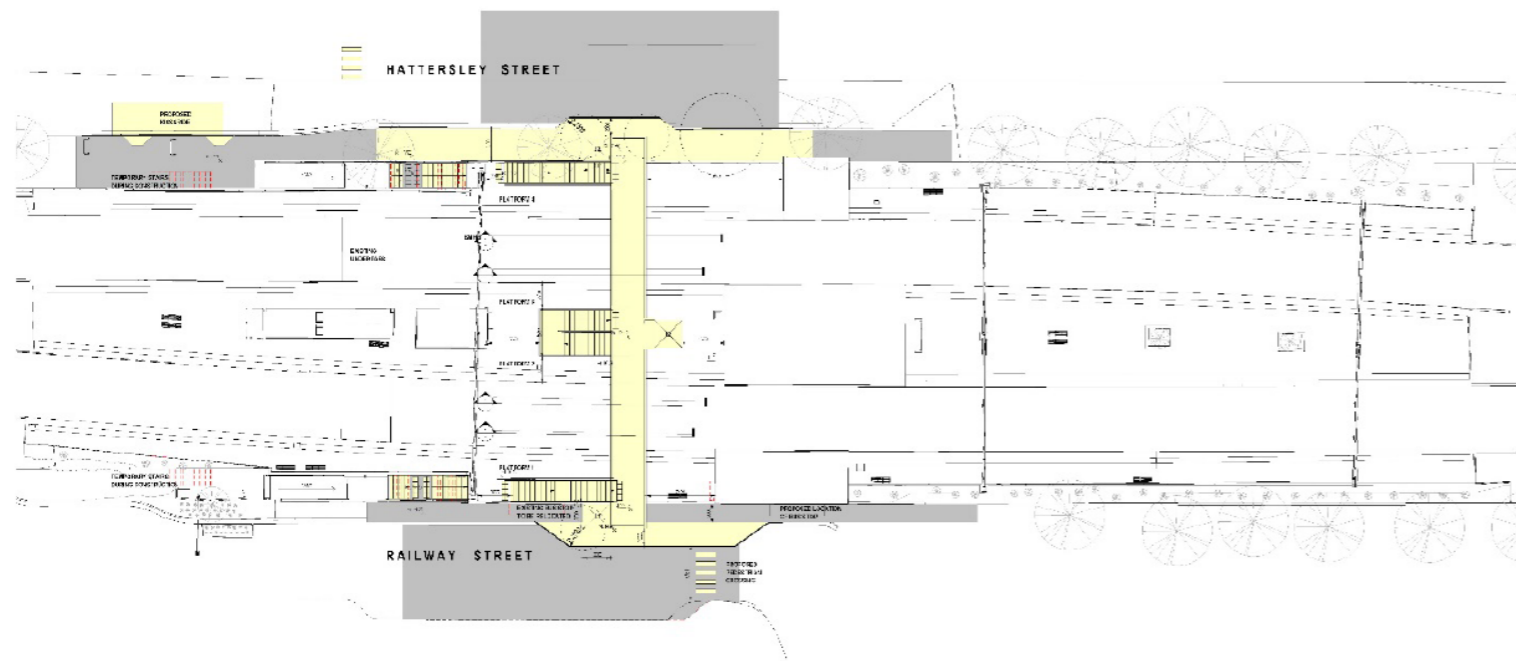


Figure 7.7: Option C

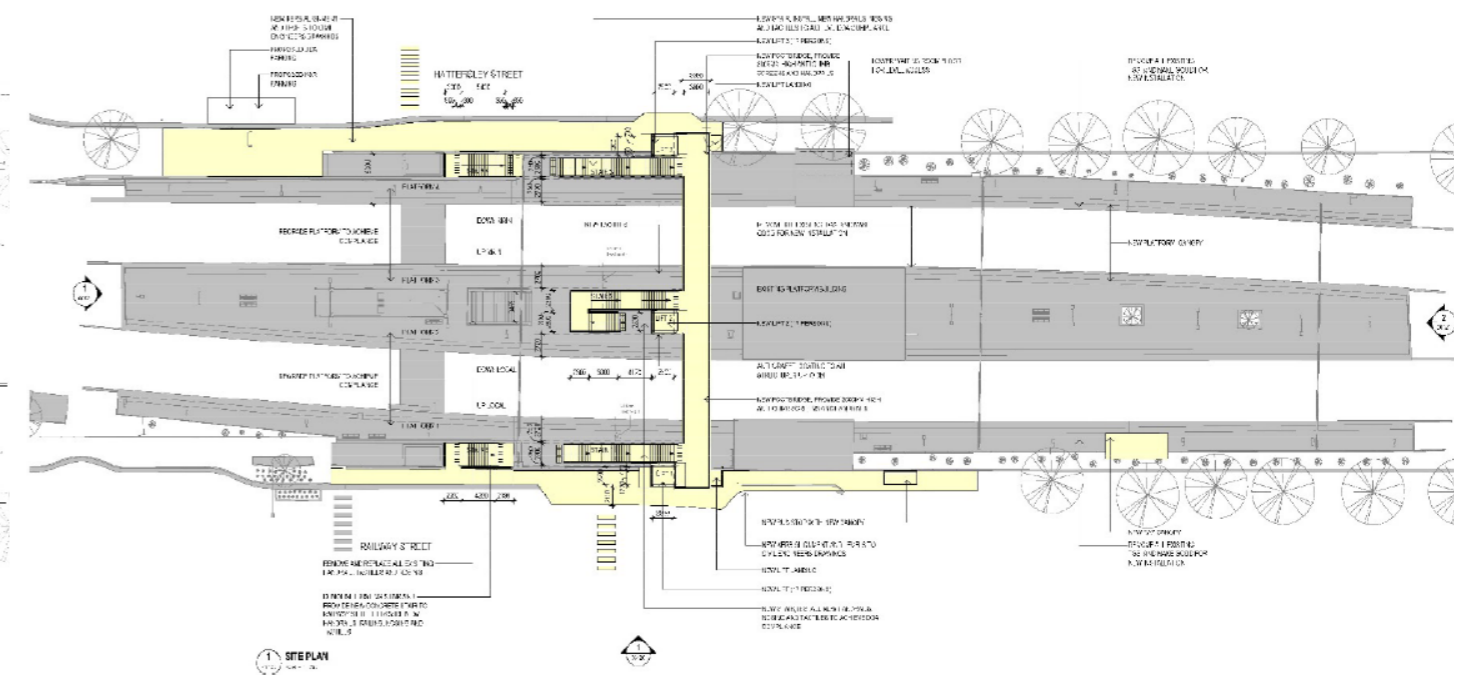


Figure 7.8: Option D

7.1.3 Downer, Transport for New South Wales constructability and cost studies, 2019

In 2019, Downer group were engaged by TfNSW to provide a cost estimate to construct the station upgrade. Investigation by Downer revealed construction issues that had a significant impact on the project cost, including piling depths over 30m due to sandy soils and relocation of high voltage aerials. The consensus was that the total footbridge cost did not represent value for money and that other alternatives needed to be explored. Four options were developed by Downer – Options E, F, G and H – which are summarised in Table 7.3 and drawings shown in Figure 7.9 to Figure 7.12.

The result of this exploration was to use the existing underpass, upgrade to control entering stormwater and provide lift access to the platforms. This outcome had other benefits including removing the bulk and scale of the proposed overbridge and was seen as a better urban design outcome for the station and the surrounding neighbourhood. The preferred option was option E due to the most appropriate lantern roof form. Option E has become the draft concept design for the most recent 2020 designs.

This exploration by Downer also provided options for platform canopies which are explored in the following section (Section 0).

Table 7.3: Downer 2019 design options Option E to Option H

Option	Description	Pros	Cons
E	Remove the existing brick and timber lantern over the underpass and replace with a gable ended metal and with lift located adjacent the new lantern roof at the city end; and Use a similar arrangement for the side platforms.	<ul style="list-style-type: none"> Improved amenity for pedestrians in the underpass; and Cost-effective roof profile. 	<ul style="list-style-type: none"> Does not stand out from the heritage building forms making it harder to interpret the station.
F	Remove the existing brick and timber lantern over the underpass and replace with a series of pyramid metal roofs over the lantern and lift shaft; and Use a similar arrangement for the side platforms	<ul style="list-style-type: none"> Improved amenity for pedestrians in the underpass; Provides better urban design outcome; and Simpler to constructed without retaining existing structure. 	<ul style="list-style-type: none"> Increased cost over E.
G	Remove the existing brick and timber lantern over the underpass and replace with a saw tooth metal and glass roof.	<ul style="list-style-type: none"> Improved amenity for pedestrians in the underpass; and Simpler to constructed without retaining existing structure. 	<ul style="list-style-type: none"> Introduces box gutters.
H	Maintain existing brick and timber lantern and remove the city end (northern end) for the lift shaft.	<ul style="list-style-type: none"> Maintains part of existing structure. 	<ul style="list-style-type: none"> Structural issues surrounding strength of existing structure to support new work; and Minimal light provided by lantern to lower level underpass.

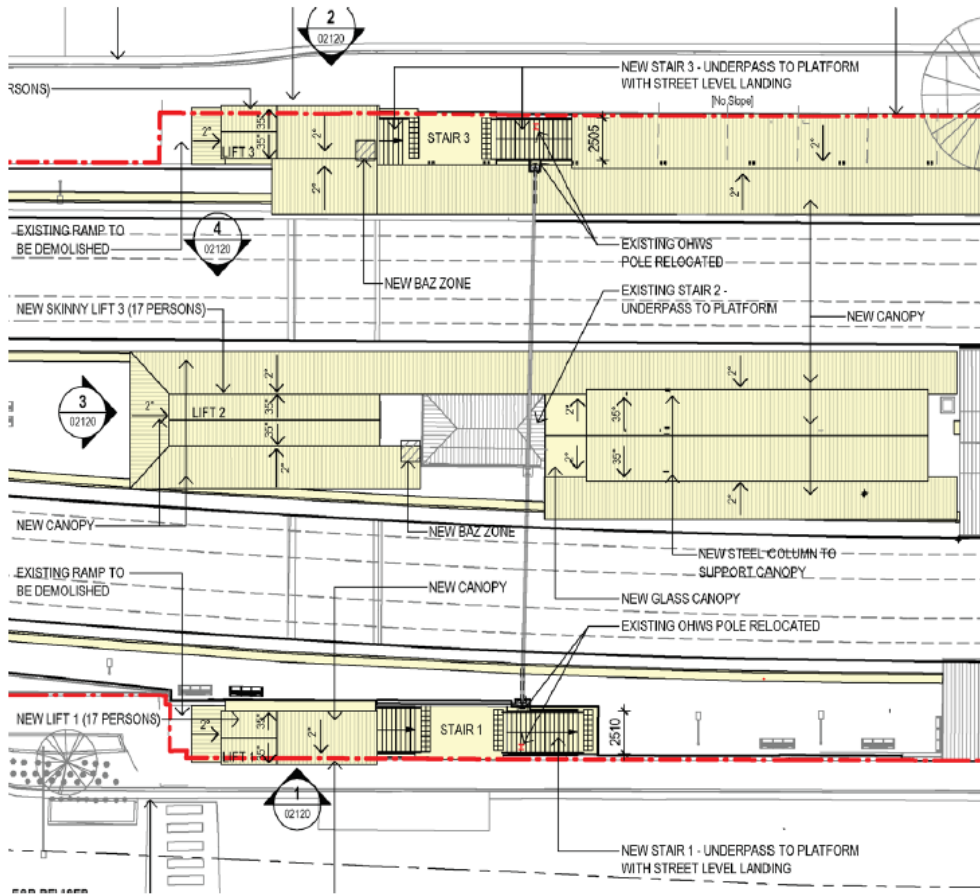


Figure 7.9: Option E

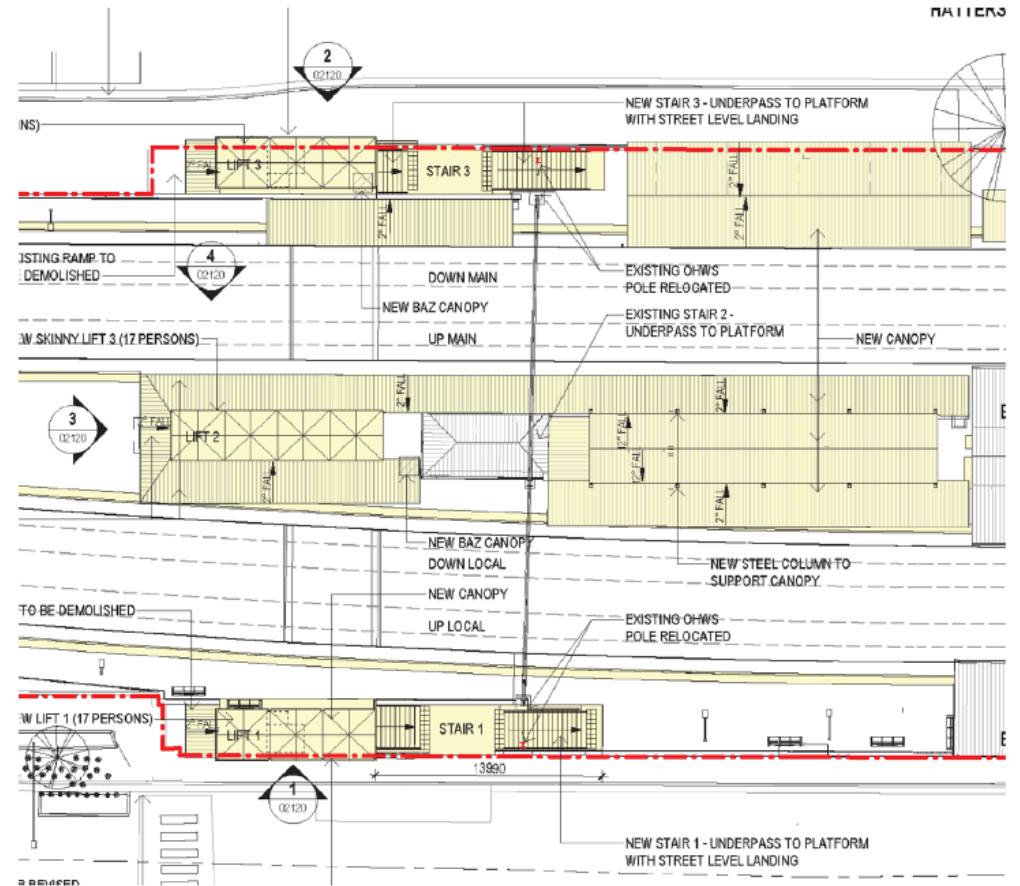


Figure 7.10: Option F

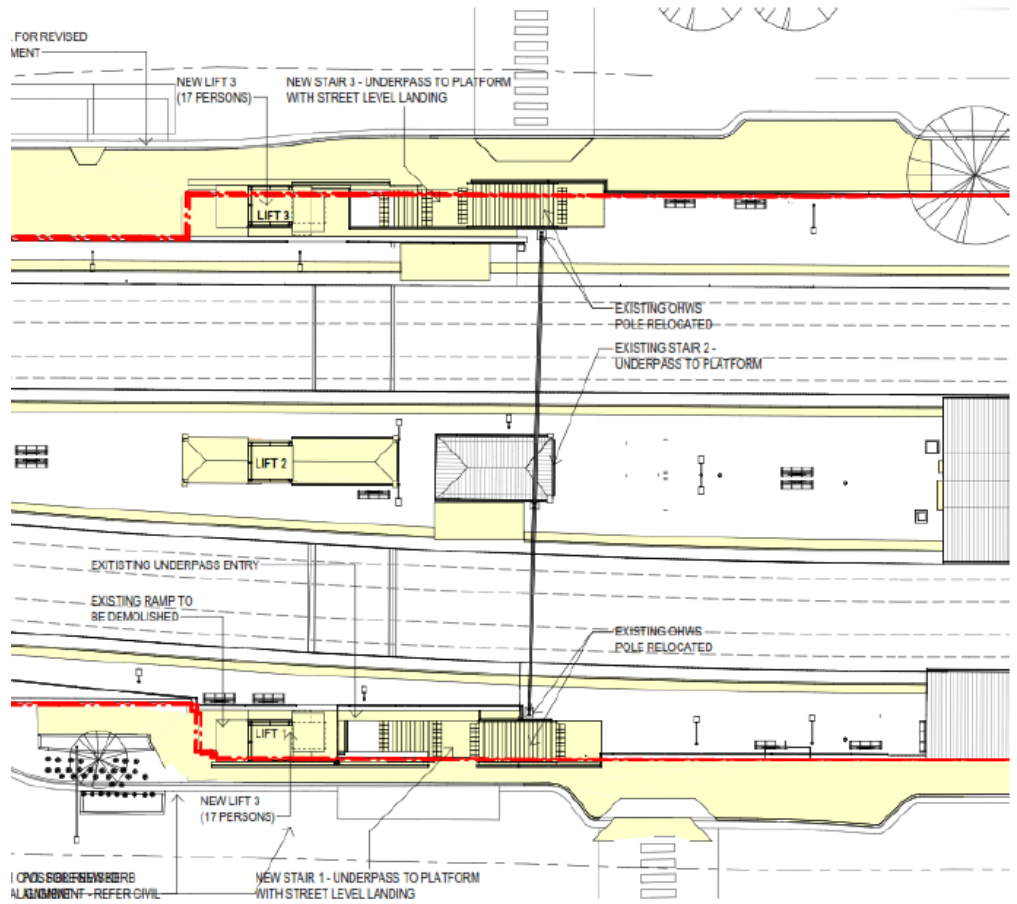
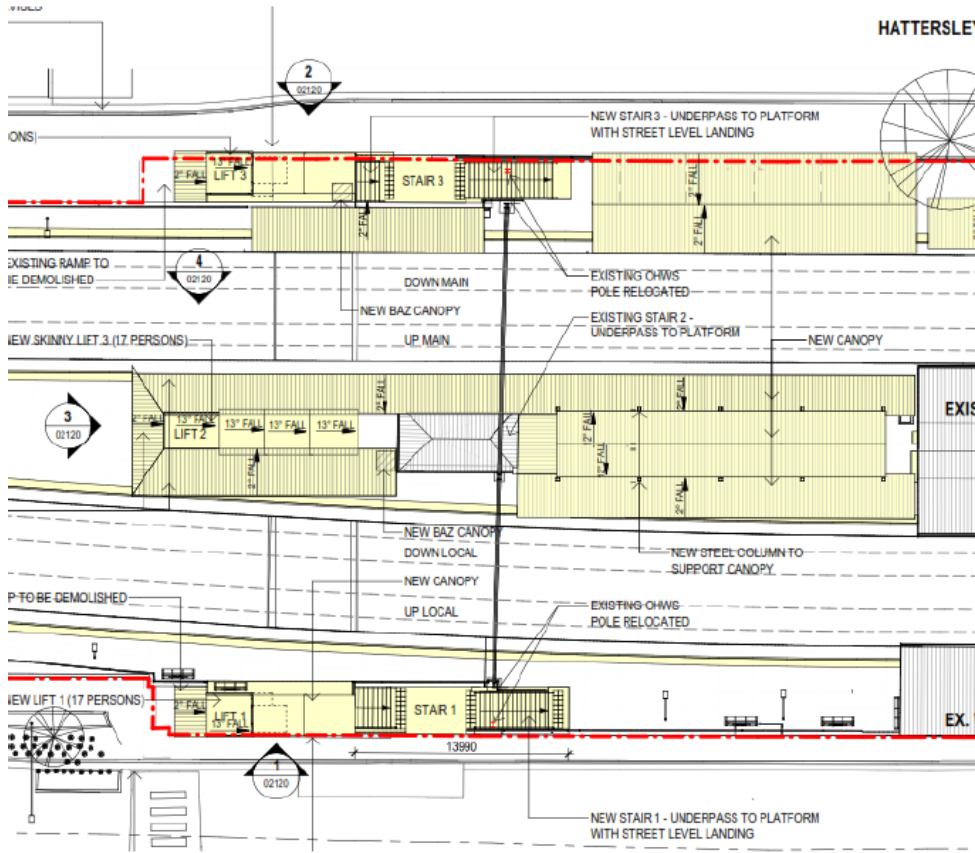


Figure 7.11: Option G

Figure 7.12: Option H

7.2 Platform canopies

The proposed works for Banksia Station include new canopies to be installed on all station platforms. Platform canopy design began in 2019 as part of the MTMS project. Table 7.4 provides a summary of the platform canopy options explored by Downer in 2019 and Table 7.5 shows design drawings for the 2019 options. The platform canopy designs went through several new design iterations in 2020. The 2020 design options are shown in Table 7.4.

Table 7.4: Downer 2019 design history for platform canopies

Month	Document	Comments pers. comms. Peter Phillips
January	Progress canopy drawings	Large canopies joined to both ends of island platform building, and long canopy with shallow gabled roof on side platform.
	Design principles	Traditional forms adopted.
	Comments on progress drawings	Roof pitches should match existing, and long canopies should be replaced by a series of shorter canopies no longer than the existing station building, with lower level links supported on new structures. Side platform canopy should have monoslope roof.
February	Comments on design principles	Principle accepted but implementation needs refinement.
	Meeting with Aurecon and Caldis Cook	Modify roof structures to allow for future access upgrade works.
March	Redesigned canopy drawings	Side canopy changed to monoslope and centre canopies separated by lower glass links from station building, although still longer than it.
	Comments on redesigned canopies	New side canopy form supported with design refinements to structural supports. Length of centre platform canopies still excessive.
April	Meeting with Aurecon and Caldis Cook	Use lower slope roofs at ends of centre platform canopies to reduce visual bulk, and double columns for side canopy.
May	Draft 100% drawings	Lower slope roofs either end of centre platform canopies; ridge length now similar to existing.
	Comments on draft 100% drawings	Amended design supported; improved heritage outcome.
July	Amended 100% drawing	-
	Comments and mark-up on amended drawing	None.

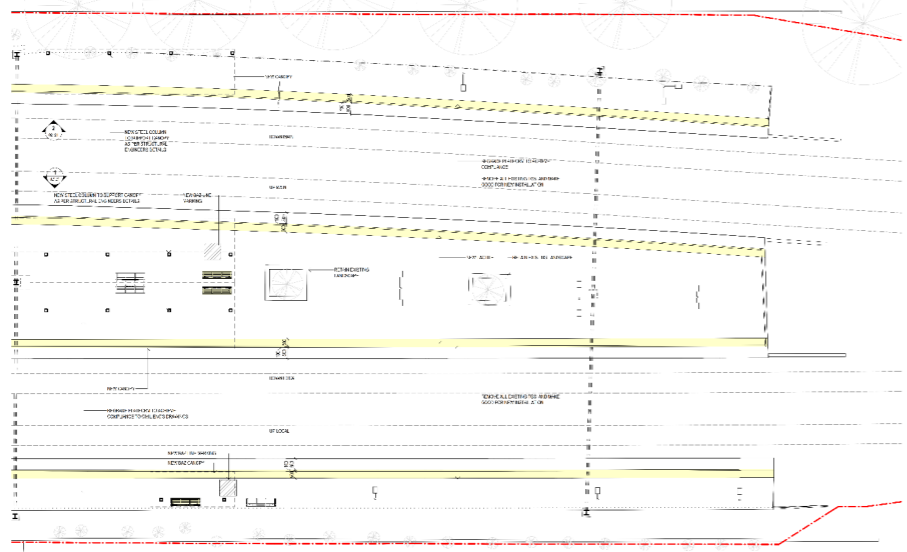
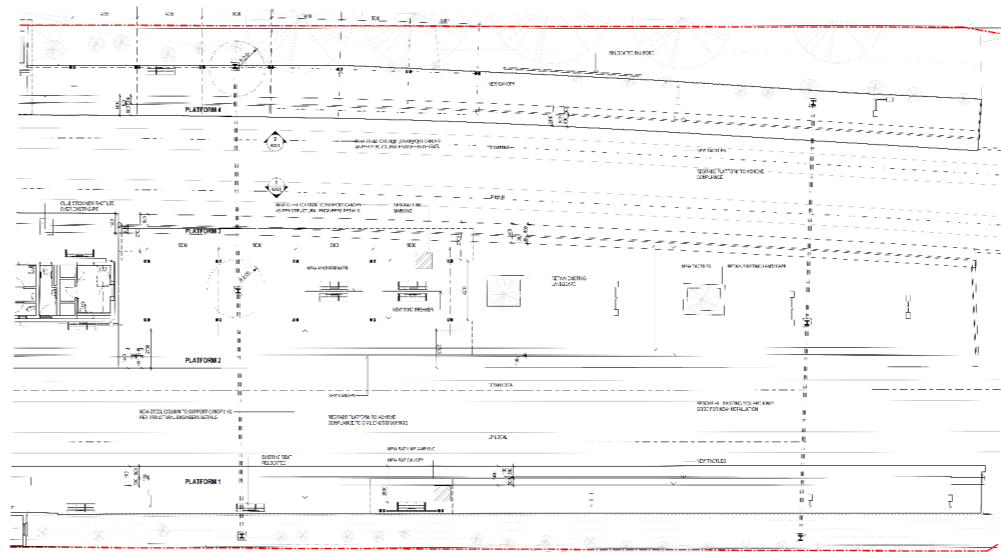
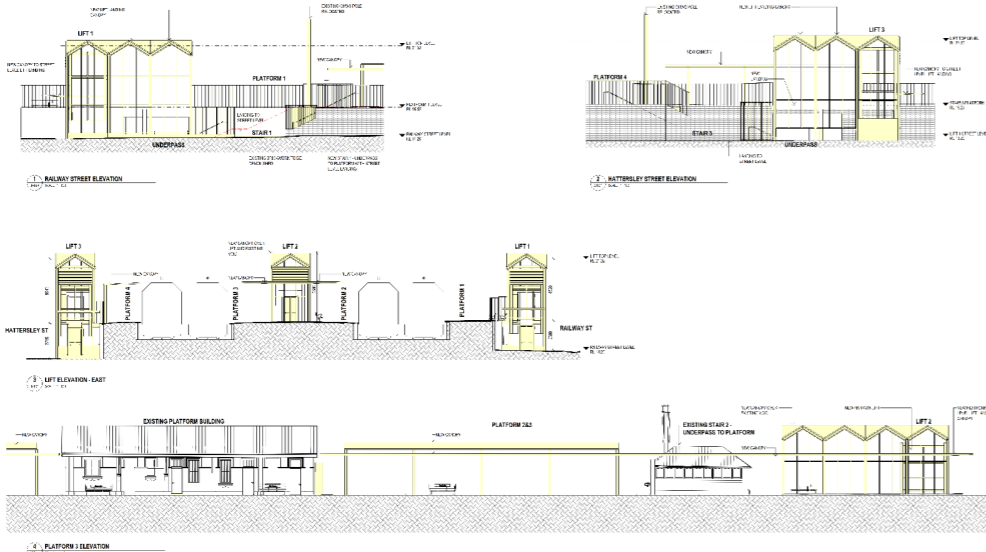
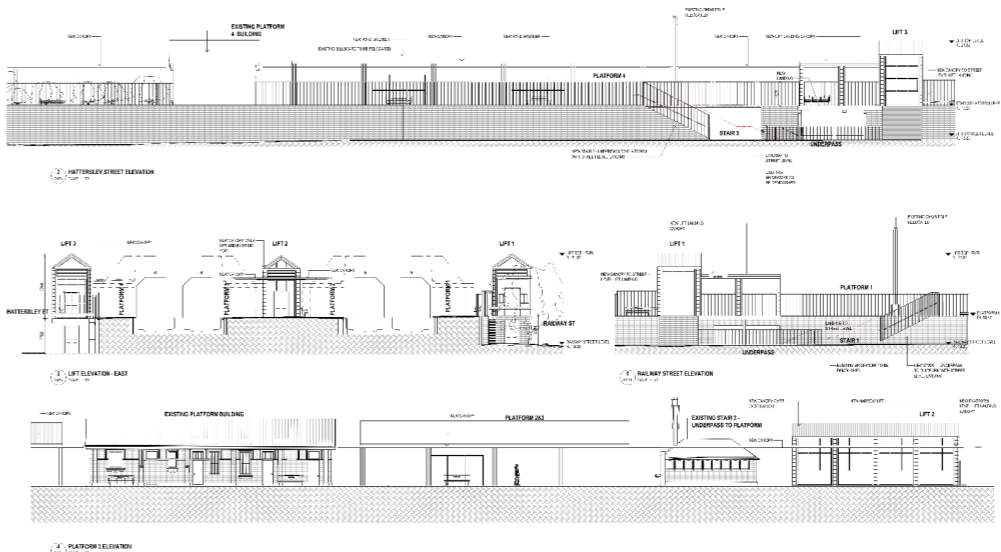
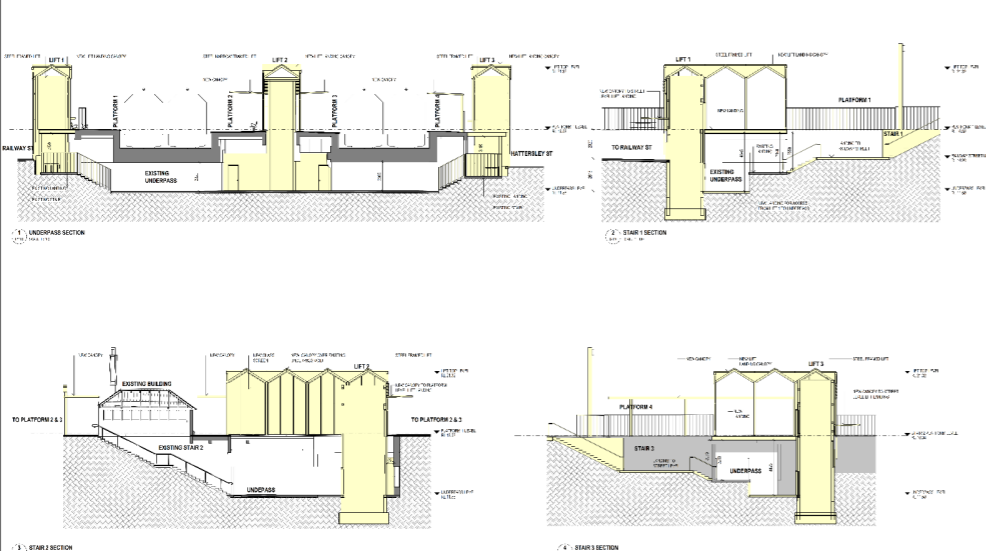
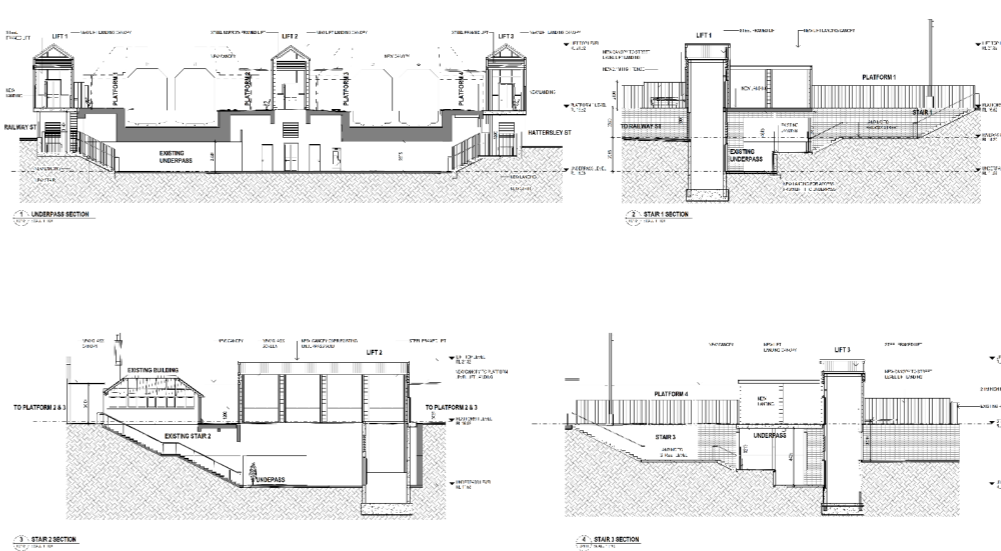
Table 7.5: Evolution of design drawings for platform canopies in 2019 – Banksia Station (Source: TfNSW)

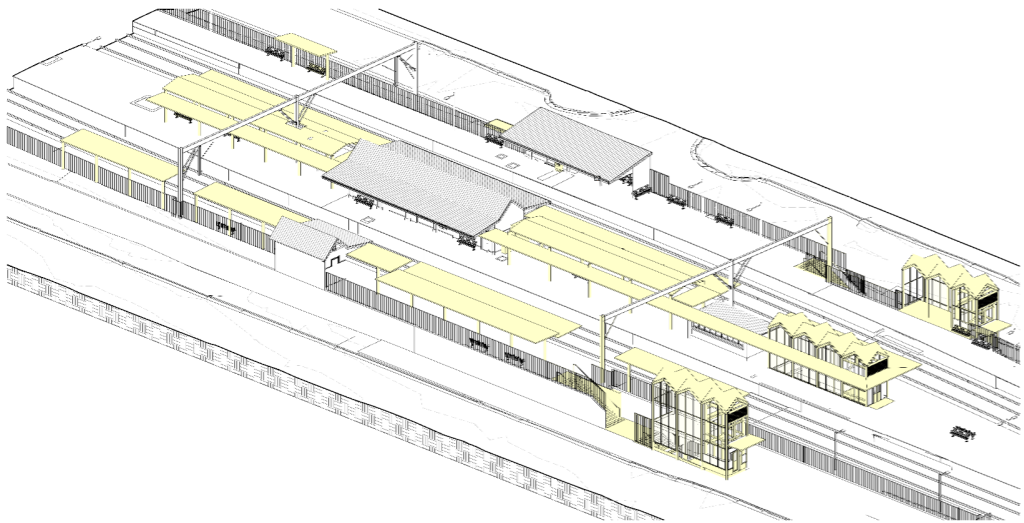
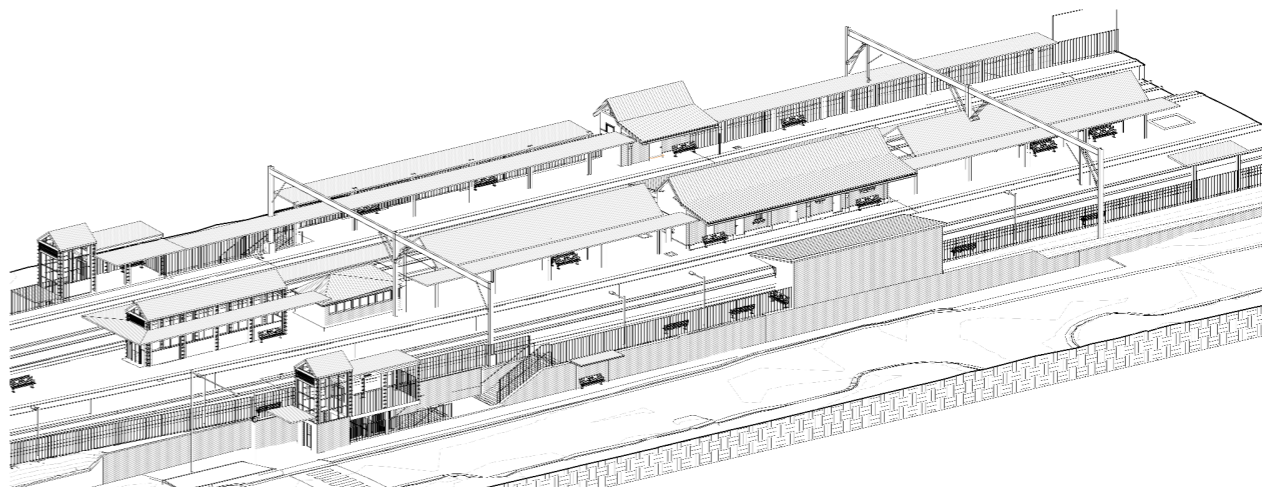
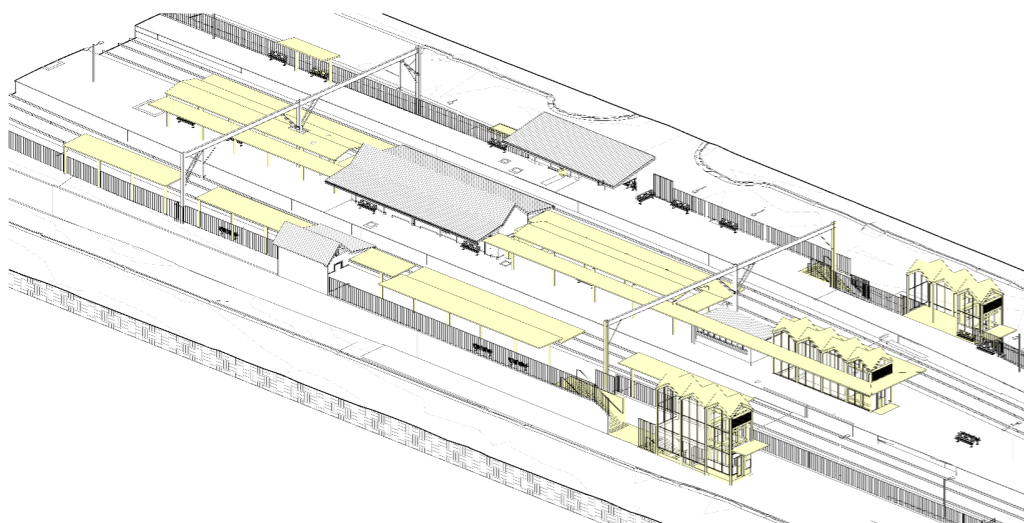
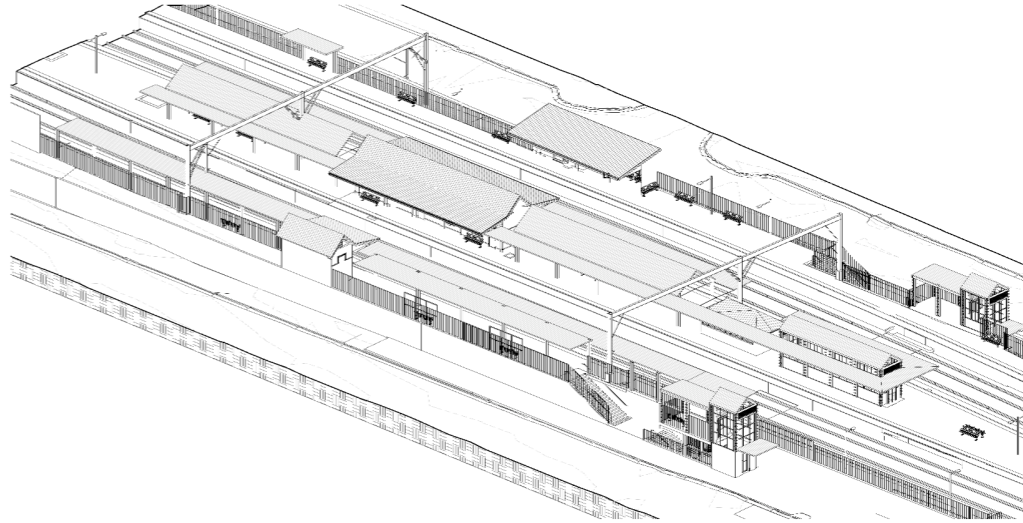
	Draft 100% issue – March 2019	Draft 100% issue – May 2019	Architecture 100% issue – June 2019
Demolition and Platform Plan			
Roof level			
Platform Level – sheet 1			

	Draft 100% issue – March 2019	Draft 100% issue – May 2019	Architecture 100% issue – June 2019
Platform level – sheet 2			
Elevations			
Sections			

Table 7.6: Evolution of design drawings for platform canopies in 2020 – Banksia Station (Source: TfNSW)

	First concept design 100% issue – 09 March 2020	Draft 100% issue – 17 April 2020
<p>Proposed site plan</p>		
<p>Platform Level – sheet 1</p>		
<p>Platform Level – sheet 2</p>		

	First concept design 100% issue – 09 March 2020	Draft 100% issue – 17 April 2020
<p>Platform Level – sheet 3</p> 		
<p>Elevations</p> 		
<p>Sections</p> 		

	First concept design 100% issue – 09 March 2020	Draft 100% issue – 17 April 2020
Axonometric views – sheet 1		
Axonometric views – sheet 2		

As a result of this design process, three options for the platform canopies were presented at a meeting between Downer, TfNSW, and Arcadis on 23 June 2020 (Option 1, 2 and 3 in Table 7.7). Following an examination of all three options, a fourth option (Option 4) combining elements of the original options with minor modifications provided a best for project approach. Consensus was reached with this option due to the overall reduction in visual impact, simplified form that was consistent across all platforms and benefits to constructability. The four options are summarised in Table 7.6 and shown in Figure 7.13 to Figure 7.16.

Table 7.7: 2020 design options for platform canopies

Option	Description	Comments
Option 1	Gable roof on top of lift structures, subway lantern, and platform 2/3 canopies (concept design)	<ul style="list-style-type: none"> ▪ Provided consistent height across new structures and the existing platform building; ▪ Maximised light ingress into the underpass; ▪ Allowed for lift shaft ventilation; and ▪ Largest visual impact of options and overshadowed existing heritage structures.
Option 2	Flat roof on top of lift structures and gable roof on platform 2/3 canopies. Roof stepped down after lifts	<ul style="list-style-type: none"> ▪ Reduced overall visual impact of the new lantern structure adjacent to the stair lantern; ▪ Visual impact of side lift structures reduced; ▪ Introduced an additional roof level making the island platform look visually busy; and ▪ Reduced light into the underpass and options for mechanical ventilation.
Option 3	Flat roof on lift shaft structures and platform 2/3 canopies. Roof stepped down after lifts	<ul style="list-style-type: none"> ▪ Greatest overall reduction in terms of visual impact to existing stair lantern and station building; ▪ More attention directed to lift shaft structures which was undesirable as well as the introduction of an additional roof level; ▪ Similar disadvantages in terms of light ingress and ventilation as option 2; ▪ Flat roof profile to platform 2/3 canopies allowed structure to be “decoupled” from existing station building and for falls to gutter away from platform edge (improved safety and maintainability); and ▪ Gap to be maintained between middle and side sections of canopy roof for maintenance access and smoke egress.
Option 4	Flat roof on all structures without a step-down after lifts.	<ul style="list-style-type: none"> ▪ Maintained overall reduction in terms of visual impact to existing stair lantern and station building by adopting a flat roof; ▪ Allowed light into the underpass and options for ventilation by removing the step-down; ▪ Allowed for a consistent roof line across lift locations; ▪ Awning to wrap around all sides of subway lantern; ▪ Glazed panel limited to section adjacent to stair lantern (as opposed to locations along the platform 2/3 canopy). Glazed panel to remain at interface to existing structures; ▪ Flat roof profile to platform 2/3 canopies allows structure to be “decoupled” from existing station building and allows for falls to gutter away from platform edge (improved safety and maintainability); ▪ Gap to be maintained between middle and side sections of canopy roof for maintenance access and smoke egress; and

Option	Description	Comments
		<ul style="list-style-type: none"><li data-bbox="512 309 1487 423">▪ Allows for the new lantern structure and station entrances to be read as a series of pavilion elements with the same design language, separated from the heritage elements by low profile, recessive canopies.

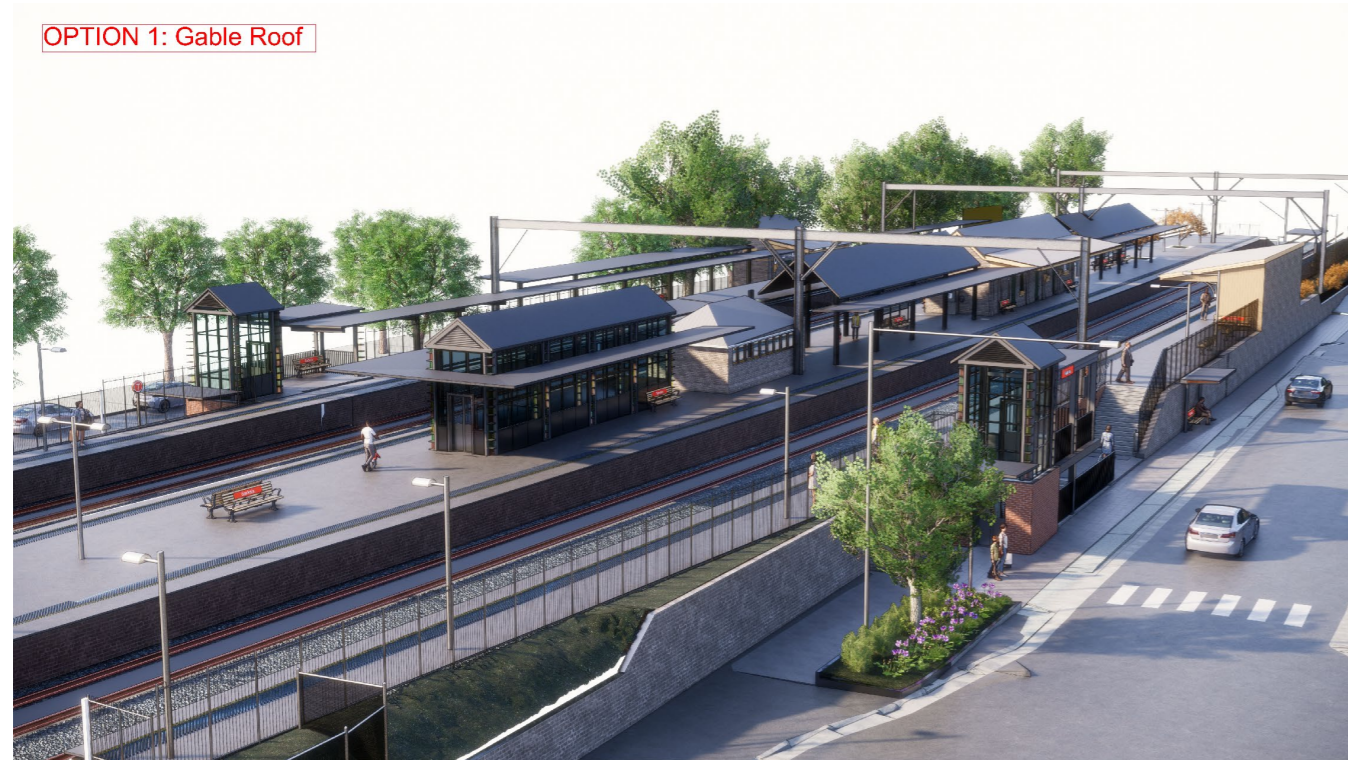


Figure 7.13: Option 1 – Gable roof (Source: Downer (2020))



Figure 7.14: Option 2 – Partial gable and flat roof with step down (Source: Downer (2020))



Figure 7.15: Option 3 – Flat roof with step down (Source: Downer (2020))

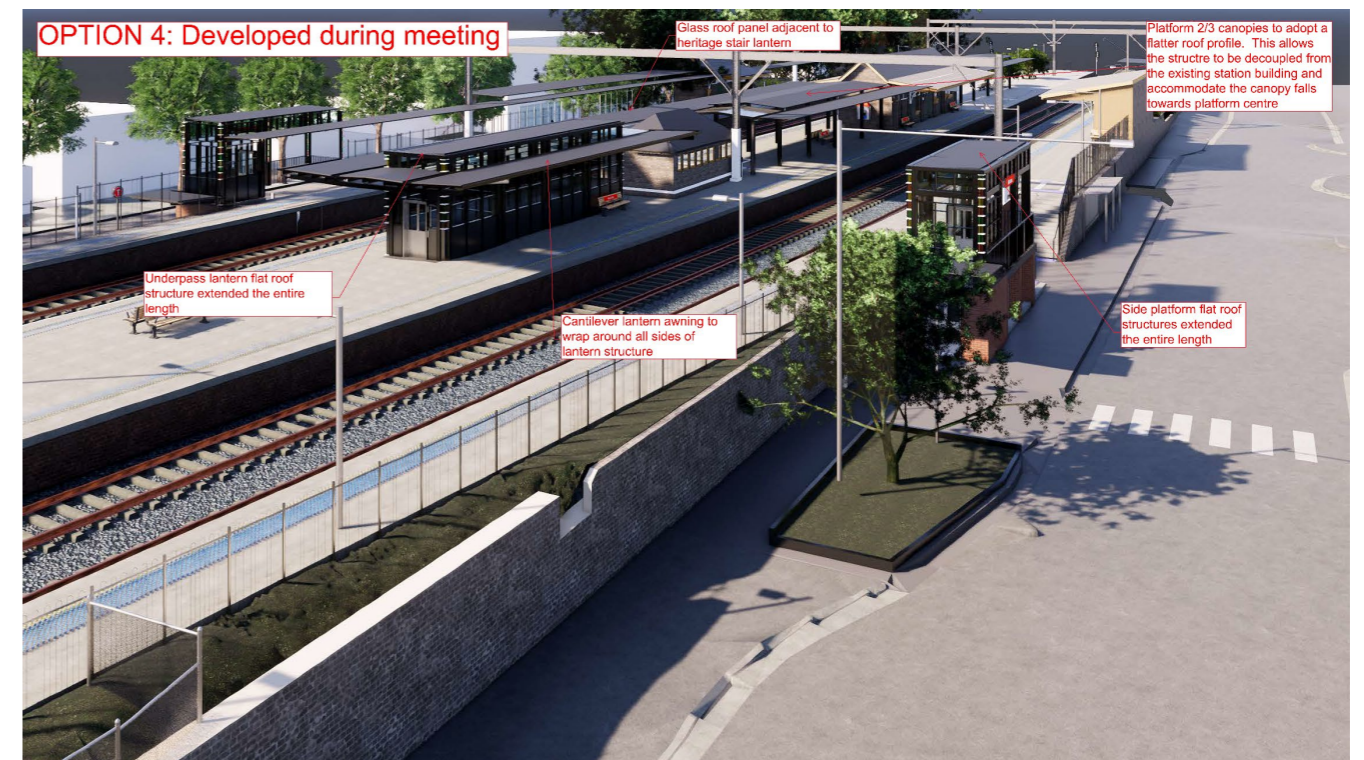


Figure 7.16: Option 4 – Developed during meeting (Source: Downer (2020))

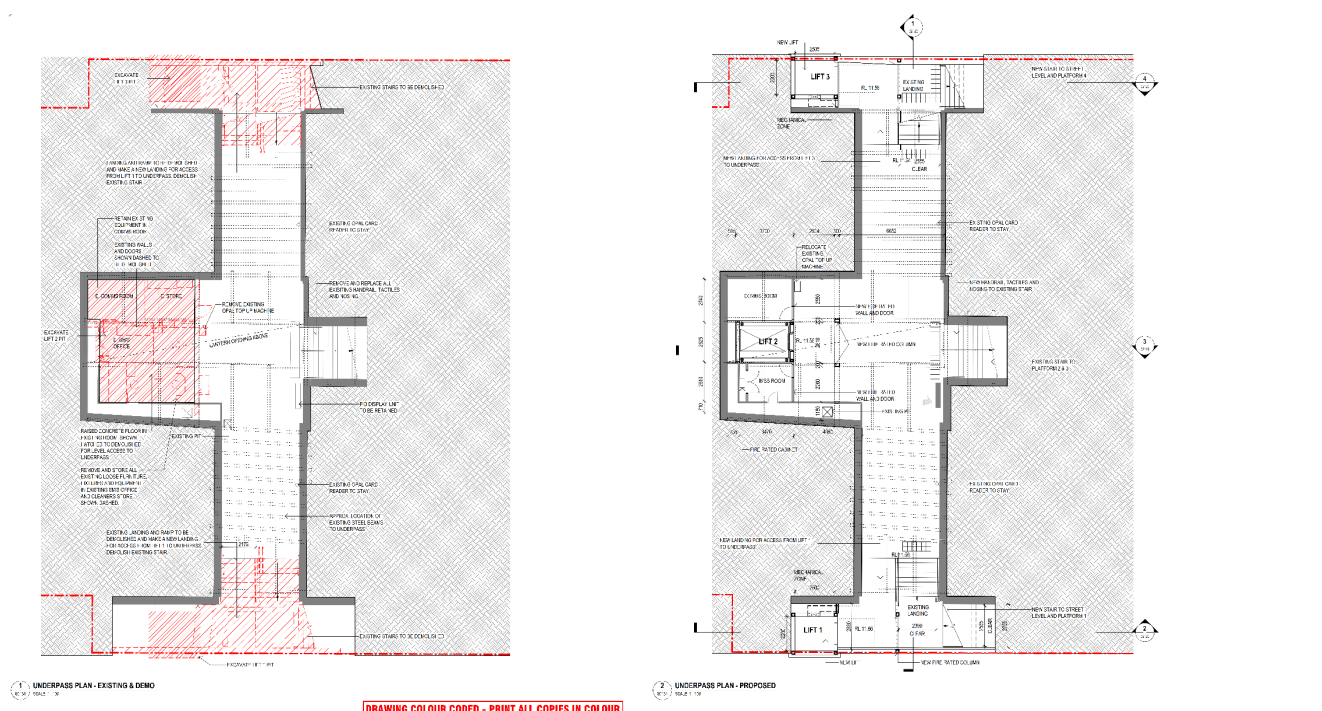


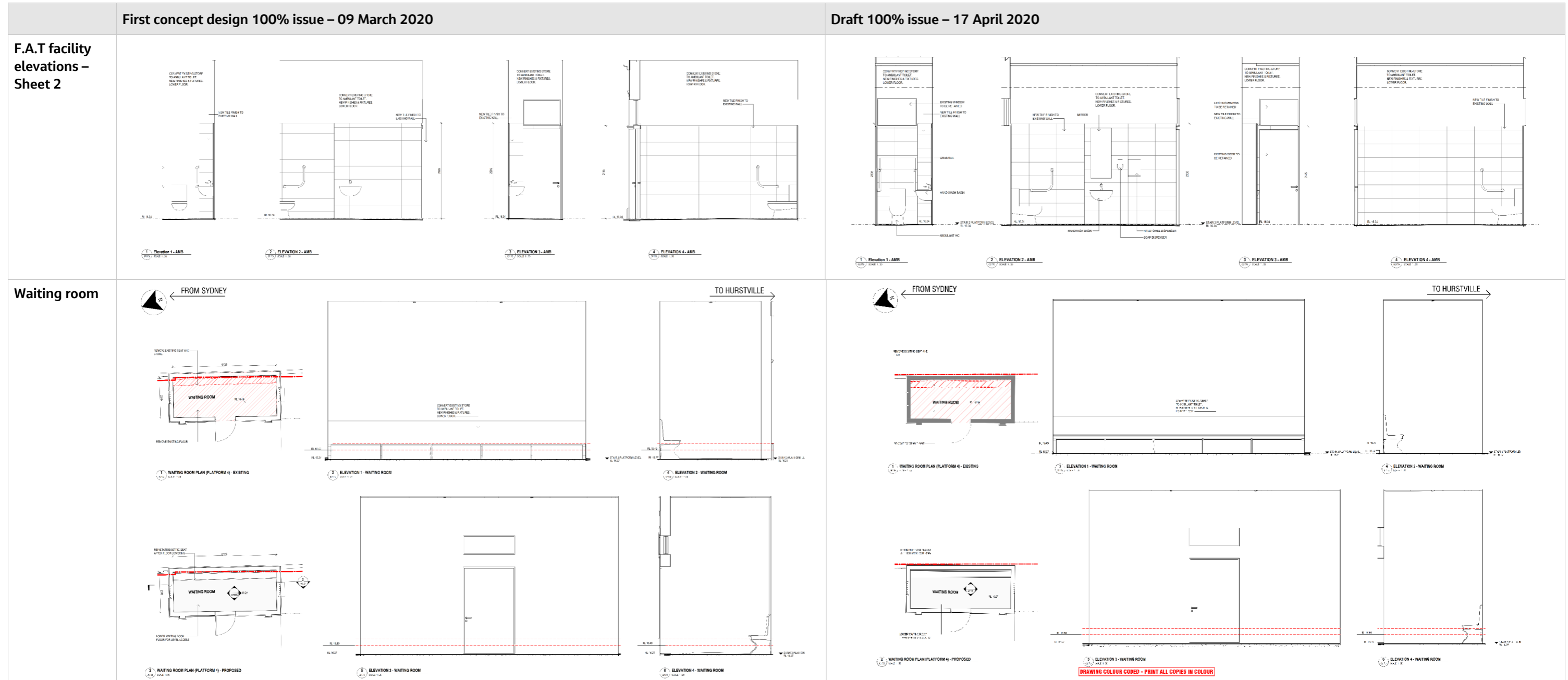
Figure 7.22: Draft 100% issue – 17 April 2020

7.4 Platform 2/3 building modifications

Design options for the proposed internal modifications to the Platform 2/3 station building were considered in two phases. These are listed below in Table 7.8 and shown in Table 7.9.

Table 7.8: 2020 design options for the Platform 2/3 building modifications

Changes proposed	First concept design 100% issue – 09 March 2020	Draft 100% issue – 17 April 2020
Amenities building	<ul style="list-style-type: none"> ▪ Demolition of the cubicles and washroom in the existing women’s bathroom; ▪ Conversion of the existing store cupboard into a unisex ambulant toilet, with permanent closure of the door on its eastern side; ▪ Demolition of existing internal walls in the men’s bathroom; ▪ Demolition of doorway nibs of the existing men’s bathroom; ▪ Demolition of the men’s bathroom privacy wall; ▪ New SMO in the existing storage room; ▪ Permanent closure of the eastern doorway into the women’s waiting room and installation of an ISMSB cupboard and new electrical racks and equipment. 	<ul style="list-style-type: none"> ▪ Demolition of one cubicle and the washroom in the existing women’s bathroom; ▪ Demolition of doorway nibs of the existing men’s bathroom; ▪ Demolition of the men’s bathroom privacy wall; ▪ Conversion of the existing storage room into a cleaner’s store; ▪ New SMO in the women’s waiting room and bathroom area; ▪ Conversion of the existing store cupboard into a unisex ambulant toilet, with permanent closure of the door on its eastern side; ▪ Permanent closure of the internal doorway within the men’s bathroom and conversion into the FAT.



The positioning and use of rooms within the Platform 2/3 station building was the subject of further conversation following the April 2020 site visit of stakeholder representatives. The proposed design (shown in Figure 7.23) used the women's waiting room and bathrooms for the new Station Master's Office (SMO), the storage room to be used as a cleaners store, the existing store cupboard to be converted to an ambulant toilet and the existing men's bathroom to be converted into the FAT.

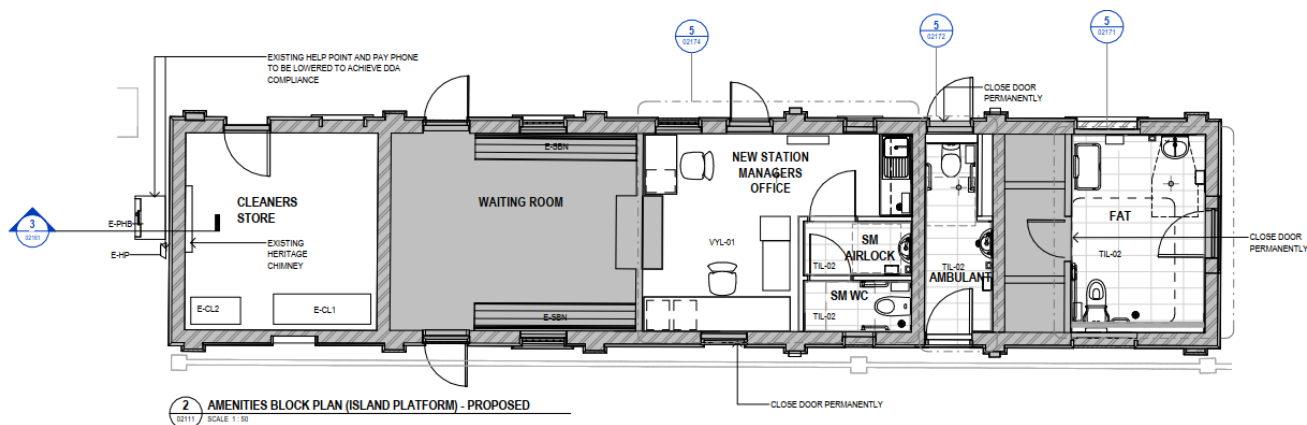


Figure 7.23: Proposed internal arrangement for Platform 2/3 building, as supported by Sydney Trains Customer Service team

Given the level of modification this would require to substantially intact spaces, an alternate arrangement was workshopped in a phone meeting between representatives of TfNSW, Downer/Arcadis, Sydney Trains Heritage, Sydney Trains Customer Service and Jacobs (14 May 2020). This alternative internal arrangement proposed to leave the women's waiting room and bathroom largely as is, aside from modifications to turn the two toilet cubicles into ambulant compliant toilets and relocate the SMO into the storage room. The store cupboard would be retained as a storage space and the men's bathroom would still be upgraded into the FAT.

Although the alternative internal arrangement had the potential for greater retention and conservation of heritage fabric, the use of the women's waiting room and bathrooms for the SMO was determined due to the size of the room and presence of existing services. Certain amenities are expected to be provided within the new SMO office and the features of the existing SMO office in the subway must be maintained e.g. a kitchenette. It is also recommended that staff bathrooms be in staff secure areas wherever possible and Sydney Trains Customer Service indicated that initial consultation with station staff heavily prioritised having an internal toilet.

During the phone workshop on 14 May 2020, brief mention was also made of an option where the existing men's bathroom could be converted into the SMO, which would provide visibility over 50% of the platforms, and the potential for a kitchenette and internal toilet utilising existing services. Initial comment on this option stressed that the FAT and ambulant toilet of the proposed design (Figure 7.23) had been positioned to existing toilet infrastructure and alternate bathroom locations would require the removal of both walls and floors in order to plumb the new bathroom fixtures. This option was not progressed further.

8. Proposed works

8.1 Overview of works

Given the continually evolving nature of the design, proposed works details have been obtained from a combination of sources, primarily the SoHI completed by Artefact for Design Inc (on behalf of Downer) (Artefact Heritage 2020). Further to that assessment, a design meeting was conducted on 23 June 2020 and included representatives from TfNSW, Downer, Arcadis, Design Inc and Artefact (Downer 2020). As a result of this meeting, design consensus with regards to the proposed canopies was reached, and a preferred option determined. Initial construction drawings have been produced, and it has been documented both in the meeting minutes, and in an updated 3D model of the proposed works.

As previously mentioned, the Project represents the integration of two TfNSW initiatives – TAP and MTMS. Their incorporation has required a rework of both scope and intent in order to arrive at a cohesive design and integrated design language, particularly with regards to the lift structure and canopies on the centre island platform.

The Project may be summarised as follows (Figure 8.1):

- Installation of three new lifts and landings to provide access between Railway Street, Hattersley Street, the existing underpass and the platforms;
- Construction of new platform canopies on Platform 1, Platforms 2/3 and Platform 4;
- Retaining wall modifications;
- Platform modifications:
 - Upgrade of the existing surfaces (re-grading/re-surfacing) of all platforms to provide compliant accessible paths to station amenities and between the new lifts and BAZs;
 - Removal and replacement of existing balustrades, railings, lighting and fencing along the platforms 1 and 4;
- Upgrade of the existing stairs between Platform 1 (Railway Street) and Platform 4 (Hattersley Street) and the underpass to include new compliant handrails, TGSIs and nosing;
- Interior changes to the existing station buildings on Platforms 2/3 and 4:
 - Conversion of the existing men's bathroom to provide new FAT facilities with DDA-compliant access;
 - Demolition of the current women's bathroom;
 - Lowering of the existing waiting room floor;
 - Conversion of the existing cistern room into an ambulant toilet; and
 - Lowering of the existing flooring to the Platform 4 building to achieve DAA compliant access.
- Introduction of full height fencing to the existing subway entrances;
- Landscape and streetscape modifications:
 - Modifications to existing footpaths;
 - Introduction of a new bus stop on Railway Street; and
 - Removal of mature trees.
- Electrical upgrades; and
- Ancillary works.

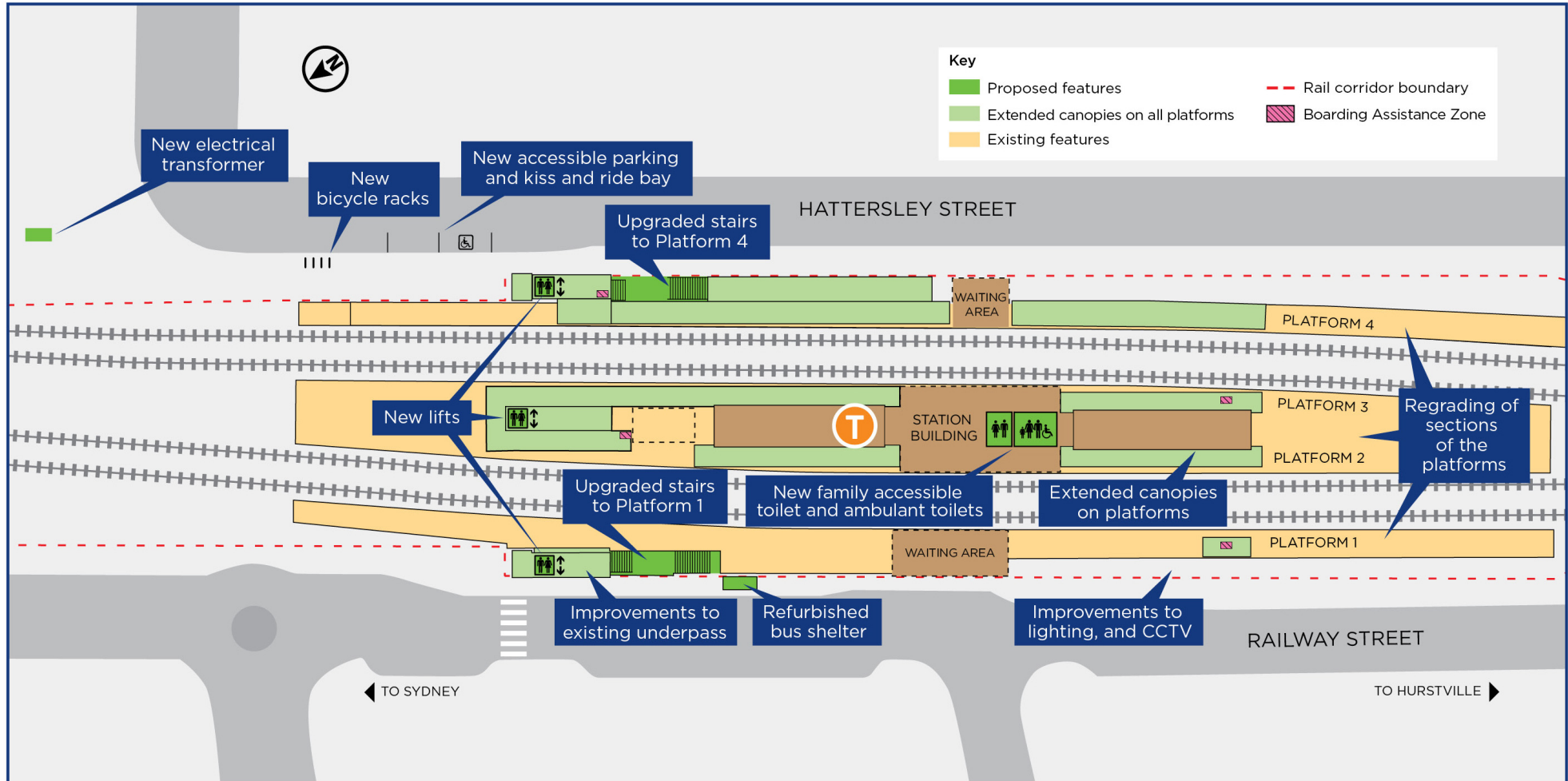


Figure 8.1: Banksia Station, proposed works schematic

8.2 Detail of works

8.2.1 Platform 1 and 4 lift structures, modification of subway/platform entrance stairs (Platforms 1 and 4) and Platform 4 station building

Two new lifts would provide access between Railway Street, Hattersley Street, the existing underpass and Platforms 1 and 4. Each lift would involve construction of a lift pit, foundation and lift shaft structure. This work would include:

- Construction of a new lift (Lift 1) and landings between Railway Street, the underpass and Platform 1;
- Demolition of the existing ramp and partial demolition of the station entrance stairs from Railway Street to the subway underpass;
- Construction of a new lift (Lift 3) and landings between Hattersley Street, the underpass and Platform 4;
- Demolition of the existing ramp and partial demolition of the station entrance from Hattersley Street to the subway underpass;
- Upgrade of the existing stairs between the underpass and Platform 1 to include a landing on Railway Street, new compliant handrails, TGSIs and nosing;
- Upgrade of the existing stairs between the underpass and Platform 4 to include a landing on Hattersley Street and the underpass, new compliant handrails, TGSIs and nosing; and

The remaining external entrance stairwells on both Platform 1 and 4 would be removed and replaced. The replacement would require approximately 5.6 metres of the platform structures to be removed for the new sitting of the stairwell.

The proposed lifts would rise between 7-8 metres above the existing ground level. The lifts would be made from prefabricated steel and glass, with the lower portion of the lift structure surrounded by cladding (material and colour scheme to be provided as part of package design). The upper 1.6 metres of the lift would consist of a lift overrun with steel exhaust louvres and topped with flat roofs. New platform canopies would be installed to cover the lift access points, while new landing would be constructed to adjoin the existing platforms (Figure 8.2 and Figure 8.3).



Figure 8.2: Proposed Railway Street entrance and lift structure on Platform 1



Figure 8.3: Proposed Hattersley Street entrance and lift structure on Platform 4

8.2.2 Platform 2/3 lift structure, demolition of subway booking office and demolition of northern subway lantern structure

One new lift would provide access between the pedestrian subway and Platform 2/3. It would also involve construction of a lift pit, foundation and lift shaft structure:

- Construction of a new lift (Lift 2) and landings between the underpass and Platforms 2 and 3;
- Demolition of the existing subway lantern on Platforms 2 and 3 including roof, walls and windows;
- Demolition of the existing subway booking office (original ticket window to be preserved and incorporated); and
- Installation of new cleaner's storeroom on the east and west of the lift structure; and
- Installation of two support columns.

The lifts would be made from prefabricated steel and glass, with the lower portion of the lift structure surrounded by cladding (material and colour scheme to be provided as part of package design) (Figure 8.4).



Figure 8.4: Platform 2/3 lift structure and canopies

8.2.3 New platform canopies on all platforms

In order to provide coverage between the new platform access points, BAZs and platform facilities, new canopies are proposed to be installed on all station platforms.

8.2.3.1 Platform 1

One new platform canopy would be constructed at the boarding assistance zone on Platform 1, five and a half metres in length immediately south of, and integrated into, the lift structure (Figure 8.5).

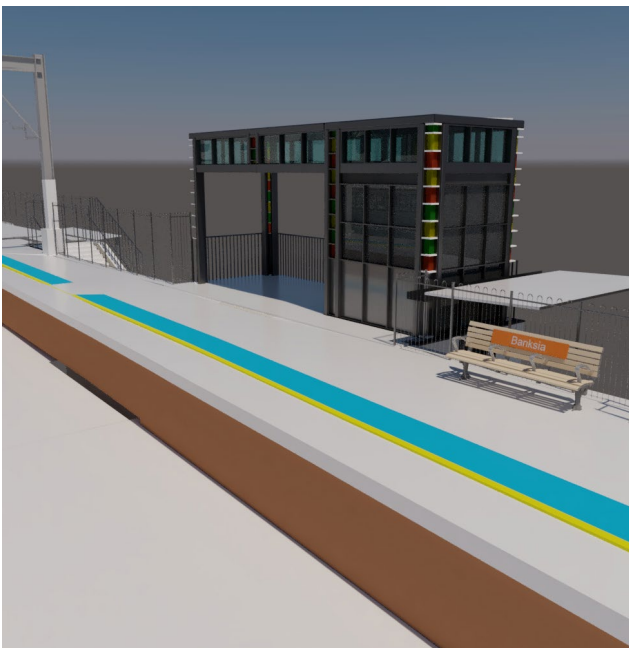


Figure 8.5: Lift 1 structure and canopy on Platform 1; facing southwest

8.2.3.2 Platform 2/3

One new platform canopy along of approximately 70 metres (excluding the awning of Platform 2/3 building) would be constructed along Platform 2/3. The two largest sections (between the Platform 2/3 stairwell lantern structure and the Platform 2/3 building, and from the Platform 2/3 building south along the platform) would be constructed with a central shallow gable, with cantilever awnings on either side which slope upwards towards the platform edges. In order to provide continual coverage between Lift 2, the existing stairs of the underpass, existing station building and the BAZ (25 metres south of the Platform 2/3 building), the eastern awning would extend north past the stairway lantern and integrate with a flat cantilever awning which wraps around the new lift/lantern structure. Glass roof panels are proposed at the canopy junctions with the existing Platform 2/3 building and the stairwell lantern structure (refer to Figure 8.6, Figure 8.7, Figure 8.8 and Figure 8.9).

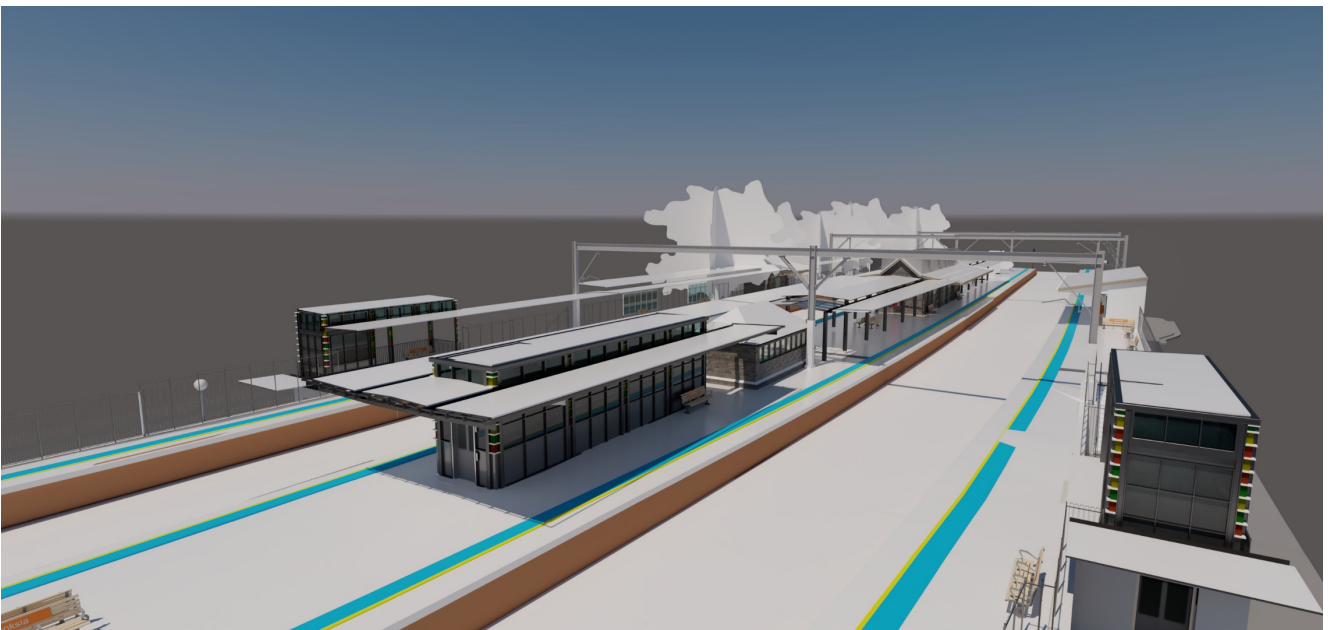


Figure 8.6: Platform 2/3 lift structure and canopies; facing south

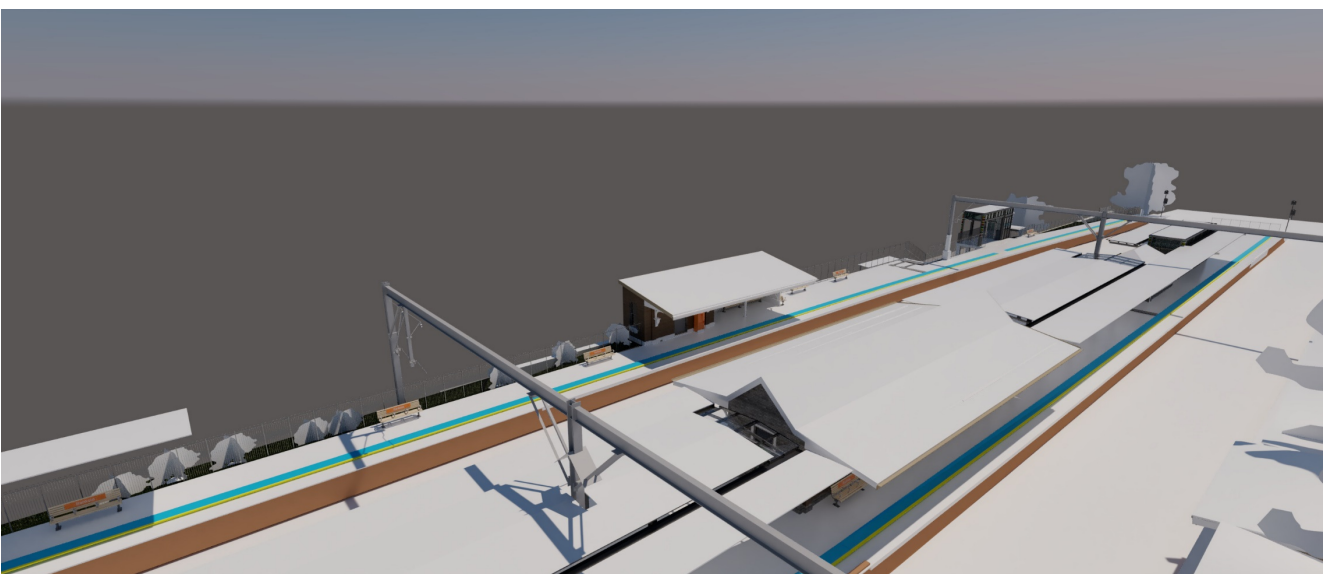


Figure 8.7: Platform 2/3 canopies and southern junction with the station building; facing northwest

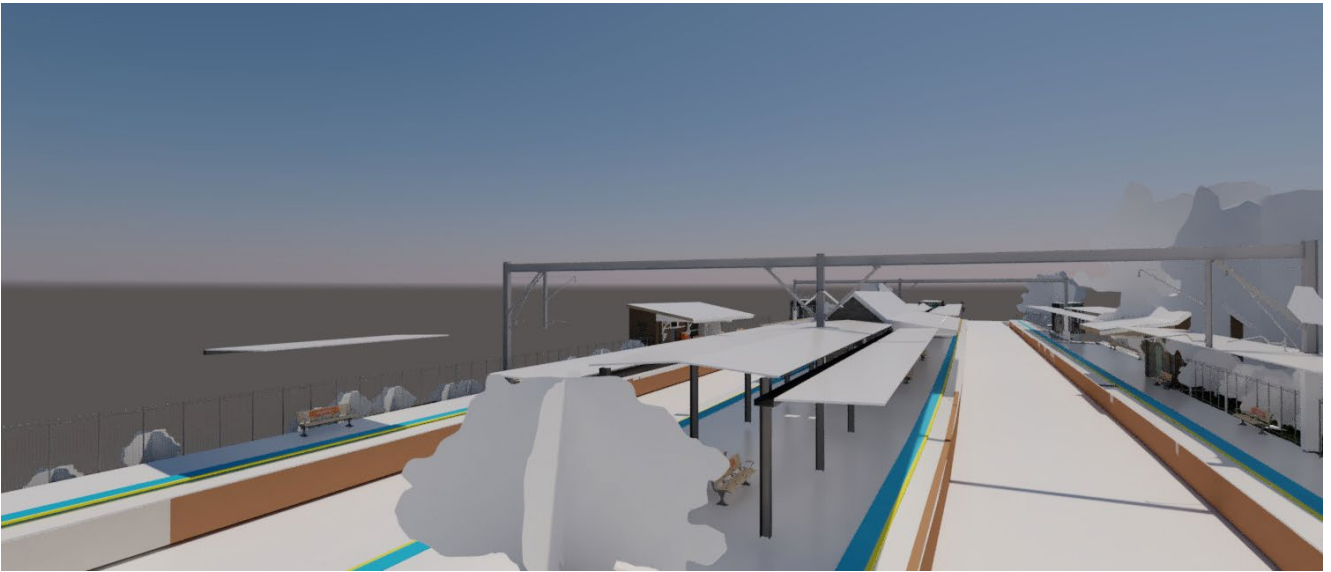


Figure 8.8: Platform 2/3 canopies; facing north

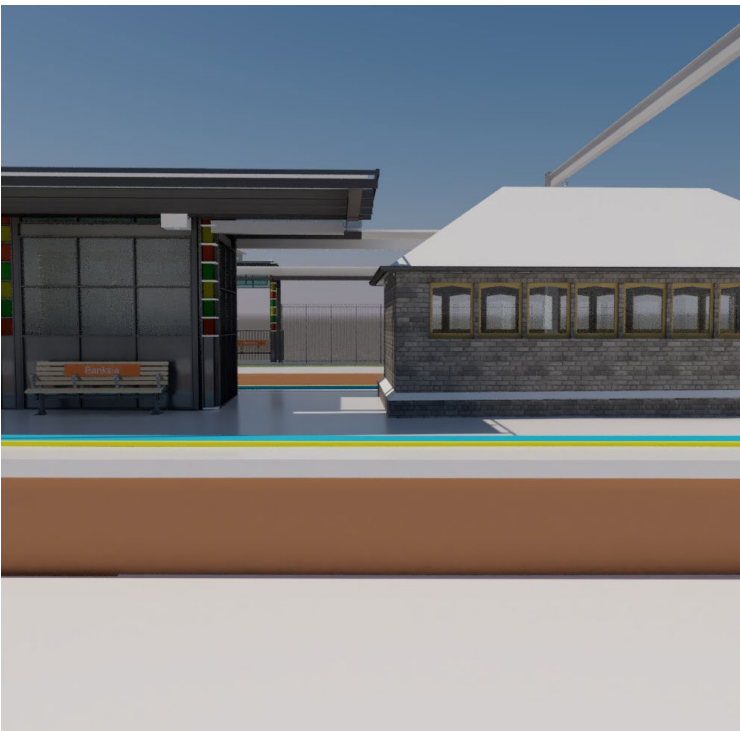


Figure 8.9: Lift 2 structure and canopy on Platform 2/3; facing west

8.2.3.3 Platform 4

One new canopy would be constructed along approximately 80 metres of Platform 4, from Lift 3 to south of the Platform 4 building. In order to account for the changes in platform width and angle along its length, the canopy would be constructed in three main sections:

- A skillion-roofed section from the top of the Platform 4 access stairs to the Platform 4 building;
- A flat-roofed cantilever awning from Lift 3, along the front of the skillion canopy to the Platform 4 building; and
- A flat-roofed cantilever awning from the Platform 4 building, extending 25 metres to the south.

8.2.4 Retaining wall modifications

Portions of the original brick retaining walls are proposed to be removed along Hattersley Street and Railway Street for the installation of the new lift structures on Platforms 1 and 4 and modifications to the platform stairways. Along Hattersley Street approximately 9 metres would be removed for the introduction of the Platform 4 lift. Along the Railway Street wall, approximately 9 metres is to be removed for the introduction of the new lift to Platform 1.

8.2.5 Platform modifications

Platform modifications include the removal of approximately 16 by 6 metres of platform fabric from platform 2/3. Upgrade of the existing surface (regrading/re-surfacing) is proposed to all the platforms to provide compliant accessible paths to station amenities and between the new lifts and BAZs.

The existing railings, balustrades and fencing along the eastern portion of the Platforms 1 and 4 would be removed and replaced. The existing stairwells to Platforms 1 and 4 would be demolished and replaced with new entries from their respective streetscapes. This replacement would require excavation of approximately 5.6 metres of the platform fabric.

The waiting room in the Platform 4 building would be lowered to provide level access into the waiting room. This would require the removal of two courses of brickwork to the existing opening, and the removal of the original timber floorboards and associated timber bearers and joists.

8.2.6 Modifications to Platform 2/3 building

The demolition of the subway booking office necessitates a replacement staff room in addition to the provision of accessible facilities.

The existing 'heritage storeroom' in the Platform 2/3 building is not proposed to be significantly modified and has been proposed to become a cleaner's storeroom. The door transom would be removed and replaced with louvres.

The existing northern waiting room doorway on the east wall of the Platform 2/3 building would be widened for accessibility and a new door installed. The existing transom (of modern glazing with original architraves) would be removed and a new louvre system installed. It is anticipated that the transom architraves would be retained and that penetration points may be required into the surrounding brickwork. The floor of the waiting room would be lowered to provide level access; existing heritage furniture within the waiting room would be reinstated.

The existing women's toilets and waiting room in Platform 2/3 building would be converted to the new station manager's office and associated amenities. This would require the removal of the bathroom stall walls and doorways and the permanent closure of the waiting room western doorway. A kitchenette, toilet and stud walls would then be installed. The original corrugated iron ceiling would be removed and replaced with a like-for-like ceiling. The original ceiling roses would be removed and reinstated.

The existing cistern room in Platform 2/3 building would be converted into a new ambulant toilet, with new flooring, ceiling and wall finishes. The project includes the lowering of the existing concrete slab, and the infill of an existing southwestern doorway for the location of the toilet facilities.

The existing men's toilets in Platform 2/3 building would be converted into a FAT. This would involve the removal of the existing stall wall which expands on a northeast to southwest alignment. The door frame would be widened to allow for DDA compliant access to the room. Existing modern finishes in the bathroom would be largely replaced for the new FAT. No other doorframes or thresholds in Platform 2/3 building would be modified. The existing brick privacy wall which covers the entrance to the bathroom would be removed. A new door would be constructed in the wider bathroom opening.

8.2.7 Electrical upgrade

An existing overhead wiring (OHW) structure that spans from Platform 1 to Platform 4 is located where the new stairs to these platforms are proposed. This overhead wiring structure would be removed, and a replacement overhead wiring structure would be installed on Platforms 1 and 4 next to the new stairs.

To accommodate power requirements for the Project, an upgrade of the existing low voltage electrical supply would be required. The work would include:

- a new pad-mounted transformer located on land next to Fortescue Reserve;
- a small section of underground cabling from the transformer to the station;
- installation of cabling in new galvanised steel troughing along Platform 4 to the underpass and then along the ceiling of the underpass to a new switchboard new Lift 2; and
- installation of cabling in a new combines services route under the edge of Platform 2 from near Lift 2 to the proposed switch room in the existing platform building.

8.2.8 Landscape and streetscape modifications

Several landscape and streetscape modifications are proposed. These will include modifications to existing footpaths surrounding Banksia Station, an introduction of a new bus stop on Railway Street; and the removal of mature trees in order to make space for the new lifts and stairs.

8.2.9 Ancillary work

The following ancillary work would also be undertaken as part of the upgrade:

- Hydraulics work for the lift and canopy downpipe systems;
- Installation of new pumps in the underpass and new stormwater pipes to transfer rainfall runoff from the canopies on Platforms 2 and 3 and in the underpass to existing stormwater pipes on Hattersley Street;
- New lighting and public address system;
- Upgrade all existing TGSIs and safety zone markings to platform edges and stairs;
- New/upgraded wayfinding signage and provision of the statutory/regulatory signage;
- Removal of an existing tree at the Hattersley Street entrance to the underpass and trimming of a tree near to the new transformer proposed near to Fortescue Reserve;
- Sanitary drainage and potable water adjustments for the station toilets;
- Temporary installation of a shed for station staff accommodation on Platforms 2 and 3;
- Temporary relocation of one bench for the installation of the station staff shed on Platforms 2 and 3;
- Adjustment of the height of the pay telephone at the northern end of the building on Platforms 2 and 3;
- Temporary removal of the Opal top up machine in the underpass. This would be reinstated in the same location prior to the completion of the work;
- Temporary site compounds for storage of materials and equipment; and
- Temporary work (where required) during construction to maintain pedestrian access to the station.

8.2.9.1 Materials and finishes

Materials and finishes for the Project have been selected based on the criteria of durability, low maintenance and cost effectiveness, to accord with heritage requirements, to minimise visual impacts, and to be aesthetically pleasing. Consideration has also been given to life cycle impacts which are calculated by assessing the

environmental impacts of materials from the point of extraction, through to transportation, use, operation and end of life.

Subject to detailed design, the Project would include the following:

- Lifts – solid base to each lift shaft with painted steel and glass infill panels;
- Lift cars – stainless steel and glass doors;
- Lift landings – flooring to match the adjacent pavement types;
- New canopies – steel frame and cladding;
- Upgraded stairs – replace non-compliant handrails, nosing and TGSIs on existing stairs; and
- Regraded platform surface – to achieve compliance.

Subsequent design iterations would be submitted to TfNSW's Urban Design and Sustainability Review Panel at various stages for comment before being accepted by TfNSW. An Urban Design Plan would also be prepared by the Construction Contractor, prior to finalisation of detailed design for endorsement by TfNSW.

8.2.10 Temporary site facilities

Temporary site facilities would be required to accommodate a site office, amenities, laydown and storage areas for materials and piling rig and crane set up and material delivery areas.

A construction site compound is proposed at the southern end of Hattersley Street in the existing 90-degree parking area alongside the rail corridor. There is a vehicle gate into the rail corridor at this location. This area would be used for a site office including a crib room and ablutions block. These portable buildings may be double stacked.

Temporary laydown and storage areas are required by the Construction Contractor for plant, equipment, materials, demolition materials being stored for reuse and stockpiles. Four potential laydown areas have been identified:

- Taylor Avenue – The portion of the road pavement alongside Fortescue Reserve between Hattersley Street and the Princes Highway that is currently used for street parking;
- Grassed area between the rail corridor and Fortescue Reserve – This location is the site of the proposed substation. There is an existing layback section in the kerb to enable vehicles to access this area;
- Intersection of Railway Street, Knight Street and Roach Street – The strip of land between the railway tracks and the footpath. The rail corridor boundary fence at this location would be temporarily removed and a temporary fence placed next to the footpath to increase the area available for laydown. A temporary vehicle access gate into the rail corridor would be installed to provide direct access from Railway Street to this laydown area; and
- Platforms 2 and 3 – A hoarding storage area is proposed at the northern end of Platforms 2 and 3.

Two potential areas for piling rig and crane set up and material delivery have been identified:

- Railway Street – The portion of the road pavement alongside the station entrance between the pedestrian crossing and bus shelter. The bus zone at this location would need to be temporarily relocated; and
- Hattersley Street – The portion of the road pavement alongside the station entrance that is signposted as a no stopping zone.

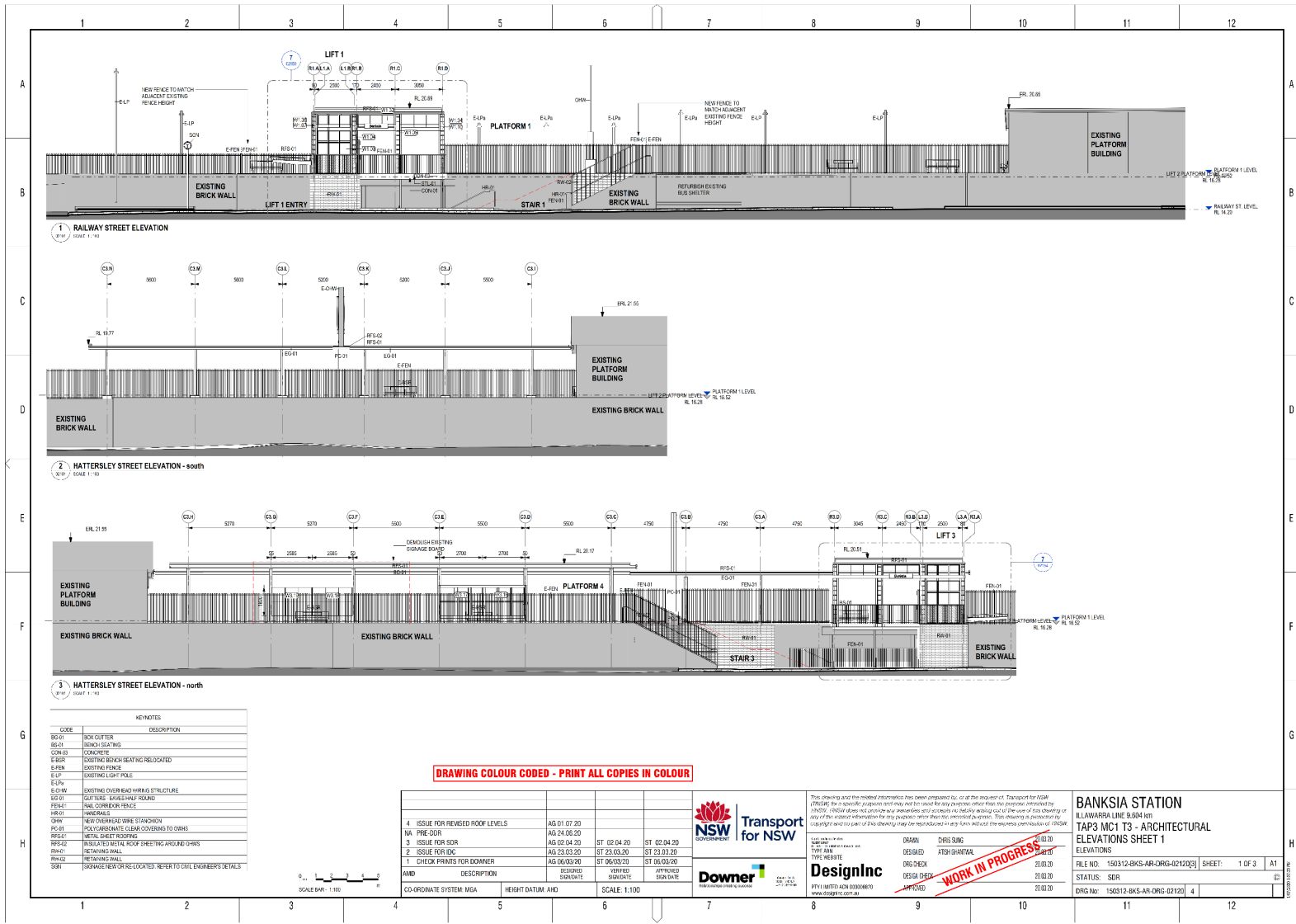


Figure 8.10: Banksia Station architectural elevations – Sheet 1

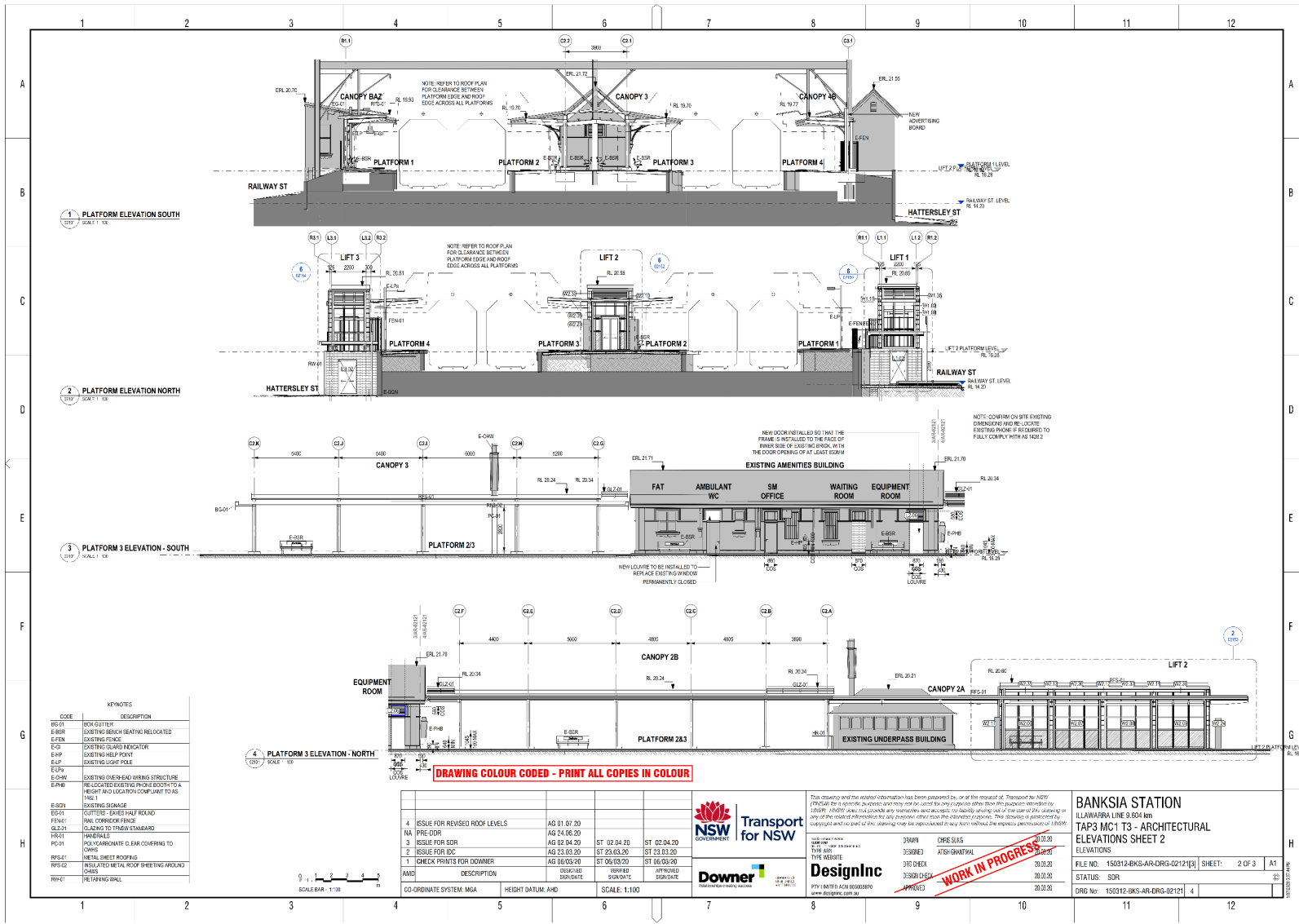


Figure 8.11: Banksia Station architectural elevations – Sheet 2

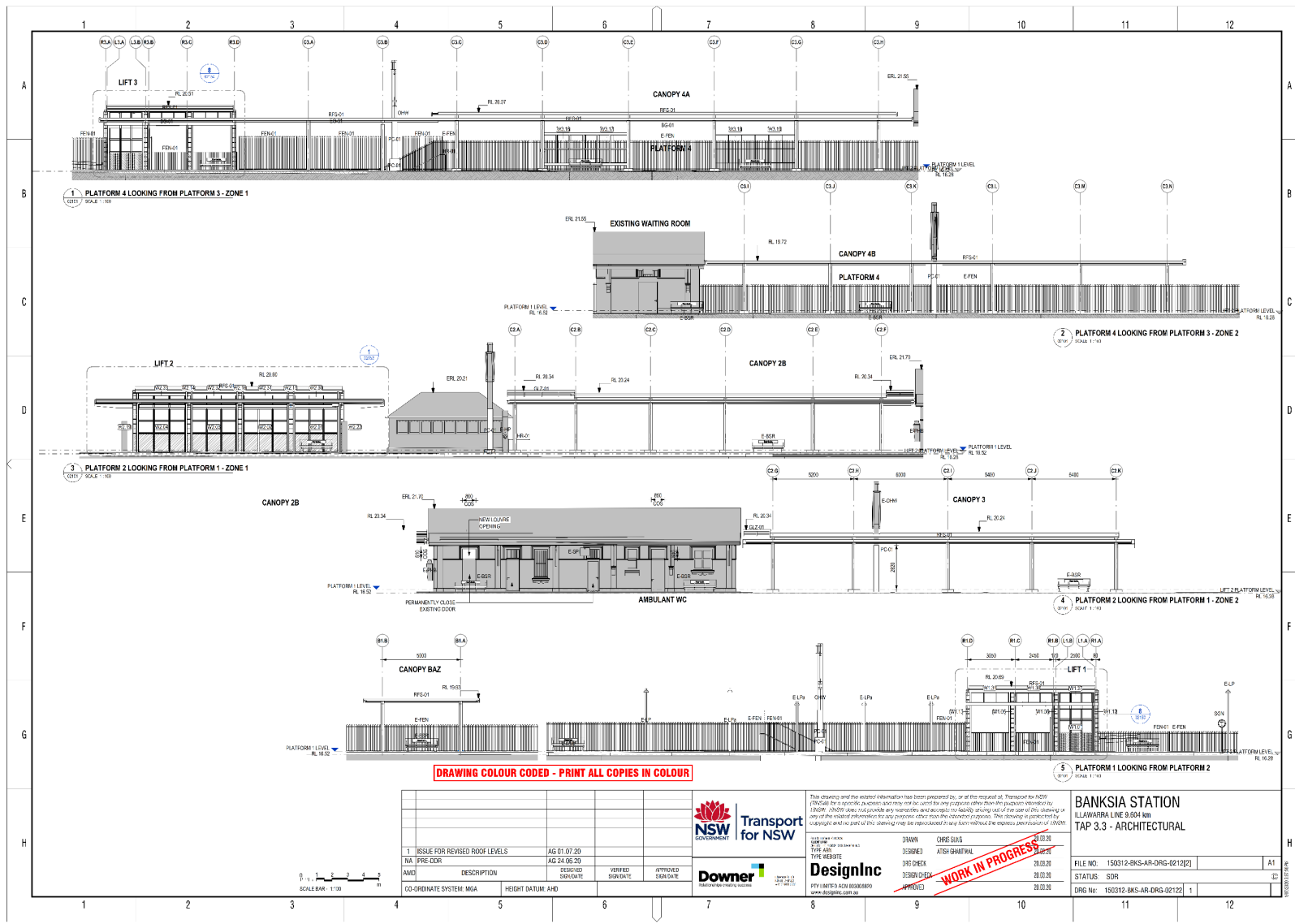


Figure 8.12: Banksia Station architectural elevations – Sheet 3

9. Heritage impact assessment

9.1 Impact of proposed works

In order to consistently identify the potential impact of the proposed works, the impact levels used in this assessment are defined in Table 9.1. These levels have been defined based on the scale and permanence of the potential impact in relation to the Banksia Station heritage item, its physical fabric and visual curtilage.

Table 9.1: Definitions of level of impact to heritage items

Level of impact	Definition
Neutral	Actions or activities that would result in a very minor change or impact to the heritage item. Generally, no mitigation is required.
Minor	Actions or activities that would result in a minor alteration to the heritage item. Generally, these actions can be mitigated.
Moderate	Actions or activities that would result in a modification to the heritage item, including its setting or landscape. These impacts may be partially mitigated.
Major	Actions or activities that would result in a long-term or otherwise substantial modification to a heritage item, its setting or landscape. These actions cannot be fully mitigated.

9.1.1 Direct (physical) heritage impacts

9.1.1.1 Installation of new lifts

The installation of lift structures at the station entrances at Platform 1 (Railway Street) and Platform 4 (Hattersley Street) would result in a neutral direct (physical) impact to the Banksia Station heritage item. They are proposed to be located along the existing platform boundaries and would not require significant modification of the station platforms in order to be constructed. The proposed removal and replacement of the existing stairwells and ramps to the two platforms is assessed to be of minor direct impact to heritage fabric through the removal of the stairs, and removal of some platform fabric. The impact of this portion of works is assessed as being of minor direct (physical) impact to the Banksia Station heritage item overall.

The excavation for, and construction of, the Platform 2/3 lift structure would require the demolition of both the northern subway lantern structure and subway booking office (graded as being of high significance). As one of the major platform-level structures within the station precinct with a direct relationship to the rare station subway, the removal of the lantern structure represents a major direct impact to heritage fabric within the station. This is also true of the removal of the subway booking office, which is substantially intact beyond the current office fit-out. This portion of works is assessed to be a major direct (physical) impact to the Banksia Station heritage item.

9.1.1.2 New platform canopies on all platforms

Piling works would occur on the platform's surface to enable the installation of supports for the proposed new canopy. Platforms 2/3 is the original platform of Banksia Station, constructed c.1906, with Platforms 1 and 4 constructed as part of the station extension in 1923. They are consistent with early brick platforms, comprising a packed earth structure with masonry retaining walls. The concrete coping is a later addition and was likely originally brick coping and an asphalt surface. Depending on the depth of the piling works, there is potential for these to breach through the modern additions into original fabric, resulting in a neutral direct (physical) impact to the heritage fabric.

9.1.1.3 Retaining wall modifications

The retaining walls are assessed as being of high significance to Banksia Station. The removal of portions of the original brick retaining walls are directly related to the installation of the new lift structures on Platforms 1 and 4 and modifications to the platform stairways. The removal of this fabric is considered to be of minor direct (physical) impact to the Banksia Station heritage item.

9.1.1.4 Platform modifications

The removal of fabric from Platform 2/3 for the construction of the lift shaft is assessed as a minor direct (physical) impact to the station overall, as the platform fabric itself is not considered to be of high significance.

The existing railings, balustrades and fencing constitute non-heritage fabric and their removal and replacement would be of neutral direct (physical) impact to the heritage item subject to suitable replacement.

The surface of the platforms would be regraded in order to provide a DDA-compliant level surface. Given that the proposed methodology and construction detail has not yet been determined, the potential impact of these works is currently uncertain. There exists the potential for a minor direct (physical) impact, if regrading is of sufficient degree to require the modification of station buildings to accommodate it. If the regrading is lesser, and does not modify existing heritage fabric, this work may be of neutral direct (physical) impact.

The removal of original heritage fabric in order to lower the floor level of the Platform 4 building represents a moderate direct impact to the heritage item; however, this may be reduced to minor if the fabric is reinstated at the new floor level.

9.1.1.5 Modifications to Platform 2/3 station building

Platform 2/3 building is of high significance to Banksia Station in both its internal and external fabric.

The widening of the waiting room doorway and installation of new louvre system would require the removal of the existing door and transom architraves and removal of brick fabric along the door margin, this is would be of minor direct (physical) impact to the heritage item.

The removal of the transom architraves on the existing storeroom doorway and their replacement with louvres would be of minor direct (physical) impact to the heritage item.

The demolition of the existing women's toilets to construct the Station Master's office represents the greatest potential direct impact of the modifications of the Platform 2/3 building. Substantially intact, the removal of fabric and modification of this space reduces the integrity of the station building as a whole. As the largest and oldest of the extant structures within the station complex, these works are considered to be of moderate direct (physical) impact to the Banksia Station heritage item.

The proposed conversion of the existing cistern room into an ambulant toilet would require the permanent closure of an original doorway on the Platform 2/3 building's eastern elevation and construction of a stud wall. As this room currently retains original fabric and detailing, the obscuring and/or removal of this fabric in conjunction with additional fixtures into original brickwork represents a minor direct (physical) impact to the Platform 2/3 station building, and a neutral direct (physical) impact to the heritage item overall.

The conversion of the existing men's toilets into a FAT would require the removal and replacement of existing tiling and finishes, and the addition of new bathroom hardware within the space. It would also necessitate the removal of existing brick privacy wall and nib walls. As some of this fabric is historical in nature (though not original), these works would result in a minor direct (physical) impact to the heritage item overall.

9.1.1.6 Electrical upgrade

The relocation of the OHW structure would require fixture within the platform surface and would be of neutral direct impact to significant fabric and the heritage item overall. The fixture of new steel troughing and combined services routes to Platforms 2 and 4 would likewise constitute a neutral direct impact to the heritage item.

9.1.1.7 Landscape and streetscape modifications

The landscape and streetscape modifications works are located outside of the heritage curtilage of the Banksia Station and would be of neutral direct (physical) impact to the item.

9.1.1.8 Ancillary works

The drainage works constitute minor modifications to existing water infrastructure and are assessed to be of neutral direct (physical) impact to the Banksia Station heritage item. Dependant on the penetration and fixture points required for the new lighting and public address system, these works would likely be of neutral direct (physical) impact to the heritage item. Tactiles, handrails and balustrades currently exist within the station and are not considered to be of heritage significance. Their proposed removal and replacement would result in a neutral direct (physical) impact to heritage fabric. The removal and/or replacement of existing platform furniture and furnishings (such as modern railings and seating) would be of neutral direct (physical) impact to the heritage item. All other proposed ancillary works are temporary and would be of neutral direct (physical) impact to the heritage item.

9.1.1.9 Temporary site facilities

The proposed temporary site facilities are temporary and would not require any disturbance or potential for damage to heritage fabric. As such these works would be of neutral direct (physical) impact to the heritage item.

9.1.2 Indirect (visual) heritage impacts

The dedicated Visual Impact Assessment (VIA) is currently being completed. This assessment of visual impacts is intended to compliment that assessment.

9.1.2.1 Existing setting

Banksia Station is in a mainly residential area with a few commercial developments, comprising mostly low-density houses and some medium-density blocks of flats. The Banksia shopping centre consists of a small group of shops on Railway Street (adjacent to the station) and includes a bakery, take-away shop, convenience store, chemist, post office and several hairdressers.

Due to the elevated nature of the rail line at Banksia Station, a majority of the public viewpoints from the surrounding streets are screened by a combination of brick retaining walls, native shrub plantings and mature Camphor laurel trees (primarily the southern half of the station), particularly from the east along Hattersley Street (Figure 9.2).



Figure 9.1: Current view from Hattersley Street towards the station buildings from south-east of Banksia Station (Source: Jacobs 2019)



Figure 9.2: Current view from Railway Street towards the platform buildings and subway entrance from west of Banksia Station adjacent to the shopping centre (Source: Jacobs 2019)

9.1.2.2 Installation of new lifts

The new lifts proposed for Banksia Station would introduce a prominent structure into the setting of the station and the surrounding streetscape. The lift structures on Platforms 1 and 4 would be visible from street level at Railway Street and Hattersley Street, and on all the station platforms. The proposed scale, form, and material of the new lifts would result in a moderate indirect (visual) impact. The proposed lift landing for Platforms 1 and 4 would retain the original visual setting of the surrounding landscape and as such would result in minor indirect (visual) impact.

The lift structure on Platform 2/3 would result in the complete demolition of two structures within the station precinct (the subway booking office and the northern subway lantern). Though the design of the lift shares design characteristics from the original subway lantern, the new lift shaft would be a prominent feature and the overall indirect (visual) impact of the lift structure is assessed to be moderate.

Considerable attention has been given during design development to the heritage setting of the station in order to reduce adverse impacts resulting from the introduction of the lift structures. The primary driver for managing this impact is the perceived scale of the new additions, which are significantly reduced from previous concept design. Alternative options shown in Section 7 would have resulted in higher built forms which would have entirely obscured the platform buildings and their significant view lines. The proposed arrangement considers the outer and central lifts as discrete pavilion forms connected via lower level canopy infills. The heights of the lift structures have been reduced to a minimum so that the primary heritage elements remain the dominant feature, and the current Platform 2/3 form (of single storey structures reducing in height towards the north) is maintained as much as possible.

9.1.2.3 New platform canopies on all platforms

The most prominent views of the platform buildings and the proposed works areas are on the platforms themselves. There are currently no canopies on the platforms, except for those immediately adjacent the existing station building, which makes the visual impact of the proposed canopies more prominent. Due to modern safety and construction standards the canopies are required to be constructed of more substantial (and therefore visually prominent) steel supports. This results in a bulky visual presence and dominates the smaller, more delicate, aesthetics of the Federation and Interwar-era buildings and wider station precinct. The proposed canopies greatly increase the visual bulk present on the platforms and creates a visual obstruction of views to and from the heritage buildings, reducing the sense of open space and discrete nature of the platform buildings, which is an integral part of their aesthetic appeal.

Although design iterations have worked to minimise the visual impact of the canopies, and the current design represents a large improvement in terms of scale, the visual impact of the proposed canopies is assessed as a major indirect impact, due to its comparison to the current scale, form and visual spacing of the station precinct.

A number of different design options were considered for the platform canopies. These included options such as high gabled canopies at a consistent level with the Platform 2/3 building roofline, an option which completely overwhelmed the station buildings with overshadowing across the whole of the station precinct. The current design was chosen based on what was least intrusive visually to the station. For example, the glazed connections at the building interface in this design provide a clear delineation of the new canopies with the existing structures, as well as bringing natural light to the elevation. In this way, it ameliorates the construction safety requirements and sits better with the current aesthetic of the station.

Further reductions in indirect impact (e.g. potentially down to moderate impact levels) may be achieved through detailed design in accordance with the recommendations of this assessment.

9.1.2.4 Retaining wall modifications

The retaining wall modifications works would not significantly alter the visual setting and landscape of Banksia Station, as the new works will be constructed using complementary brickwork. As such there is neutral indirect (visual) impact to the heritage item.

9.1.2.5 Platform modifications

The proposed platform modifications represent either like-for-like replacement, or modification of existing wearing surfaces. They would not significantly alter the visual setting and landscape of Banksia Station and would be of neutral indirect (visual) impact to the heritage item.

9.1.2.6 Modifications to Platform 2/3 station building

The removal of the transom architraves on the existing storeroom doorway and their replacement with louvres would be of minor indirect (visual) impact to the heritage item.

The proposed conversion of the cistern rooms would require the permanent locking of the north eastern entry doorway. This would not have an indirect (visual) impact on the view lines towards the elevation of the Platform building 2/3.

The modifications to the men's toilet entry would remove brick fabric from the elevation of Platform building 2/3 through the widening of the toilet entrance doorway. These proposed works would cause a minor indirect (visual) impact to the overall train station. The installation of the FAT within the men's bathroom would continue to conceal the original period detailing and materials within the room. The brick privacy wall would be removed which would increase view lines to the southern elevation of Platform building 2/3, however this represents the loss of a minor element, i.e. a two-stage privacy screen from the platform layout. Although its form and function

mirrors that of the original fabric, the later brick wall presents greater visual bulk. These works would result in a neutral indirect (visual) impact to the heritage item.

The proposed removal of the interior fabric of the female toilets and substantial modifications would result in a moderate indirect (visual) impact to the heritage item.

9.1.2.7 Electrical upgrades

The relocation of the OHW structure represents a like-for-like replacement, not any additional visual clutter, it is therefore considered to be of neutral impact to the visual setting of the heritage item.

The pad-mounted transformer and underground cabling are both located outside of the station precinct and would not significantly impact on the visual setting of the heritage item. These works are therefore considered of neutral indirect (visual) to the heritage item.

Although design detail of the new steel troughing and combined services route is not currently available, the edges of Platforms 2 and 4 are both visible to commuters on other platforms. If the materials used are not visually recessive, the installation of new services has the potential to be of minor indirect (visual) impact to the heritage item.

9.1.2.8 Landscape and streetscape modifications

The landscape and streetscape modifications works would not significantly alter the visual setting and landscape of Banksia Railway Station Group (SHI# 4801160). Primarily like-for-like replacements, the only notable change will be through the removal of mature trees on Hattersley Street. As such they are assessed as neutral indirect (visual) impact to the heritage item.

9.1.2.9 Ancillary work

The drainage works would not alter the visual setting and landscape of Banksia Railway Station Group (SHI# 4801160). As such there is neutral indirect (visual) impact. Dependant on the penetration and fixture points required for the new lighting and public address system, these works would likely be of neutral indirect (visual) impact to the heritage item. Tactiles, handrails and balustrades currently exist within the station and are not considered to be of heritage significance. Their proposed removal and replacement would result in a neutral indirect (visual) impact. The removal and/or replacement of existing platform furniture and furnishings (such as modern railings and seating) would be of neutral indirect (visual) impact. All other proposed ancillary works are temporary and would be of neutral indirect (visual) impact to the heritage item.

9.1.2.10 Temporary site facilities

The proposed temporary site facilities would include visual impacts from plant e.g. cranes and drill rigs, site offices, construction hoarding etc. However, these impacts will be temporary and constrained to the construction phase – the site would be reinstated following the completion of works. As such, they would be of neutral indirect (visual) impact to the heritage item.

9.1.3 Summary of potential impacts

The proposed direct (physical) and indirect (visual) impacts have been summarised below in Table 9.2.

Table 9.2: Summary of potential impacts of proposed works to Banksia Railway Station Group (ID# 4801160)

Proposed work	Type of impact	Degree of impact	Consequence of impact to heritage item
Installation of lifts on Platforms 1 and 4	Direct	Minor	Minor loss of contributory heritage fabric
	Indirect	Moderate	Reduction of aesthetic significance
Installation of lift on Platform 2/3	Direct	Major	Loss of integrity and intactness, reduction in heritage significance
	Indirect	Moderate	Reduction of aesthetic significance
Installation of platform canopies	Direct	Neutral	Minor impact to heritage fabric
	Indirect	Moderate to Major ³	Reduction of aesthetic significance
Retaining wall modifications	Direct	Minor	Minor loss of contributory heritage fabric
	Indirect	Neutral	No consequence to heritage item
Platform modifications	Direct	Minor - TBC	Potential for minor obscuring of elements
	Indirect	Neutral	No consequence to heritage item if like-for-like replacement
Modifications to Platform 2/3 station building	Direct	Moderate	Minor impact to heritage fabric and/or obscuring of heritage elements – change of use from public facing to back of house. Loss of understanding of historic station building arrangement.
	Indirect	Neutral to moderate	Reduction in aesthetic significance
Electrical upgrades	Direct	Neutral	No consequence to heritage item
	Indirect	Minor	Increased visual clutter along the platform edges
Landscape and streetscape modifications	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item
Ancillary works	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item
Temporary site facilities	Direct	Neutral	No consequence to heritage item
	Indirect	Neutral	No consequence to heritage item

9.2 Sydney Trains Conservation Management Strategy

Australian Museum Consulting were commissioned by Sydney Trains to prepare a Conservation Management Strategy (CMS) (Australian Museum Consulting 2015) for heritage platforms managed and maintained by Sydney Trains within the NSW railway networks. The following strategies are relevant to the proposed works in Table 9.3.

³Major represents worst case (no design refinement), while moderate is if the recommendations are actioned.

Table 9.3: Sydney Trains Conservation Management Strategy

Conservation Strategy	Response
<p>Strategy 5: Conserve and manage the fabric of heritage platforms in accordance with statutory requirements and heritage best practice.</p> <ul style="list-style-type: none"> ▪ Conservation and management of heritage platforms should be undertaken in accordance with the State-owned Heritage Management Principles and Heritage Asset Management Guidelines as outlined in the State Agency Heritage Guide (Heritage Council of NSW 2005), made under s.170A of the Heritage Act, and the principles of the Burra Charter; ▪ When change is required to meet operational requirements, and/or other safety and access standards, heritage significance is likely to be one of a number of constraints considered. In these cases, Sydney Trains should aim to avoid or minimise impacts on the heritage significance of the platform to the greatest extent feasible; ▪ Where there are conflicts between heritage requirements and other statutory requirements or standards, such as the DDA, Building Code of Australia, Australian Standards or Asset Standards Authority requirements, Sydney Trains should consult with the relevant statutory authorities to determine if compliance can be achieved via an alternative solution to the requirements, or a concession to the standards; ▪ Proposals for major repairs or changes to heritage platforms, whether of local, state, or national significance, should be developed in consultation with a Sydney Trains heritage specialist and/or appropriately qualified heritage consultant, as well as relevant statutory authorities; and ▪ If there is uncertainty about whether the proposed extent of repair or change requires heritage notification or approval, seek the advice of a Sydney Trains heritage specialist in the first instance. 	<p>Addressed within this assessment and further developed through Sydney Trains comment and review.</p>
<p>Strategy 7: Retain and conserve original or other historic platform detailing and surface features where these contribute to the heritage significance of the platform and the station precinct.</p> <ul style="list-style-type: none"> ▪ Structural repairs and other platform maintenance, refurbishments, or renewal works should maximise protection and retention of significant platform fabric and detailing, particularly where these contribute to the overall integrity and aesthetic character of the station precinct. This could include, but not be limited to retention and protection of the following historic or traditional platform features: <ul style="list-style-type: none"> ▪ Evidence of original copings, ramps, and entranceways; ▪ Steps and ladders; ▪ Signage and survey marks; ▪ Signal bays, and associated fixtures and fittings; ▪ Drains and drainage grates; ▪ Culverts; ▪ Asphalt, gravel, tile, or other unusual surfacing materials; ▪ Fencing; ▪ Lighting; ▪ Garden beds, edging material and plantings; ▪ Platform furniture; ▪ Bubblers; ▪ Doorsteps and boot scrapers; and 	<p>Addressed as part of this report's recommendations – see retention of original fabric.</p>

Conservation Strategy	Response
<ul style="list-style-type: none"> ▪ Weighing scales. ▪ It could also include other built heritage fabric that is closely associated with the platform surface and platform drainage patterns, such as: <ul style="list-style-type: none"> ▪ Underfloor vents of platform buildings; ▪ Verandah posts; ▪ Foundations of platform buildings; ▪ The design of new surface features and platform furniture, where these are required to meet DDA and other safety standards, should ensure that new features do not detract from the heritage character of the station precinct; and ▪ The potential impacts of ballast cleaning and other track repair, maintenance and reconditioning works on the surface fabric and overall physical stability of heritage platforms should be reviewed as part of the maintenance planning process. Note that Agency-specific exemptions from approval or notification under the Heritage Act only apply when the works do not adversely impact the heritage significance of any known or likely heritage items, including heritage platforms. 	
<p>Strategy 10: Where other new structures are required to improve platform access, the new fabric should be sympathetic to the existing heritage character of the place, but still be readily identifiable as new work.</p> <ul style="list-style-type: none"> ▪ Accessibility upgrades to significant platforms should support their ongoing use, without obscuring or damaging significant built heritage fabric or the integrity of original designs; ▪ New ramps, pathways, or access infrastructure in the immediate vicinity of heritage platforms should not overwhelm the heritage fabric of the platform or associated features, either in scale, mass, or colour, and should complement the character of the station precinct. They should also blend into the broader landscape setting of the station; ▪ Changes which reduce the heritage significance of the platform should be reversible. Non-reversible change should only be used as a last resort; and ▪ Relocation or removal of heritage surface features should only be considered as a last resort, where there are no conceivable means of providing equitable access without incurring a major loss of heritage significance. 	<p>Addressed through the options assessment and design process. To be further progressed through detailed design.</p>
<p>Strategy 12: Make a record of existing structural designs, fabric, and uses before changes are made.</p> <ul style="list-style-type: none"> ▪ Major works to significant platforms and fabric should be documented, including the rationale for the work, and the methods used; ▪ At state heritage stations, archival quality photographic recordings should be prepared in accordance with guidelines for Photographic Recording of Heritage Items Using Film or Digital Capture (2006), available on the Heritage Division website at: http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/infophotographicrecording2006.pdf; and ▪ Copies of relevant documentation and archival photographic records should be lodged with an appropriate long-term storage facility, including the administrator of the RailCorp Section 170 Register (for all items), the local library (local and SHR items), and the Heritage Division (now Heritage NSW) (SHR items). These documents will become part of the history of the place. 	<p>Addressed as part of this report's recommendations – see archival recording</p>

Conservation Strategy	Response
<p>Strategy 13: Communicate the history and significance of heritage platforms to users of station precincts through interpretive media.</p> <ul style="list-style-type: none"> ▪ Opportunities for interpretation should be considered as part of future proposals for major redevelopment or change. Interpretation strategies should be considered throughout the planning process. ▪ Interpretations may include a range of actions, such as: <ul style="list-style-type: none"> ▪ Retaining significant fabric in situ where it provides good evidence of earlier platform functions, technology and travel customs, such as signage and survey marks, signal bays, traditional surfacing materials, lighting, furniture, weighing scales etc; ▪ Retaining significant fabric in situ where it provides good evidence of former structural types, or technological trends in railway infrastructure; and ▪ Introducing signage panels or other graphic media to the site, to explain the history of a station and broader changes in the history of passenger transport in NSW. 	<p>Addressed as part of this report's recommendations – see site interpretation.</p>

9.3 Consideration of impacts against SoHI guidelines

The NSW Heritage Manual guidelines for preparing SoHIs (NSW Heritage Office 2002) pose a range of questions to be considered when assessing heritage impacts for works to or in proximity to a heritage item. Relevant considerations in relation to impacts Banksia Railway Station Group (ID# 4801160) are displayed in Table 9.4.

Table 9.4: Banksia Railway Station Group (SHI ID# 4801160) consideration of impacts

Proposed change to Heritage Item	Consideration	Response
Demolition of a building or structure - subway lantern and subway booking office	Have all the options for retention and adaptive re-use been explored?	The Project has included extensive consultation and options assessment which has considered a number of other possible design iterations, including retention and partial retention. Unfortunately, engineering and construction constraints on site have precluded some of these options. In order for construction to be completed, the fabric of the subway lantern would require removal to allow for the drill and crane rigs to be used for construction of the central lift – options for retention of the four corner brick piers of the subway lantern is being investigated through detailed design - reconstruction of this fabric once removed was not considered to be a sympathetic option. Recommendations for heritage sympathetic design were proposed by Artefact (2020) and have been developed to the current stage of design.
	Can all of the significant elements of the heritage item be kept, and any new development be located elsewhere on the site?	<p>The significant elements of the heritage item are unable to be kept in their entirety. Options for maximising retention, reuse and interpretation are included as recommendations of this report.</p> <p>The new development must be sited on Platform 2/3 in order to provide equitable access to the platform; it is physically unable to be located elsewhere and still form a junction with the subway underpass.</p>

Proposed change to Heritage Item	Consideration	Response
	<p>Is demolition essential at this time or can it be postponed in case future circumstances make its retention and conservation more feasible?</p>	<p>The demolition of the subway lantern and subway booking office are required to provide equitable access to Platform 2/3 with the new lift structure. As the lift construction is an immediate need, the demolition of these structures cannot be delayed. There is no available evidence that suggests that a delay would produce any technological developments that may allow construction and piling in the constrained space with a smaller rig.</p>
	<p>Has the advice of a heritage consultant been sought? Have the consultant's recommendations been implemented? If not, why not?</p>	<p>Artefact (2020) have been engaged by Downer throughout the design process to inform the options assessment and provide design advice for the proposed works. Their recommendations for heritage sympathetic design have been developed into the production of the current design phase.</p>
<p>Major/minor partial demolition (including internal elements) – modifications to the Platform 2/3 and 4 station buildings</p>	<p>Is the demolition essential for the heritage item to function?</p>	<p>The proposed modifications to the Platform 2/3 building are considered necessary to provide staff amenities of the level of modernity currently expected for station staff. These works form part of the DDA and DSAPT compliant upgrades which will allow equitable operation of Banksia station into the future.</p> <p>The removal of the Platform 4 building floor and replacement at a lower height would allow the building to be compliant with DDA standards and to continue its current usage as a platform waiting room. With a growing proportion of our community requiring equitable access of one form or another, this modification is considered essential for the heritage element to function.</p>
	<p>Are important features of the item affected by the demolition?</p>	<p>The demolition within the Platform 2/3 building would include original and/or significant fabric such as corrugated iron ceilings, ceiling roses, doorway brickwork and the substantially intact fitout of the women's waiting room and bathrooms.</p> <p>The modifications to the Platform 4 station building would remove original floor fabric including joists, floorboards, the slate door threshold and some supporting brickwork. The intention should be for the existing fabric to be carefully dismantled and salvaged and reinstated at the lower level.</p>
	<p>Is the resolution to partially demolish sympathetic to the heritage significance of the item?</p>	<p>The partial demolition is not sympathetic to the heritage significance of the item, however opportunities for mitigation and interpretation are recommended as part of this assessment.</p>
	<p>If the partial demolition is a result of the condition of the fabric, is it certain that the fabric cannot be repaired?</p>	<p>The heritage fabric is generally of good condition, it is not being removed as a result of instability or poor condition.</p>

Proposed change to Heritage Item	Consideration	Response
Major additions – lift structures and canopies	How is the impact of the addition on the heritage significance of the item to be minimised?	<p>The proposed lift structures would result in a moderate indirect (visual) impact to Banksia Station. This impact has been minimised through form and scale. The lift structure on Platform 2/3 has been scaled down to echo the previous height of the subway lantern structure to be removed, while integrating a lightwell in its design to continue to provide light down into the subway underpass. The use of glazing in these structures will minimise their visual bulk as much as possible.</p> <p>The proposed canopies would result in a major indirect (visual) impact to the visual setting of Banksia Station. This impact is to be minimised through sympathetic design, material choice, and scaling during detailed design phases. Although the current design option does not mirror the existing station roofline, it is considered to be more sympathetic than the original design in terms of scale. It provides consistency in its design language across the platforms, while also maintaining the visual separation between the three 'pavilions' on Platform 2/3. Glass infill panels are to be used at all junctions with heritage fabric to prevent overshadowing and/or visually intrusive intersections.</p>
	Can the additional area be located within an existing structure? If not, why not?	<p>The proposed lift locations cannot be located within existing structures, particularly on Platforms 1 and 4, as there are no extant structure which could accommodate the lift shaft and mechanism. The subway lantern on Platform 2/3 is part of the station landscape and cannot structurally accommodate the required height of the lift structure. The partial retention of the subway lantern structure would have resulted in a poor integration of commuter traffic as well as an ill-fitted heritage outcome if it were feasible.</p> <p>The proposed canopies are designed to provide continual coverage across spaces where there currently is none. By definition, they cannot be located within an existing structure.</p>
	Will the additions visually dominate the heritage item?	<p>The proposed lifts would introduce large and prominent structures into the visual context of Banksia Station and its surrounding streetscapes. However, they have been designed at a scale and form which is intended to minimise overshadowing the heritage structures in their proximity. Their flat roofs are visually recessive and minimise their height and visibility as much as possible. The Platform 2/3 lift has been designed as a reflection of the northern subway lantern which it will replace, retaining the current platform landscape of three discrete pavilion forms.</p> <p>The proposed platform canopies are extensive and visually prominent, introducing a visual obstruction to many of the public view lines of the heritage item.</p>

Proposed change to Heritage Item	Consideration	Response
		<p>Although care has been taken to minimise the visual impact where possible, the canopies will be the visually dominant element of the station.</p>
	<p>Is the addition sited on any known, or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?</p>	<p>As part of their assessment, Artefact (2020) completed a preliminary archaeological assessment, which defined three general phases of historical activity in the area of Banksia Station. It concluded that while there is a low potential for subsurface remains related to earlier phases of use at Banksia Station, the remains would not be considered to be of heritage significance, and therefore there are no predicted significant archaeological deposits within the study area.</p>
	<p>Are the additions sympathetic to the heritage item? In what way?</p>	<p>The proposed lifts are sympathetic to the significance of the heritage item, in that they adhere to the current layout of the station, with access points orientated around the pedestrian subway. The lift structures have been designed at a scale and form which is intended to not overshadow the heritage structures.</p> <p>Although the original MTMS canopy design was felt to be more sympathetic in form, with the required expansion in scope of TAP a tall gabled roofline would have completely dominated and obscured the platforms, unsympathetically overshadowing all the structures upon them. The flatter canopies have significant benefits in scale and include glazing panels at all junction points between new and old fabric. Although still visually dominant, the current canopy design is considered to be more sympathetic than earlier iterations which attempted to force the MTMS design across the platforms in areas where it was not originally intended.</p>
<p>New services</p>	<p>How has the impact of the new services on the heritage significance of the item been minimised?</p> <p>Are any of the existing services of heritage significance? In what way? Are they affected by the new work?</p> <p>Has the advice of a conservation consultant (architect) been sought? Has the consultant's advice been implemented?</p>	<p>Service detailing is yet to be developed; this assessment should be updated following Detailed Design Review (DDR).</p>

Proposed change to Heritage Item	Consideration	Response
	Are any known or potential archaeological deposits (underground or underfloor) affected by the proposed new services?	As part of their assessment, Artefact (2020) completed a preliminary archaeological assessment, which defined three general phases of historical activity in the area of Banksia Station. It concluded that while there is a low potential for subsurface remains related to earlier phases of use at Banksia Station, the remains would not be considered to be of heritage significance, and therefore there are no predicted significant archaeological deposits within the heritage item.

9.4 Summary Statement of Heritage Impact

The proposed works would ensure that Banksia Station is accessible to all customers and the changes are considered to be necessary and unavoidable. The upgrades have been designed to improve accessibility and to prepare for service improvements on the T4 Illawarra Line and South Coast Line assisting with continued use. Heritage significance has been weighed up against the need to provide equitable access to the station and modern transport facilities. The proposal includes demolition of the following elements:

- subway lantern and subway booking office
- Some significant internal fabric of the Platform 2/3 building, including corrugated iron ceilings, ceiling roses, doorway brickwork and the substantially intact fitout of the women's waiting room and bathrooms
- Some significant internal fabric of the Platform 4 building, including original floor fabric including joists, floorboards, the slate door threshold and some supporting brickwork.

Impacts and changes to heritage elements at Banksia Station have been avoided and minimised where possible and have been sympathetically designed where this is not possible. Options for maximising retention, reuse and interpretation have been incorporated into the design where practicable. Unavoidable impacts have been designed to be as minimal as possible, particularly in relation to scale. Heritage-sympathetic designs have been developed to ensure aesthetic continuity and the proposed designs are not considered to impact on the overall legibility of the station's heritage values. The sympathetic and considered design of the new elements are consistent with the heritage values of the station and will ensure its suitability for continued use by the community now and into the future. There are no archaeological impacts associated with the proposal. The proposal includes the addition of new elements, and alteration and demolition of existing elements. Direct impacts range from neutral to major. Overall the project is considered to have a moderate adverse impact.

Further mitigation of impacts will be in the form of a heritage advice guiding detailed design and implementation of an interpretation program.

10. Conclusions and recommendations

10.1 Summary and conclusions

Banksia Station is listed on the RailCorp Section 170 register as an item of local heritage (Banksia Railway Station Group, SHI ID# 4801160), significant for its historical, aesthetic, and social values, as well as representativeness and rarity (rarity primarily relates to the pedestrian subway as the only such example along the Illawarra Line).

The proposed works would result in the following heritage impacts:

- The installation of new lifts on Platforms 1 and 4 will result in a minor direct (physical) and a moderate indirect (visual) impact to the heritage significance of the heritage item;
- The installation of a new lift on Platform 2/3 will result in a major direct (physical) and a moderate indirect (visual) impact to the heritage significance of the heritage item;
- The installation of platform canopies on all four platforms will result in a neutral direct (physical) and a major indirect (visual) impact to the heritage significance of the heritage item;
- Retaining wall modifications will result in a minor direct (physical) and a neutral indirect (visual) impact to the heritage significance of the heritage item;
- Platform modifications will result in a neutral to minor direct (physical) and neutral indirect (visual) impact to the heritage significance of the heritage item;
- Modifications to Platform 2/3 station building will result in a neutral to moderate direct (physical) and indirect (visual) impact to the heritage significance of the heritage item;
- Electrical upgrades will result in a neutral to minor direct (physical) and neutral indirect (visual) impact to the heritage significance of the heritage item; and
- The remaining proposed works (landscape and streetscape maintenance, ancillary works, and temporary site facilities) will have a neutral direct (physical) and indirect (visual) impact to the heritage item.

The proposed works represent both direct (physical) and indirect (visual) impacts to the Banksia Station heritage items, however the works represent a necessary upgrade to allow equitable access and full continued usage of the station as an operation heritage item.

10.2 Recommendations and mitigation measures

This section provides recommendations and mitigation measures to reduce negative potential heritage impacts resulting from the Project. It should be noted that this report has been prepared during the SDR design phase, and the recommendations below relate to the current design only.

The recommendations and mitigation measures include:

Recommendation 1 - Retention of heritage fabric

The Project must endeavour to retain the maximum amount of significant heritage fabric as possible, as follows:

- The Platform 2/3 station building currently has a high level of integrity, particularly the women's waiting room and bathroom. Detailed design must include retention and/or reuse of original/early fabric, including but not limited to, cornices, joinery, ceiling roses etc.;
- The Platform 2/3 northern waiting room and Platform 4 station building both retain original seating which is not currently DDA compliant with regard to armrests. Although currently proposed to be removed, options for alteration of the original seating must be explored in order to retain the original fabric while achieving compliance.

- The demolition of the northern subway lantern represents a significant removal of original fabric from the station complex. In order to mitigate this removal, Opportunities for retention of fabric must be further explored. It has been suggested that the four brick corner piers of the lantern would be a suitable element to investigate, as it would not significantly impact the proposed design and appropriately interpret the former extent of the existing structure. As part of retention works, consider material finish for corner piers in order to reinstate original brick facing/original state. Note: Removal and reconstruction of built heritage elements is not considered to qualify as retention;
- In order to comply with equitable access requirements, it is proposed that the floor of the Platform 4 station building be lowered to platform grade or close to. It is recommended that the existing building fabric be retained and reinstated at this new level subject to condition assessment, e.g. the stone threshold, timber framing, timber floor, seating, architraves, timber bench seating. If the condition assessment precludes reuse of the timber structure or flooring, alternative option may be explored.
- Outside of the subway lantern and booking office demolition, there is no expected requirement for the removal of significant ceiling fabric i.e. corrugated iron ceilings and ceiling roses. The existing ceilings must be retained in situ.
- Opportunities for the removal of intrusive fabric which overlies heritage elements (such as the current halogen lighting over ceiling plasterwork) should be explored in favour of fittings more sympathetic to the space; and

Recommendation 2 - Further design development

A suitably qualified and experienced heritage advisor would be engaged to provide ongoing heritage and conservation advice throughout the detailed design and any subsequent design modifications. The nominated heritage advisor would provide specialist advice throughout the detailed design phase to ensure the final design adheres to the design recommendations made in the *Banksia Station Upgrade Statement of Heritage Impact*. Detailed design will include the following:

- Detailed design of the modifications proposed to the Platform 2/3 building and particularly the modifications proposed in the women's waiting room and bathroom would aim to retain and/or reuse original/early fabric including, but not limited to, cornices, joinery and ceiling roses;
- Detailed design of the proposed modifications to the Platform 2/3 building northern waiting room and Platform 4 waiting room would investigate the opportunity to alter the existing (original) seating in these rooms to include compliant armrests;
- Detailed design of the life proposed between the underpass and Platform 2/3 would retain as much of the original fabric of the underpass lantern as possible;
- The existing building fabric in the Platform 4 waiting room including the stone threshold, timber framing, timber floor, seating architraves and timber bench seating would be retained and reinstated as part of the proposed lowering of the floor in this building;
- No ceilings would be removed as part of the Proposal except those of the underpass lantern and the booking office within the underpass;
- Detailed design of the Proposal would investigate opportunities to remove existing intrusive fabric that overlies heritage elements (such as the current halogen lighting over ceiling plasterwork) in favour of more sympathetic fittings;
- Detailed design of the interfaces and setbacks of the new platform canopies would aim to maximise visibility of the Platform 2/3 building and the Platform 4 waiting room;
- Detailed design of the columns for the new platform canopies would aim to minimise their visual impact by investigating the reduction in width of the columns and concealing the column footings below the wearing surface of the platform;
- Platform regrading work would not obscure or obstruct original fabric on the platform buildings such as ventilation grates;

- Detailed design of the Proposal would minimise indirect (visual) impacts to the Banksia Station heritage item by selecting sympathetic materials and finishes;
- Detailed design of the project would include interpretation of the existing booking office, and station generally, to achieve a maximum score of 100 in accordance with the *Heritage Interpretation Guidelines* (Sydney Trains Environment Division, 2019);
- Detailed design of all work that would significantly alter the layout of an internal spaces would interpret the original/early layout to retain evidence of original configurations such as nib walls and material changes;
- Detailed design of the proposed modifications to the existing heritage storeroom in the Platform 2/3 building would investigate opportunities for conservation;
- A description of the Proposal would be submitted to Sydney Trains at least 28 days prior to the commencement of construction work as part of a notification of intent to demolish under section 170A of the Heritage Act 1977 for their landowner consent. This notice would also be submitted to the Heritage NSW at least 14 days prior to the commencement of construction;
- All ancillary work would be carried out in accordance with the relevant Sydney Trains heritage guidelines and would avoid fixing new services to the facade of the existing platform buildings and would contain/conceal new services in new structures;
- A services plan would be prepared for the Proposal and would be reviewed, assessed and endorsed by a suitably qualified heritage advisor prior to implementation;
- Prior to the commencement of construction work, during the work and at the completion of the work, a photographic archival recording of the areas of the Banksia Station heritage item that are affected by the Proposal would be prepared in accordance with *Photographic Recording of Heritage Items using Film or Digital Capture* (NSW Heritage Office, 2006) and *How to Prepare Archival Records of Heritage Items* (NSW Heritage Office, 1998). A digital copy of the archival record would be provided to Sydney Trains and Rockdale local library;
- In the event that any unanticipated archaeological deposits are identified within the Proposal site during construction, the procedures contained in Transport for NSW's *Unexpected Heritage Finds Guideline* (Transport for NSW, 2019c) would be followed, and work within the vicinity of the find would cease immediately. The Construction Contractor would immediately notify the Transport for NSW Project Manager and the Transport for NSW Environment and Planning Manager so they can assist in co-ordinating the next steps which are likely to involve consultation with an archaeologist and Heritage NSW. Where required, further archaeological work and/or consents would be obtained for any unanticipated archaeological deposits prior to work recommencing at the location;
- A heritage induction would be provided to workers prior to construction, informing them of the Banksia Station heritage item and guidelines to follow if unexpected heritage items or deposits are uncovered during the construction work;
- Although the current design for the platform canopies allows for much greater visibility of the Platform 2/3 station building and is considered to be a considerable improvement from the original design iteration, it is recommended that further consideration be given to the interfaces and set-back of the canopies and the existing station buildings. If not properly considered, the interface between the two elements has the potential to be a visually intrusive junction within a highly visible public space;
 - Initial work has been done to this end through the use of L-shaped glazing panels to retain the visual division of Platform 2/3 into three distinct 'pavilions', however this should be viewed as the starting point for consideration, rather than an end product;
- Following the completion of relevant photomontages as part of the Visual Impact Assessment (VIA), if the proposed canopies substantially block any significant viewlines within the station complex, opportunities to break their visual bulk may be explored. As continual coverage of the platforms is one of the Project requirements, this may be done through the use of transparent roofing material;
- Minimisation of visual impacts through design must be given further consideration, including but not limited to, canopy column widths and column footings (there may be opportunity to hide the column

footings below the wearing surface of the platform), the interface between the new platform level and the station buildings (original fabric such as ventilation grates should not be obscured or obstructed), and material choice and finishes; and

- New work should use finishes and materials sympathetic to the heritage context and form of the station;
- New internal tiling works to platform buildings should be undertaken with reference to the Sydney Trains *NSW Heritage Stations, Passenger Tile Finishes* (Draft, April 2020).

Recommendation 3 - Interpretation of heritage fabric proposed to be altered or removed

At any location where original fabric or layout is being significantly changed, opportunities for interpretation shall be explored and implemented, as follows:

- Under the Sydney Trains *Heritage Interpretation Guidelines* (Sydney Trains Environment Division 2019) (hereafter referred to as the Sydney Trains Interpretation Guidelines), this project is considered to be a 'major project' due to the level of heritage impact proposed. Under the weighted scoring system, a minimum score of 100 (see Figure 2.1) is therefore required for interpretation works (existing fabric and material is not counted as part of the scoring system);
- Given that the installation of the central lift would result in the complete removal of the subway booking office and its associated fabric, it is recommended that opportunities for a high level of interpretation be explored in this area. Indicative markers may be utilised through wall and/or floor treatments, and the adaptive reuse of the original booking office window should be explored for this purpose. This should be designed in keeping with the Sydney Trains Interpretation Guidelines in order to ensure a sympathetic installation that also represents an effective interpretation of the space and its past history;
- Anywhere the Project proposes to significantly alter the layout of internal spaces, the original/early layout must be interpreted in order to retain evidence of original configurations, e.g. nib walls, material changes etc.; and
- The heritage storeroom is a potential location for interpretation and maintenance outcomes and the space should be considered an opportunity for conservation and public interpretation (see also Recommendation 5).

Recommendation 4 - Notification requirements

As the owner of the heritage asset and as per S3.56 of the State Agency guidelines, a description of the proposed works to Banksia Station should be submitted to Sydney Trains as part of a *Notification of intent to demolish under S170A of the Heritage Act* (S170A permit) for their landowner consent, including the following requirements:

- A copy of this report should be provided as part of the submission;
- This notice must be submitted to Sydney Trains a minimum 28 days prior to scheduled construction commencement for landowner consent; and
- This notice must be submitted to Heritage NSW a minimum 14 days prior to undertaking works.

As per clause 14(2) of the ISEPP, where harm is proposed to a local heritage item that is more than 'minor or inconsequential', written notice of the intent to carry out the works must be provided to the Bayside Council, as follows:

- A copy of this report should be provided as part of the submission; and
- Any response to the notice received from council within 21 days must be taken into consideration.

Recommendation 5 - Minimisation of impacts within the existing heritage store

Given the level of modification proposed to the majority of the Platform 2/3 station building spaces, it is recommended that the heritage store be retained at its current level of intactness with no modification, and the following considered:

- It is considered that this room would not be suitable for reuse as an active space for services such as communications equipment due to subsequent required ventilation modifications;
- Opportunities exist for the removal of intrusive fabric e.g. where windows have been blocked off; and
- The retention of heritage fabric and opportunities for interpretation within this space would also correspond with Recommendations 1 and 3;
- Incorporated as part of the interpretation works.

Recommendation 6 - Minimisation of impacts from installation of new fabric

- All ancillary works (CCTV, PA, communications, air-conditioning etc) should be undertaken in accordance with the relevant Sydney Trains heritage guidelines. Alternative solutions must be explored where any impacts to significant fabric are identified. Works should proceed with principle of avoiding fixing new services to the facade of the exterior building and should be contained/ concealed in new development areas. A complete services plan is to be reviewed and assessed by a qualified heritage advisor identifying alternative solutions and submitted to the ADEIA for endorsement prior to works commencing.
- The perimeter white loop-topped fencing colloquially known as 'pool-fencing' is generally considered to be intrusive fabric when installed in proximity to a heritage station. Following its removal, it should not be reinstated, and options for more sympathetic options should be explored and installed.

Recommendation 7 - Complete an archival recording of the works areas

A photographic archival recording of the area/s affected by the proposed works should be prepared which records the station prior to the commencement of works, during works and at the completion of works, as follows:

- This recording must be in accordance with the NSW Heritage Division publication *Photographic Recording of Heritage Items using Film or Digital Capture* (2006);
- The digital copy of the archival record must be provided to Sydney Trains, Rockdale local library and TfNSW;
- As part of this recording, opportunities for photogrammetry and/or 3D laser scanning may also be explored.

Recommendation 8 - If unexpected finds are located, the TfNSW Unexpected Finds Guideline should be implemented

Should any unexpected built heritage, heritage items or archaeology be uncovered during these works, the TfNSW *Unexpected Heritage Finds Guidelines* (Transport for NSW 2016) should be implemented.

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Appendix A. Banksia Station S170 listing



[NSW Department of Planning, Industry and Environment](#)

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Banksia Railway Station Group

Item details

Name of item:	Banksia Railway Station Group
Type of item:	Built
Group/Collection:	Transport - Rail
Category:	Railway Platform/ Station
Primary address:	Railway Street, Banksia, NSW 2216
Local govt. area:	Rockdale

North: a line across the railway tracks level with the northern side of Godfrey Street;
 East: boundary of railway property fronting Hattersley Street, incorporating the retaining wall;
 South: a line across the railway tracks level with the southern side of Judd Street;
 West: boundary of railway property fronting Railway Street, incorporating the retaining wall.

Boundary:

All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
Railway Street	Banksia	Rockdale			Primary Address
Hattersley Street	Banksia	Rockdale			Alternate Address

Owner/s

Organisation Name	Owner Category	Date Ownership Updated
RailCorp	State Government	
RailCorp	State Government	
RailCorp	State Government	

Statement of significance:

Banksia Railway Station, constructed 1906 and extended in 1923 - inclusive of the platform buildings, platforms, pedestrian subway and brick retaining walls - is of local heritage significance. Banksia Railway Station is of historical significance as part of the early 20th century upgrading of the Illawarra Line, its buildings illustrating the progress of this upgrading from 1906 to 1923. The station is also of historical significance for its role as a

major transport hub for the suburb of Banksia since 1906, and for its role in the development of the suburb of Banksia.

Banksia Railway Station is of aesthetic significance for its 1906 Platform 2/3 building, 1923 Platform 1 & 4 buildings, and 1923 pedestrian subway, ticket office and retaining walls, as intact representative railway station structures of their periods. Banksia Railway Station is of research significance for its ability to demonstrate design and construction techniques of the NSW Railways in the early 20th century (1906-1923). The 1923 pedestrian subway at Banksia, with its retaining walls and painted signage, is rare on the Illawarra Line. Banksia Railway Station is representative within the Illawarra Line context as a station which combines buildings from two periods.

Date significance updated: 22 May 09

Note: The State Heritage Inventory provides information about heritage items listed by local and State government agencies. The State Heritage Inventory is continually being updated by local and State agencies as new information becomes available. Read the [OEH copyright and disclaimer](#).

Description

Designer/Maker: Commissioner Eddy, NSW Government Railway

Builder/Maker: NSW Government Railway, C. and E. Miller

Construction years: 1906-1923

Physical description: PRECINCT ELEMENTS

Platform 1 building (1923) type 11

Platform 2/3 Building (1906) type 11

Platform 4 building (1923) type 11

Platforms: Island platform (1906); two perimeter platforms (1923)

Pedestrian subway, steps, booking office (1923)

Brick retaining walls to Railway St and Hattersley Street (1923)

CONTEXT

The station is located between Railway St (on the west) and Hattersley St (on the east), and is entered from both streets via a pedestrian subway which accesses all platforms. There are two perimeter platforms and one island platform (Platforms 2/3).

PLATFORM 1 BUILDING (1923)

Exterior: A small painted brick single storey platform building with a skillion corrugated steel roof and a weatherboard waiting area at its northern end. The building is face brick on the Railway Street (west) elevation, with a weatherboard wall to the west elevation of the waiting area. The building has an awning with corrugated steel roof cantilevered on steel brackets mounted on stucco wall brackets. The weatherboard waiting area is open on its east side, facing the railway lines. The brick building has timber framed double hung windows, a 4-paned timber framed fanlight, and a modern timber flush door. The window on the southern elevation of the building is covered over. The bottom sash of the window on the north elevation has a single horizontal glazing bar. The waiting area has a timber valance. There are decorative stucco mouldings to window and door heads on the brick building.

Interior: Not accessed. The interior consists of a single room within the brick section of the building.

PLATFORM 2/3 BUILDING (1906)

Exterior: A painted brick single storey platform building with a gabled corrugated steel roof and skillion corrugated steel roofs over awnings on both sides. Gable ends to north and south feature rectangular timber louvred vents. The building features timber framed double hung windows (some missing) and two 8-paned fanlights. All doors are modern timber flush doors. The walls feature two decorative stucco mouldings, the upper being more elaborate, and windows have decorative stucco sills. Decorative stucco mouldings also surround the window and door heads. The awnings on both sides of this building are identical, with skillion corrugated steel roofs cantilevered on steel brackets mounted on decorative stucco wall brackets. The awnings have timber valances to each end (north and south). There is an original door opening to the male toilets at the southern end of the building, which also features a brick screen wall. One window has been bricked up, and a number of windows are missing, though the timber window frames remain in situ, the openings being filled with modern steel security screens. The doorways to the waiting room have modern metal security doors.

Interior: The interior of the building has ripple iron ceilings with metal ceiling roses. There is a chimney breast to the waiting area and original timber fitted seating. There is one original timber 4-panelled door extant in the women's toilets.

PLATFORM 4 BUILDING (1923)

Exterior: A small painted brick building with a gabled corrugated steel roof and tongue & grooved timbered eaves, a cantilevered corrugated steel skillion roofed awning on the west side only is cantilevered on steel brackets mounted on decorative stucco wall brackets, which are attached to a pair of pilasters either side of the central doorway. Windows and the central door are missing, the openings filled with modern steel security door and screens. The walls of the building feature two stucco mouldings, the upper being more elaborate, and deep stucco mouldings around the fanlight opening above the central doorway. There are also decorative stucco sills to the window openings. There are rectangular timber louvred vents with slightly arched heads to the gable ends.

Interior: The waiting room, which is the single interior space, has a timber battened plaster ceiling with timber cornices, plastered walls, a slate threshold, and original timber seating.

PLATFORMS

One island platform (1906); two perimeter platforms (1923), all with asphalt surfaces and brick edges.

PEDESTRIAN SUBWAY, STEPS, BOOKING OFFICE (1923)

Exterior: The brick pedestrian subway has entrances from Railway Street (west entry) and Hattersley Street (east entry). The entries from both streets have painted signs "Banksia Railway Station" above the subway entrances. The station entry steps to Platform 2/3 (the island platform) from the subway are protected with a hipped corrugated steel roofed brick structure which projects above the platform level. This structure has fixed timber framed windows each side. To the north, to shelter the booking office in the subway below, is another narrower, separate structure, also with brick walls and a hipped corrugated steel roof. This structure is also above the Platform 2/3 level. The booking office is located on the northern side of the subway.

Interior: The interior of the subway generally has painted brick walls and an asphalt floor. There is face brickwork within the area below the hipped roof. The subway roof has timber roof framing exposed. The brickwork to the corners of the subway entry to the Platform 2/3 steps is stop-chamfered. The interior of the booking office has plastered and painted brick walls, with a moulded plaster chair rail to the plaster walls. There is evidence of a former opening bricked up on the north (interior) wall of the booking office.

BRICK RETAINING WALLS (1923)

The brick retaining walls to both Railway Street and Hattersley Street (west and east sides respectively) of Banksia Railway Station are face brickwork, with a bull nose capping course. The retaining walls are approximately 1.5 to 2m in height, reducing in height to both north and south ends. Part of the retaining wall on the west (Railway St) side forms the base of the Platform 1 building. Along the Railway Street (west) side of the Station, the retaining wall extends from a point opposite the Godfrey Street intersection at the north end, to a point opposite the Judd Street intersection at the south end. On the Hattersley Street (east) side of the railway station, the brick retaining wall extends from a point opposite the Taylor Street intersection at the north end to a point at the south end on Hattersley Street opposite the rear of 345 Princes Highway. Part of the retaining wall on the east (Hattersley Street) side, forms a base for the Platform 4 building.

MOVABLE

Heritage-style lamp posts

Original and early door and window hardware (locks, strike plates, handles, bolts, sash sifts, sash locks etc).

Two unusual fully welded steel platform benches on Platform 3.

In staff office: cast iron safe no 51 with steel drawer inside, timber stationery organiser, collection of ticketing-related objects including ink stamps, ink pads, circular stamp holder, coin wrappers, various receipt books, click-clack credit card slider with "Banksia CityRail" inscribed, timber booking office coin (BOC) tray, small timber step ladder, metal "Electrical Instructions" box mounted to side of stationary organiser with signalling information cards inside dated 1930, orange hand lamp with "SM Banksia" in lettering, plastic CityRail information folders.

Platform waiting rooms: fitted timber benches, painted community wall mural featuring coastal banksia flowers by Leonie Morrison.

In storage: original timber fire surround, brick and cast iron grate and brick and concrete hearth in former SM office, early rare timber-framed noticeboard with timber backing board and covered with hessian, timber office desk (drawers missing), and timber pigeonhole shelving above, early timber ticket cabinet with steel ticket holders inside, timber tray holding series of rubber stamps, original/early timber mounting blocks for lights and power switches, chain brass light fittings, early cedar? desk with turned legs and two drawers, cast iron sleeper tongs.

Platform building: early wall and mosaic floor tiling in toilets, original timber toilet cubicles.

Physical condition and/or Archaeological potential:

Platform 1 building (1923): Moderate.

Platform 2/3 Building (1906): good

Platform 4 building (1923): good

Platforms: Island platform (1906); two perimeter platforms (1923): good

Pedestrian subway, steps, booking office (1923): good

Brick retaining walls to Railway St and Hattersley Street (1923): good

Date condition updated: 23 Mar 09

Modifications and dates:

1923: The original 1906 overhead booking office and footbridge were removed. Construction of the pedestrian subway, retaining walls, ticket office, and Platform 1 and 4 buildings.

N.d (modern): Platform 1 building (1923): covering over of windows. Platform 2/3 building (1906): modern metal security screen doors. One window has been bricked up, and a number of windows are missing, though the timber window frames remain in situ, with the openings being filled with modern steel security screens. The doorways to the waiting room have modern metal security doors. Platform 4 building (1923): Windows and the central door are missing, the openings filled with modern steel security door and screens.

N.d: Subway and booking office: painting of brickwork; modern ticket window; evidence of a former opening bricked up on the north (interior) wall of the booking office.

Current use:

Railway Station

Former use: Nil

History

Historical notes: The Banksia area was part of land owned by Simeon Pearce (1821-86) and his brother James Pearce in the 1850s, which extended from Rockdale to Brighton Le Sands. Until the late nineteenth century, the area was heavily timbered. Residential development began in the 1880s. Many names for the suburb were suggested but the final choice of Banksia came from Charles Stead, father of novelist Christina Stead.

The contractors C. and E. Miller built the original double track line from Illawarra Junction to Hurstville in 1884 but it was not until 1906 that an island platform station was completed at this location. The area developed more rapidly after the railway station opened on 21st October 1906.

The 1906 platform building was of a standard brick design with cantilevered awnings to each platform favoured by Commissioner Eddy: this type of platform building was to continue being built throughout the NSW rail system until the late 1920's. When quadruplication of tracks was planned for Banksia it was first considered to retain the footbridge but finally it was substituted by a brick pedestrian subway in 1923 incorporating a booking office.

The buildings on the 1923 platforms are of similar design to the 1906 platform building but smaller, the Platform 1 building being brick with a timber waiting room while there is a still smaller waiting room building on Platform 4.


In 1926 all lines were electrified.

The subway at Banksia was subject to flooding during the 1930s: a 1933 newspaper article reported "Flood water damaged the line between Kingsgrove and Dumbleton and trains could not travel over that section. Water rose to a height of 6 ft. in the subway at Banksia Railway Station and train passengers had to climb through a fence to enter the carriages." (Argus, Melbourne, Tuesday 24 January 1933, page 7).

Historic themes

Australian theme (abbrev)	New South Wales theme	Local theme
3. Economy- Developing local, regional and national economies	Transport-Activities associated with the moving of people and goods from one place to another, and systems for the provision of such movements	Building the railway network-
8. Culture- Developing cultural institutions and ways of life	Creative endeavour-Activities associated with the production and performance of literary, artistic, architectural and other imaginative, interpretive or inventive works; and/or associated with the production and expression of cultural phenomena; and/or environments that have inspired such creative activities.	Evolution of design in railway engineering and architecture-

Assessment of significance

SHR Criteria a) [Historical significance]	Banksia Railway Station, constructed 1906, is of historical significance as part of the early 20th century upgrading of the Illawarra Line, its buildings illustrating the progress of this upgrading from 1906 to 1923. The station is also of historical significance for its role as a major transport hub for the suburb of Banksia since 1906, and its role in development of the suburb of Banksia.
SHR Criteria c) [Aesthetic significance]	Banksia Railway Station is of aesthetic significance for its 1906 Platform 2/3 building, 1923 Platform 1 and 4 buildings, and 1923 pedestrian subway, ticket office and retaining walls, as intact representative railway station structures of their periods. The platform buildings illustrate the gradual change in style of station buildings in the early 20th century.
SHR Criteria d) [Social significance]	The place has the potential to contribute to the local community's sense of place, and can provide a connection to the local community's past.
SHR Criteria e) [Research potential]	Banksia Railway Station is of research significance for its ability to demonstrate NSW Railways design and construction techniques of the early 20th century (1906-1923).
SHR Criteria f) [Rarity]	The 1923 pedestrian subway at Banksia, with its retaining walls and painted signage, is rare on the Illawarra Line (only known example).
SHR Criteria g) [Representativeness]	Banksia Railway Station is representative within the Illawarra Line context as a station which combines buildings from two periods - 1906 and 1923- and includes a pedestrian subway.
Integrity/Intactness:	The station buildings are relatively intact. Alterations include painting of brickwork, removal of windows and doors.
Assessment criteria:	Items are assessed against the  State Heritage Register (SHR) Criteria to determine the level of significance. Refer to the Listings below for the level of statutory protection.

Recommended management:

1. Conservation principles: Conserve cultural heritage significance and minimise impacts on heritage values and fabric in accordance with the 'Australia ICOMOS Charter for Places of Cultural Significance'.
2. Specialist advice: Seek advice from a qualified heritage specialist during all phases of a proposed project from feasibility, concept and option planning stage; detailed design; heritage approval and assessment; through to construction and finalisation.
3. Documentation: Prepare a Statement of Heritage Impact (SOHI) to assess, minimise and prevent heritage impacts as part of the assessment and approval phase of a project. Prepare a Conservation Management Plan (CMP) prior to proposing major works (such as new additions, change of use or proposed demolition) at all places of State significance and all complex sites of Local significance.
4. Maintenance and repair: Undertake annual inspections and proactive routine maintenance works to conserve heritage fabric in accordance with the 'Minimum Standards of Maintenance & Repair'.
5. Movable heritage: Retain in situ and care for historic contents, fixtures, fittings, equipment and objects which contribute to cultural heritage significance. Return or reinstate missing features or relocated items where opportunities arise.
6. Aboriginal, archaeology and natural heritage: Consider all aspects of potential heritage significance as part of assessing and minimising potential impacts, including Aboriginal, archaeology and natural heritage.
7. Unidentified heritage items: Heritage inventory sheets do not describe or capture all contributory heritage items within an identified curtilage (such as minor buildings, structures, archaeology, landscape elements, movable heritage and significant interiors and finishes). Ensure heritage advice is sought on all proposed changes within a curtilage to conserve heritage significance.
8. Recording and register update: Record changes at heritage places through adequate

project records and archival photography. Notify all changes to the Section 170 Heritage & Conservation Register administrator upon project completion.

Listings

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Heritage Act - s.170 NSW State agency heritage register					

Study details

Title	Year	Number	Author	Inspected by	Guidelines used
State Rail Authority Heritage Register Study	1999	SRA160	State Rail Authority		N o
S170 Heritage & Conservation Register Update	2009		Paul Davies Pty Ltd		Y e s
Heritage Platforms Conservation Management Strategy	2015		Australian Museum Consulting		Y e s

References, internet links & images

Type	Author	Year	Title	Internet Links
Written			www.rockdale.nsw.gov.au/Pages/Rockdale_Sub_Banksia.aspx	
Written	Article on flooding at Banksia Railway Station	1938	The Canberra Times of 1 February 1938	
Written	Article on flooding at Banksia Railway Station	1933	The Argus (Melbourne) Tuesday 24 January 1933 issue	
Written	C.C. Singleton	1945	The Illawarra line - Wells Street to Hurstville, ARH.S.. Bulletin Vol, III, No 95, Sept	
Written	David Sheedy	2009	Historical Research for RailCorp S170 Register Update	

Note: internet links may be to web pages, documents or images.



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