



Transport  
for NSW

# Narwee Station Upgrade

## Determination Report



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# Glossary and abbreviations

Term	Meaning
<b>CBD</b>	Central Business District
<b>CEMP</b>	Construction Environmental Management Plan
<b>CoA</b>	Condition of Approval
<b>Concept design</b>	The concept design is the preliminary design presented in the REF, which would be refined by the Contractor (should the Proposal proceed) to a design suitable for construction (subject to TfNSW acceptance)
<b>Contractor</b>	The Contractor for the Proposed Activity would be appointed by TfNSW to undertake the detailed design and construction of the Proposed Activity
<b>DDA</b>	<i>Disability Discrimination Act 1992 (Cwlth)</i>
<b>Detailed design</b>	Detailed design broadly refers to the process that the Contractor undertakes (should the Proposal proceed) to refine the concept design to a design suitable for construction (subject to TfNSW acceptance)
<b>DSAPT</b>	<i>Disability Standards for Accessible Public Transport (2002)</i>
<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>LGA</b>	Local Government Area
<b>MCA</b>	Multi-Criteria Assessment
<b>NES</b>	Matters of 'National Environmental Significance' under the EPBC Act
<b>Proponent</b>	A person or body proposing to carry out an activity under Part 5 of the EP&A Act – in this instance, TfNSW
<b>Proposed Activity</b>	The construction and operation of the Narwee Station Upgrade
<b>REF</b>	Review of Environmental Factors
<b>Roads and Maritime</b>	NSW Roads and Maritime Services (formerly Roads and Traffic Authority)
<b>SoHI</b>	Statement of Heritage Impact
<b>TGSI</b>	Tactile Ground Surface Indicators
<b>TfNSW</b>	Transport for NSW (the Proponent)
<b>TMP</b>	Traffic Management Plan

# Executive summary

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## Overview of Proposed Activity

Transport for NSW (TfNSW) is responsible for improving the customer experience of transport services, transport policy and regulation, planning and program administration, procuring transport services, and infrastructure and freight.

TfNSW is the Proponent for the Narwee Station Upgrade (the 'Proposed Activity'), which is part of the Transport Access Program. The 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 Proposed Activity involves the extension of the island platform at the eastern end of the station and the construction of new stairs, a lift and waiting area to provide an accessible path of travel to the platform. Other works include upgrades of station and interchange facilities to improve customer facilities and amenity. The improvements would in turn assist in supporting the growth in public transport use and would provide an improved customer experience for existing and future users of the station.

TfNSW, 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 AECOM on behalf of TfNSW, 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

No modifications have been made to the Proposal 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 Approved Project, 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 TfNSW, as the Proponent of the Narwee Station Upgrade, to determine whether or not to proceed with the Proposed Activity. TfNSW must make a determination in accordance with the provisions of Part 5 of the EP&A Act.

## Conclusion

Based on the assessments in the REF and a review of the submissions received from the community and stakeholders, it is recommended that the Proposed Activity be approved, subject to the mitigation measures included in the REF and the proposed Conditions of Approval. TfNSW 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

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## 1.1 Background

Transport for NSW (TfNSW) is the NSW Government's lead public transport agency that ensures planning and policy is fully integrated across all modes of transport in NSW. It manages a multi-billion dollar budget allocation for train, bus, ferry, light rail and taxi services and related infrastructure in NSW.

TfNSW is responsible for improving the customer experience of transport services, transport policy and regulation, planning and program administration, procuring transport services, infrastructure and freight.

On 23 April 2012, the Minister for Transport announced the Transport Access Program. The program provides a better experience for public transport customers across the State by ensuring infrastructure improvements are delivered in a co-ordinated and integrated way.

The Transport Access Program ensures the integrated planning and delivery of works with the aim of providing:

- stations that are accessible to people with a disability, those who are less mobile, parents/carers with prams and customers with luggage
- modern buildings and facilities for all transport modes that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers between all transport modes for all customers
- safety improvements including extra lighting, help points, fences and security measures for car parks and interchanges, including stations, bus stops and wharves
- signage improvements so customers can more easily use public transport and transfer between modes at interchanges
- other improvements and maintenance such as painting, new fencing and roof replacements.

TfNSW is the Proponent for the Narwee Station Upgrade (referred to as the 'Proposed Activity' for the purposes of this document).

## 1.2 Review of Environmental Factors

A Review of Environmental Factors (REF) has been prepared by AECOM on behalf of TfNSW, in accordance with sections 111 and 112 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 TfNSW 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 Narwee Station Upgrade REF was placed on public display from 4 April 2016 to 26 April 2016, with six 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 TfNSW must make a determination in accordance with Part 5 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:

- 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 TfNSW under the *Transport Administration Act 1988*:

- a) to plan for a transport system that meets the needs and expectations of the public
- b) to promote economic development and investment
- c) to provide integration at the decision-making level across all public transport modes
- d) to promote greater efficiency in the delivery of transport infrastructure projects
- e) to promote the safe and reliable delivery of public transport and freight services.

## 1.4 Description of the Proposed Activity in the REF

The Proposed Activity would include works to Narwee Station and interchange area which is located within the Canterbury and Hurstville Local Government Areas (LGAs). The station is located around 16 kilometres south-west of the Sydney Central Business District (CBD) in the suburb of Narwee.

Narwee Station and the surrounding interchange area currently do not meet key requirements of the *Disability Standards for Accessible Public Transport 2002* (DSAPT) or the *Commonwealth Disability Discrimination Act 1992* (DDA).

Stairs currently provide the only means of accessing the station platform via a pedestrian underpass, and are not accessible for people with reduced mobility, parents/carers with prams or customers with luggage. Existing wayfinding signage to bus stops, taxi ranks and kiss and ride facilities surrounding the station is also generally insufficient. In addition, there are safety issues associated with existing street crossings, lack of access from street kerbs in some locations and the absence of Tactile Ground Surface Indicators (TGSIs) at bus stops.

The Narwee Station Upgrade is required to provide safe and equitable access to the station platform and the surrounding pedestrian network; and would also improve customer facilities and amenity. The improvements would in turn assist in supporting the growth in public transport use and would provide an improved customer experience for existing and future users of the station.

An overview of the Proposed Activity, which is the subject of the Narwee Station Upgrade REF, is provided in the Executive Summary of this report. Full details of the Proposed Activity are set out in Chapter 3 of the REF.

In summary, the Proposed Activity as outlined in the REF comprises:

- extension of the island platform at the eastern end of the station to provide new stairs, a lift and waiting area
- installation of new canopies for weather protection above the new lift, stairs and waiting area, providing cover up to the existing Platform Building

- refurbishment of the Platform Building with a new family accessible toilet, a Customer Information Window and staff facilities to replace existing facilities in the Ticket Office (to be demolished)
- improvements to bicycle facilities including new shelters and additional bicycle racks
- provision of a new kiss and ride area, new kerb ramps and bus zone works (including new shelter) on Hannans Road
- upgrade of the two existing accessible parking spaces in the commuter car park off Hannans Road to ensure compliance with relevant standards
- provision of an accessible parking space, upgrade of the taxi rank and kiss and ride area, and installation of Tactile Ground Surface Indicators (TGSI's) at the raised pedestrian crossing on Hurst Place and Fisher Place
- ancillary works including localised platform regrading (as necessary), improvements to lighting and seating, improvement of station communication systems (including CCTV cameras), wayfinding signage, services diversion and/or relocation, station power supply upgrade, minor road/drainage works, fencing and landscaping.

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

Construction is expected to commence in 2016 and take around 18 months to complete.

## 2 Consultation and assessment of submissions

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### 2.1 REF public display

The Narwee Station Upgrade REF was placed on public display from 4 April 2016 to 26 April 2016 at five locations, as well as on the [TfNSW website](#)<sup>1</sup> and the NSW Government [Have Your Say website](#)<sup>2</sup>.

Community consultation activities undertaken for the public display included:

- distribution of 3,300 flyers to customers at the station/nearby residents and/or businesses on 4 April 2016
- installation of project signage at Narwee Station
- public display of the REF at Riverwood Library, Penshurst Library, the City of Canterbury and Hurstville City Council offices and the TfNSW Community Information Centre at 388 George Street, Sydney
- placement of an advertisement in the St George and Sutherland Shire Leader on 6 April 2016
- placement of information on the TfNSW website
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the TfNSW website, along with details on how to make a submission, was sent to the City of Canterbury Council and Hurstville City Council as per the consultation requirements under clause 13 and 14 of the Infrastructure SEPP.

### 2.2 REF submissions

A total of six submissions were received, including one from the City of Canterbury Council. Submissions included feedback on a range of issues in relation to the Proposed Activity. The key issues raised in submissions were:

- design of the Proposed Activity
- traffic, transport and access
- visual amenity and urban design
- amenities
- compound sites
- drainage.

### 2.3 Consideration and response to submissions

#### Community submissions

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

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<sup>1</sup> <http://www.transport.nsw.gov.au/projects-tap>

<sup>2</sup> <http://www.haveyoursay.nsw.gov.au>

**Table 1: Response to community submissions received**

Issue no.	Submission no.	Issue/s raised	TfNSW response
1	General		
1.1	NAR02	Noted that the lift seems to be expensive and money spent unwisely, and would only benefit a small percentage of the population.	<p>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. In addition, the Proposed Activity would help Narwee Station to fulfil legislative requirements under the <i>Disability Discrimination Act 1992</i> (Cth), which requires equitable access to the station platform (where currently access is provided only by stairs).</p> <p>During the development of the concept design, feasible alternatives were developed for consideration in consultation with Sydney Trains, Canterbury and Hurstville Councils, and internal TfNSW stakeholders. The design options were assessed using a Multi-Criteria Assessment (MCA) that included consideration of factors such as customer experience, accessibility, engineering constraints, modal integration and cost to select a preferred option.</p> <p>Following the workshops and review of MCA outcomes, a preferred option was selected to progress to the next stages of planning and design development.</p>
1.2	NAR03	Support for the Proposal, but requested a more specific timeframe of when the construction period would likely commence.	If approved, TfNSW would engage a Contractor who would prepare the detailed design. Construction of the Proposed Activity is then expected to start later in 2016.

Issue no.	Submission no.	Issue/s raised	TfNSW response
1.3	NAR05	Concerned that a construction period of 18 months (or 12 months with the station closure) is too long.	<p>Construction for the Proposed Activity is restrained due to working within an operational rail environment.</p> <p>Key construction activities such as the erection of the temporary pedestrian access bridge, demolition of the Ticket Office and installation of the lift need to be undertaken during rail possessions (which are scheduled closures of the rail network that occur regardless of the Proposed Activity), to ensure the safety of the workers and customers and to minimise disruptions to rail operations. Around six rail possessions over a period of around 18 months would be required to facilitate these and other construction activities as outlined in Section 3.2.3 of the REF.</p> <p>The use of an alternative construction option, which would use an extended (six week) temporary station closure, would reduce the overall program by up to six months. The decision to utilise this alternative construction option would be determined during detailed design and communicated to the public (if adopted) prior to works commencing (refer Condition of Approval (CoA) 42).</p> <p>Environmental and community impacts would be managed through the implementation of the requirements detailed in Section 7.2 of the REF and Appendix B of this document.</p>
<b>2 Traffic, transport and access</b>			
2.1	NAR01	Requested that the lift be wide enough to accommodate two wheel chairs at any one time and that lift waiting times are not too long.	<p>The proposed lift would be a 17 person lift designed to comply with the Australian Standards 1735.12-1994 <i>Lifts, escalators and moving walks – Facilities for persons with disabilities for accessibility</i>.</p>

Issue no.	Submission no.	Issue/s raised	TfNSW response
2.2	NAR02	Requested that dual sloping and moving ramps be installed instead of a lift.	<p>During the development of the concept design, feasible alternatives were developed for consideration in consultation with Sydney Trains, Canterbury and Hurstville Councils, and internal TfNSW stakeholders. The design options were assessed using a Multi-Criteria Assessment (MCA) that included consideration of factors such as customer experience, accessibility, engineering constraints, modal integration and cost to select a preferred option.</p> <p>Following the workshops and review of MCA outcomes, a preferred option was selected to progress to the next stages of planning and design development. Moving ramps were not considered a viable option given the limited space available at Narwee Station and the preference to maximise the available waiting area on the platform.</p>
2.3	NAR04	Concerns regarding the availability of parking for residences on Nirimba Avenue during construction. Requested that construction vehicles, machinery and/or equipment are not located within the Hannans Road commuter park.	<p>Impacts to parking around the station, which is used for a variety of purposes, would be minimised as far as practicable.</p> <p>Due to the constrained nature of the site, the Proposed Activity requires temporary changes to parking, which would include the use of up to 20 spaces within the Hannans Road commuter car park for a construction compound to accommodate a site office, amenities, laydown and storage area for materials as detailed in Section 3.2.7 of the REF. The location of the construction compounds would be confirmed during detailed design. Parking impacts would be temporary and minimised as far as practicable through the implementation of a construction Traffic Management Plan (refer CoA 33).</p>
2.4	NAR05	Requested that the Ticket Office be retained due to concerns about the distance from the top of the stairs to the proposed Customer Information Window.	<p>The Proposed Activity involves the demolition of the Ticket Office which is required to allow for the construction of new station facilities (i.e. lift and stairs), de-clutter the pedestrian circulation space and to provide additional waiting areas.</p> <p>Where necessary, the Opal card readers would be relocated close to the stair and lift access points to improve customer convenience (the locations of which would be determined during the detailed design).</p>

Issue no.	Submission no.	Issue/s raised	TfNSW response
2.5	NAR05	Requested that the Platform 2 tracks be adjusted to reduce the gap between the platform and carriage.	<p>As part of the Proposed Activity, regrading to achieve compliant platform gradients for safety reasons would be undertaken.</p> <p>Track adjustment and platform raising/widening to reduce the gap is not part of the scope for the Proposed Activity and is difficult to achieve given the different types of trains and the curvature of the track; however to assist in boarding or alighting from a train safely, portable platform-to-train boarding ramps are available at all stations. The ramp can be used by customers with prams, those with mobility issues or any other valid need, on request.</p> <p>If assistance to board the train is required, customers should contact their departure station and advise staff of their requirements and travel plan, so they are ready to assist. Customers should arrive at the station well before their train is scheduled and make themselves known to staff.</p>
2.6	NAR05	Requested that the new stairs are the same dimensions as the existing stairs.	<p>The proposed stairs would be of a comparable width to the existing stairs and constructed so they are compliant with the <i>Disability Standards for Accessible Public Transport 2002</i> (DSAPT) and other Australian design standards.</p> <p>The Proposed Activity has been designed to cater for the estimated 2036 daily patronage (plus 15 per cent) and the proposed stairs would adequately cater for the projected increase in customers in terms of pedestrian flows.</p>
2.7	NAR05	Suggested that the bicycle racks on the southern side of the station be placed so that the bicycles stand parallel to the fence to avoid obstructing the pathway between Fisher Place and Hurst Place.	This feedback would be considered during detailed design where the location of the bicycle racks on the southern side of the station would be confirmed in consultation with the City of Canterbury Council.

Issue no.	Submission no.	Issue/s raised	TfNSW response
<b>3</b>	<b>Visual amenity and urban design</b>		
3.1	NAR05	Noted that previous station upgrades at Narwee Station have been identified as unsympathetic. How can TfNSW ensure that this design will be sympathetic?	<p>The detailed design of the Proposed Activity would be undertaken by the Contractor with the input of suitably qualified architects and a heritage consultant to ensure that the design is sympathetic to the heritage and local setting.</p> <p>The design would be submitted to TfNSW's Urban Design and Sustainability Review Panel at various stages for review and approval. An Urban Design Plan (UDP) and Public Domain Plan (PDP) would also be prepared by the Contractor, to address urban design matters (refer CoA 36 and 37).</p> <p>With respect to heritage, a suitably qualified and experienced heritage consultant would also be engaged to provide input to, and review of the detailed design of the Proposed Activity (refer CoA 39).</p>
3.2	NAR05	Would the station platform include the use of Taurus and Cetus tiling around the edges only? Suggestion that bitumen be used for the platform finish.	It is proposed that Taurus and Cetus tiling be provided on the edge of the station platform, with the majority of the platform having a bitumen finish. These details would be confirmed during detailed design.
3.3	NAR05	Suggestion that the original subway tiles be recovered and reused in the final design.	<p>The original subway tiles would be retained where reasonably practicable. As required by mitigation measure 52, detailed in Section 7.2 of the REF, recent paint from subway tiles would be removed to re-expose the original Art Deco design and allow the original design to match the new modern tiles of the lift alcove.</p> <p>A suitably qualified and experienced heritage consultant would also be engaged to provide input to, and review of, the detailed design of the Proposed Activity to ensure that the design is in line with heritage best practice (refer CoA 39).</p>

Issue no.	Submission no.	Issue/s raised	TfNSW response
3.4	NAR05	The Platform Building is overwhelmed by the 2010 canopies. Canopies should have had the same roofline.	<p>The proposed design of the new replacement canopy is in keeping with the scale and form of the existing 2010 platform canopies, and would establish a visual cohesion at the eastern end of the platform with a more sympathetic join to the Platform Building. The canopy would form a prominent modern architectural element of the station with features such as glazing to reduce the bulk and ensure the canopy is visually recessive.</p> <p>Details regarding the existing canopies would be subject to further consideration and heritage assessment during the detailed design phase, with the intent of minimising impacts to heritage fabric associated with the Platform Building as far as reasonably practicable (refer CoA 39).</p>
<b>4 Customer amenity</b>			
4.1	NAR01	Suggestion that all station lifts have additional signage installed requesting that those able to use the stairs do so.	TfNSW have specific Wayfinding Signage Guidelines which define wayfinding across the entire Sydney Trains network in order to maintain consistency. Wayfinding signage at Narwee Station would be developed during the detailed design.
4.2	NAR05	Requested that Platform 2 should have its Guard Indicators replaced, which have been missing since the canopy installation.	The objective of the Proposed Activity is to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The replacement of guard indicators is outside the scope of the Proposed Activity, and is an operations and maintenance matter which is the responsibility of Sydney Trains.
4.3	NAR05	Concerned about the loss of available toilets and provided suggestions regarding the reconfiguration of the Platform Building.	As part of the Proposed Activity, a unisex and family accessible toilet will be installed in the Platform Building. While this would result in a net reduction in the number of toilets, it is sufficient for the current and anticipated future patronage at the station.
4.4	NAR05	Requested information about what is proposed in terms of platform security so that the toilets can be left unlocked.	Additional CCTV is proposed to improve station security. The operation and maintenance of station toilets is the responsibility of Sydney Trains. If toilets are locked, customers can contact the Station Manager on duty to request access.

Issue no.	Submission no.	Issue/s raised	TfNSW response
4.5	NAR05	Requested additional platform seating and weather protection at the western end of the platform.	<p>Additional seating would be provided as part of the Proposed Activity, and details of new seating locations would be confirmed during detailed design.</p> <p>It is not proposed to extend or install new canopies at the western end of the platform. However the existing and new canopies at the eastern end would provide adequate weather protection for customers.</p>

## Other stakeholder submissions

Table 2 outlines issues raised by the City of Canterbury Council in their submission, along with TfNSW's response.

**Table 2: Response to the City of Canterbury Council's submission**

Issue no.	Issue/s raised	TfNSW response
<b>1</b>	<b>Compound sites</b>	
1.1	<p>The northern compound appears to be located on land owned by State Rail and Council. Some of the State Rail land is leased by Council. At this stage it is assumed that the use can be accommodated under the terms of that lease.</p> <p>For Council to licence its land, TfNSW would need to comply with the <i>Local Government Act 1993</i>, which would require consideration of the classification and proposed use to ensure it is allowable. This would also involve a public exhibition of the leasing licence.</p> <p>Fees, charges and/or bonds may also apply for the use of Council land for temporary compound sites.</p>	<p>The final construction compound locations would be determined during detailed design, in consultation with Council and with regard to the existing licences. If the compounds are to be located in an alternate location to those nominated in the REF, then additional assessment would be undertaken in accordance with CoA 2.</p>
1.2	<p>Requested that the southern compound be relocated to within land owned by TfNSW. If this is not possible, Council requested that a detailed plan be provided to Council showing site boundaries, access points and laydown areas, and that pedestrian access be maintained in that location at all times.</p>	<p>The final construction compound locations would be determined during detailed design, in consultation with Council.</p> <p>Following determination of final compound locations, a construction Traffic Management Plan would also be prepared in consultation with Council which would outline project site boundaries, access points and laydown areas (refer CoA 33).</p> <p>As required by mitigation measure 11, detailed in Section 7.2 of the REF, communication would be provided to the community and local residents to inform them of changes to parking, pedestrian access and/or traffic conditions surrounding the Proposed Activity. Also refer CoA 7, which requires the preparation and implementation of a Community Liaison Plan that would further outline the communication measures to be implemented.</p>

Issue no.	Issue/s raised	TfNSW response
<b>2</b>	<b>Traffic, transport and access</b>	
2.1	Any new bus shelter or bus stop within the City of Canterbury should comply with the <i>Disability Standards of Accessible Transport 2002</i> under the <i>Disability Discrimination Act 1992</i> .	The Proposed Activity will be designed in accordance with the requirements of the <i>Disability Standards for Accessible Public Transport 2002</i> (DSAPT) and the <i>Disability Discrimination Act 1992</i> (Cth) as detailed in Section 3.1.3 of the REF.
2.2	<p>Concerns that the proposed bicycle rack on the southern side of the station appears to encroach onto the road reserve (i.e. Hurst Place). The proposed bicycle shelter should be clear of the assumed path of travel as well as being tucked up against the railway retaining wall.</p> <p>A detailed plan needs to be provided to Council in which the extent of the encroachment to the road reserve is made clear and/or demonstrate that there is no encroachment. Council will review the plan once received.</p>	This feedback would be considered during detailed design where the location of the bicycle racks on the southern side of the station would be confirmed, in consultation with the City of Canterbury Council.
2.3	The proposed changes to interchange facilities and parking require approval of the Canterbury Local Traffic Committee.	During the detailed design phase, a construction TMP would be prepared by the contractor's Traffic Engineer in consultation with Council and the Canterbury Local Traffic Committee (refer CoA 33). All operational changes would also be provided to Council for approval.
2.4	<p>The proposed kiss and ride area on the northern side of Hannans Road is not supported due to concerns that it is too close to the intersection of Hannans Road and Station Lane and that the Proposal would result in the loss of parking for residents.</p> <p>Council suggests that the kiss and ride area on the northern side of Hannans Road be relocated to the southern side of Hannans Road adjacent to the proposed kiss and ride area so that four kiss and ride spaces are provided on the southern side.</p>	<p>The proposed kiss and ride on the north side of Hannans Road has been selected so that kiss and ride from both directions of traffic flow can be accommodated. However, the final kiss and ride locations would be determined during detailed design and located at convenient and safe areas surrounding the station. The completion of a Road Safety Audit is also required (refer CoA 35).</p> <p>The Traffic, Transport and Access Impact Assessment (AECOM, 2016) prepared for the Proposed Activity determined that although the provision of two new kiss and ride spaces on the northern side of Hannans Road would require the removal of two untimed parking spaces, this would not have a major impact on the availability of street parking and that the demand for parking would likely be absorbed by other parking areas along local streets which are currently untimed.</p>

Issue no.	Issue/s raised	TfNSW response
2.5	The proposed accessible parking spaces within the Hannans Road commuter car park should comply with Australian Standard 2890.6:2009 <i>Parking facilities – Part 6: Off-street parking for people with disabilities</i> .	<p>The Proposed Activity will be designed in accordance with the requirements of the <i>Disability Standards for Accessible Public Transport 2002</i> (DSAPT) and the <i>Disability Discrimination Act 1992</i> (Cth) as detailed in Section 3.1.3 of the REF.</p> <p>Accessible parking spaces would comply with Australian Standard 2890.6:2009 <i>Parking facilities – Part 6: Off-street parking for people with disabilities</i>.</p>
2.6	Council note that the proposed kiss and ride area in Hurst Place is not required as there is already a kiss and ride provided.	<p>Noted. The Proposed Activity would consider further enhancements to the kiss and ride area including the potential provision of:</p> <ul style="list-style-type: none"> <li>• shelter</li> <li>• signage</li> <li>• CCTV</li> <li>• lighting.</li> </ul> <p>Details of the improvements would be confirmed during detailed design.</p>
2.7	The proposed installation of Tactile Ground Surface Indicators (TGSIs) at the raised pedestrian crossings on Fisher Place and Hurst Place have already been completed by Council as part of the Town Centre Upgrade and are therefore not required.	<p>During site investigations, Tactile Ground Surface Indicators (TGSIs) were identified at the southern end of Fisher Place, but were not confirmed to be present on Hurst Place. TGSIs details would be confirmed during detailed design and installed where needed.</p>
2.8	Concerned that the proposed upgrades to the accessible parking space and taxi rank on the eastern side of Hurst Place would not comply with Australian Standard 2890.5—1993 <i>Parking facilities—On-street parking</i> (Section 4.5.2).	<p>The Proposed Activity will be designed in accordance with the requirements of the <i>Disability Standards for Accessible Public Transport 2002</i> (DSAPT) and the <i>Disability Discrimination Act 1992</i> (Cth) as detailed in Section 3.1.3 of the REF.</p> <p>Accessible parking spaces would comply with Australian Standard 2890.5—1993 <i>Parking facilities—On-street parking</i>.</p>
<h3>3 Tree removal</h3>		
3.1	No objection to the removal of trees outlined in the REF. Request that these are replaced with 22 native trees as recommended in Section 6.7.3 of the REF.	<p>Tree removal would be undertaken in accordance with TfNSW's <i>Vegetation Management (Protection and Removal) Guideline</i> (2015).</p> <p>Native trees would be used for offsetting purposes in accordance with the <i>Vegetation Offset Guide</i> (TfNSW, 2013) and undertaken in consultation with the City of Canterbury Council.</p>

Issue no.	Issue/s raised	TfNSW response
<b>4</b>	<b>Drainage</b>	
4.1	Requested that detailed plans for the proposed connection to Council's stormwater network are provided to Council for assessment.	Details of the proposed connection to Council's stormwater network would be provided to the City of Canterbury Council during detailed design.
<b>5</b>	<b>Heritage</b>	
5.1	No objection to the Proposal from a heritage perspective.	Noted. A number of Conditions of Approval to protect heritage are included in Appendix B (refer CoA 21, 39 and 40).

## 2.4 Future consultation

Should TfNSW proceed with the Proposed Activity, consultation activities would continue, including consultation with the City of Canterbury Council and Hurstville City Council regarding design development. In addition TfNSW 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 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 [TfNSW email address](mailto:projects@transport.nsw.gov.au)<sup>3</sup> and TfNSW 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 [TfNSW website](http://www.transport.nsw.gov.au/projects-tap)<sup>4</sup> would also include updates on the progress of construction.

<sup>3</sup> [projects@transport.nsw.gov.au](mailto:projects@transport.nsw.gov.au)

<sup>4</sup> <http://www.transport.nsw.gov.au/projects-tap>

### 3 Consideration of the environmental impacts

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#### ***Environmental Planning and Assessment Act 1979***

The REF addresses the requirements of section 111 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 of the REF 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 112 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>5</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 Part 5.1 of the EP&A Act is not required.

#### ***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.

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

## **4 Conditions of Approval**

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

## 5 Conclusion

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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 is not required to be prepared under Part 5.1 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 Appendix B).

## References

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AECOM, 2016, *Narwee Station Upgrade Traffic, Transport and Access Impact Assessment*, Sydney

AECOM, 2016, *Narwee Station Upgrade Review of Environmental Factors*, Sydney

TfNSW, 2013, *Vegetation Offset Guide*, Sydney

TfNSW, 2015, *Vegetation Management (Protection and Removal) Guideline*, Sydney

# Appendix A      Review of Environmental Factors

Please refer to the TfNSW website to access the Narwee Station Upgrade REF:

<http://www.transport.nsw.gov.au/projects-tap/current-works/narwee>

# Appendix B    Conditions of Approval

## CONDITIONS OF APPROVAL

### Narwee Station Upgrade

Note: these conditions of approval must be read in conjunction with the final mitigation measures in the Narwee Station Upgrade Review of Environmental Factors.

#### Schedule of acronyms and definitions used:

Acronym	Definition
CECR	Construction Environmental Compliance Report
CEMP	Construction Environmental Management Plan
CLP	Community Liaison 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> .
ISO	International Standards Organisation
OEH	NSW Office of Environment and Heritage
OOHWP	Out of Hours Works Protocol
PCSR	Pre-Construction Sustainability Report
PDP	Public Domain Plan
PECM	Pre-Construction Environmental Compliance Matrix
POCR	Pre-Operational Compliance Report
PMEIA	TfNSW Principal Manager Environmental Impact Assessment (or nominated delegate)
PMEM	TfNSW Principal Manager Environmental Management (or nominated delegate)
PMS	TfNSW Principal Manager Sustainability (or nominated delegate)
RBL	Rating Background Level
REF	Review of Environmental Factors
TfNSW	Transport for NSW

Acronym	Definition
TMP	Traffic Management Plan
UDP	Urban Design 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 TfNSW PMEM 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).
<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 Works</b>	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction, for Construction.
<b>Emergency Work</b>	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 (indigenous or non-indigenous) item.
<b>Environmental Impact Assessment (EIA)</b>	The documents listed in Condition 1 of this approval.
<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 Narwee Station Upgrade as described in the Environmental Impact Assessment.
<b>Proponent</b>	A person or body proposing to carry out an activity under Part 5 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 number	Type
<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>Narwee Station Upgrade – Review of Environmental Factors</i>, (AECOM, April 2016)</li> <li>b) <i>Narwee Station Upgrade – Determination Report</i>, (AECOM, May 2016).</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 TfNSW. The Proponent shall comply with any additional requirements from the assessment of the Project modification.</p>
<b>3</b>	<p><b>Statutory Requirements</b></p> <p>These conditions do not relieve the Proponent of the 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 Proponent shall comply with the terms and conditions of such licences, permits, approvals and permissions.</p>
<b>4</b>	<p><b>Pre-Construction Environmental Compliance Matrix</b></p> <p>A Pre-Construction Environmental Compliance Matrix (PECM) for the Project (or such stages of the Project as agreed to by the Principal Manager Environmental Management (PMEM)) shall be prepared detailing compliance with all relevant conditions and mitigation measures prior to commencement of construction. The PECM shall also include details of approvals, licences and permits required to be obtained under any other legislation for the Project.</p> <p>A copy of the PECM shall be submitted to the PMEM for approval, at least 21 days prior to commencement of construction of the Project (or within such time as otherwise agreed to by the PMEM).</p>

5

**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 the *NSW Sustainable Design Guidelines – Version 3.0* compliance checklist (7TP-FT-249)
- c) compliance with any approvals or licences issued by relevant authorities for construction of the Project
- d) 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)
- e) environmental monitoring results, presented as a results summary and analysis
- f) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused
- g) 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)
- h) details of any review and amendments to the CEMP resulting from construction during the reporting period
- i) any other matter as requested by the PMEM.

A copy of each CECR shall be submitted to the PMEM for approval. The first CECR shall report on the first six months of construction and be submitted within 21 days of expiry of that period (or at any other time interval agreed to by the PMEM). 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 PMEM) for the duration of construction.

6

**Pre-Operation Compliance Report**

A Pre-Operation Compliance Report (POCR) for the Project shall be prepared, prior to commencement of operation of the Project. The POCR shall detail compliance with all Conditions of Approval, licences and permits required to be obtained under any other legislation for the Project.

A copy of the POCR shall be submitted to the PMEM for approval at least one month prior to the scheduled operation of the Project (or such time as otherwise agreed to by the PMEM).

**Communications****7****Community Liaison Plan**

A Community Liaison Plan (CLP) 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 and businesses). The CLP shall comply with the obligations of these conditions and should include, but not necessarily be limited to:

- a) details of the protocols and procedures for disseminating information and liaising with the community and other key stakeholders about construction activities (including timing and staging) and any associated impacts during the construction period
- b) stakeholder and issues identification and analysis
- c) procedures for dealing with complaints or disputes and response requirements, including advertising the 24 hour construction response line number
- d) details (including a program) of training for all employees, contractors and sub-contractors on the requirements of the CLP.

The CLP 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 construction of the Project.

**8****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 nominated delegate) or as required by the Environment Protection Authority (EPA) (where an Environment Protection Licence (EPL) is in effect).

**9****Website**

The Proponent shall provide electronic information (or details of where hard copies of this information may be accessed by members of the public) related to the Project, on dedicated pages within its existing website, including:

- 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 2.0.

**CoA  
number**

**Type**

**10**

**Complaints Management**

The Proponent shall set up a 24 hour construction response line number.

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 TfNSW Community Engagement Manager and TfNSW Environment and Planning Manager each working day.

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**Environmental Management****11****Construction Environmental Management Plan**

A Construction Environmental Management Plan (CEMP) shall be prepared prior to 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) indigenous and non-indigenous heritage management
- f) flora and fauna management
- g) storage and use of hazardous materials
- h) contaminated land management (including acid sulphate soils)
- i) weed management
- j) waste management
- k) sustainability
- l) environmental incident reporting and management procedures
- m) non-compliance and corrective/preventative action procedures.

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 *Guideline for Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004)
- iii) include an Environmental Policy.

The Proponent shall:

1. consult with relevant government agencies and service/utility providers as part of the preparation of the CEMP
2. submit a copy of the CEMP to the PMEM for approval at least 21 days prior to the commencement of construction (or within such time as otherwise agreed to by the PMEM)
3. review and update the CEMP at regular intervals, and in response to any actions identified as part of Project audits
4. ensure updates to the CEMP are made within seven days of the completion of the review or receipt of actions identified by any audit of the document, and be submitted to the PMEM for approval.

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

**12****Environmental Management Representative**

Not used.

**CoA  
number****Type****13****Environmental Controls Map**

An Environmental Controls Map (ECM) shall be prepared in accordance with TfNSW's *Guide to Environmental Controls Map* (3TP-SD-015) prior to the commencement of construction for implementation for the duration of construction, and may be prepared in stages as set out in the CEMP.

A copy of the ECM must be submitted to the PMEM for approval, at least 21 days (or within such time as otherwise agreed by the PMEM) prior to commencement of construction of the Project.

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 audit of the document, and submitted to the PMEM for approval.

**Contamination and Hazardous Materials****14****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 a 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 relevant EPA guidelines, including *Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011).

A copy of any contamination report must be submitted to the PMEM for review for a minimum period of seven days. The PMEM 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 14 and Condition 15.*

**15****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 and WorkCover 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 14 and Condition 15.*

**CoA  
number****Type****16****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* (9TP-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 to be undertaken in clearly marked designated areas that are 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.

**17****Hazardous Materials Survey**

A hazardous materials survey in accordance with AS 2601 (2001) *Demolition of Structures* shall be undertaken by an appropriately qualified environmental scientist prior to the demolition of the stairs, pedestrian subway and Ticket Office.

Subsequent removal of any hazardous material is to be undertaken in accordance with applicable EPA and WorkCover guidelines.

**Erosion and Sediment Control****18****Erosion and Sediment Control**

Soil and water management measures shall be prepared and implemented as part of the CEMP for the mitigation of water quality and hydrology 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).

**Flora and Fauna****19****Removal of Trees or Vegetation**

Separate approval, in accordance with TfNSW's *Removal or Trimming of Vegetation Application* (9TP-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  
number****Type****20****Replanting Program**

All cleared vegetation shall be offset in accordance with TfNSW's *Vegetation Offset Guide* (9TP-ST-149). All vegetation planted on-site is to consist of locally endemic native species, unless otherwise agreed by the PMEM, following consultation with the relevant council, where relevant, and/or the owner of the land upon which the vegetation is to be planted.

**Heritage Management****21****Indigenous and Non-Indigenous Heritage**

If previously unidentified Indigenous or non-Indigenous heritage/archaeological items are uncovered during construction works, the procedures contained in the TfNSW *Unexpected Heritage Finds Guideline* (3TP-SD-115) shall be followed and all works in the vicinity of the find shall cease. The TfNSW Environment and Planning Manager shall be immediately notified to co-ordinate a response, which may include seeking appropriate advice from a suitably qualified and experienced heritage consultant (in consultation with the Heritage Division, OEH where appropriate). Works in the vicinity of the find shall not re-commence until clearance has been received from TfNSW and/or the heritage consultant.

**Hours of Work****22****Standard Construction Hours**

Construction activities shall be restricted to the hours of 7.00am to 6.00pm (Monday to Friday); 8.00am to 1.00pm (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 5 dBA higher than the rating background level (RBL) at any nearby residential property and/or other noise sensitive receivers, subject to approval by the PMEM
- 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 PMEM
- d) Emergency Work to avoid the loss of lives, property and/or to prevent environmental harm
- e) any other work as agreed by the PMEM (or nominated delegate) and considered essential to the Project, or as approved by the EPA (where an EPL is in effect).

**23****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 PMEM, or as approved by the EPA (where relevant to the issuing of an EPL).

## Noise and Vibration

24

**Construction Noise and Vibration**

Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with TfNSW's *Construction Noise Strategy* (7TP-ST-157) and the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The mitigation measures shall include, but not be 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 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 22 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 PMEM, or as approved by the EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with TfNSW's *Construction Noise Strategy* (7TP-ST-157)
- f) a description of how the effectiveness of actions and measures shall be monitored during the proposed works, clearly indicating 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.

25

**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 – the German Standard DIN 4150:Part 3 – 1999: *Structural Vibration in Buildings: Effects on Structures* and British Standard BS 7385-2:1993 *Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*
- 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 the 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 PMEM through the CEMP.

26

**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.

**CoA  
number****Type****27****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.

**28****Piling**

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

**Lighting****29****Lighting Scheme**

All permanent lighting for the Project is to be developed by a suitably qualified lighting designer and prepared in accordance with AS 1158 *Road Lighting* and AS 4282 *Control of the Obtrusive Effect 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 subject to security considerations
- g) allowing the lighting system to use low light or switch off light settings while meeting relevant lighting Standards requirements and security considerations
- h) ensuring security and warning lighting is not directed at neighbouring properties.

The proposed lighting scheme is to be submitted with the first design submission (System Definition Review) and accepted by TfNSW's Precincts and Urban Design team.

**CoA  
number**

**Type**

**Property**

**30**

**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 heritage listed buildings and other 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 potential property damage.

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).

**Sustainability**

**31**

**Sustainability Officer**

The Proponent shall appoint a suitably qualified and experienced Sustainability Officer 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, consistent with the Proponent's sustainability objectives are to be submitted to the satisfaction of the Principal Manager Sustainability (PMS) prior to preparation of the Pre-Construction Sustainability Report (PCSR).

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**Pre-Construction Sustainability Report**

Prior to commencement of construction, a Pre-Construction Sustainability Report (PCSR) shall be prepared to the satisfaction of the PMS. The Report shall include the following minimum components:

- a) a completed electronic checklist demonstrating compliance with the *NSW Sustainable Design Guidelines – Version 3.0 (7TP-ST-114)*
- b) a statement outlining the Proponent's own corporate sustainability obligations, goals, targets, in house tools, etc
- c) a documented process to identify and progress innovation initiatives on the Project as appropriate. Areas of innovation that have been confirmed, and those subject to ongoing evaluation for implementation on the Project, are to be identified.

A copy of the PCSR is to be submitted to the PMS for approval, at least 14 days prior to the commencement of construction (or within such time as otherwise agreed to by the PMS).

**Traffic 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:

- 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 (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 parking
- 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, bus stops (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.

The Proponent shall consult with the relevant roads authority during preparation of the TMP, as required and obtain any approvals as required under the *Roads Act 1993*. The performance of all Project traffic arrangements must be monitored during construction.

**34 Road Condition Reports**

Prior to construction commencement, the Proponent shall prepare road condition surveys and reports on the condition of roads and footpaths affected by construction. 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 specific assessment of:

- a) sight distances for vehicles and detailed assessment of the operation of the raised pedestrian crossings at the intersection of Hurst Place and Fisher Place, bus zone works on Hannans Road and Broad Arrow Road, new kerb ramps and any new kiss and ride areas; and mitigation measures proposed

The Road Safety Audit is to be submitted to and accepted by TfNSW. The findings of the Road Safety Audit would be provided to the City of Canterbury Council and Hurstville City Council for information.

**Urban Design and Landscaping****36 Urban Design Plan**

An Urban Design Plan (UDP) shall be prepared which demonstrates design excellence in the essential urban design requirements of the Project, as evident in the following matters:

- (a) the appropriateness of the proposed design with respect to the existing surrounding landscape, built form, behaviours and use-patterns (including consideration of Crime Prevention Through Environmental Design principles). This is to include but not be limited to:
  - i. connectivity with surrounding local and regional movement networks including street networks, other transport modes and active transport networks. Existing and proposed paths of travel for pedestrians and bicycles should be shown
  - ii. integration with surrounding local and regional open space and or landscape networks. Existing and proposed open space infrastructure/landscape elements should be shown
  - iii. integration with surrounding streetscape including street wall height, active frontages, awnings, street trees, entries, vehicle cross overs etc
  - iv. integration with surrounding built form (existing or desired future) including building height, scale, bulk, massing and land use
- (b) design detail that is sensitive to the amenity and character of the local area and heritage items located within or adjacent to the Project site
- (c) total water management principles to be integrated into the design where considered appropriate
- (d) consideration of the design refinements listed below during design development to maximise the urban design outcomes of the Project, along with a justification if any of the below is unable to be progressed:
  - i. tiling on the side walls of the new stairs should match those of the existing pedestrian subway
  - ii. the ticket vending machine/s should be relocated into the existing Platform Building
  - iii. the proposed loop metal barrier fencing to the edge of the platform to be replaced with metal fence made from steel flats

- (e) any other matters which the conditions require the UDP to address.

The UDP shall be:

1. prepared and submitted to TfNSW with the first design submission (System Definition Review)
2. prepared in consultation with councils and relevant stakeholders
3. prepared by a registered architect and/or landscape architect who has appropriate and relevant urban design expertise
4. endorsed by TfNSW's Precincts and Urban Design team.

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### Public Domain Plan

A Public Domain Plan (PDP) shall be prepared which demonstrates design excellence in the essential urban design requirements of the Project, as evident in the following matters:

- a) materials, finishes, colour schemes and maintenance procedures including graffiti control for new walls, barriers and fences
- b) location and design of pedestrian and bicycle pathways, street furniture including relocated bus and taxi facilities, bicycle storage (where relevant), telephones and lighting equipment
- c) landscape treatments and street tree planting to integrate with surrounding streetscape which, at a minimum, must address the following:
  - i. landscape details, including details of soil preparation, mulches, plant selection, plant sizes (planting container and expected final sizes)
  - ii. consideration in selection and location of new tree planting along the Hannans Road and Hurst Place frontages that may provide partial screening of constructed elements from surrounding receivers, and facilitate improved amenity, such as the landscape setting of the station
  - iii. a schedule which details the landscape maintenance requirements to be implemented for the for the 12 month period following the commencement of operation
- d) opportunities for public art created by local artists to be incorporated, where considered appropriate, into the Project
- e) total water management principles to be integrated into the design where considered appropriate
- f) design measures included to meet TfNSW's *NSW Sustainable Design Guidelines - Version 3.0 (7TP-ST-114)*
- g) identification of design and landscaping aspects that will be open for stakeholder input, as required
- h) any other matters which the conditions require the PDP to address.

The PDP shall be:

1. prepared and submitted to TfNSW with the first design submission (System Definition Review)
  2. prepared in consultation with councils and relevant stakeholders
  3. prepared by a registered landscape architect endorsed by TfNSW's Precincts and Urban Design team.
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**Additional Conditions****38****Graffiti and Advertising**

Hoardings, site sheds, fencing, acoustic walls around the perimeter of the site, and any structures built as part of the Project are to be maintained free of graffiti and advertising not authorised by the Proponent during the construction period. Graffiti and unauthorised advertising will 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.

**Site Specific Conditions****39****Minimisation of Heritage Impacts to Narwee Railway Station**

In order to minimise impacts on the heritage fabric of the station, which is listed on RailCorp's Section 170 Heritage and Conservation Register, the following shall be implemented during detailed design:

- a) due consideration is to be given to the design of the external elements of the Project such as the lift and platform canopy, along with proposed alterations to the Platform Building
- b) heritage recommendations included in the Narwee Station Upgrade Statement of Heritage Impact (AECOM, 2016) are to be considered during detailed design
- c) a suitably qualified and experienced heritage consultant, who is independent of the Contractor's personnel and approved by the PMEIA, is to provide input to the detailed design process to ensure the design is sympathetic to the heritage values of the station. The independent heritage consultant shall undertake the following:
  - i. preparation of a detailed Heritage Impact Assessment in accordance with OEH guidelines, for works that would affect the fabric of the existing station
  - ii. an archival recording of the station as a whole, which would be undertaken prior to the commencement of construction in accordance with the NSW Heritage Division guidelines *Photographic recording of heritage items using film or digital capture* (NSW Heritage Office, 2006) and *How to prepare archival records* (NSW Heritage Office, 1998). Copies are to be provided to the Sydney Trains Heritage Team and the City of Canterbury Council for future reference. In particular the following elements should be concentrated on:
    - Platform Building (1931)
    - existing pedestrian subway and stairs (1931)
    - Ticket Office (1984)
- d) the final design is to be accepted by TfNSW, in consultation with the Sydney Trains Heritage Team prior to the commencement of construction. The Sydney Trains Heritage Team is to be provided with a copy of the detailed design and heritage documentation, and is to be given a minimum 21 days advance written notice of the construction commencement date, to allow for notification to be issued to the OEH Heritage Division regarding the demolition works.

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**Vibration Impacts to Heritage Listed Structures**

In addition to Conditions 24 and 25, the following controls are to be implemented to protect listed heritage structures within proximity to the works:

- a) attended vibration monitoring is to be undertaken at the commencement of vibration generating activities to determine site specific safe working distances
- b) vibration intensive works are not to proceed within the safe working distances unless a permanent vibration monitoring system is installed approximately one metre from the building footprint, to warn operators (via flashing light, audible alarm, SMS etc.) when vibration levels are approaching the acceptable vibration limit
- c) if an exceedance is recorded, vibratory works are to cease immediately, and less vibration intensive methods of construction or equipment implemented to achieve compliance.

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**Selection of Final Location for Temporary Construction Compound(s)**

The final location of the temporary construction compound(s) is to be selected in accordance with the following criteria where reasonably practicable to ensure environmental impacts are minimised:

- a) safe access to the local road and pedestrian network is provided
- b) no excavation works required (unless approved otherwise)
- c) the site is relatively level
- d) use of the site does not adversely impact on watercourses
- e) minimal tree removal required
- f) minimal impacts on adjacent land uses.

In accordance with the requirements of Condition 2, any works for the establishment of the temporary construction site compound(s) may not commence until the environmental impacts of the proposed works have been assessed and approved by TfNSW.

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**Temporary Station Shutdown**

In the event that a temporary shutdown is proposed to be undertaken, an assessment of the environmental impacts of the temporary shutdown is to be prepared and submitted to TfNSW in accordance with the requirements of Condition 2. No activities or works associated with the temporary shutdown may commence until approved by TfNSW.

Should a decision be made to temporarily shut the station, the following are to be implemented prior to the shutdown occurring:

- a) further consultation is to be undertaken with transport operators, the City of Canterbury Council and Hurstville City Council.
- b) an alternative transport strategy (with details of replacement transport services and accompanying consultation activities) is to be prepared to the satisfaction of TfNSW
- c) the community is to be notified in advance of alternative transportation options being provided.

END OF CONDITIONS

# Appendix C Environmental Impact Assessment

## NARWEE STATION UPGRADE

### APPROVAL

I, LOUISE SUREDA, as delegate of the Secretary, Transport for NSW:

1. Have examined and considered the Proposed Activity in the Narwee Station Upgrade Review of Environmental Factors (AECOM, April 2016) and the Narwee Station Upgrade Determination Report (AECOM, May 2016) in accordance with section 111 of the *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, consistent with the Proposal described in the Narwee Station Upgrade Review of Environmental Factors as amended by this Determination Report.



Louise Sureda  
A/Director, Planning and Environment Services  
Infrastructure and Services Division  
**Transport for NSW**

Date: 20.5.16.