



**Transport
for NSW**

North Ryde Station Precinct Project Transit Oriented Development State Significant Development Application

Supporting Document

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Abbreviations

Council	City of Ryde Council
CBD	Central Business District
CLG	Community Liaison Group
CLM Act	NSW Contaminated Land Management Act 1997
DCP	Development Control Plan
OEH	NSW Office of Environment and Heritage
DGRs	Director General's Requirements
DP&I	NSW Department of Planning and Infrastructure
ECRL	Epping to Chatswood Rail Link
EEC	Ecologically Endangered Community
EIS	Environmental Impact Statement
EP&A Act	NSW Environmental Planning and Assessment Act 1979
EP&A Regulations	NSW Environmental Planning and Assessment Regulation 2000
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
ESD	Ecologically Sustainable Development
GIFML	Goodman Industrial Funds Management Ltd
ILP	Indicative Layout Plan
INSS	Draft Inner North Sub-Regional Strategy
LEP	Local Environmental Plan
LGA	Local Government Area
MPC	Macquarie Park Corridor
NSW Government	State Government of NSW
NRSP	North Ryde Station Precinct Project
OSL	NSW Office of Strategic Lands
RPSO	Ryde Planning Scheme Ordinance
RMS	Roads & Maritime Services (previously Roads and Traffic Authority)
MD SEPP	State Environmental Planning Policy (Major Development) 2005
SEPP (Infrastructure)	State Environmental Planning Policy (Infrastructure) 2007
SEPP (BASIX)	State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
SEPP 55	State Environmental Planning Policy No 55 (Remediation of Land)
SEPP 64	State Environmental Planning Policy 64 (Advertising and Signage)
SEPP 65	State Environmental Planning Policy 65 (Design Quality of Residential Flat Building)
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011

SSD	State Significant Development
SSDA	State Significant Development Application
SSS	State Significant Site
SSSS	State Significant Site Study
STA	State Transit Authority
TCA	Transport Construction Authority
Transport for NSW	Transport for New South Wales
TOD	Transit Oriented Development
TPD	Transport Projects Division of Transport for NSW
TSC Act	NSW Threatened Species Conservation Act 1995 (TSC Act)
WSUD	Water Sensitive Urban Design

Executive Summary

Introduction

This document constitutes a Supporting Document (in accordance with Part 2, Schedule 2 of the *NSW Environmental Planning and Assessment Regulation 2000* (EP&A Reg)) submitted to the Department of Planning & Infrastructure (DP&I) in support of a State Significant Development Application (SSDA) for the North Ryde Station Precinct Project (NRSP).

The SSDA will consist of subdivision, public domain and infrastructure works in accordance with Schedule 2 of *State Environmental Planning Policy (State & Regional Development) 2011* (SRD SEPP). The proposed subdivision and works are necessary to facilitate implementation of the NRSP Indicative Layout Plan (ILP) which is the subject of a separate application under *State Environmental Planning Policy (Major Development) 2005* (MD SEPP).

The purpose of this document is to request Director-General's Requirements (DGRs) from DP&I for the preparation of an Environmental Impact Statement (EIS) to support the SSDA. The document describes the existing site and locality, provides an overview of the proposed works, outlines the planning provisions applying to the project and identifies key issues that will need to be addressed.

A Preliminary Environmental Assessment (PEA) for the NRSP was lodged in December 2010. As a result of recent changes to planning legislation, certain components of the PEA that are relevant to the proposed subdivision and works are now superseded by this Supporting Document.

This document supports the SSDA under the SRD SEPP only. The proposed rezoning and ILP for the Precinct is the subject of a separate application under the MD SEPP.

Background

The North Ryde Station Precinct is located in close proximity to the Epping to Chatswood Rail Link (ECRL), which is a high quality underground rail link connecting the Macquarie Park area to the Metropolitan Cityrail network. Services on the ECRL commenced on 23 February 2009. Since commencement of services, commuter patronage levels have exceeded expectations with 11,500 people using the ECRL daily.

The North Ryde Station however, has been operating well below its patronage capacity primarily due to the surrounding "North Ryde Station Precinct" being largely undeveloped to the south and northwest. Poor pedestrian, cycle and vehicular connectivity between the station and nearby commercial development to the east, south and northwest and residential catchments to the south and west further compound this.

A transit oriented development (TOD) that encourages station usage and improves connectivity is proposed for vacant lands around North Ryde Station known as the "North Ryde Station Precinct".

The North Ryde Station Precinct comprises some 13.99 hectares of land centred around the North Ryde railway station, predominately in government ownership. This provides a unique opportunity to develop the site with a whole of government approach, consistent with NSW Government strategies, plans and policies.

The development focuses on integrating land use and transport to improve access to the station and overall connectivity within and throughout the Precinct for the benefit of existing and future residents.

The Proponent

Transport for NSW is the Proponent for this SSDA. Previously the proponent was Transport Construction Authority (TCA) which is currently in the process of transitioning its projects and functions to the Transport Projects Division (TPD) of Transport for NSW. In time TCA will be abolished and its assets, rights and liabilities transferred to Transport for NSW. TPD will be undertaking the works subject of the SSDA.

Transport for NSW is well placed to undertake the strategic planning and enabling subdivision, public domain and infrastructure works for the future development of lands surrounding North Ryde Station, given the following:

- Its understanding of the relationship between land use and transport and associated strategic planning issues.
- The knowledge and expertise accumulated in respect of the existing ECRL corridor and North Ryde Station engineering constraints.
- Its commitment to achieving the best future land use and development outcome to support the NSW Government's investment in the ECRL.
- The existing working relationship developed with the various State and local government agencies on planning and transport related issues relevant to the North Ryde Station Precinct.
- The thorough knowledge acquired of the existing environmental constraints and opportunities associated with its landholdings.
- A desire to overcome the social and economic issues caused by the existing fragmented land to provide a high quality development framework to support public transport use and create a sense of place for the North Ryde Station Precinct.

Transport for NSW has a thorough understanding of the complex issues associated with planning for land use and transport integration and carries the necessary experience and expertise to deliver the essential infrastructure which will be key to the success of this important project.

The North Ryde Station Precinct

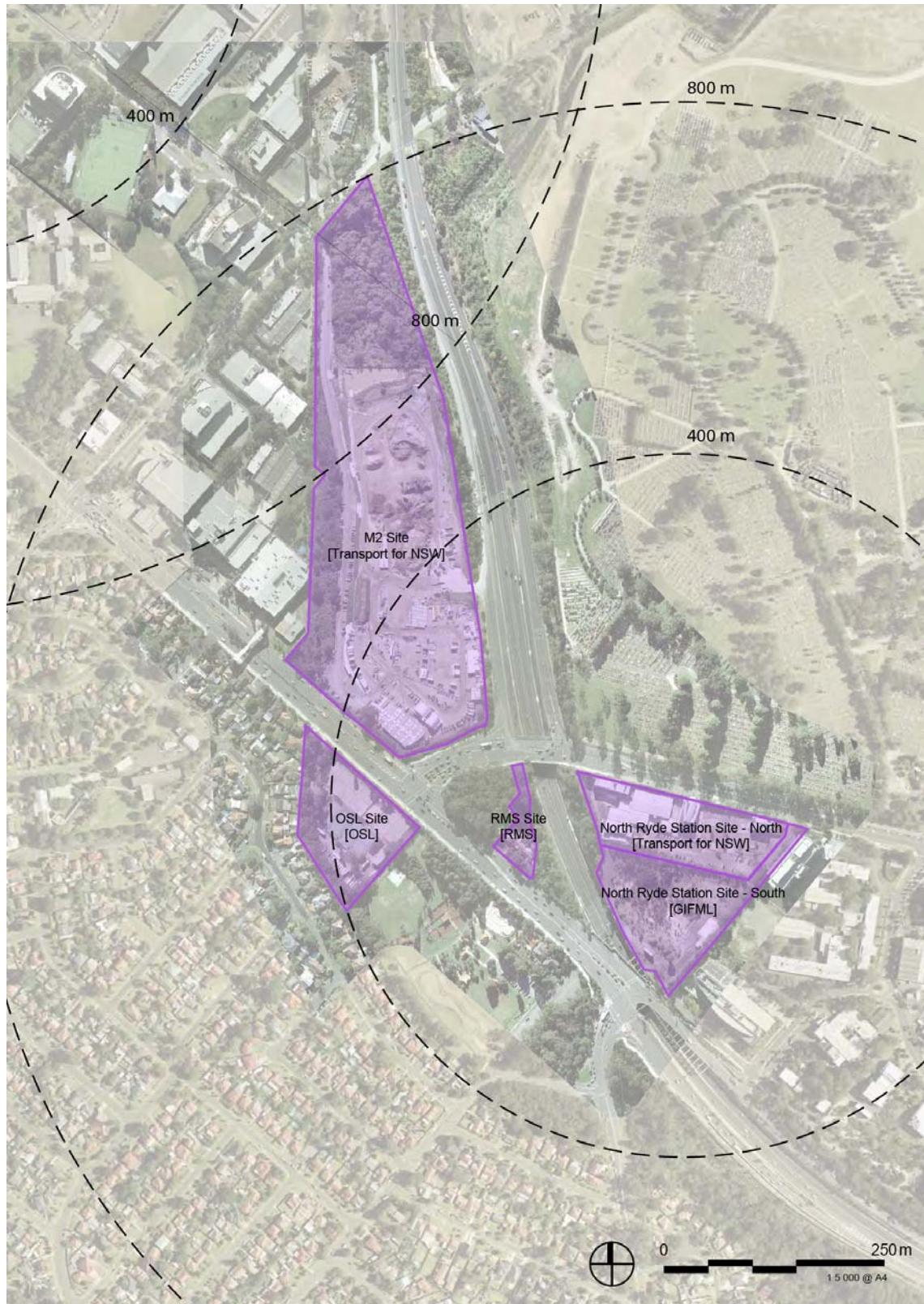
The North Ryde Station Precinct consists of five portions of land, equating to approximately 13.99 hectares. These lands are described in Table A and shown in Figure A.

Table A: Land within the North Ryde Station Precinct

North Ryde Station Precinct Lands		
Site Name	Ownership	Description
M2 Site	Transport for NSW	Land bounded by the M2 to the east, Delhi Road to the south, Epping Road to the south west, adjoining commercial/industrial land uses to the west and Wicks Road to the north. The land is currently leased to Leighton as a construction compound for the M2 widening project.

North Ryde Station Precinct Lands		
Site Name	Ownership	Description
Station Site North	Transport for NSW	Land bounded by Delhi Road to the north, the M2 to the west, adjoining commercial land to the east and the adjoining GIFML owned land to the south. Excluded from the Indicative Layout Plan are the North Ryde Station entrance building located on the site as well as two exhaust and mechanical services buildings, which are situated to the east and west of the station building accordingly. This site is also leased to Leighton.
Station Site South	Goodman Group (GIFML) (previously ING)	GIFML owned land located south of North Ryde Station and adjacent to the Transport for NSW owned land. It is bounded by the M2 to the south west, adjoining commercial zoned land to the east and the Transport for NSW North Ryde Station site to the north. The site is currently vacant.
Office of Strategic Lands Site (OSL)	OSL	Land located along the western side of Epping Road immediately opposite the Epping Road/Delhi Road intersection and the M2 site. The land is currently leased to a private operator for recreational purposes.
RMS Site	RMS (previously RTA)	Land bounded by Epping Road to the west, the M2 to the east and Delhi Road to the north.

Figure A: North Ryde Station Precinct - Lands subject of the SSDA



Planning Pathway

Transport for NSW is undertaking a masterplanning process to ensure the lands surrounding North Ryde Station are planned in an holistic manner to achieve improved land use integration and pedestrian access to the station and to guide the future development of the site.

Progression of the planning approvals process for the NRSPP has previously been undertaken by TCA in consultation with the DP&I as follows:

- On 6 October 2009, TCA received clarification from the DP&I that the site had sufficient merit to be declared an SSS and captured as a Major Project and therefore, be subject to Part 3A of the *NSW Environmental Planning and Assessment Act, 1979* (the Act).
- In December 2010, TCA submitted a Preliminary Environmental Assessment (PEA) to the DP&I requesting Director General's Requirements (DGRs) to guide the preparation and lodgement of an SSS Study, Concept Plan and Stage 1 Project Application.
- On 1 October 2011, Part 3A of the Act was repealed through the commencement of the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011*. In accordance with the relevant transitional provisions, the NRSPP could no longer proceed as a Major Project under Part 3A of the Act.
- Amendments to the Act established a new assessment system under the SRD SEPP. The NRSPP is included in Schedule 2 of the SRD SEPP, making the proposed subdivision, public domain and infrastructure works SSD.

This Supporting Document has been prepared to reflect recent changes in legislation in respect of the subdivision, public domain and infrastructure works required to facilitate the future development of the North Ryde Station Precinct.

Request

Subdivision, public domain and enabling infrastructure works proposed as part of NRSPP are listed as a State Significant Development (SSD) under Part 12 of Schedule 2 of the SRD SEPP. As SSD, Part 4 of the Act applies and provides the planning approvals process for these components of the NRSPP.

Accordingly, Transport for NSW is seeking the following in relation to the SSD:

- In accordance with Schedule 2, Part 12 of the SRD SEPP, that the DP&I prepares and issues DGRs for the NRSPP in consultation with council & agencies and places them on the DP&I website.
- That the DGRs relate to the super-lot subdivision, public domain and infrastructure works only, in accordance with the SSD listing.

This Supporting Document provides preliminary environmental and planning considerations relevant to the issue of DGRs to guide the preparation and lodgement of an SSDA including an EIS in relation to the subdivision, public domain and infrastructure works only.

Concurrent Planning Processes

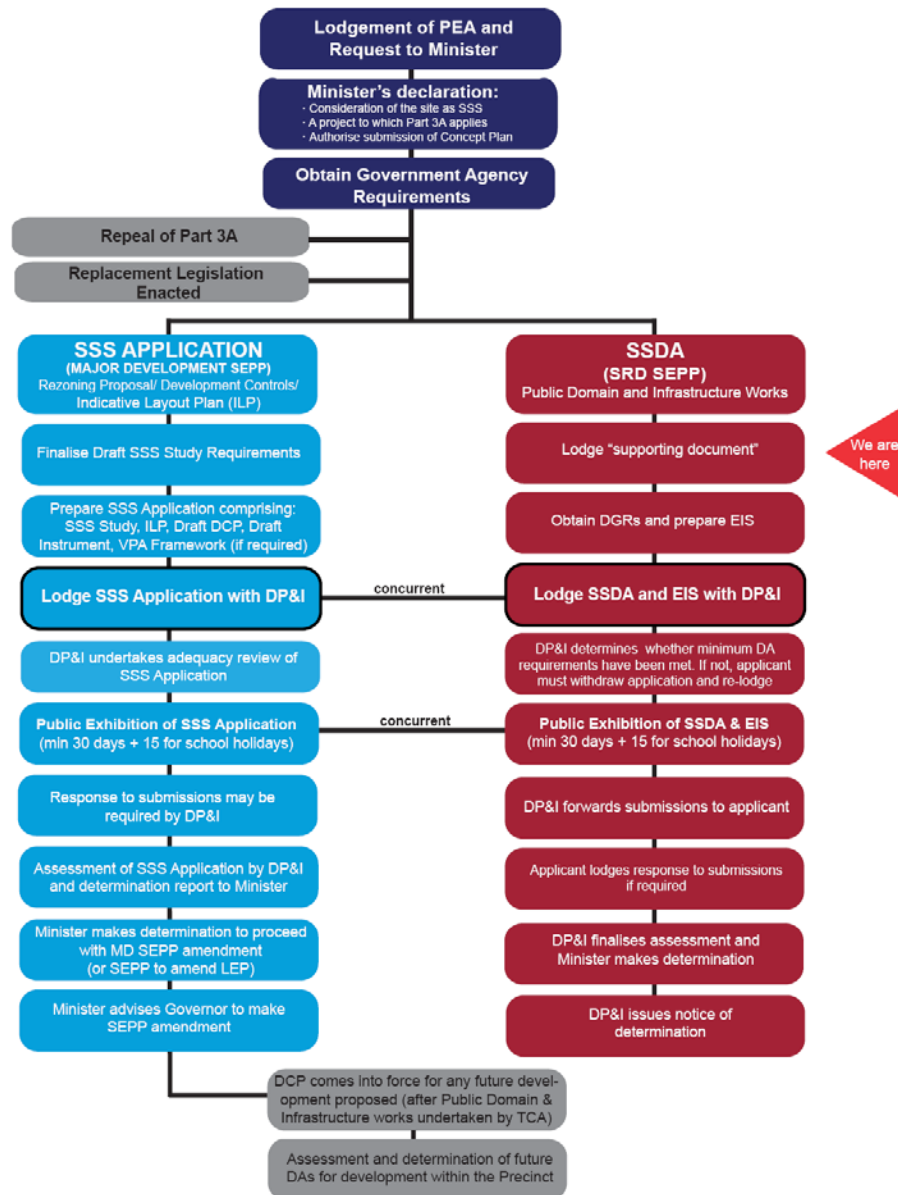
In addition to the subdivision, public domain and infrastructure works, approval will also be required for the land use framework and urban form including zoning, height and floor space ratio (FSR) forming part of the overall NRSPP.

The Transport for NSW and OSL owned lands are identified as a 'deferred matter' in *City of Ryde Council's (Council) Local Environmental Plan 2010* (Ryde LEP 2010); therefore the Ryde Planning Scheme Ordinance (RPSO) applies to these sites. The proposed uses are partly prohibited on land within the Precinct as per the RPSO and Ryde LEP 2010. Further, some of the proposed land uses on the RMS and GIFML owned lands are inconsistent with existing land use zones.

Therefore, in order to progress with the ultimate development of the land as proposed, a rezoning of the land is required.

Accordingly, a separate and concurrent request for the site to be declared a State Significant Site (SSS) has been progressed to facilitate the rezoning of the Precinct and to guide the urban form including land use, height and FSR. State Significant Site Study (SSSS) requirements have been issued by the DP&I and the SSSS is currently under preparation by Transport for NSW. It is anticipated that the SSDA and SSSS would be exhibited concurrently to maximise transparency and efficiency as illustrated in Figure B.

Figure B: Concurrent Planning Process



The Proposal

The SSDA comprises the following subdivision, public domain and infrastructure works:

- Development superlots.
- Main spine road.
- Public domain works including landscaping.
- Open space lots.
- Drainage infrastructure.
- Key intersections and access infrastructure including:

- o A pedestrian bridge over Delhi Rd linking the M2 site with the Station Site.
- o Primary roads and intersections.
- o Additional pedestrian and cycle connections and improvements.

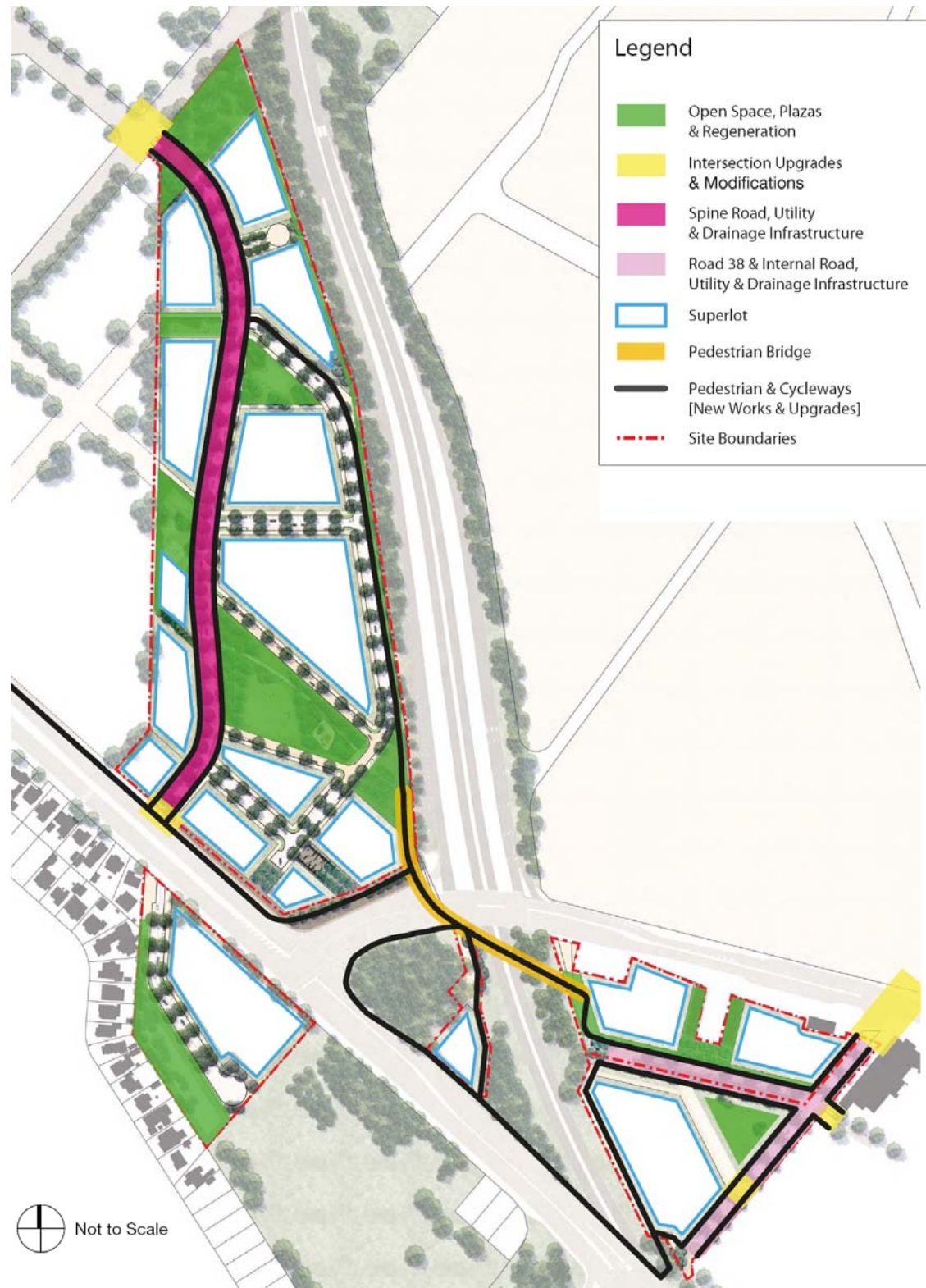
The subdivision and enabling works are required to facilitate the ILP which is the subject of a separate application under the MD SEPP.

A summary of the works included in the SSDA for each parcel of land is provided in Table B below and demonstrated in Figure C.

Table B: Summary of SSDA

M2 Site	Station Site North and Station Site South	RMS site	OSL site
- Provision of permanent open space and temporary open space where secondary roads are proposed. - Multiple development parcels. - Pedestrian bridge over Delhi Rd. - Primary roads and key intersections. - Utilities and drainage infrastructure.	Station Site North: - Provision of open space. - Multiple development parcels. - Pedestrian bridge infrastructure. Station Site South: - Provision for Road 38. - One development parcel.	- One development parcel. - Pedestrian bridge infrastructure. - Pedestrian access through the site.	- Provision of open space. - One development parcel.

Figure C: Proposed Public Domain & Infrastructure Works included in the SSDA



Proposed Indicative Layout Plan

An ILP identifying the proposed super-lots, public domain and road and infrastructure layout has been prepared to guide the future development of lands within the North Ryde Station Precinct. The ILP is included in the SSS application along with the rezoning proposal and draft development controls. The SSDA consists of enabling works which are required to implement the ILP and is therefore informed by the ILP. Whilst approval of the ILP is not sought as part of the SSDA, a description of the ILP is necessary to provide context for the proposed SSDA works.

Key elements of the ILP include:

- Residential development across all sites providing for a diversity of housing types in close proximity to North Ryde Station.
- New mixed use zones with retail and commercial/employment on the M2 site and convenience retail and complementary commercial development in proximity to North Ryde Station.
- Development of a series of public open space areas, providing for both active and passive recreation on the M2 Site and the North Ryde Station Sites with buffer zones and green links throughout the Precinct.
- Community facilities, including a community centre with associated active recreation space on the M2 site.
- Provision of a spine road through the M2 Site from Epping Road to Wicks Road to provide the main vehicular connection through the M2 site.
- Development of a vehicular access point to the M2 Site from Epping Road and one on Wicks Road with connections onto Waterloo Road.
- A footpath and pedestrian bridge sited at the southern end of the M2 site connecting the site with the Station.
- Provision for Road 38 along the eastern boundary of the North Ryde Station Site.
- Significant pedestrian and cycleway upgrades and new links to improve connectivity to North Ryde Station and the MPC.
- Best practice sustainability measures including the use of native plants grown with locally sourced seed, Water Sensitive Urban Design (WSUD) measures and rehabilitation of the riparian zones on the northern portion of the M2 Site to create a natural open space area with drainage area.
- Best practice Urban Design to create usable spaces, enhanced amenity and activation of the Precinct in accordance with TOD principles.

Transit Oriented Development

The proposal offers a unique opportunity to achieve a TOD in an under developed Precinct that has access to a new railway station. The ILP is informed by TOD principles as it seeks to achieve transport and land integration, improved connectivity to the Station and throughout the Precinct and access to open space for existing and future residents.

The proposal is consistent with recognised TOD principles as it would provide the following:

- Mixed use development within 800 metres of the North Ryde Station, with greater focus on residential development, supported by appropriate community facilities.

- Integration of North Ryde Station with retail, commercial, recreational and community uses therefore stimulating activity around the station.
- Pedestrian and bicycle connectivity to North Ryde Station.
- A high level of pedestrian and bicycle connectivity to nearby employment.
- Liveable and active public domain spaces for the community that integrate with proposed land uses and North Ryde Station.
- An opportunity to rehabilitate the riparian corridor to the north of the M2 Site.
- High quality open space that is within walking distance.

Environmental Impact Assessment

Over the coming months, Transport for NSW will progress detailed investigations and impact assessment works across the following technical disciplines for the purposes of the SSDA:

- Traffic, transport and access.
- Biodiversity.
- Flooding, stormwater drainage and detention.
- Water quality and water sensitive urban design.
- Provision of servicing infrastructure.
- Contamination.
- Rail infrastructure.
- Noise.
- Heritage.
- Social and economic.

Any additional impact assessment requirements of the Director-General, DP&I will also be addressed.

Together with input from government agencies, the community and other stakeholders, these impact assessment works will continue to inform the ILP and development controls in the lead up to lodgement of the concurrent planning applications.

1. Introduction

This document constitutes a Supporting Document (in accordance with Part 2, Schedule 2 of the *NSW Environmental Planning and Assessment Regulation 2000* (EP&A Reg)) submitted to the Department of Planning & Infrastructure (DP&I) in support of a State Significant Development Application (SSDA) for the North Ryde Station Precinct Project (NRSP).

The SSDA will consist of subdivision, public domain and infrastructure works in accordance with Schedule 2 of *State Environmental Planning Policy (State & Regional Development) 2011* (SRD SEPP). The proposed subdivision and works are necessary to facilitate implementation of the NRSP Indicative Layout Plan (ILP) which is the subject of a separate application under *State Environmental Planning Policy (Major Development) 2005* (MD SEPP).

The purpose of this document is to request Director-General's Requirements (DGRs) from DP&I for the preparation of an Environmental Impact Statement (EIS) to support the DA. The document describes the existing site and locality, provides an overview of the proposed works, outlines the planning provisions applying to the project and identifies key issues that will need to be addressed.

A Preliminary Environmental Assessment (PEA) for the NRSP was lodged in December 2010. As a result of recent changes to planning legislation, certain components of the PEA that are relevant to the proposed subdivision and works are now superseded by this Supporting Document.

This document supports the SSDA under the SRD SEPP only. The proposed rezoning and ILP for the Precinct is the subject of a separate application under the MD SEPP.

This document provides a description of the following:

- The site and the NRSP.
- NRSP State Significant Development Planning Process.
- NRSP Concurrent Planning Process.
- Statutory Planning Context.
- Preliminary environmental impact assessment of the NRSP.

The DGRs will enable the preparation of an EIS to support a SSDA for the proposed subdivision, public domain and infrastructure works.

1.1. Background

1.1.1. The North Ryde Station Precinct Project

The North Ryde Station Precinct is located in close proximity to the Epping to Chatswood Rail Link (ECRL), which is a high quality underground rail link connecting the Macquarie Park area to the Metropolitan Cityrail network. Services on the ECRL commenced on 23 February 2009. Since commencement of services, commuter patronage levels have exceeded expectations with 11,500 people using the ECRL daily.

The North Ryde Station however, has been operating well below its patronage capacity primarily due to the surrounding "North Ryde Station Precinct" being largely undeveloped to the south and northwest. Poor pedestrian, cycle and vehicular connectivity between the station and nearby commercial development to the east, south and northwest and residential catchments to the south and west further compound this.

A transit oriented development (TOD) that encourages station usage and improves connectivity is proposed for vacant lands around North Ryde Station known as the “North Ryde Station Precinct”.

The North Ryde Station Precinct comprises some 13.99 hectares of land centred around the North Ryde railway station, predominately in government ownership. This provides a unique opportunity to develop the site with a whole of government approach, consistent with NSW Government strategies, plans and policies.

The development focuses on integrating land use and transport to improve access to the station and overall connectivity within and throughout the Precinct for the benefit of existing and future residents.

1.1.2. Transit Oriented Development

TOD is a planning concept that promotes high quality, medium to high density mixed use development within a comfortable ten minute walk of established or planned rail and bus-way stations (a radius of about 800 metres).

The proposal offers a unique opportunity to achieve a TOD in an under developed Precinct that is centred on North Ryde Station. The proposal will provide transport and land integration, improved connectivity to the station and throughout the Precinct and access to open space for existing and future residents.

The NRSPP benefits from ongoing strategic input from Peter Hyland, Chair of the Queensland Government taskforce which produced the guidelines for TOD to be contained in the South East Queensland Regional Plan.

The proposal is consistent with TOD principles, as it would achieve the following:

- Mixed use development within 800 metres of the North Ryde Station, with greater focus on residential development, supported by appropriate community facilities.
- Increased residential density around North Ryde.
- Integrated Station Precinct with retail, commercial, recreational and community uses to stimulate activity around the station.
- Pedestrian and bicycle connectivity to North Ryde Station.
- A high level of pedestrian and bicycle connectivity to nearby employment.
- Liveable and active public domain spaces for the community that integrate with proposed land uses and North Ryde Station.
- Opportunity to rehabilitate the riparian corridor to the north of the M2 Site.
- High quality open space interspersed throughout the Precinct to maximise accessibility, active transport and amenity.

The proposed TOD capitalises on the NSW Government's \$2.3 billion investment into the ECRL, encouraging increased usage of North Ryde Station through improving connectivity and accessibility of surrounding lands to the station.

1.2. Proponent

Transport for NSW, as the Proponent is well placed to undertake the strategic planning and proposed subdivision, public domain and infrastructure works to facilitate the future development of lands in the North Ryde Station Precinct, given the following:

- Its understanding of the relationship between land use and transport and associated strategic planning issues.
- The knowledge and expertise accumulated in respect of the existing ECRL corridor and North Ryde Station engineering constraints.
- Its commitment to achieving the best future land use and development outcome to support the NSW Government's investment in the ECRL.
- The existing working relationship developed with the various State and local government agencies on planning and transport related issues relevant to the North Ryde Station Precinct.
- The thorough knowledge acquired of the existing environmental constraints and opportunities associated with its landholdings.
- A desire to overcome the social and economic issues caused by the existing fragmented land to provide a high quality development framework to support public transport use and create a sense of place for the North Ryde Station Precinct.

Transport for NSW has a thorough understanding of the complex issues associated with planning for land use and transport integration and carries the necessary experience and expertise to deliver the essential infrastructure which will be key to the success of this important project.

1.3. Planning History

Transport for NSW is undertaking a masterplanning process to ensure the lands surrounding North Ryde Station are planned in an holistic manner to achieve improved land use and transport integration, more efficient pedestrian access to the station and to guide the future development of the site in line with the principles of TOD.

Progression of the planning approvals process for the NRSP has been undertaken over a number of years by TCA in consultation with the DP&I as follows:

- On 6 October 2009, TCA received clarification from the DP&I that the site had sufficient merit to be declared an SSS and captured as a Major Project and therefore, be subject to Part 3A of the *NSW Environmental Planning and Assessment Act, 1979* (the Act).
- In December 2010, TCA submitted a Preliminary Environmental Assessment (PEA) to the DP&I requesting Director General's Requirements (DGRs) to guide the preparation and lodgement of an SSS Study, Concept Plan and Stage 1 Project Application.
- On 1 October 2011, Part 3A of the Act was repealed through the commencement of the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011*. In accordance with the relevant transitional provisions, the NRSP could no longer proceed as a Major Project under Part 3A of the Act.
- Amendments to the Act established a new assessment system under the SRD SEPP. The NRSP is included in Schedule 2 of the SRD SEPP, making the proposed subdivision, public domain and infrastructure works SSD.

This Supporting Document has been prepared to reflect recent changes in legislation in respect of the subdivision, public domain and infrastructure works required to facilitate the broader development of the North Ryde Station Precinct. The document relates to the SSDA only, with the SSSS being the subject of a separate, but concurrent approvals process, described further in Section 2 of this report.

1.4. Project Justification

The proposed development provides a unique opportunity to achieve a TOD in proximity to North Ryde Station and on lands that are significantly under developed. The site is unique as it is predominately in government ownership and is approximately 13.99 hectares of developable land.

The NRSPP will establish access and connectivity improvements as part of State Significant Development works which will allow existing communities to benefit from early access to open space and improved connectivity to the station, particularly given the proposed introduction of a pedestrian bridge.

The primary aim of the proposal is to better activate the North Ryde Station Precinct, improve station access and provide for a mixed use development that supports patronage of North Ryde Station and the ECRL. The NSW Government has invested significant funds in the ECRL and the proposal is considered essential to achieving appropriate utilisation of the station and rail network.

Specifically, the site is located within the MPC and would be one of the most significant development sites in the corridor. The only comparable sites for mixed use development in scale and investment would be Barrangaroo and Frasers on Broadway (ex Carlton United Brewery Site (CUB site)). The MPC is identified as a specialised centre in the *Inner North Subregion Draft Subregional Strategy* and is projected to have an estimated 55,300 employees by 2031. The site also forms part of the 'Global Economic Corridor' as identified in the Sydney Metropolitan Strategy.

The Precinct would significantly contribute to the economy of the Subregion and 'Global Economic Corridor', as the proposed development of the site is proposed to provide up to 367,000m² of floorspace for mixed land use purposes. In addition, it is likely to generate an estimated 5,440 construction jobs over the life of the proposed development.

Further, the project would significantly contribute to the activation of North Ryde Station, which is located along the ECRL. The ECRL was a \$2.3 billion investment by the NSW Government and currently carries an estimated 11,500 customers per day. The ECRL is forecast to carry an estimated 30,000 passengers by 2030. Patronage of the North Ryde Station is particularly low, with only 1,500 customers per day. The NRSPP, when completed, is expected to significantly improve patronage and activation of the Station.

The site provides an opportunity for a whole of government approach to integrate land uses and public transport on a unique site, which supports key transport and land use priorities and targets established by the NSW Government. Importantly, Transport for NSW as the NSW Government landowner responsible for delivery of the ECRL and with the most significant landholdings within the Precinct is best placed to deliver the TOD. In addition, Transport for NSW has a high level of knowledge of those sites within the Precinct, the constraints posed by the ECRL and how to best enhance patronage of the station through land use planning and improved connectivity.

2. Planning Pathway

2.1. Concurrent Planning Process

Amendments to the EP&A Act established a new assessment system for projects of genuine State significance under the SRD SEPP. The NRSP is included in Schedule 2 of the SRD SEPP – State Significant Development Identified Sites. The SRD SEPP lists certain development on the North Ryde Station Precinct as SSD including:

- Principal subdivision establishing major lots.
- Public domain areas.
- Creation of new roadways and associated works.
- Provision of a pedestrian bridge.

Following discussions with DP&I, assessment of the NRSP will now be undertaken via two separate planning processes which are anticipated to run concurrently to allow consistency and transparency in consultation.

The dual planning process, as illustrated in **Figure 1** will enable the approval of an ILP for the site as well as approval of the subdivision, public domain and infrastructure works forming the subject of the SSDA and this Supporting Document.

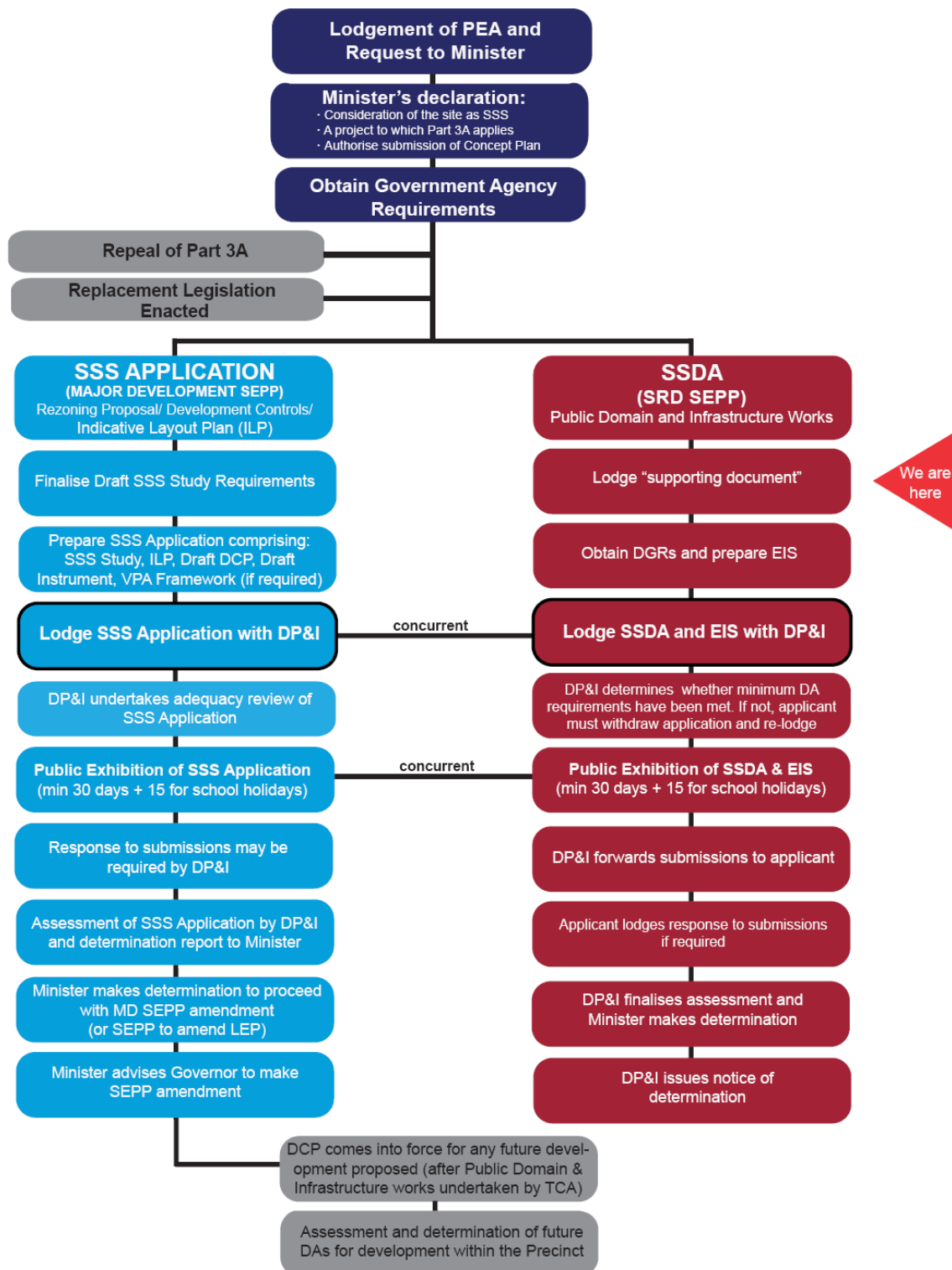
The planning approvals process for the NRSP will therefore consist of:

1. **SSS Application** to secure the land uses, urban structure and built form under the MD SEPP (as previously anticipated). This will consist of an SSS Study, ILP and draft development controls.
2. **SSDA** for the subdivision, public domain and infrastructure works associated with the NRSP under the SRD SEPP. An EIS is required to accompany the SSDA.

It is anticipated that the two separate planning applications would be exhibited and assessed concurrently.

This Supporting Document relates to the SSDA process only.

Figure 1: Concurrent Planning Process



2.2. State Significant Development Application

Certain development within the North Ryde Station Precinct is listed in Schedule 2, Part 12 of the SRD SEPP as SSD, as follows:

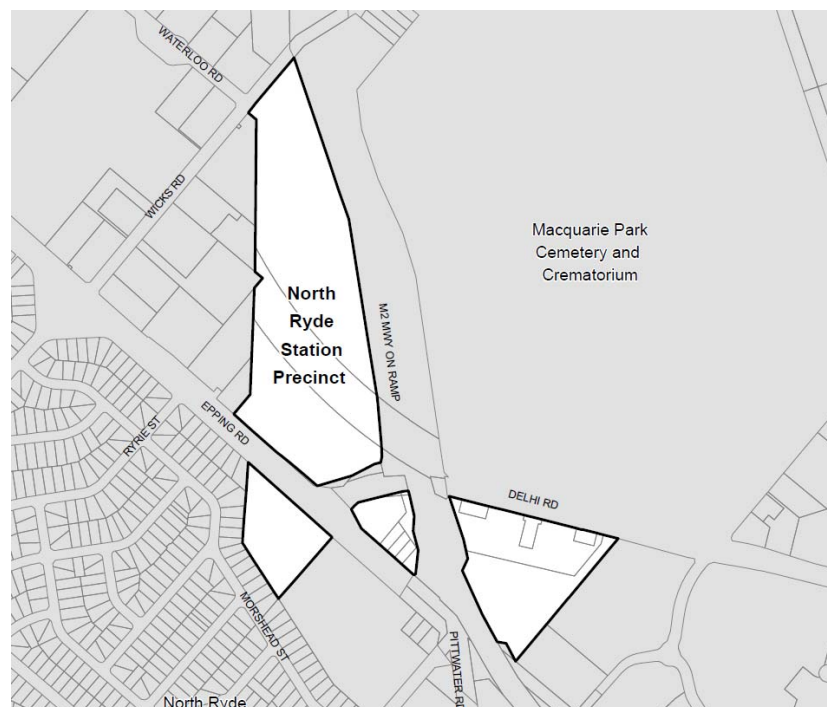
12 Development at North Ryde Station Precinct Site

Development on land identified as being within the North Ryde Station Precinct Site on the State Significant Development Sites Map if the development is for the purposes of:

- (a) a principal subdivision establishing major lots or public domain areas, or
- (b) the creation of new roadways and associated works.

Figure 2 shows the land parcels comprising the North Ryde Station Precinct Site as identified under the SRD SEPP.

Figure 2: State Significant Development Sites Map



Source: Department of Planning and Infrastructure, SRD SEPP 2011

In accordance with Schedule 2, Part 12 of the SRD SEPP, an SSDA will be lodged with and assessed by DP&I for the subdivision, public domain and infrastructure works required to facilitate the broader development of the North Ryde Station Precinct. The key steps in the approvals process are as follows:

- DP&I prepares and issues DGRs in consultation with council & agencies and places them on the DP&I website.
- Transport for NSW undertakes further consultation with Council, Agencies and the community and prepares an EIS.
- Transport for NSW lodges SSDA, including EIS under SRD SEPP.

- DP&I exhibits SSDA and EIS for a minimum of 30 days and seeks submissions from council, agencies and the community.
- DP&I forwards submissions to the applicant and relevant agencies.
- Transport for NSW lodges response to submissions within 21 days unless otherwise agreed by the Director General.
- DP&I finalises assessment and consults with council and agencies on draft conditions of consent (if any).
- The Minister for Planning & Infrastructure determines the SSDA.

The SSDA is the subject of this Supporting Document which requests the issue of DGRs to guide the preparation of the EIS.

2.2.1. Director-General's Requirements

In relation to the SSDA for the North Ryde Station Precinct, Transport for NSW is seeking the following through this Supporting Document:

- That DP&I prepares and issues DGRs for the NRSP in consultation with council & agencies and places them on the DP&I website.
- That the DGRs relate to the subdivision, public domain and infrastructure works only, in accordance with the SSD listing in Schedule 2, Part 12 of the SRD SEPP.

This Supporting Document outlines preliminary environmental and planning considerations relevant to the issue of DGRs for an SSDA and accompanying EIS in relation to the subdivision, public domain and infrastructure works only.

Once DGRs have been issued, Transport for NSW will continue consultation with Council, the community and relevant agencies and an EIS will be prepared in accordance with Part 2, Schedule 2 of the EP&A Reg. The EIS will include the following key details:

- Clearly describe the development.
- Identify its likely impacts.
- Propose measures to mitigate and manage any impacts.
- Address the construction and the operational phase.
- Present supporting technical investigations addressing key issues.
- Present a synopsis of the technical investigations undertaken for each component of the project, along with the findings, conclusions and recommendations of those investigations.
- Describe the community consultation process.
- Address Section 79C of the EP&A Act.

2.3. State Significant Site Application

On 17 September 2009, TCA made a submission to the DP&I requesting clarification in respect of the planning approval process and whether the North Ryde Station Precinct met the criteria to be declared a SSS in accordance with the *State Environmental Planning (Major Development) 2005* (MD SEPP).

On 6 October 2009, DP&I responded to the submission indicating that the site did meet the criteria to be declared an SSS and study requirements were issued by the DP&I on 9 November 2011.

An SSSS will therefore be prepared in accordance with clause 8 of MD SEPP and the SSSS requirements to seek a site specific planning regime for the North Ryde Station Precinct, including land use zones, building height and floor space ratio. This regime will provide the planning framework against which the future development of the Precinct would be assessed. The SSSS will be prepared separate to, but concurrently with the SSDA. These two applications are inherently linked, but independent as illustrated in **Figure 1** (planning process diagram).

3. North Ryde Station Precinct

3.1. Local Context

The North Ryde Station Precinct is located within the Macquarie Park Corridor (MPC), a predominantly commercial area that lies between the M2 Motorway and Epping Road, North Ryde (see **Figure 3**). The geographical scale of the MPC is similar to the Sydney Central Business District (CBD). The distance from Macquarie University to the eastern most part of the Precinct is similar to the distance between Circular Quay and Central Station.

The MPC and North Ryde Station Precinct are framed by natural bushland to the north and east. The land uses immediately surrounding the North Ryde Station Precinct include:

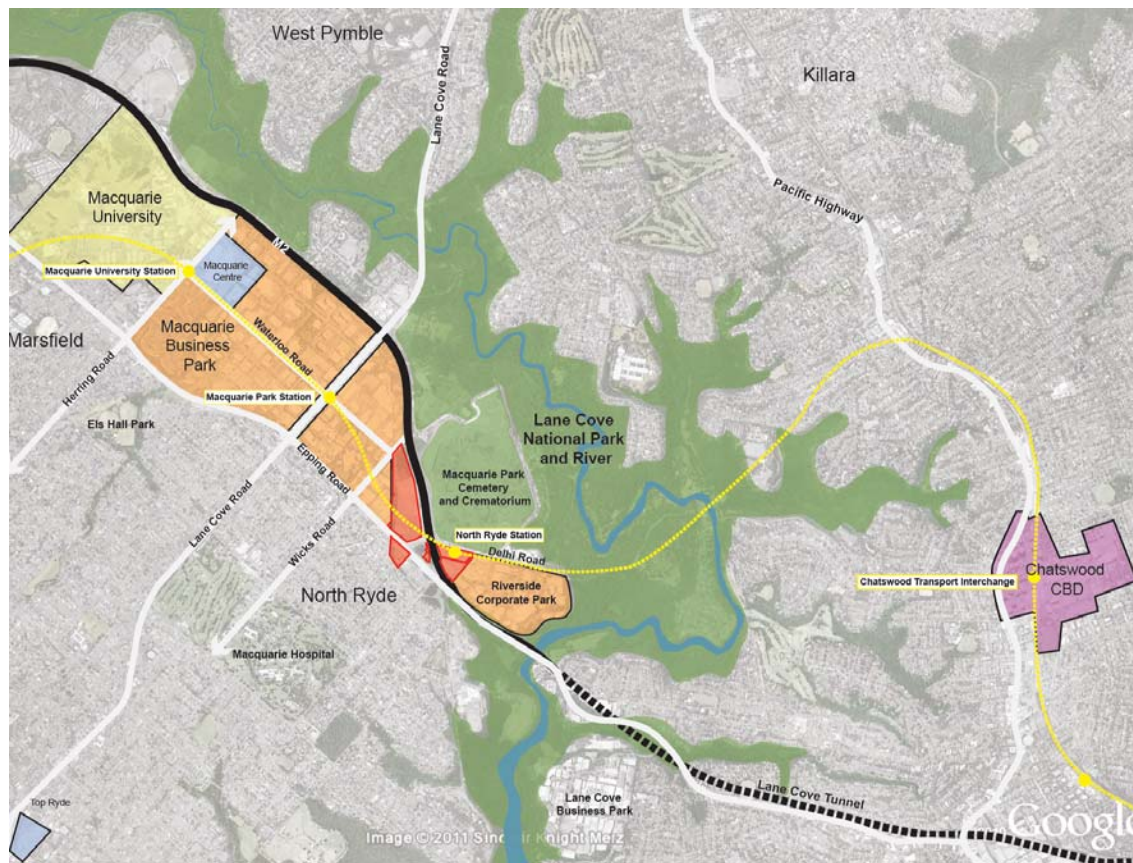
- To the south – North Ryde, a low density residential suburb consisting primarily of single storey detached dwellings.
- To the east – The M2 and the Riverside Corporate Park which is a continuation of the MPC consisting primarily of large floor plate multi storey commercial buildings.
- To the west – The built form in the area is a mix of modern medium rise, large floor plate commercial buildings, some vacant sites and older small scale commercial buildings.
- To the north – The Precinct is bounded by Delhi Road to the north of the North Ryde Station Site. The Macquarie Park Crematorium and Cemetery are located beyond Delhi Ryde to the north. To the north of the M2 Site, the site is bounded by the M2 and predominately commercial land uses that form part of the MPC.

A number of arterial roads converge on and through the North Ryde Station Precinct, influencing effective pedestrian and bicycle movements to the station and constraining site access. These roads include:

- The M2 Motorway which forms the north eastern boundary of the M2 site and the south western boundary of the North Ryde Station Sites – Northern and Southern.
- Epping Road, which bisects the Precinct and forms the southern boundary of the M2 Site and the RMS Site.
- Delhi Road, which divides the M2 Site from the North Ryde Station Sites – Station Site North and Station Site South and the RMS Site.

A core aim of the strategic planning principles and SSDA is to improve access issues that have arisen as a result of the convergence of these roads, particularly accessibility to North Ryde Station.

Figure 3: North Ryde Station Precinct Site - Local Context



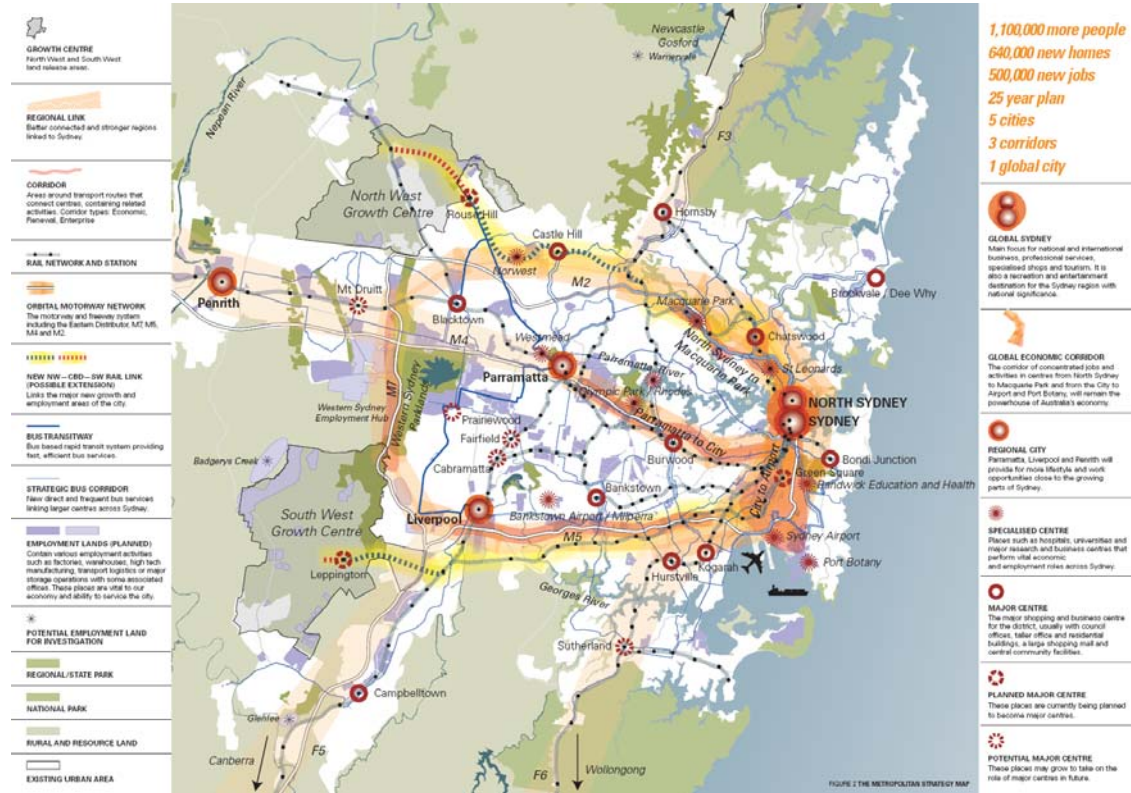
3.2. Regional Context

The MPC is situated at the north western end of the “Global Economic Corridor” within the Inner North Subregion as defined in the Sydney Metropolitan Strategy (Metro Strategy). The Corridor is an area of global economic activity stretching from Port Botany and Sydney Airport, through the CBD, North Sydney and St Leonards to Macquarie Park (refer to **Figure 4**). This region accounts for the majority of Sydney’s globally oriented commercial businesses and over 10 percent of the National Gross Domestic Product.

The Inner North Subregion is located approximately midway between the Sydney CBD and Parramatta. The Subregion is also adjacent to Sydney Olympic Park and the upper North Shore. The main transport links include the:

- ECRL - provides rail connectivity to the Sydney CBD as well as links to the greater Metropolitan Area including the Northern Railway Line, which services suburbs north of Chatswood to Hornsby and Berowra.
- M2 Motorway - providing access to the Sydney CBD to the south and Hills district to the northwest.
- Metroad 3 (Lane Cove Road – Church Street) – the main Metropolitan north-south road route linking the Northern Beaches to the St George region.

Figure 4: North Ryde Station Precinct - Regional Context



Source: The Metropolitan Strategy, DP&I 2011

3.3. The North Ryde Station Precinct Lands

The subject lands, referred to as the North Ryde Station Precinct are situated within the City of Ryde (Council) Local Government Area (LGA), at the southern end of the MPC (refer to **Figure 5**). The North Ryde Station Precinct comprises a total land area of 13.99 ha and is divided by the M2 Motorway, Epping Road and Delhi Road.

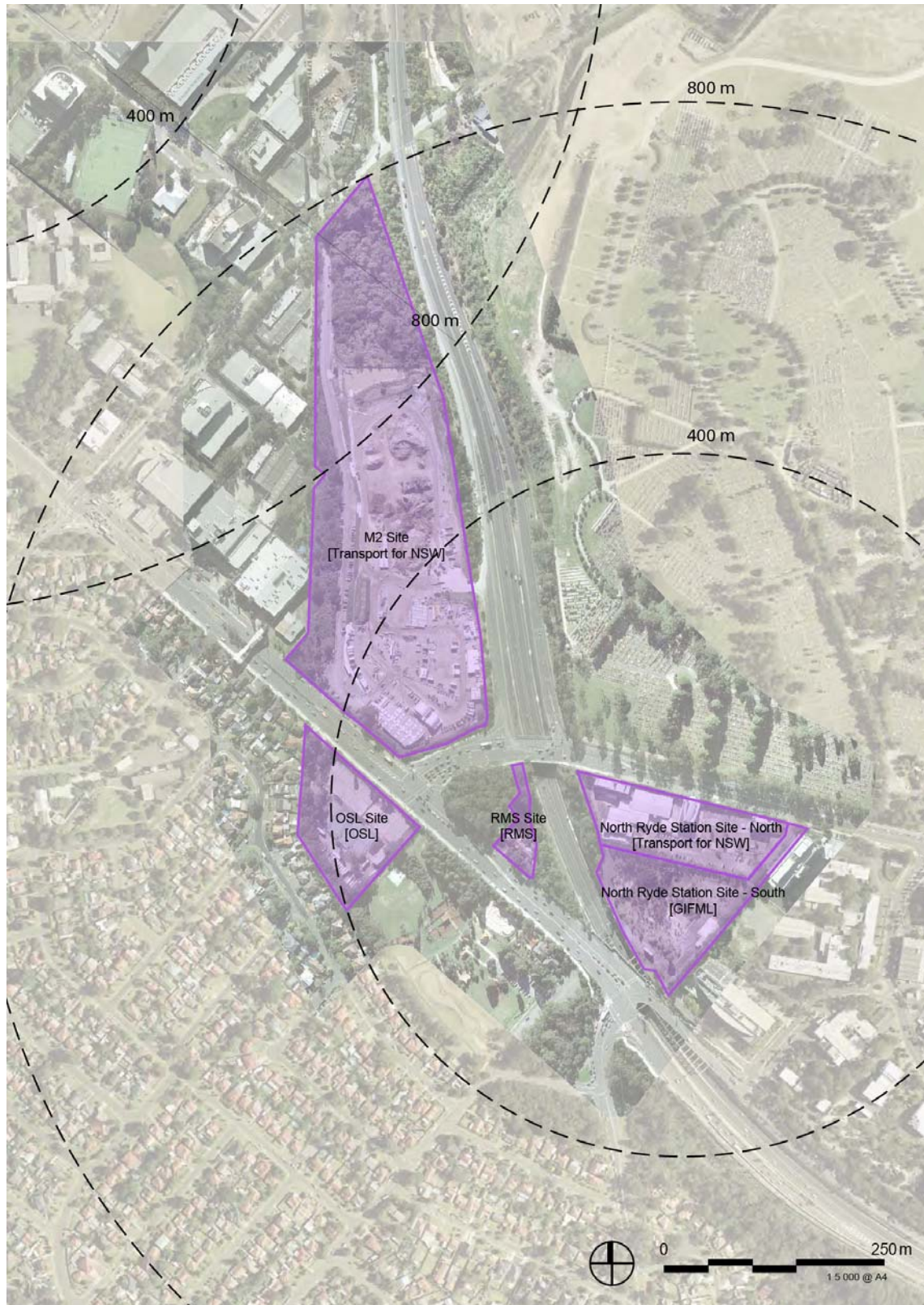
The North Ryde Station Precinct as identified in the SSD sites map, consists of significant NSW government landholdings, together with two privately owned landholdings, as outlined in **Table 1** and shown in **Figure 5**. The NSW government owned lands represent approximately 87% of the total area of the North Ryde Station Precinct.

Table 1: Summary of North Ryde Station Precinct lands

North Ryde Station Precinct			
Site Name	Ownership	Lot/DP	Site Area (Ha)
M2 Site	Transport for NSW	Lot 101 DP 1131776 and Lot 100 DP 1131776	9.16
North Ryde Station Site - North North Ryde Station Site - South	Transport for NSW	Lot 4 DP 1131774	1.3
	Goodman Group (GIFML)	Lot 160 DP 1136651	1.76
OSL Site	OSL	Lot 565 DP 28914	1.48
RMS Site	RMS	Lot 11 DP 1017829, Lot E DP 28507, Lot 11 DP 27851, Lot 12 DP 27851	0.29
Total			13.99

It is noted that Bundara Reserve and the adjoining privately-owned landholding adjacent to the RMS owned land, are not included in the SSDA the subject of this Supporting Document.

Figure 5: North Ryde Station Precinct - Lands Subject of the SSDA



3.3.1. M2 Site

The M2 Site is bound to the east by the M2 Motorway, to the south west by Epping Road, to the south by Delhi Road and to the north by Wicks Road. Access to the site for construction of the ECRL was established via a construction access point from the M2 on ramp and an access driveway from Wicks Road. The M2 Site has a total site area of 91,530m². The land generally slopes down to the north, towards Wicks Road. Part of the site is affected by the ECRL Corridor, which poses some engineering constraints for development above. The northern portion of the site is heavily weed infested and degraded. While some native vegetation exists within this area, there are no Endangered Ecological Communities are present.

3.3.2. North Ryde Station Site

North Ryde Station Site North

The North Ryde Station Site North is owned by Transport for NSW and is situated with frontage to Delhi Road. The site is bound by the M2 Motorway to the west, and privately owned land to the south (GIFML). The site has a total area of approximately 13,000m² and is located adjacent to North Ryde Station and its service buildings. The land falls away from Delhi Road to the south, towards the North Ryde Station Site South. Access to the site is via the signalised intersection (constructed by TCA as part of the ECRL) at Delhi Road and proposed Road 38 along the eastern boundary of the site. There are no major environmental constraints affecting the land.

North Ryde Station Site South

The North Ryde Station Site South is owned by GIFML and is approximately 17,600m². The site slopes to the south and is currently vacant and unoccupied. The large building that previously existed at the site has been demolished, leaving a stepped profile where the building had been cut into the natural hill slope. An abandoned single-storey brick building remains in the east of the site and a compound containing two disused transformers is located immediately adjacent. The footprint of the demolished building is unsealed, whilst the previously existing asphalt access roads and car parking areas remain and were observed to be in good condition with no evidence of spills or stains observed during the inspection. Ornamental grass and garden areas also remain in the south of the site. A Development Application for four commercial office towers was approved for this site by Council in 2008 and will expire in 2012.

3.3.3. Office of Strategic Lands Site

The OSL owned land is located on the western side of Epping Road, opposite the Delhi Road/Epping Road intersection. The site has an area of approximately 14,800m² and is currently leased to a private operator for recreational purposes (tennis courts). Blenheim Park adjoins the site to the south, while low density residential development to the west and north.

3.3.4. RMS Site

The RMS owns four blocks of land situated between Epping Road, Delhi Road and the M2 Motorway. The lands adjoin the Bundara Reserve, which is owned by Council. The RMS owned lands surround one privately owned parcel of land, which, whilst included in the North Ryde Station Precinct Site under the SRD SEPP, is not included in this application.

4. Statutory Planning Context

The lands within the North Ryde Station Precinct fall within the Ryde LGA. The following strategic plans, Commonwealth, State and local planning instruments and development control plans currently apply to the site:

- Commonwealth Environment Protection Biodiversity Conservation Act 1999 (EPBC Act)
- Environmental Planning and Assessment Act 1979 (the Act)
- Environmental Planning and Assessment Regulation 2000 (the Regulation)
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Major Development) 2005
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy 55 – Remediation of Land
- NSW 2021
- Metropolitan Plan for Sydney 2036
- Inner North Subregion Draft Sub-Regional Strategy
- Ryde Local Environmental Plan 2010
- Ryde Planning Scheme Ordinance
- Ryde Development Control Plan 2010

4.1. Commonwealth planning framework

The *Commonwealth Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act) establishes a process for assessing the environmental impact of activities and developments where 'matters of national environmental significance' may be affected. Under the EPBC Act any action which "has, will have, or is likely to have a significant impact on a matter of national environmental significance" is defined as a "controlled action", and requires approval from the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities. The eight matters of national environmental significance protected under the EPBC Act are:

- World Heritage properties.
- National Heritage places.
- Wetlands of international importance (listed under the Ramsar Convention).
- Listed threatened species and ecological communities.
- Migratory species protected under international agreements.
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- Nuclear actions (including uranium mines).

A Preliminary Ecological Assessment for the NRSP has identified that the EPBC listed Endangered Ecological Community (EEC) Sydney Turpentine Ironbark Forest (STIF) occurs within Bundara Reserve, adjoining the RMS owned land within the site.

It is not anticipated that clearing of STIF will be required as part of the SSDA. A detailed Ecological Assessment will be prepared as part of the EIS to assess any potential impacts on items of ecological significance, including Bundara Reserve and a referral under the EPBC Act would be made if deemed required. It should be noted that the northern portion of the M2 site contains native vegetation only but no EECs are located within this area.

4.2. State planning framework

4.2.1. NSW Environmental Planning and Assessment Act 1979

The EP&A Act is the principle environment and planning legislation that applies to development in NSW. The Act establishes the process by which any development is to be considered for approval by the relevant consent authority being a local government authority, a determining authority or the Minister for Planning and Infrastructure.

The NRSP was previously declared by the Minister for Planning and Infrastructure to be both a SSS and a 'Major Development' to which Part 3A of the EP&A Act applied. However, subsequent to the lodgement of a Preliminary Environmental Assessment in respect of both the SSS and Major Development application, Part 3A of the Act was repealed through the commencement of the *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011*.

In accordance with the relevant transitional provisions, the NRSP could no longer proceed as a Major Development under Part 3A of the Act as DGRs had not been issued by DP&I.

The amended Act also established a new approvals pathway for SSD under Part 4, Division 4.1.

Clause 89C specifies development that is SSD and provides the following:

89C (2) A State environmental planning policy may declare any development, or any class or description of development, to be State significant development

The SRD SEPP 2011 declares certain development within the North Ryde Station Precinct as SSD which forms the subject of this Supporting Document and the approvals pathway for the subdivision, public domain and infrastructure works forming part of the NRSP.

4.2.2. NSW Environmental Planning and Assessment Regulation 2000 (the Regulation)

The EP&A Reg establishes the protocols and procedures through which the provisions of the EP&A Act are to be implemented and includes certain requirements for the preparation of development applications and accompanying documentation.

The *Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011* and its associated regulation also effected amendments to the EP&A Reg in relation to the new SSD and State Significant Infrastructure (SSI) assessment processes, including outlining procedures for application lodgement and notification, and assessment timeframes.

Part 2, Schedule 2 of the EP&A Reg outlines the requirements for the preparation of an EIS, including those accompanying an SSDA. The EIS in respect of the North Ryde Station Precinct SSDA will be prepared in accordance with these requirements, other relevant statutes and the DGRs.

4.2.3. State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP was gazetted on 1 October 2011 and declares certain development to be SSD and SSI.

Clause 8 of the SRD SEPP states the following:

Declaration of State significant development: Section 89C

(1) Development is declared to be State significant development for the purposes of the Act if:

- (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act
- (b) the development is specified in Schedule 1 or 2.

Schedules 1 and 2 of the SRD SEPP list general classes of SSD and identified SSD sites which are subject to the associated provisions of Part 4 of the Act. The proposed North Ryde Station Precinct is listed in Schedule 2, Part 12 of the SRD SEPP with development for the purposes of subdivision, public domain and infrastructure works being identified as SSD.

The SSD process requires lodgement of an application under Part 4 of the Act including the preparation of an EIS and the consent authority is the Minister for Planning and Infrastructure.

In accordance with the requirements for an SSDA, this Supporting Document seeks the issuing of DGRs from the Director General of the DP&I which will enable an EIS to be prepared.

The EIS is required to comply with the DGRs and the Regulations.

4.2.4. State Environmental Planning Policy (Major Development) 2005

Clause 8 of MD SEPP provides the mechanism for the Minister for Planning and Infrastructure to declare a site as a SSS. Clause 8 also identifies that a study may be required to be prepared to assess the merits of the site and establishes the role of the Director-General for Planning and Infrastructure.

Following the preparation and assessment of a SSSS, the MD SEPP would be amended to list the site in *Schedule 3 State Significant Sites*. The MD SEPP would then be the applicable planning instrument for the site containing planning controls including zone, height and FSR controls for future development.

The SSSS is part of a separate application process under MD SEPP and is not the subject of this Supporting Document.

4.2.5. State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP provides consistent planning regimes with improved regulatory certainty for provision of infrastructure and services across NSW, along with providing for consultation with relevant public authorities during the assessment process.

The SEPP outlines a need for a Traffic Report, as is outlined in Clause 104 (Traffic-generating development), which must address such issues as access and any parking or traffic impacts of the proposed development.

4.2.6. State Environmental Planning Policy 55 – Remediation of Land

SEPP 55 aims to provide a State-wide planning approach to the remediation of contaminated land, and in particular, promotes the remediation of contaminated land for the purpose of reducing risk of harm to human health or the environment.

Clause 8 states that category 1 remediation works should not be carried out except with the consent of the consent authority. Accordingly, if any contaminated lands are located on the site, consent may be required for the remediation and validation works.

Key findings of contamination studies for the NRSPP site are described in the following table.

Table 2: Key Findings of Contamination Studies

North Ryde Station Precinct	
Site	Preliminary Findings
M2 Site and Station Site North	Remediation and validation has been undertaken for the M2 Site, with confirmation that the land was suitable for residential purposes. The site must be remediated at completion of its use for the M2 upgrade with appropriate validation that the site is suitable for residential purposes.
Station Site South	The Station Site South has been subject to extensive investigations. The findings of the assessment include: - The results of the initial July 2002 assessment showed that the concentrations of chemical contaminants in the soil were low and below criteria considered suitable for a commercial/industrial land use. Underground petroleum storage system and below ground grease trap had not significantly leaked. However, the main building was identified to contain asbestos materials. - Since July 2002 the main buildings at the site have been demolished and the UPSS and grease trap have been removed. A site inspection undertaken for a sampling program in 2009 showed that apart from the former UPSS and grease trap no additional potential contamination sources were identified. - The results of the targeted soil sampling program show that concentrations of chemical contaminants in soil in the vicinity of the former UPSS and the former grease trap are low and below criteria considered suitable for a commercial/industrial land use. Further, sampling in and around the footprint of the building showed no asbestos impacts in the soil following demolition of the building. - Based on the results of the July 2002 assessment and the 2009 targeted soil sampling program, the site is considered to be suitable for an ongoing commercial/industrial land use.

Other sites in the Precinct will be assessed for contaminants and remediation action plans prepared if required. This assessment will be undertaken as part of the EIS accompanying the SSDA.

4.2.7. NSW 2021

NSW 2021 replaces the NSW State Plan as the government's ten year strategic business plan setting priorities for action and guiding resource allocation.

The key objectives of NSW 2021 are to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen the local environment and communities.

NSW 2021 identifies key strategies for building 'liveable cities' and growing patronage on public transport.

The proposal meets the NSW 2021 priorities in the following ways:

- Integrating land use and transport to improve access to the station and overall connectivity within and throughout the Precinct for the benefit of existing and future residents.
- Providing a TOD that encourages station usage and improves connectivity to vacant lands around North Ryde Station.
- Incorporates a high level of pedestrian and bicycle connectivity to nearby employment.
- Creation of liveable and active public domain spaces that integrate with proposed land uses, active transport and amenity.
- Residential development across all sites providing for a diversity of housing types in close proximity to a rail transport node.

NSW 2021 also sets a priority to improve housing affordability and availability by:

- Facilitating the delivery of 25,000 new dwellings in Sydney per year.
- Increasing the available green field 'zoned and trunk serviced' lots to always be above 50,000.
- Increasing uptake of 'empty nester' opportunities.

NSW 2021 acknowledges the impact of housing supply on affordability and recognises that there is a need to ensure competitive tension in the supply of land so there is a continuing flow of new properties to the market.

NSW 2021 aims to increase the supply of land for housing and provide incentives to help make housing in NSW more affordable and housing stock more appropriate for people's needs. A key objective of the NRSP is to provide a diversity of housing types which can contribute to overall affordability in the area.

4.2.8. Sydney Metropolitan Strategy and Inner North Subregion draft Subregional Strategy

The proposal is consistent with the actions of the *Sydney Metropolitan Strategy 2010* (Metro Strategy) and the *Inner North Subregion Draft Sub-Regional Strategy* (Draft INSS). Specifically, the Draft INSS aims to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the region's population over the next 25 years.

Key actions within the Metro Strategy and Draft INSS that would be achieved by the NRSPP are identified in Table 3 below.

Table 3: Summary and Review of Metro Strategy and Draft INSS Actions

Sydney Metropolitan Strategy	
Action	Response
A1 Provide suitable commercial and employment lands in strategic areas	The North Ryde Station Precinct Site is located within the MPC. The site is currently under developed but offers a unique opportunity to provide a mix of appropriate land uses, particularly residential, in close proximity to North Ryde Station. The SSDA works would form the first stage of the NRSPP, to facilitate its future development in accordance with TOD principles.
B1 Provide places and locations for all types of economic activity and employment across the Sydney Region	The development of the North Ryde Station Precinct will introduce a range of land uses that will activate North Ryde Station and surrounding lands. The NRSPP forms a logical extension to existing development in the MPC to the west of the station and the Riverside Business Park to the east of the station. The Precinct is also located within the 'Global Economic Corridor' as identified in the Metro Strategy. Therefore it is considered to be of major significance for employment and economic activity. The works subject of the SSDA would facilitate the broader development of the North Ryde Station Precinct, providing the necessary subdivision pattern and infrastructure to ensure the various benefits of the site are realised in terms of economic activity, accessibility and sustainability.
B4 Concentrate activities near public transport	The North Ryde Station Precinct is centred on North Ryde Station which forms part of the ECRL. The NSW Government invested \$2.3 billion in the development of the ECRL. The NRSPP is aimed to encourage greater use of North Ryde Station and activate lands around the station. The proposed subdivision, public domain and infrastructure works will set the framework for the implementation of the broader NRSPP.
C2 Plan for a housing mix near jobs transport and services	The NRSPP includes a diversity of housing within the Precinct to promote housing affordability and sustainable communities near public transport. The works subject of the SSDA will facilitate the future development of the Precinct for this range of uses.
C5 Improve the quality of new development and urban renewal	The NRSPP TOD development will include appropriate sustainability measures and design excellence to enhance the quality of the ultimate redevelopment. The project will be one of the largest urban renewal projects in NSW and the SSDA forms the first step in this important process.

Inner North Subregion draft Subregional Strategy	
Action	Response
Employment	
A3.2 Integration of employment and housing markets	The NRSPP TOD aims to integrate a variety of appropriate land uses, including residential, retail and commercial development in proximity to North Ryde Station. The works subject of the SSDA will facilitate the ultimate redevelopment of the lands for this purpose.
Employment	
B2 Increase densities in centres whilst improving liveability	The NRSPP will be consistent with TOD principles and promotes higher densities to promote activation of North Ryde Station. The proposal aims to create liveable and active communities with a high degree of amenity including open space and solar access. The SSDA includes a variety of public domain and infrastructure works which will ensure that existing residents and early stages of the NRSPP benefit from the connectivity and amenity which is essential to create a sustainable and liveable community.
B4 Concentrate activities near public transport	The NRSPP will activate land uses in and around North Ryde Station by focusing commercial activities around the Station and increasing densities in proximity to this important transport node. The SSDA includes the pedestrian connections necessary to link the whole North Ryde Station Precinct to the Station, including significant investment in a pedestrian bridge across Delhi Road to maximise accessibility for existing and future residents.
Housing	
C1.2 Apply sustainability criteria for new development	The proposal would meet Transport for NSW's Sustainability Objectives. Sustainability measures would be incorporated at various stages of the development. To facilitate this, a Sustainability Strategy has been prepared for the NRSPP and would be implemented as appropriate as part of the SSDA work. Further detail on the Sustainability Strategy for the project is provided at Section 5.7 of this report.
C1.3 Plan for increased housing capacity targets in existing areas across the metropolitan region. A target of 60–70 percent of new housing will be accommodated in existing urban areas, focused around centres and corridors. This will take advantage of existing services such as shops and public transport and reduce development pressures in other parts of Sydney.	The proposal is infill mixed use development in proximity to public transport with an aim to provide up to approximately 273,000m² of residential land use within the MPC. The additional housing provides compatible uses to the surrounding employment lands. The SSDA will provide the essential infrastructure, services and public domain works to allow for the future development of the Precinct to realise these strategic benefits.

4.3. Local planning framework

4.3.1. Local Environmental Planning Instruments

The North Ryde Station Precinct falls within the City of Ryde LGA. City of Ryde Council has been progressively updating the planning controls applying to the MPC, in line with the *Standard Instrument (Local Environmental Plans) Order 2006* and relevant strategic land use studies. Currently, a number of different local environmental planning instruments apply to the various parcels comprising the North Ryde Station Precinct, summarised below:

- M2 Site - Ryde Planning Scheme Ordinance (RPSO)
- Station Site North – RPSO
- Station Site South – Ryde Local Environmental Plan 2010 (LEP 2010)
- OSL Site – RPSO
- RMS Site – LEP 2010.

The zoning of the subject lands under these instruments is summarised in Table 4.

Table 4: Land Zoning as per RPSO and Ryde LEP 2010

Site	RPSO Zoning	Ryde LEP 2010
M2 Site	1(b) County Open Space 2(a) County Road Proposed 3(f) Business Special (Research & Development) Special Uses 'A' – Council Purposes 6(a) Recreation Existing	Deferred Matter, B7 Business Park
Station Site North	3(f) Business Special (Research & Development) 3(g) Business Special (Employment) 4(d) Industrial Special (University)	Deferred Matter
Station Site South	N/A (RPSO superseded by Ryde LEP 2010)	B3 Commercial Core
Office of Strategic Lands Site (OSL)	6(a) Recreation Existing 2(a) County Road Proposed / 2(b) County Road Widening	Deferred Matter
RMS Site	N/A (RPSO superseded by Ryde LEP 2010)	E2 Environmental Conservation R2 Low Density Residential

The development subject of the SSDA includes:

- Development superlots.
- Spine/main road.
- Open space lots.
- Public domain works including landscaping and street furniture.

- Drainage infrastructure.
- Pedestrian/cycle improvements including provision of a pedestrian bridge.
- Key intersections and access infrastructure.
- Primary road, pedestrian and cyclist entry and exit points.

Whilst the above works are generally permissible in the various land use zones affecting the site, the permissibility of some components of the SSDA works on certain parts of the site subject to the RPSO is not clear. Further interpretation is not necessary in this instance since it can be demonstrated that the works are not 'wholly prohibited'. Under Clause 89E (3) of the EP&A Act, the Minister may grant consent to SSD which is 'partly prohibited' by a local environmental planning instrument. As such, provided that it can be demonstrated that the proposed SSDA works are only 'partly prohibited' as opposed to being 'wholly prohibited' (as is demonstrated in the table below), the broader permissibility issues do not need to be resolved as part of the SSDA, nor resolved prior to determination of the SSDA.

It should be noted that the strategic land use and permissibility issues affecting the broader redevelopment of the North Ryde Station Precinct are more appropriately dealt with via the SSSS pathway, to be resolved through a separate but concurrent assessment and approvals process.

A summary of the permissibility of the works subject of the SSDA is provided in Table 5 below:

Table 5: Summary of Permissibility of SSDA works

Site	Zoning	Permissibility
M2 Site	1(b) County Open Space – Reserved Land 2(a) County Road Proposed – Reserved Land 3(f) Business Special (Research & Development) Special Uses 'A' – Council Purposes 6(a) Recreation Existing B7 – Business Park	1(b) County Open Space – Reserved Land 2(a) County Road Proposed – Reserved Land Clauses 8 and 11 of the PSO deal with 'Reservation of Land' which includes 'County Open Space' and new county roads or widening of existing county roads. These reservations affect the M2 site. Clauses 9 and 12 state in this respect that <i>"a person shall not, on land reserved under this Division, erect a building or carry out or alter a work of a permanent character or make or alter a permanent excavation other than a building or a permanent work or a permanent excavation required for or incidental to the purpose for which the land is so reserved and a person shall not spoil or waste land so as to render it unfit for the purpose for which it is reserved"</i> Except where: <i>"it appears to the responsible authority that the purpose for which land is reserved under this Division cannot be carried into effect within a reasonable time after the appointed day, the owner of the land may, with the consent of the responsible authority, erect a building or carry out or alter a work of a permanent character or make or alter a permanent excavation"</i> The above clauses do not prohibit the SSDA works. Requirements for a 'County Road' are not relevant on the subject site as the M2 Motorway was constructed subsequent to the RPSO zoning

Site	Zoning	Permissibility
		3(f) Business Special (Research & Development) Child care centres, public buildings, roads, telecommunication facilities, utility installations and open space are permissible uses. In addition, any purpose which is primarily intended to service: <i>(a) the daily convenience needs of employees of and visitors to the land and may include shops, restaurants, professional or personal services, recreation facilities and the like; or</i> <i>(b) the needs of businesses and organisations within the vicinity of the land and may include business services, clubs, conference and meeting facilities and the like.</i> is also permissible. Special Uses 'A' – Council Purposes Drainage, open space, roads, telecommunications facilities, utility installations are permissible uses. 6(a) Recreation Existing Community facilities, recreation areas, refreshment rooms, buildings for the purposes of landscaping, gardening or bushfire hazard reduction and telecommunications facilities are permissible within this zone. B7 Business Park Roads, child care centres, business premises, restaurants /cafes are permissible with consent. <u>Therefore the proposed SSDA works are deemed to be 'Partly Prohibited' and 'Partly Permissible' with consent on the M2 site.</u>
Station Site North	3(f) Business Special (Research & Development) 3(g) Business Special (Employment) it	3(f) Business Special (Research & Development) Permissibility as stated above. 3(g) Business Special (Employment) Child care centres, community services, commercial premises, hotels, open space, public buildings, roads, serviced apartments; shops (not exceeding 250 m2), taverns, telecommunication facilities, utility installations are permissible uses. In addition, any purpose which is primarily intended to service: <i>(a) the daily convenience needs of employees of and visitors to the land and may include shops, restaurants, professional or personal services, recreation facilities and the like; or</i> <i>(b) the needs of businesses and organisations within the vicinity of the land and may include business services, clubs, conference and meeting facilities and the like.</i> is also permissible. 4(d) Industrial Special (University) Open space, telecommunications facilities, utility installations are permissible uses. Roads are not a nominated permissible

Site	Zoning	Permissibility
		use and are therefore deemed prohibited unless subject to the savings clause of the PSO (Clause 73) which allows for certain 'public utility undertakings'. <u>Therefore the proposed SSDA works are mostly permissible on the Station Site North.</u>
Station Site South	B3 Commercial Core	Community facilities, Recreation areas and roads are permissible uses. <u>The proposed SSDA works are therefore permissible on the Station Site South.</u>
Office of Strategic Lands Site (OSL)	6(a) Recreation Existing 2(a) County Road Proposed / 2(b) County Road Widening	1(b) County Open Space – Reserved Land 2(a) County Road Proposed – Reserved Land Permissibility as stated above. 6(a) Recreation Existing <u>Therefore the proposed SSDA works are deemed to be 'Partly Prohibited' on the OSL site.</u>
RMS Site	E2 Environmental Conservation R2 Low Density Residential	Works on the RMS site under the SSDA are limited to subdivision which is permissible in both the E2 and R2 zones. <u>Therefore the proposed SSDA works are deemed to be permissible on the RMS site.</u>

5. The Proposal

5.1. North Ryde Station Precinct Project

5.1.1. SSSS and Indicative Layout Plan

The overall aim of the NRSP is to implement a planning framework for the Precinct which will guide future development in accordance with Transport for NSW's vision and the principles of TOD. This will mean establishing land use zones, urban structure and built form controls for the Precinct.

To support the proposed future land use, urban structure and built form, amendments to the existing land use zoning are required through a SSSS and associated amendment to Schedule 3 of MD SEPP. This will also require the submission of an ILP.

The SSSS and draft ILP are the subject of a separate and concurrent process for which SSSS Requirements have been issued. However, details of the proposed land use zones and draft ILP are described below to provide context for the subdivision, public domain and infrastructure works subject of this application.

Key elements of the ILP include:

- Residential development across all sites providing for a diversity of housing types in close proximity to North Ryde Station.
- New mixed use zones with retail and commercial/employment on the M2 site and convenience retail and complementary commercial development in proximity to North Ryde Station.
- Development of a series of public open space areas, providing for both active and passive recreation on the M2 Site and the North Ryde Station Sites with buffer zones and green links throughout the Precinct.
- Community facilities, including a community centre with associated active recreation space on the M2 site.
- Provision of a spine road through the M2 Site from Epping Road to Wicks Road to provide the main vehicular connection through the M2 site.
- Development of a vehicular access point to the M2 Site from Epping Road and one on Wicks Road with connections onto Waterloo Road.
- A footpath and pedestrian bridge sited at the southern end of the M2 site connecting the site with the Station.
- Provision for Road 38 along the eastern boundary of the North Ryde Station Site.
- Significant pedestrian and cycleway upgrades and new links to improve connectivity to North Ryde Station and the MPC.
- Best practice sustainability measures including the use of native plants grown with locally sourced seed, Water Sensitive Urban Design (WSUD) measures and rehabilitation of the riparian zones on the northern portion of the M2 Site to create a natural open space area with drainage area.
- Best practice Urban Design to create usable spaces, enhanced amenity and activation of the Precinct in accordance with TOD principles.

The draft ILP developed for Transport for NSW by Cox Richardson Architects and Oculus Landscape (Cox Richardson/Oculus) is provided in **Figure 6**.

The draft ILP provides for an overall gross floor area (GFA) of 379,380 broken down into the following land uses.

Table 6: Indicative Layout Land Uses

	M2 Site	North Ryde Station Site		OSL Site	RTA Site	Total
	M2 Site	North Ryde Station Site (North)	North Ryde Station Site (South)	OSL Land	RTA Land	North Ryde Station Precinct
Site Areas (ha)	9.15	1.3	1.76	1.48	0.29	13.99
Land Use	Proposed Gross Floor Area (GFA) in square metres					
Commercial	26,400	20,000	0	0	0	46,400
Retail	4,500	1,500	0	0	0	6,000
Residential	218,800	27,600	49,060	18,310	10,710	324,480
Community	2,500	0	0	0	0	2,500
Total	252,200	49,100	49,060	18,310	10,710	379,380

Through the SSS process, approval for the following ILP elements will be sought:

- Building Envelopes.
- Quantum and location of proposed land uses.
- Extent of public domain including parks, streets and public squares etc.
- Extent of proposed open space lands.
- Indicative size and location of drainage infrastructure including wetlands and detention basin.
- Primary road, pedestrian and cyclist entry and exit points.
- New pedestrian and cyclist infrastructure providing improved connectivity to North Ryde Station including traffic signalling and road bridges.
- Provision of appropriate community facilities, which may include childcare centre, community hall, playground, library. The type and location of community facilities are yet to be confirmed.
- Staging plan addressing the timing of future release and development of land.

Figure 6: Draft Indicative Layout Plan



5.2. State Significant Development Application

To facilitate the future development of the North Ryde Station Precinct as described above, subdivision, public domain and infrastructure works are required to establish land parcels, circulation, connectivity, serviceability and amenity. Approval for these works will be sought via a SSDA under the SRD SEPP.

The scope of the SSDA would include the following:

- Development superlots.
- Open space lots / public domain works.
- Primary roads and key intersections.
- Pedestrian and cycle access infrastructure, including a pedestrian and cycle bridge over Delhi Rd.
- Drainage infrastructure.
- Utility infrastructure.

The above works are anticipated to take 12 months to complete and will commence in January 2013, subject to assessment timeframes and approvals.

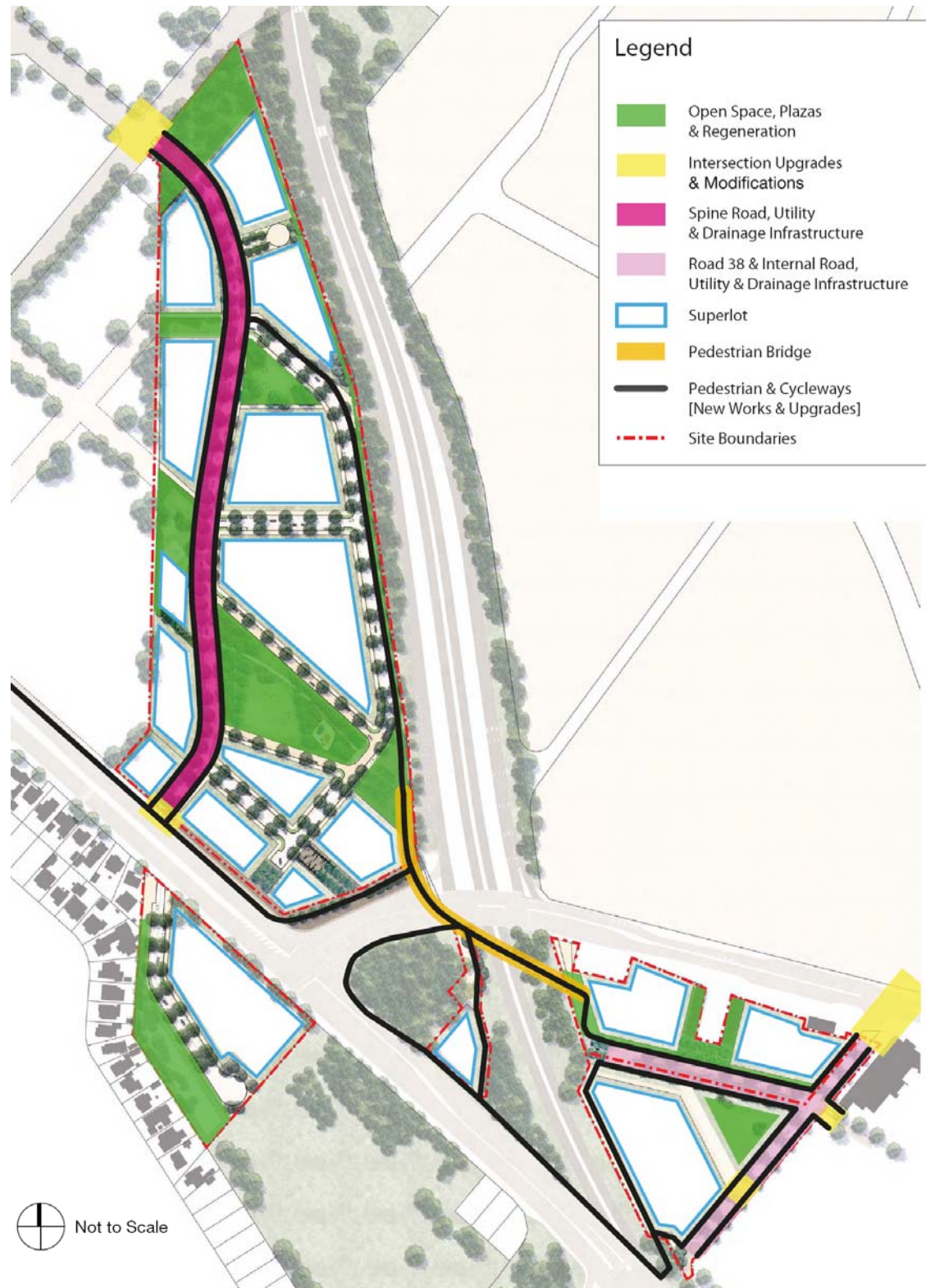
The proposed works are described further in **Table 7** and illustrated in **Figure 7**.

Table 7: State Significant Development Application

Proposed SSDA Works	M2 Site	Station Site North and Station Site South	RMS site	OSL site
Open Space Provision	Central open space including informal active recreational space and playground. Northern Bush Park consisting of a regenerated riparian zone and WSUDs infrastructure. A series of smaller open space areas to provide passive recreation and a series of public domain experiences. Bridge landing plaza will provide universal access to the pedestrian bridge with buffer planting located along the edge of the M2 corridor. Spine road will incorporate street trees in the parking lane with appropriate stormwater treatments (WSUDs). Wide footpaths/cycleways will facilitate pedestrian movements.	Station Plazas (Station Site North) will provide for pedestrian circulation and activation of the Precinct. Residential Park (Station Site South) will be connected to the Station plaza and the adjoining business park.		
Development Superlots	Superlot subdivision of the M2 site will allow for: - Provision of permanent open space areas and temporary open space areas where future connecting roads are proposed. - Multiple development parcels, including a site for a community centre along the eastern boundary and opposite the central open space.	Superlot subdivision of the Station Site North will allow for: - Provision of open space/plaza. - Multiple development parcels. Superlot subdivision of the Station Site South will allow for: - One development parcel.	Superlot subdivision of the OSL site will allow for: One development parcel.	Superlot subdivision of the OSL site will allow for: - Provision of open space. - One development parcel.

Pedestrian & Cycle Connections	The following pedestrian connections are proposed: • A pedestrian/cycle bridge across Delhi Road to the Station Site South, including any associated footpaths/cycle connections. • Pedestrian and cycle connections through the Precinct from Riverside Business Park and the North Ryde Station through to Wicks Rd. • Improvements to pedestrian and cycle infrastructure external to the Precinct. • Pedestrian and cycle infrastructure on both sides of primary roads.
Roads and Intersections	• Extension of Waterloo Road through the M2 site to Epping Road to create a Spine Road. • Signalised intersection at Wicks Road/Waterloo Road (north of M2 site). • A left-in (and potential left-out) for the M2 Site on Epping Road. • Provision for Road 38 (up to 20.4m wide) along the eastern boundary of the Station site, consistent with Council's <i>Macquarie Park Corridor Traffic Study</i> and Development Control Plan (DCP). • Connection from Road 38 into commercial area to the east (Riverside Business Park). • Internal road on the North Ryde Station site, including a turning circle provision.
Public Domain	• Landscaping and street planting on the M2 and Station Sites. • Sustainable street lighting for the Precinct.
Civil Works	• Earthworks to facilitate SSDA works. • Primary roads. • Utility Infrastructure.
Drainage and WSUD	• Rain gardens and bioremediation swales to be incorporated into primary road infrastructure. • Whole of site drainage plan, incorporating WSUDs. • Rehabilitation of riparian zone in northern section of M2 site. • Protection of any exposed soils via seeding / planting.

Figure 7: Proposed Public Domain & Infrastructure Works included in the SSDA



5.3. Sustainable Development and Climate Change

Transport for NSW aims to introduce a number of measures to ensure that the development achieves high quality sustainable outcomes. TCA drafted a sustainability strategy for the NRSP which includes high level sustainability targets and suggested measures to meet these targets.

The draft sustainability strategy addresses six key areas including:

- Traffic and Transport
- Energy and Greenhouse
- Water
- Ecology and Contamination
- Materials and Waste
- Community Benefit

The sustainability measures that will be investigated in the preparation of the SSSS and SSDA include but will not be limited to:

- Achieving high ratings for commercial, residential and community buildings e.g. Green Star, BASIX, NatHERS.
- Dedicated cycle access and cycle paths.
- Provision of adequate numbers of bicycle storage areas and end of trip facilities.
- Adequate pedestrian paths and through links.
- Provision of natural stormwater filtration systems (e.g. rain gardens).
- Adequate solar access to communal open space.
- Integrated Waste Management Strategy.
- Protection and rehabilitation of riparian zone.
- Integrated carbon neutral/low embodied Carbon Development Strategy.
- Compliance with relevant Transport NSW Sustainability Targets & adaptation of any relevant component/s of Transport NSW's Sustainable Design Guidelines V2.0 as deemed appropriate.

A number of these measures would also contribute to minimising the overall carbon footprint impact of the development. Potential measures to reduce emissions that may contribute to climate change will be explored as part of the SSDA as appropriate.

Over the coming months, further investigations will be undertaken to quantify sustainability targets for water, energy and greenhouse, materials and waste. Proposed measures and targets will be incorporated in the SSDA and SSS Application and implemented via the associated planning controls.

6. Consultation

TCA and Transport for NSW have consulted with key stakeholders and authorities in order to progress the proposal, including:

- City of Ryde Council
- Department of Planning and Infrastructure
- Office of Strategic Lands
- Roads and Maritime Services
- Railcorp
- Housing NSW
- Department of Education and Communities
- Private adjoining landowners

Further consultation will be undertaken by Transport for NSW during the development of the ILP, SSSS and SSDA/EIS.

6.1. Community Consultation

6.1.1. Overview of the Community Liaison Plan

TCA prepared a Community Liaison Plan to guide community and stakeholder consultation across the project. The CLP reflects the engagement principles and guidelines outlined in the City of Ryde Engagement Plan and Framework. TCA consulted with Council and DP&I during the preparation of the CLP.

6.1.2. Consultation activities undertaken to date

To date, TCA and Transport for NSW have implemented the following community and stakeholder consultation activities:

- Development of the CLP, to guide consultation activities.
- Published advertisements regarding the proposal and establishment of a community liaison group (CLG), in the local newspaper (The Northern District Times), on 26 October and 2 November 2011.
- Distribution of letter to approximately 90 local residents and businesses on Tuesday 1 November 2011.
- Distribution of a community newsletter, distributed to approximately 2,000 local residents and businesses on Monday 31 October 2011.
- A 'door knock' of residents in Morshead Street, and properties on the parts of Epping Road, Ryrie Road and Truscott Street that interface with Morshead Street, on Thursday 3 November 2011.
- Development of an application package and draft participation protocol for the CLG.
- The first meeting of the CLG was held Monday 5 December 2011. The second CLG is scheduled for Monday 19 December 2011.
- Development of a project website and toll free contact number.

6.1.3. Feedback received to date

Feedback received to date from the above activities is summarised in Table 8.

Table 8: Summary of Community Feedback to Date

Aspect	Detail
General interest in the proposal	• A number of residents requested further information, particularly around what is proposed and timing. • Several residents asked to be updated as the project progresses . • A number of enquiries were received about what is proposed for the Tennis World site (OSL Site). • 19 residents and stakeholders expressed interest in joining the CLG.
Land uses	• Acknowledgement by some that the land surrounding North Ryde station is appropriate for development. • Several views on suitable land uses for the Precinct.
Consultation process	• Positive feedback about the inclusive nature of the consultation process. • Queries regarding the EOI and selection process for the CLG.
Character	• Comment that future development of the Precinct should complement the character of the local area. • Acknowledgement of the importance of place making.
Infrastructure and early works	• Acknowledgement of high demand for community facilities in the area, particularly community halls and open space.

Further consultation with a variety of stakeholders including the community will be ongoing throughout the project.

7. Preliminary Environmental Impact Assessment

7.1. Traffic and Transport

The proposed development will involve the establishment of a number of new intersections, station access improvements and new streets. Arup was engaged to undertake a Transport Assessment to accompany the original PEA for the North Ryde Station Precinct. Parsons Brinckerhoff (PB) has subsequently been engaged to review Arup's preliminary findings in relation to the NRSP and to prepare the technical studies necessary to support the SSDA and SSS application.

The works subject of the SSDA are limited to road and drainage infrastructure, the pedestrian bridge and public domain works. The works would result in permanent changes to the road network and access arrangements, including a number of access improvements to North Ryde Station as well as the surrounding area. The proposed intersections and access points are generally consistent with Council's Structure Plan for the MPC identified in the Macquarie Park Development Control Plan (DCP). Access improvements are outlined in detail in Section 4.5 of this report.

The operational, construction, cumulative and offsite impacts of the proposed works in terms of traffic and access would be detailed in the EIS accompanying the SSDA. Works which are currently being undertaken by Transport for NSW and PB to progress the ILP and inform the detailed impact assessment for the SSDA include:

- A review of available traffic, transport and access studies and strategic documents relevant to the site and MPC.
- Collation of traffic and transport data required to inform the impact assessment.
- Analysis of the existing traffic volumes, capacity, intersection performance and road network performance.
- Analysis of existing public transport services, current travel patterns, access modes share, patronage, parking facilities and pedestrian and cycle facilities.
- Liaison with government agencies such as RMS, Council, STA and Railcorp to discuss traffic, transport and access issues relevant to the site and the preferred assessment methodologies.
- Preparation of an access management plan for the Precinct to determine the fundamental access points, road locations, road hierarchy and pedestrian and cycle access arrangements.
- Establishment of a base traffic and patronage model and production of preliminary modelling results to inform the ILP.

Further detailed traffic and patronage modelling is required to inform the ILP and impact assessment for the SSDA. At the request of Council and RMS, the Macquarie Park Corridor Paramics Model (MPCPM) was purchased from Council and calibrated by PB. The modelling results and other analysis being undertaken will facilitate a thorough assessment and accurate understanding of the impacts of the proposal on accessibility, the road network (intersections and capacity), vehicle movements, public transport/patronage (trains and buses), pedestrian and cycle movements, car parking and vehicle manoeuvrability. Measures to address any potential impacts will also be investigated and proposed.

Construction impacts would be largely limited to construction traffic movements which would be relatively short-term and temporary. It is also anticipated that any negative impacts would be managed through a Construction Traffic Management Plan.

New and upgraded access infrastructure and intersection and street arrangements to form part of the SSDA are described below.

7.1.1. Station Access Improvements

The primary station access improvements seek to improve connectivity across busy nearby roads including Delhi Road, Epping Road and the M2. Currently these roads form a barrier to effective access to the North Ryde Station from residential areas south and west of Epping Road and the Transport for NSW M2 Site.

A key access improvement for the Precinct will be the provision of a pedestrian/cyclist bridge over Delhi Road from the M2 Site to the Station Site North. The bridge will be approximately three meters wide to allow for both pedestrians and cyclists. The design will be universally accessible and allow for direct access from the plaza areas.

Further detailed design, engineering and traffic inputs are required to determine the final form of the bridge. The SSDA will provide further detail of the bridge and an assessment of any impacts, both positive and negative.

The Station is currently well serviced by buses due to its strategic location within the Western Region of the State Transit Authority (STA) bus network. A large number of bus routes converge near the station, providing convenient access to northern Sydney, northern beaches, western Sydney and The Hills District.

Opportunities for additional bus-stops and associated pedestrian connections will be investigated further, in consultation with STA for the purposes of the SSDA and SSS application.

7.1.2. Development Access

Key intersections and access points are outlined in the draft ILP for the lands (as shown in **Figure 8**) and have been designed to provide adequate vehicular, pedestrian and cyclist access to each of the respective development sites. Generally, these have been located to minimise the impact on the surrounding road network. Further modelling and assessment is required to determine the suitability of the proposed access arrangements.

The SSDA will include the provision of key primary access streets within the development. A preliminary review of the proposed structure of the road network has been undertaken by PB and is supported in terms of the general location, widths and orientation of streets. Further detailed engineering and traffic impact assessment will need to be undertaken to determine specific road widths, road geometry and on-street parking as part of the EIS. The new streets and access arrangements will include:

M2 Site

- A main spine road providing access through the M2 site.
- New signalised intersection in the northern end of the M2 site at Wicks Road/Waterloo Road.
- Left-in (and potential left-out) from Epping Road.
- Pedestrian access from site to Epping Road and Delhi Road intersection.

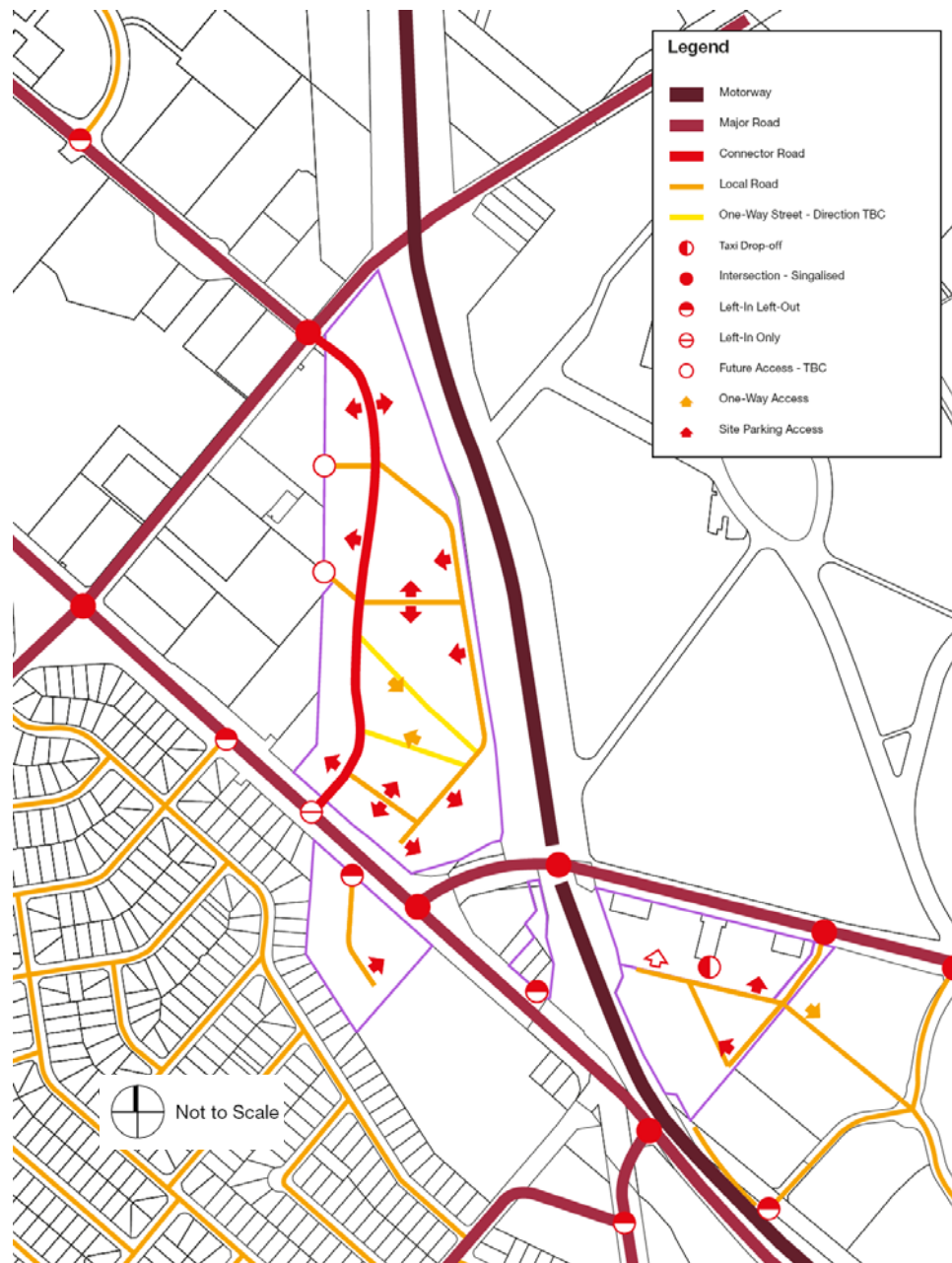
Station Sites

- Provision for Road 38 from Delhi Road to the Station Site South.
- A new internal access road between the Station Site North and Station Site South (Transport for NSW and GIFML owned land).
- Potential connection from road 38 through to commercial Precinct in the east (Riverside Business Park).

OSL Site and RMS Site

- Left-in/Left-Out access from Epping Road.

Figure 8: Proposed Vehicular Access Improvements, Key Intersections and New Streets



7.2. Traffic Generation from Proposed Development

The original traffic assessment undertaken by Arup identifies that the overall development as proposed would be expected to generate approximately 1,500 vehicular trips in a weekday peak hour period. This preliminary assessment would be further updated based on the current draft ILP and the potential traffic and transport impacts assessed as part of the SSDA. In addition, the Proponent will investigate the appropriate rate of car parking for the proposed development in light of its location in close proximity to North Ryde Station and in consideration of TOD principles as part of the SSSS and SSDA.

Traffic generated as a result of the public domain and infrastructure works the subject of the SSDA would be limited to construction traffic only. A construction traffic impact assessment will be prepared as part of the EIS for the SSDA in order to address any potential impacts of construction vehicular movements on nearby streets and intersections. Construction traffic generated during the proposed public domain and infrastructure works would be managed through a Construction Traffic Management Plan.

7.3. Biodiversity

7.3.1. Flora and Fauna

Transport for NSW has engaged EcoLogical Australia Pty Ltd (EcoLogical) to undertake further assessment of the potential constraints, opportunities and impacts of the NRSP on flora and fauna on the North Ryde Station Precinct. The latest preliminary findings (2011) are summarised in the table below.

Table 9: Summary of Preliminary Ecological Findings

Site	Flora and Fauna Overview	Conservation Value
OSL Site	The vegetation along the western boundary is Blue Gum High Forest. The Blue Gum High Forest is listed under the <i>NSW Threatened Species Conservation Act 1995</i> and the EPBC Act as a Critically Endangered Ecological Community.	The trees along the western boundary of the site will be retained. The remainder of the site has low ecological value.
M2 Site	The M2 site is largely cleared with the exception of some vegetation in the northern portion of the site. Most of this vegetation is dominated by weeds and exotic species, such that the community is not recognisable as a native vegetation community. There is a patch of Sandstone Ridgetop Woodland to the east within the northern portion which is in relatively good condition. Sandstone Ridgetop Woodland is common in the Sydney region and is not an Endangered Ecological Community. Whilst previous surveys have recorded the Red Crowned Toadlet on land adjoining the M2 site to the west, the most recent fauna surveys found no evidence of its presence. The EcoLogical report considers it unlikely that this area provides long-term habitat for the Red Crowned Toadlet or other species of endangered amphibian.	The Sandstone Ridgetop Woodland has moderate ecological value. The remainder of the site has low ecological value.

Site	Flora and Fauna Overview	Conservation Value
RMS Site	Importantly, Bundara Reserve is not part of the RMS site and is not included in the SSDA. The majority of vegetation on the RMS site comprises weeds and exotics. A small portion of the site contains Sydney Turpentine Ironbark Forest (STIF) which is listed under both the NSW TSC Act and the Commonwealth EPBC Act as an EEC.	The STIF will be retained. The remainder of the site has low ecological value.
Station Site - North	The site contains some native vegetation in the form of planted trees, shrubs and exotic dominated species. This vegetation does not contain habitat features such as hollows etc.	The site has low ecological value.
Station Site – South	The site contains regenerating Casuarina species through hardstand. Some native species are present but it is dominated by exotic species.	The site has low ecological value.

The proposed SSDA works would require the clearing of some vegetation on the site. Transport for NSW would undertake further ecological investigations as part of the SSDA to assess potential impacts on flora and fauna with mitigation and management measures recommended as appropriate. It should also be noted that the North Ryde Precinct land is not mapped as bushfire prone; however more detailed investigation would be carried out as part of the EIS for the SSDA and mitigation and management measures implemented as required.

7.3.2. Porters Creek

Porters Creek is located in the northern vegetated area of the M2 Site, adjacent to Wicks Road. An initial investigation was undertaken by Cardno (NSW/ACT) Pty Ltd (Cardno) in 2009 in order to determine whether the creek was a nominated watercourse. Cardno on behalf of TCA reviewed the NSW Office of Water (NOW) database, “*NSW Stream Order Dataset (2009)*” over the M2 Site area. It was found that the database does not nominate this section of Porters Creek as a watercourse.

It is the intent of Transport for NSW to retain and enhance the existing vegetation around the creek as part of the project and further investigations into the stream classification and appropriate management of Porters Creek in the NRSP would be undertaken as part of the SSDA.

7.4. Flooding, Stormwater Drainage and Detention

TCA engaged Cardno in 2009 to undertake an analysis of constraints related to flooding, stormwater drainage and detention at each of the sites within the North Ryde Station Precinct.

The findings of the assessment included:

Flooding

- The main areas of flood affectation are within the vicinity of Porters Creek, to the North of the M2 site adjacent to Wicks Road.
- A small amount of flood affected land has been identified at the southern end of the Station Site South. Flood affectation would not pose a significant constraint given

the significant reduced level drop to the M2 motorway directly south of the identified flooding.

Stormwater Drainage

- A whole of site stormwater drainage strategy will be designed for the site, incorporating WSUD principles for the purposes of the SSDA. Further investigations will need to be undertaken to determine the capacity of Council's existing drainage infrastructure and the required volume of on-site detention facilities.
- The westernmost parcels within the site may require extension of drainage lines to the site.

Stormwater Detention

- Below ground detention storage systems would be able to be located below roads, open space areas, car parking areas or within building basements. These would logically be combined with rainwater tanks. Exact locations would be subject to the detailed design process.

Further investigation into the hydrological context of the site and the potential impacts of the NRSP on the surrounding hydrological regime would be undertaken as part of the SSDA. Hydraulic modelling would be undertaken to inform the detailed design of stormwater management measures. Investigations would include the use of the DRAINS hydraulic model to calculate the approximate detention storage volume required and areas per site based upon:

- Council's detention storage requirements.
- Site areas and slope of land.
- Approximate impervious areas post development.

7.5. Water Quality and Water Sensitive Urban Design

Transport for NSW proposes to include appropriate water quality and Water Sensitive Urban Design (WSUD) measures as per best practice standards and Council requirements.

The WSUD measures would involve design in a manner that is sensitive to the water cycle, and includes initiatives such as:

- Reduction in the use of potable water.
- The reliance on less pit and pipe network through the encouragement of infiltration to groundwater.
- Capturing of stormwater for non-potable uses.
- Management of runoff quantities and frequencies from the site in a manner which replicates pre-development conditions.
- Management of the quality of runoff, in order to minimise detrimental impact on downstream waterways.

WSUD can be achieved by a variety of methods, and the suitable selection of a suite of treatments is generally dependent upon the particular constraints and proposed land-uses of each individual site. Further details of WSUD measures adopted as part of the NRSP and more specifically, the SSDA works would be provided in the SSDA and accompanying EIS.

7.6. Provision of Servicing Infrastructure

Cardno was also engaged by TCA in 2009 to undertake an assessment of the existing utilities and servicing infrastructure. The assessment was prepared to determine whether the existing infrastructure had sufficient capacity to service the development of the North Ryde Station Precinct. A discussion on each type of infrastructure is provided below.

Water

Assessment of the available potable water capacity to the North Ryde Station Precinct found that there is sufficient capacity in the existing network surrounding the site. Specifically, the Civil Engineering Investigation report prepared by Cardno states that:

“The site falls within Sydney Water’s identified “Major Infill Sites” in its Growth Servicing Plan. The Plan states of the corridor that “The development can be serviced by connection to existing infrastructure. Sydney Water will need to deliver works to its trunk system to cater for the cumulative effect of development in the medium term.””

The assessment also concluded that based on the size of the development, a watermain extension of a larger size would be required to provide sufficient pressures to the site. A possible scenario, which would provide ample capacity, is the provision of a 300mm diameter watermain extension from an existing 750mm diameter main in Cox’s Road.

Electricity

An assessment undertaken by Norman Disney Young (NDY) concluded that the total load for all Precincts equates to 23.75MVA. Maximum demand for the development is likely to be in the order of 17MVA assuming a diversity factor of 0.8. NDY has estimated that this load would require a minimum of five new 11kV feeders from a zone substation (ZS) plus sixteen by 1MVA kiosks or indoor type substations.

In particular, Energy Australia (now AusGrid) advised that:

“The closest Zone Substation (ZS) available for connection is the Macquarie Park ZS, located at the corner of Waterloo Road and Eden Park Drive, approximately 300m away from the site. This ZS is rated at 114 MVA, with current usage at 100MVA. (Connect believes that the 100MVA usage figure probably allows for some development within the proposed development sites). Given that there is a new ZS proposed at Top Ryde and at Epping, that the Macquarie Park ZS is able to be upgraded and that the proposed development is likely to be staged, Energy Australia advised that connection to the Macquarie Park ZS would most likely be feasible.”

Further, AusGrid recently informed Transport for NSW on November 2011, that the proposed Macquarie University ZS scheduled to be commissioned in 2015 would free sufficient load from the Macquarie Park ZS for use by the project. The staging of the NRSP would permit the take up of available power as these projects are realised. Further details of the infrastructure requirements will be included in the SSDA/EIS.

Gas

In investigating servicing of natural gas to the Precinct Cardno contacted Jemena for advice on existing location of gas mains, connections and capacity. The assessment found that:

“... the existing High Pressure Secondary (1050kPa) network adjacent to this site currently has capacity to supply the proposed development. (Jemena) also advised that pressure reduction station(s) from this gas main would be required to reduce the

pressure to acceptable residential/light commercial use prior to reticulation to individual sites.”

Sewer

The assessment undertaken by Cardno identified that there is a significant amount of sewer infrastructure surrounding and within the site. The investigation also found connection sewer mains close to or within most of the site areas. In addition, even though detailed modelling was not available, Sydney Water concluded that the existing mains will have capacity to service the majority of the site without any significant upgrade based on the following:

- the sizes of the existing mains
- that much of the site has been developed and serviced in the past
- an approximation of the sewer flow rates generated from the proposed development.

Further investigations will be undertaken as part of the SSSS and SSDA.

Telecommunications

Investigations in 2009 into availability of telecommunications servicing the site found that:

- Telstra will no longer supply copper telephone cable to green field development sites.
- From 1st June 2010 Telstra will offer high speed fibre optic cabling to all new dwellings and the provision of high speed broadband by Telstra would be developer funded.
- Discussions with the NBN Co. in November 2011 concluded that the development would be serviced by the proposed Federal Government roll out of the National Broadband Network (NBN), which is aimed at providing fibre optic cables to 90% of all Australian dwellings over the next eight years.
- The pit and pipe network within new developments is to be funded by the developer, while the fibre within the site and lead-in (backhaul) works would be provided by the NBN.

The assessment concluded that:

“Given the location of the site within an existing highly developed area, it is likely that telecommunications services would be readily available, with the only probable question being in relation to the nature of the service provided and the funding arrangements.”

7.7. Contamination

M2 Site and Station Site North

Remediation and validation has been undertaken for the M2 Site, with confirmation that the land was suitable for residential purposes. While the M2 Site is currently being used as a construction site for the M2 upgrade, the terms of the construction lease are such that the site must be remediated at completion of its use as a construction site, with appropriate validation that the site is suitable for residential purposes.

The Station Site North has been subject to preliminary assessment however detailed assessment would be required as part of the SSSS and SSDA in order to confirm if there are any contamination areas of concern.

Other Government sites

Other sites in the Precinct will need to be assessed for contaminants and remediation action plans prepared if required. This assessment will be undertaken as part of the EIS accompanying the SSDA.

Station Site South

The Station Site South, owned by GIFML has been subject to extensive investigations. The findings of the assessment include:

- The results of the initial July 2002 assessment showed that the concentrations of chemical contaminants in the soil were low and below criteria considered suitable for a commercial/industrial land use. Further, the results showed that an underground petroleum storage system (UPSS) and below ground grease trap that were in use at the time had not significantly leaked. However, the main building on the site was identified to contain asbestos materials.
- Since July 2002 the main buildings at the site have been demolished and the UPSS and grease trap have been removed. A site inspection undertaken for a sampling program in 2009 showed that apart from the former UPSS and grease trap no additional potential contamination sources were identified at the site.
- The results of the targeted soil sampling program show that concentrations of chemical contaminants in soil in the vicinity of the former UPSS and the former grease trap are low and below criteria considered suitable for a commercial/industrial land use. Further, sampling in and around the footprint of the building showed no asbestos impacts in the soil following demolition of the building.
- Based on the results of the July 2002 assessment and the 2009 targeted soil sampling program, the site is considered to be suitable for an ongoing commercial/industrial land use.

Further assessment is proposed to be undertaken to validate the site for the proposed land use purposes.

7.8. Epping to Chatswood Rail Link

The ECRL corridor traverses both the M2 and North Ryde Station Site. Development in the vicinity of the ECRL is guided by the *ECRL Underground Infrastructure Protection Guidelines* which provide the engineering and statutory requirements.

In general the placement of buildings in the ILP has been made to avoid the ECRL corridor. While no detailed engineering assessment has been undertaken, the extent of basements has avoided potential tunnel impacts as identified in the corridor protection guidelines. Further engineering testing and consultation with Railcorp will be undertaken as part of the EIS accompanying the SSDA.

7.9. Noise

Three major heavily trafficked roads, including the M2, Delhi Road and Epping Road impact upon the North Ryde Station Precinct. In addition, there is potential for noise impacts to the Station Site North and M2 Site as a result of regenerated noise from the ECRL rail corridor. Transport for NSW therefore proposes to undertake relevant acoustic assessments in line with the *Department of Planning Guidelines for Development Near Busy Roads and Railway Lines* as part of the SSSS to determine the background noise levels, vibration impacts and

potential mitigation measures required to achieve standard OEH noise and vibration criteria for the proposed land uses.

7.10. Heritage

The subject sites within the Precinct have been significantly disturbed. During construction works for the ECRL project, a non-indigenous heritage item (well/cistern) was identified on the M2 Site and an initial assessment was undertaken. Further assessment by Artefact Heritage in 2011 found that a Section 140 permit is not required by the Heritage Office under the provisions of the *Heritage Act 1977* as the project constitutes State Significant Development.

Preliminary heritage and archaeological assessments have been undertaken across the site with the key findings being:

- In relation to non-Indigenous archaeology the preliminary study found that there are no listed archaeological sites or conservation areas within the site. Overall the site has a low archaeological potential.
- No Aboriginal sites, Aboriginal Places or areas of Aboriginal archaeological potential have been previously listed within the site. The most likely sections of the study area for Aboriginal sites or areas of archaeological potential to remain are in the Bundara Reserve and the northern portion of the M2 site. The cultural values of the study area cannot be commented on until the Aboriginal stakeholder groups are invited to contribute information on the cultural significance of the study area. This consultation process has commenced.

Transport for NSW proposes to undertake relevant indigenous and European heritage investigations as part of the SSDA (including consideration of the well/cistern previously identified) to confirm whether there are any known or potential items of significance within the Precinct and if so, to address the likely impacts of the proposal on those items.

7.11. Economic Assessment

TCA has undertaken preliminary investigations into the potential economic impacts resulting from the NRSPP including creation of on-site jobs and retail expenditure. Potential benefits include:

- The NRSPP is likely to generate an estimated 5,440 construction jobs over the life of the development.
- It is estimated that 2,144 on-site jobs would be created once the NRSPP is complete.
- The on-site retail expenditure from the estimated 2,144 workers is calculated to be approximately \$2.5 million.
- This retail expenditure is additional to the potential on-site retail expenditure expected to be generated by the on-site resident population, which totals approximately \$19 million.

Further details of potential economic impacts and benefits of the works subject of the SSDA would be provided in the EIS.

7.12. Social Assessment

The NRSPP is considered to provide significant regional and local social benefits, including:

- Creating liveable communities.
- Providing diverse housing.
- Providing open space and recreational uses.
- Providing appropriate mixed-use development close to the station.
- Providing pedestrian and bicycle connectivity to surrounding area and North Ryde Station.

In relation to the works subject of the SSDA, potential social impacts would be largely related to the temporary impacts of construction works at the site, along with resultant benefits from the integration of land use and transport including improved public access to the station and improved amenity through the public domain. These impacts and benefits would be examined as part of the EIS for the SSDA and mitigation and management measures recommended as appropriate.

8. Conclusion

This Supporting Document provides preliminary environmental and planning considerations to guide the preparation of DGRs by DP&I for the preparation of an SSDA and associated EIS in respect of the NRSPP.

The North Ryde Station Precinct comprises some 13.99 hectares in close proximity to North Ryde Station, predominately in government ownership. This provides a unique opportunity to develop the site with a whole of government approach, consistent with NSW Government strategies, plans and policies.

Transport for NSW, as the Proponent, has undertaken a masterplanning process in relation to the Precinct to ensure these lands are planned in an holistic manner to achieve improved land use and transport integration, more efficient pedestrian access to the station and to guide the future development of the site in line with the principles of TOD.

The benefits of the NRSPP are as follows:

- Provision of a mixed use development within close proximity of the North Ryde Station, providing a range of uses including residential, employment, retail and community facilities. This type of development will provide North Ryde with a 'sense of place', through the creation of a centre with facilities for both new and existing residents of North Ryde.
- Introduction of residential land uses within MPC to encourage more sustainable public transport usage, by creating North Ryde as both an origin and destination station, and a population which can utilise the station, rail line and facilities both day and night.
- Through the whole of Precinct approach, provision of a development outcome which best integrates North Ryde Station with surrounding areas, through appropriate land use, development form and mix, and substantial connectivity improvements.
- Provision of liveable and active public domain spaces for the community that integrate with proposed land uses and North Ryde Station.
- Recognition of the value of environmental attributes within the Precinct with the proposed rehabilitation of the riparian corridor on the M2 Site and the integration of this area with other proposed high quality open spaces within walking distance for residents and on-site employees.

In accordance with Schedule 2, Part 12 of the SRD SEPP, it is requested that the Minister issue the DGRs for the preparation of an EIS for the proposed subdivision, public domain and infrastructure works for the NRSPP as described in this Supporting Document.

Stakeholder consultation and detailed investigations are ongoing in support of both the SSDA and the SSS Application. Once DGRs are received from DP&I, Transport for NSW will progress the EIS in accordance with the requirements and with the aim of lodging the concurrent planning applications in the second quarter of 2012.