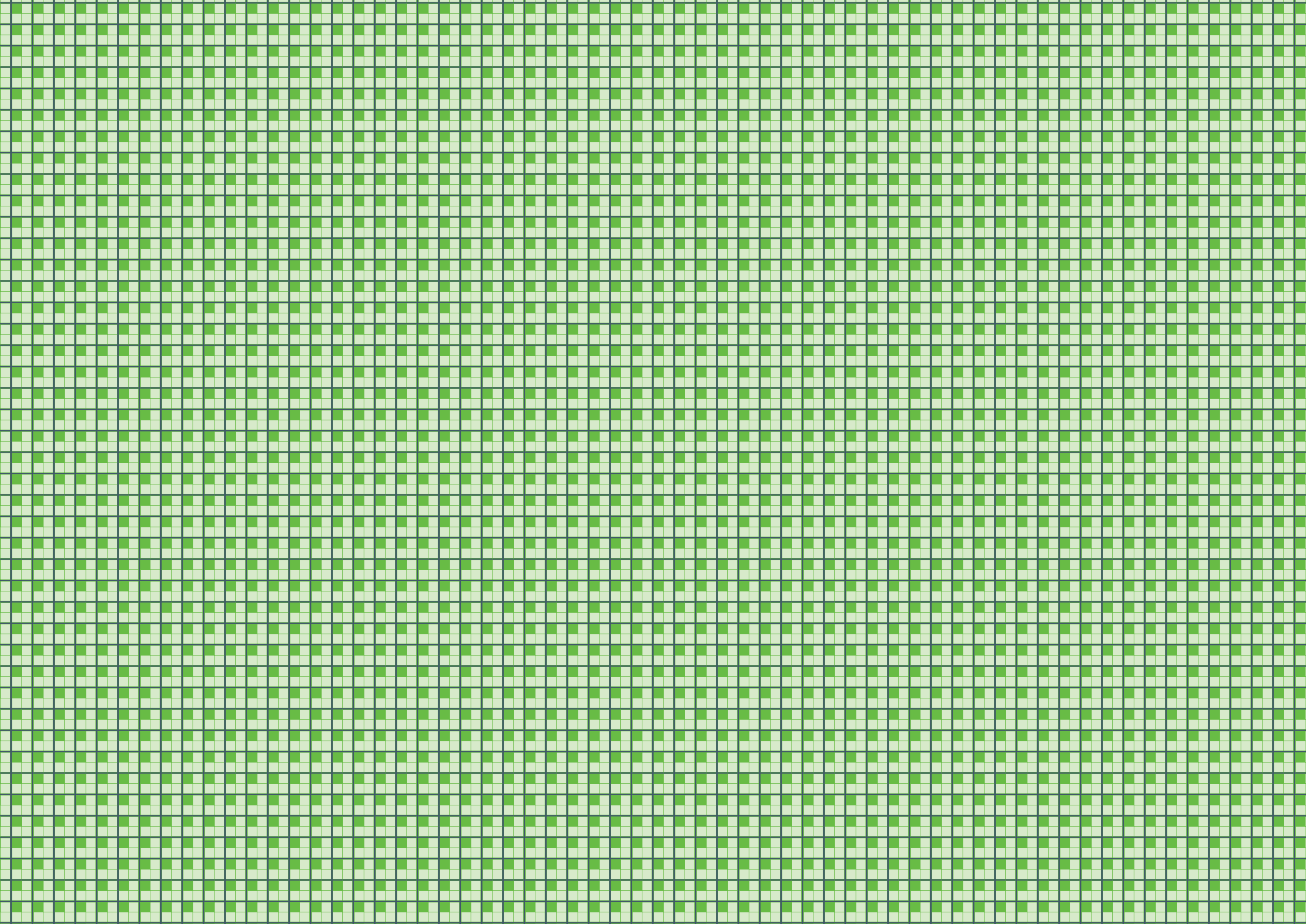


**Environmental Impact Statement
Stage 2-Stations, Rail Infrastructure and Systems**







Volume 1A

Environmental Impact Statement Stage 2 - Stations, Rail Infrastructure and Systems

October 2012

northwestraillink

Declaration under Part 3, Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Author of the Environmental Impact Statement

Name: Michael England
Address: Level 21, 420 George Street, SYDNEY NSW 2000
Qualifications: Bachelor of Arts (Urban and Regional Planning)

Name and Address of the Responsible Person As above

Address of the Land to which this EIS Applies

Land is within Hornsby Shire, The Hills Shire and Blacktown City local government areas as described within the Environmental Impact Statement (EIS) and shown in Chapters 6 and 7.

Description of the Infrastructure to which this EIS Applies

This EIS examines the station designs, railway operating systems and project operations, including: station fit-out, platforms, buildings and other architectural aspects; skytrain design and architectural aspects; rail infrastructure such as railway tracks, signalling systems, ventilation systems, overhead power supply and substations; transport interchanges, park and ride facilities, kiss and ride, bus stops, taxi ranks and bicycle facilities; and access roads and landscapes that will be required for the North West Rail Link (NWRL).

The NWRL comprises the provision of a new electrified passenger railway with services operating between Chatswood and Tallawong Road, Rouse Hill extending the heavy rail network to north west Sydney. It would include the construction of a two track rail corridor 23km in length, comprising the following main components:

- ❖ Eight new stations located at Cherrybrook, Castle Hill, Showground, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road.
- ❖ A direct underground connection into the existing Epping to Chatswood Rail Line (ECRL) at Epping.
- ❖ Services facilities at Epping and Cheltenham.
- ❖ An underground section of alignment comprised of 15.5km of two track railway in a twin tunnel configuration with cross passages at regular intervals between Epping and Kellyville.
- ❖ A 7.5km above ground section of route from Bella Vista to Tallawong Stabling Facility, Rouse hill, which would be a combination of viaduct, embankment, at grade and cutting.
- ❖ A stabling facility at Tallawong Road.

Assessment of the Environmental Impact of the Infrastructure

An assessment of the environmental impact of the infrastructure is contained in this Environmental Impact Statement.

Declaration

Pursuant to clause 6(f), Part 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*,
I declare that this Environmental Impact Statement:

- a. Has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2000*;
- b. Contains all available information that is relevant to the environmental assessment of the infrastructure to which this Environmental Impact Statement relates; and
- c. Contains information that is neither false nor misleading.



Michael England
25 October 2012



EXECUTIVE SUMMARY

Introduction

The North West Rail Link (NWRL) project has been identified by the NSW Government as a key priority railway transport infrastructure project.

The NWRL comprises the provision of an electrified railway between Chatswood and Tallawong Road, Rouse Hill extending the rail network to north west Sydney. It would include the construction of a two track alignment from Epping to Rouse Hill, 23km in length with eight new stations and associated services. It is proposed that the first 15.5 kilometres of the project would be underground in twin tunnels. Between Bella Vista and Rouse Hill a 4.2 kilometre skytrain viaduct is proposed.

New stations are planned at Cherrybrook, Castle Hill, Showground (formerly known as Hills Centre), Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road.

Bus, pedestrian and cycling facilities are proposed for all stations, with a total of approximately 4,000 park and ride spaces intended for Cherrybrook, Showground, Bella Vista, Kellyville and Cudgegong Road Stations.

A stabling yard to allow trains to parked at night and during off peak period is proposed to be provided at Tallawong Road, Rouse Hill.

Development of the project has a long and diverse history since 1998.

Since Concept Plan Approval was granted for the project in 2008 further strategic planning and project development has occurred.

The primary document to guide the direction of future growth in NSW and Sydney is NSW 2021. This document and other metropolitan planning strategies identify the NWRL as a key project that will help deliver the strategies and objectives of these plans.

The Draft NSW Long Term Transport Master Plan (September 2012) which sets out a draft framework for transport decision making and invites comment, encompasses Sydney's Rail Future – a new rail strategy for Sydney that will transform and modernise Sydney's rail network. It confirms NWRL as a priority transport project to be built as Rapid Transit within the three tiered system described by Sydney's Rail Future.

The project is subject to an environmental assessment and approval process under the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is classified as Critical State Significant Infrastructure. With recent amendments to the EP&A Act, the Concept Plan Approval for the project granted by the Minister for Planning on 6 May 2008, is taken to be a Staged Infrastructure Approval under Part 5.1 of the EP&A Act.

Before works can commence on the project, a detailed environmental assessment must be undertaken and approved by the Minister for Planning and Infrastructure for each stage or component of the project. The first EIS, which represents the detailed environmental impact assessment for Stage 1: Major Civil Construction Works (EIS 1), was submitted to the Department of Planning & Infrastructure on 4 April 2012, and was approved by the Minister for Planning and Infrastructure on 25 September 2012.

EIS 1 sought approval for the major civil construction works including:

- ❖ Two 15.5km rail tunnels between Epping and Bella Vista, linking directly into the Epping to Chatswood Rail Line (ECRL) tunnels.
- ❖ Excavation works for underground railway station construction.
- ❖ Above ground construction, including the 4.2km skytrain viaduct structure between Bella Vista and Rouse Hill.

This second and separate EIS represents the detailed environmental impact assessment for Stage 2: Stations, Rail Infrastructure and Systems (EIS 2).

EIS 2 relates to the operation of the railway as well as the construction of those elements of NWRL not addressed by Stage 1. EIS 2 addresses:

- ❖ Any additional land take for station precinct works (such as road works, pedestrian/cycle facilities, landscaping).
- ❖ Operation and construction of:
 - Stations.
 - Station precincts.
 - Services facilities.
 - Stabling facility at Tallawong Road, Rouse Hill.
 - Rail infrastructure and systems.

Separating heavy construction work from the station design and railway operations allows:

- ❖ The overall project to be delivered more quickly and efficiently.
- ❖ The project team to seek approval to start building the tunnels early – and getting on with the major construction challenges as soon as possible.
- ❖ More time to discuss with the community the planning and design of railway station surrounds – areas that will become the focal points of suburbs for generations to come.

Project Objectives

The project objectives that have guided the development of the NWRL are:

- ❖ Ensure customer needs are met through provision of a safe, high quality, integrated and affordable transport service.
- ❖ Link existing communities and new growth areas in north west Sydney with jobs and services in the Global Economic Corridor (Macquarie Park –Chatswood – North Sydney – CBD).
- ❖ Deliver stage 3 (Rapid Transit System) of Sydney's Rail Future to improve transport network reliability by facilitating a shift from road to rail for trips to and from the north west, to reduce bus/road congestion and improve amenity in Sydney CBD.
- ❖ Deliver a transport service that has been informed by engagement with communities and stakeholders and demonstrates evidence based decision making.
- ❖ Support the Government's challenge to accommodate population growth in the north west by increasing the potential for a range of housing and employment opportunities.
- ❖ Contribute to environmental, social and economic sustainability by improving liveability, minimising our impact on the environment and the community, and delivering value for money.



The Proponent

The proponent for the NWRL project is Transport for New South Wales (TfNSW), which is the lead agency of the NSW transport portfolio, with primary responsibility for:

- ❖ Transport coordination.
- ❖ Transport policy and planning.
- ❖ Transport services.
- ❖ Transport infrastructure.

TfNSW takes the lead on all policy and planning functions of the former Transport NSW, RailCorp, Transport Construction Authority, Roads and Maritime Services (RMS), Sydney Ferries and the Public Transport Ticketing Corporation. A specialised Project Team has been established within TfNSW to coordinate and expedite work on the NWRL project.

Stations, Rail Infrastructure and Systems

This EIS examines the stations, rail infrastructure and systems that will be required to complete the construction and enable the operation of the NWRL.

The key elements to be constructed include:

- ❖ Station fit-out, platforms, buildings and architectural aspects.
- ❖ Skytrain design and architectural aspects.
- ❖ Rail infrastructure such as railway tracks, signalling systems, ventilation systems, overhead power supply and substations.
- ❖ Transport interchanges, park-and-ride facilities, kiss-and-ride, bus stops, taxi ranks and bicycle facilities.
- ❖ Access roads and landscaping.

The rail systems and stations construction work component of the NWRL would commence in Q1 2016 as the sites are progressively handed over from contractors undertaking the Stage 1 major civil construction works (detailed in EIS 1). The total period of rail systems and stations construction works is expected to be approximately four years. This program is shown below.

| Construction activities | Indicative construction timeframe | | | | | | | | | | | | | | | |
|---|-----------------------------------|--|--|--|------|---|---|---|------|---|---|---|------|---|---|---|
| | 2015 | | | | 2016 | | | | 2017 | | | | 2018 | | | |
| Station construction, fit-out, ventilation and precinct works | | | | | | | • | • | • | • | • | • | • | • | | |
| Epping Services Facility fit-out | | | | | | | • | • | • | • | | | | | | |
| Cheltenham Services Facility fit-out | | | | | | • | • | • | • | • | | | | | | |
| Trackwork | | | | | | | • | • | • | • | • | | | | | |
| Tunnel systems fit-out | | | | | | | | • | • | • | • | • | | | | |
| Surface and viaduct systems fit-out | | | | | | | • | • | • | • | • | | | | | |
| Testing and commissioning | | | | | | | | | | • | • | • | • | • | | |
| Operational readiness | | | | | | | | | | | | • | • | • | • | • |
| Systems integration | | | | | | | | | | | | | | • | • | • |

Project Operations

The NWRL would provide frequent rail services seven days a week with operating hours throughout the day from early morning until late at night. Operating hours would be determined as part of the development of the service schedules for the NWRL.

The principles for timing of passenger services would be based on providing opportunities for customers to get to jobs in the Sydney CBD by 6am and with extended operating hours on Friday and Saturday night. The timetable will recognise integration with other public transport services.

The NWRL would connect directly with the existing ECRL providing access to the existing rail stations located at Epping, Macquarie University, Macquarie Park, North Ryde and Chatswood.

The trip from Cudgegong Road to Chatswood is expected to take approximately 37 minutes on a rapid transit train, including dwell time at stations.

The indicative service frequency of the NWRL would be:

- ❖ Weekday peak: train every 5 minutes (12 trains per hour).
- ❖ Weekday off-peak: train every 10 minutes (6 trains per hour).
- ❖ Weekends: train every 10 minutes (6 trains per hour).

Due to the high frequency of NWRL services, customers would be able to turn up at any NWRL station and catch the next train, eliminating the need for timetables.

At Chatswood customers would be able to cross the platform to change onto the existing rail network. Train services would be organised to ensure passengers only need to wait a few minutes to switch from a NWRL train to another train into the city in peak periods. It is expected that there would be a train every three minutes from Chatswood to the city during peak times. Regular services to / from the city in the off peak would be provided. The North Shore service levels would be increased.

Allowing for dwell time at stations and changing trains at Chatswood, a journey from the North West (Cudgegong Road Station) to the Sydney CBD is expected to take just under one hour in the peak. Customers would also be able to interchange at Epping Station onto Northern Line services. Frequent rail services to the city via Strathfield would be provided during peak times with regular services during the off peak period.

As part of a broader Sydney rail strategy, the NWRL has been designed with sufficient capacity to meet future rail travel needs of the population. Train frequencies would be increased over time to meet future patronage growth with NWRL being designed for an ultimate capacity of up to 20 trains per hour (every 3 minutes).

The infrastructure for NWRL would be developed and configured to ensure that it does not unduly constrain the development of a range of timetable options and frequencies, nor inhibit the reliable timetabling and operation of the whole rail network.



Indicative travel times to Macquarie Park, the Lower North Shore and City destinations from selected NWRL stations are shown below.

| Station | Indicative Travel time to | | | |
|-------------------|---------------------------|-----------|--------------|---------|
| | Macquarie Park | Chatswood | North Sydney | Wynyard |
| Cudgegong Road | 28 | 37 | 51 | 57 |
| Rouse Hill | 26 | 35 | 49 | 55 |
| Kellyville | 24 | 33 | 47 | 53 |
| Showground Centre | 17 | 26 | 40 | 46 |
| Castle Hill | 15 | 24 | 38 | 44 |
| Cherrybrook | 12 | 21 | 35 | 41 |

Environmental Assessment

In accordance with the Director-General’s Requirements and Conditions of Approval, the following environmental issues were assessed in the EIS:

- ❖ Soils and Groundwater
- ❖ Traffic and Transport
- ❖ Noise and Vibration
- ❖ European Heritage
- ❖ Indigenous Heritage
- ❖ Local Business Impacts
- ❖ Land Use and Community Facilities
- ❖ Ecology (Terrestrial and Aquatic)
- ❖ Visual Impacts
- ❖ Climate Change and Greenhouse Gas Assessment
- ❖ Surface Water and Flooding
- ❖ Air Quality
- ❖ Waste Management
- ❖ Cumulative Impacts

The assessment of these issues resulted in the development of measures to avoid, mitigate and manage potential impacts.

An Environmental Management Framework has been developed to set out the minimum environmental, stakeholder and community management requirements for the construction of the NWRL. It would provide a link between the EIS and the Construction Environmental Management Plans that would need to be developed by the construction contractor(s).

Community Consultation

Extensive consultation has occurred over the last 10 years on the provision of a rail link to the north west.

The first consultation occurred in 2002 with the community, local business and industry groups and included:

- ❖ Publication of the initial Overview Report (2002).
- ❖ Consultation for the Environmental Assessment and Concept Plan (2005-7).
- ❖ Publication of the Preferred Project Report (2007).
- ❖ Supplementary Submissions Report (2008).

TfNSW has taken a proactive approach to consulting the community from April 2011 when the NSW Government announced its intention to proceed with the NWRL. Since that time the following activities have been undertaken:

- ❖ A project Community Information Centre at Castle Hill opened (June 2011).
- ❖ Implementing an information/feedback line and an interactive website.
- ❖ Local newspaper advertising to advise of Information Sessions and to provide Project Updates.
- ❖ Consultation about the Project Overview Report (July 2011).
- ❖ Place Managers appointed to liaise with residents, businesses and community organisations (October 2011).
- ❖ Ongoing consultation following Ministerial announcement of the project in December 2011.
- ❖ An interactive Industry engagement process has been ongoing since December 2011.
- ❖ Consultation throughout the exhibition of the Environmental Impact Statement for Major Civil Construction Works (EIS 1).
- ❖ Public submissions received during exhibition and following exhibition of EIS 1 and the publication of a Submissions Report responding to the issues raised.

The purpose of the consultation process for EIS 2 was:

- ❖ To meet the obligations described in the Director-General’s Requirements, the Conditions of the Concept Plan Approval and the Statement of Commitments.
- ❖ To provide quality information about the plans for the NWRL and likely impacts of station and rail operations.
- ❖ To record all issues raised and suggestions made.
- ❖ To take into account issues and suggestions during the preparation of the EIS.

TfNSW will continue to engage with government agencies, local councils, industry, key stakeholders and the community throughout all phases of the project.

Other Environmental Approvals

Other approvals which would need to be obtained prior to the commencement of construction include:

- ❖ An environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997*.
- ❖ Consent under section 138 of the *Roads Act 1993*.

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires assessment and approval of certain actions that have, or will have, or are likely to have a significant impact on a matter of National Environmental Significance. A separate referral has been made for the project.

Project Justification and Conclusion

The NWRL would be the first part of *Sydney’s Rail Future*, a customer focused public transport plan to modernise Sydney’s rail network and trains. The NWRL has been identified as a key priority railway transport infrastructure project which would provide a significant expansion to Sydney’s rail network in an area of future population and jobs growth.

The project would be the first part of a new, modern high frequency rail network. The rapid transit trains would run every 5 minutes during peak periods. The project would provide access to reliable non-road based public transport and be integrated with existing rail and bus networks.

In addition the project would provide commuter car parking spaces at dedicated park and ride facilities at the proposed Cherrybrook, Showground, Bella Vista, Kellyville and Cudgegong Road stations. The NWRL would reduce the need to use private cars for travel, in particular along congested road routes into North Sydney and the Sydney CBD.



As well as its transport function the NWRL would be a catalyst for increased urban development activity, particularly in proximity to the stations.

Overall, the NWRL would provide the following benefits:

- ❖ Be the first part of Sydney’s rapid transit network, a new and modern high frequency rail network. The rapid transit network would offer a comfortable, frequent, fast and high capacity rail link between suburban regions and busy inner city areas using single deck trains.
- ❖ Rail access for approximately 400,000 residents in the North West to Epping, Macquarie Park, Chatswood, St Leonards, North Sydney,the Sydney Central Business District and beyond.
- ❖ Delivering new rapid transit rail services to existing suburbs in the Hills District as well as future areas of growth planned for the North West.
- ❖ Improving travel time reliability compared with bus and private car.
- ❖ Resulting in significant travel time savings for travel from many areas of the North West area to the Sydney CBD and Macquarie Park.
- ❖ Reducing bus congestion in the Sydney CBD in the long term.
- ❖ Increasing public transport services to the Macquarie University and Macquarie Park area.
- ❖ A more sustainable public transport and decreased greenhouse gas emissions.

Next Steps

This EIS will be exhibited to the public for at least 30 days. During this period, any person (including a public authority) will be able to make a written submission to the Director-General of the Department of Planning and Infrastructure concerning the matter. The submissions received would be documented and considered by TfNSW as part of a Submissions Report.

You can comment on the EIS or the project by sending a written submission to:

- ❖ Director, Major Infrastructure Assessments
NSW Department of Planning and Infrastructure (SSI_5414)
GPO Box 39
SYDNEY NSW 2001

Submissions must be received by the end of the public exhibition period.

The Director-General will prepare an assessment report to assist the Minister for Planning and Infrastructure’s consideration of the application for approval to carry out the NWRL State Significant Infrastructure project.

The Minister for Planning and Infrastructure will decide whether or not to approve the carrying out of the project. The decision will consider:

- ❖ The EIS.
- ❖ The Director-General’s report on the infrastructure and the reports, advice and recommendations contained in the report.
- ❖ Any advice provided by the Minister having portfolio responsibility for the proponent.
- ❖ Any findings or recommendations of the Planning Assessment Commission following a review in respect of the Critical State Significant Infrastructure.
- ❖ State Significant Infrastructure may be approved under Part 5.1 with such modifications of the infrastructure or on such conditions as the Minister may determine.

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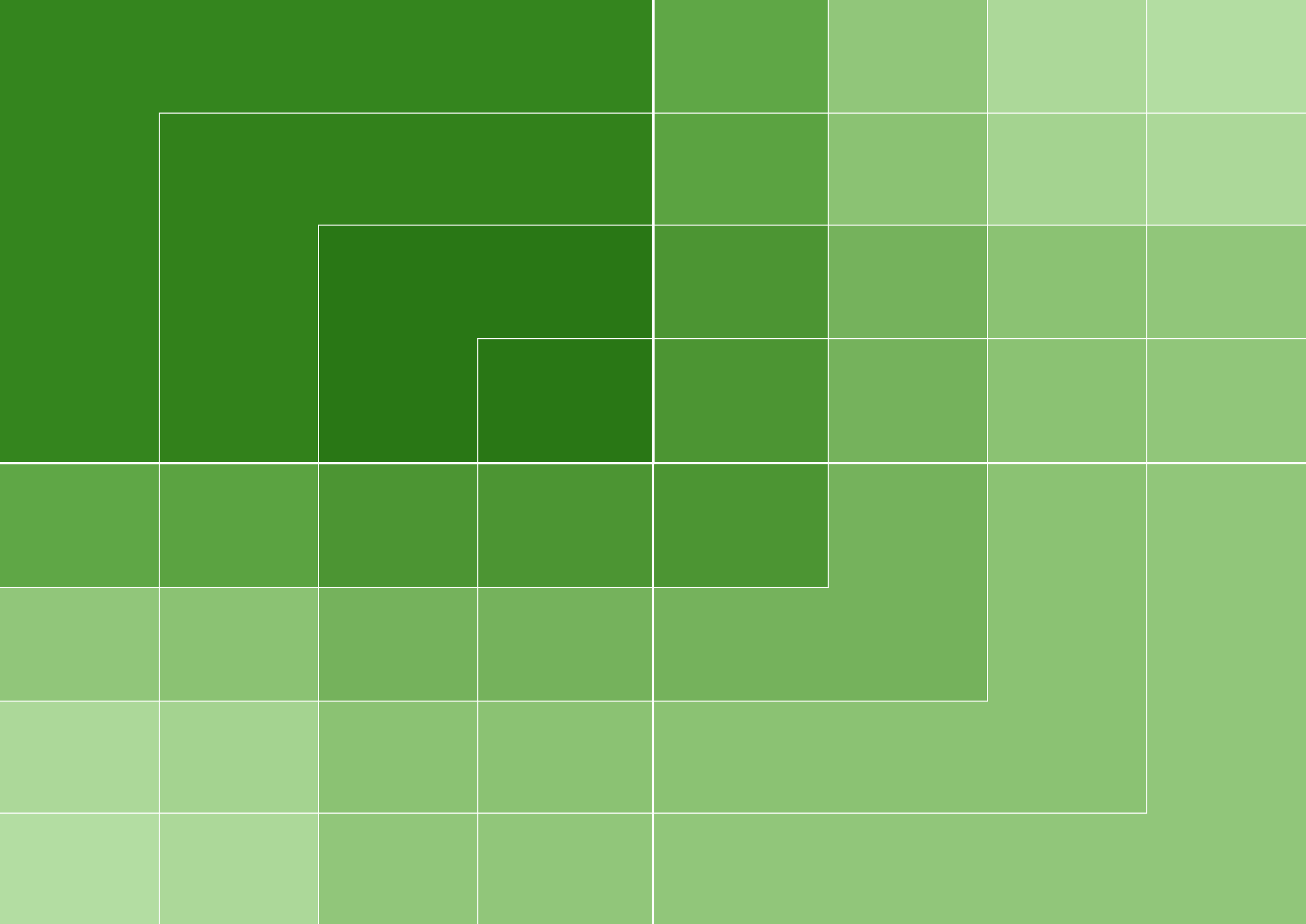
10 NOISE AND VIBRATION

11 EUROPEAN HERITAGE

An aerial view of a modern transportation hub. In the foreground, a multi-lane highway with white lane markings has several cars driving on it, including a red sedan, a blue sedan, and a black SUV. To the left of the highway is a green grassy area with some trees and shrubs. In the middle ground, a high-speed train with a white body and blue and yellow accents is traveling on an elevated track. The background features a large, modern building complex with white and grey facades, surrounded by greenery. The sky is bright blue with scattered white clouds.

CHAPTER 1

INTRODUCTION



1 INTRODUCTION

1.1 Project Overview

The North West Rail Link (NWRL) project has been identified by the NSW Government as a key priority railway transport infrastructure project. The NWRL comprises an electrified railway with services operating between Chatswood and Tallawong Road, Rouse Hill extending the rail network to north west Sydney. It would include the construction of a two track alignment from Epping to Rouse Hill, 23km in length with eight new stations and associated services.

Stations are planned at Cherrybrook, Castle Hill, Showground, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road. A stabling facility is proposed beyond the Cudgegong Road station site in an area known as Tallawong Road. Bus, pedestrian and cycling access facilities are proposed for all stations, with a total of 4,000 park and ride spaces to be provided at five of the stations, Cherrybrook, Showground, Bella Vista, Kellyville and Cudgegong Road Stations.

Among the benefits of the project, the new rail link would provide:

- ❖ Rail access for approximately 400,000 residents in north west Sydney to Epping, Macquarie Park, Chatswood, St Leonards, North Sydney, the Sydney Central Business District (CBD) and beyond.
- ❖ New rail services to existing suburbs in the Hills District as well as future areas of planned development for the north west.
- ❖ Improved travel time reliability compared with bus and private car.
- ❖ Travel time savings from many areas of the north west region to the CBD and Macquarie Park, and within the region, including to the Rouse Hill Town Centre.
- ❖ An increase in services to Macquarie University and Macquarie Park.
- ❖ Reduced bus congestion in the Sydney CBD in the longer term.

The NWRL project, including alignment and stations, was considered at concept level during 2006-2008, including widespread consultation with the community and relevant stakeholders. Since then, the concept has been optimised to ensure that it appropriately responds to the travel needs of Sydney commuters, provides value for money and produces a better product outcome for the community. This has resulted in some refinements to the project which were addressed through a modification to the 2008 Concept Approval (now Staged Infrastructure Approval).

The rail alignment would extend from Epping to Rouse Hill by way of Castle Hill, passing through the Hornsby, The Hills, and Blacktown local government areas (LGAs). The first two thirds of the rail line would be in the form of underground rail tunnels from Epping Station to Bella Vista Station while the final third between Kellyville and Tallawong stabling facility would be a combination of viaduct, embankments and cuttings, and at grade.

The tunnels would pass under the established residential suburbs of Cheltenham, Beecroft, West Pennant Hills, Cherrybrook and Castle Hill and the newly developed or developing residential and commercial areas of Norwest Business Park and Bella Vista.

The alignment emerges from the tunnels immediately north of Celebration Drive near Bella Vista. It would then pass through the new release areas of Balmoral Road, Kellyville and Rouse Hill in an identified corridor. Parts of the alignment would be elevated on viaduct, crossing the western boundary of the Balmoral Road Release Area, undeveloped land between the Balmoral Road Release Area and the Rouse Hill Town Centre, and the 'Area 20' precinct of the North West Growth Centre.

The project is subject to an environmental assessment and approval process under the Environmental Planning and Assessment Act 1979 (EP&A Act). With recent amendments to the EP&A Act, the Concept Plan Approval for the project granted by the then Minister for Planning on 6 May 2008 is taken to be a Staged Infrastructure Approval under Part 5.1 of the EP&A Act. A modification to the Staged Infrastructure Approval has been approved to align with the current description of the NWRL. However, Transport for New South Wales (TfNSW) will seek final project approvals which are independent of the Staged Infrastructure Approval. This Environmental Impact Statement (EIS) is being prepared in support of a final project approval independent of the Staged Infrastructure Approval.

Before works can commence on the project, an environmental assessment must be undertaken and approved by the Minister for Planning and Infrastructure for each stage or component of the project. The first EIS, which represents the environmental impact assessment for Stage 1: Major Civil Construction Works (EIS 1), was approved by the Minister for Planning and Infrastructure on 25 September 2012.

EIS 1 sought approval for the major civil construction works including:

- ❖ Two 15.5km rail tunnels between Epping and Bella Vista, linking directly into the Epping to Chatswood Rail Line (ECRL) tunnels.
- ❖ Excavation works for underground railway station construction.
- ❖ Above ground construction, including the 4.2km Skytrain viaduct structure between Bella Vista and Rouse Hill.

This second and separate EIS represents the environmental impact assessment for Stage 2: Stations, Rail Infrastructure and Systems (EIS 2).

EIS 2 relates to the operation of the railway as well as the construction of those elements of NWRL not addressed by EIS1. EIS 2 addresses:

- ❖ Any additional land take for station precinct works (such as road works, pedestrian/cycle facilities, landscaping).
- ❖ Operation and construction of:
 - Stations.
 - Station precincts.
 - Services facilities.
 - Stabling facility at Tallawong Road.
 - Rail infrastructure and systems.

Separating heavy construction work from the station design and railway operations allows:

- ❖ The overall project to be delivered more quickly and efficiently.
- ❖ The project team to seek approval to start building the tunnels early – and getting on with the major construction challenges as soon as possible.
- ❖ More time to discuss with the community the planning and design of railway station surrounds – areas that will become the focal points of suburbs for generations to come.

The NWRL regional context and route are presented in **Figure 1.1** and **Figure 1.2** respectively.

Figure 1.1 North West Rail Link Regional Context

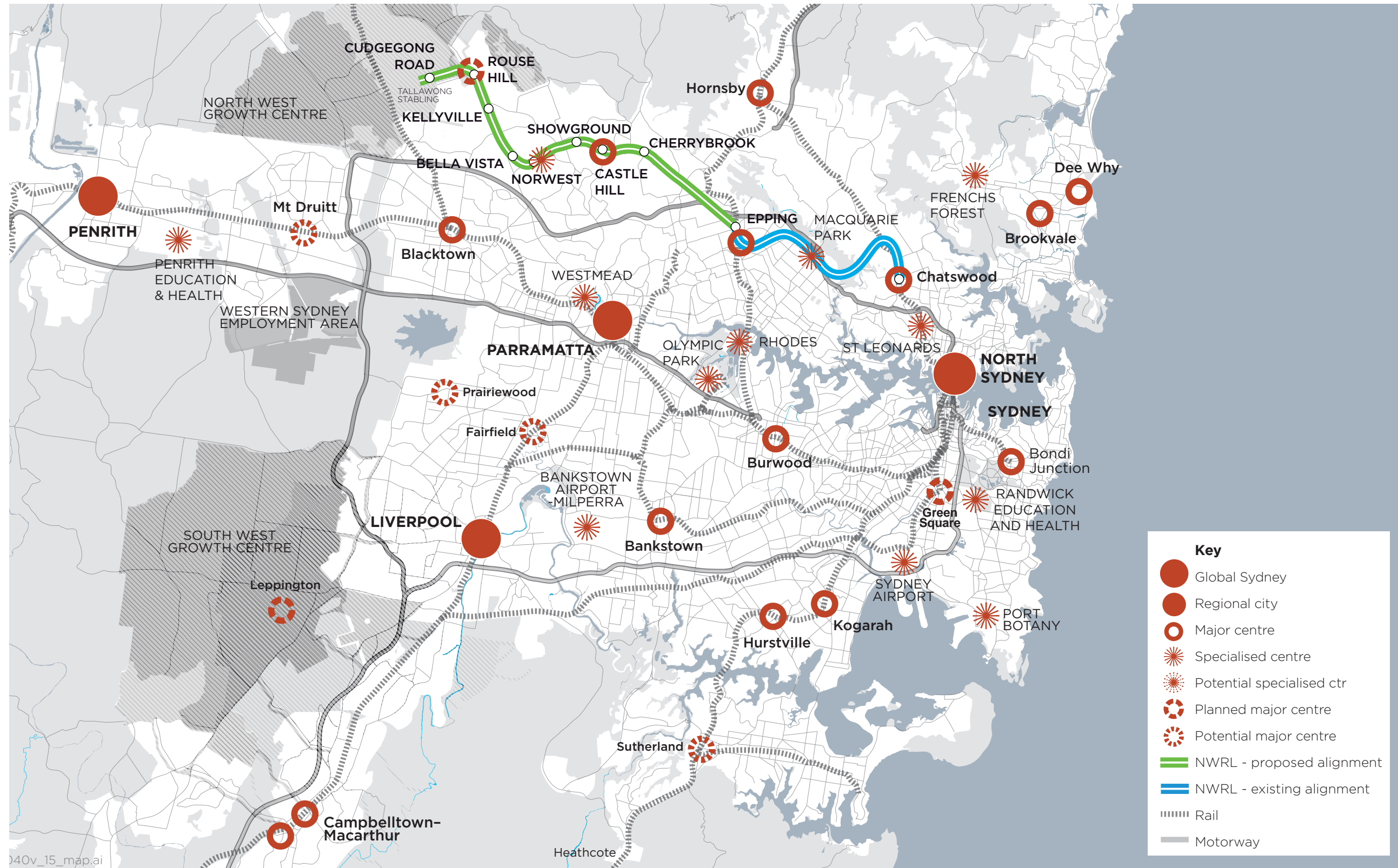
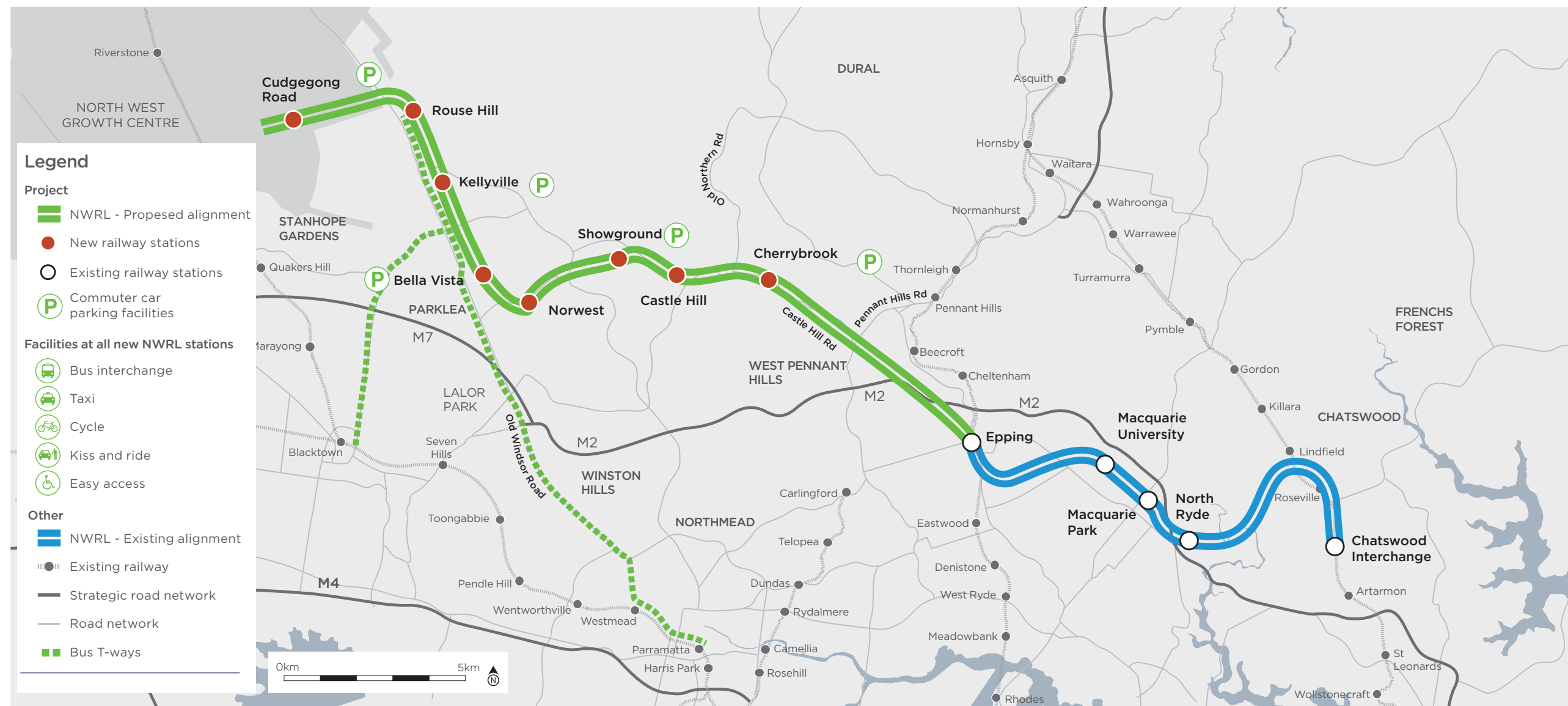


Figure 1.2 Route overview



1.2 Project Development History

Development of the NWRL project has a long and diverse history which commenced in 1998 with its announcement by the NSW Government in the document – Action for Transport 2010. Following this, a pre-feasibility assessment was commissioned and completed in 2000.

The pre-feasibility assessment concluded that the NWRL would be feasible from an engineering and technical perspective, that sufficient levels of

patronage would be generated to support a heavy rail link and that the rail link should be constructed as a single stage to Rouse Hill. As a result, a number of more detailed studies examining alignment and mode options were tested through the environmental assessment process. The current proposed route alignment is the outcome of these detailed studies. A history of this work is summarised in [Table 1.1](#).

Table 1.1 Project Development History

| 1998 - 2005 | | | |
|--|--|--|--|
| Action for Transport 2010 November 1998 | <ul style="list-style-type: none"> ❖ Epping to Castle Hill Line by 2010. ❖ Castle Hill to Rouse Hill after 2010. ❖ Conceptual alignment only, from Epping to Rouse Hill. | Metropolitan Rail Expansion Program June 2005 | <ul style="list-style-type: none"> ❖ Confirmed timing for the NWRL being a heavy rail line connecting to Rouse Hill by 2017 and on to Vineyard by 2020. |
| North West Rail Link Pre-Feasibility Study August 2000 | <ul style="list-style-type: none"> ❖ Nine potential options for heavy rail were identified between Epping and Mungerie Park, split at Castle Hill as follows: ❖ Epping to Castle Hill, Options 1/1 to 1/4. ❖ Castle Hill to Mungerie Park, Options 2/1 to 2/5. ❖ Preferred option identified as the heavy rail link Route 1/1 to Castle Hill and Route 2/1 from there to Mungerie Park. ❖ Proposed an extension to the Richmond Line and noted that the location of the stabling facility should not preclude this opportunity. <p>(Note the Rouse Hill Town Centre was formerly known as Mungerie Park)</p> | NWRL Alternatives Study | <ul style="list-style-type: none"> ❖ Introduced a number of new alignment and mode options: ❖ 11 heavy rail options |
| NWRL Infrastructure Study October 2001 | <p>Considered four alignment options:</p> <ul style="list-style-type: none"> ❖ Preferred alignment from the 2000 Pre-Feasibility Study: Route 1/1 then Route 2/1. ❖ Alignment 1, based on the Pre-Feasibility preferred option for the section between Norwest Business Park and Memorial Avenue. ❖ Alignment 2, designed to be more compatible with proposals for bus transitways and to minimise residential property intrusion. ❖ Alignment 3, developed to encompass benefits from alignments 1 and 2, and with a high level station at Mungerie Park. ❖ Preferred alignment (differed from the Pre-Feasibility Study preferred alignment). A mixture of alignments 1, 2 and 3 depending on chainage. ❖ Six stations: Franklin Road, Castle Hill, Hills Centre, Norwest Business Park, Memorial Avenue and Mungerie Park. ❖ Three potential extension alignments beyond Mungerie Park to the Richmond Line considered. <p>(Note the Rouse Hill Town Centre was formerly known as Mungerie Park)</p> | Final Report December 2005 | <ul style="list-style-type: none"> ❖ 15 light rail options. ❖ 15 transitway options. ❖ Reduced to: <ul style="list-style-type: none"> • One heavy rail option (with two alternative extension alignments beyond Rouse Hill to either Vineyard or Box Hill). • One light rail option. • Four transitway options (but with all sharing the same alignment from Hills Centre to just beyond Rouse Hill). |
| 2005 - 2006 | | | |
| North West Rail Link Overview Report: Connecting Communities March 2002 | <ul style="list-style-type: none"> ❖ Described all options considered from both the 2000 Pre-Feasibility Study and the 2001 Infrastructure Study. ❖ Confirmed the preferred alignment, subsequently named the 2002 Alignment. | Project Application and Preliminary Environmental Assessment April 2006 | <ul style="list-style-type: none"> ❖ Discussed two alignment options: ❖ The 2002 alignment (from the 2002 Overview Report). ❖ The 2017 Reference Scheme; i.e. the one heavy rail option generated by the NWRL Alternatives Study as well as consultation with key stakeholders and the community following the release of the 2002 Overview Report. ❖ The Preliminary Environmental Assessment carried the 2017 Reference Scheme forward for assessment, noting the following potential modifications: <ul style="list-style-type: none"> • Adjustments to the vertical alignment at Rouse Hill. • An alternative horizontal and vertical alignment option to the west of the proposed Castle Hill Station. |
| | | Premier's Urban Transport Statement 20 November 2006 | <ul style="list-style-type: none"> ❖ Introduced the potential for a metro system to be built to service Sydney 'in the very long term'. ❖ Committed to staged deliver of NWRL to Castle Hill by 2015 and Rouse Hill by 2017. |

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| Concept Plan Environmental Assessment Public Exhibition 22 November 2006 - 2 February 2007 | <ul style="list-style-type: none"> ❖ Carried through the 2017 Reference Scheme. ❖ Noted that two further alternatives were under consideration by the project team but were not included in the environmental assessment. <ul style="list-style-type: none"> • An underground rail connection between Epping and Franklin Road. • An elevated rail alignment between Hill Centre and Rouse Hill. ❖ Staged delivery was assessed as follows: <ul style="list-style-type: none"> • A first stage that connects with the existing Northern Line between Beecroft and Cheltenham stations to just west of Hills Centre Station (approximately 11 km in length and to be completed by 2015). • A second stage from west of Hills Centre Station, terminating at Rouse Hill (approximately 12 km in length and to be completed by 2017). |
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2006 - 2008

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| Network Connection Options Assessment May 2007 | <ul style="list-style-type: none"> ❖ Assessed connection options between Franklin Road and Epping stations: <ul style="list-style-type: none"> • Option 1, the Reference Scheme, an Epping to Beecroft quadruplication. • Option 2, a direct tunnel connection between Epping and Franklin Road. ❖ Option 2 was identified as the preferred option. |
| Preferred Project Report May 2007 | <ul style="list-style-type: none"> ❖ Adopted the preferred option (Option 2) from the 2007 Network Connection Options Assessment; a direct tunnel connection to Epping Station. ❖ Moved Norwest Station about 100 metres to the east from the 2017 Reference Scheme. |

2008 - 2010

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| SydneyLink March 2008 | <ul style="list-style-type: none"> ❖ Introduced the North West Metro linking the Sydney CBD to Rouse Hill via Victoria Road. The new North West Metro would run from Rouse Hill to Norwest, Castle Hill, Epping Top Ryde, Gladesville, Drummoyne, and Pyrmont before reaching Wynyard, Martin Place and St James in the CBD. ❖ Epping to the Hills Centre by 2015 and the entire line by 2017. |
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| Supplementary Submissions Report March 2008 | <ul style="list-style-type: none"> ❖ Noted that the alignment for the North West Metro was envisaged to be consistent with the 2017 Reference Scheme between Epping and Rouse Hill except for the tunnel alignment connecting into any new underground North West Metro station at Epping, and the connections to the existing Epping Station. |
| Concept Plan approval May 2008 | <ul style="list-style-type: none"> ❖ Approved the concept of the western portion of the North West Metro (i.e. from Epping to Rouse Hill). |
| North West Metro Product Definition Report October 2008 | <ul style="list-style-type: none"> ❖ Carried through the preferred alignment selected in the 2009 North West Metro Strategic Alignment Options Evaluation. |
| North West Metro Strategic Alignment Options Evaluation September 2009 | <ul style="list-style-type: none"> ❖ Assessed five additional options between Epping and Rouse Hill: <ul style="list-style-type: none"> • B1 Reference Scheme plus additional stations at Samantha Riley Drive, Norwest West, Thompson's Corner and alternative location at Hills Centre. • B2 Alternative northern alignment through Norwest North and Hills Centre North. • B3 Alternative northern alignment through Castle Hill. • B4 Alternative southern alignment running directly from Norwest to Castle Hill. • B5 Alternative southern alignment between Castle Hill and Epping. ❖ All were discarded, except for a component of B1 - the addition of a station at Samantha Riley Drive was canvassed for the long term. |
| North West Metro Extension Phase 2 Study October 2008 | <ul style="list-style-type: none"> ❖ Explored alignment options between Rouse Hill and Schofields stations. ❖ The preferred option introduced a station at Tallawong Road, which then continued onto a refurbished Schofields Station. |
| Metropolitan Transport Plan February 2010 | <ul style="list-style-type: none"> ❖ Sydney Metro deferred indefinitely in February 2010. ❖ Included plans to develop the heavy rail NWRL to Rouse Hill. Construction to commence 2017 with operation to commence by 2024. ❖ Preferred alignment from the May 2007 Preferred Project Report carried through. |

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| Infrastructure Australia Project Submission August 2010 | <ul style="list-style-type: none"> ❖ Revisited the 2017 Reference Scheme from the 2006 Environmental Assessment. ❖ Indicated a new alignment for a future extension, heading in the direction of Tallawong Road (informed by the 2008 North West Metro Extension Phase 2 Study). |
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2011

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| NSW 2021 - A Plan to Make NSW Number 1 | <ul style="list-style-type: none"> ❖ Aims to increase patronage on public transport through increased frequency and reliability of public transport services along with improved integration between transport services ❖ Expand public transport networks to support population growth in metropolitan centres. ❖ NWRL is identified as a key part of this expansion. |
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| Government Announcement April 2011 | <ul style="list-style-type: none"> ❖ NSW Government announced that planning and budgeting for the NWRL would start immediately, with the establishment of a project team to: ❖ Determine the planning approvals under the <i>EP&A Act 1979</i> needed to proceed with the Project. ❖ Put together a full costing of the new link. ❖ Start planning for the best way to integrate trains on the NWRL with the rest of the rail network. ❖ Start discussions with stakeholders and the community along the route. |
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| NWRL Project Overview July 2011 | <ul style="list-style-type: none"> ❖ Outlines the new elements to the NWRL since the project was approved in 2008. ❖ New elements include an extension beyond Rouse Hill to a train stabling facility at Tallawong Road and a proposed future station at Cudgegong Road |
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| Submission to Infrastructure Australia November 2011 | <ul style="list-style-type: none"> ❖ The NSW Government submission to Infrastructure Australia identifies three priority projects, of which the NWRL project is one. ❖ The submission seeks a reallocation of funding from the Australian Government to the NWRL as a priority urban rail project. |
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| Stage 1 State Significant Infrastructure Application Report December 2011 | <ul style="list-style-type: none"> ❖ Project application for NWRL - Stage 1 Major Civil Construction Works was lodged with DP&I. |
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| NWRL Industry Engagement Process December 2011 | <ul style="list-style-type: none"> ❖ The purpose of this process is to maximise the involvement of industry in project development and to encourage innovation in the design and delivery of the NWRL. |
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| Community Engagement In 2011 | <ul style="list-style-type: none"> ❖ Castle Hill Community Information Centre opened (June 2011) ❖ Place Managers appointed to liaise with residents, businesses and community organisations (October 2011) ❖ Ongoing consultation following Ministerial announcement of the project in December 2011. |
|---|---|

2012

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| NSW Long Term Transport Master Plan Discussion Paper, TfNSW February 2012 | <ul style="list-style-type: none"> ❖ Confirms the NSW Government's commitment to NWRL as part of the Long Term Transport Planning for NSW. |
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|--|--|
| Environmental Impact Statement. Stage 1 - Major Civil Construction Works (EIS 1) April 2012 | <ul style="list-style-type: none"> ❖ Lodgement of <i>Environmental Impact Statement Stage 1 - Major Civil Construction Works. Incorporating Staged Infrastructure Modification Assessment</i> with DP&I. ❖ EIS 1 placed on public exhibition from 4 April 2012 to 21 May 2012. |
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| EPBC Referral April 2012 | <ul style="list-style-type: none"> ❖ Referral submitted to the Commonwealth Government under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) in April 2012. ❖ Aspects of the project were declared a controlled action in May 2012. |
|---|--|

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|--|--|
| Sydney’s Rail Future (Modernising Sydney’s Trains), NSW Government June 2012 | <ul style="list-style-type: none">❖ Describes a plan to transform and modernise Sydney’s rail network based on a three-tiered system:<ul style="list-style-type: none">• Tier 1 Rapid Transit: rapid transit based on turn up and go services and single deck trains.• Tier 2 Suburban: timetabled services with double deck trains.• Tier 3 Intercity: timetabled services with double deck trains and on- board services for long distance commutes. |
| EIS 1 Submissions/Preferred Infrastructure Report July 2012 | <ul style="list-style-type: none">❖ Responded to over 350 submissions and dealt with changes to the project as well as establishing NWRL as a Tier 1 Rapid transit service in the context of the Sydney’ Rail Future strategy. |
| Stage 2 State Significant Infrastructure Application Report July2012 | <ul style="list-style-type: none">❖ Project application for NWRL - Stage 2 Stations, Rail Infrastructure and Systems was lodged with DP&I. |
| Draft NSW Long Term Transport Master Plan September 2012 | <ul style="list-style-type: none">❖ Sets out a draft framework for transport decision making and invites comment.❖ Encompasses Sydney’s Rail Future .❖ Confirms NWRL as a priority transport project and Tier 1 Rapid Transit within the three tiered system described by Sydney’s Rail Future. |
| Stage 1 State Significant Infrastructure Application – Major Civil Construction Works Approval September 2012 | <ul style="list-style-type: none">❖ NWRL Stage 1 Major Civil Construction works was determined by the Planning and Infrastructure Minister on 25 September 2012. Approval was granted to Stage 1 Major Civil Construction works subject to conditions. |
| The State Infrastructure Strategy 2012 – 2032 October 2012 | <ul style="list-style-type: none">❖ Infrastructure NSW endorses the three tier railway strategy developed by TfNSW as the basis for rail infrastructure investment, including the NWRL. |

1.3 Proponent

The proponent for the NWRL project is TfNSW, which is the lead agency of the NSW transport portfolio, with primary responsibility for:

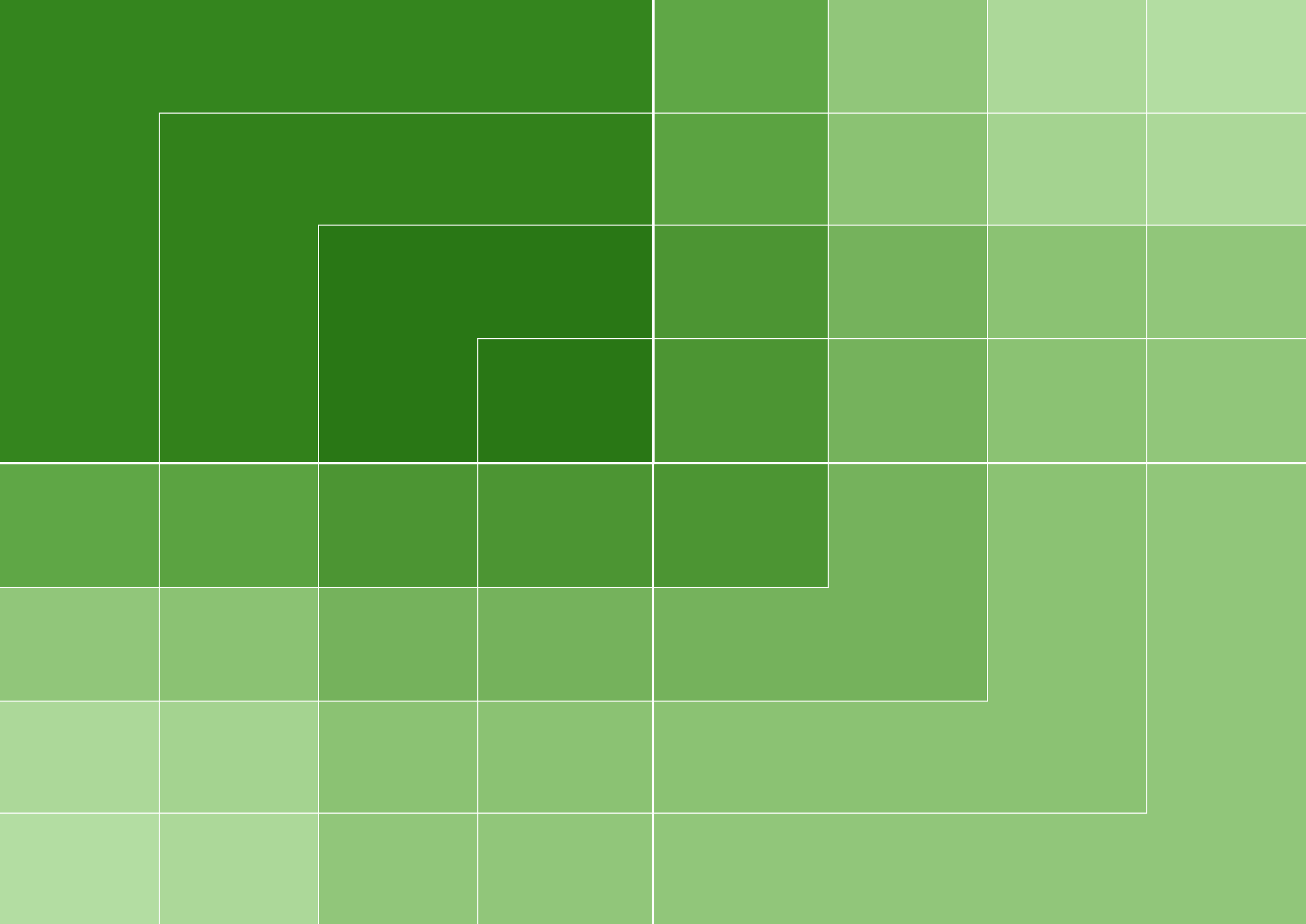
- ❖ Transport coordination.
- ❖ Transport policy and planning.
- ❖ Transport services.
- ❖ Transport infrastructure.

TfNSW takes the lead on all policy and planning functions of the former Transport NSW, RailCorp, Transport Construction Authority, Roads and Maritime Services (RMS), Sydney Ferries and the Public Transport Ticketing Corporation. A specialised Project Team has been established within TfNSW to coordinate and expedite work on the NWRL project.

An aerial photograph of a city street scene. In the foreground, there's a multi-lane road with cars and a speed limit sign of 40. To the left, a railway track runs parallel to the road. Several large, modern buildings with flat roofs are visible, some with solar panels. Trees and greenery are interspersed between the buildings. The overall scene is a mix of urban infrastructure and nature.

CHAPTER 2

STRATEGIC CONTEXT AND PROJECT OBJECTIVES



2 STRATEGIC CONTEXT AND PROJECT OBJECTIVES

2.1 Introduction

NSW 2021: A Plan to Make NSW Number One (NSW Government, 2011) (NSW State Plan 2021) is the primary document guiding the direction of development in NSW and Sydney. The plan identifies the NWRL as a key project to help deliver the NSW Government's policy goals including growth patronage in public transport by making it a more attractive choice. The *Draft NSW Long Term Transport Master Plan* released in September 2012 confirms the NWRL as a priority transport project. The Draft Plan encompasses *Sydney's Rail Future: Modernising Sydney's Trains* released in June 2012 which sets the long term strategy to increase the capacity of Sydney's rail network, through investment in new services and upgrading of existing infrastructure.

These plans, the role of the NWRL project in meeting the objectives of these plans and the metropolitan planning context of the project are discussed in the following sections.

The objectives of the NWRL project were developed based on the strategic need for the project which is established through the key plans identified above. These objectives are also presented in this section.

2.2 NSW 2021 – State Plan

NSW State Plan 2021 presents the NSW State Government's strategy to move the State forward over the next ten years and is based on five principal strategies with underlying goals. The five strategies are to:

- ❖ **Rebuild the economy** – restore economic growth and establish NSW as the 'first place in Australia to do business'.
- ❖ **Return quality services** – provide the best transport, health, education, policing, justice and family services, with a focus on the customer.
- ❖ **Renovate infrastructure** – build the infrastructure that makes a difference to both our economy and people's lives.

- ❖ **Strengthen our local environment and communities** – improve people's lives by protecting natural environments and building a strong sense of community.
- ❖ **Restore accountability to Government** – talk honestly with the community, return planning powers to the community and give people a say on decisions that affect them.

There are a number of goals specifically aimed at improving access and transport across the State. Common aims and themes across these goals are maximising the efficiency and effectiveness of public transport, and for active transport systems – including increasing utilisation, enhancing customer experience, integration across modes and desired origin/destination points and improving the frequency and reliability of services. Overall these combine as a general intent to raise the attractiveness, and hence utilisation, of the public transport system.

The NWRL would support these strategies and goals by providing a significant expansion to Sydney's rail network in an area of current and future population and employment growth, providing transport customers with real choice and contributing to the competitiveness of the region. The NWRL is specifically referenced in the plan as an initiative to achieve goals related to growing patronage on public transport (Goal 8) and renovation of infrastructure.

Goal 8 of the plan aims to increase patronage on public transport resulting in reduced traffic congestion, improved travel times and significant environmental benefits. In order to increase patronage, public transport needs to deliver an attractive, convenient and efficient choice for commuters. To achieve this, the frequency and reliability of public transport services would be increased along with improved integration between transportation services.

As part of Goal 8, TfNSW would expand public transport networks to support population growth in metropolitan centres, allowing communities to access jobs and services closer to home. The NWRL is identified as a key part of this expansion.

2.3 Metropolitan Planning Context

Long-term planning for Sydney metropolitan region aims to sustainably manage growth over the next 25 years by providing for a more compact, networked city with improved accessibility, capable of supporting more jobs, homes and lifestyle opportunities within the existing urban footprint.

To achieve this, Sydney faces a number of key growth challenges centring on population issues (including employment and housing needs); sustainability; productivity (competition and resources); and efficiencies of infrastructure delivery (particularly transport infrastructure and as part of the wider network of infrastructure across Sydney).

The rail system in Sydney is the foundation of the city's public transport system, and has been a key impetus to the growth of the city, shaping land use and human activities. Recognising this fundamental role of the transport system, metropolitan planning for the future will aim to:

- ❖ Enhance our transport system.
- ❖ Build on Sydney's strengths by further integrating transport and land use planning.
- ❖ Ensure a transport system that supports productivity through access to jobs, the efficient movement of freight and effective economic gateways.
- ❖ Ensure that our key centres are accessible and connected.
- ❖ Improve the passenger experience of public transport and promote active transport opportunities.
- ❖ Ensure transport corridors are preserved for future growth.

The NWRL would support metropolitan planning objectives by putting in place a key transport project which extends the connectivity of the existing rail network and supports growth centres in the north west.

2.4 NSW Long Term Transport Master Plan

The Draft NSW Long Term Transport Master Plan, released in September 2012, provides a framework for transport decision making. It invites comments which will be taken into account in the development of a final Plan to be released in late 2012.

The NSW Long Term Transport Master Plan will be the guiding transport planning and policy document to support the goals in NSW 2021. It will guide the prioritisation of available funds for Transport to deliver maximum benefits to NSW and integrates transport with wider economic, infrastructure, social, housing and land use planning including the Metropolitan Strategy for Sydney, and the State Infrastructure Strategy to ensure NSW has a coherent overall approach to transport planning.

The Master Plan also informs the development of more detailed plans, such as modal plans and specific Regional Transport Plans.

2.5 Sydney's Rail Future: Modernising Sydney's Trains

The Sydney's Rail Future: Modernising Sydney's Trains released in June 2012 is an integral part of the *Draft NSW Long Term Transport Master Plan*. It sets the long term strategy to increase the capacity of Sydney's rail network through investment in new services and upgrading of existing infrastructure. *The Sydney's Rail Future: Modernising Sydney's Trains* plan introduces:

- ❖ Single deck, rapid transport trains on the NWRL project.
- ❖ Procurement of rolling stock for the new rapid transit single deck train system initially operating between the North West and Chatswood, with a cross-platform interchange to suburban services for those customers travelling to the CBD.
- ❖ Upgrade of the ECRL to a high capacity rapid transit system.
- ❖ A new tunnel under the Harbour and a new Sydney CBD line, allowing services from the NWRL to extend directly to the Sydney CBD.

The NWRL project is identified in the Plan as a fast, safe and highly reliable rapid transport service.

2.6 State Infrastructure Strategy

Infrastructure NSW has released its 20-year infrastructure strategy for NSW. The Strategy represents independent advice to the Government on specific infrastructure investments and reforms. It assesses the current state of infrastructure in NSW and makes recommendations on the need and strategic priorities for infrastructure for the next 20 years.

The State Infrastructure Strategy acknowledges frequent and fast passenger trains are essential to the economic success of NSW and to the amenity of life, particularly in Global Sydney. The rail system must become world class, financially sustainable and attractive to commuters in Sydney and neighbouring regions.

The State Infrastructure Strategy also endorses the three tier railway strategy developed by TfNSW as the basis for rail infrastructure investment, including the NWRL.

The NSW Government will respond to the recommendations in the State Infrastructure Strategy by the end of 2012 following a debate in Parliament.

2.7 Project Objectives

The NWRL will provide an efficient and effective public transport service capable of moving significant numbers of people.

This public transport service aims to address the current and likely future access requirements of residents and visitors within the emerging North West Region of Sydney. It will link this region internally. By connecting with existing transport networks, access is also more readily available to the wider metropolitan area and its attributes including employment centres, the Sydney CBD (eg retail and services), universities / tertiary institutions and the airport.

The new rail service has the potential to reduce private transport and bus movements, with flow-on effects to road systems, by reducing congestion, movement numbers, safety incidents and other road-related issues.

The NWRL would deliver on the NSW Government's commitment to provide Sydney's commuters with a public transport system that is affordable and integrated with the existing transit network.

The six key objectives of the NWRL project are to:

1 Ensure customer needs are met through provision of a safe, high quality, integrated and affordable transport service

2 Link existing communities and new growth areas in north west Sydney with jobs and services in the Global Economic Corridor (Macquarie Park – Chatswood – North Sydney – CBD).

3 Deliver stage 3 (Rapid Transit System) of Sydney's Rail Future to improve transport network reliability by facilitating a shift from road to rail for trips to and from the north west, to reduce bus/road congestion and improve amenity in Sydney CBD.

4

Deliver a transport service that has been informed by engagement with communities and stakeholders and demonstrates evidence based decision making.

5

Support the Government's challenge to accommodate population growth in the north west by increasing the potential for a range of housing and employment opportunities.

6

Contribute to environmental, social and economic sustainability by improving liveability, minimising our impact on the environment and the community, and delivering value for money.

2.8 Project Alternatives

Since April 2011, when the Government announced its intention to proceed with the NWRL, a number of strategic options for optimising the scope of the base case project were analysed to improve value for money and produce a better project outcome for the community. The outcome of this analysis led to the announcement of an expanded NWRL project in December 2011.

The base case project included the construction of stations at Cherrybrook, Castle Hill, Showground, Norwest, Kellyville (in the vicinity of Memorial Avenue) and Rouse Hill with provision for stations in the future at Samantha Riley Drive and Cudgegong Road. The project scope included a train stabling facility at Tallawong Road beyond Rouse Hill.

The NSW Government applied a multi criteria assessment process modelled on the Australian Transport Council's *National Guidelines for Transport System Management in Australia* to assess a range of options that enhanced and/or optimised the base case project.

The options considered included an additional station and park and ride facility, alternative and adjusted locations for stations, and the optimised construction of sections of the rail alignment offering improved customer and product outcomes and value for money.

TfNSW has taken a proactive approach to consulting the community since April 2011 when the NSW Government announced its intention to proceed with the NWRL. In June 2011, the Minister for Transport opened the Castle Hill Community Information Centre which has been staffed five and half days a week since then and will continue for the duration of the project.

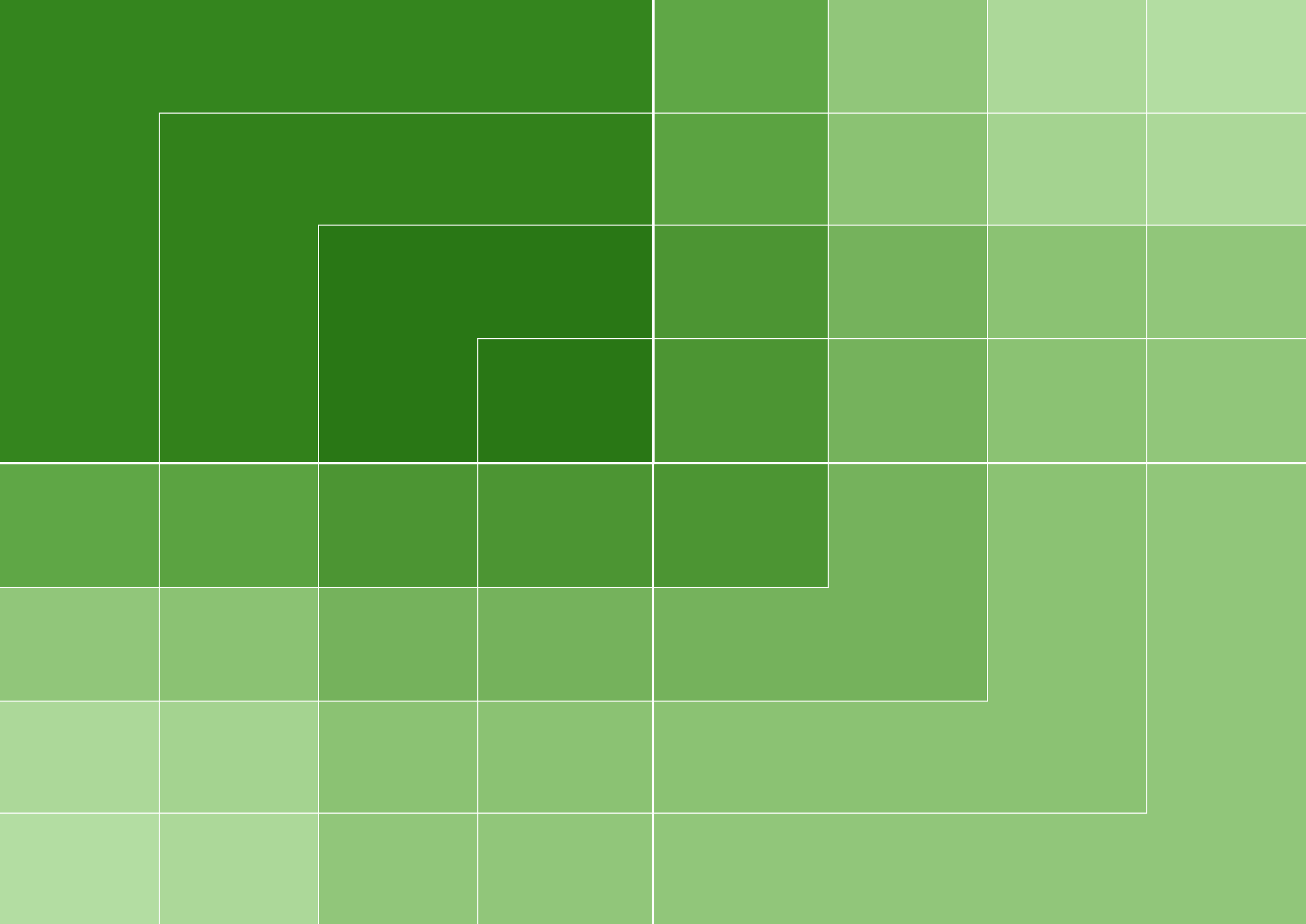
In the same month, TfNSW published the *North West Rail Link Project Overview* which canvassed a number of changes including two additional stations and an alternative location for the stabling yard. This was the subject of a public exhibition process which included 10 community information and feedback sessions, and produced an issues report that informed the final project definition.

The project the subject of this EIS is described in Chapters 6 and 7.

A photograph of construction workers on a roof. Two workers in orange safety vests and white hard hats are visible on the right side of the roof. The roof is covered with dark metal panels. Scaffolding is visible in the foreground and background. The sky is a clear, bright blue.

CHAPTER 3

STATUTORY PLANNING AND ASSESSMENT FRAMEWORK



3 STATUTORY PLANNING AND ASSESSMENT FRAMEWORK

3.1 Introduction

The following sections set out the NSW and Commonwealth approval and assessment processes as they apply to the NWRL project.

3.2 NSW Environmental Planning Approvals

The overarching statutory framework for environmental planning approval in NSW is provided by the EP&A Act. Supporting this primary piece of legislation are the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and a suite of environmental planning instruments, including State Environmental Planning Policies (SEPP) and Local Environmental Plans.

3.2.1 Project Definition and Permissibility of the North West Rail Link

The NWRL project is defined as a rail infrastructure facility under the provisions of clause 78 of *SEPP (Infrastructure)* 2007 (Infrastructure SEPP). As a rail infrastructure facility to be carried out by or on behalf of a public authority, it is identified as development that is permissible without consent under the provisions of clause 79 of the Infrastructure SEPP. The project is not proposed to be undertaken on land reserved under the *National Parks and Wildlife Act 1974* (NPW Act).

3.2.2 State Significant Infrastructure

The NWRL project has been declared to be State Significant Infrastructure under Part 5.1 of the EP&A Act through *Environmental Planning Policy (State and Regional Development)* 2011 (SRD SEPP). Clause 16(b) of the SRD SEPP declares the NWRL project as described in Schedule 5 of the SRD SEPP as State Significant Infrastructure.

As the NWRL project is State Significant Infrastructure, it will be assessed and determined by the Minister for Planning and Infrastructure under Part 5.1 of the EP&A Act.

3.2.3 Critical State Significant Infrastructure

Section 115V of the EP&A Act allows State Significant Infrastructure to be declared to be Critical State Significant Infrastructure in certain circumstances. Under clause 16 and Schedule 5 (clause 2) of the SRD SEPP, the NWRL project, has been declared to be Critical State Significant Infrastructure. The declaration recognises the importance of the NWRL as a project that is essential to the State for economic, environmental or social reasons.

3.2.4 Concept Plan Approval/ Staged Infrastructure Approval

On 6 May 2008, a Concept Plan Approval (MP 06_0157) was granted for the NWRL project under Part 3A of the EP&A Act. With the repeal and replacement of Part 3A, clause 5 of Schedule 6A of the EP&A Act sets out savings and transitional provisions in respect of Part 3A and operates to make the Concept Plan Approval issued under Part 3A, an approval for Staged Infrastructure under Part 5.1 of the EP&A Act.

A modification to the Staged Infrastructure Approval was determined by the Minister for Planning and Infrastructure on 25 September 2012.

3.2.5 Staging of State Significant Infrastructure Applications

The detailed environmental impact assessment of the NWRL project will be delivered in two major parts:

- ❖ **Stage 1:** State Significant Infrastructure Application and EIS for Major Civil Construction Works (referred to as EIS 1).

- ❖ **Stage 2:** State Significant Infrastructure Application and EIS for Stations, Rail Infrastructure and Systems (this document, referred to as EIS 2).

3.2.6 State Significant Infrastructure – Stage 1: Major Civil Construction Works (EIS 1)

An EIS for Major Civil Works was prepared and submitted to address:

- ❖ The environmental assessment requirements specified in the concept plan approval/ Staged Infrastructure approval.
- ❖ Supplementary environmental assessment requirements issued by the Director-General of the Department of Planning and Infrastructure (DP&I) on 3 February 2012.
- ❖ The commitments made in the Statement of Commitments included in *North West Rail Link Supplementary Submissions Report* (Transport Infrastructure Development Corporation), March 2008).
- ❖ The outcomes of on-going consultation with key stakeholders.

The EIS for Major Civil Construction Works was placed on public exhibition by the DP&I for 48 days from 4 April 2012 to 21 May 2012, and interested parties were invited to make a submission on the project.

A Submissions Report/Preferred Infrastructure Report was prepared and submitted to DP&I on 30 July 2012 to respond to issues raised in submissions and to address the proposed changes to the project description.

The State Significant Infrastructure application for the major civil construction works was determined by the Minister for Planning and Infrastructure on 25 September 2012, having regard to the assessment presented in the EIS, issues raised in submissions and the responses provided in the Submissions Report and the Director-General's Report.

3.2.7 State Significant Infrastructure – Stage 2: Stations, Rail Infrastructure and Systems (EIS 2)

This EIS has been prepared to address:

- ❖ The environmental assessment requirements specified in the concept plan approval/ Staged Infrastructure approval and supplementary environmental assessment requirements issued by the Director-General of the DP&I on 31 August 2012.
- ❖ The commitments made in the Statement of Commitments included in *North West Rail Link Supplementary Submissions Report* (TIDC, March 2008).
- ❖ The outcomes of on-going consultation with key stakeholders (refer Chapter 5).

This EIS would be placed on public exhibition by DP&I for at least 30 days and interested parties are invited to make a submission on the project. A Submissions Report would be prepared to respond to issues raised in submission and a Preferred Infrastructure Report may be required to address any proposed changes that minimise environmental impact or deal with any other issues raised during assessment of this application.

The Minister for Planning and Infrastructure would determine the State Significant Infrastructure application for the Stage 2: Stations, Rail infrastructure and Systems, having regard to the assessment presented in this EIS, issues raised in submissions and the responses provided in the Submissions Report and the Director-General's Report.

3.3 State Environmental Planning Instruments

With the exception of *Infrastructure SEPP and SRP SEPP*, there are no State environmental planning instruments that substantially govern the carrying out of the NWRL project.

3.4 Director-General’s Requirements, Conditions of Approval and Statement of Commitments

Table 3.1 sets out the Director-General’s Requirements in response to the State Significant Infrastructure Application - Stations, Rail Infrastructure and Systems. **Table 3.2** and **Table 3.3** set out the Conditions of Approval (CoA) and Statement of Commitments (SOC) related to the 2008 Concept Plan approval (copies of these requirements can be found in Appendix A).

Table 3.1 State Significant Infrastructure Application – Stations, Rail Infrastructure and Systems- Director-General’s Requirements

| Stations, Rail Infrastructure and Systems – Director-General’s Requirements | Where it is addressed in this EIS |
|--|-----------------------------------|
| State Significant Infrastructure Application Report Further assessment identified in the Report (North West Rail Link – Stage 2: Construction and operation of stations and rail infrastructure and systems). | Chapters 8-22 |
| Land Use Integration Integration with current and future land use plans and studies, and precinct/ structure planning, in consultation with the Department (Strategies and Land Release and Plan Making and Urban Renewal) and relevant Councils, including: <ul style="list-style-type: none">▪ impacts on land use as a result of the change in design to a viaduct, the proposed Cudgegong Station and Tallawong Stabling Facility;▪ potential land severance and connectivity to and across the rail corridor;▪ impacts associated with ancillary and servicing facilities; and▪ consideration of the Land use and Rail Integration Study for Area 20 (CFA 2011). | Chapter 14 |
| Historic Heritage Potential visual and cultural landscape impacts on historic heritage items. | Chapters 11 and 12 |
| Noise The assessment of construction and operational noise and vibration shall have consideration of the relevant components of <i>Assessing Vibration: a technical guidelines</i> (DECCW, 2006), <i>Interim Construction Noise Guidelines</i> (DECC, 2009), <i>NSW Industrial Noise Policy</i> (EPA, 2000), <i>Interim Guideline for Assessment of Noise from Rail Infrastructure Projects</i> (DECC, 2007), and the <i>NSW Road Noise Policy</i> (DECCW, 2011). | Chapter 10 |

| Stations, Rail Infrastructure and Systems – Director-General’s Requirements | Where it is addressed in this EIS |
|--|-----------------------------------|
| Traffic and Access As per the Concept Plan, the Proponent shall detail mode-of-access arrangements at Epping and each new station, with consideration to (but not necessarily limited to) the following matters: <ul style="list-style-type: none">▪ at Bella Vista Station – details of park and ride provisions, road access arrangements (including the feasibility of provision of a signalized intersection (including the feasibility of provision of a signalized intersection replacing the Lexington Drive / Celebration Drive roundabout), and pedestrian and cycle linkages between the station and residential areas (including west of the station across Old Windsor Road); and▪ at Cudgegong Road Station – details of park and ride provisions, road access arrangements, and cycle and pedestrian linkages with the Area 20 residential catchment, including a potential connection between Tallawong and Cudgegong Roads. | Chapter 9 |
| Groundwater Details of groundwater management during operation, particularly with regard to: <ul style="list-style-type: none">▪ details of the groundwater management;▪ proposed water discharge locations;▪ volume of water to be discharged at each location;▪ discharge water quality commitments; and▪ details of any ongoing treatment (if required). | Chapter 8 |
| Soils Soil erosion and associated water course impacts, soil salinity and potential acid sulphate soils. | Chapter 8 |
| Hydrology A detailed hydrological and hydraulic assessment for mainstreams and overland paths associated with major drainage changes. | Chapter 18 |
| Cumulative Impacts Assessment of cumulative impacts of the project on key environmental impact issues, particularly with regard to Stage 1 and 2 construction and interaction with other projects in the surrounding area. | Chapter 21 |
| Consultation The EIS shall document consultation undertaken with relevant government agencies, local government and the community in its preparation and how matters raised during consultation have been considered. | Chapter 5 |

Table 3.2 Staged Infrastructure Approval Conditions

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|----------------------------------|--|--|
| Terms of Concept Approval | | |
| 1.1 | <p>The Proponent shall carry out the concept plan and all related projects generally in accordance with the:</p> <p>Major Project Application 06_0157;</p> <ul style="list-style-type: none"> a. <i>North West Rail Link Environmental Assessment and Concept Plan</i>, dated November 2006, and prepared by GHD Pty Ltd; b. <i>North West Rail Link Preferred Project Report</i>, dated May 2007, and prepared by GHD Pty Ltd; c. <i>North West Rail Link Supplementary Submissions Report</i>, dated March 2008, and prepared by the Transport Infrastructure Development Corporation; d. Modification Application 06-0157 Mod 1, dated 14 December 2011; e. <i>North West Rail Link Environmental Impact Statement: Stage 1 – Major Civil Construction Works (Incorporating Staged Infrastructure Modification Assessment)</i>, dated 26 March 2012; f. <i>North West Rail Link Submission Report: Stage 1 – Major Civil Construction Works (Incorporating Preferred Infrastructure Report)</i>, dated July 2012, and g. the conditions of approval. | EIS 1 and EIS 2 have been prepared in accordance with these requirements. |
| 1.2 | <p>In the event of an inconsistency between:</p> <ul style="list-style-type: none"> a. any documents listed in condition 1.1a) to 1.1g) inclusive, the most recent document shall prevail to the extent of the inconsistency; and b. the conditions of approval and any document listed in condition 1.1a) to 1.1g) inclusive, the conditions of approval shall prevail to the extent of the inconsistency. | EIS 1 and EIS 2 have been prepared in accordance with these requirements. |
| 1.2A | In the event of an inconsistency between the terms of this approval and subsequent State Significant Infrastructure approval(s), the terms of the most recent State Significant Infrastructure approval will prevail to the extent of the inconsistency. | |
| 1.3 | <p>Limits of Approval</p> <p>To avoid any doubt, this concept plan approval does not permit the construction of any part of the proposal described in Schedule 1, unless and until a project approval is granted with respect to those works.</p> | Noted |
| 1.4 | <p>Provision of Information</p> <p>Within 6 weeks of the date of this concept plan approval the Proponent shall place an electronic copy of the documents referred to under condition 1.1 a) to h) of this approval on a new website established for the proposal, or dedicated pages within its existing website.</p> | See www.northwestrail.com.au |

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|------------------------------|---|--|
| Project Design | | |
| 2.1 | The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders, ensure that underground components of the project are designed with regard to existing and/ or planned future underground utilities and infrastructure including the planned extension of the M2 Motorway. | EIS 1 Chapter 5 and Chapter 14 |
| 2.2 | <p>The Proponent shall in consultation with relevant Councils and relevant Government agencies including (but not necessarily limited to) the SLR¹, the Department, Landcom, ensure that surface components of the project are integrated with surrounding land use (existing and planned future, as relevant) as far as reasonable and feasible, consistent with the objectives of <i>Integrated Land Use and Transport</i> (Department of Urban Affairs and Planning (DUAP) 2001 or as updated), to minimise the potential for land use conflicts.</p> <p>In particular:</p> <ul style="list-style-type: none"> ▪ design of Castle Hill station shall consider the <i>Castle Hill Draft Master Plan</i> (or as updated); and ▪ Kellyville and Rouse Hill Stations and stabling facilities are to be integrated with the precinct planning for the Burns Road Release Area, Rouse Hill Regional Centre and the Area 20 precinct of the North West Growth Centre, as relevant. | EIS Chapter 14 EIS 2 Chapter 14 |
| 2.3 | The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders ensure that ancillary infrastructure are located and designed to minimize biophysical and/ or amenity impacts, as far as feasible and reasonable. | EIS 1 Chapter 5 and Chapter 7 EIS 2 Chapter 5 and Chapter 6 |
| 2.4 | The Proponent shall ensure that station precincts across the project provide a high degree of accessibility to all modes-of-access, consistent with the objectives of <i>Integrated Land Use and Transport</i> (DUAP 2001 or as updated). | EIS 2 Chapter 6 and Chapter 9 |
| 2.5 | The Proponent shall ensure that the surface components of the project affecting roads are designed to minimise traffic disruptions as far as feasible and reasonable, in consultation with the RMS ² and/ or relevant Councils. | EIS 1 Chapter 7 and EIS 2 Chapter 9 |
| Performance Standards | | |
| 2.6 | <p>In relation to operational noise and vibration, the Proponent shall ensure that:</p> <ul style="list-style-type: none"> ▪ the project rail corridor is designed consistent with the <i>Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects</i> (DECC, 2007); ▪ the project stabling facilities are designed consistent with the <i>Industrial Noise Policy</i> (EPA, 2000); and ▪ the project is designed to consistent with <i>Assessing Vibration: A Technical Guideline</i> (DECC, 2006). | EIS 2 Chapter 10 |

¹ Strategies and Land Release (SLR) (of the Department)

² Roads and Maritime Services (RMS)

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|---|---|--|
| 2.7 | The Proponent shall ensure that any floodplain topography and/ or waterway affected by cut-and-cover construction methodology is re-instated and/ or rehabilitated consistent with pre-construction conditions. | EIS 1 Chapter 18 EIS 2 Chapter 18 |
| 2.8 | The Proponent shall ensure that the biodiversity impacts associated with the project are offset consistent with the 'improve and maintain' principles of the <i>Growth Centres Commission Biodiversity Certification</i> process, in consultation with the OEH ³ and SLR. | EIS 1 Chapter 15 EIS 2 Chapter 15 |
| Project applications and specific requirements | | |
| 3.1 | <p>Pursuant to section 75P(1)(a) of the <i>Environmental Planning and Assessment Act 1979</i>, the following environmental assessment requirements apply with respect to any projects related to this concept plan approval:</p> <ul style="list-style-type: none"> a. a detailed project description including: <ul style="list-style-type: none"> i. confirmation of the alignment, station locations (including feasibility of any additional stations) and stabling arrangements; and ii. the design and location of ancillary infrastructure; b. a detailed project-specific statement of commitments, with regard to the statement of commitments prepared for the concept plan, clearly identifying any new or amended commitments relating to the project; c. an updated assessment of statutory matters, where the project affects land that has not already been identified in the documents referred to in conditions 1.1 (a) to (d); d. an assessment of Matters of National Environmental Significance, as relevant; e. an appropriate and justified level of consultation with relevant Councils and relevant Government agencies including (but not limited to) RailCorp, SLR, Landcom, EPA⁴, OEH, DPI⁵ (Fisheries), NOW⁶, RMS, including a description of how agency and Council input has been considered in decisions on design and/ or mitigation; f. an appropriate and justified level of consultation with relevant stakeholders including a description of how stakeholder input has been considered in decisions on design and/ or mitigation; g. assessment of the key issues identified in conditions 3.2 to 3.16 of this approval, including of relevant ancillary infrastructure; and h. assessment at an appropriate level of detail of the impacts and mitigation measures associated with any additional key issues of relevance to the project, identified during further design development, that are not specifically identified in this concept plan approval. | EIS 1 and EIS 2 |

3 Office of Environment and Heritage
4 Environment Protection Authority
5 Department of Primary Industries
6 NSW Office of Water

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|------------------------------|---|---|
| 3.2 | <p>Property and Land use</p> <p>The Proponent shall confirm the footprint of the project with respect to alignment, station precincts and ancillary infrastructure as far as feasible and reasonable, describe the land use impacts on existing and planned future use associated with any additional land take.</p> | EIS 1 Chapters 7 and 14 EIS 2 Chapters 6, 7 and 14 |
| Traffic and Transport | | |
| 3.3 | The Proponent shall review mode-of-access demand and peak traffic predictions at Epping Station taking into account the impact of ECRL operations on patronage distribution; and identify any required changes to mode-of-access arrangements at Epping. | EIS 2 Chapter 9 |
| 3.4 | <p>The Proponent shall confirm mode-of-access arrangements at each new station, with consideration to (but not necessarily limited to) the following matters:</p> <ul style="list-style-type: none"> ▪ at Cherrybrook Station – details of park and ride provisions, road access arrangements (including the feasibility of a signalised intersection between Castle Hill, Glenhope and Franklin Roads); and pedestrian and cycle linkages to the surrounding pedestrian catchments of Cherrybrook and West Pennant Hills; ▪ at Castle Hill Station – investigation of options for shared use parking; bus access arrangements; and pedestrian and cycle linkages between the station and residential areas surrounding the Castle Hill town centre, retail areas within the town centre and the Castle Towers shopping centre; ▪ at Hills Centre Station [now Showground Station] - details of park and ride provisions; road access arrangements; and pedestrian linkages to the Castle Hill industrial estate; ▪ at Norwest Station - investigation of options for shared use parking; access for buses, kiss and ride and taxis; and pedestrian and bus linkages to the Norwest Business Park and surrounding residential catchments; ▪ at Kellyville Station – details of park and ride provisions; bus interchange arrangements which are integrated to the Parramatta to Rouse Hill Transitway; and road, pedestrian and cycle access that are integrated with the planned provisions for the Balmoral Road Release Area; and ▪ at Rouse Hill Station - bus interchange arrangements which are integrated to the Parramatta to Rouse Hill Transit way; and road, pedestrian and cycle access that are integrated with the planned provisions for the Rouse Hill Regional Centre. | EIS 2 Chapters 6 and 9 |

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|--|
| 3.5 | The Proponent shall confirm the construction traffic impacts associated with the project, identifying: <ol style="list-style-type: none"> haulage routes; peak congestion and intersection performance impacts at local and arterial roads considering cumulative impacts from surrounding development and from concurrent construction sites; reasonable and feasible construction options at road crossings to avoid and/ or minimise traffic disruptions; and requirements for road and/ or lane closure and alternative travel arrangements. | EIS 1 Chapters 7 and 9 EIS 2 Chapters 7 and 9 |
| 3.6 | Noise and Vibration The Proponent shall review the noise and vibration impacts of the project during construction (including construction traffic) and operation, considering all reasonable and feasible mitigation options at existing and planned future receivers. | EIS 1 Chapter 10 EIS 2 Chapter 10 |
| 3.7 | Geotechnical The Proponent shall identify risks to groundwater quality and/ or risks to surface water quality from contaminated groundwater during construction and operation, including measures to avoid, manage, mitigate and monitor impacts. | EIS 1 Chapter 8 EIS 2 Chapter 8 |
| 3.8 | Geotechnical The Proponent shall identify the following matters in relation to the bored tunnel components of the project: <ol style="list-style-type: none"> existing groundwater conditions (level and quality), taking into consideration seasonal variability; local and regional drawdown impacts, including any groundwater users impacted by the project and measures to offset impacts; options for the sustainable use and/or disposal of tunnel inflow; measures to minimise the risk of bed cracking and loss of surface flow when tunnelling below creek lines and contingency measures for restoring affected waterways consistent with pre-construction conditions, including monitoring procedures and performance criteria; impacts to groundwater dependent ecological communities (affected by groundwater drawdown) and to riparian and instream ecology (affected by surface cracking and water flow impacts); and surface locations (and associated infrastructure) above the tunnel alignment that are likely to be at risk to land subsidence or settlement impacts, including relevant settlement design criteria and measures to minimise, monitor and offset impacts. | EIS 1 Chapters 8 and 15 EIS 2 Chapters 8 and 15 |

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|------------------------------------|--|---|
| Surface Water and Hydrology | | |
| 3.9 | For surface components of the project located on floodplains, the Proponent shall identify flood design criteria in accordance with the <i>Floodplain Development Manual</i> (2005), describing risks to existing and planned future receivers and infrastructure based on the modelling of a full range of flood sizes up to and including the probable maximum flood. | EIS 1 Chapter 18 EIS 2 Chapter 18 |
| 3.10 | For temporary construction sites located on floodplains, the Proponent shall identify reasonable and feasible mitigation measures for mitigating flood risk, including procedures for restoring and monitoring any temporary creek diversions consistent with pre-construction conditions. | EIS 1 Chapter 18 EIS 2 Chapter 18 |
| 3.11 | For cut and cover tunnel components which cross creek lines, the Proponent shall describe the proposed construction methodology, identifying measures to minimise the risk of bed cracking and loss of surface flow and contingency measures for restoring and monitoring waterways, consistent with pre-construction conditions. | Not Applicable as no cut and cover tunnels are proposed which cross creek lines |
| 3.12 | The Proponent shall identify impacts to riparian and instream ecology from any direct disturbances to waterways and to flora and fauna from changes to creek flow or flood behaviour, during construction or operation. | EIS 1 Chapter 15 EIS 2 Chapter 15 |
| 3.13 | Flora and Fauna The Proponent shall confirm the ecological impacts associated with the project with consideration to conditions 3.8 e) and 3.12, and identify measures to offset impacts, clearly distinguishing between measures to be provided as part of the <i>Growth Centres Biodiversity Certification</i> process and other measures. The Proponent shall describe how the effectiveness of the offset measures would be monitored, what actions shall be taken if measures are identified to be ineffective, the maintenance responsibilities, and timing of implementation of offset measures. | EIS 1 Chapter 15 EIS 2 Chapter 15 |
| 3.14 | Indigenous Heritage The Proponent shall review the indigenous heritage impacts of the project considering cumulative impacts from surrounding development, consistent with: <ol style="list-style-type: none"> Steps 1 to 4 of the Protocol for Aboriginal Stakeholder Involvement in the assessment of Aboriginal cultural heritage in the Sydney Growth Centres (Context Pty Ltd, 2006a) and the Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres (Context Pty Ltd, 2006a), for land within the North West Growth Centre; and Guideline for Aboriginal Cultural Heritage Impacts Assessment and Community Consultation (DECC July 2005), for all other areas. The Proponent shall identify mitigation priorities with consideration to the regional significance of impacts. | EIS 1 Chapter 12 EIS 2 Chapter 12 |

| No. | Condition | Where it is addressed in EIS 1 and EIS 2 |
|------|--|--|
| 3.15 | European heritage The Proponent shall review the European Heritage impacts of the project, describing measures to minimise and/ or appropriately manage impacts. | EIS 1 Chapter 11 EIS 2 Chapter 11 |
| 3.16 | Visual and Urban Design The Proponent shall review the visual and urban design impacts and mitigation requirements for the project in accordance with Statement of Commitment 40 to 44; identifying the timing of implementation of urban design and landscaping measures, how the effectiveness of landscaping measures would be monitored, and maintenance responsibilities for relevant urban design and landscape measures | EIS 1 Chapter 16 EIS 2 Chapter 16 |

Table 3.3 Concept Approval - Statement of Commitments

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|---|
| 1 | Core sustainability principles would be developed for the design and construction of the project covering the following themes: <ul style="list-style-type: none"> Energy Greenhouse emissions Water Community and stakeholder involvement Biodiversity Resource recycling/minimisation To develop the principles a benchmarking exercise would be undertaken to enable sustainability goals and objectives to be determined, which would provide clear result areas and targets under each theme | EIS 1 Chapter 4 EIS 2 Chapter 4 |
| 2 | Communications processes would be developed and implemented throughout delivery of the project. These would include: <ul style="list-style-type: none"> Opportunities to input into the design process such as at station precincts and structures and proposed mitigation measures (e.g. noise barriers) for construction and operations Methods to inform the community of the progress and performance of the project and issues of interest to the community; Processes to receive and manage complaints; and Consultation with affected property owners. | EIS 1 Chapter 5 EIS 2 Chapter 5 Construction Environmental Management Framework |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|--|--|
| 3 | Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and Concept Plan and the Preferred Project Report | EIS 1 Chapter 5 EIS 2 Chapter 5 |
| 4 | A construction strategy would be developed confirming detailed construction activities and methodologies at each construction site for the construction of the tunnel. | EIS 1 Chapter 7 |
| 5 | Detailed construction methodologies at each construction site would be developed, including spoil management, with the aim of minimising environmental impacts and informing future impact assessment | EIS 1 Chapter 7 EIS 2 Chapter 7 |
| 6 | Consultation with Councils, the Growth Centres Commission, RailCorp and other relevant stakeholders would be undertaken to ensure environmental planning instruments reflect planning, construction and operation of the project and include integrated planning provisions for appropriate development controls within the vicinity of the rail line and stabling facility. | EIS 1 Chapter 5 EIS 2 Chapter 5 |
| 7 | Land use and property impacts of the project, including construction sites and all ancillary facilities, would be further assessed in consultation with Councils and surrounding landowners. | EIS 1 Chapters 5 and 14 EIS 2 Chapter 5 and 14 |
| 8 | A Land Asset Management Strategy to address 'land surplus to use', post construction would be developed jointly with the Department of Planning (Land Management Branch) in consultation with Councils, Growth Centres Commission and RailCorp. This strategy would investigate opportunities for land amalgamation of parcels severed by the project and identify opportunities for development that is consistent with surrounding land use planning. | Opportunities for transport and land use integration are being progressed with DP&I and local councils. EIS 2 Chapter 14 |
| 9 | Consultation with relevant Councils, government agencies, utility providers, land owners and communities involved in the planning of precincts in the vicinity of each station would be undertaken with the aim of encouraging transit-orientated development around each station. The role of each station within the context of provision of public transport services would be established, including the need and capacity of park and ride facilities, establishing connections with other transport modes (including the potential for integrated ticketing), and integrating pedestrian and cyclist facilities. | EIS 2 Chapter 5 EIS 2 Chapter 14 |
| 10 | Further investigations would be undertaken with respect to the planned expansion of the Castle Hill Shopping Centre and integration of the project with the Castle Hill Draft Master Plan | Chapters 5 and 20 and EIS 2 |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|--|--|
| 11 | At each station, further studies would be undertaken to consider the integration of the station with the local area to ensure that predicted patronage and mode access are catered for during operation. Studies would consider local connectivity requirements; pedestrian modelling (including emergency access); bicycle facilities; the potential impacts of traffic accessing the station from the surrounding road network; parking requirements and the integration of the Transitway and other bus services with the new rail stations. These investigations would be undertaken in consultation with Councils, RailCorp, Ministry of Transport and the Roads and Traffic Authority. | EIS 2 Chapter 5 EIS 2 Chapter 6 EIS 2 Chapter 9 |
| 12 | The location, scale, design and quantum of park-and-ride facilities at the Franklin Road ⁷ , Hills Centre and Burns Road Station ⁸ would be reviewed during further design. This is to be undertaken with reference to relevant parking policies and in consultation with Councils, RailCorp and the Ministry of Transport. | EIS 2 Chapter 9 |
| 13 | In consultation with Councils, RailCorp, the Ministry of Transport and surrounding landowners, investigate opportunities for 'shared use' or complementary parking facilities adjacent to Norwest Station. | TBC |
| 14 | In consultation with the RTA and Councils, investigate the feasibility of providing a direct access point to the Franklin Road site from Castle Hill Road and the potential for a signalised intersection at the intersection of Glenhope Road with Castle Hill Road. | EIS 2 Chapters 5 and 9 |
| 15 | In consultation with the RTA and Councils investigate potential access improvements to Franklin Road Station from areas to the north. | EIS 2 Chapters 5 and 9 |
| 16 | The design of construction activities would consider access points, surrounding intersections, bus routes and pedestrian flows. | EIS 1 Chapters 7 and 9 |
| 17 | Traffic modelling and traffic management analysis would be undertaken for the roads and intersections impacted by the project during the project construction and operation. This analysis would consider existing and planned road upgrades. | EIS 1 Chapter 9 EIS 2 Chapter 9 |
| 18 | A detailed construction methodology for the construction over and/or under roads would be developed in consultation with the RTA and Councils with the aim of minimising traffic disruptions (including construction of the bridge over Windsor Road at Kellyville and cut and cover construction under Norwest Boulevard, Windsor Road and Burns Road). | EIS 1 Chapter 9 |
| 19 | Maintenance access points would be identified and planned in consultation with RailCorp and Councils. | TBC |

7 Franklin Road Station subsequently renamed to Cherrybrook Station

8 Burns Road Station subsequently renamed to Kellyville Station

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|--|
| 20 | A detailed noise and vibration assessment of the proposed construction activities, including blasting if required, would be undertaken as part of design development and would include the investigation of the potential need for reasonable and feasible mitigation in accordance with relevant policies and guidelines. | EIS 1 Chapter 10 |
| 21 | Consult with local Councils, Growth Centres Commission and RailCorp in relation to land use planning and development controls to minimise the need for physical noise mitigation. | EIS 2 Chapter 10 |
| 22 | In regard to operational noise, the Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (Department of Planning, 2007) would be used to implement the following activities: <ul style="list-style-type: none"> Modelling of operational noise impacts (including ground borne noise) in more detail as part of the design development; Identification of acoustic mitigation measures to meet, where reasonable and feasible, the design goals; and Select representative locations for the project at which it is appropriate to later assess compliance. | EIS 2 Chapter 10 |
| 23 | In regard to train stabling operational noise, the following would be undertaken: <ul style="list-style-type: none"> Determine the extent of any physical noise mitigation measures in consultation with Department of Environment and Climate Change (DECC), RailCorp and Growth Centres Commission; and Review the results of RailCorp's investigations into addressing horn – noise and consider the feasibility in consultation with RailCorp of implementing a low volume horn test. | EIS 2 Chapter 10 |
| 24 | Investigate feasible and reasonable mitigation measures to manage operational vibration in consultation with Councils, the DECC and RailCorp. | EIS 2 Chapter 10 |
| 25 | Design of waterway crossings and structures would be undertaken with reference to the Guidelines for Design of Fish and Fauna Friendly Waterway Crossings (Fairfull and Witheridge 2003) and Fish Passage Requirements for Waterway Crossings (2003) and considering the quality of riparian habitat present, in consultation with the Department of Primary Industries (NSW Fisheries) and other relevant Government agencies. | EIS 1 Chapter 15 EIS 2 Chapter 15 |
| 26 | The location of structures associated with the rail tunnel, such as ventilation shafts, emergency egress/access points and discharge/runoff outlets, would be assessed with respect to the potential application of SEPP 19. | EIS 1 Chapter 15 EIS 2 Chapter 15 |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|---|
| 27 | <p>A detailed ecological assessment would be undertaken at all construction sites and along above ground sections of the project corridor.</p> <p>The assessment would identify areas to be avoided (where practicable), construction related impacts and how these can be managed; and, where required, describe measures to offset significant impacts on threatened species and/or endangered ecological communities. This assessment would be undertaken in consultation with the DECC, the Growth Centres Commissions, RailCorp and the Commonwealth Department of Environment and Water Resources as appropriate.</p> | <p>EIS 1 Chapter 15</p> <p>EIS 2 Chapter 15</p> |
| 28 | <p>‘Improve and Maintain’ assessments on biodiversity values would be undertaken to identify the potential impacts of the project and benefits from protection measures to be implemented.</p> <p>The methodology adopted for all parts of the project would be consistent with the draft Growth Centres Conservation Plan (GCC, 2007) and DECC’s draft Guidelines for biodiversity certification of environmental planning instruments (2007).</p> | <p>EIS 1 Chapter 15</p> <p>EIS 2 Chapter 15</p> |
| 29 | <p>Further investigations would be undertaken as part of the design development into opportunities for beneficial reuse of spoil.</p> <p>As a result of these investigations further assessment of transport options and routes for spoil movement would be undertaken.</p> | EIS 1 Chapters 7 and 9 |
| 30 | <p>Additional research would be undertaken to determine the history and potential heritage significance of the sites identified in Castle Hill.</p> <p>Site-specific archaeological assessments would be undertaken in the event that they are found to have heritage significance.</p> | <p>EIS 1 Chapter 11</p> <p>EIS 2 Chapter 11</p> |
| 31 | Site-specific archaeological assessments would be undertaken for the two archaeological sites identified along Old Windsor Road and Windsor Road. | <p>EIS 1 Chapter 12</p> <p>EIS 2 Chapter 12</p> |
| 32 | A view analysis would be undertaken to and from Rouse Hill House and its estate and the Glenhope property. If required appropriate mitigation measures would be identified. | EIS 2 Chapter 16 |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|---|
| 33 | The Indigenous Heritage protocol and methodology developed for the Growth Centres would continue to be applied as the project progresses, in consultation with DECC and relevant Indigenous groups. | <p>EIS 1 Chapter 12</p> <p>EIS 2 Chapter 12</p> |
| 34 | A detailed assessment would be undertaken in the vicinity of sites identified to have moderate to high archaeological potential. The assessment would identify areas to be avoided, construction related impacts and how these can be managed; and, where required, salvage excavation prior to any subsurface impact on the deposit. Advertising for interested parties would need to be undertaken prior to any subsurface investigation, in accordance with DECC requirements. | <p>EIS 1 Chapter 12</p> <p>EIS 2 Chapter 12</p> |
| 35 | Detailed geotechnical and groundwater investigations would be undertaken involving site investigations to inform future design development. | <p>EIS 1 Chapter 8</p> <p>EIS 2 Chapter 8</p> |
| 36 | A detailed flood assessment would be undertaken in accordance with appropriate NSW Government guidelines and in consultation with Councils and relevant Government agencies. This would include a two dimensional model of the Caddies Creek confluence to facilitate a better understanding of the discharges at the confluence of the creeks and associated design requirements. | <p>EIS 1 Chapter 18</p> <p>EIS 2 Chapter 18</p> |
| 37 | Investigations into the construction and operational impacts on the Elizabeth Macarthur Creek would be undertaken in accordance with relevant NSW Government guidelines. | <p>EIS 1 Chapter 18</p> <p>EIS 2 Chapter 18</p> |
| 38 | The floodplain storage impacts would be defined during design development in accordance with the relevant NSW Government guidelines. | <p>EIS 1 Chapter 18</p> <p>EIS 2 Chapter 19</p> |
| 39 | Further investigations into the location, size and treatment levels of a water treatment plant(s) would be undertaken in consultation with DECC, Councils and RailCorp. Investigations would include identifying discharge points, determining the receiving water quality and water re-use/ recycling opportunities. | <p>EIS 1 Chapters 8 and 18</p> <p>EIS 2 Chapters 8 and 18</p> |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|---|
| 40 | <p>The following architectural, landscape and urban design principles would be used to guide the design of the new stations and transport interchanges, civil works (such as noise walls, embankments and the viaduct section) and/or the stabling facility concepts:</p> <ul style="list-style-type: none"> Reinforce the role of the station and transport interchange within its surrounding neighbourhood as the principal transport and community facility within the locality. Stations and the stabling facility would be designed in the context of the scale, character and image of the surrounding area and enhance the presentation of the area to visitors, residents and travellers. Maintain or improve the links across the project and to surrounding areas and activities. Where a connection between adjacent areas is desirable, pedestrian bridges or underpasses would be considered. Easy access facilities would be incorporated into the station designs and integrated with the associated transport interchanges. Movement networks should improve existing, or establish new comfortable and inviting pedestrian environments, including equitable access within the railway station and adjoining areas. A design theme would be established for bridges/viaduct to link the overall rail design together. The design would ensure that the structures are simple, integrated with the surrounding area and finished to a high quality. Fencing, parapets and any railing on the bridges would also be integrated with the overall design. Establish a hierarchy of access to stations consistent with NSW Govt policy package <i>"Integrating land –use and transport"</i> i.e prioritise public transport and other non-car based access to the rail stations and adjoining areas where possible. Station precinct design should facilitate new development that reflects the highest standards and quality of design. | <p>EIS 1 Chapter 7</p> <p>EIS 2 Chapter 6</p> |
| 41 | <p>Visual impact assessment of the project would be undertaken as part of design development. This would consider both the existing and future urban environment to identify impacts and potential mitigation measures, such as architectural, landscape and/or urban design treatments.</p> <p>Additional assessments would apply to pedestrian and cycle facilities; proposed bridging structures; cutting and embankment treatments; landscape treatment projects; design of the stations and stabling facility; proposed acoustic treatments; and any visual buffer areas as required.</p> | <p>EIS 1 Chapter 16</p> <p>EIS 2 Chapter 16</p> |

| No. | Commitment | Where it is addressed in EIS 1 and EIS 2 |
|-----|---|---|
| 42 | <p>Measures to mitigate visual impacts and deliver high quality design outcomes would include:</p> <ul style="list-style-type: none"> Where noise walls are proposed, potential visual impacts would be minimised by implementation of urban design measures, developed in consultation with adjacent property owners (mitigation measures might include plantings and high quality facings near residential areas). Earth mounding would be considered where space allows and where significant vegetation would not be lost. The design of any civil works, such as noise walls, retaining walls, the viaduct and underpasses would adopt CPTED principles, including the need for unobstructed views into and outside of the underpass, effective drainage and ventilation, wide corridors and good lighting. Light spill would be minimised as much as possible to reduce impacts on surrounding existing and future residents in accordance with relevant standards. | <p>EIS 1 Chapter 16</p> <p>EIS 2 Chapter 16</p> |
| 43 | TIDC's Design Review Panel would guide the application of architectural, landscape and urban design principles throughout the design development. | TfNSW Design Review Panel would continue to be used to guide the design process |
| 44 | Public art and interpretation would be incorporated into architectural elements or urban design treatments and would be assessed and implemented with design themes and urban design criteria (eg. graffiti management). | EIS 2 Chapter 6 |
| 45 | An assessment of the potential impacts and benefits of construction and operation on adjacent businesses would be undertaken in consultation with business owners during the design phase. | <p>EIS 1 Chapter 13</p> <p>EIS 2 Chapter 13</p> |

3.5 Other NSW Environmental Approvals

Other environmental approvals relevant to the NWRL project under section 115ZH of the EP&A Act include:

- ❖ An environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997 (POEO Act)*.
- ❖ A consent under section 138 of the *Roads Act 1993*.

Environmental planning *approvals* that do not apply to or in respect of State Significant Infrastructure but which have been considered during the preparation of this EIS include (refer to section 115ZG of the EP&A Act):

- ❖ A permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*.
- ❖ An Aboriginal heritage impact permit under section 90 of the *NPW Act 1974*.
- ❖ A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000*.

3.6 Commonwealth Environmental Approvals

The Commonwealth Environment Protection Biodiversity Conservation Act 1999 requires assessment and approval of certain actions that have, or will have, or are likely to have a significant impact on a matter of National Environmental Significance, being:

- ❖ The world heritage values of a declared World Heritage property.
- ❖ The National Heritage values of a National Heritage place.
- ❖ The ecological character of a declared Ramsar wetland.
- ❖ Listed threatened species and ecological communities.
- ❖ Listed migratory species.
- ❖ A nuclear action.

- ❖ An action in a Commonwealth marine area.
- ❖ An action in the Great Barrier Reef Marine Park (or outside the Park but within Australian jurisdiction) that, will have, or is likely to have, a significant impact on the environment in the Great Barrier Reef Marine Park.

Approval is also required under the EPBC Act for:

- ❖ An action on Commonwealth land that has, will have, or is likely to have, a significant impact on the environment.
- ❖ An action that has, will have, or is likely to have, a significant impact on the environment on Commonwealth land, no matter where it is to be carried out.
- ❖ An action outside Australian jurisdiction that has, will have, or is likely to have, a significant impact on the environment in a Commonwealth Heritage place outside the Australian jurisdiction.
- ❖ An action by the Commonwealth or a Commonwealth agency that has, will have, or is likely to have, a significant impact on the environment.

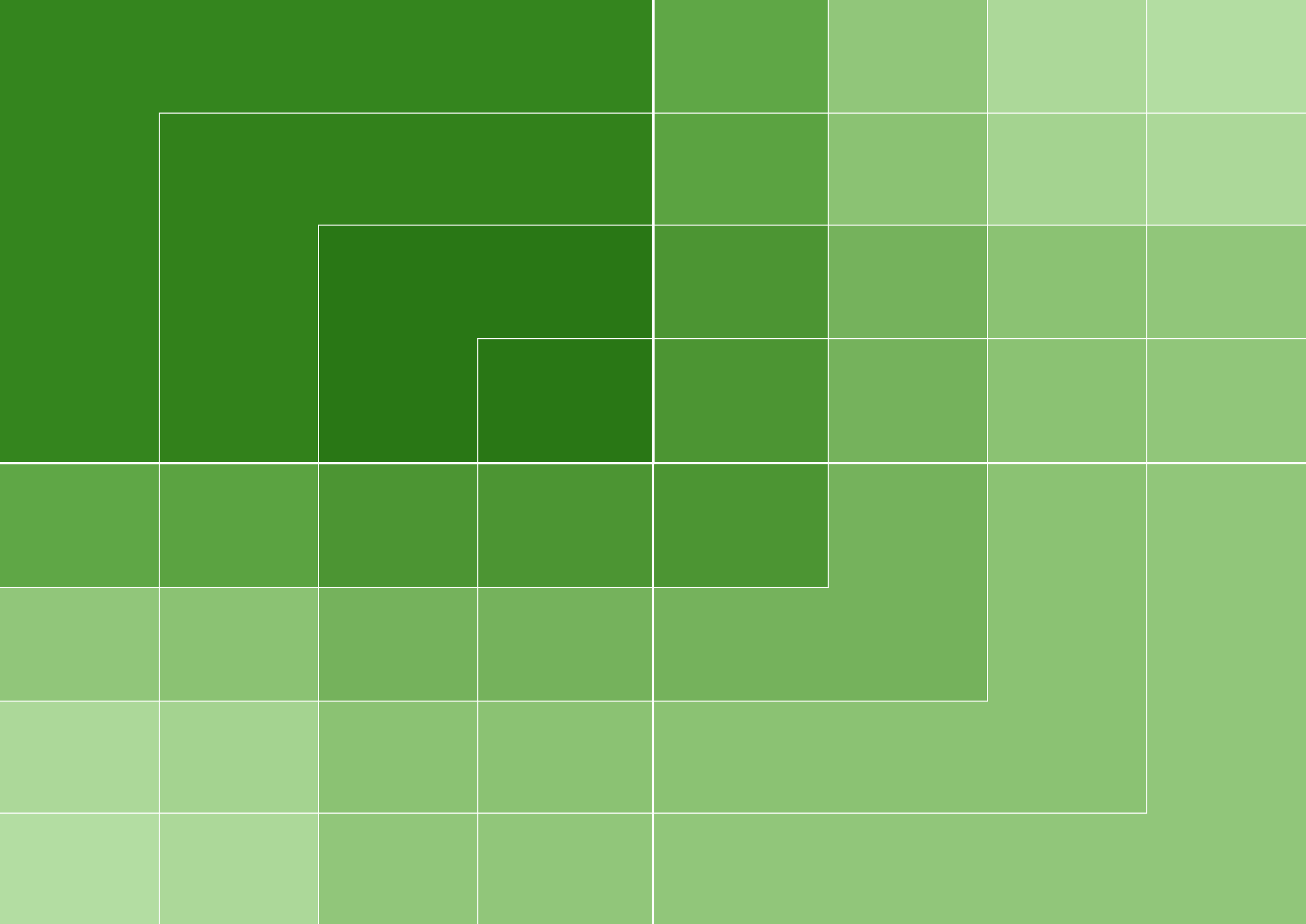
A referral has been prepared under the EPBC Act and was submitted to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) on the 20 April 2012.

SEWPaC advised the NWRL is a controlled action and will require assessment and approval under the EPBC Act before it can proceed. At the time this EIS was prepared, SEWPaC was in the process of assessing the project.

The background of the slide is a photograph of a garden bed. A green plastic sheet is laid over a layer of brown wood mulch. A small green plant with serrated leaves is growing through the mulch in the center. The plastic sheet has some condensation or water droplets on its surface.

CHAPTER 4

SUSTAINABILITY



4 SUSTAINABILITY

This chapter describes the overall approach to sustainability on the NWRL project and how specific objectives and related targets and initiatives are being incorporated into the design, construction and operation of the project.

It defines sustainability in the Australian context, outlines the NWRL Environmental and Sustainability Policy and identifies specific initiatives being incorporated into the project. As sustainability is a priority throughout the life cycle of the NWRL, the next steps to further develop and integrate sustainability initiatives are discussed.

4.1 Director-General Requirements, Conditions of Approval and Statement of Commitments

The Statement of Commitments relating to Sustainability Strategies are provided in **Table 4.1**.

4.2 Sustainability overview

There are many definitions for sustainability or sustainable development. One of the original descriptions of sustainable development is ‘*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*’ (World Commission on Environment and Development, 1987, Our Common Future, commonly referred to as the Brundtland Report).

In 1992 the Commonwealth Government defined Ecologically Sustainable Development (ESD) as ‘using, conserving, and enhancing the community’s resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased’ (Commonwealth of Australian 1992). The four principles to assist achievement of ESD are defined in both the EP&A Regulation and the *Protection of the Environment Administration Act 1999* (PEA Act) as:

- ❖ The precautionary principle.
- ❖ Inter-generational equity.
- ❖ Conservation of biological diversity and ecological integrity.
- ❖ Improved valuation and pricing and incentive mechanisms.

Chapter 22 details how the project addresses these four principles of ESD.

4.3 North West Rail Link Environment and Sustainability Policy

For the NWRL, sustainability means building public transport for current and future generations, that optimises environmental and sustainability outcomes, transit service quality and cost effectiveness.

An environment and sustainability policy has been developed for the NWRL project. It acknowledges that the project has the potential for both positive and negative sustainability related impacts and aims to maximise the potential sustainability benefits while minimising negative impacts.

To do this, the policy establishes five areas of commitment:

Leadership:

- ❖ Implement coordinated and transparent decision making, by engaging with stakeholders and suppliers, encouraging innovation and demonstrating sustainability leadership.
- ❖ Explore new benchmarks for the transport infrastructure sector by requiring high standards from our designers, contractors and suppliers.

Table 4.1 Statement of Commitments

| SoC Reference | Description | Addressed |
|---------------|---|--|
| 1 | <p>Sustainability Strategies</p> <p>Core sustainability principles would be developed for the design and construction of the project covering the following themes:</p> <ul style="list-style-type: none">▪ Energy▪ Greenhouse emissions▪ Water▪ Community and stakeholder involvement▪ Biodiversity▪ Resource recycling/minimisation <p>To develop the principles a benchmarking exercise would be undertaken to enable sustainability goals and objectives to be determined, which would provide clear result areas and targets under each theme.</p> | <p>Section 4.3 & Table 4.2</p> <p>NWRL Sustainability Strategy (summarised in Section 4.3 & Table 4.2)</p> |

Community and customer:

- ❖ Provide accessible, safe, pleasurable and convenient access and transport services for all customers.
- ❖ Establish positive relationships with community and stakeholders to maximise opportunities to add value to local communities in North West Sydney.

Land use integration and place making:

- ❖ Create desirable places, promote liveability, cultural heritage, optimise community and economic benefit.
- ❖ Balance transport oriented development opportunities with stakeholder expectations.

Embedding sustainability:

- ❖ Establish robust sustainability objectives and targets.
- ❖ Maintain an environmental management system that is integrated into all our project activities.
- ❖ Ensure thorough and open environmental assessment processes are developed, deployed and maintained.
- ❖ Develop and maintain an environmental management framework to embed best practice environmental and sustainable outcomes during construction.
- ❖ Apply effective assurance processes to monitor performance against the project environment and sustainability objectives and identify appropriate reward or corrective action, as required.
- ❖ Apply environment and sustainability specific processes to the procurement of delivery activities.

Accountability:

- ❖ Undertake public sustainability reporting
- ❖ Hold employees and contractors to the NWRL project accountable for proactively meeting their environmental and sustainability responsibilities
- ❖ Provide appropriate training and resource necessary to meet our responsibilities.

These commitments provide an overarching framework for the development of more specific sustainability objectives, developed as part of a sustainability strategy, to guide the integration of sustainability into project governance, design, construction and operation.

4.4 North West Rail Link Sustainability Strategy

The NWRL Sustainability Strategy incorporates the Environment and Sustainability Policy and sets out specific objectives and initiatives/targets to be integrated into the project planning and design, procurement, construction and operations stages of the project.

Figure 4.1 illustrates how the NWRL Sustainability Strategy integrates sustainability across the project.

Table 4.2 lists the fourteen sustainability objectives and specific initiatives/targets which have been identified for the NWRL.

Sustainability objectives and initiatives/targets would be included in the contract documents for all detailed design and construction contracts. Project contractors would be required to clearly identify how they would ensure that specific sustainability objectives and initiatives/targets are met. This approach would encourage industry to develop innovative value for money sustainability solutions.

The initiatives/targets identified in the table are not definitive and are being progressively assessed and developed by the project Sustainability Team.

Figure 4.1 Project Sustainability Strategy

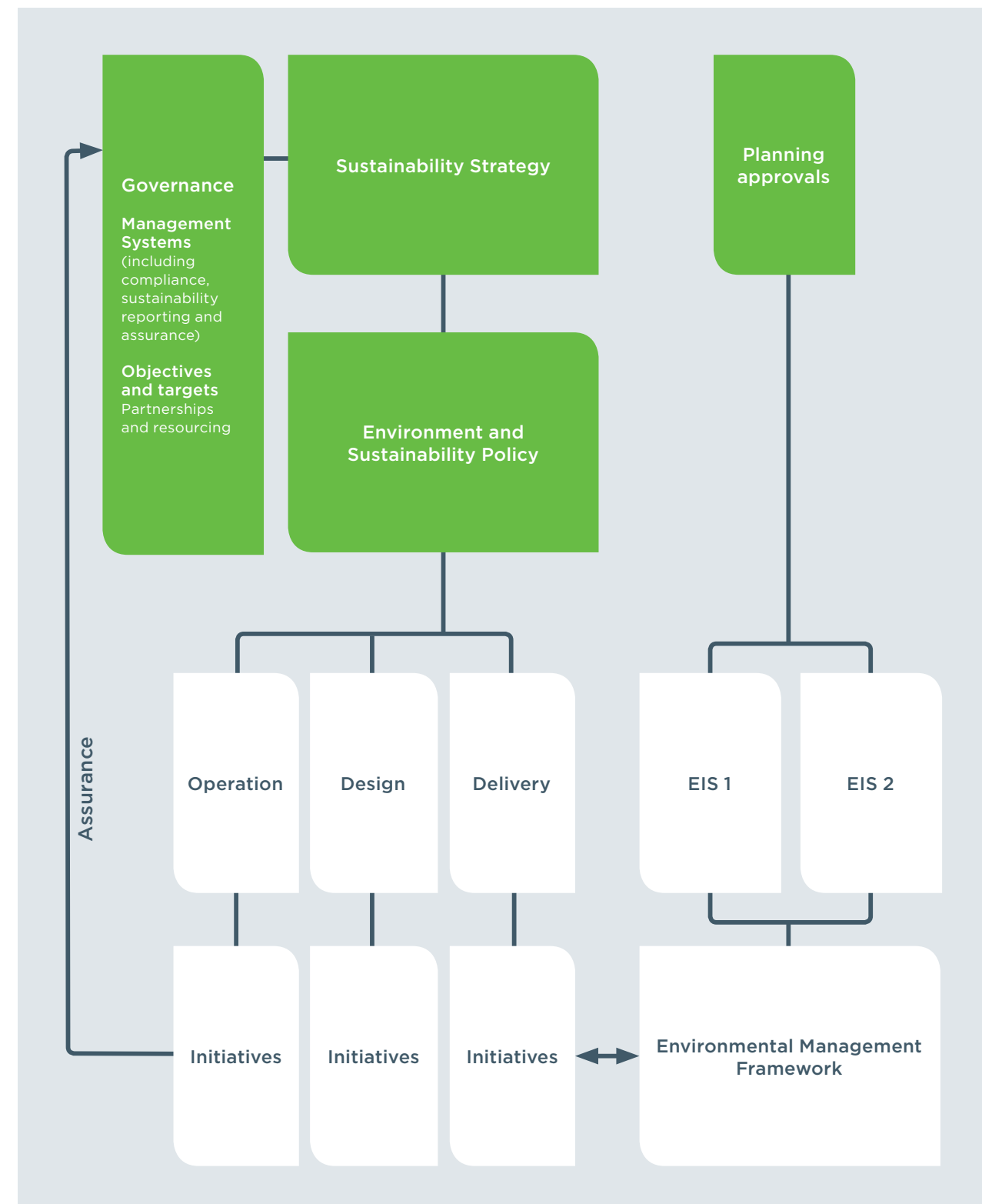


Table 4.2 Project Sustainability Objectives and Potential Initiatives/Targets.

| Sustainability objective | | Potential initiatives/targets | |
|--------------------------|---|-------------------------------|---|
| 1 | Governance objective Demonstrate sustainability leadership within the rail, transport and land use sectors. | 1.1 | Target a high level of attainment in the Australian Green Infrastructure Council Infrastructure Sustainability Rating Tool. |
| | | 1.2 | Target a high level of attainment in the Transport for New South Wales' Sustainable Design Guidelines. |
| 2 | Climate change objective Be resilient to potential climate change impacts and reduce infrastructure vulnerability. | 2.1 | Undertake a climate risk assessment. Identify and implement adaptation measures to address extreme, high or medium level residual climate risks on the project. |
| 3 | Carbon management objective Improve shift towards lower carbon transport. Reduce operational, construction and embodied carbon emissions. Identify low carbon energy generation and procurement options. | 3.1 | Explore options to offset 100% of the electricity needs for the operational phase of the Project. |
| | | 3.2 | Explore options to source 5% of operational demand from onsite renewable or low carbon sources at the stabling yard, stations or car parks. |
| | | 3.3 | Offset 20% of the electricity needs for the construction phase of the Project. |
| 4 | Energy efficiency objective Promote energy efficient design and construction, including reducing fuel usage. | 4.1 | Explore options to achieve 20% reduction energy demand on a reference case (including regenerative braking) to be achieved through design. |
| | | 4.2 | Zero artificial lighting provided to 95% of the concourse and platform area at elevated stations during the day. |
| | | 4.3 | Targets to be identified for energy efficiency / energy reduction during construction. |
| 5 | Land use integration objective Promote liveability and sustainability benefits of urban renewal and consolidation. Optimise community and economic benefit of residual land development. Promote improved public transport patronage by leveraging connectivity and interchange capabilities. | 5.1 | Targets to be established for: Electric vehicle charging points provided / safeguarded at all station car parks. |
| | | 5.2 | Distance of cycleways created (metres). |
| | | 5.3 | Number of secure cycle parking to be provided. |
| | | 5.4 | Hectares of landscape/public open space created. |
| | | 5.5 | Kilometres or hectares of creek improvements. |
| 6 | Community experience objective Promote enhanced urban design and passenger comfort. | 6.1 | Actively engaging local communities, potential customers and other stakeholders in the development and implementation of the project. |
| | | 6.2 | Ensure there are place managers to cover all areas for the project during the planning and construction phases. |
| 7 | Community benefit objective Enhance community benefits through transport amenity and reliability, healthy living, provide for community safety, ensure community engagement and involvement, provision of public art, accessible design and social inclusion. | 7.1 | Number of community legacy projects provided. |
| | | 7.2 | Demonstration of safety initiatives to deter crime. |
| | | 7.3 | Number of community workshops to communicate delivery timeframes and receive input from community members on design development. |
| | | 7.4 | Incorporation of public art at all stations. |
| | | 7.5 | All local education facilities (schools, universities, institutes) to have access to project development and benefits for curriculum development. |

| Sustainability objective | | Potential initiatives/targets | |
|--------------------------|--|-------------------------------|--|
| 8 | Resource land objective Optimise above and below ground land take requirements | 8.1 | Identify per cent reduction in efficient use of land (project footprint). |
| 9 | Resource - water efficiency objective Minimise demand for, and use of potable water, as well as maximise opportunities for water re-use from captured stormwater, wastewater and groundwater | 9.1 | Explore options to achieve 100% of non-potable water demand sourced from non-potable sources during operation. |
| | | 9.2 | Explore options to achieve 100% of non-potable water demand sourced from non-potable sources during construction. |
| 10 | Resource - waste and materials objective Reduce materials use and minimise waste through the project life-cycle. Identify materials with lower environmental footprint. | 10.1 | 100% clean spoil to be beneficially reused. |
| | | 10.2 | 90% of construction and demolition recyclable waste is recycled. |
| | | 10.3 | Identify reduction in embodied carbon emissions, compared to a reference design. |
| 11 | Heritage conservation objective Protect and promote local heritage through appropriate design, planning, and management controls | 11.1 | Identify opportunities to enhance heritage values and show evidence of implementation. |
| | | 11.2 | Develop partnerships with relevant stakeholders to utilise heritage places to promote local heritage values. |
| 12 | Biodiversity conservation objective Protect and create biodiversity through appropriate planning, management and financial controls | 12.1 | Area of biodiversity legacy provided onsite. |
| | | 12.2 | Offset biodiversity as determined by the Regulator. |
| 13 | Pollution control objective Reduce sources of pollution and optimise control at source to avoid environmental harm | 13.1 | Zero major pollution incidents. |
| 14 | 14: Supply chain objective Influence contractors, sub-contractors and materials suppliers to adopt sustainable practices in support of the NWRL Environment and Sustainability Policy | 14.1 | Develop a workforce strategy, prior to construction commencing including the following aspects: <ul style="list-style-type: none"> Local employment. Training and education. Health and wellbeing. Diversity and equal opportunity (including gender, age, minority group membership diversity). Partnerships with local universities and other educational institutes. |
| | | 14.2 | Ensure sustainability and environment performance criteria and the NWRL Environment and Sustainability policy is passed on to all suppliers. |

4.5 Benchmarking

The NWRL would be assessed against the TfNSW Sustainable Design Guidelines. The NWRL has also committed to being assessed using the comprehensive Australian Green Infrastructure Council Infrastructure Sustainability (IS) rating system. The IS rating system is a new tool (released 2012) which evaluates sustainability across the design, construction and operation of infrastructure projects.

4.6 Environmental and sustainability management

All NWRL Principal Contractors would be required to develop an environmental and sustainability management system for the project which would link to the Principal's system.

The relationship between key documents within the NWRL Environment and Sustainability Management System and the Principal Contractor's Environment and Sustainability Management System is shown in **Figure 4.2** Notably:

- ❖ The Construction Environment Management Plan (CEMP) (see Appendix B) and its sub plans would capture the construction environmental management requirements emerging from the EISs, subsequent planning approvals and the NWRL Sustainability Strategy.
- ❖ The Sustainability Plan and its sub plans would capture governance and design requirements as well as social sustainability initiatives required by the NWRL Sustainability Strategy.
- ❖ These plans would vary in scope across different delivery packages.

All sub-contractors engaged by the Contractor would be required to work under the Principal Contractor's environmental and sustainability management system.

4.6.1 Compliance of requirements under the NWRL Environmental and Sustainability Management System

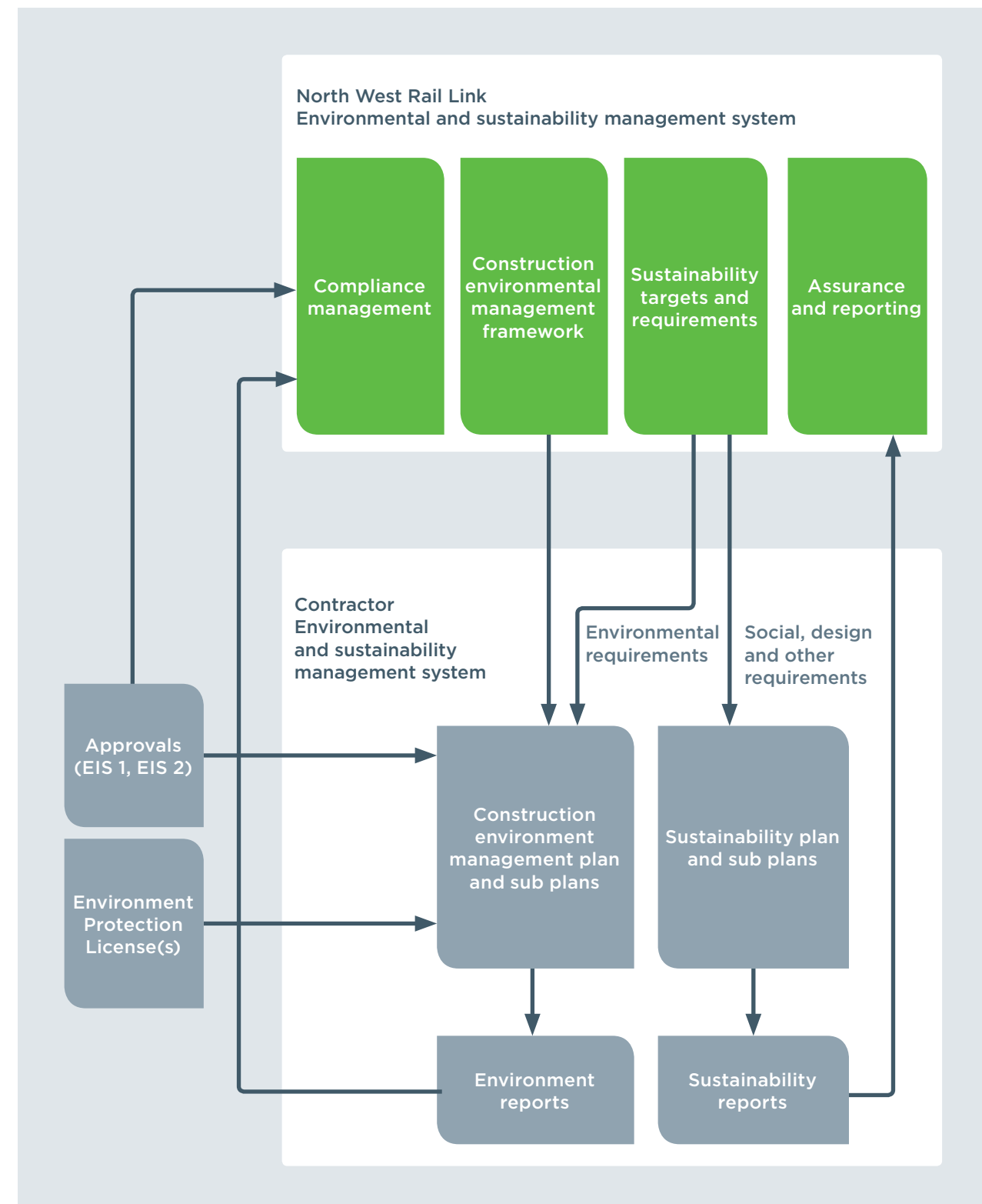
The Construction Environmental Management Framework:


The Construction Environmental Management Framework (see Appendix B) is a NWRL project-wide framework which sets out minimum environmental, stakeholder and community management requirements for construction. It acts as a linking document between the initiatives described in this EIS (and EIS 1) and their further development and implementation by contractors through individual Construction Environmental Management Plans. Contractors would be required to implement and adhere to the requirements of the Construction Environmental Management Framework and the NWRL Sustainability Strategy and both documents would be included as a contract document in all design and construction contracts.

The NWRL Sustainability Strategy:

As mentioned previously, the NWRL Sustainability Strategy outlines potential initiatives/targets for the project. Implementation of sustainability initiatives/targets would be monitored and audited in line with the requirements of the project's sustainability strategy. The result of this process would be reported and subject to independent verification as part of an overall sustainability assurance process.

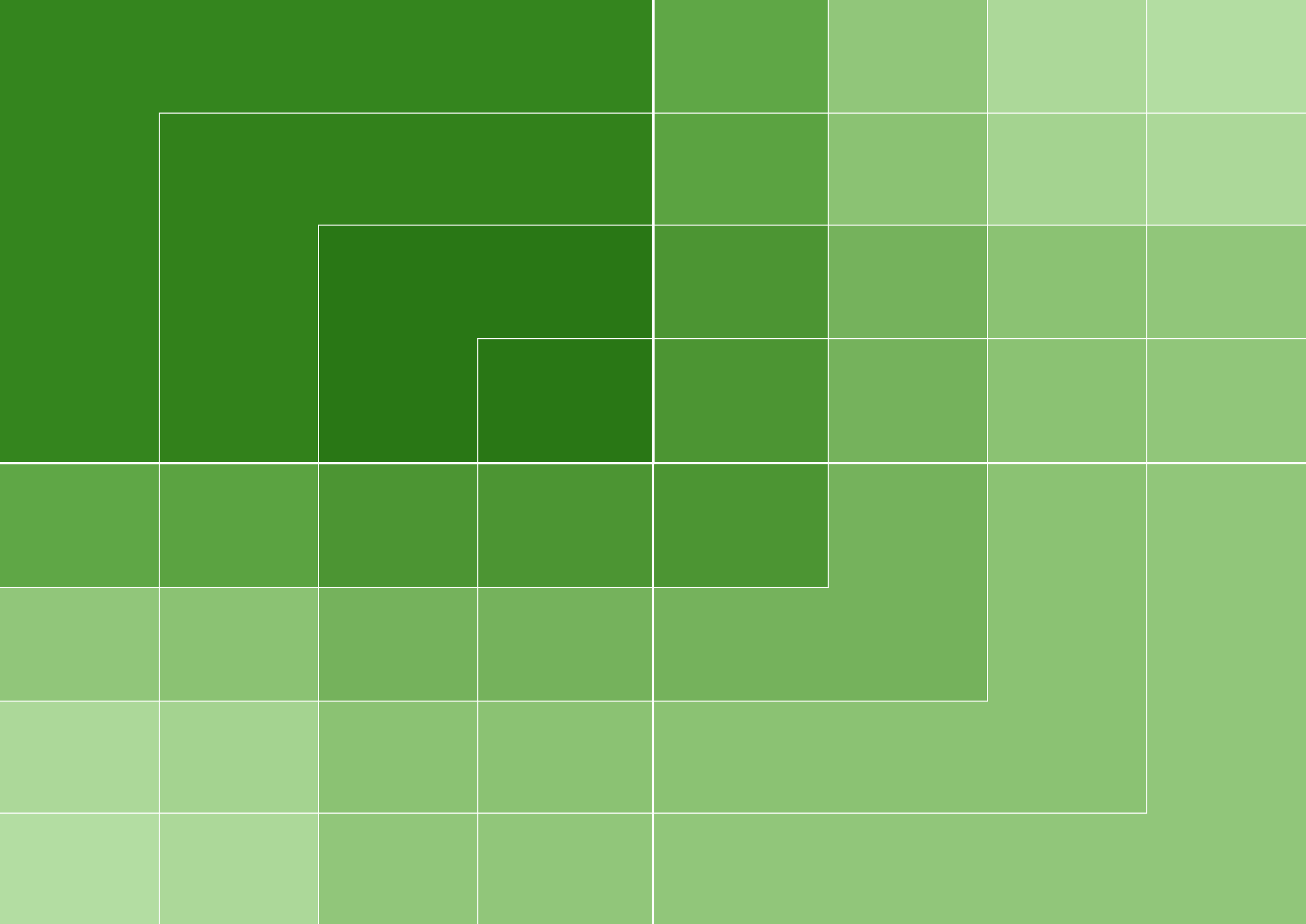
Figure 4.2 Environmental and Sustainability Management System



An aerial photograph of a suburban neighborhood. The top half shows a dense cluster of houses with various roof colors (grey, orange, brown) and some trees. To the right, there is a large sports field with a baseball diamond and a soccer field. A school building is visible near the sports field. The bottom half shows a road with a roundabout and more houses. A green banner with white text is overlaid on the middle of the image.

CHAPTER 5

CONSULTATION



5 CONSULTATION

5.1 Introduction

The purpose of this section is to describe the consultation process that occurred during the ongoing development of the NWRL and in particular in the preparation of this EIS. The chapter identifies who has been consulted, the issues that were raised, and guides the reader to the chapters within the EIS documentation in which those issues are addressed.

The background work leading up to and including the consultation shaping EIS1 has informed the preparation of this EIS.

5.1.1 Background

Extensive consultation has occurred over the last 10 years on the provision of a rail link to the north west of Sydney.

The first consultation occurred in 2002 with the community, local business and industry groups and included:

- ❖ Publication of the initial Overview Report (2002)
- ❖ Consultation for the Environmental Assessment and Concept Plan (2005-7)
- ❖ Publication of the Preferred Project Report (2007)
- ❖ Supplementary Submissions Report (2008)

TfNSW has taken a proactive approach to consulting the community from April 2011 when the NSW Government announced its intention to proceed with the NWRL. Since that time the following activities have been undertaken:

- ❖ A project Community Information Centre at Castle Hill opened (June 2011)
- ❖ Implementing an information/feedback line and an interactive website
- ❖ Local newspaper advertising to advise of Information Sessions and to provide Project Updates

- ❖ Consultation about the Project Overview Report (July 2011)
- ❖ Place Managers appointed to liaise with residents, businesses and community organisations (October 2011)
- ❖ Ongoing consultation following Ministerial announcement of the project in December 2011
- ❖ An interactive Industry engagement process has been ongoing since December 2011
- ❖ Consultation throughout the exhibition of the Environmental Impact Statement for Major Civil Construction Works (EIS 1)
- ❖ Public submissions received during exhibition and following exhibition of EIS 1 and the publication of a Submissions Report responding to the issues raised.

5.2 Early consultation activities prior to EIS process

5.2.1 Consultation activities 2002-2008

The first opportunity the public had to comment on the NWRL occurred following the publication of *Action for Transport 2010* (NSW Government, November 1998).

Consultations during the preparation of the North West Rail Link *Environmental Assessment and Concept Plan* (TIDC, 2006) commenced in November 2005 with:

- ❖ Residents within 250 metres of the proposed alignment
- ❖ Statutory agencies
- ❖ Other key stakeholders such as environmental, community and business groups.

A total of 61 submissions were received from the public and the issues raised were addressed in the Environmental Assessment when it was lodged with the DP&I (former Department of Planning (DoP)).

The government agency and local government consultations were similarly reported.

Following lodgement, the former DoP put the application for a Concept Plan on public exhibition. Over 1,600 submissions were received during and immediately following public exhibition.

In February 2007, the *North West Rail Link Preferred Project Report* (TIDC, 2007) was prepared, which provided responses to issues raised in submissions received during the public exhibition of the Environmental Assessment. It also included information about additional studies undertaken in response to submissions, and provided details on proposed modifications to the concept plan as described in the assessment.

The Preferred Project Report was then placed on public exhibition with submissions received including in excess of 3,000 form letters and 338 other individual submissions up to August 2007. This resulted in the publication of a *North West Rail Link Supplementary Submissions Report* in March 2008 in which the issues raised were addressed.

5.2.2 Consultation activities related to the North West Growth Centre (2008-2011)

Extensive community, landowner and government agency consultation was undertaken by the DP&I as part of the planning process for Area 20 within the North West Growth Centre. The NWRL corridor was identified in documentation prepared as part of the process and following exhibition in 2008, eight of the 53 submissions related to the NWRL project. The Area 20 Precinct was rezoned for urban development in October 2011 by the Minister for Planning and Infrastructure. Further detail regarding Area 20 can be found at Sydney's Growth Centres website (<http://www.gcc.nsw.gov.au/area20-55.html>).

5.2.3 Consultation activities in 2011

Following the Government's announcement to proceed with the NWRL, a project Community Information Centre at Castle Hill was officially opened by the Minister for Transport on 29 June 2011. It is staffed five and a half days per week and, since opening, more than 4,000 people have made enquiries at the centre.

In July 2011 a newsletter was distributed to more than 45,000 residents and businesses along the corridor introducing the *North West Rail Link Project Overview*. TfNSW in its *Project Overview Issues Report* (November, 2011) addressed the above issues amongst others.

The project team has also undertaken extensive consultation with the three local councils as well as government agencies with which numerous briefings and topic-specific workshops have been held.

5.2.4 Place Managers

The need for key stakeholders and the community to have accessible points of contact throughout the planning process was recognised with the appointment of four Place Managers in 2011. These specialists have clearly defined geographical areas to cover in which they are the 'face' of the project and a source of continuity throughout the NWRL's development. Following the distribution of newsletters along the proposed alignment, the Place Managers made contact with directly affected residents and businesses through door-knocking as well as visiting residents' groups, schools, sporting clubs, and many other venues to offer briefings about the plans for the project and their potential impacts. These regular encounters provide a useful conduit of feedback to the project team allowing for speedy identification and resolution of issues.

5.2.5 Consultation during preparation and exhibition of the Environmental Impact Statement for Major Civil Construction Works

TfNSW established a number of working groups in order to facilitate cross agency consultation about project impacts and how they should be managed. These groups and participants are listed below:

- ❖ RMS Services Working Group
- ❖ Planning Reference Group
- ❖ Departmental Precinct Land Use Group
- ❖ Railcorp Environmental and Sustainability Technical Working Group
- ❖ Utility and service provider meetings
- ❖ Local Council and Councillor briefings
- ❖ Station /precinct meetings

During the preparation and exhibition of the Environmental Impact Statement for Major Civil Construction Works (EIS 1), TfNSW consulted extensively with adjacent landowners, tenants and the broader community through:

- ❖ NWRL Community Information Centre
- ❖ Activities of Place Managers
- ❖ Community Information Sessions
- ❖ Briefings of stakeholder and residents groups
- ❖ Discussions with adjacent landowners and tenants
- ❖ Meetings with Indigenous groups as part of cultural heritage studies

Briefings have taken place with a large number of community based organisations whose operations may be directly impacted by construction and operation of the rail line.

Methods used to communicate with stakeholders and the wider community were:

- ❖ A newsletter and EIS 1 summary booklet describing:
 - EIS 1 major works (overview)
 - Each construction site
 - Ecology, environment and heritage
 - Management of traffic impacts

- Sustainability
- How to make a submission on EIS 1
- A brief overview of the next phases of the project
- ❖ Community information and feedback sessions including access to fact sheets, information display boards and technical specialists. Sessions were held at:
 - Epping
 - Cherrybrook
 - Castle Hill
 - Norwest
 - Rouse Hill

A total of 359 submissions were received through the public exhibition process for EIS 1. A breakdown of submissions by source follows:

| | |
|---------------------------------|-----|
| ❖ Individual | 303 |
| ❖ Council | 4 |
| ❖ Agency | 8 |
| ❖ Interest groups/organisations | 23 |
| ❖ Business | 21 |

Matters raised during the EIS 1 exhibition are outlined in the EIS 1 Submissions Report.

There were also a number of comments received as part of EIS 1 submissions that were deemed “beyond the scope” of EIS 1 and were considered as part of EIS 2. These are itemised in Chapter 5 of the EIS 1 Submissions Report. “beyond the scope” feedback was focused predominantly on the following matters:

- ❖ Public Safety
- ❖ Station Layout/ Design
- ❖ Station Location
- ❖ Station Precincts
- ❖ Bicycle Facilities
- ❖ Accessibility
- ❖ Skytrain/Viaduct
- ❖ Flora and Fauna
- ❖ Noise and Vibration
- ❖ Sites/Compounds
- ❖ Timetables and Trip Duration
- ❖ Traffic Impacts

- ❖ Bus Integration
- ❖ Rail Integration
- ❖ Parking Availability
- ❖ Pedestrian/ Bicycle Access
- ❖ Project Alternatives and Other Project Suggestions.

An interactive Industry engagement process has been ongoing since December 2011. Two major briefings for Industry have been conducted since that time in addition to a number of individual meetings with major construction companies and other industry stakeholders.

5.3 Consultation requirements - Conditions of the Concept Plan Approval, Statement of Commitments and Director-General’s Requirements

The consultation process has been guided by the conditions andStatement of Commitments attached to the 2008 Concept Plan Approval, and by Director General’s Requirements issued on 31 August 2012.

5.3.1 Concept Plan Approval - 2008

The approval conditions for the Concept Plan outline an extensive process of stakeholder engagement during the development of the NWRL. These approval conditions have been and will continue to guide the consultation during the planning approvals process for NWRL.

The approval conditions define stakeholders as:

- ❖ Relevant Councils (Hornsby Shire Council, Hills Shire Council and Blacktown City Council)
- ❖ Relevant Government Agencies: Any Commonwealth or state agency that has a statutory or other interest in the project. Agencies/Authorities noted in the approval include DP&I, SLR, OEH and EPA, NOW, RMS, Landcom and SEWPaC.
- ❖ Relevant stakeholders: A party that would be directly affected by the project or would otherwise have a reasonable interest in the project, such as affected landowners, utility and service providers, businesses, bus companies and community members.

5.3.2 Staged Infrastructure Approval and State Significant Infrastructure Application - 2011

Following lodgement of the Staged Infrastructure Approval Modification and State Significant Infrastructure Application in December 2011 (refer Chapter 3), the DP&I issued further Director-General’s Requirements requiring the modification assessment to “*document consultation undertaken with relevant government agencies and the community in its preparation, with a focus on proposed changes, and how matters raised during consultation have been considered.*” The Director-General’s Requirements also sought detailed information about ‘*consultation undertaken with Aboriginal stakeholders and describe how their view and values have been considered.*’

Details of consultation with Aboriginal stakeholders are contained in Chapter 12.

5.3.3 State Significant Infrastructure Application - 2012

The Director General’s Requirements issued on 31 August 2012 to be addressed by EIS 2 extended the EIS 1 consultation requirements to include “*document consultation undertaken with relevant government agencies, local government and the community in its preparation and how matters raised during consultation have been considered.*”

5.4 Consultation during preparation and exhibition of the Environmental Impact Statement for Stations, Rail Infrastructure and Systems

A number of consultation sessions held in the preparation of EIS 1 identified issues relevant to EIS 2. These issues were outlined within EIS 1 and have been subsequently addressed within this document.

Extensive consultation on the project supports one of the six project objectives to “deliver a transport service that has been informed by engagement with communities and stakeholders and represents value for money”.

The purpose of the consultation process was:

- ❖ To meet the obligations described in the Director-General’s Requirements, the Conditions of the Concept Plan Approval and the Statement of Commitments
- ❖ To provide quality information about the plans for the NWRL and likely impacts of station and rail operations
- ❖ To record all issues raised and suggestions made
- ❖ To take into account issues and suggestions during the preparation of the EIS.

TfNSW has established a number of working groups in order to facilitate cross agency consultation about project impacts and how they should be managed.

Table 5.1 to **Table 5.3** below discuss the membership of working groups, their focus and how their issues have been addressed.

Table 5.1 Cross-disciplinary working groups established for NWRL

| Group | Membership | Focus |
|---|--|---|
| Transport for NSW | <ul style="list-style-type: none"> ▪ Customer Experience ▪ Planning and Programs ▪ Transport Projects ▪ Transport Services | <ul style="list-style-type: none"> ▪ Research on customers ▪ Customer experience ▪ NWRL as a Transport Product ▪ Draft NSW Long Term Transport Master Plan, Sydney’s Rail Future ▪ Access for All /Disability access ▪ Strategic directions in transport ▪ Integrating NWRL with transport network ▪ Construction <ul style="list-style-type: none"> - Changes to bus operations - T-way interface issues - Temporary bus layover requirements - Truck access and routing ▪ Operations <ul style="list-style-type: none"> - Station precinct planning - Bus strategic network planning - Bus layover requirements - Interchange design - Pedestrian and cycle requirements - Commuter car parking design and requirements - Rail operations assumptions |
| Roads and Maritime Services Working Group | <ul style="list-style-type: none"> ▪ TfNSW NWRL Project Team ▪ TfNSW Planning & Programs Division ▪ RMS / Transport Management Centre (TMC) | <ul style="list-style-type: none"> ▪ Construction <ul style="list-style-type: none"> - Local and cumulative impacts of construction activities and heavy vehicle traffic on the road network - Impacts of construction activities and heavy vehicle traffic on road condition - Construction traffic access to major arterial roads - Potential changes to bus operations and T way during construction ▪ Operations <ul style="list-style-type: none"> - Longer term implications of station operations on local and regional traffic networks - Access arrangements for stations and servicing facilities - Integration of stations with local and regional cycle networks - Integration of stations with other modes of transport - Traffic management ▪ Key issues at specific locations |

| Group | Membership | Focus |
|---|--|--|
| Interagency Reference Group | <ul style="list-style-type: none"> DP&I Major Assessments (Chair) TfNSW NWRL Project Team OEI NOW Department of Industry and Investment EPA | <ul style="list-style-type: none"> Regular project updates, specialist presentations and discussion of emerging environmental and/or statutory issues, covering for example: <ul style="list-style-type: none"> Flora and fauna. Indigenous heritage consultation. Water issues, including: saline ground water groundwater interactions, licensing queries, groundwater ecosystems. Advice regarding Water Management Act, water demands, water licensing arrangements etc. Growth Centres. Biodiversity Certification & Environment Protection and Biodiversity Conservation Act Strategic Assessment. Fisheries and agriculture. Mineral resources. Environment protection licence issues. Biodiversity and threatened species and their habitat. Aboriginal cultural heritage. Climate Change impacts. |
| Departmental Precinct Land Use Group | <ul style="list-style-type: none"> DP&I Urban Renewal & Major Sites (Chair) Hornsby Shire Council The Hills Shire Council Blacktown City Council Parramatta City Council DP&I Major Assessments TfNSW NWRL Project Team | <p>The Departmental Precinct Land Use Group is focused on long-term opportunities to improve connectivity and creating opportunities for future transit-oriented development.</p> <p>A working group to ensure that the surface elements of the NWRL are coordinated.</p> |
| Commonwealth liaison | SEWPaC | <ul style="list-style-type: none"> Endangered ecological communities and other matter of National environmental significance. |

| Group | Membership | Focus |
|--|---|--|
| Rouse Hill Station Precinct Working Group | <ul style="list-style-type: none"> TfNSW GPT Group Lend Lease Office of Strategic Lands | <ul style="list-style-type: none"> Proposed construction phases and methodology. Grade separation of Windsor Road. Bus stops/interchange Kiss and ride area. Town centre design. Traffic and access within the future precinct. GPT Northern Frame Development Application coordination with NWRL project. Management of end state bus access. Pedestrian movement and safety. Mitigation of potential construction and operational impacts. |
| Education Working Group | Department of Premier and Cabinet, TAFE NSW, Department of Education and Communities, Local Employment Coordinator | <ul style="list-style-type: none"> Opportunities to up-skill ethnic/minority and other disadvantaged groups to meet likely NWRL skill needs. Potential opportunities associated with Strategic Skills Funding Program. Identify green skills training opportunities. |
| Local Council | <ul style="list-style-type: none"> Local Councillor updates Hornsby Shire Council The Hills Shire Council Blacktown City Council Station/precinct meetings | <p>Master planning and urban design issues directly related to the proposed stations and their construction.</p> <ul style="list-style-type: none"> Existing and proposed strategic planning policies, master plans and local environment plans. Traffic and access within future precincts. Car parking. Mitigation of potential construction and operational impacts. |
| RailCorp Environmental and Sustainability Technical Working Group | <ul style="list-style-type: none"> TfNSW NWRL Project Team RailCorp | <p>Part of the broader technical interface with RailCorp, focuses on environmental and sustainability issues, including the environmental assessment process.</p> <p>Construction</p> <ul style="list-style-type: none"> Potential construction impacts. Key issues such as noise and ecology. <p>Operations</p> <ul style="list-style-type: none"> Sustainability initiatives. Longer term implications of station operations on local and regional train networks. Access and maintenance arrangements for future stations and servicing facilities. Key issues such as noise and vibration. |

| Group | Membership | Focus |
|---|---|---|
| Utility and service provider meetings | Utility and service providers including: <ul style="list-style-type: none"> Ausgrid Endeavour Energy National Broadband Network (NBN) Sydney Water Telstra | <ul style="list-style-type: none"> Location and potential impacts on existing or planned utility provision. Power supply for operation. Water supply for operation. |
| The Hills District Emergency Services Representatives | <ul style="list-style-type: none"> District Fire & Rescue Service NSWPolice Service | <ul style="list-style-type: none"> Tunnel and viaduct emergency service requirements Emergency service access. Training for local emergency services required. Regular communication required between NWRL, RMS and emergency services. |

5.4.1 Compliance with Staged Infrastructure Conditions of Approval

The Staged Infrastructure Conditions of Approval made reference to specific impacts. The table below extracts these and offers commentary on how requirements have been met to date. The table focuses on design aspects and activities associated with the delivery of stations, rail infrastructure and systems, which is the focus of the current environmental assessment. Consultation is ongoing to inform the planning, design and environmental assessment for the stations and associated infrastructure.

Table 5.2 Compliance table

| Requirement | Consultation | Outcomes (design focus) |
|--|---|---|
| Ref: Condition of Approval (CoA) 2.1 Ensure that underground components of the project are designed with regard to existing and/or planned future underground utilities and infrastructure including the planned extension of the M2 Motorway. | Consultation and meetings have occurred with a range of utility providers and agencies, including: <ul style="list-style-type: none"> Ausgrid Endeavour Energy NBN Sydney Water RMS RailCorp Gas utilities TransUrban Issues discussed: <ul style="list-style-type: none"> Utility services required for construction and ongoing operation of NWRL Relocation of utilities to allow for early and enabling works | <ul style="list-style-type: none"> Ongoing discussions have taken place regarding interface provision Interface with all utility providers regarding permanent supply of services |

| Requirement | Consultation | Outcomes (design focus) |
|---|---|---|
| Ref: CoA 2.2 Ensure the surface components of the project are integrated with surrounding land use (existing and planned future, as relevant) as far as reasonable and feasible, consistent with the objectives of Integrated Land Use and Transport (DUAP 2001 or as updated), to minimise the potential for land use conflicts. In particular: Design of Castle Hill station shall consider the Castle Hill Draft Master Plan (or as updated); and Kellyville and Rouse Hill Stations and stabling facilities are to be integrated with the precinct planning for the Balmoral Road Release Area, Rouse Hill Regional Centre and the Area 20 precinct of the North West Growth Centre, as relevant. | Consultation has occurred with <ul style="list-style-type: none"> Hornsby Shire Council The Hills Shire Council Blacktown City Council Parramatta City Council DP&I Further meetings are scheduled with Hornsby Shire Council, The Hills Shire Council and Blacktown City Council to discuss master planning and urban design issues relating to station precincts and integrated land use planning issues with the various urban release areas. Consultation undertaken with Hornsby Shire Council and Parramatta City Council regarding implications of the Project in relation to the Epping Town Centre Study. Consultation undertaken with GPT Group, Lend Lease and TfNSW around planning for Rouse Hill Station Precinct. | Local strategic planning, master plans (including the Castle Hill Master Plan), precinct planning (including for Area 20) and local environmental plans (including the Balmoral Road Release Area) are informing the design of the project. The Departmental Precinct Land Use Group is focused on long-term opportunities to improve connectivity and enable future transit-oriented development. A working group has been established and has met regularly in order to ensure that the surface elements of the NWRL are coordinated with the future plans for Rouse Hill Station Precinct. |
| Ref: CoA 2.3 The Proponent shall in consultation with relevant Government agencies, relevant Councils and relevant stakeholders ensure that ancillary infrastructure are located and designed to minimise biophysical and/or amenity impacts, as far as reasonable and feasible. | The working groups described above have been consulted on a regular basis with particular focus on opportunities to minimise environmental impacts from elements such as vent shafts and car parking that were defined as ancillary infrastructure in the Staged Infrastructure Approval. | Outcomes from consultation activities are continuously elevated to the relevant technical specialists to ensure that the input has been considered in decisions on design and/or mitigation. The location of ancillary infrastructure is described further in Chapter 6. |

| Requirement | Consultation | Outcomes (design focus) |
|--|---|--|
| Ref: CoA 3.1.e An appropriate and justified level of consultation with relevant Councils and relevant Government agencies including (but not limited to) RailCorp, MoT, GCC, Landcom, DECC, DPI (Fisheries), DWE, RTA, including a description of how agency and Council input has been considered in decisions on design and/or mitigation. | Consultation has been undertaken with the following bodies: <ul style="list-style-type: none"> ▪ Hornsby Shire Council ▪ Blacktown City Council ▪ The Hills Shire Council ▪ Parramatta City Council ▪ Hawkesbury City Council ▪ Railcorp ▪ TfNSW ▪ DP&I ▪ RMS/TMC ▪ OEH ▪ NOW ▪ Department of Trade and Investment ▪ Department of Primary Industries (including relevant functional units) ▪ Department of Premier and Cabinet ▪ Landcom <p>DP&I (including the Growth Centres). The working groups outlined in Table 5.2 have been consulted wherever possible on a regular basis.</p> | Outcomes from consultation activities are continuously elevated to the relevant technical specialists to ensure that the input has been considered in decisions on design and/or mitigation. |
| Ref: CoA 3.1.f An appropriate and justified level of consultation with relevant stakeholders including a description of how stakeholder input has been considered in decisions on design and/or mitigation; | <p>The working groups outlined in Table 5.2 have been consulted wherever possible on a regular basis.</p> <p>Throughout the consultation process Place Managers have been in regular contact with key stakeholders and community groups, as well as responding to individual queries from community members along the alignment.</p> | Outcomes from consultation activities are referred to technical specialists. |

| Requirement | Consultation | Outcomes (design focus) |
|---|--|---|
| Ref: Statement of Commitment (SoC) 2 Communications processes would be developed and implemented throughout delivery of the project. These would include: <ul style="list-style-type: none"> Opportunities to input into the design process such as at station precincts and structures and proposed mitigation measures (e.g. noise barriers) for construction and operations; Methods to inform the community of the progress and performance of the project and issues of interest to the community; Processes to receive and manage complaints; and Consultation with affected property owners. | <p>A stakeholder and community consultation strategy, and complementary processes and procedures have been developed to be implemented during delivery. These include clear delineation of contractor responsibility for notifications, consultation and complaints/enquiry resolution, and will be included in contract documentation. During delivery this will complement the initiatives developed during the early planning stages, which will continue through the delivery period:</p> <ul style="list-style-type: none"> ▪ Use of the NWRL Community Information Centre as a key point for the community to gain access to information about the project during delivery, ▪ A dedicated NWRL telephone line, email address and website. ▪ Place Managers who will work closely with contractors and provide a direct point of contact for the most directly affected stakeholders ▪ One to one meetings with affected property owners. | <p>Enquiries and complaints are managed in a responsive manner so that issues are dealt with promptly and effectively.</p> <p>Through the mechanisms outlined, stakeholders have had and will continue to have an opportunity to input into the proposed mitigation measures for the construction works.</p> <p>The information lines, community information centre and stakeholder meetings will continue during the EIS2 design phase of the project.</p> <p>Refer to Appendix B – of this EIS (Environmental Management Framework)</p> |
| Ref: SoC 3 Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and Concept Plan and the Preferred Project Report | Ongoing consultation with the working groups has taken place as outlined above. Issues raised during previous consultations have been discussed within the working groups. | Refer to above items. |
| Ref: SoC 6 Consultation with Councils, the Growth Centres Commission, RailCorp and other relevant stakeholders would be undertaken to ensure environmental planning instruments reflect planning, construction and operation of the project and include integrated planning provisions for appropriate development controls within the vicinity of the rail line and stabling facility. | Consultation undertaken with Hornsby Shire Council, Blacktown City Council, The Hills Shire Council and the DP&I (including the Growth Centres) regarding environmental planning instruments. | <p>The project has been specifically planned for as part of the Area 20 precinct process and land use zoning</p> <p>Councils have undertaken to refer relevant Development Applications to TfNSW to ensure local development considers the future rail project.</p> |

| Requirement | Consultation | Outcomes (design focus) |
|--|--|--|
| Ref: SoC 7 Land use and property impacts of the project, including construction sites and all ancillary facilities, would be further assessed in consultation with Councils and surrounding landowners. | <p>Meetings have taken place with Councils and surrounding landowners with regard to land use and property impacts such as traffic, access, noise and vibration.</p> <p>Throughout the consultation process Place Managers have been in regular contact with key stakeholders and community groups, as well as responding to individual queries from community members along the alignment.</p> | <p>Mitigation measures to address the impacts of the project including construction works and project operation on land use and community facilities have been developed with Councils and landowners and are included in EIS1 Major Civil Construction Works and EIS 2.</p> |
| Ref: SoC 9 Consultation with relevant Councils, government agencies, utility providers, land owners and communities involved in the planning of precincts in the vicinity of each station would be undertaken with the aim of encouraging transitorientated development around each station. The role of each station within the context of provision of public transport services would be established, including the need and capacity of park and ride facilities, establishing connections with other transport modes (including the potential for integrated ticketing), and integrating pedestrian and cyclist facilities. | <p>Consultation with key Council and agency stakeholders has addressed precinct planning (including transit oriented development) and integrated transport planning.</p> <p>The Departmental Precinct Land Use Group, Local Council and Councillor updates and Station precinct meetings are specific examples.</p> <p>Briefings have been provided to key transport interest groups and peak bodies about the project and their feedback on issues such as the provision of public transport services, integrated transport facilities, etc has been provided.</p> <p>Through ongoing consultation with local communities and stakeholders feedback has been provided on precinct planning issues.</p> <p>Throughout the consultation process Place Managers have been in regular contact with key stakeholders and community groups, as well as responding to individual queries from community members along the alignment.</p> <p>This consultation will continue through the preparation of EIS 2 and beyond.</p> | <p>The planning of station precincts will be considered in more detail as part of upcoming consultation and with outcomes incorporated into this EIS.</p> <p>The Departmental Precinct Land Use Group is focused on long-term opportunities to improve connectivity and enable future transitorientated development.</p> |

| Requirement | Consultation | Outcomes (design focus) |
|---|---|---|
| Ref: SoC 14 In consultation with the RTA and Councils, investigate the feasibility of providing a direct access point to the Franklin Road site from Castle Hill Road and the potential for a signalised intersection at the intersection of Glenhope Road with Castle Hill Road. | <p>Hornsby Shire Council and RMS were consulted regarding the proposed construction access points and traffic intersections at the Cherrybrook construction site.</p> | <p>Construction and operational access has been coordinated with RMS and Hornsby Shire Council.</p> <p>Refer to Chapter 9 of this EIS for further details.</p> |
| Ref: SoC 21 Consult with local Councils, Growth Centres Commission and RailCorp in relation to land use planning and development controls to minimise the need for physical noise mitigation | <p>Local Councils, DP&I (including the Growth Centres) and RailCorp have been consulted.</p> | <p>Measures to assess the need for physical noise mitigation have been considered in Chapter 10.</p> |
| Ref: SoC 45 An assessment of the potential impacts and benefits of construction and operation on adjacent businesses would be undertaken in consultation with business owners during the design phase. | <p>Consultation briefings have occurred with 1 business owners. Throughout the consultation process Place Managers have been in regular contact with key stakeholders including businesses and business groups.</p> | <p>An assessment of potential impacts and benefits of construction and operations on adjacent businesses has been undertaken as presented in this EIS. Input from business owners has been incorporated in this assessment.</p> |

Table 5.3 lists those agencies and key stakeholders consulted, cross-referenced to the principal topics discussed at various meetings.

Figure 6.5C Plan and Long Section



Figure 6.5D Plan and Long Section

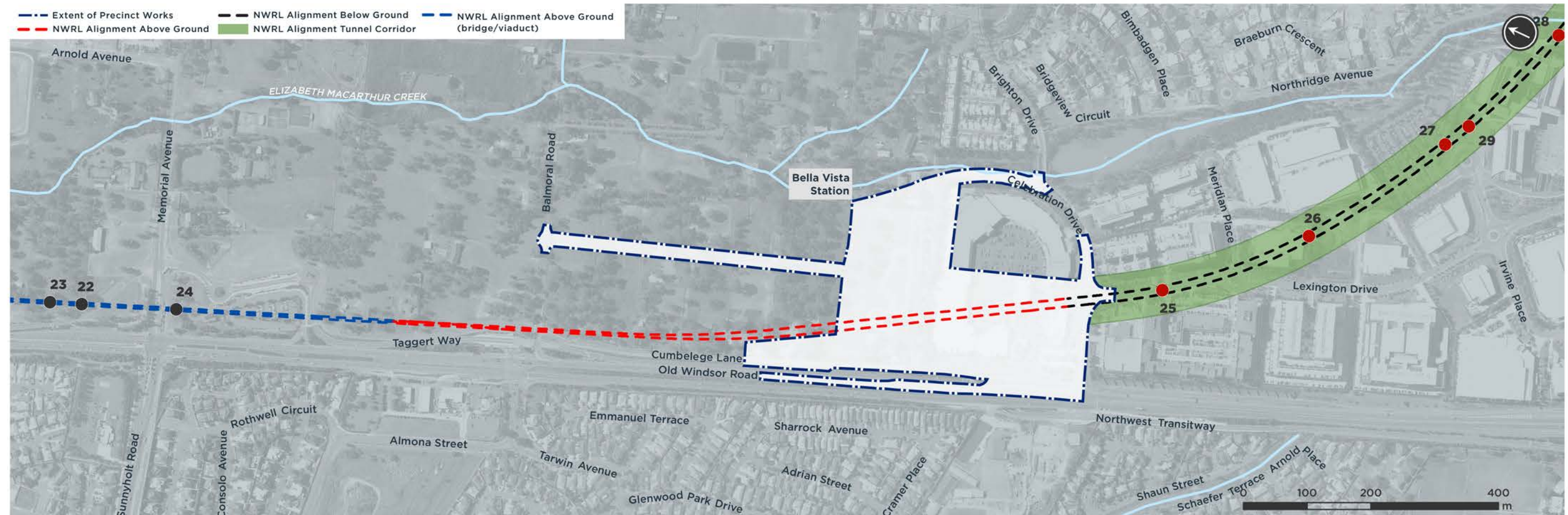


Table 5.3 Agencies and key stakeholders compliance table – summary

| ISSUES | | Communication | Construction | Operation | Design | Environment (operations & construction) | Planning | Property | Transport |
|---|--|---------------|--------------|-----------|--------|--|----------|----------|-----------|
| STAKEHOLDERS | | | | | | | | | |
| Federal Government | SEWPaC | | | | | • | | | |
| State Government Agencies | DP&I | • | • | • | • | • | • | | • |
| | TfNSW | • | • | • | • | • | • | • | • |
| | Department of Primary Industries (and its ancillary functional areas) | • | • | • | | | | | |
| | OEH (including EPA) | • | • | | | • | | | |
| | NSW Trade & Investment | • | • | | | | | | |
| | RMS | • | • | • | • | • | • | • | • |
| | Sydney Metropolitan and Hawkesbury Nepean Catchment Management Authorities | | | | | • | | | |
| | NOW | • | • | | | • | | | |
| | RailCorp | • | • | • | • | • | • | • | • |
| | Department of Premier and Cabinet | • | • | • | | | | | |
| | Department of Education and Communities | | | • | | | | | |
| | Transurban/M2 Hills Motorway | | • | | | | | | • |
| Local Government | Hornsby Shire Council | • | • | • | • | • | • | • | • |
| | The Hills Shire Council | • | • | • | • | • | • | • | • |
| | Blacktown City Council | • | • | • | • | • | • | • | • |
| | Parramatta City Council | • | • | • | • | • | • | • | • |
| Utility and Service Providers | Ausgrid | | • | • | | | | | • |
| | Endeavour Energy | | • | • | | | • | • | |
| | Sydney Water | | • | • | | | | | |
| | Jemena | | • | • | | | | • | |
| | NBN | | • | • | | | | | |
| | Telstra | | • | • | | | | • | |
| | Optus | | • | • | | | | • | |
| | Mine Subsidence Board | | • | | | | • | | |
| Bus Companies | Hillsbus | | • | • | • | • | • | | • |
| | Busways | | • | • | • | • | • | | • |
| Relevant Indigenous Groups | | | | | | • | | | |
| District Emergency Services | | | • | • | • | | | | |
| Business potentially affected by construction | | | • | • | • | • | | • | • |
| Surrounding landowners | | • | • | • | • | • | • | • | • |
| Local Communities | | • | • | • | • | • | • | • | • |

5.5 Issues raised during government agency and related consultation

During consultation with the agencies, utility and transport providers a number of specific issues were raised. These are listed below in **Table 5.4** and cross referenced to relevant chapters in this EIS. The table focuses on stations, rail infrastructure and systems, including station precincts and rail operations which are the focus of the current environmental assessment. Consultation with relevant agencies on more detailed aspects of station and precinct design, rail infrastructure and systems will be ongoing.

Table 5.4 Issues raised during the government agency and related consultation

| Eis2 Document Reference | |
|--|-----------------------------------|
| Communication | |
| Integration with agencies should be ongoing | Chapter 5 |
| Consultation with stakeholders and community should be ongoing | Chapter 5 and Appendix B CEMF |
| Construction | |
| Viaduct locations | Chapter 6 |
| Sedimentation and erosion controls | Chapters 7, 8 and Appendix B CEMF |
| Noise and vibration mitigation | Chapter 10 |
| Protection of riparian zones | Chapter 7 |
| Obtaining Environment Protection Licence | Appendix B CEMF |
| Power supply during and after construction | Chapters 6 and 7 |
| Flood risk | Chapter 18 |
| Operation | |
| Provision of emergency access | Chapter 9 |
| Vehicular access to existing properties | Chapter 9 |
| Operational bulk power supply | Chapter 6 |
| Operational water supply | Chapter 6 |
| Protection of riparian zones | Chapter 18 |
| Flood risk | Chapter 18 |
| Composition of operational workforce | Chapter 6 |
| Design | |
| Rouse Hill Town Centre Design | Chapter 6 |
| Station precinct design | Chapter 6 |
| Design quality | Chapter 6 |
| Environment (operation & construction) | |
| Operational noise impacts | Chapter 10 |
| Operational vibration impacts | Chapter 10 |
| Water Sensitive Urban Design | Chapter 18 |

| Eis2 Document Reference | |
|--|--------------------|
| Biodiversity offsetting | Chapter 15 |
| Visual impacts | Chapter 16 |
| Air quality impacts on sensitive receptors | Chapter 19 |
| Impacts on groundwater | Chapter 8 |
| Impacts on surface water and hydrology | Chapter 18 |
| Assessment of spoil and waste generation and associated impacts | Chapter 19 |
| Cumulative environmental impacts | Chapter 20 |
| Submission of Heritage Impact Statement | Chapters 11 and 12 |
| Heritage impact mitigation measures | Chapters 11 and 12 |
| Heritage management during construction | Chapters 11 and 12 |
| Planning | |
| Planning of precincts | Chapter 14 |
| Planning approvals process | Chapter 3 |
| Epping Town Centre Study | Chapter 14 |
| Long term development plans | Chapter 14 |
| Integration with growth centres | Chapter 14 |
| Safeguarding land with future development potential | Chapter 14 |
| Integration with GPT Northern Frame Development | Chapters 14 and 20 |
| Transport | |
| Bus transport movement | Chapter 9 |
| Bus network integration | Chapter 9 |
| Traffic volume pressure | Chapter 9 |
| Cumulative traffic increase as a result of precinct planning unrelated to NWRL | Chapter 20 |
| Provision of pedestrian interchanges | Chapter 9 |
| Intersection performance | Chapter 9 |
| Traffic impacts | Chapter 9 |
| Integration of stations with cycle networks | Chapter 9 |
| Integration of stations with public transport | Chapter 9 |
| Location of road bridges | Chapters 6 and 9 |
| Provision of ‘Kiss and Ride’ facilities | Chapter 9 |
| Provision of Park and Ride facilities | Chapter 9 |
| Residential car parking conflict with NWRL users | Chapters 6 and 9 |

5.6 Issues raised during consultation with local Councils

During consultation with Hornsby Shire, The Hills Shire and Blacktown City Councils a number of specific issues were raised. These are listed below in **Table 5.5** and cross referenced to relevant chapters in this EIS. Consultation with local councils on more detailed aspects of station and precinct design, rail infrastructure and systems will be ongoing.

Table 5.5 Issues Raised During Consultation with Councils

| LGA | Location | Relevant Issue Raised | Eis2 Document Reference |
|-----------|-------------|--|--|
| All | General | Sustainability strategy | Chapter 4 |
| Hornsby | General | Assessment of biodiversity values | Chapter 15 |
| | | Crime Prevention Through Environmental Design principles | Chapter 6 |
| | Epping | Communication with Councils | Chapter 5 |
| | | Ventilation stack location | Chapter 6 |
| | | Future of Epping Service Facility | Chapter 6 |
| | | Location of cycle routes | Chapters 6 and 9 |
| | | Height of acoustic shed | Chapter 10 in EIS 1 Submissions Report |
| | Cheltenham | Access issues | Chapters 6 and 9 |
| | | Traffic issues | Chapter 9 |
| | | Removal of vegetation | Chapter 15 |
| | | Netball training courts | Chapter 14 |
| | | Amenities building arrangements | Chapter 14 |
| | Cherrybrook | Traffic implications | Chapter 9 |
| | | Potential for offsite construction worker car parks | Chapter 9 |
| | | Noise impacts | Chapter 10 |
| | | Visual impacts | Chapter 16 |
| | | Number of car parking spaces | Chapter 6 |
| | | Additional land take | Chapter 6 of EIS 1 |
| | | Transit oriented development principles | Chapter 6 |
| | | Cluster of land uses around public transport node | Chapter 14 |
| The Hills | General | Spoil removal | Chapter 19 of EIS 1 |
| | | Traffic management | Chapter 9 |

| LGA | Location | Relevant Issue Raised | Eis2 Document Reference |
|-----------|-------------|--|-------------------------------|
| | | Biodiversity offset sites | Chapter 15 |
| | | Visual impact of skytrain | Chapter 16 |
| | | Noise impact of skytrain | Chapter 10 |
| | | Urban design principles for rail corridor | Chapter 6 |
| | | Recreation facilities | Chapter 14 |
| | | Road layout | Chapter 9 |
| | | Hydrological modelling of playing fields | Chapter 18 |
| | Castle Hill | Relocation of War Memorial | Chapter 14 of EIS 1 and EIS 2 |
| | | Reconfiguration of intersection | Chapter 9 |
| | Showground | Intersection operation at Gilbert Road | Chapter 9 |
| | Norwest | Car parking locations | Chapter 9 |
| | Bella Vista | Connections to business park | Chapter 9 |
| | | Future master planning of residual land | Chapter 14 |
| | | Location of car parking | Chapter 9 |
| | Kellyville | Connections with future development sites | Chapter 14 |
| | Rouse Hill | Importance of integrating planning in Rouse Hill Town Centre | Chapter 14 |
| Blacktown | General | Horizontal and vertical route alignment | Chapter 6 |
| | | Potential sterilisation of higher density land | Chapter 14 |
| | | | |
| | | Amenity impacts | EIS 1 and 2 |
| | | Impact on drainage | Chapter 18 |
| | | Location of at-grade car parking | Chapter 9 |
| | | Public car parking facilities | Chapter 9 |
| | | Activation and surveillance | Chapter 6 |
| | | Commerce and trade opportunities | Chapter 14 |
| | | Noise impact from skytrain | Chapter 10 |

| LGA | Location | Relevant Issue Raised | Eis2 Document Reference |
|-----|----------------|---|-------------------------|
| | | Corridor landscaping and pedestrian/cycle links | Chapters 6, 9 and 16 |
| | | Longer term car parking | Chapter 9 |
| | | Process for amending land use plans | Chapter 14 |
| | | Detailed master planning to integrate into Area 20 plans | Chapter 14 |
| | | Impacts of pedestrian and traffic movements | Chapter 9 |
| | | Park and ride | Chapter 9 |
| | | Road intersection treatments | Chapter 9 |
| | | Access impacts | Chapter 9 |
| | | Traffic management | Chapter 9 |
| | | Construction impact of Stage 2 | Chapters 7 – 20 |
| | | Standards of design | Chapter 6 |
| | Rouse Hill | Visual appearance of skytrain | Chapters 6 and 16 |
| | | Impact on connectivity within Area 20 | Chapter 14 |
| | | Integration of station in to surrounding development | Chapter 14 |
| | | Future development potential | Chapter 14 |
| | | Traffic flows within station area | Chapters 6 and 9 |
| | | Integration of station into wider pedestrian cycle networks | Chapter 9 |
| | Cudgegong Road | Intersection signalisation | Chapter 9 |
| | | Road links with station | Chapter 9 |
| | Tallawong Road | Amount of land take | Chapter 6 |
| | | Nature of surrounding uses | Chapter 6 and 14 |
| | | Noise impacts | Chapter 9 |
| | | Impact upon future residential development in Area 20 | Chapter 14 |
| | | Visual appearance of skytrain structure | Chapters 6 and 16 |

| LGA | Location | Relevant Issue Raised | Eis2 Document Reference |
|-------------------------|----------|--|-------------------------|
| Parramatta City Council | Epping | Link road opportunities | Chapter 9 |
| | | Provision of intersection upgrades | Chapter 9 |
| | | Continued consultation with Parramatta City Council | Chapter 5 |
| | | Integration of planning controls | Chapter 14 |
| | | Application of Place Making Principles | Chapter 6 |
| | | Impact of Epping Services Facility on urban form of Epping Town Centre | Chapter 6 |
| | | Noise and vibration impacts | Chapter 9 |

5.7 Consultation with the community

A number of contact and feedback mechanisms have been available to the community during the planning process, and proactive measures taken to disseminate information about the plans and their impacts. These are described in **Table 5.6** below.

Table 5.6 Community contact and feedback mechanisms

| Mechanism / Event | Details |
|---|---|
| Information and feedback line: | 1800 019 989 – 700 calls have been received since November 2011 |
| Email: | info@northwestrail.com.au |
| Castle Hill Community Information Centre: | Staffed five and a half days a week, this centre has the most up-to-date NWRL information and presentations. Since opening visitations have exceeded 4,000. |
| Website: | www.northwestrail.com.au . This site is continuously updated to include latest project information and offers visitors the opportunity to leave comments, participate in on-line discussions from time to time and register their interest in being kept up to date with latest NWRL developments. Since March 2011 55,300 visitors and 81,000 documents downloaded. |
| Place Managers/ door-knocking: | Place Managers have door knocked residences and businesses surrounding station sites, or areas where above ground infrastructure will be constructed. Each Place Manager has an allocated area and is proactive in making contact with potentially affected individuals, businesses and community groups. Each has an introductory newsletter with personal contact details that can be left if during door-knocking if there is no one at home. Since March 2011 there have been 1700 doorknocks by Place Managers. |

| Mechanism / Event | Details |
|---------------------------|---|
| EIS newsletter | In April 2012 a newsletter was distributed to 11,700 residents and businesses along the corridor describing the modified project and announcing the submission of EIS1. |
| Key stakeholder briefings | <p>In addition to doorknocking affected residents and businesses, a large number of briefings have been arranged with stakeholders including schools, businesses and community groups whose operations will be impacted during construction and operation. These have included:</p> <p>Primary and secondary schools</p> <ul style="list-style-type: none">▪ Beecroft Primary School▪ Cheltenham Girls High▪ Tangara School for Girls▪ Epping Heights Public School▪ Inala School <p>Sports clubs</p> <ul style="list-style-type: none">▪ Beecroft Cricket Club▪ Beecroft Football Club▪ Beecroft Netball Club▪ Budokan Judo Club <p>Community groups and services</p> <ul style="list-style-type: none">▪ Castle Hill & Hills District Agricultural Society Inc▪ Castle Hill RSL sub-branch and Castle Hill RSL Club▪ Hillsong Church▪ Robert Road residents group▪ Epping Baptist Church▪ Baptist Community Services▪ Norwest Canine Association Ltd▪ Castle Hill Players▪ Computer Pals for Seniors▪ Hawkesbury Harvest▪ Beecroft/Cheltenham Civic Trust▪ Hornsby Shire Bushcare <p>Businesses business representative groups</p> <ul style="list-style-type: none">▪ Norwest Association▪ Hills Business Chamber |

| Mechanism / Event | Details |
|---------------------|---|
| Peak body briefings | <ul style="list-style-type: none">▪ 10,000 Friends of Greater Sydney▪ Australian Constructors Association▪ EcoTransit Sydney▪ Engineers Australia▪ Hills Transport Action Group▪ Infrastructure Partnerships Australia▪ Nature Conservation Council of NSW▪ NRMA Motoring and Services▪ Planning Institute of Australia, NSW▪ Property Council of Australia▪ Sydney Business Chamber▪ Tourism and Transport Forum▪ Urban Taskforce Australia▪ The Warren Centre for Advanced Engineering |

The project has also maintained a contact database that records each contact made, the issues raised, and the response given. This will be maintained for the duration of the project.

Table 5.7 Details of Contacts Database Activity since April 2012

| Contacts | Numbers up to March 2012 | Numbers April-September 2012 |
|---------------------------------------|--------------------------|------------------------------|
| Emails received via info@NWRL address | 90 | 65 |
| 1800 callers | 174 | 316 |
| Website – Total Visits | 87,320 | 78,306 |
| Website – Unique Visits | 39,935 | 30,414 |
| Website – Documents downloaded | 43,297 | 44,820 |

5.7.1 Matters that were beyond the scope of the Major Civil Construction Works EIS

Some submissions made during the public exhibition of the Stage 1 Major Civil Construction Works EIS raised issues that were beyond scope or related to Stations, Rail Infrastructure and Systems (EIS 2). **Table 5.8** below categorises these beyond scope comments by issue and then refers to the chapter of this EIS that addresses them. The numbers in the Stakeholder IDs column will assist those who supplied contact details to track where the issues they raised in their submissions are addressed in this document.

Table 5.8 Issues that were beyond scope in submissions made in response to the Major Civil Construction Works EIS

| Issue Category | Stakeholder Ids | Eis2 Document Reference |
|--|--|-------------------------|
| Public Safety | 11, 15, 17, 18, 24, 32, 34, 36, 48, 49, 61, 62, 74, 75, 82, 94, 97, 106, 107, 115, 117, 139, 142, 163, 319, 329, 332, 336, 337, 339, 343, 344, 353 | Chapter 6 |
| Station Design | 24, 67, 106, 108, 117, 123, 125, 135, 336 | Chapter 6 |
| Station Location | 1, 10, 48, 59, 79, 101, 106, 118, 134, 136, 142, 145, 151, 162, 165, 171, 173, 230, 317, 323, 339-341,350 | Chapter 6 |
| Station Precincts | 106, 228, 255 | Chapters 6 and 14 |
| Bicycle facilities | 255 | Chapters 6 and 9 |
| Accessibility | 106, 154, 163, 352 | Chapters 6 and 9 |
| Skytrain/viaduct | 18, 27, 255, 330, 332 | Chapters 6 and 16 |
| Flora and fauna | 24 | Chapter 15 |
| Noise and Vibration | 8, 10,15, 17,18, 23, 24, 25, 27, 49, 54, 55, 61, 62, 66, 67, 70, 78, 82, 89, 101, 123, 136, 171, 229, 230, 319, 336, 339, 340, 341, 342, 343, 344 | Chapter 10 |
| Sites/compounds | 106 | Chapter 7 |
| Timetables and trip duration | 48, 117 | Chapter 6 |
| Traffic Impacts | 34, 47, 49, 50, 53-55, 61, 62, 66, 78, 79, 96, 97, 101, 106, 111, 115, 116, 135, 138, 139, 142, 144, 163, 166, 173, 288, 319, 329, 336, 338, 339, 343, 344, 347, 350, 352, 353 | Chapter 9 |
| Bus integration | 48, 59, 97, 106, 117, 123, 135, 142, 166, 228, 311, 336, 342 | Chapter 9 |
| Rail integration | 48, 59, 117, 167, 351, 352 | Chapter 6 |
| Parking Availability | 15, 34, 44, 72, 79, 96, 101, 106, 115, 123, 139, 142, 144, 166, 311, 317, 322, 330, 332, 338, 342, 347, 352, 353 | Chapter 9 |
| Pedestrian/ Bicycle Access | 32, 54, 115, 117, 142, 172, 228, 311, 326 | Chapter 9 |
| Project alternatives and other suggestions | 3, 5, 7-11, 15, 17, 23, 25-29, 31, 36, 47-49, 51, 52, 55, 59, 60,72, 76, 77, 104, 117, 137, 170, 177, 230, 232, 318, 326, 333, 335, 347 | Chapter 2 |

5.7.2 Issues raised by the community

Table 5.9 to Table 5.11 capture the issues that have been raised by individuals, businesses and community organisations during the preparation of this EIS. The tables focus on stations, rail infrastructure and systems, including station precincts and rail operations which are the focus of the current environmental assessment and include beyond scope issues raised in response to EIS 1. Consultation on more detailed aspects of station and precinct design, rail infrastructure and systems will be ongoing. Future consultation processes and activities are discussed in Section 5.8.

Table 5.9 Response to topics raised within Hornsby LGA

| Location | Relevant Issue Raised | Eis2 Document Reference |
|-------------|--|--------------------------|
| Epping | Ray Road | Chapter 7 |
| | Ray Road Parking | Chapter 7 |
| | Need for ongoing consultation | Chapter 5 |
| Cheltenham | Operation of sports facilities during and after construction | Chapter 14 |
| | Impacts on bushland | Chapter 15 |
| | Diversion of walking tracks | Chapter 9 |
| | Parking for oval users and residents | Chapter 9 |
| | Emergency access to Cheltenham Intermediate Services Facility | Chapter 6 |
| Cherrybrook | Construction <ul style="list-style-type: none">Robert Road – traffic and safety Franklin Road and the schools – traffic and safetyBuffer zone between hoardings and residential propertiesLevels of dust in station constructionNoise and vibrationUpgrade Glenhope RoadShielding of residents from visual, acoustic and congestion impactsFootpath realignment | Chapters 7, 9, 10 and 16 |
| | Operation <ul style="list-style-type: none">High levels of bus movement and commuter trafficOperational issues – noise, vibration and light spillageRoad safety on Robert RoadDiscourage commuter traffic using Robert RoadBus routes on Franklin and Robert RoadsCommuter shuttle busesImpacts on property pricesWalking catchment of station | Chapter 9 |

| Location | Relevant Issue Raised | Eis2 Document Reference |
|----------|--|-------------------------|
| | Design <ul style="list-style-type: none">▪ Depth of station▪ Detail of proposed station design | Chapter 6 |
| | Environment <ul style="list-style-type: none">▪ Revegetation▪ Sydney Blue Gum trees | Chapter 15 |
| | Transport <ul style="list-style-type: none">▪ Commuter parking on Robert Road▪ Bus integration with surrounding area | Chapter 9 |

Table 5.10 EIS 2 response to topics raised within The Hills LGA

| Location | Relevant Issue Raised | Eis2 Document Reference |
|-------------|---|-------------------------|
| Castle Hill | RSL –war memorial | Chapter 14 |
| | Integration of bus terminal with the Castle Hill railway station | Chapter 9 |
| | New access built alongside Castle Hill Road | Chapter 9 |
| | Park and ride facilities | Chapter 9 |
| | Linkages to Castle Towers | Chapter 9 |
| | Access for shops and businesses during construction and operation | Chapters 7 and 9 |
| | Business impacts during construction | Chapter 13 |
| Showground | Accommodating users of Showground and their needs | Chapter 6 and 9 |
| | Discourage commuter parking in streets around station | Chapter 9 |
| Norwest | Traffic and access issues | Chapter 9 |
| | Reinstatement of footpath and landscaping | Chapter 6 |
| | Links to Norwest Marketown and Hillsong Church | Chapter 9 |
| Bella Vista | Connections with McDonalds and BP | Chapter 6 and 9 |
| | Traffic | Chapter 9 |
| | Visual | Chapter 16 |
| | Operational noise | Chapter 10 |
| | Pedestrian access from Glenwood | Chapter 9 |

| Location | Relevant Issue Raised | Eis2 Document Reference |
|------------|---|------------------------------|
| | Increased pedestrian traffic | Chapter 9 |
| | Parking in residential streets | Chapter 9 |
| | Impacts on property prices | Outside the scope of the EIS |
| Kellyville | Visual impacts of skytrain | Chapters 6 and 16 |
| | Noise of operations | Chapter 10 |
| | Noise impacts of skytrain | Chapter 10 |
| | Parking in residential streets | Chapter 9 |
| | Precinct development | Chapter 14 |
| | Design of skytrain | Chapter 6 |
| | Cycling facilities | Chapters 6 and 9 |
| | Safety | Chapter 6 |
| | Cycle paths and bicycle shoulder lanes to be maintained | Chapter 9 |
| Rouse Hill | Integration of Rouse Hill station and associated infrastructure with Rouse Hill Town Centre | Chapter 14 |
| | Operational noise | Chapter 10 |
| | Visual impacts | Chapter 16 |
| | Bus operations | Chapter 9 |
| | Intersection design/traffic conflicts | Chapter 9 |
| | Impact on future development opportunities | Chapter 14 |

Table 5.11 EIS 2 response to topics raised within Blacktown LGA

| Location | Relevant issue Raised | EIS2 Document Reference |
|----------------|--|-------------------------|
| Cudgegong Road | Operation noise, visual impact etc | Chapters 9 and 16 |
| | Impacts of station on Area 20 zoning | Chapter 14 |
| | Cumulative impacts with the redevelopment of Schofields Road | Chapter 20 |
| | Traffic and access (congestion) | Chapter 9 |
| Tallawong | Operational noise | Chapter 10 |
| | Visual impacts | Chapter 16 |
| | Traffic and access (congestion) | Chapter 9 |

5.8 Next steps

TfNSW will continue to engage with government agencies, local councils, industry, key stakeholders and the community throughout all phases of the project.

5.8.1 Engagement to support exhibition of EIS 2

EIS 2 will be placed on public exhibition for a minimum period of 30 days. TfNSW will continue to commit significant resources to maintaining a broad based community and stakeholder consultation process during the public exhibition of EIS 2 and throughout this project. It is anticipated that a range of activities will be undertaken to enable stakeholders to learn more about EIS 2 and assist in better informing public submissions. These activities will include:

- ❖ A range of displays and other information at NWRL Community Information Centre in Castle Hill
- ❖ A range of written material that describes the plans and their impacts, customised to each location. An EIS 2 summary booklet
- ❖ Community information and feedback sessions including access to fact sheets, maps, information display boards and technical specialists.
- ❖ NWRL will involve DP&I in the information sessions to ensure the community has access to information about wider precinct planning around the stations.
- ❖ All information sessions will be widely promoted including advertising in the local press, handing-out information at key locations, and through letters of invitation to key community and government stakeholders and letterbox dropping information newsletters along the corridor.
- ❖ Each session will display information that describes project proposals for the area. Information and feedback sessions will be held at venues along the corridor
- ❖ An EIS 2 exhibition newsletter will be delivered to approximately 45,000 residents and businesses along the alignment.

- ❖ A submissions and ‘have your say’ guide to assist people, groups and agencies that wish to make a submission to the DP&I
- ❖ Tailored deliberative research forums will also be held along the alignment to seek community input into station precinct design.
- ❖ Key stakeholder briefings will be given to:
 - Government agency and council staff
 - Councillors – Hornsby Shire, The Hills Shire and Blacktown City Councils
 - SEWPaC
 - Key land owners
 - Community organisations/interest groups
 - Peak bodies
- ❖ Information about EIS 2 will also be available on the project [website www.northwestrail.com.au](http://www.northwestrail.com.au)
- ❖ Interactive online forums and material will be available on the project website
- ❖ The 1800 information line will continue to operate
- ❖ Place Managers will actively engage with stakeholders to ensure they are aware EIS 2 is on exhibition.

Engagement post determination of EIS2

TfNSW will continue to proactively engage with the community. NWRL will maintain a whole of project stakeholder engagement, communications and community engagement function following determination of EIS 2.

