

# Transport Access Program **Unanderra Station Upgrade**

## Determination Report



*Artist's impression of the proposed Unanderra Station Upgrade, subject to detailed design*



# **Unanderra Station Upgrade – Determination Report**

**Transport Access Program**

**Ref – 6494683**

## Contents

<b>Glossary and abbreviations</b>	<b>4</b>
<b>Executive summary</b>	<b>5</b>
<b>1. Introduction</b>	<b>7</b>
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
<b>2. Consultation and assessment of submissions</b>	<b>11</b>
2.1. REF public display	11
2.2. REF submissions	12
2.3. Consideration and response to submissions	12
2.4. Future consultation	19
<b>3. Consideration of the environmental impacts</b>	<b>21</b>
3.1. NSW Environmental Planning and Assessment Act 1979	21
3.2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999	21
<b>4. Conditions of Approval</b>	<b>22</b>
<b>5. Conclusion</b>	<b>23</b>
<b>Determination</b>	<b>24</b>
<b>References</b>	<b>25</b>
<b>Appendix A      Review of Environmental Factors</b>	<b>26</b>
<b>Appendix B      Conditions of Approval</b>	<b>27</b>

### Document control

<b>Status:</b>	Final
<b>Date of issue:</b>	September 2020
<b>Revision:</b>	0.2
<b>Document author:</b>	Jessica Jackson, Chris Jack
<b>Document reviewers:</b>	Louise Sureda, Rosemary Snowdon, Natalie Moore, Ben Groth, Dean Lord, Zoe Rourke, Nigel Cocks, Ben Grogan, Michelle Quinn

© Transport for NSW

## Figures

Figure 1 Planning approval process .....	8
Figure 2 Key features of the Proposed Activity (indicative only, subject to detailed design) .	10

## Tables

Table 1 Response to community submissions received .....	12
Table 2 Response to other stakeholder submissions received.....	18

## Glossary and abbreviations

Term	Meaning
<b>ATAC</b>	Accessible Transport Advisory Committee
<b>BC Act</b>	<i>Biodiversity Conservation Act 2016 (NSW)</i>
<b>CBD</b>	Central Business District
<b>CCTV</b>	Closed Circuit Television
<b>CEMP</b>	Construction Environmental Management Plan
<b>CLMP</b>	Community Liaison Management Plan
<b>CoA</b>	Condition of Approval
<b>Construction Contractor</b>	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.
<b>CPTED</b>	Crime Prevention Through Environmental Design
<b>DDA</b>	<i>Disability Discrimination Act 1992 (Cwlth)</i>
<b>Detailed design</b>	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).
<b>Determination Report</b>	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.
<b>DSAPT</b>	<i>Disability Standards for Accessible Public Transport (2002)</i>
<b>EIS</b>	Environmental Impact Statement
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
<b>EP&amp;A Regulation</b>	<i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
<b>Infrastructure SEPP</b>	<i>State Environmental Planning Policy (Infrastructure) 2007 (NSW)</i>
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local Government Area
<b>NES</b>	Matters of 'National Environmental Significance' under the EPBC Act
<b>NSW</b>	New South Wales
<b>Proponent</b>	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.
<b>Proposed Activity</b>	The construction and operation of the Unanderra Station
<b>REF</b>	Review of Environmental Factors
<b>SES</b>	State Emergency Service
<b>TAP</b>	Transport Access Program
<b>Transport for NSW</b>	Transport for New South Wales (the Proponent)

# Executive summary

---

## Overview of Proposed Activity

Transport for NSW is the Proponent for the Unanderra Station Upgrade (the 'Proposed Activity'), which is part of the Transport Access Program. The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The program provides:

- stations that are accessible to people with disabilities, are less mobile, parents/carers with prams, and customers with luggage
- modern buildings and facilities for all modes that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers between transport modes for all customers
- safety improvements including extra lighting, lift alarms, fences and security measures at stations

Unanderra 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 proposed upgrade work would provide:

- three new lifts connecting to the existing footbridge, with canopies for weather protection at the lift landings
- modifications to the existing footbridge, including regrading of the deck and replacement of stair treads and handrails
- platform modifications, including minor platform regrading and line marking of boarding assistance zones on Platform 1 and 2
- modification of the existing station building layout for the provision of a new family accessible toilet
- provision of an accessible kiss and ride bay on Berkeley Road (east), with a new access path to the station entrance including new kerb ramps
- provision of an accessible kiss and ride bay on Berkeley Road (west), including a widened footpath and a kerb ramp
- conversion of the existing non-compliant DDA parking spaces on Berkeley Road (west) into three accessible parking spaces with shared zones
- provision of accessible footpaths on Berkeley Road (west) between the station entrance, kiss and ride, bus zone and accessible parking spaces.

Transport for NSW, as the Proponent for the Proposed Activity, has undertaken a Review of Environmental Factors (REF) that details the scope of work and environmental impacts associated with the Proposed Activity. The REF was prepared by pitt&sherry 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).

No modifications have been made to the Proposed Activity since the REF was prepared, however modifications may be considered during the detailed design phase.



Should design modifications be required as a result of the detailed design process, these modifications would be assessed to determine consistency with the Proposed Activity (as approved), 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 Unanderra 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 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

Transport for NSW is the Proponent for the Unanderra Station Upgrade (the 'Proposed Activity'), which is part of the Transport Access Program. The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The program provides:

- stations that are accessible to people with disabilities, are less mobile, parents/carers with prams, and customers with luggage
- modern buildings and facilities that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers for all customers
- safety improvements including extra lighting, lift alarm, fences and security measures at stations.

Unanderra 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 the platform 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 Unanderra Station Upgrade (referred to as the 'Proposed Activity' for the purposes of this document). A description of the Proposed Activity is provided in Section 1.4.

## 1.2. Review of Environmental Factors

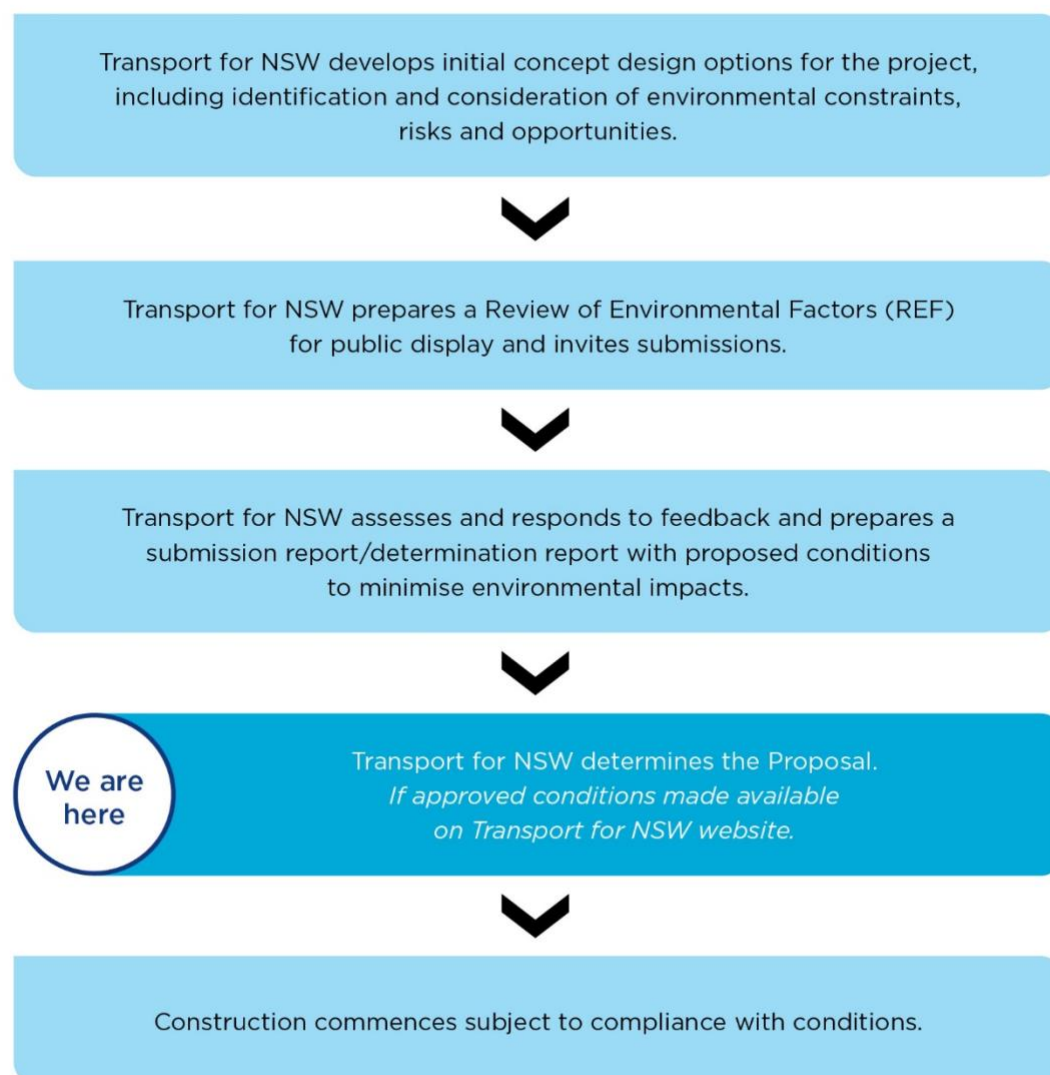
A Review of Environmental Factors (REF) has been prepared by pitt&sherry on behalf of Transport for NSW in accordance with Sections 5.5 and 5.7 of the *Environmental Planning and Assessment 1979* (EP&A Act), and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), 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 Unanderra Station Upgrade REF was placed on public display from 20 July 2020 to 3 August 2020, with 42 submissions received. 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 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*.

## **1.4. Description of the Proposed Activity in the REF**

The Proposed Activity is located in the Wollongong Local Government Area (LGA) in the suburb of Unanderra. Unanderra station is approximately 5.2 kilometres south west of the Wollongong Central Business District (CBD) and 73 kilometres south west of the Sydney CBD.

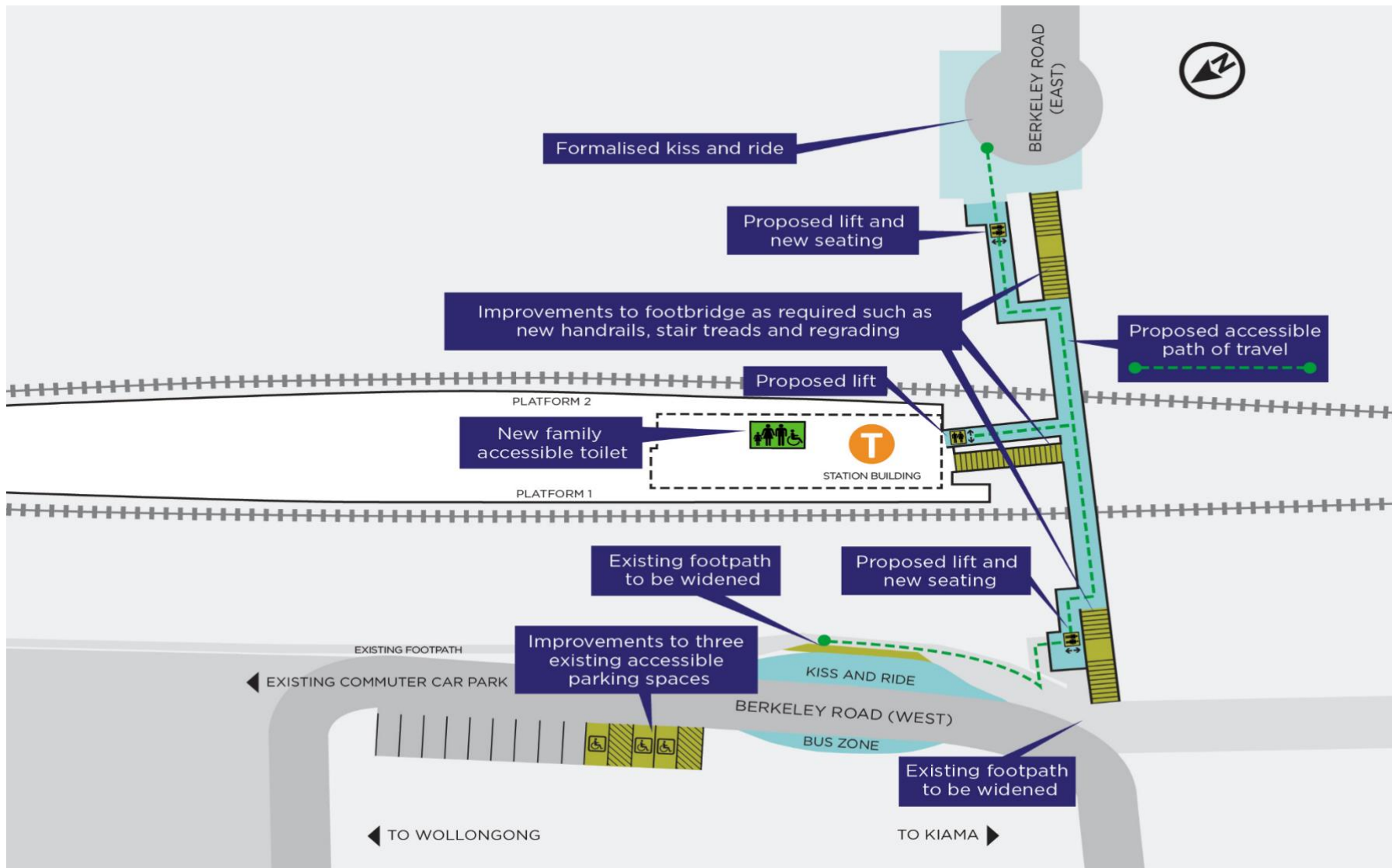
The Proposed Activity would provide safe and equitable access to the platform and to the pedestrian network surrounding the station. Customer facilities and amenities would also be improved. The upgrade would also assist in supporting growth in public transport use and would provide an improved customer experience for existing and future users of the station.

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

- installation of three new lifts connecting to the existing footbridge, with canopies for weather protection at the lift landings
- modifications to the existing footbridge, including regrading of the deck and replacement of stair treads and handrails
- construction of elevated walkways between the new lifts and the footbridge
- platform modifications, including minor platform regrading and line marking of boarding assistance zones on Platform 1 and 2 and relocation of two benches
- modification of the existing station building layout for the provision of a new family accessible toilet and a new staff unisex ambulant toilet, a Station Services Equipment Room (SSER) and store room
- provision of an accessible kiss and ride bay on Berkeley Road (east), with a new access path to the station entrance including new kerb ramps
- provision of an accessible kiss and ride bay on Berkeley Road (west), including a widened footpath and a kerb ramp
- conversion of the existing non-compliant DDA parking spaces on Berkeley Road (west) into three accessible parking spaces with shared zones
- provision of accessible footpaths on Berkeley Road (west) between the station entrance, kiss and ride, bus zone and accessible parking spaces.

A schematic outlining the key features of the Proposed Activity 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 mid-2021 and take around 18 months to complete.



**Figure 2 Key features of the Proposed Activity (indicative only, subject to detailed design)**

## 2. Consultation and assessment of submissions

---

### 2.1. REF public display

The Unanderra Station Upgrade REF was placed on public display from 20 July 2020 to 3 August 2020 on the Transport for NSW corporate website<sup>1</sup>. 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 undertaken for the public display which included:

- distribution of around 80 flyers to customers at the station and provision of 200 flyers to station staff to distribute
- flyers letterbox dropped to businesses and residential properties within a 500m radius of Unanderra Station
- doorknock local businesses within a 200m radius of Unanderra Station on 21 July 2020
- installation of project signage at Unanderra Station
- public display of the REF online<sup>1</sup>
- advertising in the Illawarra Mercury on 21 July 2020 and 28 July 2020 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
- geo-targeted social media support on the Transport for NSW Facebook page
- a dedicated project webpage on the Transport for NSW corporate website, with a feedback box for easy submission of feedback
- a briefing to Wollongong City Council officers on 9 July 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 Wollongong City Council. The letter also sought Council's feedback regarding particular aspects of the Proposed Activity in accordance with the consultation requirements under clauses 13 and 15 of *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 (SES). The letter also sought feedback regarding particular aspects of the Proposed Activity in accordance with the consultation requirements under clause 15AA of the Infrastructure SEPP.

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

## 2.2. REF submissions

A total of 42 submissions were received via letter, email and online submissions including the posted comments on the project website.

Community submissions are addressed in Table 1, while the submissions received from Wollongong City Council and the SES are addressed in Table 2.

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

- support for the Proposed Activity and/or improving accessibility at the station
- requests for additional canopies and shelters
- provision of additional commuter car parking
- improvements to lighting and security.

## 2.3. Consideration and response to submissions

### Community submissions

Table 1 Response to community submissions received

No.	Submission no.	Issue/s raised	Transport for NSW response
1	<b>General</b>		
1.1	UNAN002 UNAN006 UNAN009 UNAN010 UNAN011 UNAN012 UNAN013 UNAN014 UNAN020 UNAN021 UNAN024 UNAN026 UNAN033 UNAN034	Support for the Proposed Activity and/or for improving accessibility at the station.	Support for the Proposed Activity is noted.
1.2	UNAN001	Clarification of the plans for kerb ramps and consideration of road gradient.	The Proposed Activity includes construction of kerb ramps to the kiss and ride bays on Berkeley Road (east and west). The proposed kerb ramps would be designed and constructed to meet the requirements of the DSAPT.
1.3	UNAN003 UNAN006 UNAN010 UNAN013 UNAN020 UNAN021 UNAN027	Queries about construction start date. Request for the construction to start as soon as possible.	The construction of the Proposed Activity is expected to commence in mid-2021 and be delivered by late-2022.

No.	Submission no.	Issue/s raised	Transport for NSW response
	UNAN037		
1.4	UNAN013	Proposed Activity will make it easier for tourists to attend Nan Tien Temple.	Noted.
1.5	UNAN026 UNAN028 UNAN040	Noted previous security issues at Unanderra Station and requested additional lighting and CCTV.	The Proposed Activity includes the installation of additional lighting and CCTV cameras to provide coverage to meet security standards for new infrastructure.  The Proposed Activity would also be designed with regard to the Crime Prevention Through Environmental Design (CPTED) Principles and a security risk assessment would be undertaken as part of detailed design.
1.6	UNAN032 UNAN035 UNAN038	Noted stairs are slippery and unsafe in wet weather. Requests that dry non-slip surfaces are provided on stairs and walkway.	The condition of the stairs would be assessed during detailed design and the stair treads would either be replaced or modified to meet DSAPT standards.  Suitable material and finishes of the stairs and walkway would be selected during detailed design of the Proposed Activity.
1.7	UNAN040	Request for access to toilets when the station is unmanned.	Operational hours and station facilities are managed by Sydney Trains. This feedback will be passed onto Sydney Trains for consideration.
<b>2</b>	<b>Design</b>		
2.1	UNAN002 UNAN007 UNAN015 UNAN016 UNAN017 UNAN019 UNAN023 UNAN027 UNAN028 UNAN029 UNAN030 UNAN032 UNAN035 UNAN036 UNAN038 UNAN040	Requests that the footbridge walkway, stairs, bus stop, lift entrances and kiss and ride zones are weather-proof to protect commuters from adverse weather.	Canopies are proposed at the lift landings to provide weather protection at the waiting areas.  Additional canopies will be investigated over the footbridge walkway, stairs, bus stop and kiss and ride areas during detailed design.
2.2	UNAN004	Request for design to be a level crossing.	The focus of the Proposed Activity is to improve accessibility to meet the standards of the DDA and DSAPT.  Level crossings represent significant collision potential for pedestrians, road and rail users (Transport for NSW, 2018).



No.	Submission no.	Issue/s raised	Transport for NSW response
			Transport for NSW's approach is to avoid constructing new level crossings wherever possible given the inherent risk attached to any level crossing, even those with modern active controls (Transport for NSW, 2018).
2.3	UNAN005	Request for elevated pedestrian access to be extended to the western side of the Princes Highway to improve pedestrian safety and minimise traffic congestion at the intersection between the Princes Highway and Berkeley Road (west).	<p>An extension of the footbridge to the western side of the Princes Highway would significantly increase the scope, cost and impact of the Proposed Activity.</p> <p>To establish a lift on the western side of the Princes highway would likely result in substantial impacts to private properties in order to establish stair and lift infrastructure. Furthermore cars would still need to complete right hand turns from the Princes Highway to access the commuter car park.</p>
2.4	UNAN008	Request for the platform to be lengthened to fit the new 8-10 car intercity trains.	<p>An extension of the station platform is outside the scope of the Proposed Activity.</p> <p>Transport for NSW's New Intercity Fleet (NIF) project assesses modifications and upgrades needed to existing infrastructure to accommodate the NIF trains, this includes platform extensions. The NIF project has not identified Unanderra Station for a platform extension. The feedback will be passed onto the NIF project team.</p> <p>The New Intercity Fleet will feature enhanced safety features including automatic selective door operation technology, which ensures only the train doors positioned at the platform will open.</p>
2.5	UNAN018	Request that consultation be conducted with those who have disabilities to ensure design meets their safety and access needs.	<p>Early community consultation was undertaken from 31 March to 24 April 2020. Feedback gathered will be used to inform detailed design.</p> <p>In addition, Transport for NSW consults with the Accessible Transport Advisory Committee (ATAC), which includes representatives from disability and ageing organisations, who provide expert guidance to Transport for NSW on access and inclusion.</p>
2.6	UNAN020 UNAN021	Request to widen footpath to the existing car park. Path is often overgrown.	<p>The footpath would be widened at the proposed kiss and ride area west of the station to allow for kerb ramp accessibility and at the base of the stairs west of the station. No other footpath upgrades are included in the scope of work for the Proposed Activity.</p> <p>The footpath between the car park and the station is maintained by Wollongong City Council. The feedback will be passed onto Council.</p> <p>The overgrown vegetation comes from within the rail corridor which is maintained by</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			Sydney Trains. This feedback will be passed onto Sydney Trains.
2.7	UNAN022	Request a painted pedestrian crossing to access the station.	The detailed design process would include a Road Safety Audit to ensure safe vehicle and pedestrian movements. Any recommendations for improvement of pedestrian safety would be implemented as required.
2.8	UNAN022 UNAN028	Request for additional accessible parking.	The Proposed Activity includes upgrading the non-compliant accessible parking into three DDA compliant accessible parking spaces with shared zones.  Further consultation and monitoring would be undertaken, following construction, to determine if the demand for disability parking is higher than availability.
2.9	UNAN022 UNAN025 UNAN026 UNAN038 UNAN039 UNAN040	Request expanding the current car park or adding parking south and east of the station to cater for increased demand.	The focus of the Proposed Activity is to improve accessibility to meet the standards of the DDA and DSAPT. The scope of the Proposed Activity does not include the provision of additional commuter parking. Commuter parking requirements are assessed by Transport for NSW on a network wide basis and consider current and future demand, proximity to other car parking spaces and the feasibility of providing parking. This feedback will be passed onto the relevant Transport for NSW department for consideration in future planning.
2.10	UNAN023 UNAN028 UNAN030	Request installation of additional Opal readers at the station in covered areas and more spaced out to ease peak hour congestion.	Two Opal readers and one Opal Top up machine are available at the station, both are currently undercover. No additional Opal facilities are proposed to be installed at the station.  The feedback will be passed onto Transport for NSW Passenger Information for further consideration.
2.11	UNAN028	Request parking for parents with prams.	The scope of the Proposed Activity does not include additional parking spaces for parents with prams.
2.12	UNAN031	Requests the station upgrade include bike lockers for commuters.	Bike lockers are currently available near Unanderra Station, next to the commuter car park. The Proposed Activity would not impact the bike lockers.  Additional bike hoops/racks would be considered during detailed design.
2.13	UNAN038	Request for a taxi rank to be established at the station.	An existing taxi rank is located on Berkeley Road (east). The Proposed Activity includes new and formalised kiss and ride bays at each side of the station. These bays would be accessible for taxis to stop for up to two minutes to pick up and drop off commuters.

No.	Submission no.	Issue/s raised	Transport for NSW response
<b>3</b>	<b>Traffic and transport</b>		
3.1	UNAN038	Noted that the references in Section 2.2.3 of the REF to Bus Routes 35 and 36 (Daily Bus Frequencies - Bitzios, 2020) are the only routes relevant to the Unanderra catchment.	<p>Bus Routes 31, 33, 34, 37 and 855 have two bus stops on each side the Princes Highway, about 170 metres from the station. Bus Route 36 has two bus stops on Tannery Street about 150 metres from the station. These bus stops service the Unanderra area and are in close proximity to Unanderra Station.</p> <p>The Proposed Activity would temporarily disrupt Route 35 from accessing the bus stop adjacent Unanderra Station during construction. A temporary bus stop will be provided.</p>
3.2	UNAN038	A comment that timing and frequency of bus services are not compatible with Unanderra Station arrivals and departures.	<p>The frequency and timing of buses at the station is outside the scope of the Proposed Activity.</p> <p>The feedback will be passed onto the relevant department within Transport for NSW for further consideration.</p>
3.3	UNAN038	Noted Section 2.9 of the REF (Travel Mode Choices - Bitzios, 2020), did not include Figtree in the catchment area for Census Journey to Work Data.	<p>It is noted that Figtree wasn't included in the catchment area. The catchment area included the suburbs of Berkeley, Cordeaux Heights, Farmborough Heights and Unanderra. Figtree was not included as the suburb extends much further north and majority of the suburb is closer to Wollongong Station or Coniston Station, both of which have more frequent services.</p> <p>The addition of Figtree to the catchment would bring the census data population of the combined area to be about 33,000. Of the people who responded that they travel to work, averages would increase to about 77% use a vehicle to travel to work as a driver or passenger and only about 10% of the population use the train.</p> <p>The focus of the Proposed Activity is to improve accessibility to meet the standards of the DDA, which would improve accessibility for residents in Figtree wishing to utilise Unanderra Station.</p>
<b>4</b>	<b>Landscape and visual amenity</b>		
4.1	UNAN020 UNAN021	Preference for shade from existing trees or new plantings for the kiss and ride waiting area Berkeley Road (west).	<p>The two trees identified for removal would be offset with a minimum of eight trees. All vegetation planted on-site would consist of locally endemic native species.</p> <p>During detailed design, further investigations on the position of the kerb ramps and path widening on Berkeley Road (west) would determine if vegetation removal is required.</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			<p>Disturbance of vegetation would be limited to the minimum amount necessary to construct the Proposed Activity.</p> <p>If the removal of vegetation is necessary, all vegetation would be offset in accordance with Transport for NSW's <i>Vegetation Offset Guide</i> (Transport for NSW, 2019).</p>
<b>5.</b>	<b>Construction</b>		
5.1	UNAN029	Request that Transport for NSW seek feedback from the community whilst construction is being undertaken.	<p>Should Transport for NSW proceed with the Proposed Activity, consultation activities would continue, including notifying residents, businesses and community members before and during construction.</p> <p>Members of the Transport for NSW project team would be available at all times during the upgrade via the Project Infoline channels (1800 684 490 / <a href="mailto:projects@transport.nsw.gov.au">projects@transport.nsw.gov.au</a>).</p>
<b>6.</b>	<b>Biodiversity</b>		
6.1	UNAN020 UNAN021	Requests the footpath on Berkeley Road (west) is not widened to avoid impacting vegetation.	<p>Two trees have been identified for removal as part of the Proposed Activity.</p> <p>During detailed design, further investigations into the position of the kerb ramps and path widening on Berkeley Road (west) would determine if vegetation removal is required.</p> <p>Disturbance of vegetation would be limited to the minimum amount necessary to construct the Proposed Activity.</p> <p>If the removal of vegetation is necessary, all vegetation would be offset in accordance with Transport for NSW's <i>Vegetation Offset Guide</i> (Transport for NSW, 2019).</p> <p>The two trees identified for removal would be offset with a minimum of 8 trees. All vegetation planted on-site would be locally endemic native species.</p>
6.2	UNAN020 UNAN021	Objection to the removal of the Eucalypt and Acacia due to high habitat value.	<p>The Proposed Activity would require the removal of two trees (Scribbly Gum (<i>Eucalyptus haemastoma</i>) and Sydney Golden Wattle (<i>Acacia longifolia</i>). The two trees were assessed as having low retention value and would have a negligible impact on native flora and fauna within the locality.</p> <p>During detailed design, further investigations on the position of the kerb ramps and path widening on Berkeley Road (west) would determine if the above mentioned vegetation removal is required.</p> <p>If the removal of vegetation is necessary, all vegetation shall be offset in accordance with Transport for NSW's <i>Vegetation Offset Guide</i> (Transport for NSW, 2019).</p>

No.	Submission no.	Issue/s raised	Transport for NSW response
			The two trees identified for removal would be offset with a minimum of 8 trees. All vegetation planted on-site would be locally endemic native species.
6.3	UNAN020 UNAN021	Noted that Kookaburras, Black-faced Cuckoo-shrikes, Bower Birds, King Parrots and New Holland Honey Eaters are in the area.	<p>The vegetation within the boundaries of the Proposed Activity does not provide important resources, including habitat or food source, for any threatened fauna species or migratory bird species previously recorded or predicted to occur in the locality given:</p> <ul style="list-style-type: none"> <li>no appropriate habitat was identified within the Proposed Activity site</li> <li>isolated patch of vegetation with low connectivity to habitat in the surrounding area.</li> </ul> <p>During detailed design, further investigations on the position of the kerb ramps and path widening on Berkeley Road (west) would determine, if vegetation removal is required.</p> <p>If the removal of vegetation is necessary, all vegetation shall be offset in accordance with Transport for NSW's <i>Vegetation Offset Guide</i> (Transport for NSW, 2019).</p> <p>Construction of the Proposed Activity would be undertaken in accordance with the Transport for NSW <i>Fauna Management Guideline</i> (Transport for NSW, 2015). Should any species of fauna be discovered during necessary vegetation removal, work would stop and species would be relocated.</p>
6.4	UNAN020	Notes grey snakes under the stairs.	Construction of the Proposed Activity would be undertaken in accordance with the Transport for NSW <i>Fauna Management Guideline</i> (Transport for NSW, 2019). Should any species of fauna be discovered during necessary vegetation removal, work would stop and species would be relocated.

## Other stakeholder submissions

**Table 2 Response to other stakeholder submissions received**

Issue no.	Stakeholder	Issue/s raised	Transport for NSW response
<b>1</b>	<b>General</b>		
1.1	Wollongong City Council	Supports the improvements to access Unanderra Station and have been lobbying for improved access.	Support for the Proposed Activity is noted.

Issue no.	Stakeholder	Issue/s raised	Transport for NSW response
<b>2</b>	<b>Design</b>		
2.1	Wollongong City Council	Noted that in previous discussions the proposed lifts would be of sufficient size to allow riders and their bikes to cross rail line.	The size of the lifts allow space for bikes to utilise the footbridge lifts to cross the rail line.
<b>3</b>	<b>Hydrology</b>		
3.1	SES	Notes that the proposed works appear to have minimal risk to NSW SES response operations and does not contribute to increasing risk.	Noted
3.2	SES	Notes site design and stormwater management should minimise any risk to the community and should ensure commuters are aware of the flood risk (i.e. through an appropriate business emergency plan).	The Allans Creek Flood Study prepared for Wollongong City Council (Cardno Lawson Treloar 2008) indicates that although the rail corridor experiences inundation due to flood water, the railway structures would remain above the water surface profile during the 100-year ARI flood event.  The design has considered the potential impacts of flooding on the operation of the Proposed Activity. Further investigations would be undertaken during the detailed design stage to ensure potential risks to operational activities and equipment are addressed.

## 2.4. Future consultation

Should Transport for NSW proceed with the Proposed Activity, consultation activities would continue, including consultation with Wollongong City Council (or other 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 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 work, 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 [TfNSW email address](mailto:projects@transport.nsw.gov.au)<sup>2</sup> and Transport for NSW Infoline (1800 684 490) would continue to be available during the construction phase. Targeted consultation methods, such as use of

<sup>2</sup> [projects@transport.nsw.gov.au](mailto:projects@transport.nsw.gov.au)



letters, notifications, signage and verbal communications, would continue to occur. The Transport for NSW project website<sup>3</sup> would also include updates on the progress of construction.

<sup>3</sup> <https://www.transport.nsw.gov.au/projects/current-projects/unanderra-station-upgrade>

### **3. Consideration of the environmental impacts**

---

#### **3.1. 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?*<sup>4</sup> 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.

#### **3.2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999**

As part of the consideration of the Proposed Activity, all matters of national environmental significance (NES) and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to NES matters, 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 NES.

<sup>4</sup> Refer to the National Library of Australia's 'Trove' website  
<http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648>

## **4. Conditions of Approval**

---

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

## 5. Conclusion

---

Having regard to the assessment in the REF, consideration of the submissions received, 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 (EIS) 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 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

---

## Unanderra Station Upgrade

### APPROVAL

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

1. Have examined and considered the Proposed Activity in the *Unanderra Station Upgrade Review of Environmental Factors* (July, 2020) and the *Unanderra 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 *Unanderra Station Upgrade Review of Environmental Factors* (July, 2020).



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

Date: 11 September 2020

## References

---

- Bitzios Consulting 2020, *Unanderra Station Upgrade Transport Access Program Traffic Impact Assessment*, Sydney
- Cardno Lawson Treloar 2008, *Allans Creek Flood Study Addendum 1*
- Eco Logical Australia 2020, *Unanderra Station Arboricultural Impact Assessment*, Sydney
- Envisage Consulting, 2020, *Unanderra Station Landscape Character and Visual Impact Assessment*, Sydney
- Muller Acoustic Consulting 2020, *Unanderra Station Upgrade Noise and Vibration Impact Assessment*, Sydney
- pitt&sherry, 2020, *Unanderra Station Upgrade Review of Environmental Factors*, Sydney
- Transport for NSW, 2019, *Fauna Management Guideline*, Sydney
- Transport for NSW, 2018, *Level Crossing Safety: Construction of New Level Crossings Policy*, Online <https://www.transport.nsw.gov.au/projects/programs/level-crossing-safety>
- Transport for NSW, 2019, *Vegetation Offset Guide*, Sydney



## **Appendix A      Review of Environmental Factors**

Please refer to the Transport for NSW website to access the Unanderra Station Upgrade REF (Desksite6450098):

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

## **Appendix B      Conditions of Approval**

## CONDITIONS OF APPROVAL

### Unanderra Station Upgrade

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

#### Schedule of acronyms and definitions used:

Acronym	Definition
ADEIA	Transport for NSW Associate Director Environmental Impact Assessment (or nominated delegate)
ADEM	Transport for NSW Associate Director Environmental Management (or nominated delegate)
ADSPD	Transport for NSW Associate Director Sustainability, Planning and Development (or nominated delegate)
AFC	Approved For Construction
ATAC	Accessible Transport Advisory Committee
CECR	Construction Environmental Compliance Report
CEMP	Construction Environmental Management Plan
CIR	Contamination Investigation Report
CLMP	Community Liaison Management Plan
CMP	Contamination 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 Environmental Protection Authority under the <i>Protection of the Environment Operations Act 1997</i> .
EMR	Environmental Management Representative
EMS	Environmental Management System
HIS	Heritage Interpretation Strategy
ISCA	Infrastructure Sustainability Council of Australia
ISO	International Standards Organisation
OEH	Former NSW Office of Environment and Heritage
ONVMP	Operational Noise and Vibration Management Plan
OOHWP	Out of Hours Works Protocol
PECM	Pre-Construction Environmental Compliance Matrix
POCR	Pre-Operational Compliance Report
RBL	Rating Background Level
REF	Review of Environmental Factors
SMP	Sustainability Management Plan

Acronym	Definition
<b>TAP</b>	Transport Access Program
<b>TfNSW</b>	Transport for NSW
<b>TMP</b>	Traffic Management Plan
<b>UDLP</b>	Urban Design and Landscaping Plan

Term	Definition
<b>Construction</b>	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 Transport for NSW 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).
<b>Contamination</b>	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.
<b>Designated Work</b>	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact work including jack hammering and compaction, for Construction.
<b>Emergency Work</b>	Includes work 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.
<b>Environmental Impact Assessment (EIA)</b>	The documents listed in Condition 1 of this approval.
<b>Environmental Management Representative (EMR)</b>	An independent environmental representative appointed to the Project or a delegate nominated by Transport for NSW.
<b>Feasible</b>	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.
<b>Noise Sensitive Receiver</b>	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.
<b>Project</b>	The construction and operation of the Unanderra Station Upgrade as described in the Environmental Impact Assessment.
<b>Proponent</b>	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.
<b>Reasonable</b>	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.

CoA	Condition
<b>General</b>	
<b>1.</b>	<p><b>Terms of Approval</b></p> <p>The Project shall be carried out generally in accordance with the environmental impact assessment (EIA) for this Project, which comprises the following documents:</p> <ul style="list-style-type: none"> <li>a) <i>Unanderra Station Upgrade – Review of Environmental Factors</i> (pitt&amp;sherry, July 2020)</li> <li>b) <i>Unanderra Station Upgrade – Determination Report</i> (pitt&amp;sherry, September 2020).</li> </ul> <p>In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.</p>
<b>2.</b>	<p><b>Project Modifications</b></p> <p>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 Transport for NSW, and any additional requirements from the assessment of the Project modification must be complied with.</p>
<b>3.</b>	<p><b>Statutory Requirements</b></p> <p>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.</p>
<b>4.</b>	<p><b>Construction Environmental Compliance Report</b></p> <p>A Construction Environmental Compliance Report (CECR) for the Project shall be prepared which addresses the following matters:</p> <ul style="list-style-type: none"> <li>a) compliance with the Construction Environmental Management Plan (CEMP) and these conditions</li> <li>b) compliance with any approvals or licences issued by relevant authorities for the construction of the Project</li> <li>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)</li> <li>d) environmental monitoring results, presented as a results summary and analysis</li> <li>e) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused</li> <li>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)</li> <li>g) details of any review and amendments to the CEMP resulting from construction during the reporting period</li> <li>h) any other matter as requested by the ADEM.</li> </ul> <p>The CECR shall:</p> <ul style="list-style-type: none"> <li>(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 Transport for NSW in relation to the CECR</li> <li>(ii) be submitted to the ADEM for approval upon completion of the EMR review period.</li> </ul> <p>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.</p> <p>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.</p>



## CoA Condition

### 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 Transport for NSW 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.

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 work 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 work 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 Transport for NSW /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.

## CoA Condition

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:

- i. 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
- ii. comply with the relevant requirements of *Environmental Management Plan Guideline – Guideline for Infrastructure Projects* (Department of Planning, Industry and Environment, 2020)
- iii. 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
- iv. include an Environmental Policy.

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

CoA	Condition
-----	-----------

- |  |  |
|--|--|
|  | <ol style="list-style-type: none"><li>3. a copy of the CEMP submitted to the Associate Director Environmental Management (ADEM) for approval upon completion of the EMR review period</li><li>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</li><li>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.</li></ol> |
|--|--|

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 (EMS).

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 Transport for NSW 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 Transport for NSW, 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
- 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 Transport for NSW 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.

## CoA Condition

### 13. Environmental Controls Map

An Environmental Controls Map (ECM) shall be prepared and implemented in accordance with Transport for NSW'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 (RBL) 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 Transport for NSW's *Construction Noise and Vibration Strategy* (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)

## CoA Condition

- 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 work 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 Transport for NSW *Construction Noise and Vibration Strategy* (ST-157)
- f) a description of how the effectiveness of actions and measures shall be monitored during the proposed work, 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.

### 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 –British Standard BS 7385-2:1993 *Evaluation and measurement for vibration in buildings Part 2* and 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 6472-2:1992 *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. Property Condition Survey

Subject to landowner agreement, property condition surveys shall be completed prior to piling, excavation or bulk fill or any vibratory impact work 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 25 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.

## CoA Condition

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

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).

### 21. 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 work in the vicinity of affected educational buildings are to be minimised.

## Contamination and Hazardous Materials

### 22. 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 work 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 22 and Condition 23.*

### 23. 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.

Work 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 22 and Condition 23.*

### 24. 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, Transport for NSW's *Chemical Storage and Spill Response Guidelines* (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



## CoA Condition

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.

### Erosion and Sediment Control

#### 25. 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 4<sup>th</sup> Edition* (Landcom, 2004).

### Heritage Management

#### 26. Aboriginal and Non-Aboriginal Heritage

If previously unidentified Aboriginal or non-Aboriginal heritage/archaeological items are uncovered during construction work, the procedures contained in the Transport for NSW *Unexpected Heritage Finds Guideline* (SD-115) shall be followed and all work 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). Work in the vicinity of the find shall not re-commence until clearance has been received from Transport for NSW and/or the Heritage Advisor.

### Flora and Fauna

#### 27. Removal of Trees or Vegetation

Separate approval, in accordance with Transport for NSW'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.

#### 28. Replanting Program

All cleared vegetation shall be offset in accordance with Transport for NSW'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.

### Lighting

#### 29. 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/car park/other infrastructure type
- 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

## CoA Condition

- 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 Transport for NSW's technical (design) team for acceptance.

## Sustainability

### 30. Sustainability Officer

A suitably qualified and experienced Sustainability Officer shall be appointed who is responsible for implementing the sustainability objectives for the Project.

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.

### 31. 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)
- 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).

### 32. Infrastructure Sustainability Council of Australia (ISCA) Ratings

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

## Traffic, Transport and Access

### 33. 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



## CoA Condition

- 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 (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 kiss-and-ride, taxi ranks and rail replacement bus stops if required, including appropriate signage to direct customers, in consultation with the relevant bus operator. Particular provisions should also be considered 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.

### 34. 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.

### 35. 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 detailed assessment of sight distances for vehicles and new kiss and ride area and mitigation measures proposed.

The Road Safety Audit is to be submitted to and accepted by Transport for NSW. The findings of the Road Safety Audit shall be provided to Wollongong City Council for information.

## Urban Design and Landscaping

### 36. Urban Design and Landscaping Plan

An Urban Design and Landscaping Plan (UDLP) for the Project shall be prepared and submitted to Transport for NSW for endorsement by the Precincts and Urban Design Team. The UDLP is to address the fundamental design principles as outlined in *'Around the Tracks' – urban design for heavy and light rail* (TfNSW, Interim 2016). At a minimum, the UDLP shall:

- a) demonstrate a robust understanding of the Project 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 UDLP is to include the Public Domain Plan for the chosen option and shall provide analysis of the:

## CoA Condition

- a) landscape design approach including design of pedestrian and bicycle pathways, street furniture, interchange facilities, new planting and opportunities for public art
- b) 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 UDLP for the Project:

- *TAP Urban Design Plan Guidelines* (TfNSW, Draft 2018)
- *Commuter Car Parks Urban Design Guidelines* (TfNSW, Interim 2017)
- *Managing Heritage Issues in Rail Projects Guidelines* (TfNSW, Interim 2016)
- *Creativity Guidelines for Transport Systems* (TfNSW, Interim 2016)
- *Water Sensitive Urban Design Guideline SD-106* (TfNSW, 2017).

Endorsement of the Urban Design Plan and Landscaping Plan will demonstrate compliance with the Conditions of Approval in the Review of Environmental Factors (REF) Determination Report.

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

## Site Specific Conditions

### 37. Heritage Management

The Transport for NSW Environment Manager (Heritage) shall be engaged in the detailed design process through attendance at relevant design meetings and review of key design milestones to ensure measures to reduce minor indirect visual impacts on Station Masters Residence are incorporated, including:

- alignment of the western lift and link structure columns and structural supports to the existing footbridge arrangements to avoid unnecessary visual clutter of structural elements and maintain maximum views through from Berkeley Road (west) to the Station Masters Residence
- investigate all opportunities to reduce the overall height of the lift structures
- a recessive material palette that is consistent with the station precinct should be adopted
- opportunities for forecourt and landscaping works to better integrate the Station Masters Residence in to the new western station entry to facilitate possible future activation of the Station Masters Residence by others.

### 38. Bushfire risk

Opportunities to minimise risk from bushfire during operation including consideration of the following during detailed design:

- relevant requirements for bushfire prone land
- limited use of timber
- urban design is to limit selection of large canopy trees close to buildings
- adequate ventilation to minimise risk of bushfire smoke impact.

### 39. Safety

During detailed design investigate the following opportunities to increase safety:

- a crossing location at Berkeley Road (west) to provide safe access between the station and the accessible parking spaces and bus stop
- an additional footpath next to accessible parking spaces to access shared manoeuvring area

CoA	Condition
	<ul style="list-style-type: none"> <li>• alternative pedestrian footpaths or traffic management from Commuter Car Park to station</li> <li>• speed humps, connected footpaths, pedestrian crossings and speed limits within the commuter carpark</li> <li>• additional signage and line marking on the single lane bridge on Berkeley Road (east) to clarify right of way and mitigate congestion</li> <li>• relocation of the proposed kiss and ride area on the eastern side of the station due to decreased manoeuvrability</li> <li>• investigate opportunities to improve lighting and CCTV coverage.</li> </ul>
<b>40.</b>	<b>Trees on Berkley Road (west)</b> During detailed design investigate the relocation of the kerb ramp on Berkeley Road (west) to avoid the need to remove two trees.
<b>41.</b>	<b>Bike hoops/racks</b> During detailed design investigate the opportunities to install bike hoops/racks.
<b>42.</b>	<b>Canopies</b> During detailed design investigate opportunities to provide additional canopy coverage.

END OF CONDITIONS