



Transport Access Program

Banksia Station Upgrade

Determination Report



Artist's impression of the proposed Banksia Station Upgrade, subject to change during detailed design

September 2020



Banksia Station Upgrade – Determination Report

**Transport Access Program and More Trains, More Services
Program**

Ref – 6495423

Contents

Glossary and abbreviations	4
Executive summary	5
1. Introduction	7
1.1. Background	7
1.2. Review of Environmental Factors	7
1.3. Determination Report	7
1.4. Description of the Proposed Activity in the REF.....	9
2. Consultation and assessment of submissions	12
2.1. REF public display.....	12
2.2. REF submissions	12
2.3. Consideration and response to submissions	14
2.4. Future consultation.....	27
3. Changes to the Proposed Activity	28
3.1. Assessment of design changes	28
4. Consideration of the environmental impacts	32
4.1. NSW Environmental Planning and Assessment Act 1979	32
4.2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999	32
5. Conditions of Approval	33
6. Conclusion	34
Determination	35
References	36
Appendix A Review of Environmental Factors	37
Appendix B Conditions of Approval	38

Document control

Status:	Final
Date of issue:	17 September 2020
Revision:	C
Document author:	Simon Cornell
Document reviewers:	Louise Sureda, Steven Barry, Ben Groth, Tracey Leotta, Trent Middleton, Natalie Moore, Michelle Quinn, Ali Syed, Vivian Tse

© Transport for NSW

Figures

Figure 1 Planning approval process 8

Figure 2 Key features of the Proposed Activity as described in the REF (indicative only, subject to detailed design)..... 11

Figure 3 Key features of the Proposed Activity (indicative only, subject to detailed design)..30

Figure 4 Temporary site facilities and laydown areas31

Tables

Table 1 Response to community submissions received..... 14

Table 2 Response to Bayside Council’s submission.....23

Table 3 Response to the State Emergency Service’s submission26

Table 4 Assessment of design changes28

Glossary and abbreviations

Term	Meaning
CCTV	Closed Circuit Television
Construction Contractor	The Construction Contractor for the Proposed Activity would be appointed by Transport for NSW to undertake the detailed design and construction of the Proposed Activity.
Detailed design	Detailed design broadly refers to the process that the Construction Contractor undertakes (should the Proposed Activity proceed) to refine the concept design to a design suitable for construction (subject to Transport for NSW acceptance).
Determination Report	This document – a report prepared by Transport for NSW to assess and address certain matters to allow for a determination of the Proposed Activity under, and in accordance with Division 5.1 of the EP&A Act.
DSAPT	<i>Disability Standards for Accessible Public Transport (2002)</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
Infrastructure SEPP	<i>State Environmental Planning Policy (Infrastructure) 2007 (NSW)</i>
NSW	New South Wales
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in this instance, Transport for NSW.
Proposed Activity	The construction and operation of the Banksia Station Upgrade.
REF	Review of Environmental Factors
Rockdale DCP	Rockdale Development Control Plan 2011
Rockdale LEP	Rockdale Local Environmental Plan 2011
SIMP	Site Incident Management Plan
TGSI	Tactile Ground Surface Indicators

Executive summary

Overview of the Proposed Activity

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 Proposed Activity) forms part of two NSW Government initiatives:

- the Transport Access Program, which aims to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. Under this program, work is 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 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.

Banksia Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* or the Commonwealth *Disability Discrimination Act 1992*. The Proposed Activity would provide:

- three new lifts providing access to Platforms 1, 2/3 and 4
- new canopies on Platforms 1, 2/3 and 4. The new canopies on Platform 1 would provide cover at the lift waiting area and boarding assistance zone only
- a new unisex ambulant toilet and a family accessible toilet in the existing building on Platform 2/3
- a new accessible parking space and kiss and ride space on Hattersley Street
- a widened footpath between the lift and bus stop on Railway Street
- regrading sections of the platforms
- new lighting, CCTV and wayfinding signage
- electrical and drainage upgrades for new infrastructure.

Transport for NSW, as the Proponent for the Proposed Activity, has undertaken a Review of Environmental Factors (REF) that details the scope of works and environmental impacts associated with the Proposed Activity. The REF was prepared by Jacobs (dated August 2020) on behalf of Transport for NSW in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

Modifications to the Proposed Activity

Since the public display of the REF, two design changes have been made to the Proposed Activity:

- three bicycle parking hoops would be provided on the corner of Railway Street and Bowmer Street
- an existing retail space on the corner of Hattersley Street and Taylor Street would be temporarily used as a construction site office.

The impacts associated with the design changes have been considered in accordance with clause 228 of the EP&A Regulation (refer to Chapter 3).

Should further design modifications be required as a result of the detailed design process, these modifications would be assessed to determine consistency with the Conditions of Approval for the Proposed Activity, including significance of impact on the environment. Additional mitigation measures and/or consultation would be undertaken where necessary.

Purpose of this report

The purpose of this Determination Report is for Transport for NSW, as the Proponent of the Banksia Station Upgrade, to comply with its obligations under Division 5.1 of the EP&A Act and determine whether or not to proceed with the carrying out of the Proposed Activity. Transport for NSW must make a determination in accordance with the provisions of Division 5.1 of the EP&A Act.

This report also presents a summary of the submissions provided during the public display of the REF, and Transport for NSW's response to the issues and comments raised in these submissions.

Conclusion

Based on the assessments in the REF and consideration of the submissions received, it is recommended that the Proposed Activity be approved, subject to the mitigation measures included in the REF and the proposed Conditions of Approval (refer Appendix B). Transport for NSW will continue to liaise with the community and other stakeholders as the Proposed Activity progresses through detailed design and into the construction phase.

1. Introduction

1.1. Background

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 forms part of two NSW Government initiatives:

- the Transport Access Program, which aims to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. Under this program, work is 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 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.

Banksia Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA). The non-compliant station entrances and stairs to Platforms 1 and 4 do not facilitate access for people with reduced mobility, parents/carers with prams or customers with luggage. There are no accessible parking spaces, no lift facilities and inadequate Tactile Ground Surface Indicators (TGSIs) to stairs, platforms and interchange facilities.

Transport for NSW is the Proponent for the Banksia Station Upgrade (referred to as the 'Proposed Activity' for the purposes of this document). Also refer to Section 1.4 for a description of the Proposed Activity.

1.2. Review of Environmental Factors

A Review of Environmental Factors (REF) has been prepared by Jacobs (dated August 2020) on behalf of Transport for NSW in accordance with Sections 5.5 and 5.7 of the *Environmental Planning and Assessment 1979* (EP&A Act), and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), to ensure that Transport for NSW takes into account to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposed Activity. The REF is included at Appendix A.

The Banksia Station Upgrade REF was placed on public display from Tuesday 11 August 2020 to Monday 24 August 2020, with 21 community submissions received. Submissions were also received from Bayside Council and the NSW State Emergency Service. Issues raised in these submissions are addressed in Section 2.3 of this report.

1.3. Determination Report

Prior to proceeding with the Proposed Activity, the Secretary for Transport for NSW must make a determination in accordance with Division 5.1 of the EP&A Act (refer Figure 1).

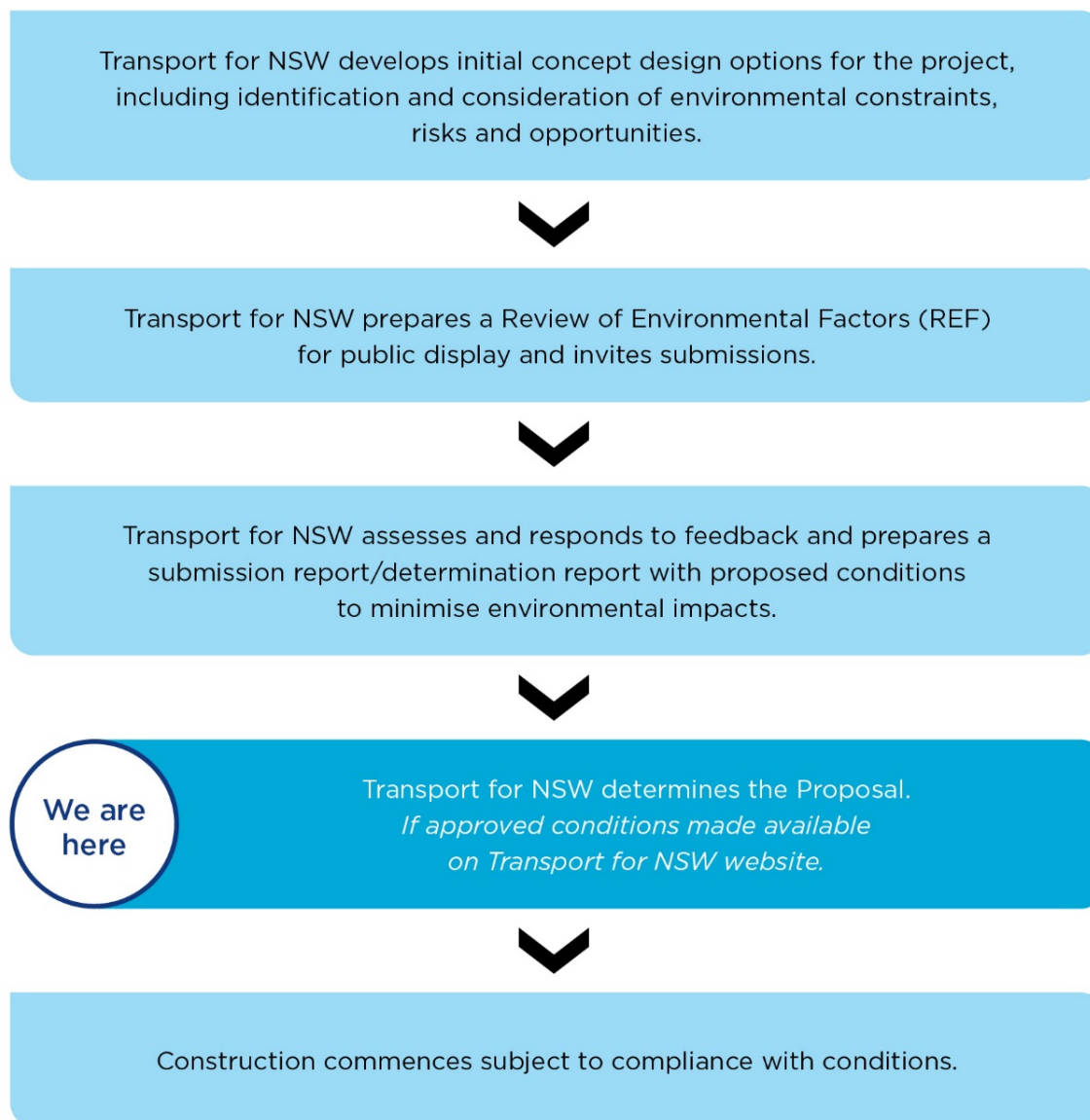


Figure 1 Planning approval process

The purpose of this Determination Report is to address the following to allow for a determination of the Proposed Activity:

- present a summary of the submissions received during the public display of the REF and Transport for NSW’s response to the issues and comments raised in these submissions
- assess the environmental impacts with respect to the Proposed Activity, which are detailed in the environmental impact assessment (and any proposed modifications, as detailed and assessed in this Determination Report)
- identify mitigation measures to minimise potential environmental impacts
- determine whether potential environmental impacts are likely to be significant
- address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposed Activity.

This report has been prepared having regard to, among other things, the objectives of Transport for NSW under the *Transport Administration Act 1988*:

- a) to provide an efficient and accountable framework for the governance of the delivery of transport services
- b) to promote the integration of the transport system
- c) to enable effective planning and delivery of transport infrastructure and services
- d) to facilitate the mobilisation and prioritisation of key resources across the transport sector
- e) to co-ordinate the activities of those engaged in the delivery of transport services
- f) to maintain independent regulatory arrangements for securing the safety of transport services.

1.4. Description of the Proposed Activity in the REF

The Proposed Activity is located in the suburb of Banksia in the Bayside Local Government Area about 10 kilometres from Central Station. Banksia Station consists of four platforms that are accessed via a pedestrian underpass that provides cross-rail corridor connectivity linking Railway Street and Hattersley Street. The Station is listed on the RailCorp Heritage and Conservation Register under Section 170 of the *Heritage Act 1977*, as part of the Banksia Railway Station Group.

Banksia Station does not currently meet key requirements of the DSAPT or DDA. It also does not allow for equitable access to the station platforms.

A detailed description of the Proposed Activity is provided in Chapter 3 of the Banksia Station Upgrade REF, and would provide:

- three new lifts and landings to provide access between Railway Street, Hattersley Street, the existing underpass and the platforms
- upgraded stairs between Platform 1 (Railway Street) and Platform 4 (Hattersley Street) and the underpass to include new compliant handrails, TGSIs and nosing
- new platform canopies on Platform 1, Platform 2/3 and Platform 4. The new canopies on Platform 1 would provide cover at the lift waiting area and boarding assistance zone only
- interior changes to the existing station building on Platform 2/3 including a new unisex ambulant toilet and a new family accessible toilet
- upgraded interchange infrastructure around the station including:
 - a new bus shelter on Railway Street alongside Platform 1 to replace the existing bus shelter in the same location
 - a new kerb ramp at the Railway Street pedestrian crossing
 - widening of the footpath to 2.5 metres between the lift and bus stop on the eastern side of Railway Street
 - one new accessible car parking space and one kiss and ride space along Hattersley Street
 - a new kerb ramp at the Hattersley Street entrance
- upgraded surfaces (re-grading/re-surfacing) on all four platforms to provide compliant accessible paths to station amenities and between the new lifts and boarding assistance zones
- upgraded power supply infrastructure including a new transformer (to be installed on land next to Fortescue Reserve)

- upgraded drainage including the installation of new pumps in the underpass and new stormwater pipes to transfer rainfall runoff from the canopies on Platform 2/3 and in the underpass to existing stormwater pipes on Hattersley Street
- ancillary work including adjustments to lighting, electronic ticketing, relocation or replacement of existing customer facilities, improvements to station communications, hearing loops, wayfinding signage and new TGSIs.

A schematic outlining the key features of the Proposed Activity as described in the REF is provided in Figure 2.

The need for, and benefits of the Proposed Activity are outlined in Chapter 2 of the REF.

Construction is expected to commence in late 2020 and finish in early 2023.

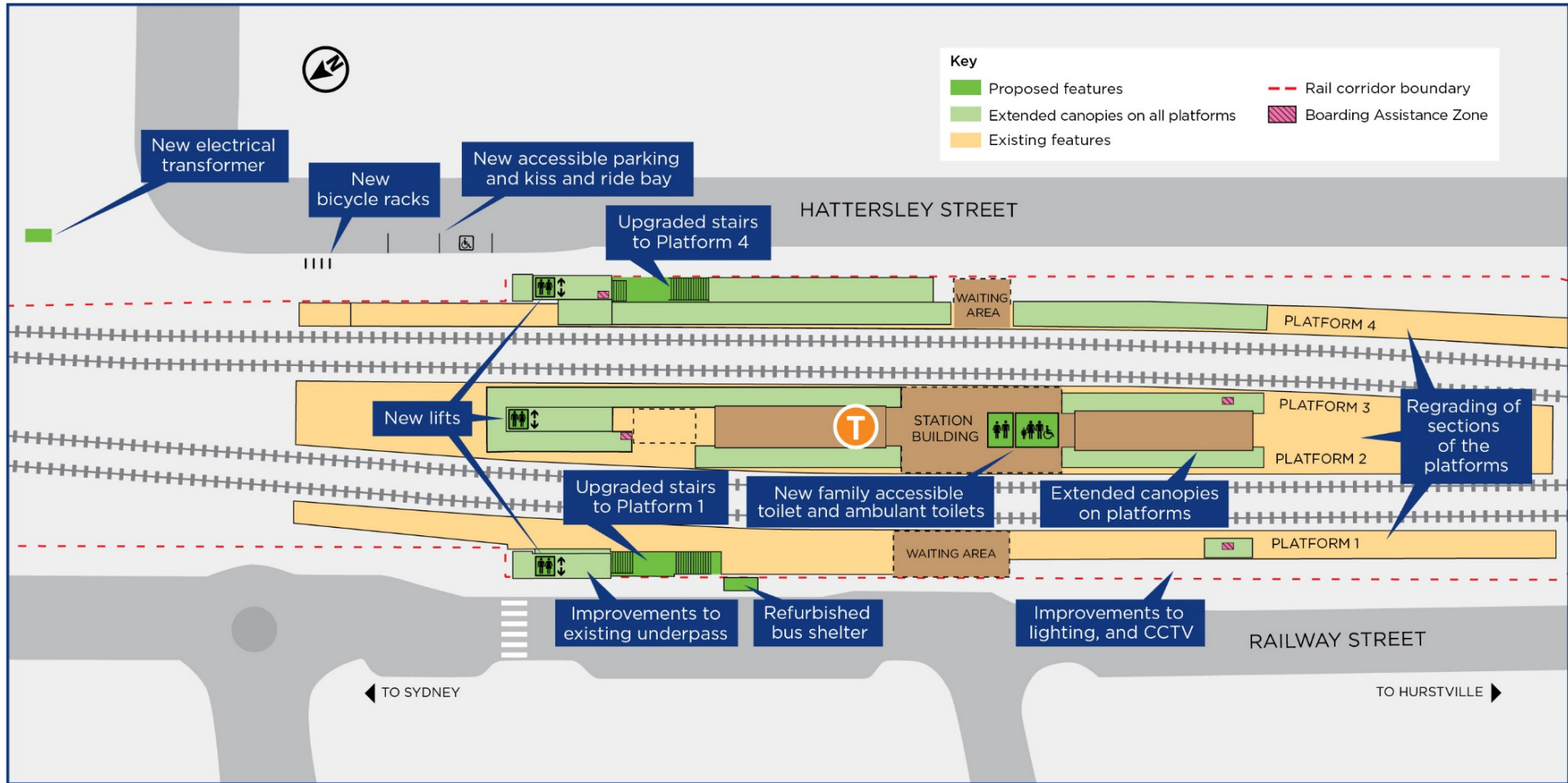


Figure 2 Key features of the Proposed Activity as described in the REF (indicative only, subject to detailed design)

2. Consultation and assessment of submissions

2.1. REF public display

The Banksia Station Upgrade REF was placed on public display from Tuesday 11 August 2020 to Monday 24 August 2020 on the [Transport for NSW corporate website](https://www.transport.nsw.gov.au/projects/current-projects/banksia-station-upgrade)¹ and [NSW Have our Say Website](http://www.haveyoursay.nsw.gov.au)².

Under normal circumstances, printed copies of the REF would have been available at various locations, however due to impacts of COVID-19, the REF was available online in digital format only with printed copies available upon request.

A range of other community consultation activities were however undertaken for the public display which included:

- distribution of around 1,260 flyers to the local community via letterbox drop on 11 August 2020
- installation of project signage at Banksia Station
- public display of the REF online
- targeted consultation with local businesses, schools and other community groups through phone calls and emails
- geographically targeted social media advertising via Facebook to inform locals of the Proposed Activity and invite their feedback online
- creation of a dedicated project webpage on the Transport for NSW corporate website, with a feedback box for easy submission of feedback
- a briefing to Bayside Council officers on 25 June 2020
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the Transport for NSW website, along with details on how to make a submission was sent to Bayside Council as per the consultation requirements under clauses 13 and 15 of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP)
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the Transport for NSW website, along with details on how to make a submission was sent to the NSW State Emergency Service as per the consultation requirements under clause 15AA of the Infrastructure SEPP.

2.2. REF submissions

A total of 21 community submissions were received via email and online submissions. Submissions were also received from Bayside Council and the State Emergency Service regarding the Proposed Activity. Community submissions are addressed in Table 1, while the submission received from Bayside Council and the State Emergency Service are addressed in Table 2 and Table 3 respectively.

¹ <https://www.transport.nsw.gov.au/projects/current-projects/banksia-station-upgrade>

² <http://www.haveyoursay.nsw.gov.au>

Submissions included feedback on a range of issues in relation to the Proposed Activity. The key issues raised in submissions were:

- design considerations, including:
 - providing more canopy area along Platform 1
 - providing more seating on Platform 1
 - providing ramps between Railway Street and Hattersley Street and the underpass
 - providing more space within the underpass
 - providing more lighting and active and passive surveillance on Hattersley Street
 - connecting the lifts to a new overpass instead of the existing underpass
 - retaining the existing male and female toilets instead of the proposed unisex ambulant toilet and family accessible toilet
 - the extent to which the Proposed Activity would address the nuisance flooding of the underpass that currently occurs
 - how flooding risks have been addressed in the design
 - incorporating solar power
 - the effectiveness of canopies in encouraging customers to spread along the platform
- traffic, transport and access considerations, including:
 - providing additional accessible parking spaces
 - providing a kiss and ride area on Railway Street
 - providing bicycle parking spaces including on Railway Street
 - improving the security of the bicycle parking at the station
 - improving bicycle access around the station including through the underpass
 - providing a pedestrian crossing on Hattersley Street
 - providing additional pedestrian crossings on Railway Street near Godfrey Street and Bowmer Street
 - providing traffic calming devices on Hattersley Street
 - the condition of the existing footpath through Fortescue Reserve
 - the condition of the existing footpath along Subway Road
- concerns regarding potential environmental impacts including:
 - the heritage impact of the Proposed Activity
 - the visual impact of the lifts and canopies
 - the visual impact of removing the tree at the Hattersley Street entrance to the station
 - dust and noise during the construction of the Proposed Activity.

2.3. Consideration and response to submissions

Community submissions

A summary of all issues and associated responses is provided in Table 1.

Table 1 Response to community submissions received

No.	Submission no.	Issue/s raised	Transport for NSW response
1	Support		
1.1	BANK001, BANK006, BANK007, BANK008, BANK011	Five submissions noted support for the Proposed Activity and emphasised the need to upgrade station access via lifts.	Support for the Proposed Activity is noted.
2	Design		
2.1	BANK002, BANK004, BANK012, BANK014	Four submissions requested the Proposed Activity include more canopy area along Platform 1 compared to that proposed in the REF.	<p>The Proposed Activity includes new canopies on Platform 1 at the lift waiting area and boarding assistance zone (refer to Figure 2). These new canopies would be in addition to the existing canopy at the waiting area. The new canopies would increase the length of Platform 1 with a canopy from about 13 metres currently to about 23 metres. The canopies proposed on Platform 1 would be provided as part of the Transport Access Program and would ensure that Banksia Station meets legislative requirements under the DDA and the DSAPT.</p> <p>The More Trains, More Services 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. This change is expected to take effect in late 2022, a few months prior to work finishing on the Proposed Activity (early 2023). Once this change has occurred fewer trains would operate from Platform 1.</p> <p>The Proposed Activity includes about 90 metres of canopy coverage along Platforms 3 and 4 as part of the More Trains, More Services Program. These canopies would provide customer amenity that is supportive of higher frequency train services on the T4 Illawarra Line as it would encourage passengers to spread along a greater length of these platforms and thereby increase the efficiency of train boarding, reduce train dwell times and increase timetable reliability.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
2.2	BANK002, BANK004	Two submissions requested the Proposed Activity include more seating on Platform 1.	<p>The primary objective of the Transport Access Program is to ensure that Banksia Station meets legislative requirements under the DDA and the DSAPT. These requirements do not extend to the availability of seating on station platforms. Accordingly, this feedback has been provided to Sydney Trains for their consideration.</p> <p>It should be noted that the More Trains, More Services Program includes a network reconfiguration strategy that would result in customers boarding and alighting trains at Banksia Station from Platforms 3 and 4 instead of Platforms 1 and 2. This change is expected to start in late 2022. Once this change has occurred, fewer trains would operate from Platform 1.</p>
2.3	BANK005, BANK006	Two submissions requested the Proposed Activity include ramps between Railway Street and Hattersley Street and the underpass.	<p>The Proposed Activity provides lifts between Railway Street and Hattersley Street and the underpass as there is insufficient space at the station entrances to provide compliant ramp access to the underpass. People with a disability, limited mobility or luggage and parents/carers with prams would be able to cross the rail corridor between Railway Street and Hattersley Street by using the lifts at each station entrance to access the underpass.</p>
2.4	BANK006, BANK009	Two submissions requested that the Proposed Activity provide more space within the underpass including retail space.	<p>The Proposed Activity would locate lift waiting areas in the underpass outside the path of travel for people using the stairs to move between Railway Street, Hattersley Street and the platforms.</p> <p>The existing underpass is at a relatively shallow depth below the railway tracks. As a result, it would be difficult to excavate a retail space within the underpass. Furthermore, the provision of retail space is not an objective of the Transport Access Program as it is unrelated to achieving compliance with the legislative requirements of the DDA and DSAPT. Accordingly, this feedback has been provided to Sydney Trains for their consideration.</p>
2.5	BANK005, BANK021	Two submissions requested that the Proposed Activity include more lighting and active and passive surveillance along Hattersley Street and in Fortescue Reserve.	<p>A security risk analysis was carried out as part of the preparation of the concept design for the Proposed Activity. This analysis considered lighting, CCTV coverage and passive surveillance within the station precinct.</p> <p>The Proposed Activity includes new lighting and a CCTV camera at the station entrance on Hattersley Street. The proposed removal of the large tree at this entrance would also improve passive surveillance at this location.</p> <p>The purpose of the Proposed Activity is to improve accessibility at the station and connections to transport interchanges within the station precinct. Fortescue Reserve and the sections of Hattersley Street beyond the station entrance are outside of the station precinct. The feedback regarding these areas will be provided to Bayside Council for their consideration.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
2.6	BANK006	One submission requested that the Proposed Activity include lifts that connect to a new footbridge instead of the existing underpass.	<p>As noted in Section 2.3 of the REF, Transport for NSW considered a design option for lifts that would connect the platforms to a new footbridge. Under this option, the underpass would remain open. This design option was not advanced because:</p> <ul style="list-style-type: none"> ○ a footbridge would dominate views of the station from several viewpoints and would obscure views of the platform buildings, which are a feature of the station's heritage significance ○ a footbridge would not optimise use of the existing underpass and would create additional infrastructure that requires ongoing maintenance ○ a footbridge's stairs and support structure would require space on the platforms, which would reduce the waiting area available to customers ○ a footbridge option would incur high construction costs due to sandy soil conditions requiring extensive piling, and would therefore not deliver a 'value for money' option.
2.7	BANK005, BANK011	Two submissions requested that the Proposed Activity retain the existing male and female toilets instead of the proposed unisex ambulant toilet and family accessible toilet.	<p>The Proposed Activity includes internal work to the existing building on Platform 2/3 including:</p> <ul style="list-style-type: none"> ○ converting the existing heritage store room to become a cleaner's store room ○ converting the existing female toilets to become a new station manager's office ○ converting the existing general store room to become a new unisex ambulant toilet ○ converting the existing male toilets to become a new family accessible toilet. <p>The Platform 2/3 building is a primary heritage element of the station and the proposed internal works are designed to minimise impacts to heritage fabric while providing toilet facilities that meets legislative requirements under the DDA and the DSAPT. Due to the limited space within the Platform 2/3 building it would not be possible to retain the existing female and male toilets and also meets legislative requirements under the DDA and the DSAPT.</p>
2.8	BANK006, BANK013	Two submissions noted the existing flooding that occurs inside the underpass and one of these submissions queried whether the Proposed Activity would adequately address this problem.	<p>Flooding of the underpass is discussed in Section 6.9 of the REF. It notes that the underpass experiences both 'nuisance' flooding during heavy rain events due to water ingress from the track drainage above the underpass, as well as inundation when there is localised flooding of Railway Street.</p> <p>The Proposed Activity includes drainage work within the underpass to mitigate the nuisance flooding that currently occurs in the underpass during heavy rain events.</p> <p>The flood modelling completed by Transport for NSW indicates that there is no feasible design solution which would enable the underpass to remain open during a flood event due to the inundation of the underpass by floodwaters entering the underpass from Railway Street. In such flood events, the use of</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			<p>drainage pumps within the underpass would not be feasible as any water pumped out would simply be replaced by further inflow from Railway Street. During such flood events, the station would need to close.</p>
2.9	BANK020	<p>One submission recommended that the Proposed Activity include solar power or be designed to enable the future installation of solar power.</p>	<p>Transport for NSW investigated the feasibility of implementing renewable energy as part of its application of the Infrastructure Sustainability Council of Australia's Infrastructure Sustainability Rating assessment to the Proposed Activity. Solar power has not been pursued as the current configuration of high and low voltage power supply to the station means there are few electricity demands at the station that on-site solar panels could directly supply and there are no simple means of directing surplus solar energy back to the power supply network. Transport for NSW would implement other sustainability initiatives as part of the Proposed Activity to achieve an Infrastructure Sustainability Rating of 'Excellent'.</p> <p>Notwithstanding, the Proposed Activity would not preclude the future installation of solar power at Banksia Station.</p>
2.10	BANK017, BANK018, BANK021	<p>Three submissions queried whether extending canopies along about much of the lengths of Platforms 2/3 and 4 would encourage customers to spread out along these platforms. These submissions noted that there is not currently crowding occurring at the existing canopies.</p>	<p>Customer distribution along the platform impacts boarding and alighting times and hence train dwell times. Boarding and alighting is improved by a uniform distribution of customers along the platform. Where customers choose to wait on a platform can be based on a range of factors including the expected arrival time of the next train, the location of the exit at the station they intent to alight at, the number of customers on the platform and the availability of seating. The provision of canopies along most of the length of a platform reduces the influence of weather on where customers decide to wait on the platform.</p> <p>The Proposed Activity would provide about 90 metres of canopy coverage along Platforms 2/3 and 4. These canopies would enable more uniform customer distribution along these platforms during all weather conditions and thereby minimise risk to train dwell times.</p> <p>Canopies also provide other benefits including reducing the risk of slips trips and fall during wet weather and future proofing a station from increased patronage.</p>
2.11	BANK010	<p>One submission recommended that the Proposed Activity include the installation of a 'Beyblade arena'.</p>	<p>The primary objective of the Transport Access Program is to ensure that Banksia Station meets legislative requirements under the DDA and the DSAPT. Whilst the popularity of Beyblade battles is acknowledged, the objectives of the Transport Access Program do not extend to the installation of entertainment facilities.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
3	Traffic, transport and access		
3.1	BANK017, BANK018	Two submissions requested that the Proposed Activity include more accessible parking spaces.	<p>The Proposed Activity includes one accessible parking space on the western side of Hattersley Street at the station entrance. The provision of this space would mean that Banksia Station complies with the DDA and DSAPT requirements for accessible parking.</p> <p>The new accessible parking space on the western side of Hattersley Street would benefit customers with a disability and/or limited mobility by providing them with a dedicated parking space that is within a few metres of a station entrance.</p> <p>Five unmarked two-hour parking spaces would need to be removed from the eastern side of Hattersley Street to accommodate the accessible parking space and the adjoining kiss and ride space due to the narrowness of Hattersley Street. This permanent loss of five parking spaces is expected to inconvenience the residences and businesses at the northern end of Hattersley Street.</p> <p>If additional accessible parking spaces were to be provided on Hattersley Street (or on Railway Street) it would result in further loss of other parking spaces and greater inconvenience to residences and businesses and possibly also commuters.</p>
3.2	BANK005, BANK013	Two submissions requested that the Proposed Activity include a kiss and ride parking area on Railway Street.	<p>The Proposed Activity includes one kiss and ride space on Hattersley Street. The provision of this space would mean that Banksia Station complies with the DDA and DSAPT requirements for kiss and ride facilities.</p> <p>The new kiss and ride space on the western side of Hattersley Street would benefit all customers including those with a disability and/or limited mobility by providing them with a designated drop-off and pick-up location that is within a few metres of a station entrance.</p> <p>Space is much more constrained at the Railway Street entrance to the station than the Hattersley Street station entrance. There is also more traffic and pedestrian activity on Railway Street than Hattersley Street. Relocating the kiss and ride space from Hattersley Street to Railway Street, or developing an additional kiss and ride space on Railway Street, would result in much greater disruption to traffic and parking than that already expected to occur. However, a kiss and ride space on Railway Street would be more convenient for people who live on the western side of the rail corridor. Transport for NSW would investigate opportunities for a kiss and ride on Railway Street during the detailed design of the Proposed Activity.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
3.3.	BANK005, BANK020	Two submissions requested that the Proposed Activity include bicycle parking on Railway Street.	<p>The Proposed Activity has been amended to include three bicycle parking hoops on the corner of Railway Street and Bowmer Street.</p> <p>The existing bicycle parking rack at the station entrance on Hattersley Street, which has capacity for about four bicycles, would be replaced with four bicycle parking hoops in the same location.</p> <p>Transport for NSW periodically reviews bicycle parking requirements across the public transport network, in line with the broader strategy for active transport.</p>
3.4	BANK020	One submission requested that the Proposed Activity include improvements to the security of bicycle parking facilities at the station.	<p>The Proposed Activity would replace the existing bicycle parking rack at the station entrance on Hattersley Street with four bicycle parking hoops. New lighting and CCTV would be provided at this entrance to the station, which would improve the security of bicycle parking at this location.</p> <p>The Proposed Activity also includes three bicycle parking hoops on the corner of Railway Street and Bowmer Street. This is a busy location with a high level of passive surveillance.</p> <p>Transport for NSW has discontinued the installation of station bicycle lockers for community safety and security.</p>
3.5	BANK020	One submission requested that the Proposed Activity provide easy access for bicycles to be taken through the underpass between Railway Street and Hattersley Street.	<p>The Proposed Activity includes lifts between Railway Street and Hattersley Street and the underpass. Bicycle users would be able to use the lifts to access the underpass to travel between these two streets.</p>
3.6	BANK005, BANK009	Two submissions requested that the Proposed Activity include pedestrian crossings of Hattersley Street at the station entrance and of Railway Street near Godfrey Street and Bowmer Street.	<p>The primary objective of the Transport Access Program is to ensure that Banksia Station meets legislative requirements under the DDA and the DSAPT. These requirements do not extend to the provision of pedestrian crossings at locations outside of the station precinct that are not associated with interchange between transport modes.</p> <p>Hattersley Street and Railway Street are local roads that are the responsibility of Bayside Council. This feedback will be provided to council for their consideration.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
3.7	BANK009	One submission requested that the Proposed Activity include traffic calming devices on Hattersley Street.	<p>The purpose of the Proposed Activity is to improve accessibility at Banksia Station and connections to transport interchanges within the station precinct to comply with the legislative requirements of the DDA and DSAPT. These requirements do not extend to the provision of traffic calming devices on roads near the station.</p> <p>Hattersley Street is a local road that is the responsibility of Bayside Council. This feedback will be provided to council for their consideration.</p>
3.8	BANK017, BANK018, BANK021	Three submissions raised a concern about the condition of the footpath through Fortescue Reserve.	<p>Fortescue Reserve is managed by Bayside Council. No work is proposed within Fortescue Reserve as part of the Proposed Activity.</p> <p>Section 3.4.7 of the REF identified temporary laydown and storage areas that would be required by the Construction Contractor for plant, equipment, materials, demolition materials being stored for reuse and stockpiles. Two potential laydown areas are proposed near Fortescue Reserve:</p> <ul style="list-style-type: none"> ○ 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. Vehicles accessing this area would need to cross the footpath that connects between the station entrance and Fortescue Reserve. <p>The Construction Contractor would be responsible for repairing any damage caused to the footpath between the station entrance and Fortescue Reserve.</p>
3.9	BANK003, BANK005	Two submissions raised a concern that the footpath on Subway Road is not wide enough and is not safe.	<p>The purpose of the Proposed Activity is to improve accessibility at Banksia Station and connections to transport interchanges within the station precinct to comply with the legislative requirements of the DDA and DSAPT. Subway Road is located well outside the station precinct.</p> <p>Subway Road is a local road that is the responsibility of Bayside Council. This feedback will be provided to council for their consideration.</p>
4	Heritage		
4.1	BANK015, BANK017, BANK018, BANK021	Four submissions raised concerns about the heritage impact of the Proposed Activity. Two of these submissions identified the removal of the underpass lantern as of particular concern.	<p>Development of the Proposed Activity has included detailed heritage advice by heritage advisors to minimise heritage impacts to the station and local precinct. The design has sought to minimise visual and physical impacts to the station, whilst accommodating essential accessibility requirements and expected increases in patronage.</p> <p>A Statement of Heritage Impact was prepared for the Proposed Activity and it identifies the heritage impacts to the heritage listed Banksia Railway Station Group. The Statement of Heritage Impact and Section 7.1 of the REF discuss mitigation measures</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			that would be implemented to further minimise the potential heritage impacts of the Proposed Activity, including for the detailed design of the lift proposed between the underpass and Platform 2/3, to retain as much of the original heritage fabric as possible.
5	Landscape and visual amenity		
5.1	BANK015, BANK017, BANK018, BANK021	Four submissions raised concerns about the visual impact of the Proposed Activity and particularly the lifts and canopies.	<p>The visual impact of the Proposed Activity was an important consideration during the preparation of the concept design. As noted in Section 2.3 of the REF, Transport for NSW considered a design option for lifts that would connect the platforms to a new footbridge. A key reason that option was not selected was because it would have greater visual impacts than lifts that connect to the existing underpass.</p> <p>The visual impact of the lift structures and canopies was refined during preparation of the concept design to reduce their bulk and make them more sympathetic to the existing buildings on the platforms. The various canopy and lift structure designs that were considered are described in Section 7 of the Statement of Heritage Impact. The preferred design has minimised the elevation of the lift structures and canopies, and would have the least visual impact.</p>
5.2	BANK017, BANK018, BANK021	Three submissions raised a concern about the visual impact of the proposed removal of the tree at the Hattersley Street entrance to the station.	<p>The Proposed Activity includes the removal of one large Brush Box (<i>Lophostemon confertus</i>) tree at the station entrance on Hattersley Street. The removal of this tree would result in there being no screening to the Platform 4 lift and canopy from Hattersley Street.</p> <p>The removal of this tree is necessary to construct the lift between Platform 4, Hattersley Street and the underpass. The construction of this lift forms a key part of the Proposed Activity and the removal of the tree is unavoidable.</p> <p>All vegetation cleared as part of the Proposed Activity would be offset in accordance with TfNSW's (2019) <i>Vegetation Offset Guide</i> in consultation with Bayside Council, and/or the owner of the land upon which the vegetation is to be planted.</p> <p>A Landscape Plan would be developed for the Proposed Activity that includes planting new trees at suitable locations on Hattersley Street. Transport for NSW would engage with Bayside Council regarding the exact location of these plantings and the type of species.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
5.3	BANK017, BANK018	Two submissions raised a concern about the potential for the Proposed Activity to impact trees within Fortescue Reserve and along Hattersley Street.	<p>Fortescue Reserve is managed by Bayside Council. No work is proposed within Fortescue Reserve as part of the Proposed Activity.</p> <p>Section 3.4.7 of the REF identified temporary laydown and storage areas that would be required by the Construction Contractor for plant, equipment, materials, demolition materials being stored for reuse and stockpiles. Two potential laydown areas are proposed near Fortescue Reserve:</p> <ul style="list-style-type: none"> ○ 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. <p>The Proposed Activity would include removal of one large Brush Box (<i>Lophostemon confertus</i>) at the station entrance on Hattersley Street and trimming of another large Brush Box near to the new transformer. These impacts are unavoidable to carry out the proposed work. No other trees on Hattersley Street and no trees within Fortescue Reserve would be impacted by the Proposed Activity.</p> <p>All vegetation cleared as part of the Proposed Activity would be offset in accordance with TfNSW's (2019) <i>Vegetation Offset Guide</i> in consultation with Bayside Council, and/or the owner of the land upon which the vegetation is to be planted.</p>
5.4	BANK021	One submission requested that a smaller lift be used to minimise the visual impact of the Proposed Activity.	<p>The Proposed Activity would provide 17-person capacity lifts to each platform. This is the standard lift size used for the Transport Access Program.</p> <p>The lifts on Platforms 1 and 4 would have a square shape as they need to provide for a customer in a wheelchair to turn around within the lift car as the lift doors in the underpass and on the platforms are on the same side of the lift.</p> <p>The lift on Platform 2/3 would be a narrow through lift as the lift doors in the underpass and on the platform are on opposite sides of the lift. Customers in wheelchairs would not need to turn around within this lift car.</p> <p>While the lift proposed on Platform 2/3 is narrower and longer than the lifts proposed on Platforms 1 and 4, they all have the same height and capacity.</p>
6.	Noise		
6.1	BANK019	One submission raised concerns about the potential noise impacts during construction of the Proposed Activity.	<p>The potential noise impacts from the construction of the Proposed Activity are discussed in Section 6.3 of the REF.</p> <p>During standard construction hours, there would be noise exceedances of the applicable noise management levels for each of the identified construction scenarios. However, exceedances of</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			<p>this type would be intermittent and are typical of impact associated with works of this nature.</p> <p>Outside standard construction hours (rail shut down periods and night-time works), noise at residential receptors is also expected to exceed noise management levels. These noise level impacts would require implementation of construction noise mitigation measures as detailed in Section 7.2 of the REF. Consideration would also be given to staging construction to reduce noise impacts to sensitive receptors.</p>
7.	Air quality		
7.1	BANK019	One submission raised concerns about the potential for dust during construction of the Proposed Activity.	<p>The potential air quality impacts from the construction of the Proposed Activity are discussed in Section 6.10 of the REF.</p> <p>During construction, air quality impacts would largely result from dust generated during excavation of the station platforms, stockpiling of excavated material and the movement of construction vehicles, plant and equipment along unsealed surfaces. Given that the Proposed Activity is not likely to expose large areas of soil and that air quality impacts can be managed through the implementation of standard management measures as detailed in Section 7.2. of the REF, impacts on air quality are expected to be temporary and minor.</p>

Note: Submission numbers are not in sequential order.

Other stakeholder submissions

Table 2 outlines issues raised by Bayside Council along with Transport for NSW's response. The main issues raised by Bayside Council are:

Table 2 Response to Bayside Council's submission

Issue no.	Issue/s raised	Transport for NSW response
2	Design	
2.1	<p>Recommended that a flood risk management plan be prepared for the site to address the existing and future flood risk up to the probable maximum flood event. This plan should address risks to human safety and property, flood warning systems including signs, depth indicators and site closure requirements, a flood evacuation and awareness strategy, an emergency response/evacuation plan, the location of power and other utility services relative to the 1 in 100 year annual exceedance probability flood level and also the storage of hazardous materials</p>	<p>Flooding of the underpass is discussed in Section 6.9 of the REF. It notes that the underpass experiences both 'nuisance' flooding during heavy rain events due to water ingress from the track drainage above the underpass, as well as inundation when there is localised flooding of Railway Street.</p> <p>The Proposed Activity includes drainage work within the underpass to mitigate the nuisance flooding that currently occurs in the underpass during heavy rain events.</p> <p>The flood modelling completed by Transport for NSW indicates that there is no feasible design solution which would enable the underpass to remain open during a flood event due to the inundation of the underpass by floodwaters entering the underpass from Railway Street. In such flood events the use of</p>

Issue no.	Issue/s raised	Transport for NSW response
	<p>and valuable goods above this level. The plan should also assess the potential for people to be trapped within the underpass during a flood event including consideration of lift failure.</p>	<p>drainage pumps within the underpass would not be feasible, as any water pumped out would simply be replaced by further inflow from Railway Street. During such flood events, the station would need to close.</p> <p>TfNSW would update the Banksia Station Site Incident Management Plan (SIMP) in consultation with Sydney Trains as part of their operational Safety Management System. The SIMP would include:</p> <ul style="list-style-type: none"> • recommendations to minimise risk to personal safety of users/ occupants and the risk of property damage • a flood evacuation and awareness strategy • an on-site emergency response/ evacuation plan • an assessment of the potential for people to be trapped within the underpass during a flooding event including consideration of lift failure. <p>New electrical assets of the Proposed Activity include the installation of lift control panels, sub-boards, and a pole mount transformer. These assets would be located above the 1 in 100 year annual exceedance probability flood level.</p> <p>The Proposed Activity does not include the storage of hazardous materials.</p>
3	Traffic, transport and access	
3.1	Requested that the Proposed Activity include re-marking of the existing pedestrian crossing at the station entrance on Railway Street.	The Construction Contractor would prepare dilapidation surveys of the area surrounding the work site including the pedestrian crossing on Railway Street. If the work causes a deterioration in the pedestrian crossing marking then it would be restored to at least its pre-construction condition.
3.2	Requested that the Proposed Activity include bicycle parking racks on both the eastern and western sides of the station because Spring Street and Railway Street are two key local cycling access routes.	The Proposed Activity has been amended to include three bicycle parking hoops on the corner of Railway Street and Bowmer Street. Also, the existing bicycle parking rack at the Hattersley Street entrance to the station would be replaced with four bicycle parking hoops.
3.3	Requested that the proposed refurbished bus shelter on Railway Street include a new Transport for NSW bus timetable and route signage.	The refurbished bus shelter would include a new Transport for NSW bus timetable and route signage.
3.4	Requested that the Proposed Activity include standard wayfinding and pedestrian signage to Barton Park, Gardiner Park, Arncliffe Youth Centre and Rockdale Library.	The purpose of the Proposed Activity is to improve accessibility at Banksia Station and connections to transport interchanges within the station precinct. The provision of wayfinding and pedestrian signage for destinations in the wider Banksia, Arncliffe and Rockdale area is not proposed.

Issue no.	Issue/s raised	Transport for NSW response
4	Landscape and visual amenity	
4.1	Noted that the REF has not considered Clause 6.14 Design Excellence of the <i>Rockdale Local Environmental Plan 2011</i> (Rockdale LEP).	As noted in Section 4.2.5 of the REF, the provisions of the Infrastructure SEPP prevail over the Rockdale LEP. Notwithstanding, it is noted that Clause 6.14 (Design Excellence) of the Rockdale LEP is aimed at the design of new buildings within the Arncliffe and Banksia precincts of the <i>Bayside West Precincts Plan 2036</i> (Department of Planning and Environment, 2018) and, therefore, was not considered to be relevant to the Proposed Activity. The Proposed Activity has been designed in accordance with Transport for NSW's (2018) draft <i>Transport Access Program Urban Design Plan Guidelines</i> .
4.2	Noted that the REF has not considered future pedestrian movements to and from Banksia Station including via through site links identified in the <i>Rockdale Development Control Plan 2011</i> (Rockdale DCP). In particular, the REF has not considered the following objectives of section 7.7.3 Public Domain – 3.1. Street network and design: <ul style="list-style-type: none"> ○ To provide for improved and safer street crossings for pedestrians through the precincts. ○ To enhance the precincts permeability including new and improved site links and connections to adjacent areas outside the precinct. 	As noted in Section 4.2.5 of the REF, the provisions of the Infrastructure SEPP prevail over the Rockdale LEP (including the Rockdale DCP). An Urban Design and Public Domain Plan would be prepared as part of the detailed design of the Proposed Activity and would reference the sections of the Rockdale DCP that address the proposed pedestrian connections from Banksia Avenue to Hattersley Street and from Tabrett Street to Hattersley Street.
4.3	Noted that the REF has not considered the draft <i>Arncliffe and Banksia Public Domain Plan and Technical Manual</i> for the work proposed within the public domain including the identified palette and street furniture suite.	An Urban Design and Public Domain Plan would be prepared as part of the detailed design of the Proposed Activity and would reference the <i>Arncliffe and Banksia Public Domain Plan and Technical Manual</i> in its selection of materials and furniture within the public domain on Hattersley Street and Railway Street.
4.4	Noted that the removal of the large Brush Box (<i>Lophostemon confertus</i>) at the station entrance on Hattersley Street is inconsistent with Control 3 in Section 7.7.3 Public Domain – 3.1 Street Network and Design, which requires that significant trees in streets be retained and protected where possible and appropriate. Furthermore, it is recommended that a tree of appropriate species of like size and spread be planted	The Proposed Activity includes removal of one large Brush Box (<i>Lophostemon confertus</i>) tree at the station entrance on Hattersley street. The removal of this tree is necessary to construct the lift between Platform 4, Hattersley Street and the underpass. The construction of this lift forms a key part of the Proposed Activity and the removal of the tree is unavoidable. Transport for NSW's (2019) <i>Vegetation Offset Guide</i> requires planting of a minimum of eight trees to offset the removal of each large tree with a diameter at breast height of more than 60 centimetres. A landscape plan would be prepared for the Proposed

Issue no.	Issue/s raised	Transport for NSW response
	in the immediate location so as not to impact on the existing tree canopy coverage.	Activity and would include planting new trees at suitable locations on Hattersley Street. Transport for NSW would engage with Bayside Council regarding the exact location of these plantings and the type of species.
5.	Heritage	
5.1	Recommended the adoption of the mitigation measures identified in Section 10.2 of the Statement of Heritage Impact.	The mitigation measures in Section 10.2 of the Statement of Heritage Impact are included in the REF and form part of the conditions of approval for the Proposed Activity, refer to Appendix B.

Table 3 outlines issues raised by the State Emergency Service along with Transport for NSW's response. The main issues raised by the State Emergency Service are:

Table 3 Response to the State Emergency Service's submission

Issue no.	Issue/s raised	Transport for NSW response
2	Design	
2.1	Encouraged site design and stormwater management that minimises any risk to the community.	<p>Flooding of the underpass is discussed in Section 6.9 of the REF. It notes that the underpass experiences both 'nuisance' flooding during heavy rain events due to water ingress from the track drainage above the underpass, as well as inundation when there is localised flooding of Railway Street.</p> <p>The Proposed Activity includes drainage work within the underpass to mitigate the nuisance flooding that currently occurs in the underpass during heavy rain events.</p> <p>The flood modelling completed by Transport for NSW indicates that there is no feasible design solution which would enable the underpass to remain open during a flood event due to the inundation of the underpass by floodwaters entering the underpass from Railway Street. In such flood events the use of drainage pumps within the underpass would not be feasible, as any water pumped out would simply be replaced by further inflow from Railway Street. During such flood events, the station would need to close.</p>
2.2	Requested that the State Emergency Service be notified during the construction phase of the Proposed Activity if significant rainfall is forecast and the construction work has the potential to cause inundation of neighbouring properties.	<p>Appropriate environmental site controls would be implemented during construction works in accordance with the project specific Construction Environmental Management Plan. This would include measures to manage any potential flood risk from heavy rainfall events.</p> <p>In the event of an incident appropriate notification procedures would be followed in accordance with the requirements under the <i>Protection of the Environment Operations Act 1997</i>.</p>

Issue no.	Issue/s raised	Transport for NSW response
2.3	Recommended an emergency plan that includes measures to prepare for, respond to and recover from flooding.	<p>The Construction Contractor would prepare an emergency plan for the construction phase of the Proposed Activity. The plan would address the risk of flooding of the construction site.</p> <p>TfNSW would update the Banksia Station SIMP in consultation with Sydney Trains as part of their operational Safety Management System. The SIMP would include measures to prepare for, respond to and recover from flooding.</p>
2.4	Recommended that users of Banksia Station be made aware of the flood risk.	<p>The community would be provided with regular updates during the construction phase of the Proposed Activity on the progress of the work. Where relevant, the community would be made aware of the existing flood risk at the station and any change to this risk as a result of the construction work.</p> <p>TfNSW would update the Banksia Station SIMP in consultation with Sydney Trains as part of their operational Safety Management System. The SIMP would identify any need for the users of the station to be made aware of flood risks.</p>

2.4. Future consultation

Should Transport for NSW proceed with the Proposed Activity, consultation activities would continue, including consultation with Bayside Council and other relevant stakeholders regarding design development. In addition, Transport for NSW would notify residents, businesses and community members in the lead up to and during construction.

The proposed consultation activities would help to ensure that:

- local council and other stakeholders have an opportunity to provide feedback on the detailed design
- the community and stakeholders are notified in advance of any upcoming works, including changes to pedestrian or traffic access arrangements and out of hours construction activities
- accurate and accessible information is made available
- a timely response is given to issues and concerns raised by the community
- feedback from the community is encouraged.

The [Transport for NSW email address](mailto:projects@transport.nsw.gov.au)³ and Transport for NSW Infoline (1800 684 490) would continue to be available during the construction phase. Targeted consultation methods, such as use of letters, notifications, signage and verbal communications, would continue to occur. The [Transport for NSW project website](https://www.transport.nsw.gov.au/projects/current-projects/banksia-station-upgrade)⁴ would also include updates on the progress of construction.

³ projects@transport.nsw.gov.au

⁴ <https://www.transport.nsw.gov.au/projects/current-projects/banksia-station-upgrade>

3. Changes to the Proposed Activity

Based on the submissions received from the community during the public display of the REF and from Bayside Council, the Proposed Activity has been changed to include three bicycle parking hoops on the corner of Railway Street and Bowmer Street. These would be in addition to the four bicycle parking hoops proposed at the Hattersley Street entrance to the station to replace the existing bicycle parking rack at this location.

Since the public display of the REF a lease has been negotiated for the temporary use of an existing retail space on the corner of Hattersley Street and Taylor Avenue as a construction site office.

3.1. Assessment of design changes

The proposed change to the Proposed Activity is outlined in Table 4, along with a discussion of its impacts. Impacts related to other aspects of the Proposed Activity are considered to be consistent with the findings of the REF including with respect to clause 228 of the EP&A Regulation and impacts to matters of national environmental significance. Where additional mitigation measures are required, these have been included as Conditions of Approval in Appendix B.

Table 4 Assessment of design changes

Aspect of the Proposed Activity	Design change	Discussion of impacts
Bicycle parking	Inclusion of three bicycle parking hoops on the corner of Railway Street and Bowmer Street as shown in Figure 3. These would be in addition to the four bicycle parking hoops proposed at the Hattersley Street entrance to the station to replace the existing bicycle parking rack at this location.	The Proposed Activity would result in an increase in the bicycle parking available within the station precinct and Banksia local centre as well as making bicycle parking available on both sides of the rail corridor at Banksia Station. Cyclists using the on-road local bicycle route along Railway Street would not need to cross the rail corridor to park their bicycle. This would make interchange between bicycle and train or bus easier. It would make it easier for people to cycle to the Banksia town centre.
Temporary construction site office	An existing retail space on the corner of Hattersley Street and Taylor Avenue would be temporarily used as a construction site office. A lease has been negotiated for the use of the portion of 309 Princes Highway that fronts Hattersley Street (refer to Figure 4). The site office would only be used for administrative purposes. It would be fitted out for use as an office and would include meeting spaces, desks and other office furniture and equipment. The site office would be used during standard working hours (7:00 am to 6:00 pm Monday to Friday; 8:00 am to 1:00 pm Saturday).	The proposed site office would be used by construction personnel who would otherwise need to be provided with office space and amenities in portable buildings. Reducing the number of portable buildings required for the Proposed Activity would reduce the visual impact associated with these buildings as well as the traffic and noise impacts associated with their delivery, installation, servicing and removal. The proposed site office is currently vacant. Leasing this building during the construction phase of the Proposed Activity would have economic benefits by increasing demand for local commercial space.

Aspect of the Proposed Activity	Design change	Discussion of impacts
	The existing retail space occurs on land zoned as B4 Mixed Use under the Rockdale LEP. The proposed use as a site office is consistent with the intended and permissible use under the Rockdale LEP.	

Matters of national environmental significance and clause 228

Matters of national environmental significance under the EPBC Act and the environmental factors listed in clause 228 of the EP&A Regulation were considered as part of the change to the Proposed Activity. The Proposed Activity remains consistent with Appendix A and B of the REF.

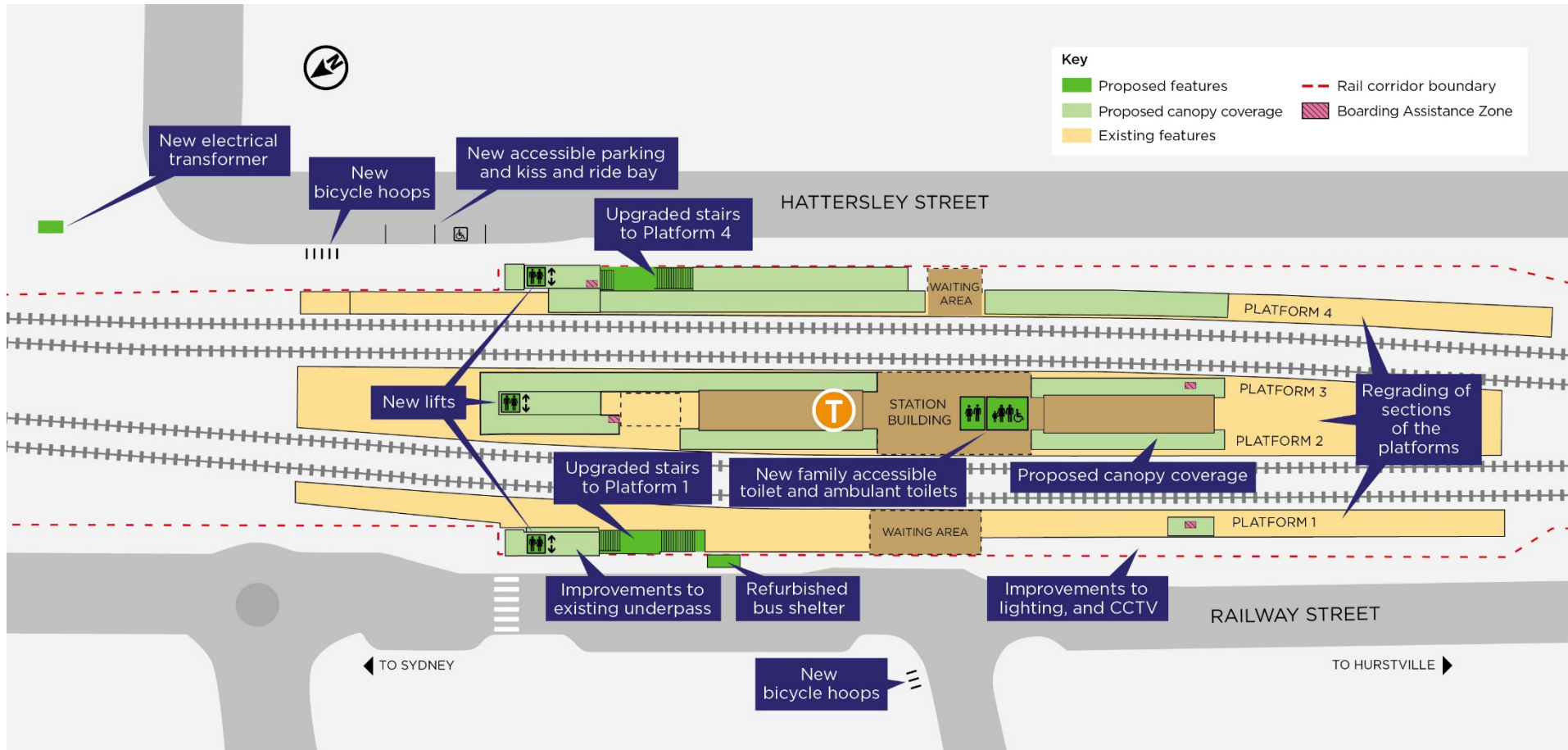
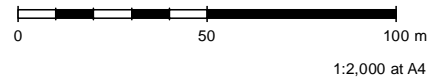


Figure 3 Key features of the Proposed Activity (indicative only, subject to detailed design)



Legend

- Study area
- Construction footprint
- Road
- Existing railway track
- Platform number
- Railway station
- Existing vehicle access gate
- Proposed temporary vehicle access gate
- Potential weekend possession delivery and crane set up area
- Proposed construction site compound
- Proposed laydown area
- Proposed site office



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

Figure 4 Temporary site facilities and laydown areas

4. Consideration of the environmental impacts

4.1. NSW Environmental Planning and Assessment Act 1979

The REF addresses the requirements of Section 5.5 of the EP&A Act. In considering the Proposed Activity, all matters affecting or likely to affect the environment are addressed in the REF and the Determination Report and associated documentation.

In accordance with the checklist of matters pursuant to clause 228(3) of the EP&A Regulation, an assessment is provided in Chapter 6 and Appendix B of the REF.

In respect of the Proposed Activity an assessment has been carried out regarding potential impacts on critical habitat, threatened species, populations or ecological communities or their habitats, under Section 5.7 of the EP&A Act.

The likely significance of the environmental impacts of the Proposed Activity has been assessed in accordance with the then NSW Department of Planning's 1995 best practice guideline [*Is an EIS Required?*](#)⁵ It is concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Accordingly, an environmental impact statement under Division 5.2 of the EP&A Act is not required.

4.2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

As part of the consideration of the Proposed Activity, all matters of national environmental significance and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to matters of national environmental significance, this evaluation has been undertaken in accordance with Commonwealth Administrative Guidelines on determining whether an action has, will have, or is likely to have a significant impact. A summary of the evaluation is provided in Chapter 6 and Appendix A of the REF.

It is considered that the Proposed Activity described in the REF is not likely to have a significant impact on any Commonwealth land and is not likely to have a significant impact on any matters of national environmental significance.

⁵ Refer to the National Library of Australia's 'Trove' website
<http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648>

5. Conditions of Approval

If approved, the Proposed Activity would proceed subject to the Conditions of Approval included at Appendix B.

6. Conclusion

Having regard to the assessment in the REF, consideration of the submissions received and the design changes subsequent to the public display of the REF, it can be concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats.

Consequently, an environmental impact statement is not required to be prepared under Division 5.2 of the EP&A Act.

It is also considered that the Proposed Activity does not trigger any approvals under Part 3 of the EPBC Act.

The Proposed Activity would provide several benefits to the community including:

- a station that provides improved accessibility to people with a disability, limited mobility, parents/carers with prams and customers with luggage
- modernisation of the existing station building and facilities on Platform 2/3 to meet the needs of a growing population
- additional canopy areas along Platforms 2/3 and 4 that promote the use of the length of these platforms, thereby reducing train dwell times and improve timetable reliability. The new canopies on Platform 1 would provide cover at the lift waiting area and boarding assistance zone
- improved accessibility of interchange between train and bus services and private vehicles at Banksia Station
- improved drainage infrastructure in the pedestrian underpass to prevent the nuisance flooding that currently occurs during heavy rain events.

The environmental impact assessment (REF and Determination Report) is recommended to be approved subject to the proposed mitigation and environmental management measures included in the Conditions of Approval (refer to Appendix B).

Determination

BANKSIA STATION UPGRADE

APPROVAL

I, Louise Sureda, as delegate of the Secretary, Transport for NSW:

1. Have examined and considered the Proposed Activity in the *Banksia Station Upgrade Review of Environmental Factors* (August 2020) and the *Banksia Station Upgrade Determination Report* (September 2020) in accordance with Section 5.5 of the NSW *Environmental Planning and Assessment Act 1979*.
2. Determine on behalf of Transport for NSW (the Proponent) that the Proposed Activity may be carried out in accordance with the Conditions of Approval in this Determination Report (September 2020), consistent with the Proposed Activity described in the *Banksia Station Upgrade Review of Environmental Factors* (August 2020).



Louise Sureda
Director Planning, Environment and Sustainability
Environment and Sustainability Branch
Safety, Environment and Regulation Division
Transport for NSW

Date: 18/09/2020

References

NSW Department of Planning (1995), *Is an EIS required?* Sydney

Transport for NSW (2018) *Transport Access Program Urban Design Plan Guidelines* (draft), Sydney

Transport for NSW (2019), *Vegetation Offset Guide*, Sydney

Transport for NSW (2020), *Banksia Station Upgrade Review of Environmental Factors*, Sydney

Appendix A Review of Environmental Factors

Please refer to the Transport for NSW website to access the Banksia Station Upgrade REF (Desksite 6449148.).

Link to the Transport for NSW website:

<https://www.transport.nsw.gov.au/projects/current-projects/banksia-station-upgrade>

Appendix B Conditions of Approval

CONDITIONS OF APPROVAL

Banksia Station Upgrade

Note: these Conditions of Approval must be read in conjunction with the final mitigation measures in the Banksia Station Upgrade Review of Environmental Factors.

Schedule of acronyms and definitions used:

Acronym	Definition
ADEIA	TfNSW Associate Director Environmental Impact Assessment (or nominated delegate)
ADEM	TfNSW Associate Director Environmental Management (or nominated delegate)
ADSPD	TfNSW Associate Director Sustainability, Planning and Development (or nominated delegate)
CECR	Construction Environmental Compliance Report
CEMP	Construction Environmental Management Plan
CLMP	Community Liaison Management Plan
CoA	Condition of Approval
dba	Decibels (A-weighted scale)
ECM	Environmental Controls Map
EIA	Environmental Impact Assessment
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPL	Environment Protection Licence issued by the Environment Protection Authority under the <i>Protection of the Environment Operations Act 1997</i>
EMR	Environmental Management Representative
HIP	Heritage Interpretation Plan
ISCA	Infrastructure Sustainability Council of Australia
ISO	International Standards Organisation
OEH	Former NSW Office of Environment and Heritage
OOHWP	Out of Hours Works Protocol
REF	Review of Environmental Factors
SMP	Sustainability Management Plan
TfNSW	Transport for NSW
TMP	Traffic Management Plan

Term	Definition
Construction	Includes all work in respect of the Project, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the TfNSW ADEM to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected, unless otherwise agreed by the ADEM).
Contamination	The presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
Designated Works	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction, for Construction.
Emergency Work	Includes works to avoid loss of life, damage to external property, utilities and infrastructure, prevent immediate harm to the environment, contamination of land or damage to a heritage (Aboriginal or non-Aboriginal) item.
Environmental Impact Assessment (EIA)	The documents listed in Condition 1 of this approval.
Environmental Management Representative (EMR)	An independent environmental representative appointed to the Project or a delegate nominated by Transport for NSW.
Feasible	A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given project constraints such as safety and maintenance requirements.
Noise Sensitive Receiver	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios, places of worship/religious facilities (e.g. churches), and other noise sensitive receivers identified in the Environmental Impact Assessment.
Project	The construction and operation of the Banksia Station Upgrade as described in the Environmental Impact Assessment.
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in the case of the Project, Transport for NSW.
Reasonable	Selecting reasonable measures from those that are feasible involves making a judgment to determine whether the overall benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the measure.

General**1. Terms of Approval**

The Project shall be carried out generally in accordance with the environmental impact assessment (EIA) for this Project, which comprises the following documents:

- a) *Banksia Station Upgrade – Review of Environmental Factors* (TfNSW, August 2020)
- b) *Banksia Station Upgrade – Determination Report* (TfNSW, September 2020).

In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.

2. Project Modifications

Any modification to the Project as approved in the EIA would be subject to further assessment. This assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised. The assessment shall be subject to approval under delegated authority by TfNSW, and any additional requirements from the assessment of the Project modification must be complied with.

3. Statutory Requirements

These conditions do not remove any obligation to obtain all other licences, permits, approvals and land owner consents from all relevant authorities and land owners as required under any other legislation for the Project. The terms and conditions of such licences, permits, approvals and permissions must be complied with at all times.

4. Construction Environmental Compliance Report

A Construction Environmental Compliance Report (CECR) for the Project shall be prepared which addresses the following matters:

- a) compliance with the Construction Environmental Management Plan (CEMP) and these conditions
- b) compliance with any approvals or licences issued by relevant authorities for the construction of the Project
- c) implementation and effectiveness of environmental controls (the assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP)
- d) environmental monitoring results, presented as a results summary and analysis
- e) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused
- f) number and details of any complaints, including summary of main areas of complaint, actions taken, responses given and intended strategies to reduce recurring complaints (subject to privacy protection)
- g) details of any review and amendments to the CEMP resulting from construction during the reporting period
- h) any other matter as requested by the ADEM.

CoA Condition

The CECR shall:

- i) be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review and provide any comments to TfNSW in relation to the CECR
- ii) be submitted to the ADEM for approval upon completion of the EMR review period.

The first CECR shall report on the first six months of construction and be submitted within six weeks of expiry of that period (or at any other time interval agreed to by the ADEM). CECRs shall be submitted no later than six months after the date of submission of the preceding CECR (or at other such periods as requested by the ADEM) for the duration of construction.

The final CECR shall detail compliance with all Conditions of Approval, licences and permits required to be obtained under any other legislation for the Project.

5. Graffiti and Advertising

Hoardings, site sheds, fencing, acoustic walls around the perimeter of the site, and any structures built as part of the Project shall be maintained free of graffiti and advertising not authorised by TfNSW during the construction period. Graffiti and unauthorised advertising shall be removed or covered within the following timeframes:

- a) offensive graffiti will be removed or concealed within 24 hours
- b) highly visible (yet inoffensive) graffiti will be removed or concealed within a week
- c) graffiti that is neither offensive or highly visible will be removed or concealed within a month
- d) any unauthorised advertising material will be removed or concealed within 24 hours.

Communications

6. Community Liaison Management Plan

A Community Liaison Management Plan (CLMP) shall be prepared and implemented to engage with government agencies, relevant councils, landowners, community members and other relevant stakeholders (such as utility and service providers, bus companies, Taxi Council and businesses). The CLMP shall comply with the obligations of these conditions and should include, but not necessarily be limited to:

- a) a comprehensive, project-specific analysis of issues and proposed strategies to manage issues through the duration of the Project
- b) details of the communication tools (traditional and digital) and activities that will be used to inform and engage the community and stakeholders
- c) a program for the implementation of community liaison activities relating to key construction tasks with strategies for minimising impacts and informing the community
- d) policies and procedures for handling community complaints and enquiries, including the Contractor's nominated 24 hour contact for management of complaints and enquiries
- e) analysis of other major projects/influences in the area with the potential to result in cumulative impacts to the community and strategies for managing these.

CoA Condition

The CLMP shall be prepared to the satisfaction of the Director Community Engagement (or nominated delegate) prior to the commencement of construction and implemented, reviewed and revised as appropriate during the construction of the Project.

7. Community Notification and Liaison

The local community shall be advised of any activities related to the Project with the potential to impact upon them.

Prior to any site activities commencing and throughout the Project duration, the community is to be notified of works to be undertaken, the estimated hours of construction and details of how further information can be obtained (i.e. contact telephone number/email, website, newsletters etc.) including the 24 hour construction response line number.

Construction-specific impacts including information on traffic changes, access changes, detours, services disruptions, public transport changes, high noise generating work activities and work required outside the nominated working hours shall be advised to the local community at least seven days prior to such works being undertaken or other period as agreed to by the Director Community Engagement or as required by the Environment Protection Authority (EPA) (where an Environment Protection Licence (EPL) is in effect).

8. Website

Project information shall be made available to members of the public, either on dedicated pages on the TfNSW/Project website or details provided as to where hard copies of this information may be accessed. Project information to be provided includes:

- a) a copy of the documents referred to under Condition 1 of this approval
- b) a list of environmental management reports that are publicly available
- c) 24 hour contact telephone number for information and complaints.

All documents uploaded to the website must be compliant with the *Web Content Accessibility Guidelines Version 2.0*.

9. Complaints Management

A 24 hour construction response line number shall be established and maintained for the duration of construction.

Details of all complaints received during construction are to be recorded on a complaints register. A verbal response to phone enquiries on what action is proposed to be undertaken is to be provided to the complainant within two hours during all times construction is being undertaken and within 24 hours during non-construction times (unless the complainant agrees otherwise). A verbal response to written complaints (email/letter) should be provided within 48 hours of receipt of the communication. A detailed written response is to be provided to the complainant within seven calendar days for verbal and/or written complaints.

Information on all complaints received during the previous 24 hours shall be forwarded to the Environmental Management Representative (EMR) each working day.

Environmental Management**10. Construction Environmental Management Plan**

A Construction Environmental Management Plan (CEMP) shall be prepared prior to the commencement of construction which addresses the following matters, as a minimum:

- a) traffic and pedestrian management (in consultation with the relevant roads authority)
- b) noise and vibration management
- c) water and soil management
- d) air quality management (including dust suppression)
- e) Aboriginal and non-Aboriginal heritage management
- f) biodiversity management
- g) storage and use of hazardous materials
- h) contaminated land management (including acid sulphate soils)
- i) weed management
- j) waste management
- k) bushfire risk
- l) environmental incident reporting and management procedures
- m) non-compliance and corrective/preventative action procedures
- n) details of approvals, licences and permits required to be obtained under any other legislation for the Project.

The CEMP shall:

- iii) comply with the Conditions of Approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management
 - iv) comply with the relevant requirements of *Guideline for Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004)
 - v) include a pre-construction environmental compliance matrix for the Project (or such stages of the Project as agreed to by the EMR) that details compliance with all relevant conditions and mitigation measures
 - vi) include an Environmental Policy.
-

CoA Condition

In preparing the CEMP the following shall be undertaken:

1. consultation with government agencies and relevant service/utility providers (as required)
2. a copy of the CEMP submitted to the EMR for review
3. a copy of the CEMP submitted to the Associate Director Environmental Management (ADEM) for approval upon completion of the EMR review period
4. review and update the CEMP at regular intervals, and in response to any actions identified as part of the EMR's audit of the document
5. ensure updates to the CEMP are made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document, and be submitted to the EMR for approval.

The CEMP must be approved by the ADEM prior to the commencement of construction work associated with the Project.

11. Environment Personnel

Suitably qualified and experienced environmental management personnel shall be available and be responsible for implementing the environmental objectives for the Project, including undertaking regular site inspections, preparation of environmental documentation and ensuring the Project meets the requirements of the Environmental Management System.

Details of the environmental personnel, including relevant experience, defined responsibilities and resource allocation throughout the project (including time to be spent on-site/off-site) are to be submitted for the approval of the ADEM, at least 21 days prior to commencement of construction of the Project (or such time as otherwise agreed by the ADEM).

Any adjustments to environmental resource allocations (on-site or off-site) are to be approved by the ADEM.

12. Environmental Management Representative

Prior to the commencement of construction, the ADEM shall appoint an EMR for the duration of the construction period for the Project.

The EMR shall provide advice to the ADEM in relation to the environmental compliance and performance of the Project. The EMR shall have responsibility for:

- a) considering and advising TfNSW on matters specified in these conditions and compliance with such
- b) reviewing and where required by the ADEM, providing advice on the Project's induction and training program for all persons involved in the construction activities and monitoring implementation
- c) periodically auditing the Project's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by the ADEM
- d) reporting weekly to TfNSW, or as required by the ADEM
- e) issuing a recommendation for work to stop immediately, if in the view of the EMR circumstances so require. The stop work recommendation may be limited to specific activities if the EMR can easily identify those activities

CoA Condition

- f) requiring reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts
- g) reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections
- h) providing reports to TfNSW on matters relevant to the carrying out of the EMR role as necessary
- i) where required by the ADEM, providing advice on the content and implementation of the CEMP and Environmental Controls Map (ECM) in accordance with the conditions
- j) reviewing and approving updates to the CEMP.

The EMR shall be available during construction activities to inspect the site(s) and be present on-site as required.

13. Environmental Controls Map

An Environmental Controls Map (ECM) shall be prepared and implemented in accordance with TfNSW's *Guide to Environmental Controls Map* (SD-015) prior to the commencement of construction for implementation for the duration of construction. The ECM is to be endorsed by the EMR and may be prepared in stages, as set out in the CEMP.

A copy of the ECM shall be submitted to the EMR for review and endorsement. The EMR is to be given a minimum period of seven days to review and endorse the ECM. Following receipt of the EMR's endorsement, the ECM shall be submitted to the ADEM for approval, at least 14 days prior to commencement of construction (or such time as is otherwise agreed by the ADEM).

The ECM shall be prepared as a map – suitably enlarged (e.g. A3 size or larger) for mounting on the wall of a site office and included in site inductions, supported by relevant written information.

Updates to the ECM shall be made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document and submitted to the EMR for approval.

Hours of Work

14. Standard Construction Hours

Construction activities shall be restricted to the hours of 7:00 am to 6:00 pm (Monday to Friday); 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except for the following works which are permitted outside these standard hours:

- a) any works which do not cause noise emissions to be more than 5dBA higher than the rating background level at any nearby residential property and/or other noise sensitive receivers
- b) out of hours work identified and assessed in the EIA or the approved Out of Hours Work Protocol (OOHWP)
- c) the delivery of plant, equipment and materials which is required outside these hours as requested by police or other authorities for safety reasons and with suitable notification to the community as agreed by the ADEM
- d) Emergency Work to avoid the loss of lives, property and/or to prevent environmental harm
- e) any other work as agreed by the ADEM and considered essential to the Project, or as approved by EPA (where an EPL is in effect).

15. High Noise Generating Activities

Rock breaking or hammering, jack hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel and any other activities which result in impulsive or tonal noise generation shall not be undertaken for more than three hours, without a minimum one hour respite period unless otherwise agreed to by the ADEM, or as approved by EPA (where relevant to the issuing of an EPL).

Noise and Vibration**16. Construction Noise and Vibration**

Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with TfNSW's *Construction Noise and Vibration Strategy* (DMS-ST-157) and the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The mitigation measures shall include, but not limited to:

- a) details of construction activities and an indicative schedule for construction works
- b) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly sensitive noise receivers
- c) detail what reasonable and feasible actions and measures shall be implemented to minimise noise impacts (including those identified in the EIA)
- d) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise and vibration complaints
- e) an Out of Hours Work Protocol (OOHWP) for the assessment, management and approval of works outside the standard construction hours identified in Condition 14 of this approval, including a risk assessment process which deems the out of hours activities to be of low, medium or high environmental risk, is to be developed. All out of hours works are subject to approval by the EMR and/or ADEM or as approved by EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with the TfNSW *Construction Noise and Vibration Strategy* (DMS-ST-157)
- f) a description of how the effectiveness of actions and measures shall be monitored during the proposed works, identification of the frequency of monitoring, the locations at which monitoring shall take place, recording and reporting of monitoring results and if any exceedance is detected, the manner in which any non-compliance shall be rectified.

CoA Condition

17. Vibration Criteria

Vibration (other than from blasting) resulting from construction and received at any structure outside of the Project shall be limited to:

- a) for structural damage vibration – German Standard *DIN 4150: Part 3 – 1999: Structural Vibration in Buildings: Effects on Structures*
- b) for human exposure to vibration – the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006) which includes British Standard *BS 7385-2:1993 Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*.

These limits apply unless otherwise approved by the ADEM through the CEMP.

18. Non-Tonal Reversing Beepers

Non-tonal reversing beepers (or an equivalent mechanism) shall be fitted and used on all construction vehicles and mobile plant regularly used on-site (i.e. greater than one day) and for any out of hours work.

19. Piling

Wherever practical, piling activities shall be completed using non-percussive piles. If percussive piles are proposed to be used, approval of the ADEM shall be obtained prior to commencement of piling activities.

20. Noise Impacts on Educational Facilities

Potentially affected pre-schools, schools, universities and any other affected permanent educational institutions shall be consulted in relation to noise mitigation measures to identify any noise sensitive periods (e.g. exam periods). As much as reasonably practicable noise intensive construction works in the vicinity of affected educational buildings are to be minimised.

Contamination and Hazardous Materials

21. Unidentified Contamination (Other Than Asbestos)

If previously unidentified contamination (excluding asbestos) is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA guidelines, including the *Guidelines for Consultants Reporting on Contaminated Sites* (Office of Environment and Heritage, 2011).

A copy of any contamination report shall be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review.

A revised copy of the report shall be submitted to the ADEM for consideration upon completion of the EMR review period. The ADEM shall determine whether consultation with the relevant council and/or EPA is required prior to continuation of construction works within the affected area.

Note: *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 21 and Condition 22.*

22. Asbestos Management

If previously unidentified asbestos contamination is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of the asbestos contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA, Safe Work Australia and SafeWork NSW guidelines and include the proposed methodology for the remediation of the asbestos contamination. Remediation activities must not take place until receipt of the investigation report.

Works may only recommence upon receipt of a validation report from a suitably qualified contamination specialist that the remediation activities have been undertaken in accordance with the investigation report and remediation methodology.

Note: *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 21 and Condition 22.*

23. Storage and Use of Hazardous Materials

Construction hazard and risk issues associated with the use and storage of hazardous materials shall be addressed through risk management measures, which shall be developed prior to construction as part of the overall CEMP, in accordance with relevant EPA guidelines, TfNSW's *Chemical Storage and Spill Response Guidelines* (DMS-SD-066) and Australian and ISO standards. These measures shall include:

- a) the storage of hazardous materials, and refuelling/maintenance of construction plant and equipment are to be undertaken in clearly marked designated areas designed to contain spills and leaks
- b) spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits are to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits are to be kept in close proximity to potential discharge points in support of preventative controls
- c) all hazardous materials spills and leaks to be reported to site managers and actions to be immediately taken to remedy spills and leaks
- d) training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.

Flora and Fauna**24. Removal of Trees or Vegetation**

Separate approval, in accordance with TfNSW's *Removal or Trimming of Vegetation Application (FT-078)*, is required for the trimming, cutting, pruning or removal of trees or vegetation where the impact has not already been identified in the EIA for the Project. The trimming, cutting, pruning or removal of trees or vegetation shall be undertaken in accordance with the conditions of that approval.

CoA Condition

25. Replanting Program

All cleared vegetation shall be offset in accordance with TfNSW's *Vegetation Offset Guide* (ST-149). All vegetation planted on-site is to consist of locally endemic native species, unless otherwise agreed by the ADEM, following consultation with the relevant council, where relevant, and/or the owner of the land upon which the vegetation is to be planted.

Erosion and Sediment Control

26. Erosion and Sediment Control

Soil and water management measures shall be prepared, implemented and maintained as part of the CEMP for the mitigation of water quality impacts during construction of the Project. The management measures shall be prepared in accordance with *Managing Urban Stormwater: Soils and Construction Volume 1 4th Edition* (Landcom, 2004).

Heritage Management

27. Aboriginal and Non-Aboriginal Heritage

If previously unidentified Aboriginal or non-Aboriginal heritage/archaeological items are uncovered during construction works, the procedures contained in the TfNSW *Unexpected Heritage Finds Guideline* (SD-115) shall be followed and all works in the vicinity of the find shall cease. The EMR shall be immediately notified to co-ordinate a response, which may include seeking appropriate advice from a suitably qualified and experienced Heritage Advisor (in consultation with Heritage NSW, and/or the Energy, Environment and Science Group of the Department of Planning, Industry and Environment, as applicable). Works in the vicinity of the find shall not re-commence until clearance has been received from TfNSW and/or the Heritage Advisor.

28. Protection of Heritage Items Listed on the RailCorp Section 170 Conservation Register

Design and construction of the Project within the curtilage of the Section 170 listed 'Banksia Railway Station Group' must be undertaken in accordance with the recommendations made in the Statement of Heritage Impact (Jacobs, 2020).

29. Heritage Advisor

A suitably qualified and experienced Heritage Advisor who is independent of the design and construction team's personnel shall be engaged to the satisfaction of the ADEIA. The Heritage Advisor shall provide ongoing heritage, design and conservation advice throughout detailed design and any subsequent relevant design modifications to ensure that the final design adheres to the recommendations of the heritage assessments provided in the EIA.

The Heritage Advisor's involvement and reporting shall include, but not be limited to:

- attendance at design meetings and/or heritage meetings to provide iterative heritage advice to actively inform design development
- targeted historical research to inform the iterative advice as required (to be documented as part of the below summary)

CoA Condition

- summary of the iterative heritage advice provided which should capture (as a minimum):
 - o reporting against the recommendations of the heritage assessments provided in the EIA
 - o the optioneering process undertaken as part of the design development, including heritage pros & cons
 - o discussion on why particular heritage sensitive solutions might be discounted
 - o discussion of the relevant detailed design stage
 - o recommendations for next steps to further mitigate heritage impacts.

A progress draft of the above is to be provided at each detailed design stage. A final copy of the summary report is to be provided to TfNSW no later than 1 week after final submission. The summary report is to also include:

- a) confirmation of the extent of involvement of the Heritage Advisor in the detailed design process at the completion of the Approved for Construction design stage
- b) identification and assessment of any changes to, and/or additions to the scope of work from those identified in the EIA which would affect heritage significance
- c) a description of the impacts, and recommended mitigation measures relating to any new or amended scope of work identified in (b) above including the requirement for additional heritage approvals for consultation
- d) confirmation that the detailed design is compliant with the requirements of the EIA.

30. Heritage Interpretation Plan

If required by the recommendations of the Statement of Heritage Impact (Jacobs, 2020) heritage interpretation shall be planned and integrated into the detailed design of the Project. The heritage interpretation planning shall be prepared by the Heritage Advisor (and sub-consultants as required i.e. graphics) with reference to Sydney Trains Heritage Interpretation Guidelines. The heritage interpretation planning shall be captured in a Heritage Interpretation Plan (HIP) that is to be issued as a progress report at each stage of detailed design.

The HIP is to be submitted to the ADEM for approval at least 14 days prior to the commencement of construction of the Project (or such time as is otherwise agreed by the ADEM).

31. Archival Recording

Archival recording of 'Banksia Railway Station Group' shall be undertaken in accordance with the Heritage NSW guidelines prior to works commencing. The archival recording shall be reviewed and endorsed by the EMR prior to submission to Heritage NSW or other government body.

Copies of the archival recording are to be provided to Bayside Council and Sydney Trains Heritage Team for future reference.

Lighting**32. Lighting Scheme**

A lighting scheme for the construction and operation of the Project is to be developed by a suitably qualified lighting designer and prepared in accordance with *AS 1158 Lighting for Roads and Public Spaces* and *AS 4282 Control of the Obtrusive Effects of Outdoor Lighting*. The lighting scheme shall address the following as relevant:

- a) consideration of lighting demands of different areas
- b) strategic placement of lighting fixtures to maximise ground coverage
- c) use of LED lighting
- d) minimising light spill by directing lighting into the station
- e) control systems for lighting that dim or switch-off lights settings according to the amount of daylight the zone is receiving
- f) motion sensors to control low traffic areas
- g) allowing the lighting system to use low light or switch off light settings while meeting relevant lighting Standards requirements, and
- h) ensuring security and warning lighting is not directed at neighbouring properties.

The proposed lighting scheme is to be submitted to TfNSW's technical (design) team for acceptance.

Property**33. Property Condition Surveys**

Subject to landowner agreement, property condition surveys shall be completed prior to piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction (Designated Works) in the vicinity of the following buildings/structures:

- a) all buildings/structures/roads within a plan distance of 20 metres from the edge of the Designated Works
- b) all sensitive structures within 50 metres from the edge of the Designated Works.

Property condition surveys need not be undertaken if a risk assessment indicates that selected buildings/structures/roads identified in (a) and (b) will not be affected as determined by a qualified geotechnical and construction engineering expert with appropriate registration on the National Professional Engineers Register prior to commencement of Designated Works.

Selected potentially sensitive buildings and/or structures shall first be surveyed prior to the commencement of the Designated Works and again immediately upon completion of the Designated Works.

All owners of assets to be surveyed, as defined above, are to be advised (at least 14 days prior to the first survey) of the scope and methodology of the survey, and the process for making a claim regarding property damage.

A copy of the survey(s) shall be given to each affected owner. A register of all properties surveyed shall be maintained.

CoA Condition

Any damage to buildings, structures, lawns, trees, sheds, gardens, etc. as a result of construction activity direct and indirect (i.e. including vibration and groundwater changes) shall be rectified at no cost to the owner(s).

Sustainability**34. Sustainability Officer**

A suitably qualified and experienced Sustainability Officer shall be appointed who is responsible for implementing the sustainability objectives for the Project, in line with the Program's overarching Sustainability Strategic Management Plan.

Details of the Sustainability Officer including defined responsibilities, duration and resource allocation throughout the appointment are to be submitted to the satisfaction of the Associate Director Sustainability, Planning & Development (ADSPD) prior to the preparation of the Sustainability Management Plan.

35. Sustainability Management Plan

A Sustainability Management Plan (SMP) which details the approach to managing sustainability requirements and opportunities during design and construction shall be prepared. The SMP shall include the following as a minimum:

- a) a completed electronic checklist demonstrating compliance with the Infrastructure Sustainability Council of Australia (ISCA) scorecard demonstrating credits targeted to meet an Infrastructure Sustainability Rating Scheme (v1.2) of 'Excellent'
- b) a statement outlining the Construction Contactor's own corporate sustainability policies, obligations, goals, targets and commitments
- c) a description of the processes and methodologies for encouraging and identifying innovative sustainability outcomes on the Project, and the areas targeted for innovative sustainable solutions to be explored and/or implemented on the Project
- d) the approach to the identification of opportunities to reduce carbon emissions, energy use and embodied lifecycle impacts of the Project. This should include a summary of initiatives proposed for implementation to meet energy and carbon management objectives and targets
- e) the approach to sustainable procurement including how procurement processes have taken in to account the principles of ISO 20400: 2017 – Sustainable Procurement in the selection of all materials, products and services
- f) a description of the processes, standards and procedures for undertaking climate change risk assessments and strategies for mitigation of risks associated with climate change and extreme weather events.

A copy of the SMP shall be submitted to the ADSPD at least 30 days prior to the commencement of construction, for approval (or such time as is otherwise agreed by the ADSPD).

36. Infrastructure Sustainability Council of Australia Ratings

The Project shall be registered with the ISCA, and shall aim to achieve a minimum 'Infrastructure Sustainability Rating Tool' (v1.2) 'Excellent' rating for the 'Design' and 'As-Built' components of the Project.

Traffic, Transport and Access**37. Traffic Management Plan**

A construction Traffic Management Plan (TMP) shall be prepared as part of the CEMP which addresses, as a minimum, the following matters:

- a) ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised
- b) maximising safety and accessibility for pedestrians and cyclists
- c) ensuring adequate sight lines to allow for safe entry and exit from the site
- d) ensuring access to railway stations, businesses, entertainment premises and residential properties and schools unless affected property owners have been consulted and appropriate alternative arrangements made
- e) managing impacts and changes to on and off street parking and requirements for any temporary replacement provision
- f) parking locations for construction workers away from stations and busy residential areas and details of how this will be monitored for compliance
- g) routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses
- h) details for relocating the taxi rank and bus stop on Railway Street. If required, the TMP is to identify signage requirements to direct customers to any new bus stop and taxi rank arrangements (in consultation with the relevant bus operator). Particular provisions should also be made for the accessibility impaired
- i) measures to manage traffic flows around the area affected by the Project, including as required regulatory and direction signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the TMP.

Consultation with the relevant roads authority must be undertaken during the preparation of the TMP, as required. The performance of all Project traffic arrangements must be monitored during construction.

38. Road Condition Reports

Prior to construction commencement, road condition surveys and reports on the condition of roads and footpaths to be affected by construction shall be prepared. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear, shall be repaired at the Proponent's expense.

39. Road Safety Audit

A Road Safety Audit shall be undertaken as part of the detailed design process and on completion of construction. The Road Safety Audit shall include but not be limited to a detailed assessment of:

- a) sight distances associated with the bus zone on Railway Street
- b) sight distances associated with the new kiss and ride area and bike hoops on Hattersley Street.

CoA Condition

The Road Safety Audit is to be submitted to and accepted by TfNSW. The findings of the Road Safety Audit shall be provided to Bayside Council for information.

Urban Design and Landscaping

40. Urban Design Plan and Landscaping Plan

An Urban Design Plan and Landscaping Plan is to be submitted to TfNSW and endorsed by the Precincts and Urban Design team. The Urban Design Plan is to address the fundamental design principles as outlined in *Around the Tracks – urban design for heavy and light rail*, TfNSW, Interim 2016. The Urban Design Plan and Landscaping Plan shall:

- a) demonstrate a robust understanding of the site through a comprehensive site analysis to inform the design direction, demonstrate connectivity with street networks, transport modes, active transport options, and pedestrian distances
- b) identify opportunities and challenges
- c) establish site specific principles to guide and test design options
- d) demonstrate how the preferred design option responds to the design principles established in 'Around the Tracks', including consideration of Crime Prevention through Environmental Design Principles.

The Urban Design Plan and Landscaping Plan is to include the Public Domain Plan for the chosen option and will provide analysis of:

- a) the landscape design approach including design of pedestrian and bicycle pathways, street furniture, interchange facilities, new planting and opportunities for public art
- b) the Materials Schedule including materials and finishes for proposed built works, colour schemes, paving and lighting types for public domain, fencing and landscaping
- c) an Artist's Impression or Photomontage to communicate the proposed changes to the precinct.

The following design guidelines are available to assist and inform the Urban Design Plan and Landscaping Plan for the Project:

- a) *TAP Urban Design Plan Guidelines*, TfNSW, Draft 2018
- b) *Commuter Car Parks, Urban Design Guidelines*, TfNSW, Interim 2017
- c) *Managing Heritage Issues in Rail Projects Guidelines*, TfNSW, Interim 2016
- d) *Creativity Guidelines for Transport Systems*, TfNSW, Interim 2016
- e) *Water Sensitive Urban Design Guidelines for TfNSW Projects*, 2016.

Endorsement of the Urban Design Plan and Landscaping Plan will demonstrate compliance with the Conditions of Approval in the EIA.

The Urban Design Plan and Landscaping Plan shall be:

- i) prepared prior to concept design and finalised
- ii) prepared in consultation with Local Council and relevant stakeholders
- iii) prepared by a registered Architect and/or Landscape Architect.