Darwin Shared Path & Bicycle Lane Technical Notes

13. Pedestrian access ways (PAWs)

Objective

The objective of the *Darwin Shared Path & Bicycle Lane Technical Notes* is to provide direction and guidance for the planning and delivery of cycling facilities within the City of Darwin area. These technical notes are also intended to provide information for other stakeholders including the NT Government, cycling groups and the community to enable a consistent standard of infrastructure and treatments to be provided across the Metropolitan area.

References

Throughout this document, references have been made to the following technical standards and guidelines:

- Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* (2009)

The technical note should be read in conjunction with these documents.

Introduction

This technical note provides direction and guidance on the design of pedestrian access ways (PAWs), and the interface between these and both shared paths and the roadway. The information is compiled from multiple sources detailing good design practices and appropriate signage location and installation processes adopted throughout Australia.

PAWs are primarily provided for pedestrian access, however they should also be designed to facilitate local cycling access. In some locations they may form part of a continuous cycle route and in these circumstances they should be designed to shared path standards as far as possible.

Where off-road shared paths or bicycle paths intersect with a PAW, it is necessary to provide an engineering treatment to permit a safe and smooth passage for cyclists and pedestrians. Where PAWs connect to the road it may also be necessary to prevent access by unauthorised vehicles.

Layout of connection

PAWs create an important pedestrian and cycling link between disconnected roads, and are common where the road network contains long, uninterrupted sections of development, or to connect cul-de-sac streets together.

The utility of these connections means that there is a likely demand for unauthorised use by cars using the PAW as a 'short-cut'.

Therefore, it important to make sure that cyclists and pedestrians are aware of the upcoming road and have sufficient sight of the possible oncoming traffic, and to install a barrier to unauthorised vehicles without creating a permanent hazard.

Issues and design responses

The key safety and management issues for PAWs are:

- visibility / sight distance where PAWs junction with footpaths and roads
- unauthorised vehicle access

PAWs are usually constrained by a fence along each property boundary, with limited or nil truncation at either end, which can create sightline issues for pedestrians and cyclists entering and leaving the PAW. Visibility splays of 1.5mx1.5m at the entrance should be implemented wherever possible in order to provide a basic level of sight distance at the junction with other paths.

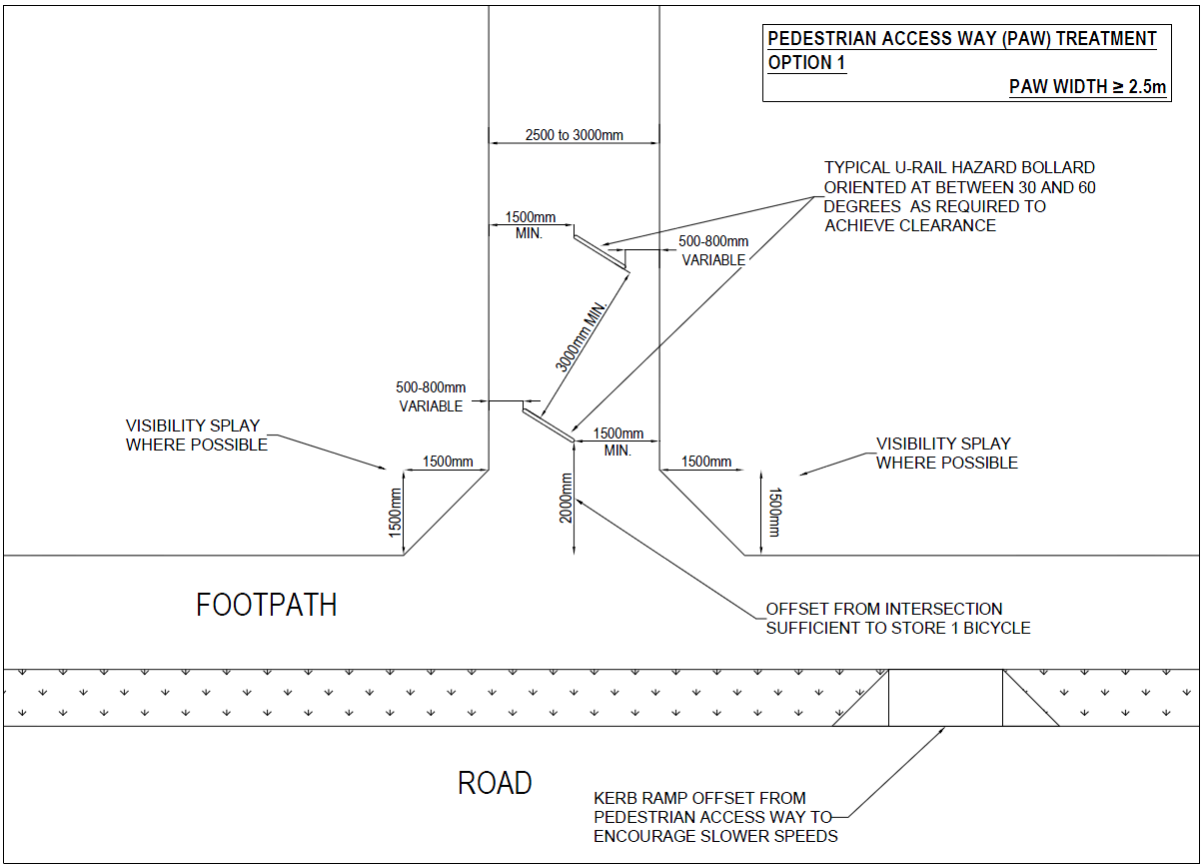
Regardless of whether visibility splays are provided, it is still desirable to restrict the speeds of cyclists using a PAW on the approach to a path or road junction. In order to achieve this, a carefully designed slow point (refer to Option 1 drawing below) which encourages slower speed but does not prevent access for prams, gophers, cargo bikes or bicycle trailers. The orientation of the U-Rail Hazard Bollards shall be orientated between 30 and 60 degrees to the direction of travel. Where a PAW has an east-west orientation, consideration should be given to the possibility of limited visibility due to the rising or setting sun and the Hazard Bollards may be placed at 90 degrees to the direction of travel with additional space between the bollards to allow for manoeuvrability of small path sweeping vehicles. This slow point will also function as a barrier which prevents unauthorised vehicle access through the PAW.

If sufficient width is not available to achieve the dimensions depicted in Option 1, an alternative treatment can be used as shown in Option 2. In Option 2 a fence is located between the footpath and the road which prevents unauthorised vehicle access, and prevents errant cyclists from entering the road at speed. However this option does not achieve the desired slowing of cyclist speed prior to the termination of the PAW.

Removable U-Rail Hazard Bollards shall be as per Northern Territory Government Standard Drawing CS3010 with left or right hazard boards as required. Fences should be painted in a contrasting colour and fitted with reflective tape on horizontal and vertical elements, as per the requirements of Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* (2009), to minimise the risk of impact from errant cyclists.

Where the PAW terminates at a busy road, installation of a u-rail is beneficial to allow cyclists to wait for safe crossing. It also functions as passive wayfinding, identifying the location of the connection to passing cyclists and pedestrians.

Option 1 – Pedestrian Access Way Width ≥ 2.5m



Option 2 – Pedestrian Access Way Width < 2.5m