

NorthConnex

Building for the future

The background image of the cover is a photograph of a city street scene. A large white cable-stayed bridge with a metal mesh railing spans the road. Below the bridge, several cars and a large white truck with a blue tarp are stopped at a traffic light. A street sign for "RAILWAY ST" is visible. The sky is blue with some clouds. The text "Volume 1C" is overlaid in white on a dark grey rectangular background in the upper right corner.

Volume 1C

Environmental Impact Statement - Volume 1C

Main Volume Chapters 8 to 11

Appendix A - Director-General's Requirements

Appendix B - *Environmental Planning and Assessment Regulation 2000* Checklist

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In 2012, the NSW Government received an unsolicited proposal from Transurban and the Westlink M7 Shareholders (Sponsors) to design, construct, operate, maintain and finance a tolled motorway linking the M1 Pacific Highway at Wahroonga to the Hills M2 Motorway at the Pennant Hills Road interchange at West Pennant Hills, known as NorthConnex.

Roads and Maritime Services is the Proponent for the environmental impact statement and lodgement of an application for environmental and planning approval. Roads and Maritime is working with the Sponsors on the community consultation and public exhibition of this environmental impact statement.

8 Assessment of other issues

This chapter provides an assessment of the project's potential impacts that were not identified as key issues by either the Director-General's Requirements or the environmental risk analysis (**Chapter 10**).

The issues discussed in this chapter have either been directly identified by the project team or have emerged through the consultation process (see **Chapter 6**).

8.1 Land use and property

This chapter assesses land use and property impacts associated with the project. **Table 8-1** sets out the Director-General's Requirements as they relate to land use and property, and where in the environmental impact statement these have been addressed.

Table 8-1 Director-General's Requirements – land use and property

Director-General's Requirements	Where addressed
Impacts on directly affected properties and land uses, including impacts related to access, land use, property acquisition and amenity related changes.	Impacts to properties, land use, property acquisition and amenity impacts provided in Section 8.1.2 . Further details regarding amenity related changes are provided in Section 7.1 (Traffic and transport), Section 7.2 (Noise and vibration) and Section 7.3 (Air quality).

8.1.1 Existing environment

Regional context

The project is located in a major transport corridor for Sydney's northern and western suburbs. The area acts as an important link between the Hills district, the upper north shore and the north-western growth centres and is a key access point for the M1 Pacific Motorway. The project corridor passes through a number of suburbs including Baulkham Hills, Westmead, North Rocks, Carlingford, West Pennant Hills, Beecroft, Pennant Hills, Thornleigh, Normanhurst and Wahroonga.

The majority of the existing housing in the region is concentrated through the Ku-ring-gai and Hornsby local government areas. Historically, urban areas have been developed as settlements focused around the Northern and North Shore Railway Lines and the major road corridors of Pennant Hills Road, Pacific Highway and Beecroft Road, with outlying settlements around the Hawkesbury River and Pacific Highway extending to the north.

More recently, residential development has spread into outlying urban areas such as Cherrybrook, Castle Hill and Dural. Some urban consolidation has also occurred with medium and high density development within the Ku-ring-gai local government area and around the Hornsby town centre.

Several smaller local centres have established throughout the region, mainly focused around railway stations or on major roadways, including local centres along Pennant Hills Road such as at Thornleigh and Pennant Hills. Within the broader region Gordon and Epping provide larger town centres, whilst Hornsby has been identified as the region's principal centre.

The Draft North Subregional Strategy (Department of Planning, 2007) provides strategic planning direction at a regional level. This strategy identifies the need for an additional 21,000 homes within the region to provide for existing and future population growth. In order to protect the existing character of the North Subregion, including existing low density housing and outlying rural lands, future development is planned to be focused around the existing centres, particularly those along major transport routes such as railway lines and major roadways.

Local context

The majority of the project traverses three local government areas (LGAs) and is subject to the provisions of *The Hills Local Environmental Plan 2012* (Hills LEP), the *Hornsby Local Environmental Plan 2013* (Hornsby LEP), the *Ku-ring-gai Planning Scheme Ordinance 1971* (as amended) (Ku-ring-gai Planning Ordinance) and the *draft Ku-ring-gai Local Environmental Plan 2013* (draft Ku-ring-gai LEP). The main alignment tunnels traverse a variety of zonings within the three local government areas but surface works have only been proposed at discrete locations. Because of this, the local context is discussed separately for each surface site. Impacts to public utilities from the project works at each site are also outlined.

The local context for each site can be seen in **Figure 8-1** to **Figure 8-7**.

Windsor Road compound (C1)

A temporary construction compound would be established on the north-western corner of the Windsor Road / Hills M2 Motorway interchange. Surrounding land uses are predominately residential. Other land uses in the vicinity of the compound include the Our Lady of Lourdes school on the opposite side of Windsor Road and Baulkham Hills Pre School Kindergarten and a tyre retailer around 150 metres north of the site.

The compound site is unoccupied but has previously been used as a construction compound for the recently completed Hills M2 Motorway upgrade project. The site is zoned R3 Medium density residential under the Hills LEP.

The south-western side of the Hills M2 Motorway / Windsor Road interchange is located within the Parramatta LEP. Zonings in this area are primarily R2 Low Density Residential with a corridor of W1 Natural Waterways and E2 Environmental Conservation surrounding Toongabbie Creek. Land use zonings in the vicinity under the Hills LEP described in **Table 8-2**.

Table 8-2 Land use zonings under the Hills LEP surrounding the Windsor Road compound

Land use zoning	Features
R2 Low Density Residential	Located south of the Hills M2 Motorway on the eastern side Windsor Road.
R3 Medium Density Residential	The main land use zoning on the northern side of the Hills M2 Motorway.
R4 High Density Residential	Located around 50 metres north of the site along Windsor Road and on the southern western side of the Hills M2 Motorway / Windsor Road interchange.
RE1 Public Recreation	Several discreet locations within the local area.
SP2 Infrastructure	The Hills M2 Motorway and several minor sections of Windsor Road.

While a number of utilities are present around the site, these are not anticipated to be impacted by the works.

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Figure 8-1 Windsor Road construction compound local context

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Darling Mills Creek compound (C2)

A temporary construction compound would be established within the Hills M2 Motorway road corridor at the Darling Mills Creek viaduct. The primary land uses in the local area is residential. However the immediate surrounds of the site comprise native bushland.

The site is zoned SP2 Infrastructure under the Hills LEP and is located within the road corridor. Other land use zonings around the site are described in **Table 8-3**.

Table 8-3 Land use zonings under the Hills LEP surrounding the Darling Mills Creek compound

Land use zoning	Features
R2 Low Density Residential	The surrounding residential areas.
RE1 Public Recreation	Bushland areas on both sides of the Hills M2 Motorway.
E2 Environmental Conservation	Bushland areas on both sides of the Hills M2 Motorway.

While a number of utilities are present around the site, these are not anticipated to be impacted by the works.

Barclay Road compound (C3)

The Barclay Road compound would be located on the southern side of the Hills M2 Motorway on the corner of Barclay Road and Perry Street. The surrounding land uses are primarily residential with the exception of Muirfield Golf Course located directly south of the site on Barclay Road.

The site is zoned SP2 Infrastructure under Hills LEP and is located within the road corridor. Other land use zonings around the site are described in **Table 8-4**.

Table 8-4 Land use zonings under the Hills LEP surrounding the Barclay Road compound

Land use zoning	Features
R2 Low Density Residential	The surrounding residential areas.
RE1 Public Recreation	Several discreet areas in the vicinity.
RE2 Private Recreation	Muirfield Golf Course
E2 Environmental Conservation	Bidjigal Reserve to the west of the site.

While a number of utilities are present around the site, these are not anticipated to be impacted by the works.

Yale Close compound (C4)

The Yale Close compound would be located within the road reserve of the Hills M2 Motorway in the vicinity of the Yale Close overbridge. The primary land uses surrounding the site are residential on the southern side of the Hills M2 Motorway and natural bushland on the northern side of the Hills M2 Motorway. Other land uses in the local area include Muirfield High School around 100 metres west of the site and the Royal Institute for Deaf and Blind Children around 150 metres east of the site.

The site and the Hills M2 Motorway road corridor are zoned SP2 Infrastructure under the Hills LEP. Other land use zonings around the site are described in **Table 8-5**.

Table 8-5 Land use zonings under the Hills LEP surrounding the Yale Close compound

Land use zoning	Features
R2 Low Density Residential	The surrounding residential areas on the southern side of the Hills M2 Motorway.
RE1 Public Recreation	Bushland areas on the northern side of the Hills M2 Motorway.
E2 Environmental Conservation	Bushland areas on the northern side of the Hills M2 Motorway.

Whilst a number of utilities are present around the site, these are not anticipated to be impacted by the works.

Hills M2 Motorway integration works

Integration works for the Hills M2 Motorway would extend from the southern interchange at Pennant Hills Road through to Windsor Road in Baulkham Hills. The surrounding area is composed of a mixture of residential land uses and native bushland comprising Bidjigal Reserve which includes a public walking track passing underneath the Hills M2 Motorway at Darling Mills Creek viaduct. The integration works would occur largely within the suburb of North Rocks but would also pass through Carlingford and Baulkham Hills.

The integration works would occur largely within the road corridor, which is zoned SP2 Infrastructure. Other land use zonings around the site are described in **Table 8-6**.

Table 8-6 Land use zonings under the Hills LEP surrounding the Hills M2 Motorway integration

Land use zoning	Features
R2 Low Density Residential	The surrounding residential areas.
RE1 Public Recreation	Bushland areas on either side of the Hills M2 Motorway.
E2 Environmental Conservation	Bushland areas on either side of the Hills M2 Motorway.

The Hills M2 Motorway intelligent transport system (ITS) communication cables are located along the southern boundary of the motorway and are likely to be directly impacted by the works.

High voltage power lines cross the Hills M2 Motorway in the vicinity of Morton Avenue and in the vicinity of Gossell Grove. Direct impacts to these items have been avoided in the design of the project.



Figure 8-2 Hills M2 Motorway integration local context

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Southern interchange (C5)

The southern interchange would be situated at the intersection of Pennant Hills Road and the Hills M2 Motorway within the suburbs of Beecroft, Carlingford and West Pennant Hills. **Figure 8-3** shows the location of the proposed works. The local area is characterised by low density residential development. The area surrounding the interchange comprises Pennant Hills Golf Course located immediately to the east of Pennant Hills Road, a number of small parks, discrete areas of native vegetation and community facilities. Significant land uses in the area include several retail businesses located to the south of the Hills M2 Motorway on Carmen Drive and the West Pennant Hills Community Church around 500 metres to the west of the southern interchange.

The majority of project works would be within or adjacent to the road corridor, zoned as SP2 Infrastructure under the Hills LEP. The area proposed for the southern ventilation facility, the motorway control centre and the Pennant Hills Road on and off-ramps is zoned as R2 Low Density Residential. The project would also affect a small area on the northern side of the Hills M2 Motorway zoned as RE1 Public Recreation. The existing land use generally reflects this zoning with low density residential developments, however a commercial landscape supply business also operates at this location. The surrounding land zonings are described in **Table 8-7**.

Table 8-7 Land use zonings surrounding the southern interchange

Land use zoning	Features
R2 Low Density Residential (Hills LEP and Hornsby LEP)	The surrounding residential areas
RE1 Public Recreation (Hills LEP)	Discrete areas of parkland
RE2 Private Recreation (Hornsby LEP)	Pennant Hills Golf Course

Public utilities that would be impacted by works at the southern interchange include:

- Ausgrid power supply infrastructure at the Hills M2 Motorway.
- Overhead power lines at Eaton Road.
- Water mains at the Hills M2 Motorway and in the existing Pennant Hills Road northbound kerb lane.
- Sewer along Pennant Hills Road.
- Telecommunications infrastructure on the west side of Pennant Hills Road.
- Traffic lights at Pennant Hills Road, Copeland Road and Eaton Road.
- Red light camera at the Copeland Road / Eaton Road intersection.

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