

Appendix 4. Photo Survey, Safety and Compliance Audit - Waterloo Rd (west) Shared User Path
 (Nothing in this report indicates that cyclists accept this route as a reasonable or safe alternative to the existing M2 cycle facility.)

This is Appendix 4 of the Bike North Audit of the M2 Interim Bicycle Detour as proposed by Transurban. It covers the Waterloo Rd (west) Shared User Path (SUP) from Culloden Road to Vimiera Road. Other appendices will cover various sub routes and options that were suggested. This document should be read in conjunction with the other documents.




This audit was undertaken by Bike North with the aim of determining whether it complies with Austroads 14 and NSW Bicycle Guidelines and make recommendations as to the work required. As documented below this section of the route does not comply. Some work will need to be undertaken to raise the facility to a safe standard but even at that stage it will not comply with the required regional route guidelines.

Principal Auditor : Doug Stewart (Bike North). Audit Date: 16 January 2007.

Key to references :

Austroads with page numbers = Austroads Part 14, Bicycles, Second Edition 1999, published by Austroads




NSWBG with page numbers = NSW Bicycle Guidelines, version 1.2 July 2005, published by the RTA (see web site)

	Location	Comments	Work
	1. Waterloo Rd, Culloden Road and Gymnasium Road Corner. Start of path. (facing west) Refer to Appendix 1 photo 60.	Safety hazard. Impossible access to the start of the path, which is in the centre of the photo. Cut in median is not wide enough. Median is not wide enough, minimum 2m. (NSWBG p46) No obvious path from Culloden Road to join the path. Road crossing too close to roundabout, minimum 6m. Needs redesign. (Austroads p65-66)	Redesign access to path from Culloden Rd by creating an off road path adjacent to Culloden and then a right angle crossing back from roundabout with a wider median with a wider gap.
	2. Waterloo Road Shared User Path (SUP) at the junction with Culloden Road. Start of path. (facing west)	To meet regional path requirements this path should be widened to 3m with centre line and logos. There is no shared path signage. The path is offset from the kerb ramp and should be aligned when path is widened.	Widen and align path. Provide line markings, logos and shared path signs.
	3. Waterloo Road SUP (facing west)	The path has a section missing which should be remedied	Fill missing path section.

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Location	Comments	Work
	<p>4. Waterloo Road SUP at first bus stop (facing west)</p> <p>The path runs behind the bus stop but needs line marking. The asphalt is uneven and should be smoothed out. The bus stop needs reflective material added in case of light failure.</p>	<p>Smooth path. Add line marking. Add reflective material to edges of the bus stop structure.</p>
	<p>5. Waterloo Road SUP at the corner with Macquarie University Village Student Housing (facing west)</p> <p>The path crosses the access driveway for the 1,000 bed residential complex on private property. It is likely that the path users have priority. Warning signs needed for driveway users, and 'give way to cyclists' signage. Line markings and logos. Warning for Waterloo Road that bike path will be crossed.</p>	<p>Install warning and give way signs.</p>
	<p>6. Waterloo Road SUP (facing west)</p> <p>The retaining wall effectively reduces pedal clearance and thus the effective path width. There should be a 0.3m setback of the fence from the path. (Austroads p112-115) Path also needs widening.</p>	<p>Widen path and push fence back 0.3m from widened edge of new path.</p>
	<p>7. Waterloo Road SUP at second bus stop (facing west)</p> <p>Path travels in front of bus stop but this is a conflict point. Path should pass behind the bus stop as for the other bus stop on this path. (NSWBG p26) Fence should be set back 0.3m and reflective material added to fence and bus stop.</p>	<p>Redesign to take the path behind the bus stop. Add reflective material.</p>

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	Location	Comments	Work
	8. Waterloo Road SUP approaching Vimiera Road (facing west)	Path deviates around a kerb ramp and crossing point. Needs line marking to take account of crossing pedestrian traffic.	Line marking
	9. Waterloo Road SUP at the corner with Vimiera Road (facing west)	Asphalt surface is rough and looks like a temporary solution that should be remedied. Debris is washing down onto path from the high ground to the left and surface needs regrading to allow drainage down from path into a slight depression. Pole needs reflective material.	Install smooth concrete path. Regrade path when path is widened to allow drainage away from path. Install reflective material on pole.
	10. Vimiera Road SUP just south of Waterloo Road. End of path. (facing south)	This is the end of the shared path. Transition to road is too abrupt requiring a sharp left turn. This should be changed to a 45 degree angle transition at least 1.2m wide. (Austroads p36.)	Redesign transition to allow for angled access to the bicycle lane on the road.

This short section of path will not be used by cyclists travelling long distances but may be used by local cyclists. The design at the start of the path (photo 1) must be remedied in all cases. The most likely route for cyclists who are travelling long distances such as back to the M2 would be to follow the roadway as detailed in Appendix 1.