



Supplement to Austroads Guide to Road Design Part 4

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Intersections and Crossings – General (2017) Version 2.1

Austroads has released the Guide to Road Design, Part 4: Intersections and Crossings - General and all road agencies across Australasia have agreed to adopt the Austroads guides to provide a level of consistency and harmonisation across all jurisdictions. This agreement means that the new Austroads guides and the Australian Standards, which are referenced in them, will become the primary technical references for use within Roads and Maritime Services.

This supplement is issued to clarify, add to, or modify the Austroads Guide to Road Design, Part 4: Intersections and Crossings – General.

Roads and Maritime accepts the principles in the Austroads Guide to Road Design, Part 4: Intersections and Crossings - General with variations documented in this supplement under the following categories:

- Roads and Maritime enhanced practice: Roads and Maritime practice that enhances the Austroads Guides
- Roads and Maritime complementary material: Roads and Maritime reference material that complements the Austroads Guides. These documents include Roads and Maritime manuals, technical directions and/or other reference material and are to be read in conjunction with the Austroads Guides
- Roads and Maritime departures: Roads and Maritime practice that departs from the Austroads Guides.

Document Information

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| Author: | Road Policy, Specifications and Technology |
| Contributors: | Manager Road Policy, Specifications and Technology, Standards and Technology Manager, Lead Standards and Technology Analyst, Manager Design Review and Special Projects, Manager Road Design, Manager Traffic Signals Operations and Director Road Design |
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Document History

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| 2.1 | 31/08/2017 | Revised Austroads edition | All | Road Policy, Specifications and Technology |
| 2.0 | 11/10/2016 | Major review. | All | Road Policy, Specifications and Technology |
| 1.0 | 03/03/2011 | First issue. | All | Technology Standards (Road) |

General

In the context of road design, a greenfield site is a location on which a new road is being built where there are no constraints that prevent the use of the Normal Design Domain (NDD) design values.

A brownfield site is a location where development or constraints influence the design to the extent that use of values outside the NDD may be necessary for one or more elements of the design.

The Austroads Guide to Road Design provides Normal Design Domain criteria suitable for new roads (greenfield sites). In most cases, the same criteria that is used for greenfield sites should also be used for modifications and upgrades to existing roads (brownfield sites).

The use of design parameters outside of the Normal Design Domain requires approval from an authorised person in accordance with the Roads and Maritime Services Delegations Manual.

Roads and Maritime: complementary material

The following documents provide additional detail of Roads and Maritime best practice. It is necessary to comply with complimentary material:

- NSW Bicycle Guidelines
- Roads and Maritime Supplements to Austroads Guides
- Roads and Maritime Australian Standards Traffic Supplements
- Roads and Maritime Traffic Signal Design Guide
- Roads and Maritime Delineation Manual
- Roads and Maritime Standard Drawings
- Roads and Maritime Technical Directions.

The documents are published and can be found on the Roads and Maritime website.

Roads and Maritime: enhanced practice and departures

3 Road design considerations for intersections

3.1 Road users

Table 3.1: Considerations for road users in intersection design (motor vehicle drivers)

For clarification, motorcyclists are motor vehicle drivers.

Table 3.1: Considerations for road users in intersection design (pedestrians)

Kerb ramps are to be designed in accordance with Roads and Maritime Standard Drawings.

7 Property access and medians

7.2.3 Rural roads

For arterial roads, it is advisable to avoid direct access where alternate access is available from a regional and/or local road. Where no alternate access is available, the use of a road intersection layout needs to be considered and is dependent on traffic volumes, turning volumes, land use and road geometry.

For access to low traffic generators, such as rural dwellings, a risk assessment should be carried out to determine if there is a need to supplement the rural property access treatment with a basic right-turn treatment (BAR). The use of BAR is generally only warranted for locations that have poor sight distance, are used by heavy vehicle movements or when traffic volumes on the main road greater than 3000 vehicles per day.

For accesses to higher traffic generators, a traffic analysis and/or risk assessment should be carried out to determine the appropriate treatments.