



Cycle Notes

No. 12 October 2002

Design Standards for Bicycle Facilities

Welcome to CYCLE NOTES No. 12. The purpose of CYCLE NOTES is to provide information on the design of bicycle facilities for engineers and planners.

CYCLE NOTES should be read in conjunction with:

- Austroads Guide to Traffic Engineering Practice, Part 14 – Bicycles, and
- Australian Standard 1742.9, Manual of Uniform Traffic Control Devices, Part 9 – Bicycle Facilities.

Introduction

The purpose of this edition of *Cycle Notes* is to provide guidance on the standards that are required for on-road bicycle lanes and off-road bicycle paths.

The guidelines address the width of bicycle facilities, the linemarking that is required and the signs that need to be erected.

Incorporation of these standards will ensure that all bicycle projects comply with the Road Safety (Road Rules) Regulations 1999, and are designed and constructed in a consistent manner across Victoria.

Widths of Bicycle Lanes and Paths, Linemarking and Signs

On-road bicycle lanes must be wide enough to ensure that cyclists have sufficient space to ride in, and that they are separated from adjacent motor vehicles.

On-road bicycle lanes must also be clearly identified as bicycle lanes and need to be distinguished from other traffic lanes and parking lanes.

This is achieved by providing bicycle lane lines, bicycle logos and bicycle lane signs.

Similarly, off-road bicycle paths must be wide enough to provide sufficient clearance between cyclists and pedestrians.

Off-road bicycle paths must also have the correct signs installed to distinguish them as a shared path, separated footpath or a bicycle path, rather than a footpath.

For further information on signing and linemarking for off-road bicycle paths, please refer to *Cycle Notes No 10* (Behavioural Signs) and *Cycle Notes No 11* (Directional Signs).

Signs and Linemarking used to create a high standard bicycle lane along Brighton Road in St Kilda



Standard Widths for Bicycle Lanes and Bicycle Paths

Austrroads Guide to Traffic Engineering Practice, Part 14 – Bicycles, contains the agreed national standards for the design and construction of on-road bicycle lanes and off-road bicycle paths.

The following standards for the widths of bicycle lanes and bicycle paths are from this guide. All bicycle lanes and paths should be constructed in accordance with these standards.

Where a new road is being constructed and there is sufficient space, the “desirable” width should be provided.

Where bicycle lanes are being “retrofitted” to an existing road, their width should fall into the acceptable range.

On-road bicycle lanes are generally measured to the face of kerb.

Exclusive Bicycle Lanes and Sealed Shoulders¹



	Overall Bicycle Facility Width (m)		
Road Speed (km/h)	60	80	100
Desirable Width (on new roads)	1.5	2.0	2.5
Acceptable Range (when retrofitting to roads)	1.2 - 2.5	1.8 - 2.7	2.0 - 3.0

Shared Parking and Bicycle Lanes¹



	Overall Bicycle Facility Width (m)	
Road Speed (km/h)	60	80
Desirable Width (on new roads)	4.0	4.5
Acceptable Range (when retrofitting to roads)	3.7 - 4.5	4.0 - 4.7

Wide Kerbside Lanes¹



	Overall Bicycle Facility Width (m)	
Road Speed (km/h)	60	80
Desirable Width (on new roads)	4.2	4.5
Acceptable Range (when retrofitting to roads)	3.7 - 4.5	4.3 - 5.0

Off-road Paths Adjacent to Carriageway²



	Local Access Path	Commuter Path	Recreation Path
Desirable Width	2.5	3.0	3.5
Acceptable Range	2.0 - 2.5	2.0 - 3.5	3.0 - 4.0

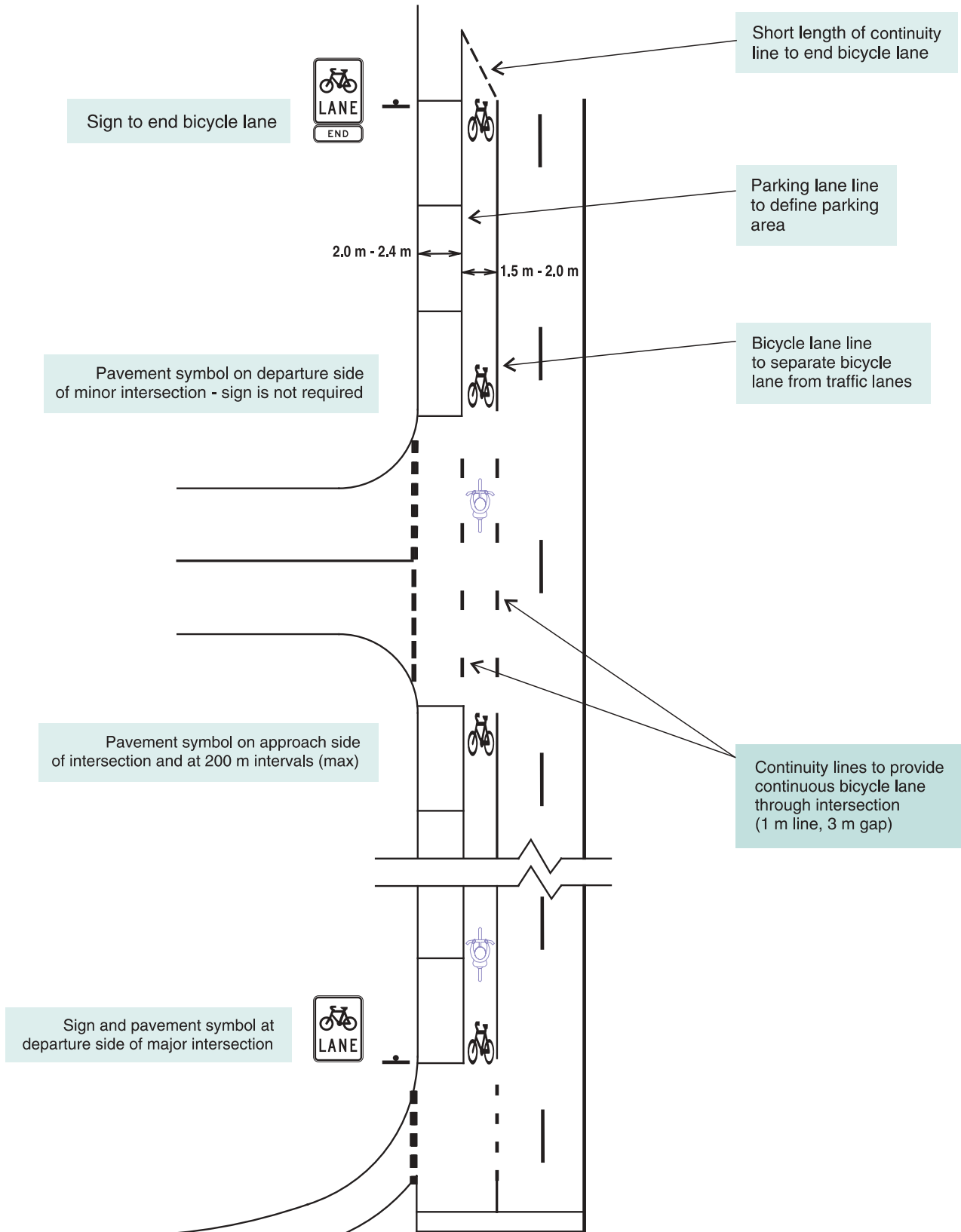
¹ The width of the lane is generally measured from the face of the kerb.

² For information on separated footpaths and bicycle paths, see Austrroads Guide to Traffic Engineering Practice, Part 14 – Bicycles, Sections 6.6.2 and 6.6.3.

Signs and Linemarking for On-Road Bicycle Lanes

On-road bicycle lanes are defined by painting two, 100 mm wide, solid white lines each side of the bicycle lane, by painting bicycle logos on the pavement and by installing bicycle lane signs.

The following diagram provides guidance on providing signs and linemarking for an on-road, shared bicycle/parking lane.



For further design details on the lines and bicycle pavement logos, please refer to:
Australian Standard: AS 1742.9 - 2000 - Manual of Uniform Traffic Control Devices Part 9: Bicycle Facilities.

Signs for On-Road Bicycle Lanes and Off-Road Bicycle Paths

It is important that the correct signs be installed to legally designate bicycle lanes and bicycle paths for use by cyclists. The Road Safety (Road Rules) Regulations 1999 require the following signs to be erected for on-road bicycle lanes and off-road bicycle paths.

Signs for On-Road Bicycle Lanes

Types of Signs

Regulation 153 of the Road Safety (Road Rules) Regulations 1999 defines an on-road bicycle lane as a marked lane that begins at a *bicycle lane sign* applying to the lane and ends at an *end bicycle lane sign* applying to the lane.

A bicycle lane that has bicycle logos but does not have a *bicycle lane sign* erected is not legally a bicycle lane.

Location of signs

A *bicycle lane sign* should be erected at the start of each bicycle lane and on the departure side of major intersections. An *end bicycle lane sign* should be erected at the end of the bicycle lane, unless the bicycle lane ends at an intersection.

It is unnecessary to erect an *end bicycle lane sign* on the approach side to an intersection if the bicycle lane is continued past the intersection by broken lines.

Signs for Off-Road Bicycle Paths

Shared paths are the most common type of off-road bicycle path and can be used by both pedestrians and cyclists.

Regulation 242 of the Road Safety (Road Rules) Regulations 1999 defines a shared path as a path that begins at a *shared path sign* and ends at an *end shared path sign*. Paths that do not have these signs erected are considered to be footpaths and may not be used by cyclists.

A separated footpath is a path on which cyclists and pedestrians are required to use separate, designated areas of the path. A bicycle path is a path that can only be used by cyclists.

Regulation 239 of the Road Safety (Road Rules) Regulations 1999 defines a separated footpath as a path that begins with a *separated footpath sign* and a bicycle path as a path that begins with a *bicycle path sign*.



Bicycle Lane Sign



End Bicycle Lane Sign



Shared Path Sign



End Shared Path Sign



Separated Footpath Sign



Bicycle Path Sign

For further information on design standards for on-road bicycle lanes and off-road bicycle paths, please contact:

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Previous editions of Cycle Notes can be downloaded from the VicRoads web site at: www.vicroads.vic.gov.au

For further information on the use of signs for on-road bicycle lanes and off-road bicycle paths, including sign dimension details, please refer to:

- Australian Standard: AS 1743 – 2001 Road Signs Specifications, and
- Australian Standard: AS 1742.9 – 2000 Manual of Uniform Traffic Control Devices Part 9: Bicycle Facilities.