



North Ryde Station Precinct - M2 Site
State Significant Development Application
Traffic & Transport Impact Assessment

Appendix B Public Transport Facilities Plan

Public Transport Facilities Plan

The viability of the M2 Site as a site for TOD is largely dependent on residents, employees and visitors utilising the [immediately] available public transport; and being able to access everyday retail, commercial, social and recreation services via walk and cycle trips. These *Objectives* are detailed in Section 3.3 of the NRSP DCP: -

- a. Reduce reliance on private vehicles.*
- b. Maximise use of public transport by future residents and workers, particularly of North Ryde Station and Epping Road bus services.*
- c. Improve facilities for bus users.*
- d. Facilitate easy and safe pedestrian and cycle access to public transport facilities.*

The NRSP DCP Controls relating to these *Objectives* are provided below: -

1. *A Public Transport Facilities Plan is to be prepared for the Precinct identifying the location, design, timing, funding and responsibilities for delivery of key public transport facilities within the Precinct.*
2. *The key public transport facilities are:*
 - a. passenger set-down/pick up and cycle parking at the North Ryde railway station;*
 - b. new bus shelter and facilities at Epping Road inbound stop between Wicks and Delhi Roads;*
 - c. new bus facilities at Epping Road outbound stop at Delhi Road;*
 - d. relocation of bus stop and facilities at Delhi Road eastbound stop at Road 38;*
 - e. completion of the Macquarie University to Macquarie Park North Ryde active transport spine; and*
 - f. Waterloo Road (northern side) shared pedestrian and cycle path.*

As suggested, the provision of high quality pedestrian and cycle links through and beyond the M2 Site – and particularly connectivity with public transport services - is paramount. Further to the pedestrian and cycle infrastructure detailed in **Section 5** of the TTIA; and the available public transport services detailed in **Section 6** of the TTIA, each of the NRSP DCP Public Transport Facilities Plan (**PTFP**) components are examined below.

1.1 PTFP Control 2.a: North Ryde Station Infrastructure

With reference to the 2014 North Ryde Station Site North Infrastructure Works Development Application - Transport impact assessment (SSN TIA), passenger set-down/pick up and cycle parking will be provided in Station Street immediately adjacent to the North Ryde railway station: -

The number of on-street parking spaces has increased slightly, the prioritisation of on-street parking for car share, disabled parking, a loading zone, kiss-and-ride, short-stay timed parking and motorcycle parking proposed in the TMAP is retained in the proposed development.

Bicycle parking at North Ryde Station is proposed as per the TMAP. It would be provided in the forecourt area surrounding the Station, with staged introduction to match demand.

Further to our discussions with UGNSW, the Station Street shared zone and pedestrian crossing of Road 38 will be provided as part of the Station Site North *enabling infrastructure works*.

1.2 PTFP Control 2.b: Epping Road Bus Shelters

Funding for the provision of a bus shelter at the Epping Road (south) bus stop immediately west of the Epping Road pedestrian overpass will be provided as part of a proposed Voluntary Planning Agreement (**VPA**). As detailed in **Section 5.1.5** of the TTIA, the existing Epping Road (north) bus stop located immediately east of the Epping Road pedestrian overpass will be relocated to the immediate west of the Epping Road pedestrian overpass so as to provide ingress lane from Epping Road to Spine Road. The proposed VPA would also provide funding for a bus shelter at this relocated bus stop.

1.3 PTFP Control 2.c: Epping Road at Delhi Road Bus Shelter

It is the understanding of ARC that *PTFP* Control 2.c relates to the existing bus stop located on the southern side of Epping Road east of Delhi Road. Table 11.2 of the TMAP indicates that *new bus facilities* be provided at this location, and that the provision of such be the responsibility of *developers*.

The proposed VPA will provide funding for the upgrade of this bus stop, again envisaged to be the provision of a shelter.

1.4 PTFP Control 2.d: Delhi Road Bus Shelter

The TMAP provided a recommendation that the existing Delhi Road bus stop adjacent to North Ryde Rail Station be relocated such as to provide for additional traffic capacity at the intersection of Delhi Road & Road 38. Revised TMAP modelling prepared in regard to the Station Site North concludes that this relocation is no longer required, as reported in the SSN TIA: -

The retention of the traffic signals at the intersection of Delhi Road and Road 38 in their current configuration has allowed the bus stops on Delhi Road at North Ryde Station to remain in their current location. The pedestrian crossing across Delhi Road at Road 38 will remain on the western side of the intersection, providing convenient access to the current location.

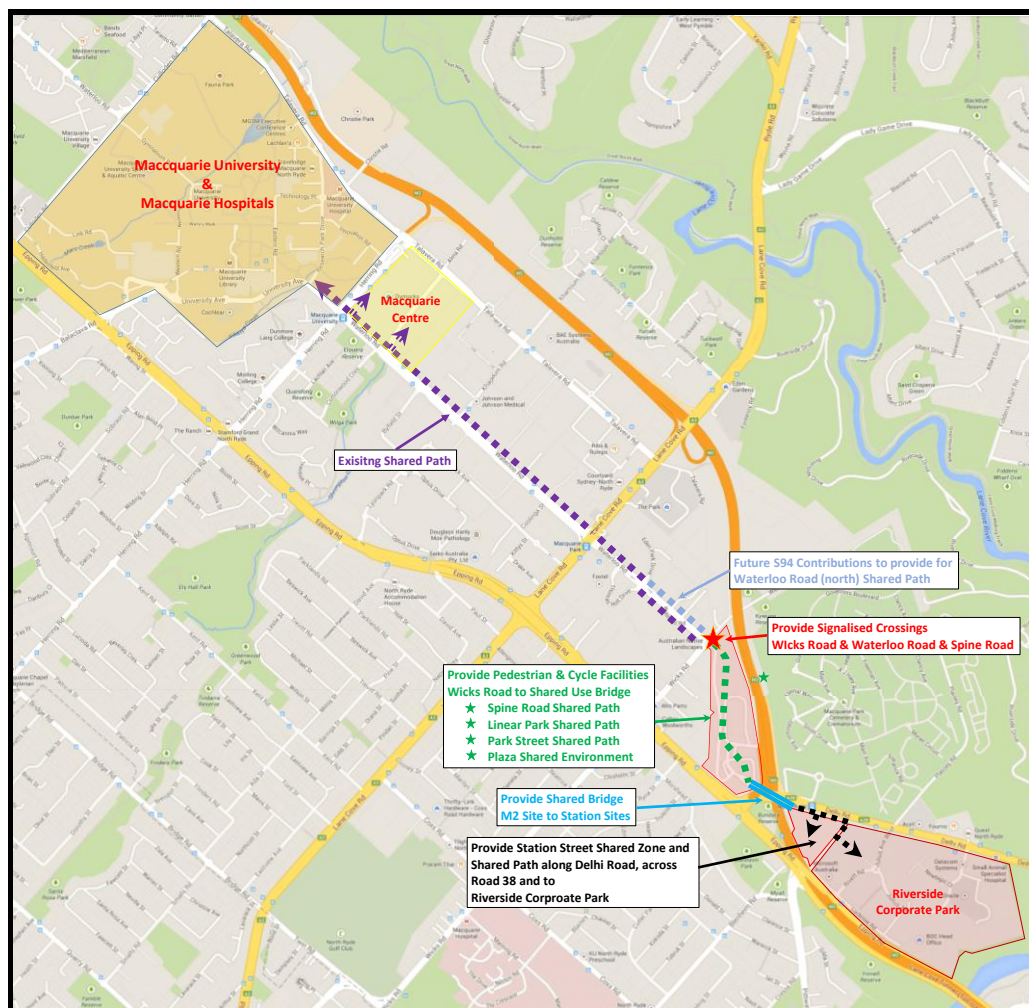
1.5 PTFP Control 2.e: Macquarie Active Transport Spine

The Macquarie University to Macquarie Park North Ryde Active Transport Spine (**MATS**) is an initiative of Ryde Council (supported in the **TMAP**) to provide a continuous pedestrian and cycle path linking Macquarie University, Macquarie Centre and the M2 Site along Waterloo Road; then through the M2 Site to the Shared Bridge linking to the North Ryde Station Sites. The final link proposed is from the Station Sites through to the Riverside Corporate Park

With regard to the provision of this MATS infrastructure relating to the M2 Site, following the removal of the *Local Road M2 Edge* from the internal road network (see **Section 4** of the TTIA) the primary pedestrian/cycle path will be along the Spine Road and Linear Park. However, this route in and of itself provides the most efficient route between Wicks Road and the Shared Bridge and as such makes this section of the MATS even more efficient.

Further to the broader NRSUAP pedestrian and cycle infrastructure proposals outlined in **Section 5** of the TTIA, the resulting MATS is shown in **Figure 1.5**.

Figure 1.5 Macquarie Active Transport Spine



Sources: Google Maps, **TMAP** and ARC

In summary, the SSDA provides for the implementation of all M2 Site related MATS infrastructure, specifically including: -

- Signalised pedestrian crossings on all approaches at the intersection of Wicks Road & Waterloo Road & Spine Road
- Continuous pedestrian and cycle paths between Wicks Road and the Shared Bridge utilising the Spine Road, Liner Park, Park Street, Central Park, Plaza Street and the Plaza
- The construction of the Shared Bridge between the M2 Site and the Station Sites.

In addition, the SSN TIA commits to the provision of the section of the MATS between the Station Sites and the Riverside Corporate Park.

The infrastructure relevant to the Station sites includes...

- *the creation of a continuous shared pedestrian and cycle path from the Riverside Corporate Park, through the North Ryde Station Site North, over the new pedestrian bridge, through the M2 Site and connecting to the new shared paths on Waterloo Road*

Further to the submission of the SSN TIA, the Shared Bridge design has been revised to deliver pedestrians and cyclists to a Delhi Road Shared Path running along the Station Site North frontage. This shared path would then be extended into Road 38, and – via a crossing of Road 38 – continue to the Riverside Corporate Park.

Based on our consultation with UGNSW in regard to the Station Site North (which is also being developed by UGNSW), the MATS pedestrian and cycle infrastructure connecting the Shared Bridge via the Station Site North to Riverside Corporate Park (a per **Figure 1.5** above) will be constructed as part of the *enabling infrastructure works* for the Station Site North.

The Waterloo Road Shared Path as indicated in **Figure 1.5** is discussed below.

1.6 PTFP Control 2.f: Waterloo Road Shared Path

The NRSP Finalisation Report requires that a Waterloo Road (north - essentially between Eden Park Drive and Wicks Road) Shared Path be provided further to future [likely Section 94] contributions from developers of land outside of the M2 Site.

Until such time, it is important to note that Waterloo Road already provides a shared path along the northern side of the road between Lane Cove Road and Eden Park Drive, and then on the southern side of Waterloo Road between Eden Park Drive and Wicks Road. Notwithstanding, the provision of a continuous shared path along Waterloo Road (north) linking to the Waterloo Road (north) shared path to the west (to Macquarie University); and the Spine Road/Linear Park (north)

shared path to the east (and then through the Station Sites to Riverside Corporate Park) would essentially complete the MATS.

1.7 PTFP Summary

This PTFP commits UGNSW to the provision of MATS pedestrian and cycle infrastructure within and external to the M2 Site; and to upgrades (through a proposed VPA) of the key bus stop infrastructure adjacent to the M2 Site.

Combined with the Station Site North commitment to the provision of a shared path linking the Shared Bridge and the Riverside Corporate Park; and the future upgrade to a Waterloo Road (north) Shared Path further to developer contributions; this PTFP provides for the completion of the MATS, and moreover would establish all M2 Site related facilities prior to occupancy of the M2 Site.