

AS 1742.2:2022



STANDARDS
Australia



Manual of uniform traffic control devices

Part 2: Traffic control devices for general use



AS 1742.2:2022

This Australian Standard ® was prepared by MS-012, Road Signs And Traffic Signals. It was approved on behalf of the Council of Standards Australia on 05 August 2022.

This Standard was published on 26 August 2022.

The following are represented on Committee MS-012:

- ARRB (Australian Road Research Board)
- Association of Consultants in Access Australia
- Australian Automobile Association
- Australian Industry Group
- Australian Motorcycle Council
- Austroroads
- Department of Infrastructure, Planning and Logistics (NT)
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This Standard was issued in draft form for comment as DR AS 1742.2:2021.

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ISBN 978 1 76113 905 5

Manual of uniform traffic control devices

Part 2: Traffic control devices for general use

First published as AS 1742.2—1978.
Previous edition 2009.
Fifth edition 2022.

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Preface

This Standard was prepared by the Standards Australia Committee MS-012, Road Signs and Traffic Signals to supersede, in part, AS 1742.2:2009, *Manual of uniform traffic control devices, Part 2: Traffic control devices for general use*.

This Standard is one of a series of 14 Standards as follows:

AS 1742.1, *Manual of uniform traffic control devices, Part 1: General introduction and index of signs*

AS 1742.2, *Manual of uniform traffic control devices, Part 2: Traffic control devices for general use* (this Standard)

AS 1742.3, *Manual of uniform traffic control devices, Part 3: Traffic control for works on roads*

AS 1742.4, *Manual of uniform traffic control devices, Part 4: Speed controls*

AS 1742.5, *Manual of uniform traffic control devices, Part 5: Street name and community facility name signs*

AS 1742.6, *Manual of uniform traffic control devices, Part 6: Tourist and services signs*

AS 1742.7, *Manual of uniform traffic control devices, Part 7: Railway crossings*

AS 1742.9, *Manual of uniform traffic control devices, Part 9: Bicycle facilities*

AS 1742.10, *Manual of uniform traffic control devices, Part 10: Pedestrian control and protection*

AS 1742.11, *Manual of uniform traffic control devices, Part 11: Parking controls*

AS 1742.12, *Manual of uniform traffic control devices, Part 12: Bus, transit, tram and truck lanes*

AS 1742.13, *Manual of uniform traffic control devices, Part 13: Local area traffic management*

AS 1742.14, *Manual of uniform traffic control devices, Part 14: Traffic signals*

AS 1742.15, *Manual of uniform traffic control devices, Part 15: Direction signs, information signs and route numbering*

This document is divided into key sections, dealing with treatments at intersections, treatments at expressway interchanges and terminals, treatments between intersections and pavement markings.

This edition of this document contains a number of revisions that reflect changes in practice and traffic control device usages that have evolved since the previous edition of the document was published. The more significant changes are as follows:

- (a) Several new signs have been added. These include additional supplementary signs for the restriction of vehicles over a certain mass or size, signs relating to emergency stopping bays and median access points. Symbolic signs for warning of the presence on the road of a horse and rider as well as further wild animal variants have also been included.
- (b) Signs to warn of road conditions and hazards specific to motorcyclists such as tightening curves and sudden crossfall changes have been included.
- (c) The upper safe vertical clearance limit for the provision of CLEARANCE signs at overhead structures has been increased.
- (d) The type of treatment required at lane reductions (zip-merge or lane change) is now specific to the prevailing speed limit.
- (e) Section 5, which specifies the requirements and recommendations for pavement markings, has been substantially revised. This has incorporated key outcomes from the Austroads Harmonization of Pavement Markings and National Pavement Marking Specification project.

- (f) The patterns, widths and layouts of all longitudinal and transverse pavement markings have been rationalised in line with the project mentioned at Item (e), consolidated into this Standard and assigned specific identifiers for each type. A similar arrangement for the identification of the different types of pavement arrows is incorporated. Layouts, dimensions and spacing for diagonal and chevron markings have also been simplified with set values based on the speed limit.
- (g) Advice on the dimensions and application of audio-tactile line markings, wide centre line treatments and yellow box markings at signalized intersections has been introduced.
- (h) The layout and dimension information for various pavement marking elements (such as line patterns, symbols and messages) found in other parts of AS 1742 has been incorporated into this Standard as the primary source for this information. Future revision of other parts will necessarily remove the dimension components and specify application requirements only.
- (i) A new Appendix and specific signs dealing with the inherent safety issues associated with a modified intersection where the major road turns or curves to the left has been introduced.

This document is accompanied by additional data in a ZIP file. The ZIP file contains drawings files in DWG and PDF formats. The ZIP file may be obtained on purchase of the Standard in any format. The technical drawings materials in the accompanying product shall only be used, reproduced or modified by an authorised user in a way that meets the requirements of this Standard. They shall not be used for any other purposes.

The terms “normative” and “informative” have been used in this Standard to define the application of the appendix to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

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Australian Standard®

Manual of uniform traffic control devices

Part 2: Traffic control devices for general use

Section 1 Scope and general

1.1 Scope

This document specifies requirements for regulatory and warning signs, pavement markings and other devices for general use on roads, including expressway type roads, and sets out the way they are applied at intersections and interchanges, between intersections, and at a number of specific situations including substandard horizontal and vertical curves, approaches to structures and obstructions, changes in pavement width, climbing and overtaking lanes, steep grades and water crossings.

1.2 Application

This document deals with regulatory and warning signs, markings and devices for general use. Apart from specific exceptions in the text, this document applies to all roads.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

AS 1163, *Cold-formed structural steel hollow sections*

AS 1742.3, *Manual of uniform traffic control devices, Part 3: Traffic control devices for works on roads*

AS 1742.4, *Manual of uniform traffic control devices, Part 4: Speed controls*

AS 1742.7, *Manual of uniform traffic control devices, Part 7: Railway crossings*

AS 1742.9, *Manual of uniform traffic control devices, Part 9: Bicycle facilities*

AS 1742.10, *Manual of uniform traffic control devices, Part 10: Pedestrian control and protection*

AS 1742.12, *Manual of uniform traffic control devices, Part 12: Bus, transit, tram and truck lanes*

AS 1743, *Road signs — Specifications*

AS 1744, *Standard alphabets for road signs*

AS 2700, *Colour Standards for general purposes*

AS 4049 (series), *Paints and related materials — Pavement marking materials*

AS/NZS 1158.1.1, *Lighting for roads and public spaces, Part 1.1: Vehicular traffic (Category V) lighting—Performance and design requirements*

AS/NZS 1906 (series), *Retroreflective materials and devices for road traffic control purposes*

AS/NZS 2009, *Glass beads for pavement-marking materials*

AS/NZS 3845.1, *Roadside safety systems and devices — Barrier systems*

1.4 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

1.4.1

85th percentile speed

V₈₅

speed at, or below, which 85 percent of vehicles are observed to travel under free-flowing conditions past a nominated point

Note 1 to entry: A guide to the determination of 85th percentile speed is given in [Appendix A](#).

1.4.2

annual average daily traffic

AADT

total yearly traffic volume in both directions at a road location, divided by the number of days in the year

Note 1 to entry: This term also applies to estimates of AADT based on short-term traffic volume counts.

1.4.3

expressway type road

expressway

divided highway for through traffic with full or partial control of access and generally with grade separation at intersections

Note 1 to entry: The term includes expressways, freeways, tollways and motorways.

1.4.4

major road

<1> at an intersection where GIVE WAY or STOP sign control applies, road on which there are no control signs

<2> at an intersection where the T-intersection rule applies, the continuing road

1.4.5

may

indicates the existence of an option

1.4.6

merge

point, area or manoeuvre where a line of traffic is required to join with another line when a lane is discontinued, by either a zip-merge or a lane change

1.4.7

minor road

<1> at an intersection where GIVE WAY or STOP sign control applies, any road where a GIVE WAY or STOP sign faces an approaching driver

<2> at an intersection where the T-intersection rule applies, the terminating road

1.4.8

relevant authority

agency authorised by legislation or regulation to issue determinations, orders, or other instructions in respect of any subject covered by this document

1.4.9

shall

indicates that a statement is mandatory

1.4.10

should

indicates a recommendation

1.4.11 **stopping sight distance** **SSD**

distance, in metres, required to enable a normally alert driver, travelling at the design or operating speed, on wet pavement, to perceive, react and brake to a stop before reaching a hazard on the road ahead

Note 1 to entry: For the purposes of this Standard, unless specified in the text, the design or operating speed is taken to be the 85th percentile speed (see [Clause 1.4.1](#)) of a vehicle approaching the hazard or conflict point.

Note 2 to entry: The values for stopping sight distance corresponding to a particular travel speed is given in the *Austrroads Guide to Road Design, Part 3: Geometric Design*.

1.4.12 **traffic control device**

any sign, signal, pavement marking or other installation placed or erected under authority or direction of the relevant jurisdiction, for the purpose of regulating, warning or guiding road users

1.4.13 **travelled way**

portion of a carriageway ordinarily assigned to moving traffic, exclusive of shoulders, parking lanes, bicycle lanes and medians

1.4.14 **zip-merge**

merging of lines of traffic that does not require any line of traffic to change lanes (i.e. by crossing any lane line or continuity line) to complete the merge

Note 1 to entry: The term zip-merge is synonymous with the term merge in the relevant places in the Australian Road Rules.

1.5 Specification of signs, markings and delineators

For detailed specifications for the materials and manufacture of the signs and devices, and for pavement marking materials specified in this Standard reference shall be made to the following Standards:

- (a) AS 1743
- (b) AS 1744
- (c) AS/NZS 1906 Series
- (d) AS/NZS 2009
- (e) AS 4049 Series

1.6 Responsibility and authority for installation

Responsibility for installing traffic control devices is vested in various state and local government authorities. The installation of new devices or interference with existing ones without authority is an offence. Attention is drawn to the fact that it is necessary to obtain approval of the appropriate authority before installing any traffic control device.

Display of unofficial and non-essential devices by private or commercial organizations shall not be permitted.

It is not possible to prescribe in a Standard all circumstances that arise on a road network. It is important, however, that similar situations be treated in a consistent manner. Any interpretation that falls outside of specific requirements, or any recommendation not applied, for a particular circumstance needs to be based on sound traffic engineering judgment and documented.

1.7 General principles

1.7.1 Basic principles for all traffic control devices

To achieve the purpose for which they are installed, traffic control devices should be used only after engineering studies have indicated the need for them. A device should conform to the following basic principles:

- (a) It should be capable of fulfilling an important need.
- (b) It should command attention.
- (c) It should convey a clear, simple meaning with the minimum number of messages required to obtain the desired response from the driver.
- (d) It should command respect.
- (e) It should be located to give adequate time for response.
- (f) It should not obscure any other traffic control devices.

The failure of a device to fulfil its function may result from —

- (i) inadequate traffic engineering studies;
- (ii) the device conveying the wrong message, or more messages than the driver can comprehend in the reading time available;
- (iii) disregard of weather and physical conditions (such as grades and sight distance), driver psychology, and vehicle limitations;
- (iv) lack of maintenance;
- (v) lack of credibility caused by excessive or inappropriate use of the device;
- (vi) inadequate design of the road facility (traffic control devices cannot overcome deficiencies in geometric design); or
- (vii) placement of the device either too close to other control devices, or too remote from the hazard or place of action, or outside the driver's normal field of view.

It is essential that similar conditions should always be treated with the same type of device so that road users can anticipate the course of action required. The use of a device that is at variance with its use elsewhere is likely to be confusing and may create a potentially hazardous situation.

1.7.2 Specific principles for signs

1.7.2.1 General

Traffic signs are provided to aid the safe and orderly movement of traffic. The signs covered by this Standard contain regulatory requirements and non-regulatory traffic instructions for the road user, warning of hazards that may not be self-evident, and signs delineating hazards.

As uniformity in the design of signs facilitates identification by the road user, the shape and colour of each class of sign shall be in accordance with this Standard and the requirements of AS 1743. This assists the road user in promptly interpreting the message or instruction, which may be either a legend or a symbol, or both.

As signs are an essential part of the road traffic system, their messages should be consistent, their design and placement coordinated with the road geometric design, and their size selected so that they are both conspicuous and legible at required reading distances.

NOTE Guidance on sign size selection is given in [Appendix B](#).

1.7.2.2 Reflectorization and illumination

All signs are intended to convey messages during daylight and darkness and, except where an electronic sign is used (see [Clause 1.7.2.7](#)), shall be either reflectorized or illuminated as given in [Appendix C](#), so that the same message, colours and shapes are displayed under day, low light and night conditions.

1.7.2.3 Installation and location of signs

Requirements and recommendations for the installation and location of signs are given in [Appendix D](#).

1.7.2.4 Non-standard signs and devices

Non-standard traffic signs and devices shall not be used without approval by the relevant authority.

Users should be aware of the powers of the relevant regulatory authorities to control the use of non-standard traffic signs and devices and shall follow any procedures and requirements set out by jurisdictional guidance.

1.7.2.5 Excessive use

The use of regulatory and warning signs should be restricted to the minimum consistent with their particular requirements, as signs can lose their effectiveness if used unnecessarily or too frequently.

Signs that merely repeat the obligation of a Road Rule should be avoided.

1.7.2.6 Safety aspects

As safety of the road user is of major importance in road design and traffic engineering, traffic control devices and any supporting structures should not present a hazard to road users by contributing to the occurrence or severity of crashes.

1.7.2.7 Electronic signs

Some signs listed in this standard may be replaced by an electronic version. The electronic display shall be identical in design and colour to that of the corresponding standard sign as shown in AS 1743, except that —

- (a) signs with two colours may have the colours reversed; and
- (b) signs with more than two colours may have black and white reversed.

Where an electronic version of a regulatory sign applies at all times, it shall not flash, except for the following:

- (i) The GIVE WAY TO PEDESTRIANS (R2-10) sign, for which it is permissible to flash the words of the sign.
- (ii) Signs with a red annulus and a red diagonal bar that operate part time (e.g. No Right Turn (R2-6(R)) sign), where the inner part of the red annulus may flash and the outer part of the red annulus and the red diagonal bar shall remain illuminated and non-flashing.
- (iii) Speed Limit series (R4) signs with a red annulus that operate part time, where the inner part of the red annulus shall flash and the outer part of the red annulus shall remain illuminated and non-flashing. Requirements for the application of variable speed limit signs (VSLS) are given in AS 1742.4.

Electronic signs shall show no message under any conditions of incident sunlight when switched off.

Section 2 Treatments at intersections

2.1 Scope of section

This Section specifies regulatory and warning signs, and other devices for use at intersections and sets out principles for their installation together with typical applications. Requirements for expressway type interchanges including ramp terminal intersections are specified in [Section 3](#).

2.2 Devices used

Signs and devices used at or near intersections comprise the following:

- (a) *Regulatory signs* —
 - Movement series (R1).
 - Direction series (R2).
 - Miscellaneous series (R6).
- (b) *Warning signs* —
 - Intersection series (W2)
 - Advance warning of traffic control device series (W3)
 - Modified intersection series (W9).
- (c) *Guide signs, information signs and route numbering* (G1 to G4, G8) — Refer to AS 1742.15.
- (d) *Traffic Instruction signs* (G9).
- (e) *Pavement markings* — See [Section 5](#).
- (f) *Hazard marker signs* (D1 to D4).

2.3 Movement control, direction control and advance warning

This Section deals with the control of conflicting traffic streams at grade and the regulation of their movement as follows:

(a) *Movement control* — This is achieved by the following measures:

- (i) GIVE WAY sign control, see [Clause 2.5](#).
- (ii) STOP sign control, see [Clause 2.5](#).
- (iii) Roundabout control, see [Clause 2.6](#).
- (iv) Traffic signal control, refer to AS 1742.14.

NOTE GIVE WAY sign control, STOP sign control and roundabout control are NOT a series of hierarchical steps. The use of each is dependent on the geometry of the intersection and in the particular case of STOP sign control, the sight distance available for entering traffic.

(b) *Direction control* — This is required for the control of turning movements, one-way operation and wrong way entry, see [Clause 2.8](#).

(c) *Advance warning* — This is required under certain conditions to warn road users on either the major or minor approach to an intersection of the presence or configuration of the intersection or to give advance warning of intersection traffic control devices, see [Clauses 2.9](#) and [2.10](#).

(d) *Direction signposting* — Refer to AS 1742.15.

2.4 Application of devices

It is not possible to describe in a Standard all circumstances that arise at intersections. This Section deals with the most common arrangements. Where other conditions occur, it is important that similar situations be treated in a consistent manner and that the type of treatment used at a particular intersection is consistent with its function.

2.5 GIVE WAY sign and STOP sign control

2.5.1 General

GIVE WAY (R1-2) signs and STOP (R1-1) signs are used to control traffic at intersections, other than those controlled by roundabouts or traffic signals, by allocating priority to traffic on one of the intersecting roads.

These signs are provided as follows:

- (a) GIVE WAY signs shall be provided at all intersections with four or more legs.
- (b) GIVE WAY signs shall be provided at any three-way intersection where the layout is such that it is not clear if, or how, the T-intersection rule would operate (e.g. at a Y-intersection).
- (c) GIVE WAY signs should be used for road safety reasons at unsignalized T-intersections in both rural and urban areas where the major road is an arterial or collector type road.
- (d) STOP signs shall be provided instead of GIVE WAY signs at items (a), (b) and (c) on any controlled approach where intersection sight distance is limited by a permanent obstruction as determined in accordance with [Clause 2.5.3](#). STOP signs shall not be used where intersection sight distance is adequate for GIVE WAY signs.

In all other cases, GIVE WAY signs are not required if the T-intersection rule operates satisfactorily and there is no requirement for STOP signs due to limited intersection sight distance.

Signs used for give way and stop control are listed in [Table 2.1](#).

Guidance in the selection of the appropriate sign size is given in [Appendix B](#).

Table 2.1 — Signs for give way and stop control

Sign	Sign number	Size, mm	Clause
GIVE WAY	R1-2	A 750 height B 900 height C 1 200 height	2.5.4(a)
STOP	R1-1	A 600 × 600 B 750 × 750 C 900 × 900	2.5.4(b)

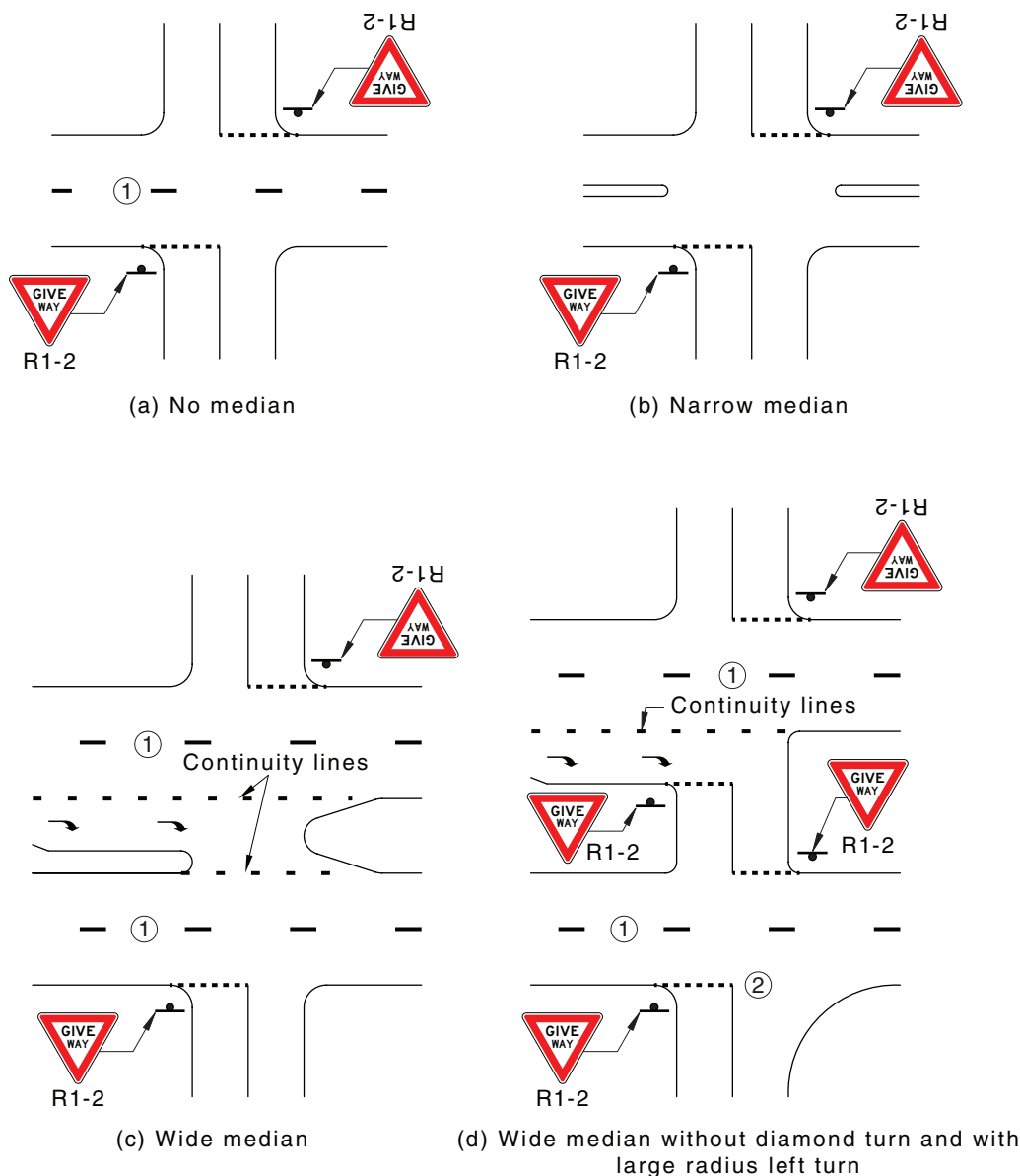
2.5.2 Application

GIVE WAY sign and STOP sign control at an intersection needs to be applied in the simplest manner practicable. This is achieved as follows:

- (a) Except as permitted by [Clause I.4.2](#) (see [Appendix I](#)), every controlled intersection shall have exactly two uncontrolled legs that together form the major road through the intersection.
- (b) The major road through the intersection either —
 - (i) should be on a straight, or substantially straight, alignment; or
 - (ii) if on a curved alignment, should have pavement markings, kerbs or other indications aligned in such a way that its path is clearly defined.

If a simple control pattern cannot be achieved, and alternative treatments (e.g. a roundabout) are not appropriate, the intersection should be modified by means such as construction or relocation of kerbs, provision of median or channelizing islands, widening of the pavement, or a combination of these, so that the path of the major road through the intersection is clearly defined.

The pavement markings used with GIVE WAY signs and STOP signs shall conform to [Clauses 5.5.2, 5.5.3](#) and [Clause 5.5.4](#). [Figure 2.1](#) shows the use of GIVE WAY signs and the associated give way lines on roads of various widths, with and without medians. The use of STOP signs and associated stop lines is similar.



NOTE 1 Any dividing or lane lines on the main road, except double two-way barrier lines, are carried through the intersection, see [Clause 5.3.9](#) (a)(i).

NOTE 2 For the optional use of a continuity line across the right hand side of the approach, see [Clause 5.5.4](#) (b).

Figure 2.1 — Location of GIVE WAY signs and associated pavement markings

2.5.3 Requirements for installation of STOP signs

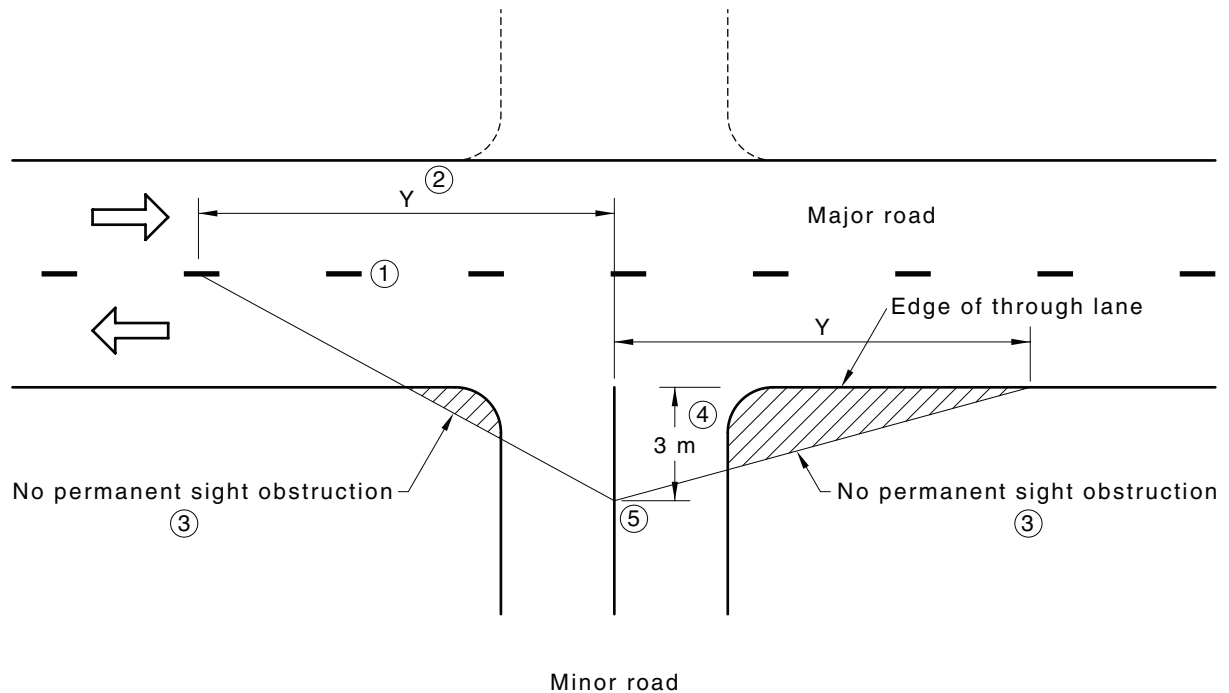
Give way is the usual condition for controlling minor road traffic at an intersection.

A history of crashes may prompt requests for STOP signs. However, where intersection sight distance is adequate, it is most likely that crashes can be reduced more effectively by other means (e.g. by improved delineation of the conflict area). Furthermore, the use of STOP signs where obstructed sight distance is not a factor can lead to poor driver compliance and reduce the credibility of STOP signs. For these reasons, no crash warrant is given for the use of STOP signs.

This Clause specifies sight distance conditions for determining whether a STOP sign is required on any approach to an intersection on which a driver is required to give way to an intersecting traffic stream.

Where these conditions are met a STOP sign shall be used, regardless of whether a GIVE WAY sign would have otherwise been installed.

A STOP sign shall be used when, for minor road traffic, the sight distance Y in either direction along the major or uncontrolled road as shown in [Figure 2.2](#) is less than the distance given for the corresponding major road speed shown in [Table 2.2](#). A STOP sign shall NOT be used if the sight distance is equal to or greater than the value indicated for the relevant speed.



NOTE 1 Dividing line (undivided road) or right hand edge of right hand through lane (divided road).

NOTE 2 A check to the left is required at a divided road except where the median is wide enough for a crossing or turning manoeuvre to be staged in the median.

NOTE 3 Where visibility is limited due to some removable obstruction, (e.g. vegetation or earth bank) attempts should be made to remove the obstruction rather than install a STOP sign. Any isolated, narrow sight obstruction (e.g. a pole) should be ignored.

NOTE 4 Where the minor road approach is an arterial road this dimension should be increased to 4.5 m.

NOTE 5 When checking sight distance, the height of the observer's eye is 1.1 m and the target height is 1.25 m (i.e. the top of a typical light vehicle). Where an obstruction such as safety barrier exists within sight lines, and there is no street lighting, a target height of 0.65 m (i.e. vehicle headlight height) may be used.

Figure 2.2 — Method of assessing sight distance for use of STOP signs

Table 2.2 — Sight distances for use of STOP signs

Major road speed, km/h (see Note 1)	Distance along major road: Y, m (see Note 2)
30	15
40	25
50	30
60	45
70	60
80	70
90	80
100	90
110	120
120	150

NOTE 1 The posted or default speed limit is used, unless the 85th percentile speed is significantly higher.

NOTE 2 The distance value Y along the major road, and the distance along the minor road shown in [Figure 2.2](#) are empirically based. The distances are specific to the warrant for the use of STOP signs and independent of the values for stopping, safe intersection and minimum gap sight distances given in Austroads Guidelines.

2.5.4 Signs for give way and stop control

The following signs are used for give way and stop control:

- (a) *GIVE WAY (R1-2)*



R1-2

The GIVE WAY (R1-2) sign shall be used as indicated in [Clauses 2.5.1](#) and [2.5.2](#).

The GIVE WAY sign shall be positioned on the left side of the roadway, facing approaching traffic and as close as practicable to the edge of the intersecting roadway, consistent with it still being in view for minor road traffic. Where a sign-controlled road intersects at an acute angle, the GIVE WAY sign shall be placed so that its face is not prominently in view of road users on the through roadway.

NOTE Signs within a 10 degree sight triangle to the left or right from the driver's straight ahead line of sight are likely to be in view, see [Appendix B](#).

In the case of two approach lanes at an intersection or limited visibility to the sign on the left side of the roadway, GIVE WAY signs shall be installed on both sides of the roadway facing approaching traffic. Where a median island exists of sufficient width to support clearance to sign edges, the right hand GIVE WAY sign should be installed in the median.

At a left turn slip-lane which requires entering traffic to give way to the intersecting traffic stream, a GIVE WAY sign may be provided. If the slip-lane has an acceleration lane of adequate length to enable traffic to merge, a GIVE WAY sign shall not be used.

Except on unsealed roads, the GIVE WAY sign shall be supplemented with pavement markings as specified in [Clause 5.5.2](#).

(b) *STOP (R1-1)*



R1-1

The STOP (R1-1) sign shall only be used when the requirements of [Clause 2.5.3](#) are met. In all other cases the GIVE WAY (R1-2) sign shall be used as specified in [Clauses 2.5.1](#) and [2.5.4\(a\)](#).

The STOP sign shall be used in the same way and for the same purpose as specified for the GIVE WAY (R1-2) sign but with the additional requirement that a complete stop is necessary for safety before entering the intersection.

STOP signs shall be positioned in the same method specified for GIVE WAY (R1-2) signs, see [Clause 2.5.4\(a\)](#) and, except on unsealed roads, shall be supplemented with pavement markings as specified in [Clause 5.5.3](#).

2.5.5 Advance warning signs for give way and stop control

The use of warning signs in advance of intersection approaches where GIVE WAY (R1-2) signs and STOP (R1-1) signs are installed shall be restricted to the following:

- (a) Except where Item (d) is appropriate, the Give Way Sign Ahead (W3-2) sign shall be used in advance of a GIVE WAY (R1-2) sign in accordance with [Clause 2.10.2](#).
- (b) The Stop Sign Ahead (W3-1) sign shall be used in advance of a STOP (R1-1) sign in accordance with [Clause 2.10.2](#).
- (c) The Cross Road (W2-1) sign or Cross Road on a Curve (W2-15) sign shall not be used on any approach to a GIVE WAY sign or STOP sign.
- (d) Where a T-intersection (W2-3) sign, or T-intersection Beyond a Curve (W2-14) sign is used on the approach to a T-intersection in accordance with [Clauses 2.9.4\(a\)](#) and [2.9.4\(b\)](#), the Give Way Ahead sign is not necessary.

Care is needed to ensure that intersection warning signs, if used, do not draw attention away from, or otherwise reduce the effect of, the GIVE WAY or STOP signs.

2.6 Roundabout control

2.6.1 General

Signs used for roundabout control are listed in [Table 2.3](#).

Guidance in the selection of the appropriate sign size is given in [Appendix B](#).

Table 2.3 — Signs for roundabout control

Sign	Sign number	Size, mm	Clause
Roundabout	R1-3	A 750 height B 900 height	2.6.3(a)

2.6.2 Application

The Roundabout (R1-3) sign is used to control traffic at roundabouts by allocating priority to traffic on the circulating roadway.

Roundabout (R1-3) signs shall be provided at each immediate approach to a roundabout in accordance with [Clause 2.6.3\(a\)](#).

Pavement markings used with the Roundabout (R1-3) sign shall consist of give way lines placed across each approach to a roundabout, see [Clause 5.5.2\(b\)](#).

Exit lines shall be used at multi-lane roundabouts to guide circulating streams of traffic into an exit, see [Clause 5.3.9\(a\)\(vi\)](#).

[Figures 2.8](#) and [2.9](#) show the signs and associated pavement markings used at roundabouts.

2.6.3 Signs for roundabout control

The following sign is used for roundabout control:

Roundabout (R1-3)



R1-3

The Roundabout (R1-3) sign shall be used on the immediate approach to roundabouts to indicate that traffic on the approach must give way to traffic within the roundabout. It shall be installed on all approaches and shall be positioned as near as practicable to the associated give way line at the entry point to the roundabout, see [Clause 5.5.2\(b\)](#). It shall be placed on both sides of the roadway where the approach to the roundabout has two or more lanes.

2.6.4 Advance warning signs and hazard marker signs for roundabouts

The Roundabout Ahead (W2-7) sign shall be used on the approaches to a roundabout where the requirements of [Clause 2.10.3\(c\)](#) are met.

The need for hazard marker signs should also be considered, see [Clause 4.5.7](#).

2.7 Control by traffic signals

For requirements relating to the location and display of traffic signals, and the signs and pavement markings used in conjunction with them, refer to —

- (a) AS 1742.7 for signals at railway crossings;
- (b) AS 1742.10 for mid-block pedestrian operated signals; and
- (c) AS 1742.14 for signals at intersections.

NOTE The GIVE WAY TO PEDESTRIANS (R2-10), U TURN PERMITTED (R2-15) and Hook Turn Only (R2-21) signs are for exclusive use at, or in conjunction with, traffic signals at intersections, refer to AS 1742.14.

2.8 Direction control at intersections

2.8.1 General

Direction control may apply full time or part time or to certain classes, mass or size of vehicles. In these situations, supplementary signs are used with the relevant direction control sign, see [Clause 2.8.6](#).

Signs used for direction control at intersections are listed in [Table 2.4](#).

Guidance in the selection of the appropriate sign size is given in [Appendix B](#).

Table 2.4 — Signs for direction control at intersections

Sign	Sign number	Size, mm	Clause
ONE WAY	R2-2	A 450 × 600 B 600 × 800	2.8.2(a)
KEEP LEFT, KEEP RIGHT	R2-3 (L or R)	A 450 × 600 B 600 × 800	2.8.2(b)
NO ENTRY	R2-4	A 450 × 450 B 600 × 600 C 750 × 750 D 900 × 900	2.8.2(c)
No U Turn	R2-5	A 450 × 450 B 600 × 600 C 750 × 750 D 900 × 900	2.8.4(a)
No Left Turn, No Right Turn	R2-6 (L or R)	A 450 × 450 B 600 × 600 C 750 × 750 D 900 × 900	2.8.4(b)
No Turns	R2-7	A 450 × 600 B 600 × 800	2.8.4(c)
LEFT LANE MUST TURN LEFT, RIGHT LANE MUST TURN RIGHT	R2-9 (L or R)	A 450 × 750 B 600 × 1 000	2.8.5(a)
All Traffic Turn	R2-14	A 600 × 800 B 900 × 1200	2.8.5(a)
NO HOOK TURN BY BICYCLES	R2-22	750 × 750	2.8.5(c)
Time of Operation — Single period	R9-1-1	A 450 × 300 B 600 × 400 C 900 × 600 D 1 200 × 800	2.8.6(a)
Times of Operation — Two periods	R9-1-2	A 450 × 450 B 600 × 600 C 900 × 900 D 1 200 × 1 200	

Table 2.4 (continued)

Sign	Sign number	Size, mm	Clause
BUSES EXCEPTED	R9-2	A 450 × 300 B 600 × 400 C 750 × 500	2.8.6(b)
BICYCLES EXCEPTED	R9-3	A 450 × 300 B 600 × 400 C 750 × 500 D 1 500 × 300	
AUTHORISED VEHICLES EXCEPTED	R9-4	A 450 × 300 B 600 × 400 C 750 × 750	
NEXT x m	R9-6-1	A 750 × 500 B 1000 × 200 C 1200 × 240	2.8.6(d)
NEXT x m	R9-6-2	A 450 × 300 B 600 × 400 C 750 × 500	
NEXT x km	R9-7-1	A 750 × 500 B 1 000 × 200 C 1 200 × 240	
NEXT x km	R9-7-2	A 450 × 300 B 600 × 400 C 750 × 500	
AT ... (street name)	R9-8	A 450 × 450 B 600 × 600 C 900 × 900	
VEHICLES OVER x t GVM	R9-10-1	A 450 × 300 B 600 × 400 C 900 × 600 D 1 200 × 800	2.8.6(c)
VEHICLES OVER x m LONG	R9-11-1	A 450 × 300 B 600 × 400 C 900 × 600 D 1 200 × 800	
VEHICLES OVER x m HIGH	R9-12-1	A 450 × 300 B 600 × 400 C 900 × 600 D 1 200 × 800	
VEHICLES OVER x m WIDE	R9-13-1	A 450 × 300 B 600 × 400 C 900 × 600 D 1 200 × 800	

Table 2.4 (continued)

Sign	Sign number	Size, mm	Clause
OVER x t GVM	R9-10-2	AA 450 × 300 A 600 × 400 B 900 × 600 C 1 200 × 800	2.8.6(c)
OVER x m LONG	R9-11-2	AA 450 × 300 A 600 × 400 B 900 × 600 C 1 200 × 800	
OVER x m HIGH	R9-12-2	AA 450 × 300 A 600 × 400 B 900 × 600 C 1 200 × 800	
OVER x m WIDE	R9-13-2	AA 450 × 300 A 600 × 400 B 900 × 600 C 1 200 × 800	
TO TRAFFIC FROM LEFT	R9-18	900 × 400	2.8.6(e)
Distance x m	G9-78	A 600 × 200 B 900 × 300 C 1200 × 400	2.8.6(d)
SERVICE ROAD ENTRY	G9-71	600 × 750	2.8.7(a)
LEFT TURN FROM SERVICE ROAD ONLY	G9-72	1 200 × 1000	2.8.7(b)

2.8.2 Signs for the restriction of travel direction

The following signs are used for restriction of travel direction:

- (a) *ONE WAY* (R2-2) (L or R)



R2-2(L)



R2-2(R)

The ONE WAY (R2-2) sign restricts vehicular traffic to travelling in one direction on a roadway.

On a one-way road a ONE WAY sign shall be located at the beginning of the road to face entering traffic and shall likewise be provided at intermediate intersections.

At each intersection on a divided road with a kerbed median, where there is no median break, a ONE WAY sign shall be located on the median opposite the side road, unless a left turn pavement arrow or an All Traffic Turn Left (R2-14(L)) sign is installed on the side road.

In both cases, a ONE WAY sign may also be provided opposite significant intermediate access points (e.g. major car parks or commercial developments).

NOTE 1 Other devices such as turn prohibition signs and pavement arrows typically supplement the use of ONE WAY signs on one-way roads.

Where a one-way road terminates, and also where it crosses another road, NO ENTRY (R2-4) signs (see Item (c)), shall be used to prevent movements in the prohibited direction.

A ONE WAY (Repeater) (R2-17) sign may be used on a one-way road away from the approach to an intersection in accordance with [Clause 4.12.2\(b\)](#).

Supplementary signs may be used in conjunction with the ONE WAY sign (e.g. Exception), see [Clause 2.8.6\(b\)](#).

(b) *KEEP LEFT and KEEP RIGHT (R2-3) (L or R)*



R2-3(L)



R2-3(R)

Except as set out below, a KEEP LEFT (R2-3(L)) sign or KEEP RIGHT (R2-3(R)) sign shall be used near the start of a median island or similar device where traffic can physically pass on either side, but it is necessary for all traffic on the particular approach to pass it on one side only.

These signs need not be provided if it is readily apparent under all normally encountered conditions that drivers should keep to the left or right of the obstruction (e.g. on traffic islands within a continuous median treatment or where other signs such as Unidirectional Hazard Marker signs are provided).

NOTE 2 Road Rules include general provisions to keep as far left as practicable.

The sign should be positioned —

- (i) when approached longitudinally, 2 to 8 m from the approach end of the island or median on which it is located;
- (ii) when approached at right angles by a right turning vehicle, 600 mm minimum from the end of the island or median and partially rotated towards that approaching vehicle.

Supplementary signs may be used in conjunction with the KEEP LEFT or KEEP RIGHT sign (e.g. Exception, Mass or size restriction), see [Clauses 2.8.6\(b\)](#) and [2.8.6\(c\)](#).

(c) *NO ENTRY (R2-4)*



R2-4

The NO ENTRY (R2-4) sign shall be used at the termination of a one-way road to prohibit access from the wrong direction.

At one-way road exits, at least one NO ENTRY sign shall be erected at the intersection facing in the opposite direction to the one-way flow. It may need to be located a short distance into the one-way road if there is a possibility of drivers becoming confused as to which road is closed to entry. If one sign at the one-way road exit is not readily visible to all potential wrong-way

approaches, NO ENTRY signs should be placed on both sides of the exit. Some signs may have to be set at an angle to achieve this purpose.

The sign may also be required to prohibit wrong way movement through a left turn slip lane. A KEEP LEFT (R2-3) sign shall not be used for this purpose.

At channelized intersections, signs such as KEEP LEFT (R2-3), which give positive instructions, are preferable to NO ENTRY signs.

Supplementary signs may be used in conjunction with the NO ENTRY sign (e.g. Part time operation, Exception, Mass or size restriction), see [Clauses 2.8.6\(a\)](#), [2.8.6\(b\)](#) and [2.8.6\(c\)](#).

2.8.3 Application of turn prohibition signs

Full time turn prohibitions are normally used for one or more of the following reasons:

- (a) To prohibit wrong-way movements at an intersection where one or more legs carry one-way traffic into the intersection. ONE WAY (R2-2) signs or NO ENTRY (R2-4) signs or both will usually be required in addition to the signs in this instance.
- (b) To prevent hazardous or congested traffic conditions that would result if the turn were permitted.

Part time turn prohibitions are normally used where turns during peak periods cannot be tolerated.

2.8.4 Signs for the prohibition of turns

The following signs are used for prohibition of turns.

- (a) *No U Turn (R2-5)*



R2-5

Where there is a No Right Turn (R2-6(R)) sign, a No U Turn sign is usually not required because the R2-6(R) sign also prohibits U turns. Otherwise the No U Turn (R2-5) sign shall be used where vehicles are prohibited from making a turn to reverse the direction of travel. Where state regulations prohibit a U Turn at traffic signals, the No U Turn (R2-5) sign shall not be used at signalized intersections.

Supplementary signs may be used in conjunction with the NO U Turn sign (e.g. Part time operation, Exception, Mass or size restriction, Distance or location), see [Clauses 2.8.6\(a\)](#), [2.8.6\(b\)](#), [2.8.6\(c\)](#) and [2.8.6\(d\)](#).

(b) *No Left Turn and No Right Turn (R2-6) (L and R)*

R2-6(L)



R2-6(R)

The No Left Turn (R2-6(L)) sign or the No Right Turn (R2-6(R)) sign shall be used at intersections where vehicles are prohibited from making a turn to the left or right.

Supplementary signs may be used in conjunction with the No Left Turn or No Right Turn sign (e.g. Part time operation, Exception, Mass or size restriction, Distance or location), see [Clauses 2.8.6\(a\)](#), [2.8.6\(b\)](#), [2.8.6\(c\)](#) and [2.8.6\(d\)](#).

NOTE The No Right Turn (R2-6(R)) sign also prohibits U turns.

(c) *No Turns (R2-7)*

R2-7

The No Turns (R2-7) sign shall be used at intersections where vehicles are prohibited from making turns of any description.

This sign shall not be used to indicate that a street or road is one-way. The ONE WAY (Repeater) (R2-17) sign, see [Clause 4.12.2\(b\)](#), is used for this purpose.

Supplementary signs may be used in conjunction with the No Turn sign (e.g. Part time operation, Exception, Mass or size restriction, Distance or location), see [Clauses 2.8.6\(a\)](#), [2.8.6\(b\)](#), [2.8.6\(c\)](#) and [2.8.6\(d\)](#).

2.8.5 Signs for specific turn control

The following signs are used for specific turn control:

(a) *LEFT LANE MUST TURN LEFT and RIGHT LANE MUST TURN RIGHT (R2-9) (L and R)*

R2-9(L)



R2-9(R)

The LEFT LANE MUST TURN LEFT (R2-9(L)) sign and RIGHT LANE MUST TURN RIGHT (R2-9(R)) sign may be used alongside a marked lane which is reserved exclusively for vehicles turning left or right at the next intersection.

The sign is especially useful in conditions where the volume of turning traffic is so great that pavement arrows and other markings are frequently obscured by vehicles ahead.

Where it is desired to advise drivers in advance of an intersection that a lane becomes an exclusive turn lane at a second or subsequent intersection a distance or location supplementary sign (see [Clause 2.8.6\(d\)](#)), indicating the intersection to which the sign applies, may be mounted below this sign.

Where a more complex series of turning indications is required in advance of an intersection, the Advance lane designation (G9-42 or G9-43) sign, should be considered, refer to AS 1742.15.

(b) *All Traffic Turn (R2-14) (L and R)*



R2-14(L)



R2-14(R)

The All Traffic Turn (R2-14) sign may be used at intersections where all approaching traffic on the roadway must turn in the direction indicated by the arrow.

NOTE The All Traffic Turn sign applies to traffic in all lanes.

(c) *NO HOOK TURN BY BICYCLES (R2-22)*



R2-22

The NO HOOK TURN BY BICYCLES (R2-22) sign shall be used in advance of any intersection where a hook turn by cyclists might be contemplated but is to be prohibited in the particular case.

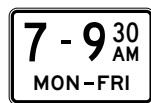
2.8.6 Supplementary signs

Where it is necessary to impose a regulatory control only at certain times, or to permit certain classes of vehicle to pass a regulatory control sign or to only restrict vehicles over a specified mass or size from passing a regulatory control sign, it shall be effected by adding a supplementary sign below the associated regulatory sign.

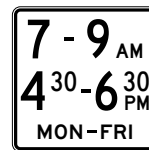
The following signs shall be used:

(a) *Part time operation signs*

Times of Operation – Single Period (R9-1-1), Times of Operation – Two Periods (R9-1-2)



R9-1-1



R9-1-2

Part time operation signs shall be used with regulatory signs where the control is to only apply at specific times.

The sign shall be mounted below the associated sign and match it in width.

An electronic sign (see [Clause 1.7.2.7](#)) is preferable for the part time operation of a regulatory control.

NOTE 1 It will be necessary to indicate AM or PM with the commencing time of operation only if one time is before noon and the other, after.

(b) *Exception signs*

BUSES EXCEPTED (R9-2), BICYCLES EXCEPTED (R9-3), AUTHORISED VEHICLES EXCEPTED (R9 4)



R9-2



R9-3



R9-4

Exception signs shall be used with regulatory signs where the named classes of traffic are to be exempted from the control.

The sign shall be mounted below the associated sign and match it in width.

Signs other than those listed may be used where permitted by jurisdictional guidance.

(c) *Mass and size restriction signs*

VEHICLES OVER x t GVM (R9-10-1), VEHICLES OVER x m LONG (R9-11-1), VEHICLES OVER x m HIGH (R9-12-1), VEHICLES OVER x m WIDE (R9-13-1), OVER x t GVM (R9-10-2), OVER x m LONG (R9-11-2), OVER x m HIGH (R9-12-2), OVER x m WIDE (R9-13-2)



R9-10-1



R9-11-1



R9-12-1



R9-13-1



R9-10-2



R9-11-2



R9-12-2



R9-13-2

Mass or size restriction signs shall be used with regulatory signs where the control only need apply to vehicles over a specified mass, length, height or width.

The sign shall be mounted below the associated sign and match it in width.

NOTE 2 Use of these signs will necessarily mean the corresponding regulatory sign does not apply to vehicles of, or under, the specified mass or size.

The R9-10-1, R9-11-1, R9-12-1 and R9-13-1 signs are used where the corresponding regulatory sign (e.g. NO ENTRY, No Left Turn, No Right Turn) would otherwise apply to all vehicle classes.

The R9-10-2, R9-11-2, R9-12-2 and R9-13-2 signs are used with regulatory signs specific to a vehicle class, such as the Trucks Prohibited (R6-10-2) sign. Refer to AS 1742.12.

(d) *Distance and location signs*

NEXT x m (R9-6 Series), NEXT x km (R9-7 Series), AT (street name) (R9-8), Distance x m (G9-78)



R9-6-1



R9-6-2



R9-7-1



R9-7-2



R9-8



G9-78

Distance and location signs shall be used with regulatory signs to indicate the extent or location of a prohibition or restriction when it applies at locations other than the immediate sign position.

The sign shall be mounted below the associated sign and match it in width.

(e) *Other supplementary signs*

TO TRAFFIC FROM LEFT (R9-18)



R9-18

The TO TRAFFIC FROM LEFT (R9-18) sign shall only be used with the GIVE WAY (R1-2) sign and its use shall be limited to the application permitted in [Appendix I](#).

2.8.7 Signs for other direction instruction

The following signs are used for other direction instruction:

(a) *SERVICE ROAD ENTRY (G9-71),*



G9-71

The SERVICE ROAD ENTRY (G9-71) sign shall be used at an outer separator opening to indicate a point of entry into a service road that cannot otherwise be readily seen by an approaching driver. Where the service road entry provides access to side streets off the service road, the (name) ST VIA SERVICE ROAD (G5-11) sign (refer to AS 1742.5) should be used instead.

(b) *LEFT TURN FROM SERVICE ROAD ONLY (G9-72)*



G9-72

The LEFT TURN FROM SERVICE ROAD ONLY (G9-72) sign shall be used to give advance warning of an outer separator opening in advance of an intersection that must be used to make a left turn at the intersection (e.g. as illustrated in [Figure 2.7](#)).

2.9 Advance warning of intersections

2.9.1 General

Signs that may be used in advance of intersections are listed in [Table 2.5](#).

Guidance in the selection of the appropriate sign size is given in [Appendix B](#).

Where it is necessary to emphasize the warning of a particularly hazardous situation, an enhanced warning sign treatment as described in [Appendix E](#), may be considered.

Table 2.5 — Signs for advance warning of intersections

Sign	Sign number	Size, mm	Clause
Cross Road	W2-1	A 600 × 600	2.9.3(a)
T-intersection	W2-3	B 750 × 750	2.9.4(a)
Side Road Intersection	W2-4 (L or R)	C 900 × 900	2.9.5(a)
Staggered Side Road Intersection	W2-8 (L or R)	D 1 200 × 1 200	2.9.6(a)
Side Road Intersection on a Curve			2.9.5(b)
Outside	W2-9 (L or R)		2.9.6(b)
Inside	W2-10 (L or R)		
Staggered Side Road Intersections on a Curve	W2-11 (L or R) W2-12 (L or R)		
Successive Side Road Intersections on a Straight	W2-13 (L or R)		2.9.6(c)
			2.9.4(b)
T-intersection Beyond a Curve	W2-14 (L or R)		
Cross Road on a Curve	W2-15 (L or R)		2.9.3(b)
Side Road Intersection on a Curve (side road on a straight alignment)	W2-16 (L or R)		2.9.5(c)
Merging Traffic	W5-34 (L or R)		2.9.8
Added Lane	W5-35 (L or R)	See Table 3.2	2.9.8
CONCEALED DRIVEWAY	W5-55-1	A 600 × 600	2.9.9
CONCEALED DRIVEWAYS	W5-55-2	B 750 × 750	
ADDED LANE	W5-36	See Table 3.2	2.9.8
Modified T-Intersection	W9-1 (L or R) W9-2 (L or R) W9-3 (L or R)	A 600 × 600 B 750 × 750 C 900 × 900	2.9.7(a)
GIVE WAY IF GOING STRAIGHT AHEAD	R9-19	A 750 × 625 B 900 × 750 C 1050 × 875	2.9.7(b)

2.9.2 Application

Warning signs in this series should be provided in advance of an intersection where sight distance along the main road to a vehicle about to enter from the side road is less than the required stopping sight distance value for the corresponding travel speed on the main road. They may also be required where an unusual intersection layout is not readily discernible by an approaching driver.

They shall not be used where direction signs, other devices or geometric cues give sufficient information to approaching drivers about the layout, importance or existence of the intersection.

It is preferable to implement engineering changes to achieve the required stopping sight distance rather than to rely on intersection warning signs.

The intersection warning signs shown in [Clauses 2.9.3, 2.9.4](#) and [2.9.5\(a\)](#) and [2.9.5\(b\)](#) are expected to meet most requirements for warning of intersections in accordance with this Clause.

However, there may arise unusual situations such as an intersection on a curve where it is essential to include the curve in the warning message, or a staggered intersection where two successive side roads enter on a curve or from the same side of the road, or a modified intersection (see [Clause 2.9.7](#)) where the two uncontrolled legs are not in reasonable prolongation of one another. Where such signs are required, they shall be limited to those specified in [Clauses 2.9.5\(c\), 2.9.5\(d\)](#) and [2.9.5\(e\), 2.9.6](#) and [2.9.7](#) and shall be used in accordance with [Table 2.6](#).

Signs in this series show only one or two intersecting legs. Where more complex intersection layouts require signing, a diagrammatic direction (G1-3) sign should be considered, or sections of the intersection signposted separately, refer to AS 1742.15

Furthermore, side roads are shown only at right angles to the main road as it is considered unnecessary and possibly confusing to alter symbols when side roads enter at other angles.

The requirements upon which the uses specified in [Table 2.6](#) are based, are as follows:

- (a) If an intersection requires warning on the through road in accordance with this Clause and is on a curve, not necessarily substandard, signs of the type W2-9, W2-10, W2-11, W2-12, W2-15 and W2-16 shall be used in accordance with [Clauses 2.9.5\(b\), 2.9.6\(b\), 2.9.3\(b\)](#) and [2.9.5\(c\)](#).
- (b) If a curve requires warning (e.g. because it is substandard), and there are intersections on the curve, signs in the W2 Series (see [Clause 4.3.5](#)), with advisory speed signs shall be used.

NOTE Sign symbols in the W1 Series other than the W1-3 curve warning sign cannot be used as a basis for a multi-purpose curve/intersection warning sign symbol.
- (c) In either of the above cases, if the curve is substandard, the advisory speed sign shall be used, see [Clause 4.3.4](#).

Table 2.6 — Use of curve warning signs at intersections

Type of curve, bend or corner	On the major road				On the side road approach to a major road
	Where intersection warning is warranted (see Clause 2.9.2)		Where intersection warning is not warranted		
Where curve is substandard (see Clause 4.3.1)	W2-9	With advisory speed sign	W1-1	With advisory speed sign (W1 Series signs are shown in Clause 4.3.5)	W2-14
	W2-10		W1-2		
	W2-11		W1-3		
	W2-12		W1-4		
	W2-15		W1-5		
	W2-16		W1-7		
Where curve is not substandard but the road is obviously curved	W2-9		Warning signs are not usually required (see Clause 4.3.5(c))		W2-14
	W2-10				
	W2-11				
	W2-12				
	W2-15				
	W2-16				
On a road that is straight or with a minor curve only	W2-1		Warning signs are not required		W2-3 if warranted
	W2-4				
	W2-8				
	W2-13				
Where the priority road goes around the corner at an intersection	W9-1		In very low speed streets, warning signs may not be required		Not applicable (see Clause 2.10.3(a) and (b))
	W9-2				
	W9-3				

2.9.3 Signs (on the major road) for warning of a cross road intersection

The following signs are used on the major road for warning of a cross road intersection:

- (a) *Cross Road (W2-1)*



W2-1

The Cross Road (W2-1) sign shall be used where warranted in accordance with [Clause 2.9.2](#) in advance of an intersection where roads cross at a common point on a straight alignment.

This sign shall not be used on any approach controlled by a GIVE WAY (R1-2) sign or STOP (R1-1) sign, see [Clauses 2.10.3\(a\)](#) and [2.10.3\(b\)](#).

- (b) *Cross Road on a Curve (W2-15) (L and R)*



W2-15(L)



W2-15(R)

The Cross Road on a Curve (W2-15) sign shall be used where warranted in accordance with [Clause 2.9.2](#) in advance of an intersection where roads cross at a common point on a curved alignment.

This sign shall not be used on any approach controlled by a GIVE WAY (R1-2) sign or STOP (R1-1) sign, see [Clause 2.10.3\(a\)](#) and [2.10.3\(b\)](#).

For use of this sign at substandard curves, see [Clause 4.3.5\(c\)](#).

2.9.4 Signs (on the minor road) for warning of a T-intersection

The following signs are used on the minor road for warning of a T-intersection:

- (a) *T-intersection (W2-3)*



W2-3

The T-intersection (W2-3) sign may be used on a minor road approaching a T-intersection with a major road.

It is not normally required on an approach controlled by a STOP (R1-1) sign. In such cases, the Stop Sign Ahead (W3-1) sign shall be used in accordance with [Clause 2.10.3\(b\)](#). However, it should be used if the T-intersection occurs unexpectedly (e.g. just beyond a crest). In this case, the T-intersection sign shall precede the Stop Sign Ahead sign.

Where the T-intersection is controlled by a GIVE WAY (R1-2) sign, the use of the Give Way Sign Ahead (W3-2) sign is not necessary in addition to this sign, see [Clause 2.5.5\(d\)](#).

This sign shall not be used if either of the continuing legs of the T is controlled by a GIVE WAY or STOP sign. A Modified Intersection (W9-2) sign in accordance with [Clause 2.9.7\(a\)](#) may be required in such cases.

(b) *T-intersection Beyond a Curve (W2-14) (L and R)*



W2-14(L)



W2-14(R)

The T-intersection Beyond a Curve (W2-14) sign shall be used where a T-intersection occurs just beyond a curve and a driver may not have adequate time to react to the presence of the T-intersection, and where a curve warning sign alone may mislead a driver as to the closeness of the T-intersection to the curve.

The Advisory Speed (W8-2) sign shall not be used with this sign.

Where the T-intersection is controlled by a GIVE WAY (R1-2) sign, the use of the Give Way Sign Ahead (W3-2) sign is not necessary in conjunction with this sign, see [Clause 2.5.5\(d\)](#).

On an approach controlled by a STOP (R1-1) sign, the Stop Sign Ahead (W3-1) shall also be used in conjunction with this sign in accordance with [Clause 2.10.3\(b\)](#). In this case, the T-intersection Beyond a Curve sign shall precede the Stop Sign Ahead sign.

2.9.5 Signs (on the major road) for warning of a side road intersection

The following signs are used on the major road for warning of a side road intersection:

(a) *Side Road Intersection (W2-4) (L and R)*



W2-4(L)



W2-4(R)

The Side Road Intersection (W2-4) sign shall be used where warranted in accordance with [Clause 2.9.2](#) in advance of a side road intersection where the side road forms the stem of the T.

- (b) *Side Road Intersection on a Curve — Outside (W2-9) (L and R) and Side Road Intersection on a Curve — Inside (W2-10) (L and R)*



W2-9(L)



W2-9(R)



W2-10(L)



W2-10(R)

The Side Road Intersection on a Curve — Outside (W2-9) sign and Side Road Intersection on a Curve — Inside (W2-10) sign apply where a side road intersection occurs on a curve and the existence of the curve contributes to the magnitude of the hazard.

See [Clause 4.3.5\(c\)](#) regarding use of these signs at substandard curves.

- (c) *Side Road Intersection on a Curve (side road on straight alignment) (W2-16) (L and R)*



W2-16(L)



W2-16(R)

The Side Road Intersection on a Curve (side road on straight alignment) (W2-16) sign applies to situations where the road curves but a minor road continues on straight alignment. The right-hand version W2-16(R) should be used where a driver may be confused about which is the continuing major road. The left-hand version W2-16(L) shall be used at all applicable intersections as set out in [Appendix I](#) and shall always be used in conjunction with the GIVE WAY IF GOING STRAIGHT AHEAD (R9-19) sign, see [Clause 2.9.7\(b\)](#).

See [Clause 4.3.5\(c\)](#) regarding use of these signs at substandard curves.

2.9.6 Signs (on the major road) for warning of staggered and successive side road intersections

The following signs are used on the major road for warning of staggered and successive side road intersections:

(a) *Staggered Side Road Intersection (W2-8) (L and R)*



W2-8(L)



W2-8(R)

The Staggered Side Road Intersection (W2-8) sign shall be used in advance of a pair of intersections that occur other than at a common point on a straight alignment, and that both require advance warning in accordance with [Clause 2.9.2](#), but are not far enough apart to be each signposted separately. The number of side roads shown on any one symbol shall be limited to two.

(b) *Staggered Side Road Intersections on a Curve (W2-11) (L and R) and (W2-12) (L and R)*



W2-11(L)



W2-11(R)



W2-12(L)



W2-12(R)

The Staggered Side Road Intersections on a Curve (W2-11 and W2-12) signs shall be used in advance of a pair of intersections that occur other than at a common point on a curved alignment, and that both require advance warning in accordance with [Clause 2.9.2](#), but are not far enough apart to be each signposted separately, and the existence of the curve contributes to the magnitude of the hazard. The number of side roads shown on any one symbol shall be limited to two.

See [Clause 4.3.5\(c\)](#) regarding use of signs W2-11 and W2-12 at substandard curves.

(c) *Successive Side Road Intersections on a Straight (W2-13) (L and R)*

W2-13(L)



W2-13(R)

The Successive Side Road Intersections on a Straight (W2-13) sign shall be used, where two side road intersections on the same side occur in close succession and both meet the requirements of [Clause 2.9.2](#). It may also be used if the second intersection alone warrants the warning. The number of side roads shown on any one symbol shall be limited to two.

2.9.7 Signs (on the major road) for warning of a modified intersection

The following signs are used on the major road for warning of a modified intersection:

(a) *Modified Intersection (W9-1, W9-2 and W9-3) (L and R)*

W9-1(L)



W9-1(R)



W9-2(L)



W9-2(R)



W9-3(L)



W9-3(R)

Where an intersection has been modified so that the major route turns through the intersection, the Modified Intersection (W9-1, W9-2 or W9-3) sign as appropriate, with reduced width elements for the side road or roads, may be used. These signs should only be used where the major road turn is not apparent in time to be properly and safely appreciated by a driver before the intersection is reached.

Advisory speed signs should not be used with these signs except where there is a high speed approach to the turn.

The requirements and recommendations for the use of W9-1(L) and W9-3(L) signs are given in [Appendix I](#), including where the W9-1(L) sign is used in conjunction with the GIVE WAY IF GOING STRAIGHT AHEAD (R9-19) sign, see Item (b).

(b) *GIVE WAY IF GOING STRAIGHT AHEAD (R9-19)*



R9-19

The GIVE WAY IF GOING STRAIGHT AHEAD (R9-19) sign shall only be used in conjunction with the W2-16(L) sign or the W9-1(L) sign and it shall be limited in its use to the applications permitted in [Appendix I](#), and in particular [Clause I.4](#).

NOTE Use of this sign is an interim treatment, see [Appendix I](#).

2.9.8 Signs for warning of merges and added lanes from intersections

Where two streams of traffic from separate roadways are required to merge (e.g. at a low angle slip-lane), or where a slip-lane joins a roadway and continues as a parallel lane without merging with another lane, signs in the Intersection series (W2) or Modified intersection series (W9) shall not be used.

In these cases, either the Merging Traffic (W5-34) sign or Added Lane (W5-35) and ADDED LANE (W8-26) sign assembly shall be used in accordance with the requirements for expressway entry ramps given in [Clause 3.5.3\(a\) and \(b\)](#).

2.9.9 Signs for warning of private driveways

Signs in the Intersection series (W2) or the Modified intersection series (W9) shall not be used to provide advance warning of private property driveways.

In these cases the following signs apply:

(a) *CONCEALED DRIVEWAY (W5-55-1) and CONCEALED DRIVEWAYS (W5-55-2)*



W5-55-1



W5-55-2

The CONCEALED DRIVEWAY (W5-55-1) sign may be used on approach to a single private property driveway where a vehicle entering or leaving a road from, or into, the driveway cannot be seen by a driver approaching the driveway for a distance less than the stopping sight distance for the corresponding 85th percentile speed of approaching traffic.

It shall not be used where other measures (e.g. removal or restriction of on-street parking, turn restrictions, removal of vegetation, sight benching, property fence adjustment or

relocation of the access) can be practically undertaken to resolve the sight distance restriction to and from the driveway.

Where the site distance restriction applies to only one approach direction to the driveway, a corresponding sign on the other approach shall not be provided.

The Distance x m (W8-5) sign (see [Clause 4.11.9\(c\)](#)) may be used with the W5-55-1 sign where it is desirable to give additional indication of the driveway location.

The CONCEALED DRIVEWAYS (W5-55-2) sign may be used where there are a number of private property driveways over a length of road that all meet the requirements for CONCEALED DRIVEWAY signs but are too closely spaced to sign individually. Either the NEXT x km (W8-17-1) sign or NEXT x m (W8-17-2) sign (see [Clause 4.11.9\(c\)](#) and (d)) shall be used in conjunction with this sign to indicate the extent of the driveways it applies to. It is recommended that the maximum length of road covered by a W5-55-2 and W8-17-1, or W8-17-2, sign assembly is 2 km.

Use of these signs may be subject to further requirements and limitations set out by jurisdictional guidance.

2.10 Advance warning of intersection traffic control devices

2.10.1 General

Signs that may be used in advance of intersection traffic control devices are listed in [Table 2.7](#).

Guidance in the selection of the appropriate sign size is given in [Appendix B](#).

Where it is necessary to emphasize the warning of a particularly hazardous situation, an enhanced warning sign treatment, as described in [Appendix E](#), may be considered.

Table 2.7 — Signs for advance warning of intersection control devices

Sign	Sign number	Size, mm	Clause
Roundabout Ahead	W2-7	A 600 × 600	2.10.3(c)
Give Way Sign Ahead	W3-2	B 750 × 750	2.10.3(a)
Stop Sign Ahead	W3-1	C 900 × 900	2.10.3(b)
Signals Ahead	W3-3-1	D 1 200 × 1 200	2.10.3(d)
Signals Ahead (FYG)	W3-3-2		2.10.3(d)
PREPARE TO STOP	W8-27	A 750 × 375	2.10.3(d)
		B 900 × 450	
		C 1 200 × 600	

2.10.2 Application

Warning signs listed in [Table 2.7](#) may be provided in advance of an intersection traffic control device where -

- (a) the stopping sight distance along the approach road to the traffic control device is less than the required value for the corresponding 85th percentile speed of approaching traffic; or
- (b) the presence of the traffic control device is not readily apparent, or is unexpected to an approaching driver; or
- (c) high approach speeds require advance warning; or
- (d) there is a demonstrated lack of compliance with GIVE WAY (R1-2) or STOP (R1-1) signs.

2.10.3 Signs for advance warning of intersection traffic control devices

The following signs are used for advance warning of intersection traffic control devices:

- (a) *Give Way Sign Ahead (W3-2)*



W3-2

The Give Way Sign Ahead (W3-2) sign shall be restricted to use in advance of a GIVE WAY (R1-2) sign (see [Clause 2.5.5\(a\)](#)) in accordance with the requirements of [Clause 2.10.2](#).

The sign is not necessary on the terminating road approach to a T-intersection where a T-intersection (W2-3) sign or T-intersection Beyond a Curve (W2-14) sign (see [Clause 2.9.4\(a\)](#) and (b)) has been used, also see [Clause 2.5.5\(d\)](#).

- (b) *Stop Sign Ahead (W3-1)*



W3-1

The Stop Sign Ahead (W3-1) sign shall be restricted to use in advance of a STOP (R1-1) sign (see [Clause 2.5.5\(b\)](#)) in accordance with the requirements of [Clause 2.10.2](#).

- (c) *Roundabout Ahead (W2-7)*

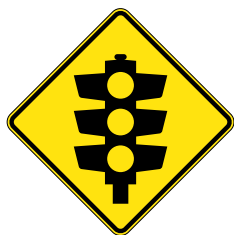


W2-7

The Roundabout Ahead (W2-7) sign is for use on any one or all of the approaches to a roundabout in accordance with the requirements of [Clause 2.10.2](#).

It shall not be used where a diagrammatic Advance Direction (G1-5 or G9-88) sign is provided on the approach, refer to AS 1742.15.

(d) *Signals Ahead (W3-3-1), Signals Ahead (FYG) (W3-3-2), PREPARE TO STOP (W8-27)*



W3-3-1



W3-3-2



W8-27

For use of these signs, refer to AS 1742.14.

Signs in the Intersection series (W2) or Modified intersection series (W9) shall not be used on the approach to traffic signals.

2.11 Pavement markings at intersections

Pavement markings supplement the devices specified in this Section and may also impose regulatory controls. At complex intersections, channelizing islands also supplement the devices by directing traffic into the correct path for the route selected.

A system of clear and effective pavement markings is essential for the proper guidance and control of vehicles and pedestrians at intersections.

Detailed descriptions of the various types of pavement markings together with requirements and guidelines for their use are given in [Section 5](#).

2.12 Hazard marker signs and other devices

2.12.1 Hazard marker signs

Hazard marker signs may be used to highlight the start of a channelizing island, median or separator, and on the central island of a roundabout to indicate vehicle paths past or around them, see [Clause 4.5.7](#).

2.12.2 Sight boards

Sight boards comprising two Unidirectional Hazard Marker (D4-1-1) signs end to end as shown in [Figure 2.3](#), may be erected to face the stem of a T-intersection where approach speeds are high on the terminating leg, and where standard intersection signposting would not provide sufficient warning of the intersection. Typical sizes range from 4 000 mm × 400 mm to 6 000 mm × 600 mm and may be varied outside this range if necessary to suit visibility requirements. The Bidirectional Hazard Marker (D4-2-3) sign, excluding size AA (see [Clause 4.5.7.2\(b\)](#)), may be more appropriate where a sight board is required at a low-speed approach. However, as this sign is typically used to delineate obstructions that can be driven past, its use as a sight board should only be considered where the surfaces around it are illuminated at night or the terminating road is controlled by a GIVE WAY sign or STOP sign.

Sight boards may not be necessary where Intersection Direction signs or Fingerboards are present, refer to AS 1742.15. Where used in conjunction with directional signs, sight boards shall be mounted below the Intersection Direction or Fingerboard signs.



Figure 2.3 — Sight board

A single Unidirectional Hazard Marker sign may be used on the far side of a T-intersection on a divided road with a wide median.

NOTE The potential for end on impacts to signs installed parallel with the traffic direction needs to be considered, see [Clause D.2.1](#).

2.12.3 Kerb markings

Guidance on the use of kerb markings is given in [Clause 5.5.7](#).

2.12.4 Pavement bars and markings

Pavement bars may be used to control movement and discourage vehicle encroachment on certain areas of the pavement at an intersection in place of raised or painted islands.

Guidance on the layout of islands and medians formed from pavement bars is given in [Clause 5.10](#).

2.13 Typical arrangement diagrams for intersections

The signing and marking treatments for the various intersection types illustrated in [Figures 2.4 to 2.11](#) are typical only, the layout of a particular intersection may require reference to two or more figures to obtain a suitable guide for a composite treatment.

NOTE These Figures show direction sign examples and locations for context only. For direction sign treatments at these intersection layout examples, refer to AS 1742.15.

The precise layout of pavement markings should be adjusted to suit the design of the intersection, and positioning of signs and the need for additional signs or delineating devices may be affected by variations in the layouts, particularly where there are curves or crests on any approach.

Signs at or in the vicinity of intersections should always be coordinated with other street furniture to ensure that —

- (a) intersection sight distance at critical locations is not affected;
- (b) the signs themselves are not obscured by other street furniture;
- (c) where practical, common posts or supports are used so that sign clutter is reduced to a minimum; and
- (d) signs and supports are located sufficiently clear of kerbs to avoid being struck by turning vehicles, especially cyclists and high vehicles.

This is particularly important in urban areas where signs may need to be carefully placed with respect to traffic signals, lighting columns, electricity distribution poles and trees.

2.14 Typical arrangement diagrams

The notes for [Figures 2.4 to 2.11](#) do not fit within the available space. Refer to the following notes for the appropriate figure:

- (a) [Figure 2.4](#)

NOTE 1 Barrier lines and island outline markings may be augmented with retroreflective raised pavement markers (RRPMs), see [Clause 5.9.5.2](#).

NOTE 2 Barrier lines are extended if sight conditions on any approach so require, see [Clause 5.3.3](#).

NOTE 3 Where the route is not edge lined continuously and edge lines are provided through the intersection they should be continued to the end of approach barrier line.

NOTE 4 A part of the parallel portion of the turning lane is typically bounded by a single unbroken line for control of traffic using the turning lane, or for better delineation of the adjacent through lane, see [Clause 5.3.9\(a\)\(iv\)](#).

NOTE 5 The GIVE WAY (R1-2) sign may be repeated on the median island if visibility to the left hand sign is inadequate, see [Clause 2.5.4\(a\)](#). A R1-2 sign may also be provided at the slip lane.

NOTE 6 A sight board may be required for long distance visibility from the side road approach (i.e. it may need to be offset if the approach is curved, or raised if there is a crest in the side road approach), see [Clause 2.12.2](#).

NOTE 7 A Bidirectional Hazard Marker (D4-2-2 or D4-2-3) sign as appropriate, may be necessary on the slip lane island, see [Clause 4.5.7.2\(b\)](#).

NOTE 8 For directional sign requirements, refer to AS 1742.15.

(b) [Figure 2.5](#)

NOTE 1 Barrier lines may be supplemented with RRPMS if night time delineation of the intersection is likely to be a problem and the remainder of the route is not treated continuously with RRPMS.

NOTE 2 For use of the side road dividing line, see [Clause 5.3.9\(a\)\(ii\)](#).

NOTE 3 The T-intersection Beyond a Curve (W2-14) sign is only necessary in certain situations, see [Clause 2.9.4\(b\)](#).

NOTE 4 Curve Alignment Markers (CAMs) (D4-6) may be needed if the curve is substandard, see [Clause 4.3.6](#).

NOTE 5 For use of the Side Road Intersection on a Curve – Outside (W2-9) and Advisory Speed (W8-2) signs, see [Clause 2.9.5\(b\)](#).

NOTE 6 Similar signs may be required for the opposite approach.

NOTE 7 A sight board may be required for long distance visibility from the side road approach (i.e. it may need to be offset if the approach is curved, or raised if there is a crest in the side road approach), see [Clause 2.12.2](#).

NOTE 8 For directional sign requirements, refer to AS 1742.15.

(c) [Figure 2.6](#)

NOTE 1 Dividing lines and outline markings may be augmented with RRPMS, see [Clause 5.9.5.2](#).

NOTE 2 To prohibit lane changing just in advance of an intersection a length of single continuous lane line is typically marked on the approach, see [Clause 5.3.9\(a\)\(iii\)](#).

NOTE 3 A GIVE WAY (R1-2) sign may be provided at the slip lane, see [Clause 2.5.4\(a\)](#). Where there is an identified issue of drivers inadvertently turning into the slip lane, a No Entry (R2-4) sign may be provided facing the right turn lane, typically installed on the reverse side of the R1-2 sign.

NOTE 4 The KEEP LEFT (R2-3(L)) sign is mounted on the signal post where practicable and angled towards right-turning traffic.

NOTE 5 A supplementary Unidirectional Hazard Marker (D4-1-2) sign may be required if the KEEP LEFT sign alone is not sufficient to delineate the median end, see [Clause 4.5.7](#).

NOTE 6 For directional sign requirements, refer to AS 1742.15.

(d) [Figure 2.7](#)

NOTE 1 Island outline markings may be augmented with RRPMS, see [Clause 5.9.5.2](#).

NOTE 2 To prohibit lane changing just in advance of an intersection a length of single continuous lane line is typically marked on the approach, see [Clause 5.3.9\(a\)\(iii\)](#).