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1. Introduction

1.1 General

All road agencies across Australia are working towards greater consistency between States/Territories in how road networks are managed. In order to achieve this, the Austroads Guide to Traffic Management and Australian Standards relating to traffic management have been adopted to assist in providing that level of consistency and harmonisation across all jurisdictions. This agreement means that these Austroads Guides and the Australian Standards are the primary technical references.

Australian Standards AS1742.15:2007 - Manual of uniform traffic control devices – Part 15: Direction signs, information signs and route numbering is a nationally agreed standards document outlining the use of traffic control devices on the road network and has been adopted by all jurisdictions, including VicRoads.

All jurisdictions will be developing their own supplement to clearly identify where its practices currently differ and to provide additional guidance to that contained within AS1742.15:2007. This document is the VicRoads supplement and shall be read in conjunction with AS AS1742.15:2007.

1.2 How to Use this Supplement

There are two key parts to this document:

Classification of Supplement Information: this table classifies supplement information as a Departure, Additional Information or both. This information assists with identifying its hierarchy in relation to the Australian Standard.

- Details of Supplement Information: this section provides the details of the supplement information.
 - ➤ **Departures:** where VicRoads practices differ from the guidance in the Australian Standard. Where this occurs, these differences or 'Departures' will be highlighted in a box. The information inside the box **takes precedence** over the Australian Standard clause. The Australian Standard clause is not applicable in these instances.
 - Additional Information: all information not identified as a departure provides further guidance to the Australian Standard and is read and applied <u>in conjunction</u> with the Australian Standard clause.

Where a clause does not appear in the body of this supplement, the Australian Standard requirements are followed.

2. Classification of Supplement Information

The classification of each clause as a Departure, Additional Information or both is shown in the table below.

Clause	Classification
1.3.2	Additional Information
1.4	Additional Information
1.6	Additional Information
1.6.1	Additional Information
1.6.2	Departure
1.6.4	Additional Information
1.6.5	Departure
1.6.6	Additional Information
1.6.8	Additional Information
Table 1.1 and 1.2	Departure
1.6.9	Additional Information
Table 1.3	Additional Information
1.6.10	Additional Information
1.6.11	Additional Information
2.1	Additional Information
2.2.1	Additional Information
2.2.2	Additional Information
2.2.2 (a)	Additional Information
2.2.2 (b)	Additional Information
2.2.3	Departure/Additional Information
2.3	Additional Information
2.3.1	Additional Information
2.3.2	Additional Information
2.4.1	Departure/Additional Information
2.4.2	Additional Information
2.4.3	Departure/Additional Information
2.4.4	Departure
2.4.7	Departure/Additional Information
2.4.8	Departure/Additional Information
2.5	Departure/Additional Information
2.5.2	Additional Information
2.5.3	Additional Information
2.5.4	Departure
2.6	Additional Information

Clause	Classification
3.1	Departure/Additional Information
3.2	Additional Information
3.3	Additional Information
3.3.1	Departure
3.3.2	Departure
3.3.3	Additional Information
3.3.4	Departure/Additional Information
3.4	Additional Information
3.4.1	Additional Information
3.4.2	Additional Information
3.4.3	Additional Information
3.4.5	Additional Information
3.4.6	Additional Information
3.5.1	Additional Information
3.5.2	Additional Information
3.6.1	Departure/Additional Information
3.6.2	Additional Information
3.7.1	Additional Information
3.7.2	Additional Information
3.8	Departure
3.9	Additional Information
4.1	Additional Information
4.2	Additional Information
4.2.1	Additional Information
4.2.5	Departure/Additional Information
4.3.2	Departure/Additional Information
4.3.3	Departure
4.3.4	Departure
4.4.1	Departure
4.4.3	Departure/Additional Information
5.1.4	Departure/Additional Information
5.1.5	Additional Information
5.1.6	Departure/Additional Information
5.2.1	Additional Information
5.2.2	Departure/Additional Information
5.2.3	Additional Information
5.3.1	Additional Information

Clause	Classification
5.3.2	Additional Information
Appendix A	Additional Information
Appendix B2 (d)	Departure
Appendix D3	Additional Information
Appendix D4	Additional Information
Attachment A	Additional Information

Australian Standard requirements are followed for clauses not shown in this table.

3. Details of Changes

Clause 1.3.2 – Focal point map

In Victoria, focal point maps are also known as standard through destination maps (refer to Attachment A in this Supplement).

Clause 1.4 – RESPONSIBILITY AND AUTHORITY FOR INSTALLATION

For information regarding the responsibility and authority for installation of traffic control devices in Victoria, refer to Traffic Engineering Manual Volume 3 Part 2.1.

Clause 1.6 - SIGN DESIGN GUIDELINES

Selection of standard through destinations

A standard through destination is a town, city or suburb that continuously appears on advance and intersection direction signs along a road. These destinations are usually major towns or suburbs, recognisable to both local and non-local drivers.

In rural areas, towns and cities used as standard through destinations are selected based on the following conditions.

At least three of the following conditions below should be satisfied for a town or city to appear as a standard through destination on direction signs on major roads (typically M, A and B Routes):

- is a significant regional population centre
- is a significant industrial and/or commercial hub
- · contains tourist attractions of state significance
- located at the junction of major roads which lead to other significant areas of the State
- the only or final town along a road (or on a side road beyond the terminus of the road) where no other destination can be signed.

However, if the minimum number of the above conditions cannot be satisfied and the major road terminates at a point further on, then the last condition listed above should be used as the determinant of the standard through destination.

For the selection of standard through destinations on rural C Routes and other minor roads, at least two of the above conditions should be met. However, this should be assessed against local navigational needs whereby destinations which do not meet the above criteria may be selected if no other destinations can be reasonably signed.

In urban areas, suburbs used as standard through destinations are selected based on the following conditions. At least one of the following conditions below should be satisfied for a suburb to appear as a standard through destination on direction signs:

- is a major activities area, centre or district (either within the urban area or beyond)
- is a significant industrial and/or commercial hub
- contains a significant cultural, sporting or other community facility which is recognisable across the metropolitan area
- is at the junction of major arterial roads or is a public transport hub
- the only or final suburb along a road (or on a side road beyond the terminus of the road) where no other destination can be signed.

There are restrictions on the number of destinations that can be shown on a direction sign. Refer to Clauses 2.2.3 (advance direction signs), 2.5.2 (reassurance direction signs) and 3.3.2 (freeway signs) and their relevant Supplement clauses for further details.

It should be noted that the purpose of standard through destinations is not merely for the 'promotion' of a town for 'tourism' or other similar purpose. Standard through destinations provide motorists with a sense of direction, reassuring them that the right route, and the right direction along that route, is being taken. For example, signs with 'Ballarat' not only assist drivers who are intending to travel to Ballarat, but for

other drivers who are heading to western Victoria (such as to the Grampians) - these drivers would associate 'Ballarat' with the notion of travelling 'west away from Melbourne'.

For predetermined cities, towns and suburbs used as standard through destinations, refer to Attachment A of this Supplement.

For selection of destinations on reassurance direction signs, refer to Clause 2.5.2 of this Supplement.

Clause 1.6.1 – Signboard layout

Standard drawings for G series signs used in Victoria can be found in the VicRoads Supplement to AS 1743.

Sign border design

Signage shall no longer be branded with the VicRoads logo (e.g. direction signs). Removal of the logo on existing signs is not required.

All direction signs (except for some G8 route number signs) shall have a border design consisting of an inner border with an outer edge strip. The details of borders, edge strips and corners shall follow the VicRoads Supplement to AS 1743 (including the standard drawings of individual signs in that Supplement).

Clause 1.6.2 – Presentation of information

To ensure that the correct information is displayed on a sign, practitioners should check whether the following elements are included:

- all route numbers
- · legends which use the correct font and letter size
- all relevant destinations
- arrows in their correct location
- panels in their correct location
- correct dimensions for sign elements, e.g. on corner radii for panels and sign borders
- correct colours, e.g. 'standard green' (as defined and specified in AS/NZS 1906.1; also refer to point below) has been used for the background of a direction sign
- correct sign sheeting material has been specified the sign shall only use VicRoads approved retro-reflective sheeting materials – refer to Road Design Note 06-11 (see Clause 1.6.10 of this Supplement).

DEPARTURE

Subclause (b) shall only be followed in exceptional circumstances where numerous drivers are not making the correct turn.

Order of destinations on direction signs

Exceptions to subclause (c) where the further destination is listed first:

- The nearer destination is off the route being signed, and is of minor importance compared with the other listed destination.
- Where two or more route numbers are shown on different lines on an advance or intersection direction sign, they are listed with the most important route number on top (see Figure 46 left side). As destinations are aligned with their respective route numbers, they therefore may not be in order of increasing distance. For example, as shown below, along the M31/B400 duplex (two route numbers on one road), 'Melbourne' is listed first although it is further away than 'Yarrawonga'. This is due to 'Melbourne' being associated with the first listed route number in the duplex M31.



Partial Dividing Line

Where there are multiple and long-worded destinations associated for each departure and there is the likelihood that drivers may get confused over which destination applies to which departure, a partial dividing line may be added between the opposing legends to better visually separate the information.

The partial dividing line is generally used on G1-V4 signs (but not limited to) where there is a common element with each departure (e.g. the same road name or route number).



Partial dividing line between the left and right departure destinations

Clause 1.6.3 - Sign format

Driving instructions

Driving instructions are words used to supplement or replace arrows to indicate the correct lane(s) to use or the correct location to make a turn.

On advance direction signs (G1 and GE1 series), driving instructions may be used on a multi-lane approach where one or more lanes become a turn lane or some lanes continue in different directions. Driving instructions may also be used to replace arrows to avoid ambiguity where there is an intervening side street.

Acceptable driving instructions on G1, GE1 and G9-V8 signs are:

- ONLY
- EXIT x km (or xxx m)
- THIS EXIT
- NEXT EXIT
- LEFT LANE
- LEFT LANE ONLY
- 2 LEFT LANES
- NEXT LEFT
- TURN LEFT xxx m (or xxx km)

- RIGHT LANE
- RIGHT LANE ONLY
- 2 RIGHT LANES
- NEXT RIGHT
- TURN RIGHT xxx m (or xxx km)
- RIGHT TURN LANE(S)
- LEFT TURN LANE(S)
- FOLLOW
- USE

The use of ONLY is limited to the following situations:

- One or more approach lanes is an exclusive (trap) lane, leading directly into a diverging route, in which
 case the legend will be in the sequence 'Destination (or ROAD NAME) LEFT (or RIGHT) LANE ONLY'.
- Drivers may mistakenly believe a turn (or through movement) may be made from two or more lanes, in which case the legend will be 'Destination (or ROAD NAME) LEFT (or RIGHT) LANE ONLY'.
- A minor (or wrong) turn may be mistaken for a major turn located just downstream, in which case the
 legend (at the minor turn) will be in the sequence 'Destination (or ROAD NAME) [arrow] ONLY'.
 Similarly on a diagrammatic advance direction sign, the word ONLY may be included below a minor
 local destination (e.g. a car park) which may be mistaken for a through destination.
- A sign or panel is placed directly above an exclusive (trap) lane an ONLY panel may be placed beside the arrow to emphasis the trap lane.

ONLY (including LEFT LANE ONLY and RIGHT LANE ONLY) in the above situations appear as black uppercase letters on a yellow rectangular panel.







Use of ONLY panels on various direction signs

The use of FOLLOW is limited to the following situations:

- A destination is reached by following a route number (e.g. 'Donnybrook FOLLOW M90') the route number used is generally of the road that drivers need to turn/exit at.
- A destination is reached by following another destination (e.g. 'Moe FOLLOW Sale signs'). However, the first style using the route number is more preferred as route numbers provide a simpler message.



Freeway supplementary exit sign with 'FOLLOW' driving instruction

On G9-43 multiple lane designation direction signs, the following driving instructions may be included as a panel at the bottom of the sign:

- AT ROUNDABOUT
- AT SIGNALS
- AT 2ND SIGNALS
- XXX m

These driving instructions should only be used where the position is ambiguous or not obvious. For example, AT SIGNALS should only be used if the signalised intersection is not visible at the point where drivers read the sign or there is an intervening side street. AT ROUNDABOUT and AT SIGNALS are preferable to showing a distance to the turn, as drivers often find it difficult to judge distances.



G9-43 with AT SIGNALS instruction

Road type

Where it is necessary to sign the type of road after an intersection, then one of the following messages may be used. The legend is black uppercase letters on a yellow background panel.

LOCAL ACCESS

NO THROUGH ROAD

Signing of the type of road should be limited to situations where numerous drivers are inadvertently using that road contrary to the intention of that road (e.g. continuing straight into a no through road where the major route turns at the intersection or where a previously continuous road is now severed due to a new road).

The message LOCAL ACCESS, when used, is for a minor terminating road or driveway which is a signed departure on a G1 series sign (e.g. a departing leg on a roundabout advance direction sign).



G1 series sign with NO THROUGH ROAD panel

Clause 1.6.4 - Distances on signs

A sign giving a distance to a driving action point shall include 'km' or 'm' (e.g. EXIT 1 km, TURN LEFT 300 m).

Distances should be used on G2-V1 and G2-V2 signs where reassurance direction signs are not provided. Refer to Clause 2.4.7 of this Supplement for display styles.

Distances to destinations shown on reassurance and intersection direction signs are to the recognised centre of the signed destination.

For the distance to Melbourne, this is measured from the intersection of Swanston Street and Flinders Street.

Clause 1.6.5 – Route and street names

DEPARTURE

Road names shall only be shown on direction signs based on the following principles, in place of the principles listed in Clause 1.6.5 of AS 1742.15:2007:

a) Rural areas and provincial cities

Advance and intersection direction signs

In rural areas on the Statewide Route Numbering road network, road names shall not be shown on advance and intersection direction signs (G1, G2, GE1 and GE2 series signs). This is due to the length of some road names (e.g. 'Town A – Town B Road') being quite long (unnecessarily increasing the amount of information drivers have to comprehend) and that the alphanumeric route number provides a simpler form of navigation for non-local drivers. However, the local road name may be used in the following circumstances:

- Where a particular leg of an intersection is required to be signed and there is no relevant destination that can be used, the road name is shown as the main legend in that direction.
- Within regional cities and large towns, road names may be used for A, B and C Routes if the section of the route has a significant local name which applies within the city or town limits and a simple street name blade sign (G5 series) does not have sufficient conspicuity.
- Where deemed absolutely necessary, the road name may be included with intersection direction signs in rural areas. However, the signing of the road name should be limited to situations where the

destination alone does not give sufficient guidance to motorists. The road name shall not be used on advance direction signs.

On certain freeway advance exit and exit direction signs as per Clause 3.3.2 (a) of this Supplement.

Reassurance direction signs

Black legend on white background road name panels shall be used on reassurance direction signs on all M and A Routes.

White legend on brown background road name panels shall be used on the following tourist routes:

- B100 Great Ocean Road
- B400 Murray Valley Highway
- B420 Phillip Island Road
- B500 Great Alpine Road.

The road name to be shown should be the declared name and not the local name (e.g. Midland Highway instead of Creswick Road in Ballarat).

b) Melbourne metropolitan area

Within the urban area of Melbourne, including on A, B and C Routes located in the fringes of the urban area, road names shall be included as follows:

Advance direction signs

The road name is included for each turnoff shown on the sign. The through direction road name is shown on the sign (generally in the top panel) if:

- The named route turns at the intersection or,
- The name of the 'through' route changes at the intersection.

Intersection direction signs

The road name is included on intersection direction signs. Refer to Clause 2.4.2 of this Supplement for placement details.

Reassurance direction signs

Road names are included at the top of each sign. Where a route number is present, the road name is either to the right or below the route number.

Lane designation direction signs

On a G9-V42 sign, the road name is signed using the same principles for advance direction signs (see above). Refer to Clause 2.3 of AS 1742.15:2007.

On G9-V7 and G9-43 signs, road names are generally shown only for complex lane arrangements where the addition of the road name would aid navigation through the intersection. Refer to Clause 2.3 of AS 1742.15:2007.

Roads with dual names

Where a road is known by two names, e.g. a 'highway' with an alternative local name, the supplementary name is shown below the principal name within the same panel but with a smaller legend size. Refer to Table 6.

Clause 1.6.6 – Directions to distant routes

For subclause (b), it is preferred that a legend in the format 'TO A85 (Town)' be used instead of '(Town) VIA A85 (NAME) HWY'. This format provides a simpler message to drivers and requires less space on the sign face, see 'Signing remote route number' below. In addition, this format is preferred in rural areas where road names are not generally used.

For subclause (a), 'TO' should always be shown in white, as shown below.



Example of a road name used as a destination on a freeway direction sign

Legend series and sizes can be found in Clause 1.6.8 (g) of this Supplement.

Signing remote road names within a road name panel

When signing a road with multiple names (i.e. the road name changes at a point further on and it is necessary to show the name of the remote road), this may be done within the road name panel. For example, the remote road name may be signed in the form 'TO xxxx ROAD' underneath the current road name. See Clause 1.6.8 (f) of this Supplement for legend sizes.



Example of signing a remote road name within a road name panel

Signing remote route numbers (including remote freeways)

Where a remote route number is to be signed, the legend shown is 'TO [route number]' (e.g. 'TO A440'). A destination associated with the remote route may also be added (maximum of two destinations) (e.g. 'TO A440 Sale').

The remote route number information, with or without an additional destination, may be signed in the same panel as the side road information. In this case, the remote route number information shall be listed under the destination(s) of the side route to avoid confusion that the destination(s) of the side route is only reached via the remote route.





Figure 1: Signing of remote route number in same panel of side road

Use of 'VIA'

The word 'VIA' is used where there is an alternative route to a destination. At the intersection with the alternative route, signs for the alternative route should in the format 'Destination VIA [Alternative Route]'.

An example is at the Frankston-Dandenong Road and M3 interchange, where 'Dandenong' can be reach by either continuing on Frankston-Dandenong Road or turning onto the freeway. In this case, signs for the freeway display 'Dandenong VIA M3' while signs for the through direction on Frankston-Dandenong Road remain as 'Dandenong'.

In all instances, 'VIA' should be shown in white text.

Legend series and sizes for 'VIA' can be found in Clause 1.6.8 (g) of this Supplement.



Signing of an alternative route to a destination

Clause 1.6.8 – Letter types and sizes, sign colour (including Table 1.1 and Table 1.2)

VicRoads has adopted subclauses (a) to (d), (f), (g) and (i) in full.

VicRoads adopts subclause (e) with the exception that TOLL signage is treated differently, refer to Clause 3.8 of this Supplement for further details.

Further to subclauses (b) and (d) of Clause 1.6.8 of AS 1742.15:2007, the following colour schemes are used:

- Road name panels on designated tourist routes are in uppercase white legend enclosed in a brown panel with a white border; refer to Clause 1.6.5 of this Supplement.
- Alphanumeric route numbers are shown as fluorescent yellow text on a standard green background.
- Metropolitan Route number shields use white legend and border on a blue background.
- National Route number shields use black legend and border on a white background.
- Signs and panels related to tollways and toll roads use a yellow legend and border on a blue background; refer to Clause 3.8 of this Supplement. Route numbers on toll roads also use a different colour scheme.

DEPARTURE

The following principles below shall be used instead of subclause (h), Table 1.1 and Table 1.2.

a) Legend Type (Font)

- The main letter types used on direction signs are series C, D, E and E Modified.
- Letter series F is rarely used as it results in a sign too wide to be accommodated or results in an unbalanced sign face design.
- Letter series A and B are not used on direction signs as their legibility is not appropriate for viewing from vehicles at speed.
- Letter series E Modified is generally used for destinations and names of places or establishments.
- Letter series D is generally used for road names and driving instructions (e.g. LEFT LANE ONLY).
- Cardinal points of the compass are in capital letters, unless part of a route or destination name.

The permitted letter series used on the various sign types are specified in the standard drawings contained in the VicRoads Supplement to AS 1743.

b) Principal legend heights and use on signs

Direction signs in Victoria have specific principal legend heights corresponding to a sign size code (AA to F) as shown in Table 1 of this Supplement. The principal legend is the most prominent legend on the sign, in most cases this refers to the destination shown on the sign. Within a particular sign code, other legends (e.g. road name panels or driving instructions) in the sign may use different letter sizes which are detailed in this Clause and in the individual direction sign standard drawings found in the VicRoads Supplement to AS 1743.

Note for some sign types, the sign code refers to a different principal legend height to what is shown in Table 1 (e.g. for G3 series signs, an 'A' size sign uses a legend height of 120 mm). These different principal legend sizes are detailed further on in this Clause.

When designing direction signs (standard and non-standard), the following list of preferred sizes should be used to simplify the manufacture of signs. Note these standardised sign sizes may also be applied to tourist and services signs (refer to the VicRoads Supplement to AS 1742.6)

Table 1: Standard letter sizes and associated size codes for the principal legend

Size code	Size code Principal Legend		General usage (2)		
	Capitals (mm) (1)	Lower case (mm)			
AA	120	90	Low speed urban environments, in exceptional circumstances including: Lane designation signs used on minor roads. Notating destinations on a minor leg of a diagrammatic sign to limit the size of the sign face.		
A	140	105	 Generally used in the following situations: Default size for most direction signs on local/municipal roads. On arterial roads where a B size direction sign cannot fit and other redesign options have been exhausted. For signs on non-freeway roads with a traffic instruction or message of a non-critical nature. 		
В	180	135	 Generally used in the following situations: Default size for most direction signs on divided and undivided arterial roads (excluding M Routes). Default size for most direction signs on freeway offramps. On local/municipal roads where an A size sign does not provide sufficient conspicuity (e.g. a wide divided municipal road). 		
C	240	180	 Generally used in the following situations: Most overhead signs on arterial roads (excluding M Routes). On arterial roads where a B size direction sign does not provide sufficient conspicuity. Most direction signs on the arterial road approach to a freeway interchange. Most direction signs on the freeway/M Route approach to an at-grade intersection 		
D	320	240	Supplementary signs for a freeway exit. For freeway signs with a traffic instruction or message of a non-critical nature.		
Е	400	300	Default size for most direction signs leading to an exit on freeways/M Routes (refer to Table 2 of this Supplement).		
F	640	480	Not generally used as it results in an extremely large sign.		

Notes to Table 1:

For some sign types, the size code refers to a different principal legend height (e.g. for G3 series signs, an 'A' size sign uses a principal legend height of 120 mm) – these different principal legend sizes are detailed in Clause 1.6.8 of this Supplement.

- 2. 'General usage' provides an overview of size sizes used in common road environments. For further details on specific sign size types and their use, refer to the sign matrices in Clause 2.1 (a) of this Supplement and the following sections in AS 1742.15:
 - Direction signs on arterial roads see Section 2
 - Direction signs on freeways see Section 3 and Table 2 of this Supplement
 - General information signs see Section 5

For Series E Mod font, words in lower case letters are indicated typically in the form "180/135 LC" where the first number (180) is the height of initial capital and the second number (135) is the lower case height.

c) Direction signs on non-freeway roads

Non-freeway direction signs shall follow the principal legend sizes given in Figure 3 (metropolitan/urban) and Figure 4 (rural) of this Supplement (the sign matrices). Signing of an isolated grade separated interchange on an arterial road (which is not an M Route) should follow Table 2 of this Supplement. However, smaller sign sizes may be considered if there are space restrictions at or on the approach to the interchange (see subclause (j) below).

d) Direction signs on freeways

Sign sizes for freeway direction signs for use on freeways shall follow Table 2 of this Supplement. Table 2 also applies to intersections and interchanges on M Routes. Some additional guidance can be found in Figure 3 and Figure 4 of this Supplement.

Letter types and sizes for other sign elements such as driving instructions and route numbers shall follow the standard drawings in the VicRoads Supplement to AS 1743 for the sign size listed in Table 2 (note some freeway direction sign standard drawings only have one set of dimensions listed – in most cases this is equivalent to E size).

Table 2: Legend sizes for freeway direction signs

Sign Type	Sign Code	Sign Size (Principal Legend Size – Uppercase (UC)/Lowercase (LC))	
Advance exit signs Exit direction signs	GE1-V5, GE1-V6 GE1-V11 series GE1-V12 series	E size (400 mm UC/300 mm LC)	
	GE1-V13 GE1-V14 series GE1-V20 series		
	GE1-V103, GE1-V104 GE2-V1 series GE2-V2 series		
Supplementary advance exit signs	GE1-8 GE1-V8 series	D size (320 mm UC/240 mm LC)	
Bypass Town Sign	GE1-V15	D size (minimum) (320 mm UC/240 mm LC)	
Reassurance direction sign Interchange sequence sign	G4-V1 GE1-9 GE1-V9 series	C size (minimum) (240 mm UC/180 mm LC	
Advance and intersection direction signs on exit ramps	G1 series G2 series G3 series	B size (180 mm UC/135 LC – G1 and G2 series) (200 mm UC – G3 series)	
Advance and intersection direction signs at at-grade intersection on M Route approach	G1 series G2 series G3 series	C size (240 mm UC/180 mm LC – G1 and G2 series) (200 mm UC – G3 series)	

e) Route numbers (including when used as free standing signs)







Statewide Route Number (MABC) (Table 3)

Metropolitan Route
(Table 4)

National Route (Table 5)

The legend size on free standing route numbers shall meet the same criteria as for reassurance direction signs – for example, where a 'B' size reassurance direction sign is specified, a 'B' size free standing route number sign is the equivalent sign.

It should be noted that:

- Legend series (font) and sizes for free standing route number signs may be different to when the route number is used within a direction sign.
- Metropolitan Route shields (refer to Clause 4.2 of this Supplement) have different numeral legend series and sizes.

For OD Routes, legend series and sizes can be found in the G8-V107, G8-V108, G8-V109 and G8-V110 standard drawings in the VicRoads Supplement to AS 1743.

Numeral legend sizes and series are shown in the Tables below for the various route numbering systems.

Table 3: Statewide Route Numbering Scheme (alphanumeric routes, MABC) legend series and sizes

Size Code	Numeral Legend Size and Series		
	Free standing route number sign (G8-V11-2)	Within direction signs	
A size	140 mm, series E Mod	140 mm, series E Mod	
B size	180 mm, series E Mod	180 mm, series E Mod	
C size	240 mm, series E Mod	240 mm, series E Mod	
D size	-	320 mm, series E Mod	
E size	-	400 mm, series E Mod	

Table 4: Metropolitan Route Numbering System legend series and sizes

	Free standing route number sign (G8-V8-1)	Within direction signs (G8-V8-2) (note 2)		
Letter Series (Font)	Single numeral (e.g. '9') – series E Two numeral with '1' (e.g. '41') – series D Two numeral without '1' (e.g. '34') – series C	Single numeral (e.g. '9') – series E Two numeral with '1' (e.g. '41') – series D Two numeral without '1' (e.g. '34') – series C		
Size	Numeral Legend Size			
Code	Free standing route number sign (G8-V8-1)	Within direction signs (G8-V8-2) (note 2)		
A size	(note 1)	120 mm		
B size	240 mm	160 mm		
C size	320 mm	200 mm		
D size	-	280 mm		
E size	-	360 mm		

Notes to Table 4:

- 1. Where an 'A' size free standing sign is specified, a 'B' size sign shall be used instead.
- 2. For G8-V16 END signs, a G8-V8-1 route shield is used instead of a G8-V8-2 route shield.

Table 5: National Route Numbering System legend series and sizes

Size Code	Numeral Legend Size and Series				
	Route number 'ALT' legend (G8-V1-1) (G8-V2-7)		Within direction signs (G8-V1-2)		
			Route number	'ALT' legend	
A size	(note 1)	(note 1)	120 mm, series E	60 mm, series D	
B size	240 mm, series E	120 mm, series D	160 mm, series E	80 mm, series D	
C size	320 mm, series E	160 mm, series D	200 mm, series E	100 mm, series D	
D size	-		280 mm, series E	140 mm, series D	
E size	-		360 mm, series E	180 mm, series D	

Notes to Table 5:

1. Where an 'A' size free standing sign is specified, a 'B' size sign shall be used instead.

f) Road name panels

Where road name panels are provided with advance, intersection and reassurance direction signs, the legend size and series shall be as shown in Table 6. Figure 2 shows the difference between principal and supplementary road names.



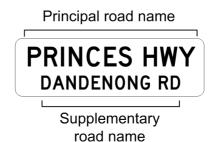


Figure 2: Principal and supplementary road names

Table 6: Legend size and letter series for road name panels

Size Code	Principal road name (3)	Supplementary Road Name (2) (3)	
(Principal Legend Size)	Legend Size and Series	Legend Size and Series	
A Size (140 mm)	110 mm, series C, D or E	100 mm, series C, D or E	
B Size (180 mm)	140 mm, series D or E	100 mm, series D or E	
C Size (240 mm)	180 mm, series D or E	140 mm, series D or E	
D Size (320 mm)	240 mm, series D or E	180 mm, series D or E	
E Size (400 mm)	320 mm, series D or E	240 mm, series D or E	

Notes to Table 6:

- 1. Use the most legible legend series to suit other sign face design controls.
- 2. A supplementary road name is where the road name panel is to display a secondary, local or alternative road name (e.g. Dandenong Road underneath Princes Highway).
- 3. Some flexibility is allowed in these legend sizes and series in order to achieve a balanced sign face design (e.g. use of wider letter series to increase conspicuity).

g) Road names used as destinations

Where a road name is used as a destination (e.g. 'TO SPRINGVALE RD'), the road name component of the legend shall be in uppercase and the size and series shall be as shown in Table 7.

Table 7 shall also be used to determine the legend size and series for the words 'TO' and 'VIA' when used in accordance with Clause 1.6.6 of AS 1742.15:2007.





Table 7: Road name used as destination legend size and series

Size Code	Remote road name (1)
(Principal Legend Size)	Legend Size and Series
A Size (140 mm)	130 mm, series D or E
B Size (180 mm)	160 mm, series D or E
C Size (240 mm)	220 mm, series D or E
D Size (320 mm)	280 mm, series D or E
E Size (400 mm)	360 mm, series D or E

Notes to Table 7:

h) Road name signs (G3 series)





The standard sizes for road name signs (G3 series) are shown in Table 8.

Table 8: Road name signs

Size Code	Principal Legend Height and letter series (Capitals)	General usage
А	120 mm	Low speed roads under 60 km/h.
В	160 mm	Roads with a speed limit equal or greater than 60 km/h.
С	200 mm	On M Routes (excluding exit ramps).
		In situations where a B size sign does not have sufficient conspicuity.

Supplementary Information (including driving instruction messages)





Supplementary information such as lane discipline (e.g. LEFT LANE) is normally one legend size smaller than the principal legend size.

^{1.} Some flexibility is allowed in these legend sizes and series in order to achieve a balanced sign face design (e.g. use of wider letter series to increase conspicuity).

Cautionary legends (driving instructions such as ONLY or LEFT LANE ONLY) are normally in the same legend size and letter series as the principal road name in road name panels (see (f)), albeit on a yellow background panel.

For supplementary information on G9-43 signs (e.g. 'AT SIGNALS' or 'AT ROUNDABOUT'), the legend size may be larger; the same size as the principal legend height of the sign is usually appropriate.

Refer to the relevant direction sign standard drawings in the VicRoads Supplement to AS 1743 for further details.

j) Changes in sign and legend size

Further to subclause (i) of Clause 1.6.8 of AS 1742.15:2007, the following additional principles should be considered:

Increase in sign size

The sign and/or legend sizes may need to be increased (usually one size larger, e.g. from 'A' size to 'B') in circumstances such as:

- · where a sign is overhead mounted
- the sign enters the driver's field of view earlier than usual
- an abnormally large offset of a sign from the driver's path (e.g. there are four or more lanes (including parking lanes) in the direction approaching the sign)
- where positioning of the sign sufficiently far in advance of an intersection is not practicable.

Decrease in sign size

In some situations, the suggested sign sizes in this Clause and Table 1 may result in a sign not being able to be installed at a particular location due to limited road space (e.g. narrow nature strip in inner urban areas).

Before adopting a sign/legend one size smaller, the following should be considered first:

- a sign in a narrow format design
- redesign the sign to best use the available sign face (but without compromising the clarity of the sign)
- overhead mounting of the sign (should be used when operating speed is 80 km/h or above, but not limited to).

Where the above considerations are not possible, then one sign/legend size smaller may be adopted. Refer to the relevant smaller sign size in Table 1 for guidance on legend sizes.

k) Use of abbreviations

Road name suffix abbreviations listed in Clause 2.5 of AS1742.5:1997 (e.g. 'RD' or 'HWY') may be used to reduce the overall length of a sign where a road name is of abnormal length.

Abbreviations for destination and road names are discouraged due to the possibility that drivers will not understand the shortened form of the name. However, some names may be abbreviated if it is determined that the shortened name will still be recognisable to drivers (e.g. 'Melb' for Melbourne). Consultation with Network Standards should be sought for the use of abbreviated destination and road names.

Clause 1.6.9 - Use of arrows

Arrow types, locations and orientations on direction signs are detailed in the VicRoads Supplement to AS 1743. Only the standard arrow shape and size shall be used to ensure adequate visibility from a distance – refer to the S-V400 series drawings in the VicRoads Supplement to AS 1743.

Table 1.3 - USE OF ARROWS ON DIRECTIONS SIGNS

Other arrows are shown in Table 9 below.

Table 9: Other 'turns off the through route' arrows

Arrow Shape	Advance Direction Signs	Driving Instruction Direction Signs		Exit Direction Signs on expressway type roads
		Side mounted	Overhead	
THROUGH L	ANES(S)	,		
\$	Through direction on a narrow format roundabout advance direction sign	Arrows not normally used	Not used	Not used
TURNS OFF	THE THROUGH ROUTE			
1	Left turn on a narrow format roundabout advance direction sign	Arrows not normally used	Not used	Not used
4	Right turn on a narrow format roundabout advance direction sign	Arrows not normally used	Not used	Not used
4	Type B1(L): Extended bent arrow for left turn – where left turn is beyond the next intersection encountered and a left turn at next intersection encountered is not possible	Not used	Not used	Not used
4	Type B1(R): Extended bent arrow for right turn – where right turn is beyond the next intersection encountered and a right turn at next intersection encountered is not possible	Not used	Not used	Not used
7	Type B2(L): Extended bent arrow for left turn – where left turn is beyond the next intersection encountered and a left turn at next intersection encountered is possible (note 9a)	Not used	Not used	Not used
F	Type B2(R): Extended bent arrow for right turn – where right turn is beyond the next intersection encountered and a right turn at next intersection encountered is possible (note 9a)	Not used	Not used	Not used

Notes to Table 9:

9a. Where there is more than one intermediate intersection between the direction sign and actual turn, then additional horizontal legs may be added between the bottom of the arrow shaft and arrow head. No more than two horizontal legs should be shown.

The principles below shall be followed in addition to the information presented in Table 1.3 of AS 1742.15:2007:

• Turns off the through route:

- o where the side road is at an acute angle, a horizontal arrow is usually appropriate.
- on stack-type (narrow format) advance direction signs for roundabouts, curved arrows with the shaft commencing vertically should be used for all directions to highlight the need to pass to the left of, and to circulate around, a central island (see Table 9 of this Supplement)
- o an arrow indicating an exit, at the exit position, shall be angled and straight. Angled arrows are not used on any sign in advance of the exit position.

Overhead signs:

- o where two or more arrows are used on an overhead mounted sign to indicate individual lanes, each arrow shall be positioned, as far as practicable, over the centre of the applicable lane
- where the road approaching the sign is on a horizontal curve, care is required in positioning the sign, both longitudinally and transversely, to accurately indicate the applicable lanes. Such signs may not be suitable when placed within tight curves
- o any arrow indicating the through direction at an exit shall be at least as big as, or bigger than, the arrow on the adjacent exit direction sign.
- The shaft of the arrow may be extended to improve the prominence of the arrow against multi-line or long legends. Details can be found in the relevant S-V400 arrow series standard drawings in the VicRoads Supplement to AS 1743.
- Where additional lanes develop after the sign position, there are specific rules about the use of arrows on lane designation signs. Refer to Clauses 2.3.1 and 2.3.2 of this Supplement for details.

Clause 1.6.10 – Illumination and reflectorisation

The requirements for the manufacture and packaging of road signs are contained in VicRoads Standard Specification Section 860 - Manufacture of Road Signs (available on the VicRoads website: http://webapps.vicroads.vic.gov.au/VRNE/csdspeci.nsf/).

Retroreflective sign sheeting materials

All retroreflective direction signs shall comprise an approved VicRoads sheeting material as specified in Road Design Note 06-11 (https://www.vicroads.vic.gov.au/~/media/files/technicaldocuments/standards-and-supplements/roaddesignnote061-acceptedretroreflectivesheetingmaterials.ashx).

Colour and class of retro-reflectivity

Table 1 in the VicRoads Supplement to AS 1742.1:2014 provides guidance on the colours that should be used for direction and information signs and Table 2 provides guidance on the class of retroreflective sheeting to be used.

As indicated in Table 2 in the VicRoads Supplement to AS 1742.1:2014, Class 1 retroreflective sheeting material is used for side mounted direction signs. Where a sign is mounted overhead, Class 1W material shall be used instead (see below).

Overhead signage

Overhead signs are always reflectorised (whether they are externally illuminated or not). Class 1W material should be used on overhead mounted signs. Refer to Table 2 in the Supplement to AS 1742.1:2014.

Illumination of signs is not required except in special circumstances. Any proposal to illuminate signs is subject to the approval of the Director – Network Policy & Standards.

Clause 1.6.11 - Non-standard signs

Wherever practicable, a standard sign should be selected to suit a particular purpose. If there is no suitable standard sign and a non-standard sign is required, it shall be designed in accordance with AS 1742.1 and AS 1743 with regard to colour, shape, design, specifications and development of symbols. In the development of these signs, consultation and approval from the Manager – Network Standards will be required.

Letter series and size can be determined using the principles found in Clause 1.6.8 of this Supplement.

In tunnel environments, any non-standard signage within a tunnel environment will need to be designed in accordance with the Austroads Guide to Road Tunnels.

Clause 2.1 - GENERAL

For best practice, where a G series sign is mentioned in Section 2 of AS 1742.15:2007, it should be substituted with the Victorian version of the sign, by adding 'V' in front of the last digit of the sign code (unless if the sign is not used in Victoria or as otherwise specified).

Victorian versions of the G series signs have been created in accordance with AS 1742.1:2014 Clause 1.8, to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

In subclause (a), the following Victorian version of G1, G3 and G9 series signs are used:

- G1-V1 to G1-V7 and G3-V8 for advance direction signs
- G9-V7, G9-V8 and G9-V42 for driving instruction signs.

In subclause (b), only the following Victorian version of G2 and G3 series signs are used:

- G2-V1 to G2-V5 for intersection direction signs
- G3-V5 for municipal road intersections (no route numbers are shown on these signs)
- G2-V3 external road name panels are used in Victoria, which are placed above G2-V1 and G2-V2 signs.

In subclause (c), the following signs are used:

- G4-V1 for reassurance direction signs
- G8 series free standing route number signs; refer to Clause 4.4.3 of this Supplement.

Consistency in the appropriate scale of treatment at each intersection, having regard to its relative importance, can best be achieved by considering a route, or major section of a route as a whole and preplanning the direction signing requirements for this section of road at the one time. Austroads Guide to Traffic Management Part 10 (2009) Section 3 offers a method by which this may be done.

a) Sign matrix

The sign matrices shown in Figure 3 (metropolitan) and Figure 4 (rural) have been prepared as a guide to enable practitioners to determine the direction signs required at interchanges and intersections based on the functional classification of a road. They also include a guide to the principal legend size to be used on these signs, in accordance with standardised sign sizes as described in Clause 1.6.8 of this Supplement (in particular Table 1 and Table 2). However, alternative legend and sign sizes may be appropriate, as outlined in Clause 1.6.8 of this Supplement.

It should be noted that in some circumstances, not all signs can be installed as indicated in the sign matrices. For example, the installation of both advance and intersection direction signs at the intersection of two primary arterial roads may be impractical, e.g. at a strip shopping centre. In such cases, engineering judgement is required so that the appropriate (and necessary) signs are installed.

b) Signing at Arterial Road and Municipal Road intersections

Figure 5 shows the types of direction signs required for arterial road and municipal road intersections for when a destination is to be signed along the intersecting road.

Figure 6 is for when there is no destination to be signed along the municipal road.

Figure 5 and Figure 6 shall be read in conjunction with:

- Sign selection requirements as specified in Figure 3 or Figure 4 (sign matrices)
- Clause 1.6.8 of this Supplement
- Clause 2.6 of this Supplement (contains figures showing typical direction sign layouts at intersections)

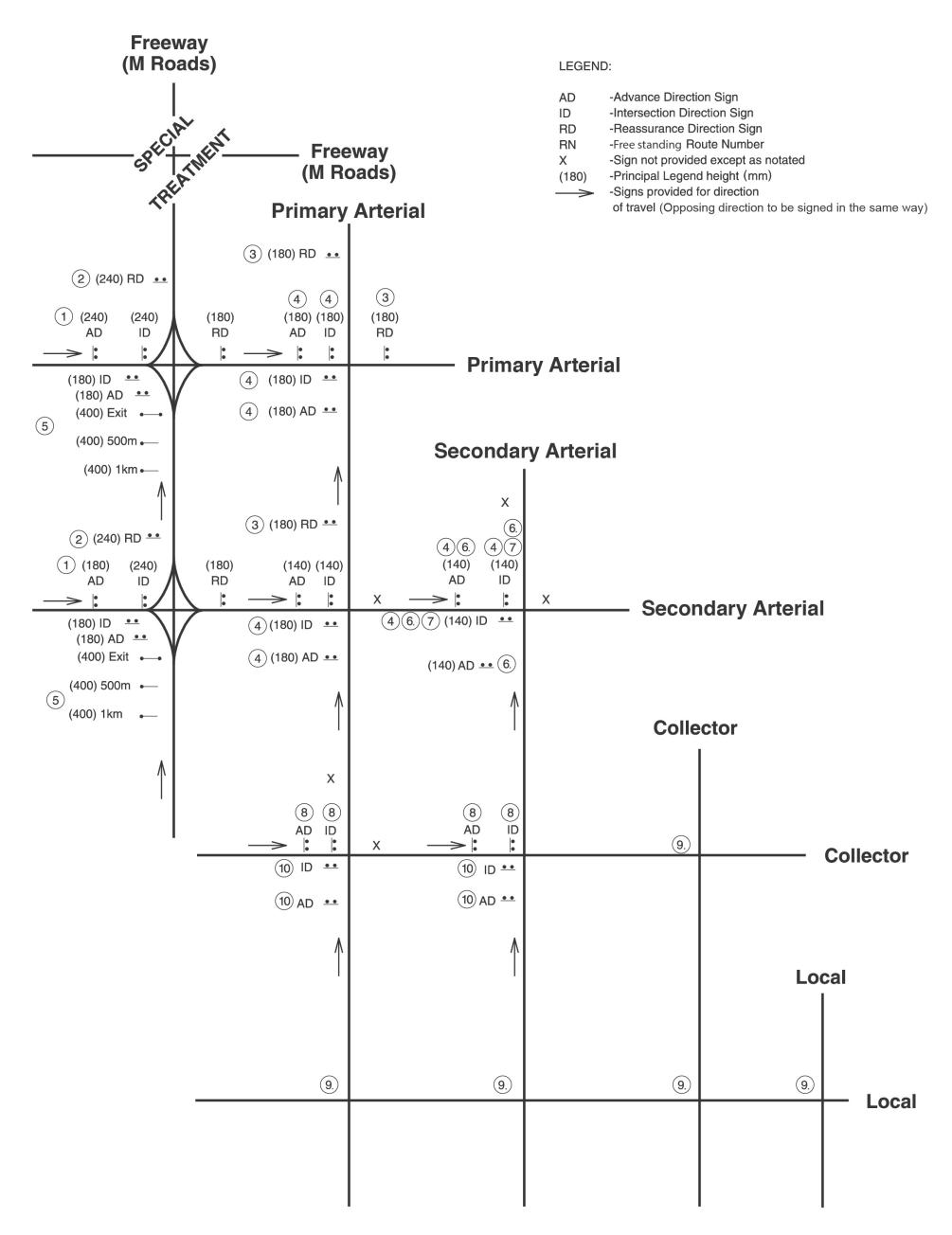


Figure 3: Sign matrix for metropolitan/urban direction signs - guide for sign selection and principal legend size

Notes for Figure 3:

- 1. The advance direction sign is overhead mounted with a principal legend height of 240 mm. For alternative legend sizes for advance direction signs on the approach to freeway interchanges, refer to Clause 1.6.8 (j) of this Supplement.
- 2. Reassurance direction signs should be installed after major interchanges, but are not necessary after every interchange on metropolitan freeways, refer to Clause 3.6.1 of AS 1742.15 and this Supplement.
- 3. Install reassurance direction signs and free standing route number signs in accordance with spacing requirements of Clause 2.5.3 and Table 11 of this Supplement. For alternative legend size for reassurance direction signs, refer to Clause 1.6.8 (j) of this Supplement.
- For alternative legend sizes for advance and intersection direction signs, refer to Clause 1.6.8 (j) of this Supplement.
 Larger text sizes should be used for approaches with more than four lanes (including parking and turning lanes) refer to Clause 1.6.8 (j).
 - Where site constraints restrict the erection of these signs, narrow format or overhead signs may be used see Clauses 2.2.2 (a) and (b) (for AD signs) and Clause 2.4.2 (for ID signs) of this Supplement.
- 5. See Section 3 of AS 1742.15 (and relevant Supplement Clauses) for details on freeway direction signs.
- 6. Where there are space restrictions and a full set of signs (advance and intersection) cannot be installed (e.g. in a shopping strip), then only the advance direction sign is required and should be installed at least 50 m from the intersection. Note that a G2-V5 series sign may be used in this situation.
- 7. Signing is normally limited to intersection direction G2-V1 or G2-V5 series signs. See Clause 2.4.2 of this Supplement.
- 8. The signing options on the collector road approach may be one of the following:
 - For low volume collector roads, one sign in advance of the intersection a G1 series sign, G2-V5 series sign (refer to the bottom example of Figure 17) or a free standing route number sign where space is limited (if applicable).
 - For high volume collector roads (e.g. large number of non-local drivers, large turning movements, has a route number or is a significant traffic route) – an advance direction sign followed by an intersection direction sign (refer to the top example of Figure 17 or Figure 16 where it would be beneficial for destinations of the intersecting road to be shown). The sign used will generally be 'A' size.
 - Roundabouts generally require an advance direction sign and intersection direction signs refer to Figure 18.
- Normally only G5 series street name signs are installed which are the responsibility of the municipal council. G3 series signs may also be installed; see Clause 2.4.3 of this Supplement.
- 10. The signing options on the approach to a collector road may be one of the following:
 - Only one G3-V5 series sign, installed in advance of the intersection (refer to Figure 6 and the bottom example of Figure 17)
 - For high volume collector roads or if the intersection is signalised G3-V8 (advance) and G3-V5 (intersection) signs. Refer to Figure 6 and the top example of Figure 17 for additional guidance.
 - Where the collector road has a route number and/or allocation standard through destinations, both advance and intersection signs are required. These signs will be in the G1 and G2 series sign formats respectively, refer to Figure 5 and Figure 6 of this Supplement.

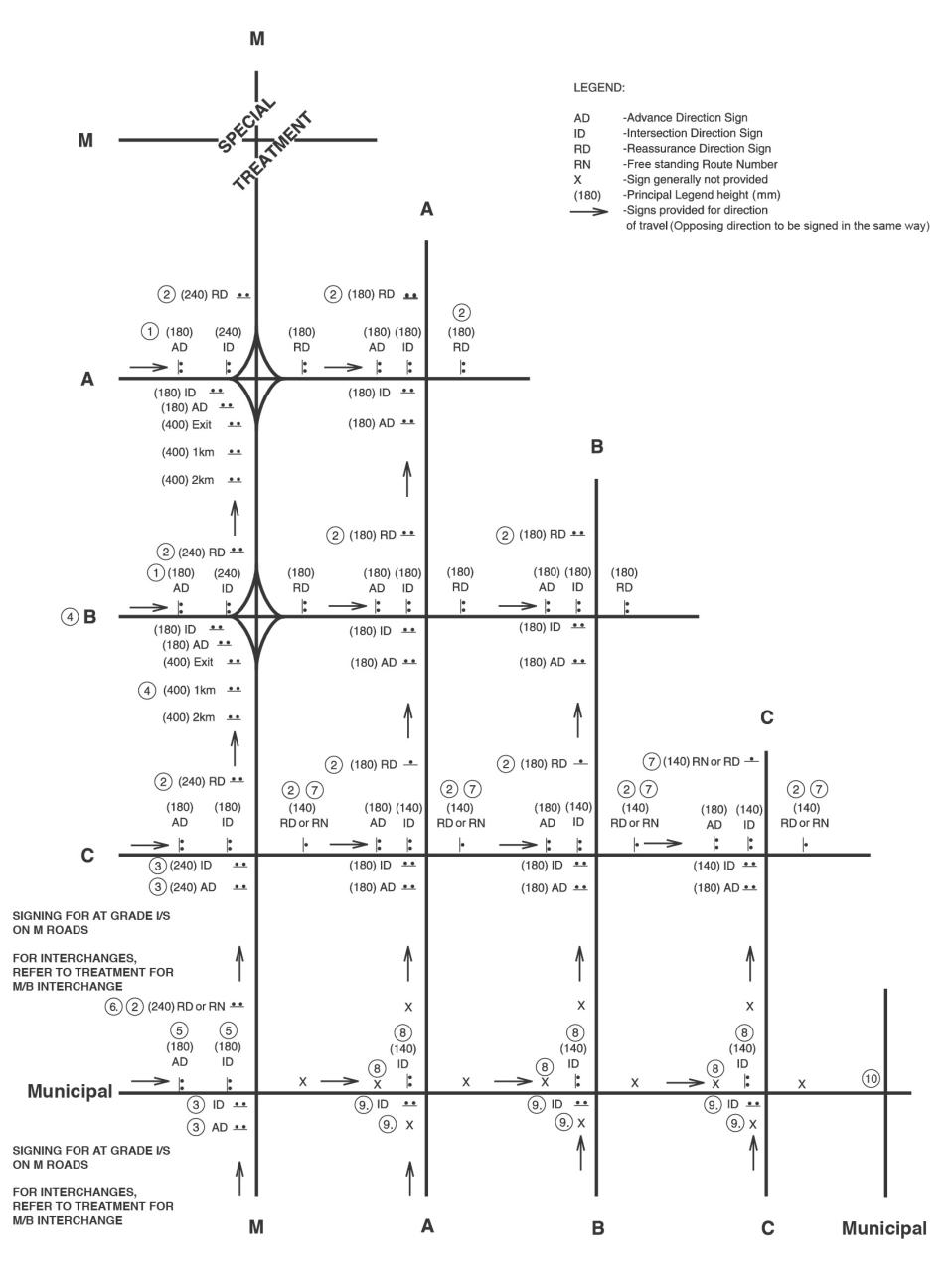


Figure 4: Sign matrix for rural direction signs - guide for sign selection and principal legend size

Notes to Figure 4:

- 1. For alternative legend sizes for advance direction signs on the approach to freeway interchanges, refer to Clause 1.6.8 (j) of this Supplement. Note that overhead signs are one legend size larger than side mounted signs.
- Install reassurance direction signs and free standing route number signs in accordance with spacing requirements of Clause 2.5.3 and Table 11 of this Supplement. For alternative legend sizes for reassurance direction signs, refer to Clause 1.6.8 (j) of this Supplement.
- 3. For details on required signs at M Route/municipal road at-grade intersections, refer to:
 - Figure 38, Figure 39, Figure 40 for a municipal road without destinations
 - Figure 37 (right approach road) for a municipal road with destinations

Depending on the type of intersection, not all signs shown are required (see figures listed above).

The principal legend size used on a G1 or G2 series sign (240 mm) is different to on a G3 series sign (200 mm). Refer to Clause 1.6.8 (h) of this Supplement and the figures listed above for further details.

- 4. This sign arrangement shall be adopted where interchanges are provided at C Routes and municipal (local) roads. Refer to Figure 33 for signing treatment for a municipal road without destinations.
- 5. For direction sign requirements on the municipal road approach, refer to:
 - Figure 38, Figure 39, Figure 40 for a municipal road without destinations
 - Figure 37 (right approach road) for a municipal road with destinations
- 6. A reassurance direction sign or free standing route number sign may be required on the M Route departure, refer to 'At-grade M Route intersections' in Clause 2.5.3 (a) of this Supplement.
- 7. Reassurance direction signs may be permitted on C Routes, refer to Clause 2.5.3 (a) of this Supplement. One size larger should be used for divided C Routes or where greater conspicuity of the sign is required (e.g. where there is a large offset from the traffic lanes).

Where a reassurance direction sign is not warranted, a free standing route number sign shall be installed instead.

- 8. The signing options on the municipal road approach may be one of the following:
 - For low volume municipal roads, one sign at the intersection generally a free standing route number sign with an arrow plate (refer to Clause 4.4.3 of this Supplement). Where it would be beneficial to show the intersecting road's destination(s), install a G2 series sign (e.g. double chevron ended G2-V4 sign) instead. Either signing options use an 'A' size sign (140 mm principal legend height).
 - For high volume municipal roads (e.g. where there is a large number of non-local drivers, a high volume of turning movements, or if the road is a significant traffic route) a G1 series advance direction sign followed by a G2 series intersection direction sign i.e. sign in a similar format to a C Route departure. The signs will be 'A' size (140 mm principal legend height).
 - Where the municipal road has a previously signed standard through destination, this destination will need to be repeated on the relevant signs at the intersection. In this case, at the very minimum, a G2 series intersection direction sign (A size) is required facing the municipal road and that destination, if reached via the intersecting road, will need to be shown on this sign (and on the advance sign, if present).
 - Roundabouts generally require an advance direction sign and intersection direction signs refer to Figure 18 and Figure 20.
- 9. The signing options on the approach to a municipal road may be one of the following:
 - Only one G3-V5 series sign, installed in advance of the intersection (refer to Figure 14)
 - For high volume municipal roads or where there is a particular need for advance navigational information G3-V8 (advance) and G3-V5 (intersection) signs (refer to Figure 14).
 - Where the municipal road has a standard through destination, both advance and intersection signs are required.
 These signs will be in the G1 and G2 series sign formats respectively, refer to Figure 14 of this Supplement (use the C Route example but without the route number shown for the municipal road).

G1 and G2 series signs on A, B and C Routes are B size (180 mm principal legend height), except for the C Route ID sign which is A size (140 mm). G3 series signs specified here are generally 160 mm principal legend height (refer to Clause 1.6.8 (h) of this Supplement).

10. Direction signs are generally not required. Where there is a particular need for signage, refer to note 9.

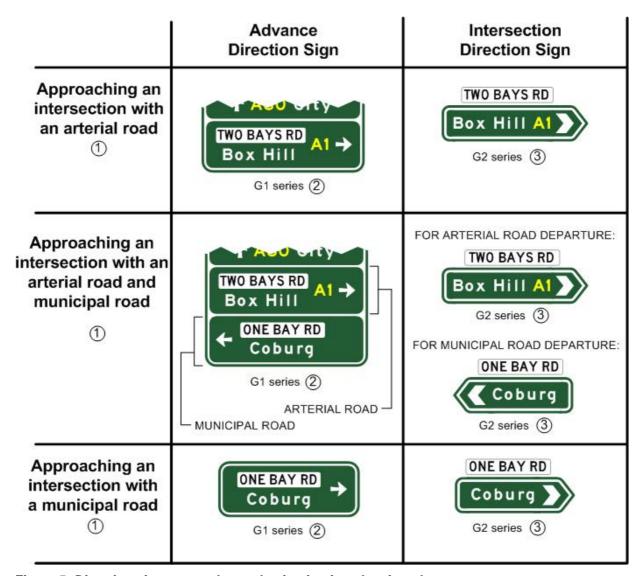


Figure 5: Direction sign types when a destination is to be signed

Notes to Figure 5:

- 1. Refer to Clause 2.6 of this Supplement for example sign layouts at intersections.
- 2. See AS 1742.15:2007 Clause 2.2 and the relevant Supplement for sign details and alternative designs. The display of road names shall be in accordance with Clause 1.6.5 of this Supplement.
- 3. Refer to Clause 2.4.2 of this Supplement for sign details and alternative designs. The display of road names shall be in accordance with Clause 1.6.5 of this Supplement.

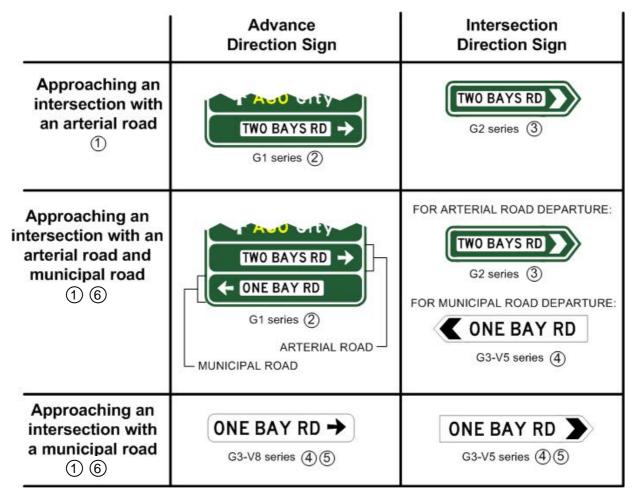


Figure 6: Direction sign types when no destination is to be signed

Notes to Figure 6:

- 1. Refer to Clause 2.6 of this Supplement for example sign layouts at intersections.
- 2. See AS 1742.15:2007 Clause 2.2 and the relevant Supplement for sign details and alternative designs. The display of road names shall be in accordance with Clause 1.6.5.
- 3. See AS 1742.15:2007 Clause 2.4 and the relevant Supplement for sign details and alternative designs. The display of road names shall be in accordance with Clause 1.6.5.
- 4. See Clause 2.4.3 of this Supplement for sign details and alternative signs.
- 5. A G3-V8 advance sign is generally not required see Clause 2.4.3 of this Supplement.
- 6. Where the municipal road has a route number or driving instruction (e.g. 'LEFT LANE'), a G1 series advance direction sign and G2 series intersection direction sign shall be used instead of G3 series signs (i.e. use 'approaching an intersection with an arterial road' signing arrangement).

For when the intersection is a roundabout, refer to Figure 18 for signing arrangement.

Clause 2.2.1 – Application

Advance direction signs should not be used as positional signs within or close to an intersection. The exception is that if the signs are mounted overhead where traffic speeds are low (e.g. in a business district) they may be a satisfactory substitute for both advance and intersection direction signs. In such cases, the signs shall be located a minimal distance in advance of the intersection.

Advance direction signs are the most critical sign at an intersection as they provide drivers with early directional information, allowing them to correctly position themselves in the appropriate lane in a safe and timely manner.

Clause 2.2.2 - Format and use

For best practice, where a G series sign is mentioned in this Clause of AS 1742.15:2007, it should be substituted with the Victorian version of the sign, by adding 'V' in front of the last digit of the sign code (unless otherwise specified). The relevant standard drawings for these signs can be found in the VicRoads Supplement to AS 1743.

Victorian versions of the G series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

Types

Advance direction signs may be of the following types:

- Stack signs (list type):
 - o wide format (G1-V1, G1-V2, G1-V4)
 - narrow format (G1-V6)

Refer to Clause 2.2.2 (a) of this Supplement.

- Diagrammatic direction signs (G1-V3): refer to Clause 2.2.2(b) of this Supplement
- · Roundabout signs:
 - o wide format (G1-V5-1)
 - narrow format (G1-V5-2)

Refer to Clause 2.2.2 (b) of this Supplement.

- Lane Designation signs (G9-V7, G9-V8, G9-V42 or G9-43-1, G9-43-2, G9-43-3): refer to Clause 2.3, Clause 2.3.1 and Clause 2.3.2 of this Supplement.
- Road Name signs (G3-V8): refer to Clause 2.4.3 of this Supplement.

Use of free standing route number signs

Free standing route number signs with arrow plates (G8 series) are installed in advance of an intersection where the installation of standard direction signs is not warranted; refer to Clause 2.1 (a) and Clause 4.4.3 of this Supplement.

Median placement of signs

Direction signs may be placed in the median of divided roads (including expressway type roads and M Routes with at-grade intersections). Measures should be taken to ensure that the road safety risk posed by the sign is mitigated (e.g. using a frangible post system).

Driving instructions

Driving instruction words (e.g. LEFT LANE) may be used to supplement or replace arrows on G1 signs in situations where arrows do not provide sufficient lane guidance or turning information; refer to Clause 1.6.3 of this Supplement.

Clause 2.2.2 (a) - Stack signs

Stack signs (list type): wide format (G1-V1, G1-V2, G1-V4) and narrow format (G1-V6)

The G1-V1 and G1-V2 signs are used where a route number or road name is associated with one direction in any panel. The G1-V4 sign is used where a common route number or road name is associated with two different directions in any panel.

Consideration may be given to placing long multi-word names on two lines to reduce the sign width.

Where road name panels are permitted in accordance with the requirements of Clause 1.6.5 of this Supplement, they shall be centre justified above the destination (where a destination is signed).

Order of panels and arrow for wide and narrow format stack signs

For G1-V1, G1-V2, G1-V4 and G1-V6, order of panels (or sub-panels) and arrows is as follows:

- The order, top to bottom, is:
 - o a panel with vertical arrows (for through direction)
 - o then a panel containing 45 degree arrows
 - then a panel containing horizontal arrows (left and right directions).
- Further to the above, the panel or information group with a right direction arrow is generally above the panel or information group with a left direction arrow, except where:
 - the more important destination is to the left
 - signs approaching a staggered T intersection, in which case the first leg reached shall be located below the other (see sign examples below).
- Adjacent panels shall have the arrows placed at opposite ends, except if adjacent panels are for the same direction.

G1-V1 and G1-V2 signs

In addition to the principles in Clause 2.2.2 (a), the G1-V1 and G1-V2 signs have the following design features:

- Each panel has only one arrow and is separated by a white horizontal dividing line.
- Location of arrows in adjacent panels for different directions is as shown below.









Staggered arrangement of arrows on G1 series signs – adjacent panels for different directions have arrows placed at opposite ends

- The destination and route number is always horizontally centre justified in the top panel. If this panel is
 the principal panel controlling the width of the sign, then standard horizontal spacing shall apply for the
 particular legend size.
- See the sign examples below and in Figure 2.1 of AS 1742.15:2007 for options of how the route number(s) and destination(s) may be presented in each panel.



G1-V4 signs

In addition to the principles in Clause 2.2.2 (a), G1-V4 signs have the following design features:

- The two arrows within the panel are located at opposite ends and the text is always justified towards
 the end of the panel corresponding to the indicated direction. Note that a minimum spacing is required
 between the sign border and the text at the opposite end of the arrow to accentuate this justification.
- Right hand arrows are generally above left hand arrows, except where the more important destination leads to the left.
- Route numbers are located as shown in sign examples in this Clause and as described in Clause 2.2.2 (a) of AS 1742.15:2007.

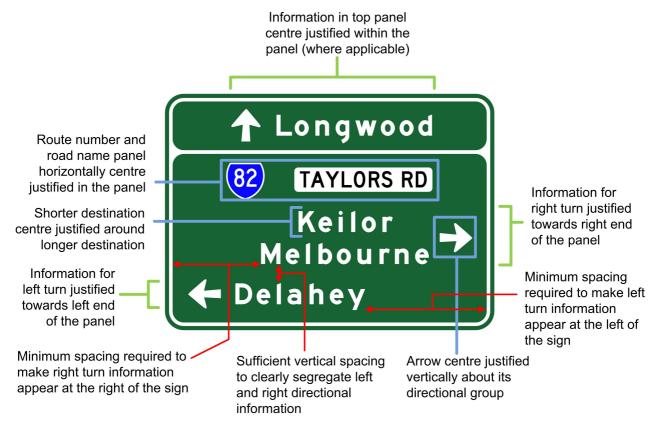


Figure 7: Design principles for a typical G1-V4 sign (showing design with top panel)





G1-V4 (with top panel)

G1-V4

G1-V6 sign - narrow format

The guidelines below are in additional to the principles in Clause 2.2.2 (a) for G1-V6 signs.

This sign is not normally available in C size. At any location requiring a C size sign, more practical alternatives such as overhead mounting should be considered.

The general arrangement of arrows and route numbers on these signs are described below and in Figure 2.1 of AS 1742.15:2007.

The G1-V6 signs have the following design features:

- Route numbers and arrows are always on the same line and centre justified in the panel as follows:
 - Vertical arrows may be positioned to the left or right of the route number, depending on the justification of the arrow in the panel immediately below. The vertical arrow and route number are always located above the destination(s).
 - Horizontal and 45 degree arrows are positioned on the side of the sign corresponding to the indicated direction and located with the route number:
 - above the destination(s) when indicating the through route
 - below the destination(s) when not indicating the through route.
- Right hand arrows are generally above left hand arrows of the same angle, except where the more important destination leads to the left.

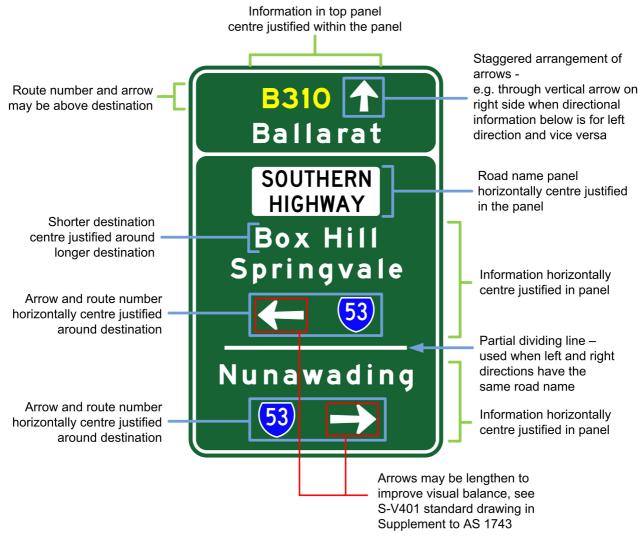


Figure 8: Design principles for a typical G1-V6 sign

Advance direction signs at freeway/M Route at-grade intersections

Where at-grade intersections occur on a rural freeway or M Route, direction signs are provided as described below:

- C size G1-V1, G1-V2, G1-V4 or G3-V8 signs are used for signs on the freeway/M Route.
- The through direction is always shown on G1-V1, G1-V2 and G2-V4 signs (typically through destination and route number).
- The route number for the side road is always shown (where applicable).
- Where a side road leads to a town or named locality, only the town or locality name will normally be shown.
- Where there is no town or named locality to be reached via the side road, only the road name will normally be shown (refer to Clause 1.6.5 of this Supplement). In these cases, a G3-V8 (refer to Clause 2.4.3 of this Supplement) sign is normally used when the side road is a municipal road.
- Where one departure of the side road is an arterial road and the other departure is a municipal road,
 refer to Figure 5 and Figure 6 for signing arrangements.
- If the side road leads to a town or locality named from the freeway at the intersection, the G1-V4 advance direction sign (showing the freeway's destinations) is installed on the side road approach to the intersection.

- If the side road is signed from the freeway by road name only, the advance direction sign on the side road is sign G2-V5-1, showing only the route number and arrow. However, if there is a significant volume of turning traffic into and out of the side road, then a G4-V1 sign should be considered instead.
- B size signs are normally used for advance direction signs on the side road.

Typical layout of signs at freeway or M Route at-grade intersections can be found in Clause 3.9 (in particular Figures 37, 38, 39 and 40) of this Supplement.





G1-V4

G3-V8

Clause 2.2.2 (b) - Diagrammatic direction signs

The guidelines below are in addition to the principles in Clause 2.2.2 (b) for diagrammatic signs.

Route numbers are normally located:

- above the legend for the left and right turning movements. However, they may be positioned under the legend to improve sign balance, reduce the sign size or increase separation between information on adjacent legs of the intersection.
- For the through leg, the route number is normally positioned to the left of the destination. The route number may be located above the destination to reduce the width of the sign.

Typical arrangements of these signs are shown in the following examples.

a) Multiple intersection signs (G1-V3)

Example of multiple intersection G1-V3 signs:





G1-V3

G1-V3

b) Roundabout (G1-V5-1, G1-V5-2 and G1-V5-3)

Advance direction signs are used for roundabouts where requirements are met for the provision of signs in accordance with the sign matrices; refer to Clause 2.1 (a) of this Supplement. The diagrammatic sign G1-V5-1 shall be used in all cases except where visibility to the sign and/or roadside space is restricted, in which case the G1-V5-2 sign may be used. Where the G1-V5-2 sign is used, a symbolic roundabout warning sign (W2-7) is placed in advance of the sign.

G1-V5-1 and G1-V5-3 signs

Examples of wide format G1-V5-1 and G1-V5-3 signs:





G1-V5-1 G1-V5-3

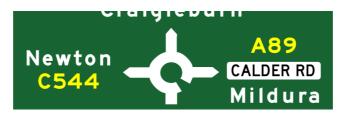
The G1-V5-1 and G1-V5-3 wide format signs have the following design features:

- This sign should be used for where there are more than three departure legs.
- For the through movement:
 - o The route number and destination is horizontally centred justified above the through leg.
 - The route number may be placed above the destination in order to reduce the width of the sign.
 - A road name panel, provided in accordance with Clause 1.6.5 of this Supplement, is shown for the through movement where the road changes name after the roundabout. The road name panel is centre justified horizontally above the destination.



Example arrangement of through movement information

- For the non-through movements (e.g. left and right movements):
 - The route number is generally centre justified horizontally above the destination but may be position below instead to improve sign balance, reduce the sign size and increase separation between information on adjacent legs of the intersection.
 - The road name panel, provided in accordance with Clause 1.6.5 of this Supplement, is centre
 justified horizontally above the destination and in some cases above the route number when
 the route number is positioned above the destination.



Example arrangement of non-through movement information

- Where one of the movements located near the bottom of the sign has multiple lines of legend, the bottom shaft of the approach leg should be extended to improve sign balance and aesthetics.
- G1-V5-3 sign includes the use of a W8-V104 supplementary panel.

 Where there is a non-accessible terminating leg (e.g. freeway offramp), this leg should be shown with an 'inverted' arrowhead and a no entry symbol (symbol S-V135) (see below).



Signing a non-accessible terminating leg

G1-V5-2 signs

Examples of narrow format G1-V5-2 signs:



G1-V5-2 (rural example)



G1-V5-2 (urban Melbourne example)

The G1-V5-2 sign is principally a narrow format sign with the following design features:

- This sign shall not normally be used for roundabouts that have more than four legs.
- Each G1-V5-2 panel (or sub-panel) has only one arrow.
- Special arrows are used for the through, right and left movements to simulate the movement of traffic through the roundabout (see examples above and in Table 1.3 in this Supplement).
- The order of panels, top to bottom, is through, right turn and then left turn movement, although the left and right may be swapped if the more important destination leads to the left.
- Adjacent panels have arrows at opposite ends.
- The relative location of route numbers and arrows depends on whether the sign has a rural alphanumeric number or route shield as follows:
 - For rural intersections:
 - the route number is centre justified above the destination
 - the arrow is centre justified vertically about the route number and destination
 - the arrow and text are horizontally centre justified within the panel.
 - o For urban intersections with route numbers in shields, the route numbers and arrows are always on the same line and centre justified in the panel as follows:
 - through movement arrows may be positioned to the right or left of the route number depending on the justification of the arrow in the panel immediately below. The through movement arrow and route number is always located above the destination

- right and left turn arrows are positioned on the side of the sign corresponding to the indicated direction and located below the destination.
- Where road name panels are permitted in accordance with Clause 1.6.5 of this Supplement, they shall be centre justified above the destination.
- A partial dividing line is provided between panels instead of a full separation line when opposing directions have the same road name.

Roundabout advisory speed supplementary panel (W8-V104)

The supplementary panel (W8-V104) for roundabout signs to indicate advisory speeds should only be used in a rural environment where approach speeds are greater than 80 km/h.

Advisory speeds shown on supplementary panels apply to through movements only, on the basis that drivers of turning vehicles are already aware of the need to slow down in order to turn. Hence, these panels are not normally used on the "stem" approaches to T-intersection roundabouts. In these cases, however, an alternative panel "REDUCE SPEED NOW" may be used in special circumstances to address an existing or potential safety problem. This alternative panel may also be used on an approach which does not have a clearly defined through movement but where at least one movement at the roundabout might not be perceived by drivers as a turn requiring substantial speed reduction.

Typically, roundabouts on high speed roads are designed to provide for through movements by cars at a maximum speed of 50 km/h. In general, the speed values to be shown on advisory speed panels should be:

- 50 km/h for single lane roundabouts.
- 40 km/h for multi-lane roundabouts.

The lower speed for multi-lane roundabouts is based on the car remaining in the one lane as it passes through the roundabout rather than changing lanes through the roundabout to drive a path of least deflection.

The above speed values apply to roundabouts in which the path of least deflection has a radius of approximately 100 m, and an outward crossfall of 0.02 - 0.03 m/m. For roundabouts with significantly different geometric characteristics (in particular, tighter through movement alignment, e.g. for a pair of intersection legs which are not 180 degrees apart), appropriate values of advisory speed can be determined by reference to Section 7 of Austroads Guide to Road Design Part 3 (2010) and the corresponding VicRoads Supplement. Calculated speed values should be rounded to the nearest 5 km/h for display on supplementary panels.



W8-V104 supplementary panel

c) Signing of staggered T-intersections

At minor staggered T-intersections, the installation of diagrammatic signs is generally not warranted. As an alternative, consideration may be given to using list type signs with specially developed S-V403 ('cranked upwards arrow') (refer to VicRoads Supplement to AS 1743).

The approach to signing staggered T-intersections depends primarily on the separation distance between the minor road legs.

Table 10 shows the favoured arrangement of arrows (and hence destinations) on the sign faces for the major and minor road approaches to "right-left" staggered intersections. For a 'left-right' stagger, the same principles are used with appropriate modification to the position of arrows on the sign face.

Separations less than 30 m: advance signs on the major road

The format of direction signs shall be the same as for a simple cross road, as the separation is considered to be small.

Separations less than 30 m: advance signs on the minor road

- The cranked upward arrow for what is effectively the through movement is placed on top and located
 on the right-hand side of the sign for a "right-left" stagger and the left-hand side for a "left-right" stagger.
- The horizontal arrows for the major road legs are placed in a lower panel and located so that the three arrows on the sign are arranged in a staggered pattern.

Separations 30 m to 200 m: advance signs on the major road

- The vertical arrow for the through movement is placed at the top (as usual)
- The right-angled arrow (i.e. for the second intersection) comes next, on the basis that the movement to this leg involves firstly a through movement, then a turn.
- The horizontal arrow is placed at the bottom.
- As usual, the vertical arrow is placed on the opposite side of the sign to the next arrow below it on the sign.

Separations 30 m to 200 m: advance signs on the minor road

• Same as for the 'less than 30 m' case.

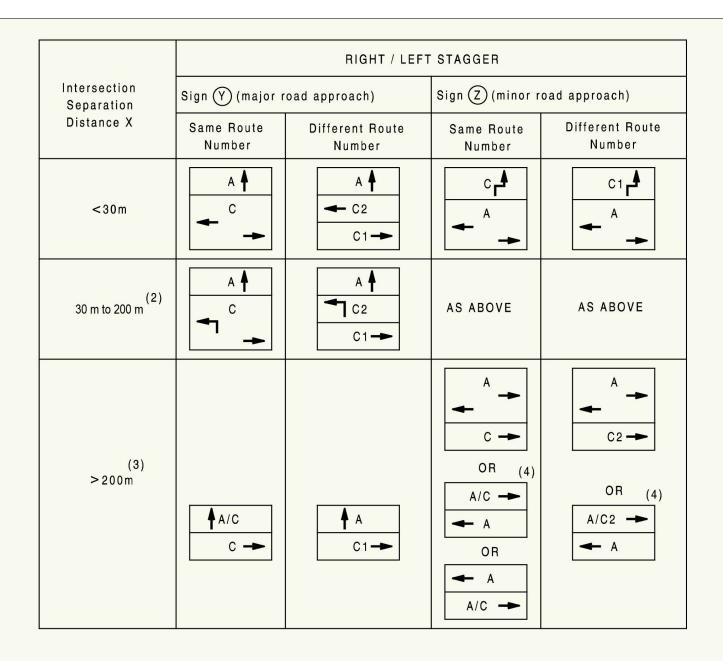
Separations 200 m: advance signs on the major road

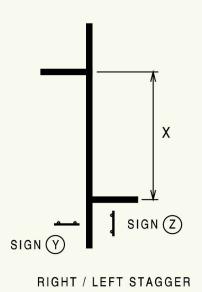
It is considered that there is sufficient separation between intersections to provide separate advance intersection signs for the second intersection. However, if the staggered roads have the same route number, then the through movement should be signed as a combined route number. This is to ensure that drivers are aware that the particular route has alternate directions.

Separations 200 m: advance signs on the minor road

Signs may be any of the options shown in Table 10.

Table 10: Signing of staggered intersections





- (1) FOR THE PURPOSE OF THIS EXAMPLE THE MAJOR ROAD APPROACH IS AN 'A' ROAD AND MINOR ROAD APPROACH(ES) ARE 'C' ROAD(S).
- (2) SEPARATION BETWEEN INTERSECTIONS NOT SUFFICIENT TO INSTALL ADVANCE DIRECTION SIGN TO SECOND INTERSECTION.
- (3) SIGN AS TWO SEPARATE INTERSECTIONS WITH ADVANCE DIRECTION SIGNS ON EACH APPROACH ALONG THE MAJOR ROAD.
- (4) THIS STYLE SIGN IS USED WHEN THE ROUTE SPLITS BEYOND THE DESTINATION.

Clause 2.2.3 – Legend

DEPARTURE

The information contained in Clause 1.6.8 of this Supplement shall be used for legend sizes instead of Table 1.1.

In some exceptional circumstances, three destinations may be signed for one departure – e.g. where there are three closely spaced towns of equal importance. Consultation with Network Standards shall occur where more than two destinations are proposed to be signed.

For signing two destination names in a dual numbering situation, refer to Figure 46 and Clause 1.6.2 of this Supplement ('Order of destinations on direction signs').

Road names are shown on advance and diagrammatic signs in accordance with Clause 1.6.5 of this Supplement.

For the selection criteria of standard through destinations for use on advance and intersection direction signs, refer to Clause 1.6 of this Supplement.

For predetermined cities, towns and suburbs to be used as standard through destinations, refer to Attachment A of this Supplement.

Brackets are not used on destinations on advance and intersection direction signs (refer to Clause 2.5.2 of this Supplement).

The principles below shall also be followed when signing standard through destinations on advance direction signs:

a) Signing the through direction

The next standard through destination shall always be shown, and repeated on successive advance direction signs until that destination is reached.

The next intermediate destination or a distant standard through destination (e.g. Melbourne or City on inbound directions) may be also included in the through direction at key intersections, only if considered necessary and the sign legend limits permit. It should be noted that, on some routes, there may be two standard through destinations which will need to be continuously signed.

Practitioners should check existing direction signs along the route to ensure that signs have consistent destinations shown. Furthermore, signs adjacent to a state border should be checked against signs in the adjacent state to ensure consistent cross-border destinations are used (including on reassurance direction signs).



Consistent destinations to be shown on successive direction signs

b) Signing the intersecting road

Side or cross-road destinations shown on the advance direction sign shall be the next town or suburb on the side road as shown on the standard through destination figures applicable to that side road (see Attachment A of this Supplement).

If the intersecting road is a municipal road and/or road with no allocated destination, then the closest town or suburb along that road should be used as the destination. Care shall be taken in selecting the destination as it is imperative that drivers are able reach that destination when following subsequent signs along the side road. Once a destination appears, it should be used on all intermediate signs until that destination is reached.

If there is no destination along the road, the road name shall be used on the sign.

c) Signing from a side road

Signing from a side or cross road shall be the next town or suburb along the intersecting road. Refer to the standard through destination figures in Attachment A of this Supplement for destinations along freeways and arterial roads.

If the standard through destination of the side road is reached by turning on to the intersecting road, then the side road's standard through destination shall be shown in conjunction with the intersecting road's standard through destination on direction signs on the side road; refer to Figure 2.3 of AS 1742.15:2015.

In rural areas where the side road approach is a C Route, the destinations shown may be the next standard through destination, in each direction of the intersecting road, or an intermediate (local) destination where local usage would make this more appropriate. However, it is preferred that both the standard through and intermediate destinations are signed.

Signing Melbourne in conjunction with the standard through destination may be appropriate at more important junctions with radial M, A, or B Routes.

Practitioners should check existing direction signs along the side road to ensure that signs have consistent destinations displayed.

d) Signing for City/Town Bypass routes

Where a route runs within a city/town boundary but bypasses the city/town centre, access roads to the centre of the city/town may be signed 'Town Centre' or 'City Centre'. If other more distant destinations also appear on the sign, the city/town name of the city/town centre should also be included to avoid confusion. For example, within Ballarat, a sign also including directions to 'Hamilton' should refer to the city centre as 'Ballarat City Centre'.

e) Signing remote route numbers (including remote freeways)

Refer to Clause 1.6.6 of this Supplement.

f) Signing at the end of route number multiplexes (road with multiple route numbers)

The advance direction sign on the multiplex route approach to the terminus of the multiplex should show both the intermediate and distance through destinations of each route number. One of the destinations used for each route should be the standard through destination.

This is imperative, especially if prior reassurance direction signs along the route multiplex show a combination of destinations from each route number. Refer to Clause 2.5.2 and Figure 12 of this Supplement.

Clause 2.3 – DRIVING INSTRUCTION DIRECTION SIGNS

In addition, these signs should be installed in the following situations:

- Where a mid-block lane runs directly into a turning lane (i.e. trap lane).
- Where a raised separator between a through lane and a turning lane extends some distance back from the intersection.

A lane designation sign should not be used to replace the advance direction sign for a roundabout, but a G9-43 sign may be used as an intermediate sign to assist with lane discipline.

For allowable driving instruction messages (e.g. use of ONLY messages) refer to Clause 1.6.3 of this Supplement.

Clause 2.3.1 – Single direction type (G9-7 and G9-8)

The Victorian versions of these signs are the G9-V7 and G9-V8 signs. These signs are detailed in the VicRoads Supplement to AS 1743. For best practice, these Victorian sign versions should be used as they cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. However, the principles for the usage of G9-7 and G9-8 signs still apply to the Victorian versions of these signs.

The information contained in Clause 1.6.8 of this Supplement shall be used for legend sizes instead of AS 1742.15:2007 Table 1.1.

The G9-V7 sign shall only indicate the number of lanes actually available at the sign position, regardless of how many additional turning lanes may be developed downstream of the sign.

Acceptable driving instructions for G9-V8 signs are set out in Clause 1.6.3 of this Supplement.

Clause 2.3.2 – Multiple direction/lane type

The Victorian version of the G9-42 is the G9-V42 sign. These signs are detailed in the VicRoads Supplement to AS 1743. For best practice, these Victorian sign versions should be used as they cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. However, the principles for the usage of G9-42 signs still apply to the Victorian version of this sign.

Other examples of multiple lane type signs for exclusive turn lanes are shown below:





In this example, access to a further turnoff is from the right most exclusive left turn lane. In this example, additional right turn lanes for an intermediate intersection develop from an exclusive right turn lane for a downstream intersection.

G9-43 signs

Where additional legends (e.g. destinations, road names and/or route numbers) are required on a G9-43 sign, the legend sizes shall comply with the requirements in Clause 1.6.8 of this Supplement. The overall size of the G9-43 sign (as detailed in AS 1743) may be scaled up or down to ensure that the diagrammatic arrows are well proportioned to the legend size used.

Clause 2.4.1 – Function and classification

DEPARTURE

Type 1 and a select number of Type 2 signs are used in Victoria. See Clause 2.4.3 of this Supplement for further information.

Intersection direction signs often perform two other important functions, and their location should be selected with these in mind:

- They can indicate to drivers the presence of the intersection and the precise point of conflict with entering traffic, especially if the pavement is not adequately visible on the approach.
- At complex channelised intersections, they can help drivers select the correct path through the intersection, and thus deter wrong-way or misdirected movements. It is therefore important that these signs (particularly chevron-ended signs) are appropriately placed.

One or two intersection direction signs may be provided for a particular direction, depending on the importance and size of the intersection (generally, divided roads require more signs than undivided roads). Refer to Figures 15 and 16 of this Supplement.

Intersection direction signs at M Route at-grade intersections (G2-V1, G2-V2, G3-V5)

- All intersection direction signs within the intersection are of one of the following types:
 - G2-V1 (refer to Clause 2.4.2 of this Supplement)
 - o G2-V2 (refer to Clause 2.4.2 of this Supplement)
 - G3-V5 (refer to Clause 2.4.3 of this Supplement).
- The side road legend is either a town or locality name or a road name, in accordance with the legend shown on the prior advance direction sign on the freeway/M Route.
- Where one departure of the side road is an arterial road and the other departure is a municipal road, refer to Figure 5 and Figure 6 of this Supplement for signing arrangements.
- C size is used for these signs.

Refer to Figures 37, 38, 39 and 40 for the placement of these signs at an M Route at-grade intersection.

Clause 2.4.2 – Major Intersection Direction Signs (Type 1) - Description and use

The Victorian versions of these signs are the G2-V1, G2-V2, G2-V4 and G2-V5 series signs. For best practice, these Victorian sign versions should be used for the reasons described below. These signs are detailed in the VicRoads Supplement to AS 1743.

Victorian versions of the G series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

The information contained below shall be read in conjunction with the guidance in Clause 2.4.2 of AS 1742.15 for the design and installation of these signs. The placement of road name panels on intersection direction signs should follow guidance in (c) below. For the display of distances and route numbers, refer to Clause 2.4.7 of this Supplement.

Further examples of G2-V1 and G2-V4 signs:



(c) Road Name Panels

In Victoria, the road name panel may be provided externally at the top of the sign (sign G2-V3).

Road names are included on intersection direction signs as described in Clause 1.6.5 of this Supplement. The legend size for road name panels is described in Clause 1.6.8 (f) of this Supplement.

On G2-V1, G2-V2 and G2-V4 signs, the road name panel is provided in the form of either:

- An auxiliary road name panel (sign G2-V3):
 - The G2-V3 sign is in the same size code as the parent sign (e.g. a B size G2-V3 sign would be used above a B size intersection direction sign). Refer to Table 6 of this Supplement.
 - o It is mounted above and centrally along the horizontal part of the top edge of the parent sign.
 - The auxiliary road name panel should not be longer than the parent sign below.
 Excessively long road names are accommodated by either:
 - extending the length of the parent sign to suit
 - using a two line version of the G2-V3 road name panel
 - reverting to Series C font for the road name (least preferred option).



G2-V3 sign showing road name over two lines

Route numbers may be included on the left hand side of the road name on the G2-V3 road name
panel for sign balance, i.e. where a long destination name is to be signed in association with a
short road name.



G2-V3 signs with route number

A road name panel included within the sign face and not as a separate G2-V3 panel. This is an
option when there are sign installation restrictions. This is the only method of presentation for
G2-V5 style signs.



G2-V1 sign with internal road name panel

(i) Wide format

G2-V1 and G2-V4 signs

The G2-V1 and G2-V4 signs have the following design features:

 Road names are provided on these signs in metropolitan areas in accordance with Clause 1.6.5 of this Supplement.

- Route numbers and distances shall be provided in accordance with Clause 2.4.7 of this Supplement.
- Multiple lines of destinations are centre justified about the longest text.
- Consideration may be given to showing long multi-word names on two lines to reduce the sign width.
- Where a combined route is to be signed down a particular leg of an intersection, consideration should be given to using separate G2-V1 signs depicting the destination and route number of each particular route.



G2-V1

- At a T-intersection where a combined route is to be signed, the following sign formats should be used:
 - A double chevron G2-V4 sign, i.e. one sign board is used and the destinations relating to a
 particular route number are shown on the same line. Where a single destination relates to both
 route numbers, the destination is vertically centre justified between the two numbers, as shown
 below for 'Mildura'.



G2-V4

 Two separate single chevron G2-V1 signs with one sign mounted above the other (refer to Clause 2.4.8 of this Supplement for installation information).



G2-V1

 A combination of G2-V1 and G2-V4 signs especially where the combined route is only on one departure of the intersection.



G2-V4 (top) & G2-V1 (bottom)

G2-V2 signs

G2-V2 signs are used singularly to indicate straight ahead or angled directions, or in groups where one or more of the directions shown is straight ahead or angled.

Signs having arrows at both ends are not provided for this style of sign; the G2-V4 sign is used where a double chevron (arrow) sign is required, or a G2-V5-1 sign may be used.

Further examples of G2-V2 signs:





G2-V2 G2-V2

The G2-V2 signs have the following design features:

- Generally, the arrow is located on the side of the sign closest to the traffic lane which the sign refers to.
- Adjacent signs mounted in a stack arrangement have arrows at opposite ends.
- The order of signs, top to bottom, is vertical arrows, then 45 degree arrows, then horizontal arrows.
- The arrow is vertically centre justified about the:
 - o route number for wide format signs, i.e. the route number is adjacent to the destination
 - o route number and destination for stack format signs, i.e. the route number is centre justified above the destination.
- Road names are provided on G2-V2 signs in metropolitan areas in accordance with Clause 2.4.2 (c) of this Supplement.
- Multiple lines of text are centred justified about the longest line.



G2-V2 with external road name panel and destinations centre justified about longest line

- Route numbers and distances shall be provided in accordance with Clause 2.4.7 of this Supplement.
- Consideration may be given to showing long multi-word names on two lines to reduce the sign width.

Where a G2-V2 sign is used in advance of a roundabout, the arrow used shall be of the roundabout type (refer to Table 9 of this Supplement). Examples are shown below.



G2-V2



G2-V2

(ii) Narrow format - G2-V5 series

The narrow format intersection direction sign may be substituted for the wide format type sign where visibility of the sign and/or roadside space is limited and precludes the use of the latter. Its use should generally be confined to built-up areas where a combination of narrow footpaths, street trees, service poles, and/or narrow medians and traffic islands render the selection of a suitable site for a wide format sign impossible.

A C size sign is not normally used.

Examples of G2-V5-1 (double ended arrow), G2-V5-2 (single ended arrow) and G2-V5-3 (vertical arrow) signs:







G2-V5-1

G2-V5-2

G2-V5-3

The G2-V5 signs have the following design features:

- Arrows:
 - For the G2-V5-1 sign, the arrow is double-ended and generally horizontal. However, one side
 of the double ended arrow may be angled to diagrammatically represent the intersection
 alignment.
 - o For the G2-V5-2 and G2-V5-3 signs, the arrow is vertical, 45 degrees or horizontal only.
- For the G2-V5-2 and G2-V5-3 signs, the route numbers and arrows are always on the same line and centre justified in the panel as follows:
 - o Vertical arrows are positioned to the right of the route number. The vertical arrow and route number shall be located above the destination(s).



Vertical arrow and route number placement

o Horizontal and 45 degree arrows are positioned on the side of the sign corresponding to the indicated direction and located below the destination(s).



Horizontal arrow and route number placement

- Where the sign contains a road name panel and destination(s), the road name panel shall be centre justified above the destination(s).
- For the G2-V5-1 sign, the route number is centre justified above the double ended arrow. Where a road name panel is included, the road name panel is located between the route number and double ended arrow.
- Consideration may be given to showing long multi-word names on two lines to reduce the sign width.

G2-V5 signs at M Route at-grade intersections

Generally, if the side road is signed from the freeway by road name only, then the advance direction sign on the side road is sign G2-V5-1, showing only the route number and arrow. B size signs are normally used.



G2-V5-1

(for side road to an M Route at-grade interchange)

Clause 2.4.3 – Minor Intersection Direction Signs (Type 2) - Description and use

DEPARTURE

Only the G3-V5 and G3-V8 Road Name signs are used in Victoria.

Type 2 G3-3 and G3-4 signs are not used in Victoria. Standard G2 series signs (Type 1) shall be used instead, as these signs are easier to comprehend from a further distance due to their larger size and use of mixed case legend for destinations.

The use of G3-V5 and G3-V8 signs shall follow the principles below.

Road Name signs are used where:

- · an advance or intersection direction sign is needed
- · the road being signed is a municipal road
- no destination is signed.

They are generally used at the intersection of significant municipal roads with:

- an M, A, or B Route
- a divided C Route
- an urban arterial road that is either divided and/or has a turn bay for the municipal road
- other municipal roads of similar significance.

Note that in urban areas, in addition to the above guidelines, it is best practice to install a G3-V5 sign (as a minimum) if the turnoff to the municipal road is via a turn bay or deceleration lane, regardless of the significance of the municipal road (refer to Figure 17 of this Supplement).

Both G3-V8 advance sign and G3-V5 intersection sign are generally required at signalised intersections (refer to Figure 17 of this Supplement for an example sign layout).

These signs provide the road name information of the municipal road and no other information is to be included.

Examples of signs are shown below - refer to G3-V5 and G3-V8 standard drawings in the VicRoads Supplement to AS 1743 for the full range of signs.



General principles for the use and location of these signs are as follows:

- Road Name signs are located where they will be most readily visible to drivers. At channelised or wide intersections, it may be necessary to duplicate signs at two or more locations.
- Road Name signs with an arrow (G3-V8) are used when the sign is to be located in advance of the intersecting municipal road (or turn bay to the municipal road).
- Road Name signs with a chevron (G3-V5) are used when the sign is to be located close to or at the turnoff to the municipal road.

Where a municipal road has a route number but not a destination, G1 and G2 series signs should be used instead. In this case, the road name is shown in a road name panel within the G1 or G2 sign.

Refer to Clause 2.1 (a) of this Supplement for sign type selection.

Refer to Clause 1.6.8 (h) of this Supplement for sign and letter sizes.

Refer to Clause 2.6 of this Supplement for typical layout of G3 signs on arterial roads.

Refer to Clause 3.9 of this Supplement for typical layout of G3 signs at freeway/M Route at-grade intersections.

Clause 2.4.4 – Fingerboards (Type 3 Intersection Direction signs)—Description and

DEPARTURE

Type 3 G3-6 and G3-7 signs are not used in Victoria. Standard G2 series signs shall be used instead, as these signs are easier to comprehend from a further distance due to their larger size and use of mixed case legend for destinations.

Clause 2.4.7 – Display of route numbers and distances

DEPARTURE

For intersection direction signs in Victoria, the following guidance shall be used instead:

a) Distance numerals only on a single or double ended board

The distance numeral shall always be on the right of the destination name, except for double ended signs (e.g. G2-V4) where the distances are located at the chevron end.

Where a multiple list of distances is provided, the distance list is right justified away from the adjacent list of destination names.

This arrangement allows for the most important information on the sign (the destination) to be read first.



b) Route number only on a single ended board

Either between the point/chevron/arrow and the destination name or centre justified above the destination name.





c) Route number only on a double ended board

(i) Same number each direction - between the opposing destination names.



DEPARTURE

(ii) Where there is a different number for each direction, two separate signs shall be used. The route number may be either between the point/chevron/arrow and the destination name or above the destination name.

This arrangement clearly separates route numbers for each direction.



DEPARTURE

d) Route number and distance numerals on a single ended board

The distance numeral shall always be on the right of the destination name. The route number may either be on the left of the destination name or centre justified above the destination name and distance numeral.



The distance shall not be adjacent to the route number to avoid any confusion between the numerals. This arrangement allows for the most important information on the sign (the destination) to be read first.

e) Route number and distance numerals on a double ended sign

The distance numerals shall be positioned at the point/chevron/arrow ends, and the route number between the destination names. If the route number is different for each direction, then (f) below shall be followed.

The distance shall not be adjacent to the route number to avoid any confusion between the numerals.



Route number and distance numerals both required on a double ended sign but route number different for each direction

In this situation, a G2-V4 double ended sign shall not be used. Separate signs shall be used as per (d) above

Clause 2.4.8 - Location

DEPARTURE

Type 3 signs are not used in Victoria.

Intersection Direction Sign Assemblies

Where intersection direction signs are to be installed on the same assembly, and the signs are for different directions, then the following guidance below shall be followed.

Assemblies of intersection direction signs should be designed and erected so that:

- No sign (other than a G2-V3 road name panel) should be less than 75% of the length of the longest sign in the assembly. Shorter signs are lengthened to meet this requirement. The additional blank space created by the sign extension is normally at the opposite end of the sign from the chevron or arrow, but the space may be split between both ends of the sign to improve its appearance. Any associated wide format services or tourist intersection signs (refer to AS1742.6) should also conform to this requirement.
- Arrows or chevrons on successive signs are located at opposite ends in a staggered arrangement
 wherever possible. An exception to this rule is when signing for combined route numbers and two
 separate G2-V1 or G2-V2 signs are used (pointing in the same direction); these signs shall be
 located one above the other.
- A vertical separation of approximately 25 mm is provided between signs, or if the lower sign includes a G2-V3 road name sign, 150 mm is provided (refer to Figure 9).
- There shall be no more than three boards at one assembly group.

A horizontal offset (X) is provided between signs indicating different directions as illustrated in Figure 9.

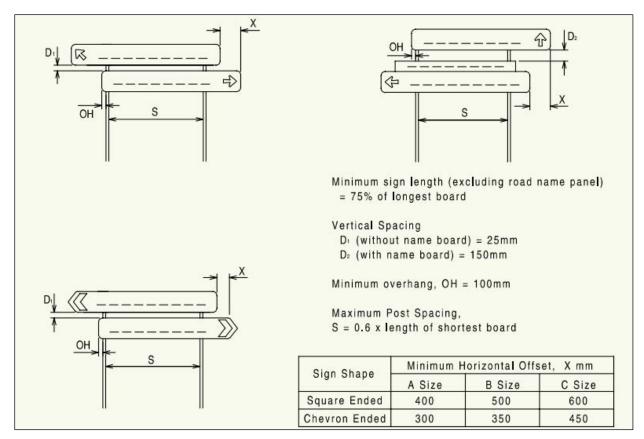


Figure 9: Intersection direction sign assemblies

Clause 2.5 – REASSURANCE DIRECTION SIGNS

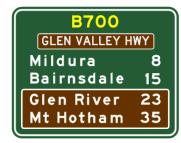
DEPARTURE

The Victorian versions of the G4-1 sign are the G4-V1 series signs. The G4-V1-1 sign is the standard sign while the G4-V1-2 and G4-V1-3 signs contain an allowance for a tourist or service destination (refer to AS 1742.6). On M Routes, C size G4-V1 signs are used instead of the GE4-1 sign.

These signs are detailed in the VicRoads Supplement to AS 1743.







G4-V1-1 G4-V1-2 G4-V1-3

Clause 2.5.2 - Legend

Selection and display of destinations

Destinations to be shown on reassurance direction signs (G4-V1 series) shall be selected from the eligible towns, cities and suburbs marked on the standard through destination maps in Attachment A of this Supplement.

As per Clause 2.5.2, where there is a route number on the sign, the maximum number of destinations to be shown on a reassurance direction sign is four. Any more than four and there is a risk that drivers do not have enough time to completely comprehend the destination and distance information.

Selecting the appropriate destinations to be shown on any particular reassurance direction sign should comply with the following guidelines:

- The next standard through destination shall always be shown.
- The remaining destinations to be shown on the reassurance direction sign may be selected from:
 - The standard through destination beyond the one currently signed.
 - o Major cities, towns or suburbs along the route or reached via this route.
 - Other suburbs/towns which have tourist, historic, or geographic interest, or lie at the junction of a subsidiary route.
 - The 'terminal destination' for the route i.e. a distant standard through destination where the route ends, or the ultimate destination beyond the route terminus (e.g. Mildura on the A/B200).
- On the principal interstate routes the appropriate capital city should be shown on all relevant reassurance direction signs. This applies to:
 - M8/A8 show Melbourne and Adelaide
 - B12 show Adelaide and Sydney
 - A20 show Adelaide and Sydney
 - B23 show Canberra
 - M31 show Melbourne and Sydney.
- Reassurance direction signs facing drivers travelling in the direction of a state border should also include recognisable towns and cities in the adjacent state (where space permits).

Signs at the departure from state borders (i.e. on the Victorian side of the border) should be checked against direction signs in the adjacent state to ensure consistent destinations are shown.

An example for the selection of destinations for use on reassurance direction signs can be found in Figure 10 which shows the destinations used on M8/A8 Western Highway/Freeway corridor.

For a guide on the cities and towns that should be used as destinations on M/A/B Route reassurance direction signs, refer to Figure 11. Some additional guidance regarding the use and selection of these destinations can be found in Attachment A of this Supplement. The guidelines in this Clause should be closely followed when selecting the destinations.

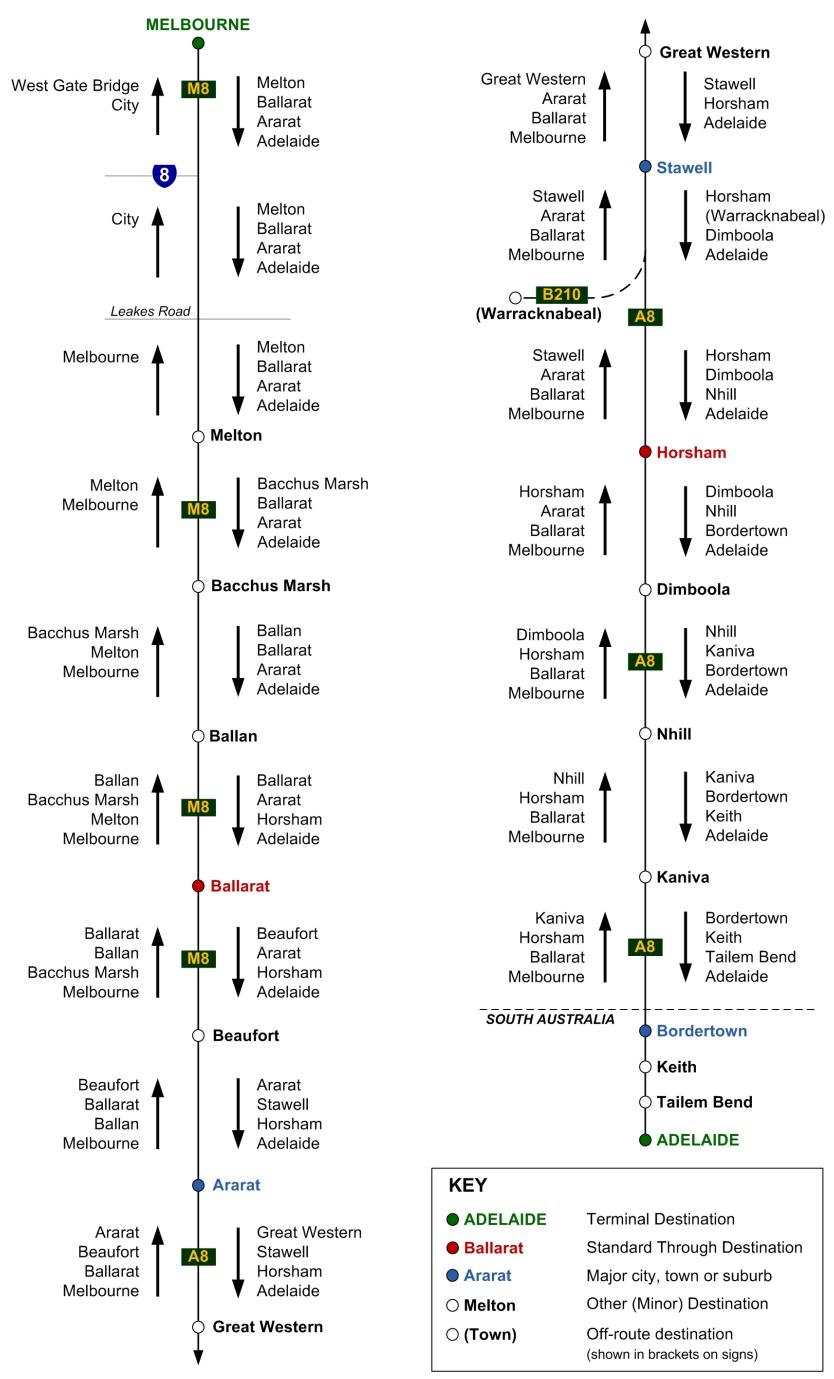


Figure 10: Example of selection and signing of destinations on reassurance direction signs (M8/A8 corridor shown)

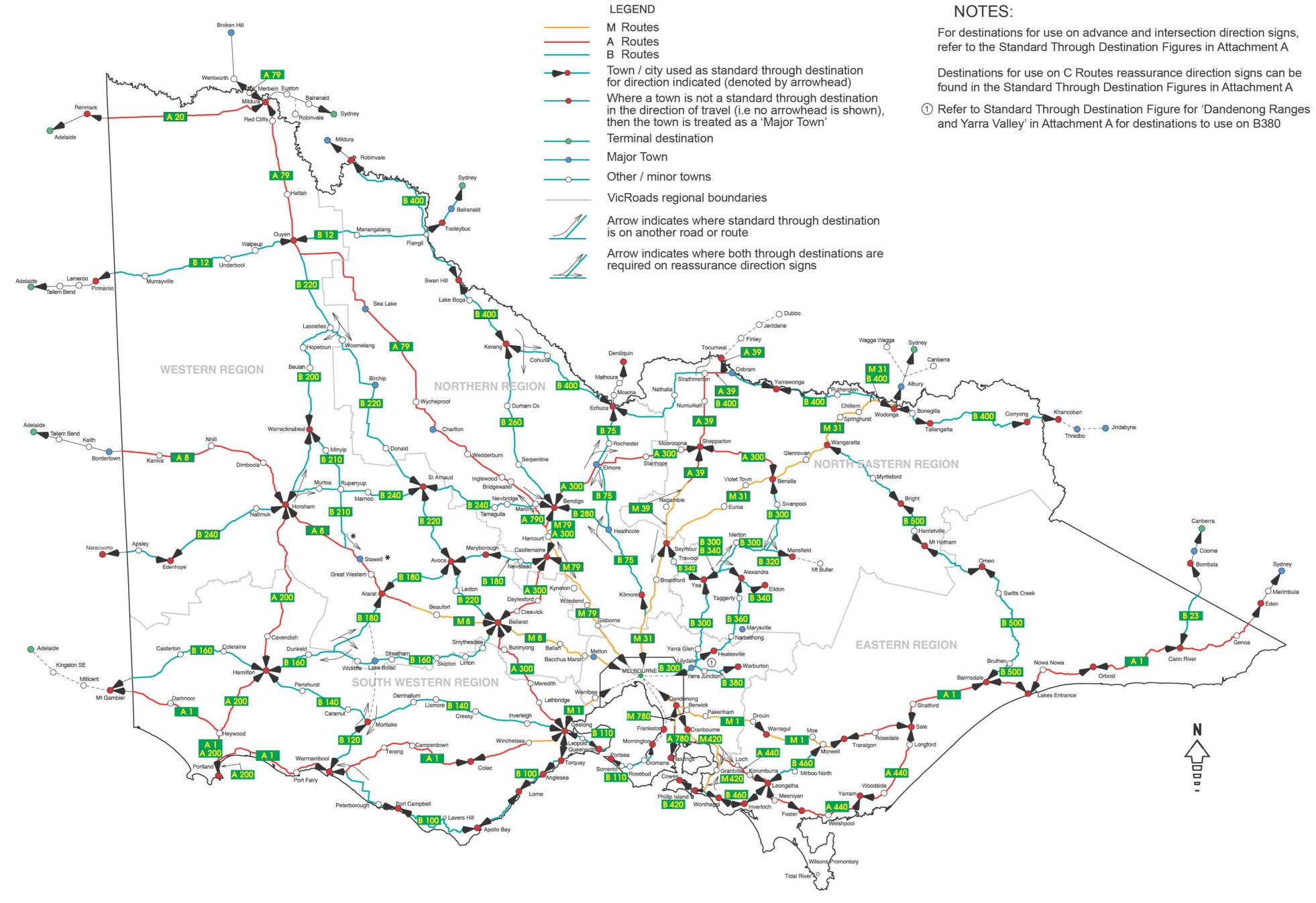


Figure 11: Cities and towns for use as destinations on reassurance direction signs on M, A and B Routes

Other requirements

- The order of listing of destinations (top to bottom) shall be strictly in order of distance with the closest destination at the top.
- The list of destinations is left justified while the corresponding distances are right justified.
- A general principle is that, along a route, once a destination is used on a reassurance direction sign, it should appear on all subsequent reassurance direction signs until the destination is reached.
- All destinations used on advance and intersection direction signs at the previous intersection for that
 direction of travel should be repeated on the reassurance direction sign, unless it is a minor destination
 used only on/for the side road approach.
- When installing new reassurance direction signs along a route, existing signs along the route should be checked to ensure consistent destinations are shown and that the destinations complies with the principles in this Clause.

Road names

Road names may be included on reassurance direction signs as specified in Clause 1.6.5 of this Supplement. These are shown as black upper case letters on a white road name panel for standard signs (G4-V1-1) or white legend and border on a brown road name panel (G4-V1-3) for designated tourist routes.

Route numbers

The route number is always shown at the top of the sign and may be:

- Centre justified above the road name panel or, where no road name panel is present, above the list of destinations and distances.
- Located on the same line and to the left of the road name panel. In this case, the route number and road name panel is centre justified above the list of destinations and distances.

Route number multiplexes (road with multiple route numbers)

Where a section of road has two route numbers, and each route number is associated with a set of destinations, then the next intermediate destination (usually the standard through destination along that part of the route) and a distant through destination of each route is to be listed on reassurance direction signs. It should be noted that either the intermediate destination or the distant through destination should be the same as the standard through destination used along each of the routes. The maximum number of destinations is four.

Brackets are not to be used on these destinations, unless a destination is already bracketed along a particular route prior to the multiplex. At the terminus of the route multiplex, both the intermediate and distant destination shall be shown on advance and intersection direction signs.

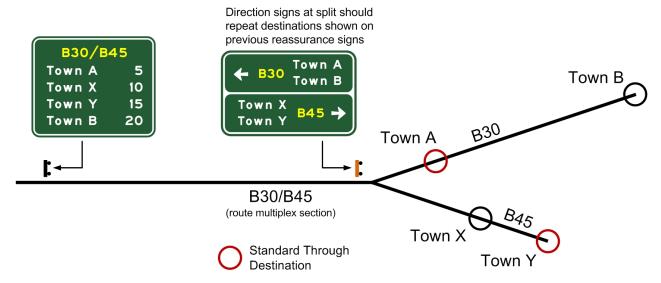


Figure 12: Destination signing on a route number multiplex

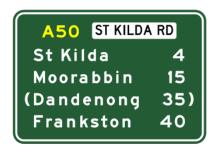
Parentheses

Where a destination named on the sign is on a route that branches off from the route being travelled, the destination and distance shall be enclosed in brackets, apart from the cases described below.

It is imperative that the destination is then shown on direction signs at the turnoff, as well as along the turnoff route until the destination is reached.

Brackets shall not be used in the following cases:

- On freeway reassurance direction signs where towns are bypassed (i.e. the town is located on the previous route alignment that has been replaced by the bypass).
- Routes within the Statewide Route Numbering Scheme which have the same number but a different letter prefix are considered to be a continuous route. Destinations reached on a different prefixed section do not require brackets.
- Where a route number ends before the destination and the destination is reached without making any turnoffs along the continuing road which is unnumbered.
- On route number multiplexes, where destinations are associated with one route number, but not the other (unless the destination is already bracketed along a particular route).
- On direction signs for any purpose other than that described in this Clause (i.e. not to be used on advance or intersection direction signs).



G4-V1-1 with a destination in parentheses

Brackets shall be applied in the following specific cases:

- A turnoff is required off the numbered route in order to reach the destination.
- The destination is not along the numbered route, but is reached without making a turnoff (i.e. a turnoff is required in order to follow the route number being travelled but not to reach the destination).
- Where no route number is present, the destination is not along the route of the declared road.

Clause 2.5.3 – Location

The guidance below should be used in addition to the parent clause to determine appropriate locations for the installation of reassurance direction signs. Unless otherwise specified, the guidance below also applies to free standing route number signs (G8 series).

a) Rural roads

Departures from cities and towns

Install a sign on the outskirts of each city or town facing traffic leaving the city or town as follows:

- Reassurance direction signs are used for medium and large towns or towns adjacent to state borders.
- Free standing route number signs are used for minor and small towns.

Rural intersections and interchanges

Install a sign on the departure from each intersection/interchange on roads shown in the sign matrices; refer to Clause 2.1 (a) of this Supplement, as follows:

- up to 400 m beyond the intersection for reassurance direction signs
- 100 to 150 m beyond the intersection for free standing route number signs.

A reassurance direction sign should be installed on the departure leg of a C Route in place of a free standing route number sign where:

- the C Route has two or more standard through, intermediate or off-route destinations
- there are a number of towns along the C Route where, for the benefit of drivers, it would be useful to show them on a reassurance direction sign (e.g. a town at a junction with another arterial road).
- the C Route has one destination and that destination is a significant town/locality.

At state borders

A reassurance direction sign is installed on M, A, B and C Routes near each state border crossing to face drivers entering Victoria. Where there is a town on the Victorian side, the sign is place on the departure from the town.

At-grade M Route intersections

A reassurance direction sign should be installed on the M Route departure at an intersection with an arterial road (refer to Figure 4 of this Supplement).

A reassurance direction sign should also be installed on the departure from municipal road intersections where there are:

- a significant number of non-local drivers turning onto the freeway
- advance direction signs along the M Route that do not show the route number being travelled on (e.g.
 G3 signs have only been used at subsequent intersections which, in their design, do not include a
 through direction panel) and the maximum spacing between reassurance direction signs specified in
 Table 11 has been exceeded.

For sign installation locations, refer to Figure 37 for an arterial road at-grade intersection and Figure 38, Figure 39 and Figure 40 for municipal road at-grade intersections.

Where a reassurance direction sign is not warranted on the M Route departure from a municipal road, a free standing route number sign may be installed instead to reassure drivers of the M Route number, subject to the requirements in Table 11.

Minimum and maximum spacing

Where the distance between successive signs is less than the minimum spacing in Table 11, one of the signs may be omitted.

Where the maximum spacing specified in Table 11 is exceeded, additional signs should be provided at appropriate locations not necessarily associated with towns or major intersections. Note that free standing route number signs are used as intermediate markers between reassurance direction signs.

Other requirements

On rural two-lane two-way roads, free standing route number signs, located other than at intersections, may be erected back to back if visibility to the sign in both directions is satisfactory, given that for one direction the sign is mounted on the right hand side.

On M and A Routes, free standing route number signs are installed with kilometre plate markers at every 15 km interval. However, where a reassurance direction sign or separate free standing route number sign is installed as per Table 11 spacing requirements, a free standing route number sign is not required above the kilometre marker post if it is within 1 km of that reassurance direction sign or separate free standing route number sign. Refer to Clause 5.2.2 of this Supplement.

Typical intersection/interchange arrangement diagrams

Refer to Clause 2.6 of this Supplement for typical intersection arrangement diagrams showing further details regarding placement of signs at intersections.

Refer to Clause 3.9 of this Supplement for further details regarding placement of signs at freeway/M Route interchanges.

b) Metropolitan and provincial city roads

Install a sign on each departure leg of an intersection, as shown in the sign matrix in Clause 2.1 (a) of this Supplement, as follows:

- 100 to 150 m beyond the intersection for reassurance direction signs
- 50 to 100 m beyond the intersection for free standing route number signs
- Where the distance between successive signs is less than the minimum spacing in Table 11 (i.e. 1 km), one of the signs may be omitted.
- Where the maximum spacing specified in Table 11 is exceeded, additional sign(s) should be provided
 at appropriate locations, generally favouring the more important secondary intersections. Note that
 free standing route number signs are used as intermediate markers between reassurance direction
 signs.

Refer to Clause 2.6 of this Supplement for typical intersection arrangement diagrams showing further details regarding placement of signs at intersections.

For details on the types of free standing route number signs, refer to Clause 4.4.3 of this Supplement.

c) Spacing of reassurance direction signs and free standing route number signs

Table 11 below provides an overview of spacing requirements for reassurance direction signs and free standing route number signs.

Table 11: Spacing of reassurance direction signs and free standing route number signs

Road Category	Maximum Spacing (1)		Minimum Spacing (2)	
	RDS (3)	FSRNS (4)	RDS (3)	FSRNS (4)
Rural – M Route	20 km	10 km	3 km	3 km
Rural – Non M Route	30 km	15 km	3 km	3 km
Metropolitan (5)	5 km	2 km	1 km	1 km

Notes to Table 11:

- 1. Maximum spacing a driver should not drive the listed distance without passing a reassurance direction sign.
- 2. Minimum spacing where these guidelines might otherwise require two or more signs for one direction of travel within the minimum distance listed, some signs may be omitted to achieve spacing between the minimum and maximum.
- 3. Reassurance direction sign (RDS).
- 4. Free standing route number sign (FSRNS). Free standing route number signs are installed as intermediate markers between reassurance direction signs or in conjunction with free standing route number signs and arrow plates, refer to Clause 4.4.3 of this Supplement.
- 5. Adopt metropolitan spacing in provincial cities.

Clause 2.5.4 – AusLink logo

DEPARTURE

Following the cessation of the AusLink federal government program, display of the AusLink logo is not required on reassurance direction signs.

Clause 2.6 – TYPICAL ARRANGEMENT DIAGRAMS

The following layout plans shall be read in conjunction with Clause 2.1 (a) of this Supplement (including Figures 3, 4, 5 and 6). They establish the level of signing required for a particular intersection.

Where there are differences between the figures here and AS 1742.15 Clause 2.6, the Victorian figures in this Clause generally take precedence. Regulatory, warning and other non-direction sign requirements for these intersections are given in AS 1742.2 and the VicRoads Supplement to AS 1742.2:2009 (in particular Clause 2.12). AS 1742.2 (and its Supplement) also sets out the requirements for linemarking, pavement marking and raised retroreflective pavement markers.

The Victorian versions of AS 1742.15 Clause 2.6 figures are:

Figure 2.8 Major Rural Intersection – Using Type 1 Intersection Direction Signs:

- Figure 13 (A and B Route)
- Figure 14 (A/B Route with C Route)

Figure 2.9 Minor Rural Intersection – Using Type 2 Intersection Direction Signs:

- Figure 14
- Figure 18 for a roundabout

Figure 2.10 Minor Rural Intersection – Using Type 3 Fingerboards:

• Not used, use signing arrangement in Figure 14 instead

Figure 2.11 – Major Urban Intersection

• Figure 15 (undivided road)

Figure 2.12 - Major Urban Intersection - divided road

• Figure 16 (divided road)

Figure 2.13 - Minor Urban Intersections

- Figure 17 (arterial/collector and arterial/collector or municipal (local) road)
- Figure 18 for a roundabout

Figure 2.14 – Roundabout on Arterial Road

- Figure 19 (major urban roundabout)
- Figure 20 (major rural roundabout (undivided))
- (rural M Route)

This section does not include direction signs on freeways, at freeway interchanges, or at at-grade rural freeway/M Route intersections. Refer to Clause 3.9 of this Supplement for these freeway interchanges and intersections.

Note that the principles for signing major and minor intersections in provincial regional cities are the same as for metropolitan Melbourne, except that alphanumeric route numbers are used.

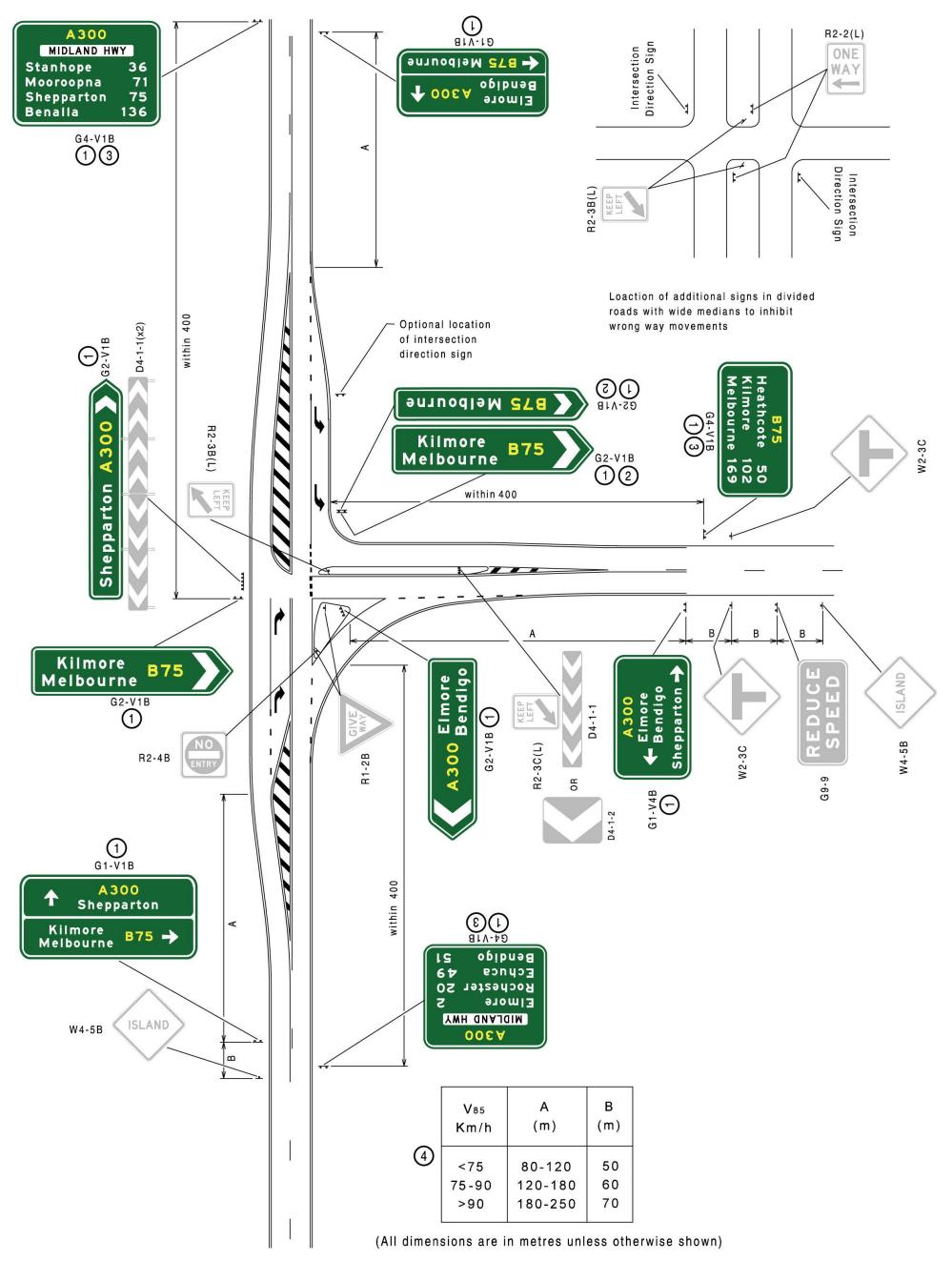


Figure 13: Major rural intersections (A and B Routes)

Notes to Figure 13:

- 1. Refer to Clauses 2.2.2, 2.4.2 and 2.5 of this Supplement for details on advance, intersection and reassurance direction signs, including the use of narrow and wide format designs (for advance and intersection direction signs).
- 2. These signs shall be sited so that adequate 'safe intersection sight distance' is maintained. Refer to Appendix D2 of AS 1742.15.
- 3. Reassurance direction signs are provided subject to minimum spacing requirements; refer to Clause 2.5.3 of this Supplement. Refer to Clause 2.5.2 of this Supplement regarding the use of road name panels in rural areas.
- 4. V85 = 85th intersection percentile approach speed measured 300 to 500 m in advance of the intersection.
- Refer to AS 1742.2 for pavement marking and non-direction sign requirements. Clause 2.12 in the VicRoads Supplement to AS 1742.2 provides an overview of these requirements.

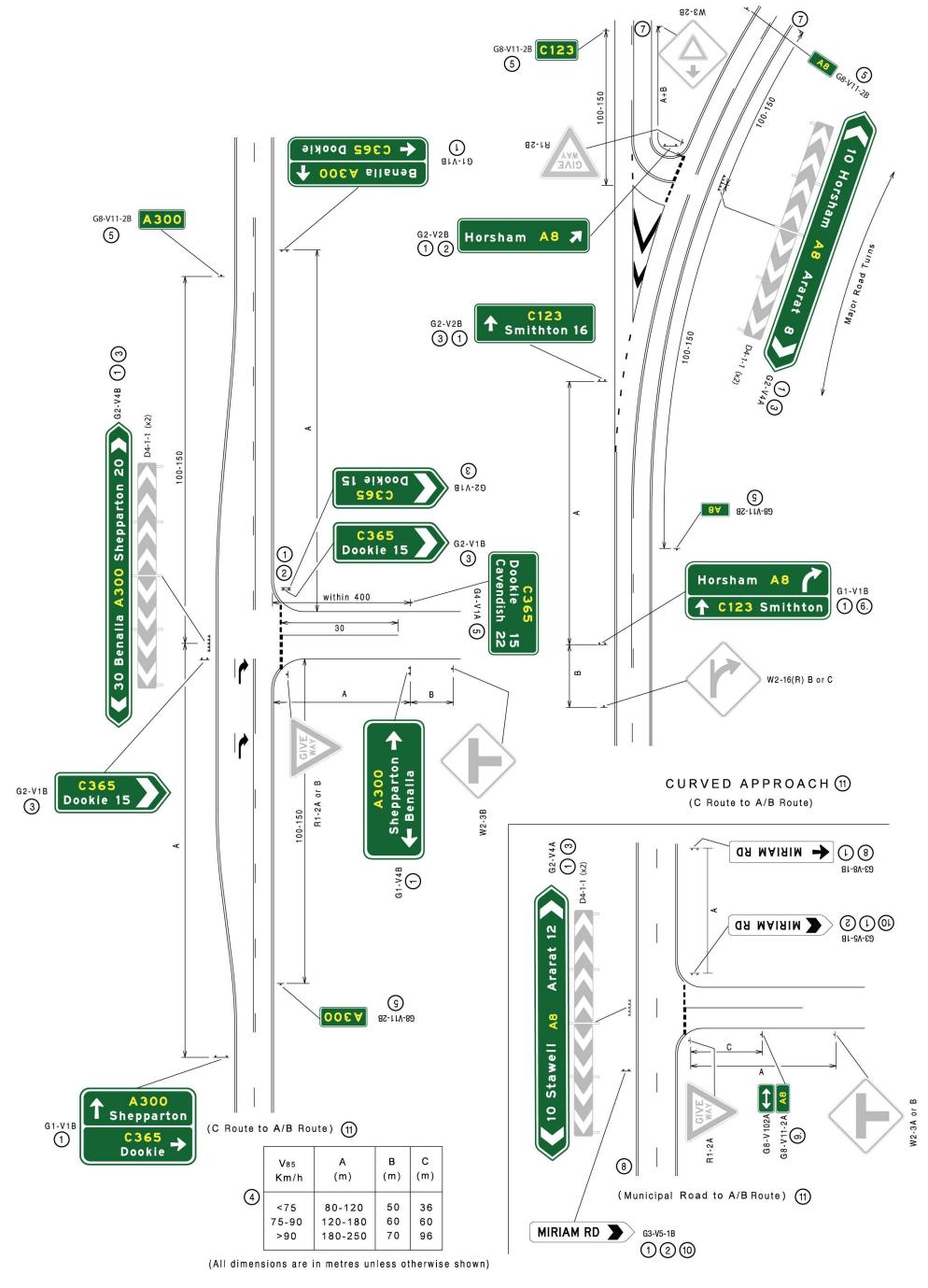


Figure 14: Minor rural intersections

Notes to Figure 14:

- 1. Refer to Clauses 2.2.2 and 2.4.2 of this Supplement for details on advance and intersection direction signs, including the use of narrow and wide format designs.
- 2. These signs shall be sited so that adequate 'safe intersection sight distance' is maintained. Refer to Appendix D2 of AS 1742.15.
- 3. Distances are shown on intersection direction signs if there is no reassurance direction sign provided after the intersection, refer to Clause 2.4.7 of this Supplement. Note also that an intermediate destination may also be signed on signs facing side road traffic; refer to Clause 2.2.3 of this Supplement.
- 4. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection.
- Reassurance direction signs and free standing route number signs are installed in accordance with Clause 2.5.3 of this Supplement.
- 6. The sign may be modified to provide an oversize legend in the upper panel.
- 7. Advance direction signs are required but not shown on these legs.
- 8. Advance G3-V8 sign not normally installed unless there is a particular need for advance navigational information (refer to note 9 of Figure 4 in this Supplement).
- 9. A free standing route number sign with arrow plate or advance direction sign may be required, refer to note 8 of Figure 4 in this Supplement.
- 10. Where only a G3-V5 sign is required on each approach (refer to Figure 4 of this Supplement), the G3-V5 sign is to be located at the start of the left/right turn bay or between 150 m to 200 m from the intersection where there is no turn bay.
- 11. The 'C Route to A/B Route' signing layout should also be used for when an intersecting municipal road has a destination. In this case, the direction signs will not include a route number for the municipal road, free standing route number signs on all departures are not installed and the advance direction sign on the municipal road approach is only installed when the conditions in note 8 of Figure 4 are met.

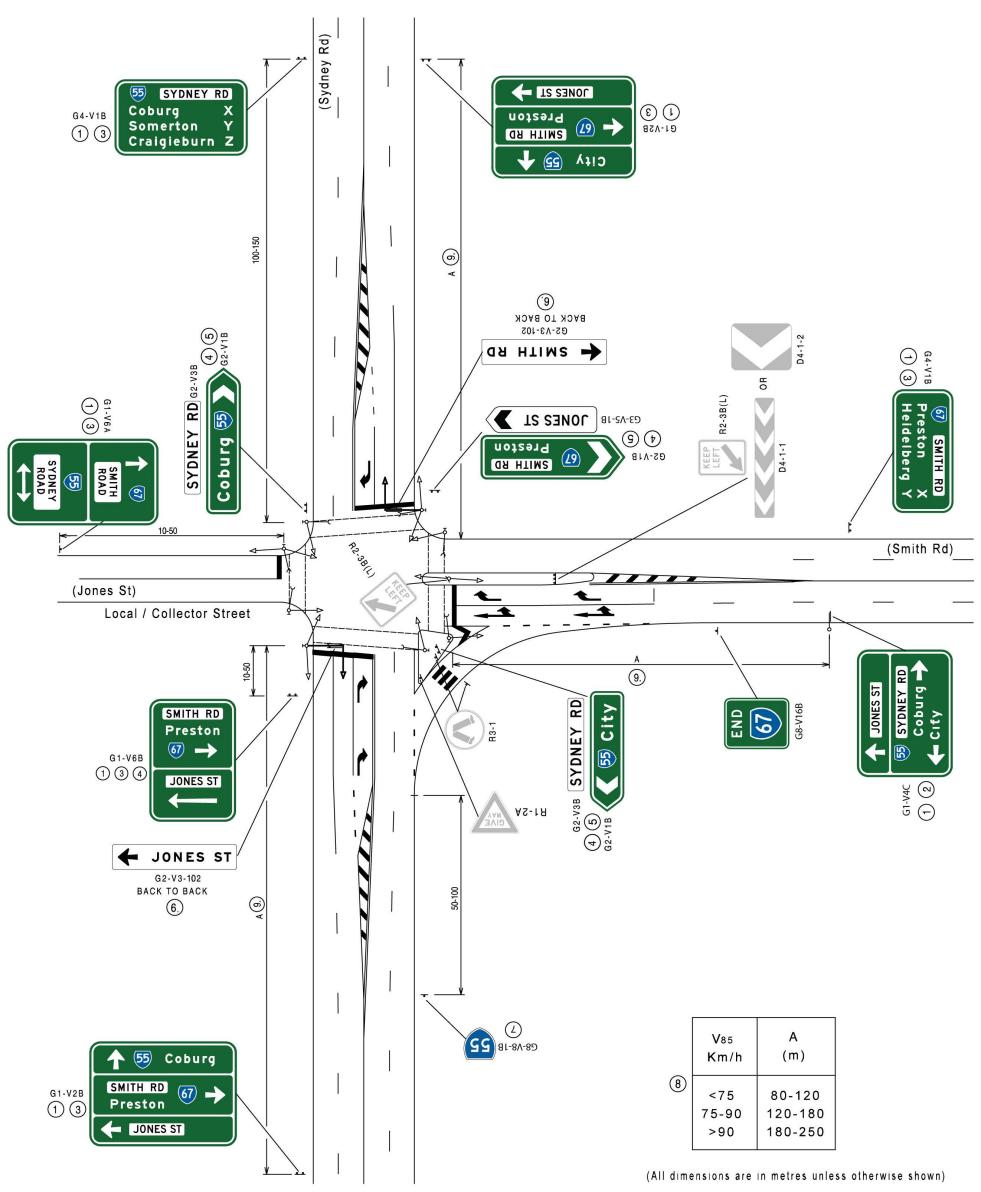


Figure 15: Major urban intersection – undivided road

Notes to Figure 15:

- 1. Refer to Clauses 2.2.2, 2.4.2 and 2.5 of this Supplement for details on advance, intersection and reassurance direction signs, including the use of narrow and wide format designs (for advance and intersection direction signs).
- 2. Cantilever supported advance direction sign used where site conditions preclude left side or median mounting, refer to Clause 2.2.2 of AS 1742.15. Note, as shown in the figure, overhead signs are one sign size larger than sign mounted signs; refer to Clause 1.6.8 of this Supplement.
- 3. Install the direction sign in the nature strip if wide enough, or span above the footpath. Consider also single post mounting, refer to Appendix D of AS 1742.15. Provide a minimum clearance of 2.5 m above footpaths.
- Chevron-ended intersection direction signs are preferred but narrow format direction signs may be required in urban situations where lateral space restrictions or sight distance problems occur, refer to Clauses 2.4.2 and 2.4.3 of this Supplement.
- 5. High mounting of intersection direction signs on existing poles or joint use traffic signal pedestals should be used wherever possible, refer to Appendix D of AS 1742.15.
- 6. For details on mast arm mounted street name signs, refer to the VicRoads Supplement to AS1742.5.
- 7. Example assumes that the next major intersection warrants a reassurance direction sign within the specified minimum spacing on the route, refer to Clause 2.5.3 of this Supplement, hence a free standing route number sign is placed here. Otherwise a reassurance direction sign is required 50 to 150 m from the intersection.
- 8. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection. In urban areas where the measurement may not be practical or provide appropriate values, the posted speed limit may be used.
- 9. The location of the advance direction sign shall be well in advance of the start of the fully developed left or right turn bay (whichever starts first). In some cases, this may mean distance A is greater than the length specified.

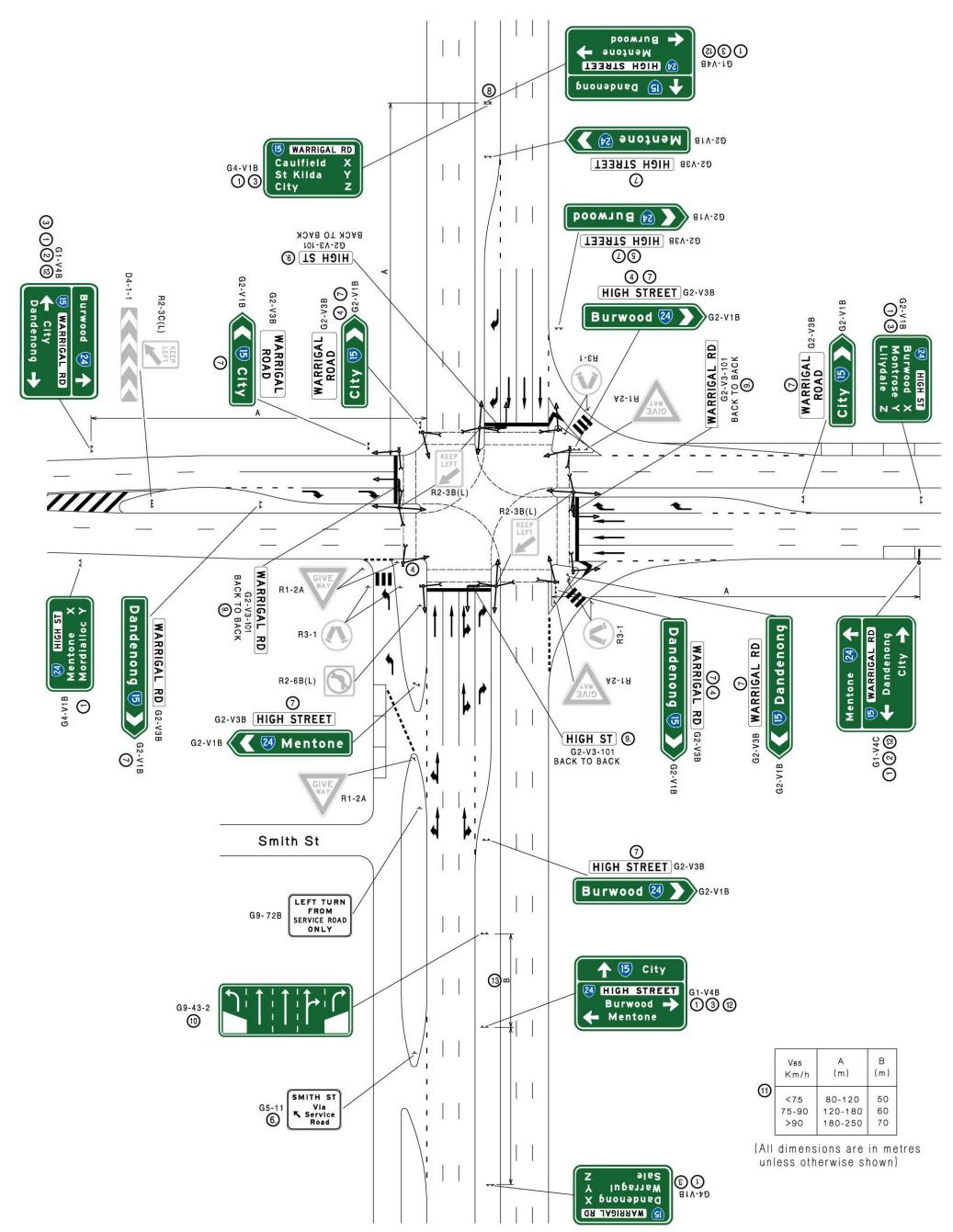
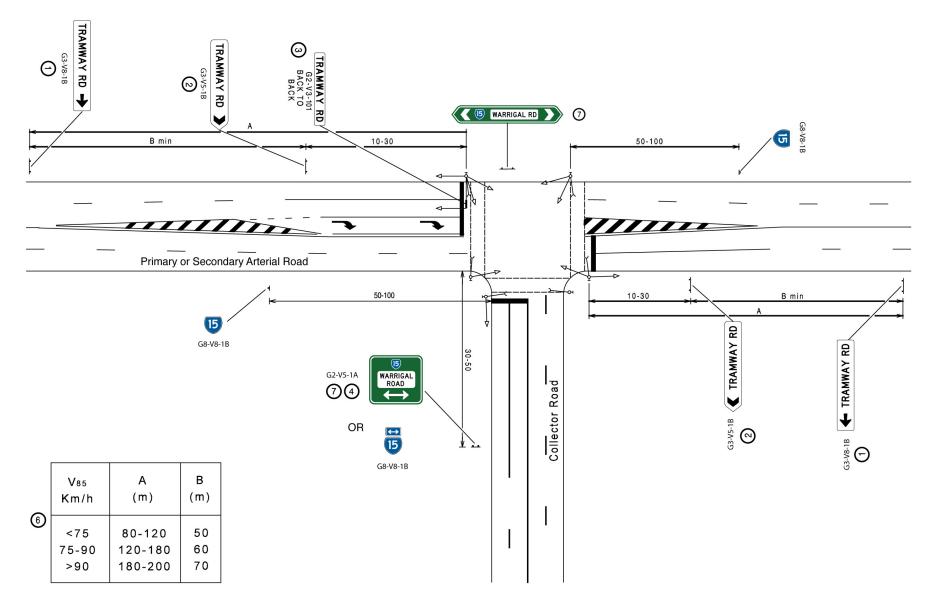


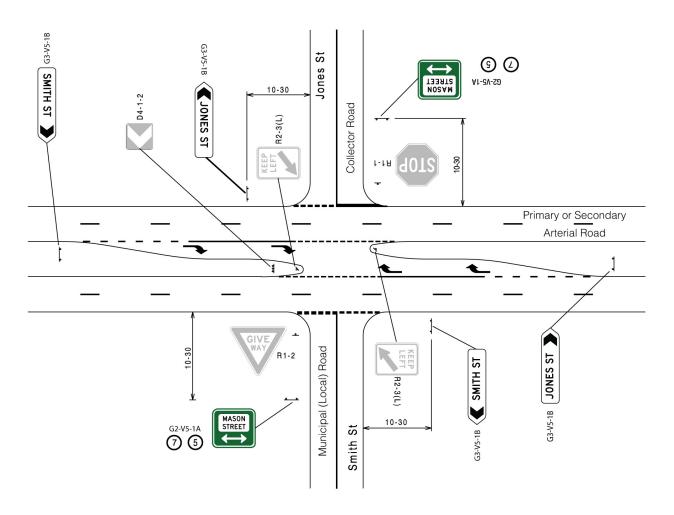
Figure 16: Major urban intersection – divided road

Notes to Figure 16:

- 1. Refer to Clauses 2.2.2 and 2.5 of this Supplement for details on advance and reassurance direction signs, including the use of narrow and wide format designs (for advance direction signs).
- Cantilever supported advance direction sign used where site conditions preclude left side or median mounting, refer to Clause 2.2.2 of AS 1742.15. Note, as shown in the figure, overhead signs are one sign size larger than sign mounted signs; refer to Clause 1.6.8 of this Supplement.
 - Distance A may be reduced in business districts where an overhead sign acts as a substitute for both advance and intersection direction signs, refer to Clause 2.2.1 of this Supplement.
- 3. Median mounting of advance and reassurance direction signs is generally preferred to left side mounting provided adequate sign visibility is assured and road safety risks are mitigated. Where mounted on the left side, single post mounting may be considered, refer to Appendix D of AS 1742.15.
- 4. "Far side" intersection direction signs are provided for the benefit of right turners, especially at wide, complex or multiple carriageway intersections. They may be omitted if insufficient room available.
- 5. Alternative location where there is insufficient room in the traffic island.
- 6. This "via Service Road" sign to be used only in accordance with Clause 2.8.11 of the VicRoads Supplement to AS1742:2 2009.
- 7. For alternative designs of intersection direction signs refer to Clause 2.4.2 of this Supplement. High mounting of intersection direction signs on existing poles or on joint-use traffic signal pedestals should be used wherever possible, refer to Appendix D of the Supplement to AS1742:2 2009.
- 8. Back to back mounting of signs should be considered if adequate visibility for approaching traffic from both directions can be maintained.
- 9. Mast arm mounted street name signs are mounted back to back, refer to the VicRoads Supplement to AS1742.5.
- 10. Install lane designation sign in accordance with Clause 2.3 and Clause 2.3.2 of this Supplement.
- 11. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection. In urban areas where measurement may not be practical or provide appropriate values, the posted speed limit may be used.
- 12. The location of the advance direction sign shall be well in advance of the start of the fully developed left or right turn bay (whichever starts first). In some cases, this may mean distance A is greater than the length specified.
- 13. Where an intersection direction sign is provided at the beginning of a turn lane, the advance direction sign should precede the intersection direction sign by a minimum of 80 m.



Arterial/Collector (Signalised)



Arterial/Collector or Municipal (Local) Road (Unsignalised)

(All dimensions are in metres unless otherwise shown)

Figure 17: Minor urban intersections

Notes to Figure 17:

- Use a G3-V8 series sign in advance of the intersection. Refer to Clause 2.4.3 of this Supplement for alternative designs.
- Use a G3-V5 series sign at or close to the intersection. Refer to Clause 2.4.3 of this Supplement for alternative designs.
- 3. For details on mast arm mounted street name signs, refer to the VicRoads Supplement to AS1742.5.
- 4. A free standing route number sign with arrow plate may replace the G2-V5 sign where space is limited.
- 5. Signs should not obstruct visibility to STOP/GIVE WAY signs.
- 6. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection. In urban areas where the measurement may not be practical or provide appropriate values, the posted speed limit may be used.
- 7. For further details on the use of intersection direction signs (including G2-V5 signs), refer to Clause 2.4.2 of this Supplement.
- 8. This signing arrangement is not limited to collector roads it may be used for other signalised municipal road intersections (including when new signals are installed at a pre-existing intersection).
- 9. Refer to the sign matrix for metropolitan/urban direction signs (Figure 3) for further details on the required direction signs at these types of intersections.

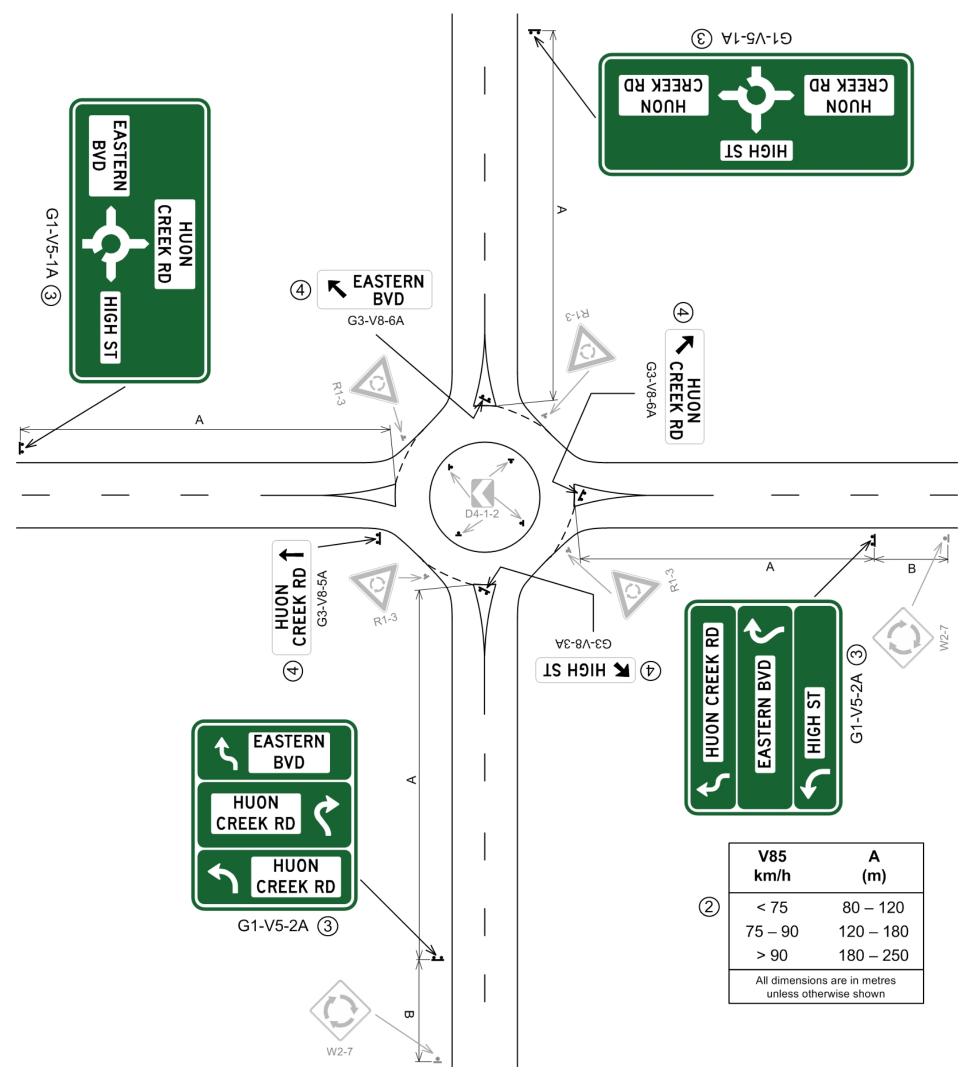


Figure 18: Minor urban/rural roundabout (undivided)

Notes to Figure 18:

- 1. This layout may be used for collector roads and local roads without destinations. Where destinations are to be signed, refer to Figure 19 for guidance on direction sign types.
- V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection.
 On low speed roads (less than 60 km/h, typically in urban or built-up areas), distance 'A' may be less than the 80 m minimum to cater for adjacent intersections on the approach to the roundabout or the presence of other signs or road furniture.
- 3. For alternative roundabout advance direction sign designs, refer to Clause 2.2.2 (b) of this Supplement. For alternative roundabout advance direction sign designs, refer to Clause 2.2.2 (b) of this Supplement. Where a G1-V5-2 sign (narrow format, non-diagrammatic) is used, a roundabout warning sign shall be provided, refer to Clause 2.9.3 (a) of AS1742.2:2009.
- 4. For alternative G3 series sign designs, refer to Clause 2.4.3 of this Supplement. These signs are preferred in the splitter island, however where there are space restrictions, they may be installed on the left side of the departure.
- 5. For details on regulatory, warning and other non-direction sign requirements, refer to AS 1742.2 (and Supplement). Also refer to AS 1742.2 (and Supplement) for linemarking and RRPM requirements.

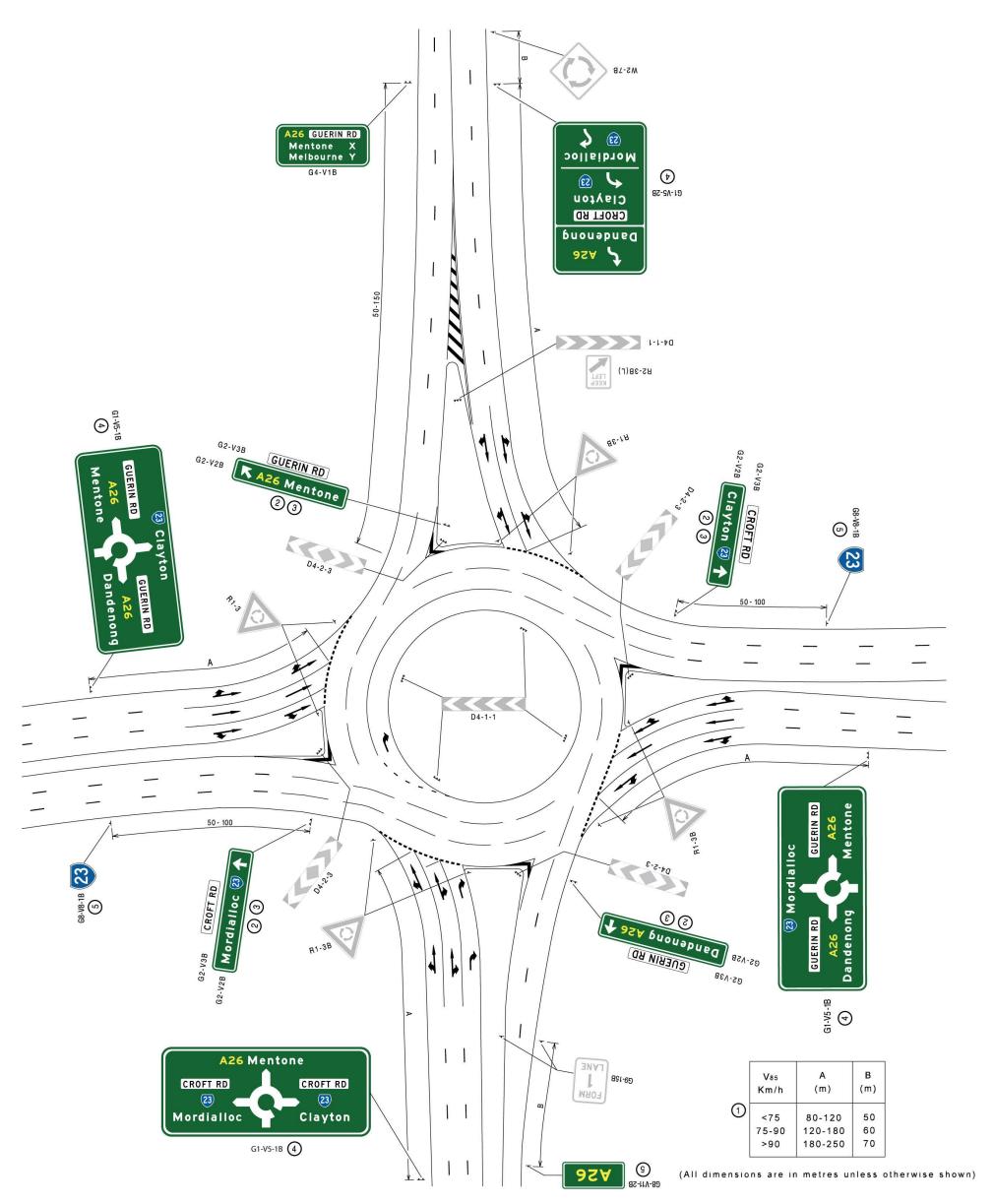


Figure 19: Major urban roundabout (divided/undivided)

Notes to Figure 19:

- 1. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection. In urban areas where the measurement may not be practical or provide appropriate values, the posted speed limit may be used.
- For alternative designs of intersection direction signs refer to Clause 2.4.2 of this Supplement. Where the departure is a municipal road without a standard through destination, use a G3-V8 road name sign - refer to Clause 2.4.3 of this Supplement.
- 3. Intersection direction signs are located on the island for better visibility for circulating traffic, provided sight distance for traffic entering on that approach is not obscured. Otherwise place on the left side of the departure note the arrow used and position within the sign.
- 4. Narrow format direction signs, refer to Clause 2.2.2 (b) of this Supplement, may be required in urban situations where lateral space restrictions or sight distance problems exist.
- 5. A free standing route number sign is required when no reassurance direction sign is to be placed on this departure leg i.e. where a reassurance direction sign at the next intersection is within minimum spacing, refer to Clause 2.5.3 of this Supplement.

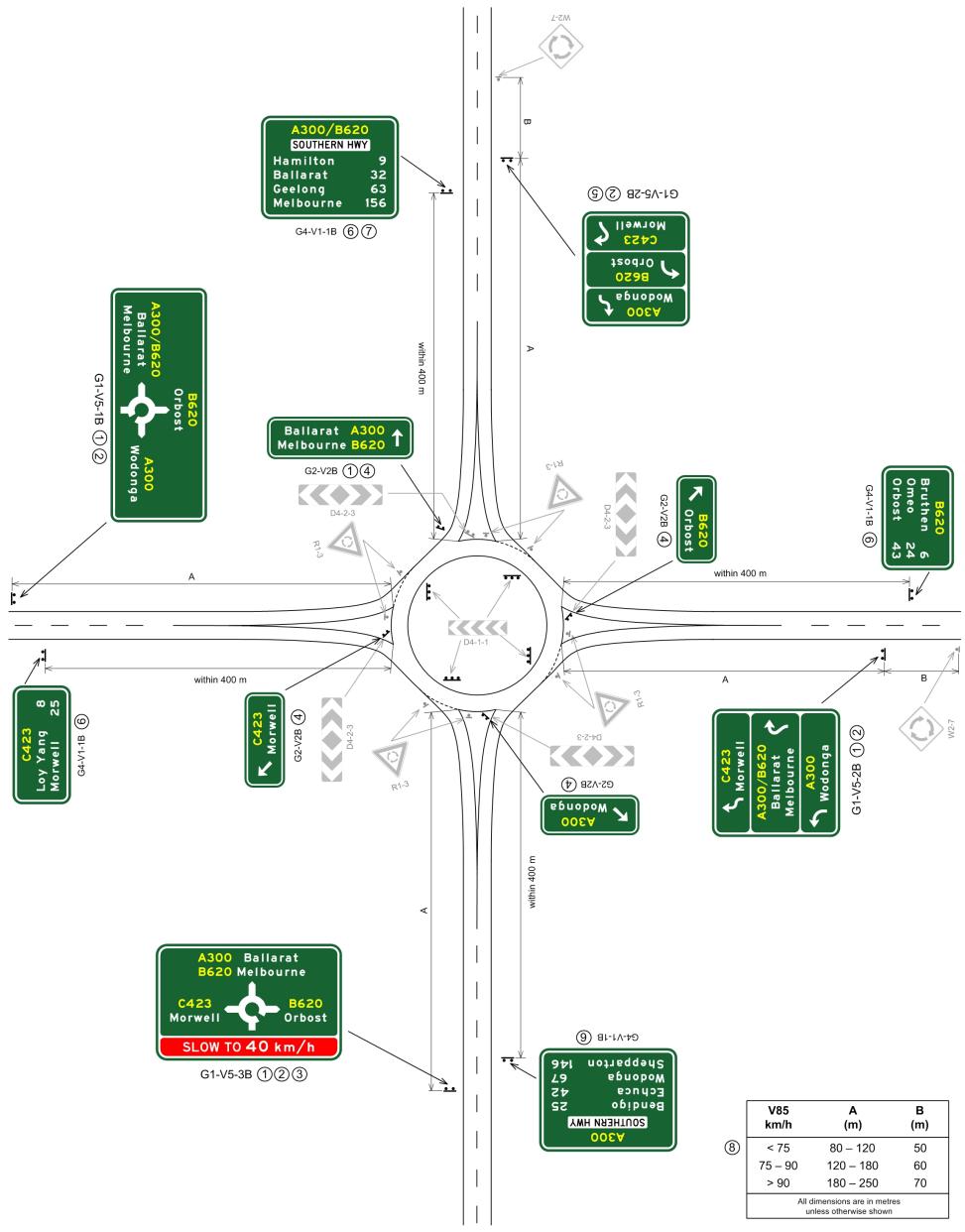


Figure 20: Major rural roundabout (undivided)

Notes to Figure 20:

- 1. For details on the display of duplex route numbers (dual numbering), refer to Clause 4.4.1 of this Supplement. The preferred style is to list each route number and destination on the same line.
- 2. For alternative designs of G1-V5 advance direction signs, including narrow format signs, refer to Clause 2.2.2 (b) of this Supplement.
- 3. Usage of the W8-V104 roundabout advisory speed supplementary panel shall be in accordance with Clause 2.2.2 (b) of this Supplement. Note the G1-V5-3 sign design includes the use of the W8-V104 panel.
- 4. For alternative designs of intersection direction signs refer to Clause 2.4.2 of this Supplement. When the departure is a municipal road without a standard through destination, use a G3-V8 road name sign refer to Clause 2.4.3 of this Supplement.
 - Intersection direction signs are located on the island for better visibility for circulating traffic, provided sight distance for traffic entering on that approach is not obscured. Otherwise place on the left side of the departure note the arrow used and position within the sign.
- 5. Where the left departure is more important than the right departure, it may be listed above the right departure panel.
- 6. Refer to Clause 2.5.2 of this Supplement regarding the information required to be displayed on reassurance direction signs (route numbers, road names, destinations, etc.).
- Refer to 'Route number multiplexes' in Clause 2.5.2 of this Supplement regarding the display and selection of destinations along a duplex route (dual numbered road).
- 8. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection.

Clause 3.1 – GENERAL

Section 3 of AS 1742.15 also applies to freeways and roads with an M Route number that have grade separated interchanges.

DEPARTURE

Apart from the GE1-8 supplementary advance exit signs, all signs listed in (a) to (e) shall be substituted with the Victorian version of the sign, by adding 'V' in front of the last digit of the sign code (e.g. GE1-V5 instead of GE1-5) (unless otherwise specified). A G4-V1 sign (C size) shall be used instead of the GE1-4 sign.

Rural/urban signing differences

For the purposes of signing and linemarking on freeways, urban conditions are defined as:

- Within or on the urban growth boundary of the Melbourne metropolitan area. The map identifying the urban growth boundary can be found at http://www.mpa.vic.gov.au/urban-growth-zone.
- Within or on the urban boundary of provincial cities (population greater than 25,000).

Rural conditions for signing apply to areas outside the urban boundary.

Some aspects of freeway signing and linemarking are different in urban and rural areas because of the need to cater for higher volumes of traffic and more frequent interchanges in urban areas.

Signs and markings for all freeways within the urban boundary shall comply with the following urban standards:

- The first advance exit sign is approximately 1 km before the exit (refer to Clause 3.4.1 of AS 1742.15:2007).
- Advance exit and exit signs (apart from large diagrammatic signs) are mounted overhead on cantilevers or gantries.
- Exit destinations include road names (refer to Clause 3.3.2 of this Supplement).
- Step-out exit markings are not provided (refer to VicRoads Supplement to AS 1742.2).
- Signing for emergency median openings is to comply with the urban standards (Refer to Clause 4.13.7 of the VicRoads Supplement to AS1742.2:2009).

In fringe areas, up to 5 km outside the urban boundary, a mix of urban and rural standards may be appropriate depending on interchange spacing, number of lanes and other conditions. Urban conditions may become more appropriate as urban development expands. For example, if it is expected that a section of freeway will become part of an urban area once construction is completed, then urban conditions should be adopted.

The signing of A, B and C Routes has not yet been implemented generally within the Melbourne metropolitan area. Where a blue Metropolitan Route number is to be signed, space shall be reserved around the Metropolitan Route shield to accommodate a future three character alphanumeric route number overlay. The widest three character route number is 'A44'.

Other requirements

In Victoria, major traffic generators may be signed on adjacent freeways. For further information refer to AS 1742.6.

Information regarding the procedure for preplanning direction signing requirements at intersections along a major route can be found in Austroads Guide to Traffic Management Part 10 (2009) Section 3.

Clause 3.2 – PROVISION OF SIGNS

Signing of all exits requires a minimum of two advance exit signs followed by an exit direction sign at the exit ramp, refer to Table 12. Other signs are added to this basic arrangement for specific purposes, as illustrated in Figures 26, 28 and 30 for direction sign arrangements at rural and urban interchanges.

Diagrammatic type advance exit signs should be installed at important exits (e.g. major route junctions) or where there are potentially complicated arrangements such as closely spaced exits and right hand exits.

a) Overhead signs

The following situations generally require overhead signs:

- All direction signs (before and at the exit) on urban freeways.
 - Exceptions are:
 - reassurance direction signs
 - large diagrammatic signs
 - tourist or service signs for minor establishments or facilities
 - supplementary advance signs (e.g. GE1-8 THIS EXIT signs) for minor destinations
 - low volume ramps in outer urban areas where side mounted signs may be satisfactory.
 - o However, if there is a need to increase conspicuity of the sign in the above exceptions, then overhead mounting of the sign should be considered.
- Non-diagrammatic direction signs on rural freeways where:
 - o the interchange is a significant junction such as an interchange with another freeway, major arterial road or main access to a large town.
 - there are three or more lanes on a carriageway
 - o volumes are consistently high and contain an appreciable proportion of commercial vehicles.
- Advance exit and exit direction signs associated with:
 - o two-lane exits
 - o closely spaced exits.
- Any sign in a location which might be otherwise partially hidden by natural or man-made features.
- Any sign in a location where there is insufficient room for side mounting.
- Any other location where a side mounted sign might be hidden from view for its full legibility distance.

b) Sign size

The size of a sign face is determined by the amount of legend, the letter size and legend series as described in Section 3.3. These factors enable the sign firstly to be noticed, and then read.

Where two or more overhead signs are to be erected on the one gantry, the amount of legend on each may mean they do not need to be the same height. However, small differences in the height of adjacent signs results in a poor overall appearance and for aesthetics, it may be desired to make them the same height. In such cases, the size of the smaller sign is increased. The size of the larger sign shall not be compromised by reducing legend size, series or spacing below minimum standards.

Increases to sign heights (in the order of 20%), beyond that normally required to accommodate letter heights and spacings, may be made to achieve this balanced height. Beyond this, distinctly different sign heights will have a better appearance. Nevertheless, the most important consideration is to achieve the required letter heights, letter series and spacing on all signs, rather than achieve uniform sign heights.

In some cases, it may be desired that signs erected on overhead structures are designed to fit in the depth of structure for aesthetic reasons. However, sign heights must not be reduced in a way which results in reductions in letter heights, letter series or spacing.

c) General sign requirements

Table 12 sets out signing requirements for freeway interchange exits.

Table 12: Selection of Direction Sign Treatments at Freeway Interchange Exits

Freeway Location	Application	Signs and Mounting Required		
		1st Advance Sign	2nd Advance Sign	Exit Direction Sign
Rural	Standard interchange (note 1)	Side mounted at 2 km (note 2)	Side mounted at 1 km (note 2)	Side mounted at exit taper (note 2)
Urban	Standard single lane exit (note 1)	Cantilever mounted at 1 km (note 3)	Cantilever mounted at 500 m (note 3)	Gantry at exit taper
Urban	Two lane exit (note 4)	Cantilever mounted at 1 km	Gantry mounted at 500 m (generally start of auxiliary lane)	Gantry at exit taper
All Locations	Single trap (exclusive) lane exit	Refer to Clause 3.4 of this Supplement		
All Locations	Successive exits spaced at 1.2 km or less	Refer to Clause 3.4.6 Refer to Figure 35 of this Supplement.		

Notes to Table 12:

- 1. An example of a standard interchange is a basic full diamond interchange.
- 2. Refer to Subclause (a) above for the use of overhead mounting on rural freeways.
- 3. At low volume exit ramps in the urban area on freeways that carry a low volume of heavy vehicles, consideration may be given to side mounted signs in consultation with the Manager Network Standards. This case will normally occur only on 4 lane outer urban freeways.
- 4. Refer to Figure 34 of this Supplement.

Clause 3.3 – LEGEND SELECTION

Sign sizes and their corresponding principal legend heights can be found in Clause 1.6.8 of this Supplement as well as in the individual sign standard drawings found in AS 1743 (and VicRoads Supplement).

Clause 3.3.1 – Amount of legend

DEPARTURE

The maximum amount of legend on freeway signs should be as follows:

a) Advance exit direction and exit direction signs

One road name, two route numbers and two destinations.

For advance exit direction signs, an additional two lines for a driving instruction (e.g. LEFT LANE).

Note that the same information (destination(s), route number(s) and road name (if applicable)) shall be repeated on the two advance exit direction signs and the exit direction sign at the exit, with the exception of signing of major traffic generators (refer to the Supplement to AS 1742.6).

b) Reassurance direction sign

As per Clause 3.6.1 of this Supplement.

c) Signs on exit ramps and at ramp terminals

One road name, two route numbers and two destinations per sign panel.

d) Lane allocation signs

At complex interchanges, where it may be necessary to show multiple destinations for various movements, the amount of information shown should be kept to the absolute minimum where it would be sufficient for drivers to be able to navigate to their required exit.

e) Signs on non-freeway cross roads

As per Clause 2.2.3 of this Supplement.

Clause 3.3.2 – Destinations and route names

DEPARTURE

a) Common principles for rural and urban freeways

Display of road names

Where a road name appears on a GE series freeway advance exit or exit direction sign, it shall always be placed in a road name panel. The road name is normally upper case black lettering within a white panel.

Where the road name is used as a destination, e.g. 'TO HIGH STREET', it is shown in accordance with Clause 1.6.6.

Legend sizes for road names on freeway signs are detailed in Clause 1.6.8 of this Supplement.

Road name panels are used on freeway signs as follows:

- on advance exit and exit direction signs in urban areas
- on advance and exit direction signs in rural areas where a road name is used instead of a town name, due to there being no viable town name to use, or where there is a need to distinguish two or more exits that would otherwise have the same destination name
- on through direction signs where the freeway becomes a tollway
- on reassurance direction signs, as the freeway name is always included on these signs.

Note that the names of roads which underpass or overpass the freeway, streams and other significant features are signed by use of the G6 series signs (refer to Clause 5.1.5 of this Supplement).

Road names are used on the cross road approach to a freeway and at exit ramp terminals as follows:

- In rural areas road names are used on offramp direction signs if the cross road does not have an assigned route number or destination (through the use of G3 signs, refer to Figure 33 of this Supplement).
- In urban areas road name panels are used on:
 - intersection direction signs leading traffic onto a tolled freeway, refer to Clause 3.7.2 of this Supplement
 - o advance direction signs leading traffic onto a tolled freeway.
 - o advance and intersection direction signs leading off a freeway on the exit ramp and at its terminal, refer to Clause 3.7.1 and 3.8 of this Supplement.
- In other situations as described in urban and rural signing guidelines below.

Through destinations

On both urban and rural freeways, through destinations are given as localities (city, suburb or town names). These are typically provided where there is overhead signing at exits.

Where a through direction sign at an overhead mounted assembly is provided, the standard through destination along the freeway is used. A second destination may be used with the approval of the Manager – Network Standards. The freeway name is not normally included on these signs.

Freeway standard through destinations are described in Attachment A of this Supplement.

Signs on exit ramps and at ramp terminals

The same information (destinations and/or road name) shown on the freeway exit signs shall be used on both the advance direction signs and the intersection direction signs on the freeway exit ramp and ramp terminal.

Subject to a maximum of two destinations being shown in any one direction, an additional destination may be added as appropriate. However, when included, they must appear on both the advance and the intersection direction signs, and on other subsequent direction signs along the cross road until that

destination is reached. It is preferred however that only one destination is used for each direction to limit the amount of information to be interpreted by the driver.

If supplementary signs (e.g. THIS EXIT signs) have been used on the freeway before the exit, then the information on the supplementary sign shall be repeated on the ramp, either with the standard ramp direction signs or as a single standalone sign located between the ramp advance direction sign and the end of the offramp (refer to Clause 3.5.1 and Figure 26).

For predetermined cities, towns and suburbs to be used as standard through destinations, refer to Attachment A of this Supplement.

Signs on cross road (including signs directing to a freeway)

The standard through destinations of the freeway shall be shown on direction signs on the cross road, along with the freeway route number. Freeway standard through destinations are described in Attachment A of this Supplement. The standard through destinations for the cross road should also be shown for direction signs relating to the cross road (refer to Clause 2.2.3 of this Supplement).

The freeway name should not be shown, except if the freeway is a toll road.

b) Signing on rural freeways

Advance exit signs

Destinations are used on freeway advance exit signs for intersecting cross roads as follows:

- Where a destination has been allocated to the cross road as per standard through destination maps in Attachment A, a maximum of two destinations is to be shown (e.g. one destination for each departure from the interchange).
- Where there is space for another destination to be shown, a town or locality immediately served by the interchange may be used (which may not necessarily be shown in the standard through destination maps).
- Where destinations are used, a road name shall not be shown on the sign, except in provincial cities and as described in 'Cities or towns with multiple exits' below.

Road names (in a road name panel) are used on rural freeway advance exit signs as follows:

- where no destination has been allocated to the cross road as per the standard through destination maps
- · where no other nearby town or locality can be used as a destination for the cross road
- where signing a destination is determined to be difficult (e.g. the certain town requires numerous turns along a number of non-declared roads).

Towns with multiple exits

Where a town is served by two or more interchanges in either direction of travel, alternative destination names (e.g. a distant or adjacent locality) should be used instead of the town name for all interchanges, except the interchange most directly serving the town. Note that an interchange could therefore be signed differently for each direction of travel.

There may be situations where the above is not possible, and all the multiple interchanges required the town name to be shown. Where this occurs, the town name is shown for all relevant interchanges, with the route number or road name (for when there is no route number) also shown to distinguish one exit from another.

Where a general term (e.g. City Centre) is used as a destination from a town bypass, care is required if it appears on the same sign as a distant town destination name, to ensure that the two separate destinations are not misread as one, (e.g. Hamilton City Centre on the approach to Ballarat).

Where the choice of exits is not apparent, then the GE1-8-3 "NEXT EXITS" sign may be considered, refer to Clause 3.5.1 and Clause 3.5.2 of this Supplement.

Exit direction signs

The information shown on the exit direction signs shall be the same as those shown on the advance exit signs.

Reassurance direction signs

The freeway name and route number is always shown on freeway reassurance direction signs.

Refer to Clause 3.6.1 of this Supplement for further details.

c) Signing on urban and provincial city freeways

Advance exit signs

The name of the cross road shall be shown in a road name panel.

Where the cross road name changes at or close to the interchange, the name of the more significant road should be shown. Only if both road names are equally significant should both be shown (e.g. McIntyre Road and Sunshine Avenue on the M80 (and to comply with Clause 3.3.1 (a) of this Supplement, only one destination would generally then be included on the sign to limit the amount of information shown).

City or suburb names are added underneath the road name panel, subject to the following conditions:

- A suburb name is added if the exit serves a standard through destination for the freeway, and that
 destination is shown on the through direction signs at upstream interchanges. This includes exits that
 lead to the "City".
- At exits from one freeway to another freeway, the standard through destination is added. This includes destinations such as Geelong, Ballarat, Bendigo, Melbourne Airport, Frankston, and Warragul.
- At other interchanges, a suburb name may be added subject to certain conditions refer to 'Destinations for intersecting roads' below.

Signing a remote road for an exit

If an interchange to a cross road is in proximity of another major road and the exit is the only link from the freeway to that road, that road name may also be included on the signs, preceded by the word "TO". Alternatively, that road may be advised by use of a supplementary advance sign (e.g. TO SPRINGVALE RD THIS EXIT). Route numbers should be included in this information where appropriate.

Note that the signing of 'TO XXX ROAD' would be treated as a direction to a remote road (refer to Clause 1.6.6) and therefore not be shown in a road name panel.



GE1-8-1

Destinations for intersecting roads

In urban areas, freeway direction signs show the road name of the intersecting cross road.

In addition to the road name, a suburb name should also be shown where the interchange is the exit to a standard through destination of the freeway (e.g. Dandenong, Chadstone or City on the M1). Furthermore, a suburb name should be shown in the following circumstances:

- If the intersecting road serves a locality adjacent to the freeway, it may be more appropriate to sign that locality instead of the intersecting road's standard through destination (e.g. Vermont for Canterbury Road exit from M3 EastLink). The maximum number of destinations to be shown is two.
- If signing the adjacent locality is inappropriate, the standard through destination of the intersecting road should be used. The maximum number of destinations to be shown is two.
- A combination of the above two options can be used for the cross road (i.e. the standard through
 destination is shown for one departure while a locality adjacent to the freeway is shown for the other).
 The maximum number of destinations to be shown is two.

• If any of the above destination signing options cannot be satisfied, then signing of a destination for the intersecting road should be avoided.

The road name is included within a road name panel above the suburb destination on the advance exit and exit direction signs.

At freeway to freeway interchanges, freeway names are not normally shown for the exit from one freeway to another freeway, except if the exiting freeway is tolled. The route number should be the primary identifier for freeways, as it is a simpler form of navigation for drivers to use and as an effort to simplify signage.

For predetermined cities, towns and suburbs to be used as standard through destinations, refer to Attachment A of this Supplement.

Exit direction signs

The road name(s) and/or destination(s) shown on the exit direction signs shall be the same as those shown on the advance exit signs.

Through direction sign at an overhead exit sign assembly

The exit direction sign is normally mounted on a gantry at the exit point on urban freeways and includes a separate through direction sign that indicates the next standard through destination of the continuing freeway.

Alternatively, the through destination may be in reference to a remote freeway. In this case, the legend shown would include the remote freeway's route number and destination, preceded by the word 'TO'. An example is on the M80 where one of the southbound destinations is 'TO M1 Geelong' (using the M1 Princes Freeway as a destination).



Figure 21: Signing remote freeway as a destination

The freeway name along which the driver is travelling is not shown unless the freeway ahead becomes a tolled freeway.

Reassurance direction sign

The standard through destination is always shown on reassurance direction signs. Other destinations are selected following the principles in Clauses 2.5.2 and 3.6.1 in this Supplement.

In addition, major freeway interchanges/junctions may be signed as destinations (refer to Clause 3.6.1 of this Supplement).

The freeway name and route number is shown on all reassurance direction signs on urban freeways.

Signs on exit ramps and at ramp terminals

In urban areas, road names are also included on ramp direction signs.

Clause 3.3.3 – Route numbering

Route numbers are included on advance exit signs, exit signs, direction signs on ramps and at terminals, on cross road direction signs leading to a freeway, at freeway interchanges and on reassurance direction signs. It should be noted, however, that route numbers are not included on the GE1-8/V8 "THIS EXIT" sign, unless a remote road is being signed – refer to Clause 3.3.2 (c) of this Supplement.

The route number shall not be positioned at non-standard locations on the sign face for the purpose of reducing the sign size for economic or other reasons.

For allocation of M Route numbers for freeways, refer to Clause 4.3.2 of this Supplement.

Clause 3.3.4 – Exit numbering

DEPARTURE

The Victorian versions of the GE2-6 sign are GE2-V102-1 and GE2-V102-2. Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743. These Victorian versions cater for the addition of a letter prefix or suffix (e.g. EXIT 1W).

a) General

Exit numbers should be included with freeway exit signs in accordance with the guidance in AS 1742.15 and below.

Exit numbers are to be implemented on the freeways shown in Figure 22 and Figure 23. They should not be implemented on other freeways (i.e. those generally in rural areas) until there is a policy decision to do so.

The exit number relates to an interchange as a whole, regardless of the direction from which the driver approaches the interchange. However, freeway-to-freeway interchanges have a different number in relation to each freeway.

The numbers are sequential along the freeway. In one direction, they count up and in the opposite direction, they count down. Where there is an exit in one direction and not the other (i.e. at half diamond interchanges), the number in the direction without an exit is skipped.

Exit numbers shall be allocated as shown in Figure 22 and Figure 23. These numbers should not be changed once signing has been erected. If additional exits are added that have not been allowed for on Figure 22 and Figure 23, then for the new exit, the previous lower value exit number should be used with an 'A' suffix added to the number (e.g. a new exit between EXIT 5 and 6 would be signed as EXIT 5A). Any subsequent new exits after that should then be numbered 'B', 'C', etc.

Exit numbers are included on:

- the first advance exit sign, generally 1 km before the exit in urban areas
- the second advance exit sign, generally 500 m before the exit in urban areas
- · the exit direction sign at the exit itself
- lane allocation signs, where relevant
- diagrammatic direction signs, where relevant
- supplementary advance signs, but only when the sign indicates a destination is reached via 'USE EXIT x' (sign GE1-V8-4).

Exit numbers are not included on:

- exit gore signs (GE2-3)
- reassurance direction signs
- supplementary advance signs which indicate a destination is reached via 'THIS EXIT', 'NEXT EXIT' or 'NEXT x EXITS'.

b) Exit number sign/panel design

Where practical, the exit number should be incorporated within the sign face. However, where exit numbers are retrofitted onto existing signs, they may be added as an additional plate above the existing sign as shown in Figure 24.



Figure 22: Freeway exit numbering overview - Melbourne North and West

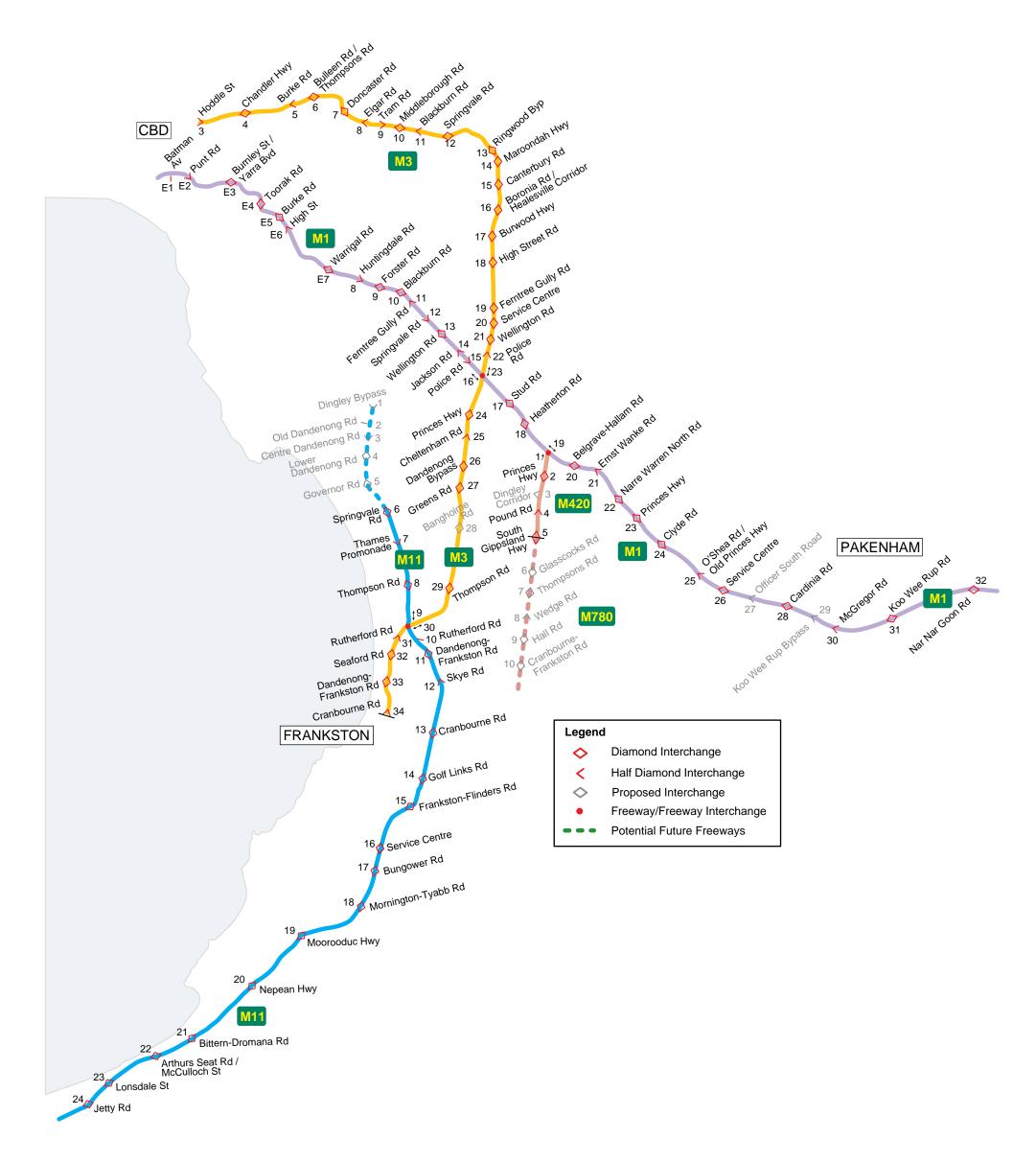


Figure 23: Freeway exit numbering overview – Melbourne South and East

The exit number is located in the top left corner of the sign. However, in the rare cases where the exit or freeway divergence is to the right or straight ahead, then the exit number is placed in the top right corner of the sign.

The exit number sign appears in the following formats:

- As a separate sign to be mounted above an existing direction sign
 - Sign GE2-V102-1 is the standard sign for when the exit number is numerals only.
 - o Sign GE2-V102-2 is for when the exit number include a letter suffix (e.g. 'A').
- Incorporated into the freeway direction sign. The GE2-V102 series sign designs are used as a panel within the sign face minus the green border.

Refer to the VicRoads Supplement to AS 1743 for the standard drawings of GE2-V102 series signs and freeway direction signs that incorporate the exit number panel.

Where a freeway-to-freeway interchange allows travel to both directions of the intersecting freeway, a cardinal point suffix is added to distinguish the direction. The cardinal direction relates to the direction in which the motorists will be travelling once they reach the freeway they are entering. Only the primary cardinal points, North (N), South (S), East (E) and West (W) shall be used (refer to Figure 25).

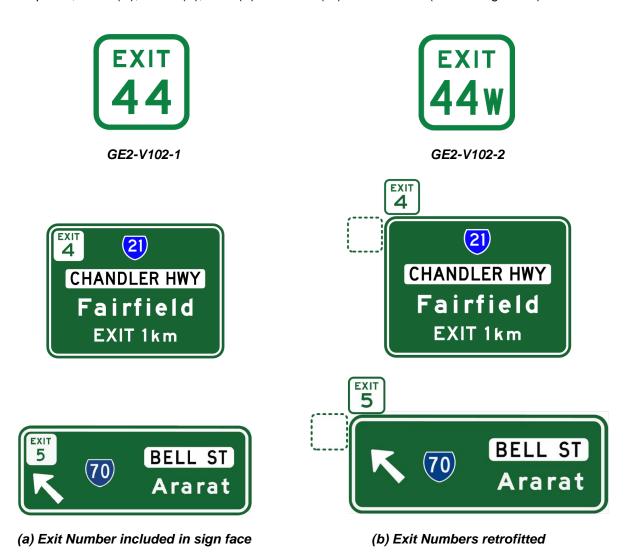


Figure 24: Exit Number Signs and Panels

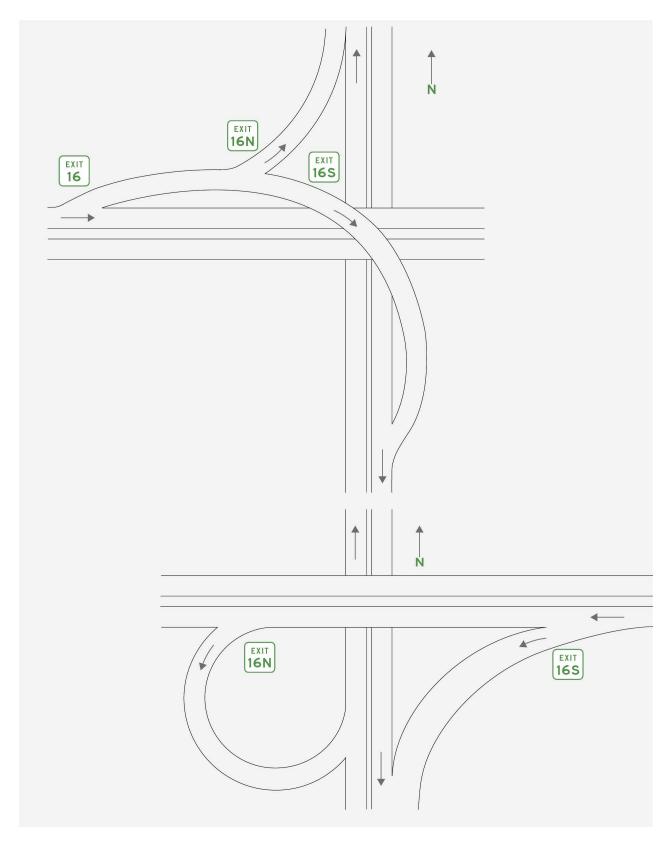


Figure 25: Exit Numbers at Freeway to Freeway Interchanges

Clause 3.4 – ADVANCE EXIT AND EXIT DIRECTION SIGNS

Single trap (exclusive) lane exit signs

Where a single lane of a freeway (usually the left lane) becomes a trap (exclusive) lane for an exit, it is crucial that appropriate exit signs are provided so that drivers and not inadvertently leaving the freeway.

The following signing arrangement should be used:

- For the first advance exit sign, generally installed 1 km in advance of the exit:
 - o Sign GE1-V103 which has the legend 'EXIT x km' and 'LEFT LANE ONLY' on the next line below in uppercase black text on a yellow panel.
 - Where greater emphasis on the trap lane is required (e.g. at complex interchanges), sign GE1-V14-2 should be used with the legend 'EXIT x km' located with the information for the trap lane
 - o In either of the above cases the sign is overhead mounted.
- For the second advance exit sign, generally installed 500 m in advance of the exit:
 - Sign GE1-V14-1 should be used (in this case driving instructions such as 'LEFT LANE' or 'EXIT x km' is not required). This sign is overhead mounted over all lanes.
 - Where a GE1-V14-1 sign cannot be installed, then sign GE1-V104, which has a curved upwards arrow and a yellow 'ONLY' panel on the left side of the arrow, should be used instead. This sign shall be mounted over the trap lane.

At the exit:

- A standard GE2-V1 series sign should be used, and it shall be mounted on a gantry over the exiting lane.
- A GE2-V2 sign is installed on the same gantry over the through lanes.

Where a GE1-V14 series sign is used, the lane arrows shown shall match the lane arrangements at the sign location. Refer to Clause 3.4.5 of this Supplement for various panel designs for GE1-V14 series signs.

Where greater warning of the trap lane is required (e.g. in a rural area or at a complex interchange) additional advance exit signs may be installed at an earlier distance.





GE1-V103

GE1-V104



GE1-V14-2

Freeway to freeway interchanges

Signing of freeway to freeway interchanges will vary according to the lane configuration on each freeway, the types of connection, the interchanging traffic volume, and whether the freeway on the approach appears to continue through, or turn away from, the through route. The following general principles should be applied:

- In general, sign types and locations will be as given for important exits from the freeway, either single or two-lane.
- The advance exit and exit direction signs should not include the name of the continuing freeway or freeway that the exit leads to, except if the continuing freeway or freeway that the exit leads to is a toll road. The route number should be the primary identifier for freeways; it is a simpler form of navigation for drivers to use and as an effort to simplify signage. However, in exceptional circumstances, the name may be included if it aids in navigation through the interchange.
- The destinations shown on signs shall be kept to a minimum so as to not overload the driving task.
- Signing of the freeway interchange should begin at a distance where it would allow drivers to comfortably position themselves into the correct lane.

Examples of signing at a freeway junction are shown in Figure 41 and Figure 42, and includes the following:

- A gantry (or possibly cantilever depending on the interchange layout) at the 1 km point, which should include lane discipline information.
- At major or complex interchanges, it may be essential to install a diagrammatic sign at the 1.5 km location in addition to the 1 km sign, but this would depend on other signing requirements. A diagrammatic sign showing the freeway alignment is considered as a preferred alternative to the 1 km sign, but would need to be side mounted, and therefore may lack conspicuity on carriageways more than 3 lanes wide.
- A gantry for the 500 m advance sign providing lane discipline information (GE1-V14 style sign).
- A gantry at the exit point area (GE2-V1 and/or GE2-V2 style signs) (refer to Clause 3.4.3 of this Supplement).
- On GE1-V14 series (lane allocation) signs, 45 degree or oblique arrows may be used instead of the conventional lane arrows if, for example, the use of curved arrows would be misleading due to the exit movement and/or ramp geometry.

It should be noted that lower speed connecting ramps should be signed with conventional curve warning signs, possibly using large and overhead mounting for such signs.

Approval of the Manager – Network Standards shall be obtained for these signing schemes.

Clause 3.4.1 – Advance exit signs-legend type (GE1-5, GE1-6, GE1-13)

The Victorian versions of these signs are GE1-V5, GE1-V6 and GE1-V13. For best practice, these Victorian sign versions should be used for the reasons described below. Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743.

Victorian versions of the GE series signs have been created in accordance with AS 1742.1:2014 Clause 1.8, to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

GE1-V5, GE1-V6 and GE1-V13 signs have the following general layout:

- Route numbers are located:
 - o above the destination or, when a road name panel is present, above the road name panel
 - o for short road names or when the road name is over two lines, the route number may be located to the left of the road name panel (in order to reduce sign width).
- The exit number panel is located in accordance with Clause 3.3.4 of this Supplement. Example layouts also shown in this Clause.

- Destination(s) are located:
 - o under the route number or road name panel (if applicable) and horizontally centre justified in the sign
 - o either below or beside the exit number panel where the cross road has no route number or road name.
- Destination(s) shall not to be located above a road name panel.
- Driving instructions (e.g. EXIT 2 km or LEFT LANE) are located at the bottom of the sign and horizontally centre justified in the sign.

Further examples of GE1-V5 and GE1-V13 signs are shown on the next page.

As outlined in Table 12, for standard interchanges, two advance exit signs are erected for each exit ramp.

Refer to Figure 28 for typical rural signing arrangements.

Refer to Figure 30 for typical urban signing arrangements.







GE1-V5

GE1-V5

GE1-V13







GE1-V5

GE1-V13

GE1-V5

The GE1-V6 advance direction sign may be used at complex or non-standard freeway exit points. This sign has two lines of driving instructions, which normally includes distance indication and lane discipline advice. However, it should be noted that the provision of a diagrammatic sign for the first advance sign is the preferred treatment, particularly for non-standard freeway exit arrangements.



GE1-V6

The GE1-V6 sign is typically used at the following locations:

- The sign is used at closely spaced exits (less than 0.8 km apart) where the legend "EXIT 500 m, LEFT LANE" is used at two locations (refer to Figure 35).
- At two lane exits, the sign is used if the left exiting lane is already developed at the 1 km point or it is a continuation of a through lane (refer to Figure 34). In this case sign GE1-V6 has the legend "EXIT 1 km. 2 LEFT LANES".
- At right hand exits, the GE1-V5 sign is replaced by sign GE1-V6 sign with the legend "EXIT 1 km, RIGHT LANE" and sign GE1-V13 (located 500 m from the exit) has the legend "RIGHT LANE".

Signs GE1-V5, GE1-V6 and GE1-V13 are to include route numbers as described in Clause 3.3.3 of this Supplement.

Clause 3.4.2 – Advance exit signs-diagrammatic type (GE1-11, GE1-12)

The Victorian versions of these signs are the GE1-V11 and GE1-V12 series signs. In addition, other diagrammatic signs used are the GE1-V20 series signs. For best practice, these Victorian sign versions should be used for the reasons described below. Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743.

Victorian versions of the GE series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

Diagrammatic exit direction signs may be used at complex interchange exits where the movements required of drivers are not normally expected, e.g. a right hand exit or directional loop or ramp connections. These signs also illustrate limitations on movements which may occur from the particular exit ramp.

The intent of the diagrammatic sign is to provide a pictorial representation to the driver of movements able to be made, thereby providing a simple message which is quickly recognised by a driver, rather than a complex worded description which may not be effectively comprehended. The disadvantages of these signs are that they:

- are significantly larger than standard type (legend only) signs requiring special mounting arrangements which can result in a greater cost
- generally require side mounting due to their size and therefore may not be as conspicuous as overhead mounted signs.

Wherever possible, diagrammatic signs should be used in advance of closely spaced exits (see Clause 3.4.6 below).

In addition to the above, diagrammatic signs may be considered at major route junctions or at principal access points into large towns or major suburbs. Sign GE1-V11-1 may be used as the first advance exit sign and GE1-V12-1 may be used as the second advance exit sign. For these cases, diagrammatic signs are used for both advance exit signs. The first advance sign (GE1-V11-1) does not include a through destination, but the second one (GE1-V12-1) does.





GE1-V12-1

GE1-V11-1

Where diagrammatic advance exit signs are used on a route, they should preferably be used consistently at all important exits on that route.

The signs GE1-V20-1 and GE1-V20-2 are primarily used at (but not limited to) freeway interchanges.



GE1-V20-1



GE1-V20-2

Clause 3.4.3 – Exit direction signs and assemblies (GE2-1, GE2-2)

The Victorian versions of these signs are GE2-V1-1, GE1-V1-2 and GE1-V1-3. For best practice, these Victorian sign versions should be used for the reasons described below.

The GE2-V1-1 is considered to be a wide format sign, while the GE2-V1-2 and GE2-V1-3 are narrow format signs. The GE2-V2 series signs are used for the through direction and are the Victorian version of the GE2-2 sign.

Victorian versions of the GE series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743.

The word 'EXIT' is generally not used on exit direction signs in Victoria.

On a gantry sign assembly, the right edge of the rightmost sign (usually the GE2-V2 sign) should not extend past the right edge of the carriageway; while the left edge of the leftmost sign (usually the GE2-V1 sign) should not extend past the left edge of the shoulder.

a) GE2-V1 series signs

Exit direction signs of the GE2-V1 series are provided to indicate the ramp exit point. These signs are located as shown in Figure 28 and Figure 30.

Where signs are to be side mounted (e.g. in rural areas), consideration should be made in using the narrow format design to ensure that the exit direction sign is within the driver's viewing area.

The sign repeats the destination, route number and road name (where applicable) information shown on the advance exit signs. They shall contain a straight, 45 degree angled arrow.











GE2-V1-1

GE2-V1-3

When mounted over the left lane, the exit direction sign should be mounted so that:

- The right edge of the sign shall nominally be a minimum of 500 mm from the right hand edge of the left lane, and
- The left edge of the sign should not extend beyond the outer edge of the shoulder.
- Where the exit direction sign cannot be satisfactorily mounted in accordance with the above requirements, the following options may be used in order of preference:
 - o The sign may be modified to spread text over more lines to reduce the sign width.
 - The gantry may be located further back along the taper or into the gore area. For this case, the lateral location of the exit direction sign shall be as far as practicable centred over the exiting ramp. The location of all signs on the gantry shall take into account the approach geometry to give clear directional guidance to the exit path and through movement, refer to Figure 30.
 - The gantry may be replaced with a cantilever sign with the exit direction sign attached and the through direction sign (GE2-V2) mounted beyond the exit ramp on the interchange overpass structure, or on a separate cantilever. In certain circumstances this sign may be omitted as noted below.

b) GE2-V2 signs

Where overhead mounting of exit signs are required (refer to Clause 3.2 of this Supplement), a gantry is normally installed to allow for the erection of the through direction sign GE2-V2 over the through lanes.

This sign has a single upward, vertical arrow. In rare cases where the vertical arrow may confuse motorists about the alignment immediately beyond the sign, a curved arrow with its shaft commencing vertically may be used. However, a curved arrow shall not be used when the through carriageway curves in the same direction as the exit ramp. The arrow is placed on the right side of the sign (except where the sign is beside a right hand exit, in which case the arrow shall be placed on the left side).

The right edge of a GE2-V2 sign should not extend beyond the outer edge of the shoulder (except where the sign is beside a right hand exit, in which case it is the left edge).

The GE2-V2 through direction sign may be omitted from a sign assembly in exceptional circumstances (e.g. the design of an overhead bridge structure prohibits the installation of multiple signs); provided that the spacing between through direction signs along the freeway does not exceed 5 km.





GE2-V2

GE2-V2

The route number is generally placed above the destination; however it may be located on the same line as the destination, in between the destination and arrow.

Road name panels may be included on GE2-V1 and GE2-V2 signs in accordance with Clause 3.3.2 of this Supplement.

Clause 3.4.5 – Two-lane exits

Signs for two-lane exits, overhead mounted (GE1-V14-1, GE1-V14-2)

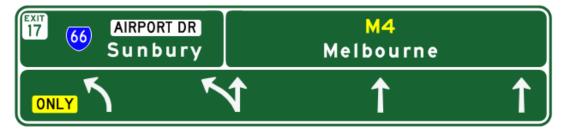
The Victorian versions of the GE1-14 sign are the GE1-V14-1 and GE1-V14-2. Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743. For best practice, these Victorian sign versions should be used for the reasons described below.

Victorian versions of the GE series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

The layout of signs and markings for a typical two-lane exit is illustrated in Figure 34.

The following signs are required in advance of two lane exits:

- The first advance exit sign is:
 - A GE1-V5 sign or GE1-V6 sign. Sign GE1-V6 is used instead of sign GE1-V5 where the
 additional exiting lane is already developed at the 1 km (urban) or 2 km (rural) point or it is a
 continuation of a through lane (refer to Figure 34). Thus in this application, sign GE1-V6 shall
 have the legend "2 LEFT LANES".
 - At locations where there is a high volume of traffic exiting or it desirable to give full lane discipline information, a GE1-V14-2 sign should be used. This sign includes a distance to the exit. This sign is mounted on a gantry and shall include an arrow located over each lane at the sign position.
- The second advance exit sign (GE1-V14-1) is mounted on a gantry and shall include an arrow located over each lane at the sign position.
- The GE2-V1 sign is generally used as the exit direction sign at the exit position. A GE2-V2 through direction sign is also generally installed adjacent to the GE2-V1 sign.



GE1-V14-1

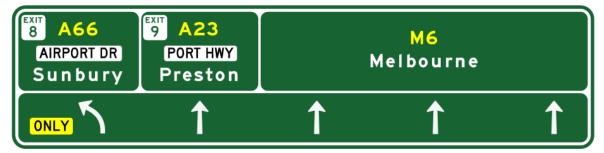


GE1-V14-2

It should be noted that a two lane exit followed by a closely spaced second exit is difficult to sign, particularly in the vicinity of the second advance exit sign position (refer to Clause 3.4.6). Arrangements of this type should therefore be avoided in the road design stage. If required, such signing shall be approved by the Manager – Network Standards.

Design and layout of panels

The layout of GE1-V14 series signs shall be simple and clear to ensure drivers can easily understand the information given. The following diagrams show a number of typical panel layouts on GE1-V14 series signs.



Example 1

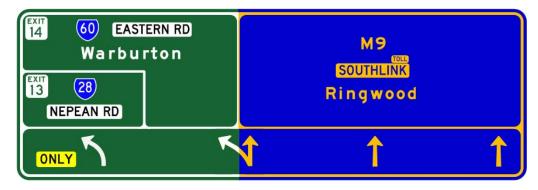
The above layout is suitable where there are subsequent exits. The exit to 'A23 Port Hwy' occurs after the exit to 'A66 Airport Dr', thus a straight arrow is shown under the 'A23' panel. Note in this example both exits are trap lanes. The exit number panel is in the top left corner when the exit is on the left hand side.



Example 2

Where the exit leads to two different departures of the same road, the information should be displayed as above.

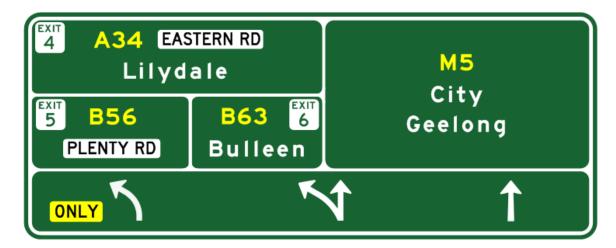
As both departures have the same name and route number, this information is centre justified above the destinations as shown. The 'EXIT 8W' exit number panel is placed in the top right corner as once drivers have left the mainline of the freeway, the 'Geelong' exit will be on the right hand side of the off ramp.



Example 3

In the above layout both exit lanes leads to the same road ('Eastern Road'), while the left most exit lane also leads to a second road ('Nepean Road').

Note in this example the exits lead to non-toll roads while the through direction is a toll road.



Example 4

In this example:

- The left most exit lane leads to both 'A34 Eastern Road' and 'B56 Plenty Road'.
- The right most exit lane leads to both 'A34 Eastern Road' and 'B63'.
- The 'B63' exit is on the right hand side once drivers are on the off ramp, thus the exit number is in the top right corner of the 'B63' panel.

Clause 3.4.6 - Closely spaced exits

The Victorian versions of the GE1-12 sign are GE1-V12-1 and GE1-V12-2. Standard drawings for these signs can be found in the VicRoads Supplement to AS 1743. For best practice, these Victorian sign versions should be used for the reasons described below.

Victorian versions of the GE series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 that are still used in Victoria.

Typical treatments of closely spaced exits are illustrated in Figure 35.

It is preferred that the first sign should be the diagrammatic type showing both exits (GE1-V11 series sign). Only where there is insufficient room for this sign to be side mounted, or conspicuity of a side mounted sign is compromised (e.g. road geometry of four or more lanes of traffic), should the alternative of a cantilevered sign GE1-V5 "EXIT x km" or GE1-V6 "EXIT 1 km/2 LEFT LANES" be used.





GE1-V11-1 GE1-V11-2

Where the closely spaced exits both lead onto the same cross road (or intersecting freeway), but are required for the opposite directions on that cross road (or intersecting freeway), the GE1-V11-2 sign should be used and shall include advice to that effect in a panel at the top of the sign (e.g. "M80 EXITS"). As this sign has a large amount of information, consideration may be given using a principal legend height greater than 400 mm for the top panel.

Where the exits are between 0.8 and 1.2 km apart, a GE1-V13 "LEFT LANE" sign is used at the second advance sign position. Confirmation for the driver regarding the second exit is provided using the GE1-V5 "EXIT x km" sign on the gantry or just downstream of the exit (e.g. mounted on an overpass structure or cantilever).

Where the spacing of the exits is closer than 0.8 km, there is generally insufficient distance between exit ramps to install both the first advance sign GE1-V5 "EXIT x km" and the second advance sign GE1-V13 "LEFT LANE". A gantry is therefore provided at the location of the second advance sign (instead of the usual cantilever) to enable the GE1-V5 "EXIT x km" sign to be erected adjacent to the GE1-V6 "LEFT LANE" sign, refer to Figure 35. The GE2-V2 through direction sign is also erected on this gantry if sufficient width is available. A cantilever is normally provided at the exit position for this case.

Clause 3.5.1 – THIS (NEXT) EXIT(S), USE – EXIT signs (GE1-8)

This type of sign may be used to indicate access to:

- An important town or city remote from the freeway corridor, and which would not ordinarily warrant
 naming on the principal direction signs for the subject exit. It is important that this type of sign is not
 used merely to list more destinations reached via the exit than can be accommodated on the principal
 direction signs. This is to be especially avoided on urban freeways.
- A major traffic generator, e.g. major sporting or cultural venues, universities and major recreational
 areas, refer to the VicRoads Supplement to AS 1742.6. It is important that this type of sign is not used
 for facilities of limited interest, which are clearly indicated in an urban street directory or on online
 maps, or which are obviously accessed via the locality name on the other exit signs (e.g. Smithville
 Hospital, accessed via the Smithville exit).
- These generators are typically:
 - A major tourist attraction, in which case the sign is white on brown (refer to the VicRoads Supplement to AS 1742.6).

 A major service or community facility which is located off the freeway, in which case the sign is white on blue. Note that services on rural freeways are generally indicated by a service sign located under the first advance exit sign and under the exit direction sign (refer to AS1742.6).

Only one supplementary advance sign is permitted on each freeway approach to an interchange. It shall include preferably one, but no more than two destinations. Where used, it is installed as a separate sign. It shall be in the style described in this Clause, and shall not include other driving instructions, arrow or route numbers.

Refer to Figure 26 for a typical 'THIS EXIT' signing arrangement on a freeway and subsequent signing on the freeway offramp.

USE (EXIT NUMBER) sign

As per (b) in Clause 3.5.1, if exit numbering is in place along a freeway the legend 'USE EXIT No . . .' may be used instead. An example of this sign (GE1-V8-4) is shown below.



GE1-V8-4

Using other road identifiers

As per (b) in Clause 3.5.1, other road identifiers may be used in the 'USE ... EXIT' message. Examples include using the route number or destination of the exit, as shown below. A distance may be added underneath the 'USE ... EXIT' message.





GE1-V8 series

GE1-V8 series

Note that the destination and route number used in the 'USE ... EXIT' message is in Series E Mod font, and is one legend size smaller than the principal legend height (refer to Clause 1.6.8 (i) of this Supplement).

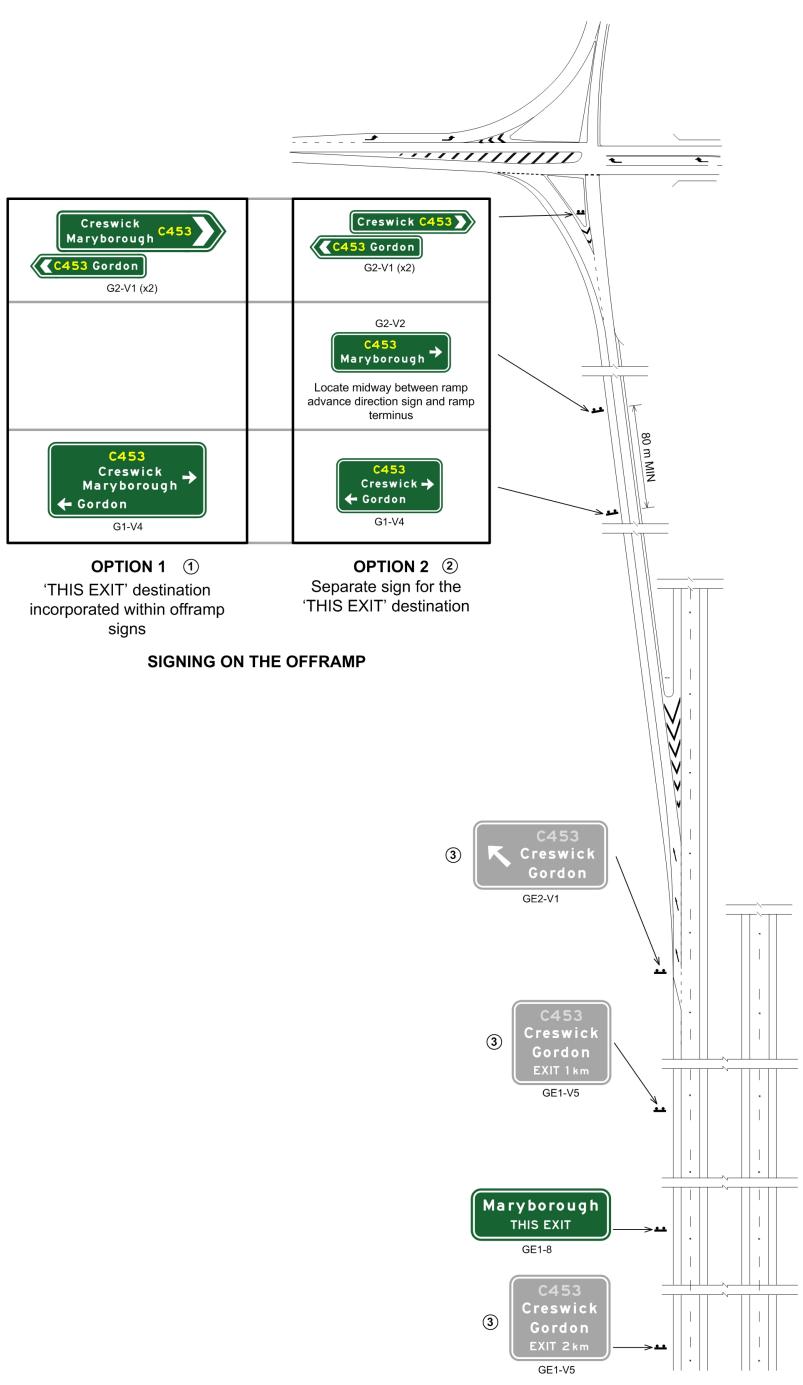


Figure 26: THIS EXIT signing on a freeway

Notes to Figure 26:

- 1. Option 1 signing arrangement should be used where the 'THIS EXIT' destination is significant and the maximum number of destinations in the ramp direction sign (or relevant subpanel of the sign) has not been exceeded (refer to AS 1742.15:2007 Clause 2.2.3).
 - Refer to Clauses 2.2.2 (a), 2.2.2 (b) and 2.4.2 of this Supplement for various design layouts for advance and intersection direction signs.
- 2. Option 2 signing arrangement should be used where the 'THIS EXIT' destination is relatively minor and/or the maximum number of destinations in the ramp direction sign (or relevant subpanel of the sign) has been exceeded (refer to AS 1742.15:2007 Clause 2.2.3).
- 3. Refer to the Clauses 3.4.1, 3.4.3 (as well as other subclauses under 3.4) and 3.9 for the layout of freeway advance exit and exit direction signs, including the different signing arrangements for rural and urban freeways.

Clause 3.5.2 – By-passed town signs (GE1-15)

The Victorian version of the GE1-15 sign is the GE1-V15. The standard drawing for this sign can be found in the VicRoads Supplement to AS 1743. For best practice, the Victorian sign version should be used for the reasons described below.

Victorian versions of the G series signs have been created in accordance with AS 1742.1:2014 Clause 1.8 to cater for the standardised sign sizes as specified in Clause 1.6.8 of this Supplement. These Victorian designs also cater for route numbering systems no longer covered in AS 1742.15:2007 but are still used in Victoria.

Where used, the sign shall be located between the second advance exit sign and the exit direction sign. It should be used where the original highway has now been bypassed and the city/town is major centre and/or has services or facilities that may be of use to passing drivers.

The route number of the town access route, where applicable, should be added to this sign.

The sign may also be used on non-freeway roads where a significant town has been bypassed. In this case, a C size sign should be used; however a larger size may be used if there is a need to increase conspicuity of the sign.





GE1-V15

GE1-V15

Clause 3.6.1 – Reassurance direction signs (GE4-1)

DEPARTURE

In Victoria, sign GE4-1 is not used. Sign G4-V1-1 in C size is used instead (G4-V1-1C). The standard drawing for this sign can be found in the VicRoads Supplement to AS 1743.



G4-V1-1C

Clauses 2.5, 2.5.2 and 2.5.3 (c) of this Supplement outlines the general principles for the provision of reassurance direction signs.

In addition to the principles in Clause 2.5.2, major freeway interchanges/junctions may be signed as destinations on freeway reassurance direction signs. The display should be in the form '[route number] FREEWAY' or '[route number] JUNCTION' where:

- The route number is in the principal legend size and font (240 mm Series E mod).
- The word freeway or junction is in uppercase Series D font with a legend height of 220 mm.
- The words freeway and junction may be abbreviated as per AS 1742.5.
- The freeway name may be included with the '[route number] FREEWAY' format. However this may result in an unnecessarily wide sign.



G4-V1-1C

On freeways and M Routes, reassurance direction signs are placed approximately 300 m beyond each entry ramp. The number of destinations on the sign shall not exceed four. Where entry ramps are closely spaced, a sign beyond each ramp is not necessary, the sign normally being located beyond the last entry ramp.

On urban freeways, reassurance direction signs should be installed after major road interchanges and freeway-to-freeway interchanges or where the standard through destination of the freeway changes. However, reassurance direction signs should also be provided at other interchanges where it is deemed beneficial for entering traffic or to remind drivers of other destinations (usually distant destinations) reached by the freeway.

Distances to destinations are shown to the post office of the destination via the most convenient exit and route.

Clause 3.6.2 – Interchange sequence sign (GE1-9)

Exit numbers and route numbers, where applicable, should be shown on the left of the road names on these signs (sign GE1-V9-1).

A minimum principal legend height of 240 mm (C size) shall be used for this sign. Road names are shown in uppercase Series E font with a minimum legend height of 220 mm.

The distance shown is to the exit ramp terminal of the named road.



GE1-V9-1

Clause 3.7.1 – Exit ramp terminals

The typical layouts at these locations are shown in Figure 28 and Figure 29 (rural) and Figure 30 and Figure 31 (urban).

On multi-lane ramps, the advance signs may be complemented by a sign from the G9 series to assist drivers in selecting the correct lane.

In urban areas, road name panels are used to designate the cross road about to be entered and are provided on both the advance and intersection direction signs. In rural areas, the road name is used only where the cross road does not have an alphanumeric route number or destination. Refer to Clause 3.3.2 of this Supplement for further details.

a) Advance signs on ramps (G1-V1, G1-V4, G1-V5, G3-V8))

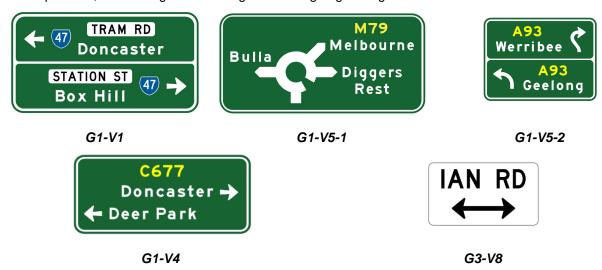
The following signs are used:

- The ramp terminal is in the form of a cross road or T-junction:
 - o G1-V1 or G1-V4 sign is normally used.
- · Where the ramp terminal is a roundabout,
 - o G1-V5-1, G1-V5-2 or G1-V5-3 sign shall be used.
- Where the intersecting cross road is a municipal road with no allocated destinations or route number:
 - o G3-V8 series sign

Further details of the above signs can be found in Section 2.

Where the through movement at the end of the offramp is on to an onramp back on to the freeway, this information is usually omitted from these signs.

Where one departure of the intersecting cross road is an arterial road and the other departure is a municipal road, refer to Figure 5 and Figure 6 for signing arrangements.



b) Lane designation signs on ramps (G9-V7, G9-V42, G9-43)

On high volume, multi-lane exit ramps, consideration should also be given to providing additional information for drivers to select the correct lane. This is done using lane designation direction signs, either:

- Overhead mounted G9-V7 type,
- Cantilever or side mounted G9-V42 type, or
- Side mounted G9-43 type.

Such lane designation signs shall be located an appropriate distance beyond the exit direction sign and within the ramp. These signs shall not be used as a substitute for the advance direction signs on the ramp unless destinations and route numbers are provided.

Signs G9-V7, G9-V42 and G9-V43 must show the correct number of lanes at the sign position.

Sign G9-V7 shall have the lane arrows positioned over the relevant lanes.

Sign G9-V42 is normally cantilever mounted and shall be laterally positioned clear of the lanes to ensure that no confusion results with respect to lane discipline (i.e. the right hand arrow on this sign may be interpreted by a driver as referring to the left lane if the sign is mounted over the left lane). Side mounted signs shall be located on the left hand side (for left hand exit) to maximise their offset from the freeway through carriageways.







G9-V42 G9-V7 G9-43

Refer to Clause 2.3 for further details on these signs.

c) Intersection signs at ramp terminals (G2-V1, G2-V2, G3-V5)

At the ramp terminal, appropriate signs from the G2 series shall be provided, giving directions to destinations along the cross road. The G2-V1 (chevron ended) sign should be used for all cases except roundabouts, where the G2-V2 (arrow) sign is used.

A G3-V5 sign is used for when the intersecting cross road is a municipal road with no allocated destinations.

Refer to Clause 2.4.2 and 2.4.3 of this Supplement for further details.



Clause 3.7.2 – Approaches to entrance ramp terminals

a) Advance direction signs (G1-V1, G1-V2, G1-V3, G1-V4)

On the cross road approach to a freeway interchange, an advance direction sign G1-V2 (stack - typically used at a diamond interchange) or the G1-V3 or G1-V5 (diagrammatic signs) is placed in advance of the interchange.

Where indirect movements are to be made onto the freeway, e.g. via a loop, a diagrammatic sign may be the most appropriate.

When a diagrammatic sign is used, the "No Entry" symbol is included on the sign as a deterrent to drivers from inadvertently driving the wrong way into the exit ramp.

The advance direction sign may incorporate a variable message panel giving freeway traffic condition information (refer to Clause 3.16.6 of the Supplement to AS1742.3 2009).

Road name panels designating the freeway being entered should not be used, unless if the freeway is tolled (refer to Clause 3.3.2 of this Supplement).

At an interchange with ramp terminals at roundabouts (refer to Figure 32), where reference is made to a freeway entry beyond the first roundabout encountered, the information relating to that entry shall be prefix with 'TO' (e.g. 'TO M11 Frankston') and shown with the through movement leg.

Overhead mounting of advance direction signs should be provided where the approach road has 3 or more lanes, unless conspicuity can be assured if the sign is side mounted.







G1-V2

G1-V5-1

G1-V3

b) Lane indication signs (G9-V7, G9-V8)

Where an urban arterial road or major rural arterial road crosses a freeway at an interchange, lane indication signs will usually be required on the arterial road within the interchange to indicate the lane(s) for traffic turning onto the freeway.

For right turn movements, this sign is most desirably located beyond the point at which an incorrect right turn could be made into an exit ramp, and wherever practicable, should be placed in the median at the point where turning lanes are first developed.

For G9-V7 signs:

- The sign shall only be used where the turn lanes have been developed and the sign can be placed
 over the lanes. The sign shall only indicate the number of lanes actually available at the sign position,
 regardless of how many additional turning lanes may be developed downstream of the sign. For this
 purpose, the sign may have only a single arrow.
- Each arrow on the sign shall be positioned over the lane to which it refers.
- If it is required to designate the use of all lanes, a gantry mounted sign is placed across the carriageway and signed according to Clause 3.7.1 (b) of this Supplement.

For G9-V8 RIGHT LANE signs:

- The sign should be used where the turning lane has not been developed at the sign position.
- The sign should be overhead mounted (e.g. on a cantilever). However, side mounting in the median may be considered if adequate space and prominence is assured.
- Where there is a very long right turn lane, the sign will need to be in advance of the interchange.

A G9-V8 sign with the message LEFT LANE may also be required where there are more than three lanes on the cross road approaches or where there is an unusual interchange approach configuration.

Where the freeway passes over the arterial road, signs may be mounted on the overpass structure.





G9-V7

G9-V8

c) Intersection direction signs at entry ramps (G2-V1, G2-V2, G2-V5)

These signs shall be provided at each entry ramp access point, as illustrated by example in Figure 28 and Figure 29 (rural) and Figure 30 and Figure 31 (urban).

Refer to Clauses within Section 2 of this Supplement for sign details (in particular Clause 2.4.2).



G2-V1

d) Trailblazer signs

At major surface route intersections in the vicinity of a freeway interchange, normal advance and intersection direction signs should include directions to the freeway where necessary. Where it is desired to not include directions to the freeway within the standard direction signs, separate approach signs, generally in the form of G2-V5 signs, may be used. They are normally located 20 to 100 m in advance of the turn movements for the intersection.

The distance from the freeway that signs should commence depends upon the layout of the adjacent road system. Normally, the signs should start no more than approximately 2 km from a ramp leading to the freeway and commence at a major intersection. Where signs are provided, they shall be used at all intervening intersections to indicate where the route to the freeway turns.

The legend on the signs should be as simple as possible. Where necessary, additional information relating to the direction or destination of the freeway may need to be given, particularly where some movements are not possible onto the freeway from the surface road system (e.g. at a half diamond interchange).







G2-V5

Clause 3.8 – SIGNS ON APPROACH TO AND ALONG TOLLED EXPRESSWAYS

DEPARTURE

General

The general principles of signing for tollways are the same as for non-tolled freeways. The exceptions are that:

- Signs which ordinarily include the word "freeway" are changed to "tollway".
- Signs are required to advise motorists that a fee is charged for travel and how that is done.
- Direction signs directing traffic towards, onto, or along the tollway have different colours, as described below.
- Regulatory signs advising end/start of tollway and classes of traffic prohibition signs require amended wording to reflect operational responsibility of the facility, refer Clause 3.4.3 (b) of the Supplement to AS1742.2:2009.
- Advance signs are installed on non-tolled freeways advising motorists that they are approaching a tollway. These signs are installed in advance of the two exit points prior to reaching the tollway.

Colour of direction signs on tollways

Direction signs, or parts of direction signs, which direct traffic towards, onto or along a tollway, are to have a yellow legend and border and blue background.

a) On roads leading to a tollway

- On signs which only include directions toward or onto a tollway, the legend and border shall be yellow and the background blue.
- On signs which include directions along non-tolled roads (e.g. stack-type advance direction signs), only
 the panel(s) directing traffic onto the tollway shall have a yellow legend and border on a blue
 background. The remainder of the sign which leads to non-tolled roads has a white legend and border
 on a standard green background (see G1-V2-2 sign below).
- Diagrammatic advance signs shall be a white legend and border on a standard green background with the tollway destinations indicated by panels with a yellow legend and a blue background enclosed in a yellow border (see G1-V5-4 sign below).
- The road name panel for a tollway shall be blue text on a yellow background.







G1-V5-4

G2-V3-104 (top) G2-V1-101 (bottom) G1-V2-2

NOTE: Toll panel (middle panel) in the G1-V2-2 example has a blue outer edge strip on the left and right sides.

b) On the tollway

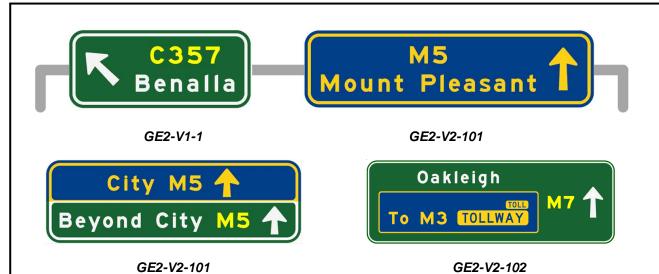
- Advance exit, exit direction and supplementary exit signs (which only include directions off the tollway)
 for an exit to a non-tolled road shall be a white legend and border on a standard green background with
 a standard green outer edge strip.
- Advance exit, exit direction and supplementary exit signs (which only include directions off the tollway)
 for an exit to another tollway or toll road shall be a yellow legend and border on a blue background with
 a blue outer edge strip.

Diagrammatic advance exit signs shall be a yellow legend and border on a blue background with a blue outer edge strip. The destination, including the route number leading off the tollway, shall be indicated by a white legend on a standard green background enclosed in a white border. The only exception is where both the through destination and the exit are tollways/toll roads, in which case the whole sign shall have a yellow legend and border on a blue background with blue outer edge strip.



Tollway diagrammatic advance exit sign, with exits to non-tolled roads

- A GE1-V14 series or GE2-V2 sign with composite tollway/non-tolled destinations shall be subdivided
 with a yellow legend and border on a blue background for the tolled section of the sign and a white
 legend and border on a standard green background for the non-tolled section. An alternative style is to
 show the tollway information in a yellow legend and border on a blue background panel within the nontolled green background (see the GE2-V2 examples).
- At the exit location, where the tollway continues, the through destination sign (GE2-V2) shall have a
 yellow legend and border on a blue background with a blue outer edge strip (refer to sign examples
 below).
- At the exit location, where the tollway continues as a non-tolled freeway, the through destination sign (GE2-V2) shall have a white legend and border on a standard green background with a standard green outer edge strip.
- On signs that include directions to or along both a tollway and a non-tolled road, the sign shall be subdivided with a yellow legend and border on a blue background for the tolled section of the sign and a white legend and border on a standard green background for the non-tolled section (refer to GE2-V2 sign examples below).
- Reassurance direction signs shall be a yellow legend and border on a blue background with a blue outer edge strip.
- The road name panel for a tollway shall be blue text on a yellow background.



Notes for composite design GE2-V2-101:

Toll panel (top panel) has a blue outer edge strip.

Non-toll panel (bottom panel) has a standard green outer edge strip.

Toll Indication

On direction signs leading to a tollway or toll road, a TOLL panel shall be included. This consists of the word "TOLL" in uppercase letters, in blue text on a yellow panel. No other indication of tolling systems or brands shall be shown.

Where the tollway name is included on the sign, the TOLL panel shall be placed immediately on top of
the tollway name, with the right edge of the TOLL panel in line with the right edge of the tollway name
panel. Both panels have blue text on a yellow background.



Figure 27: Toll indication style to be used within toll direction signs

• Where the tollway name is not included on the sign, the TOLL panel is placed under or next to the route number for the tollway. The placement must make it clear which route is tolled and which is not.

Clause 3.9 – TYPICAL DIRECTION SIGN TREATMENT

The following layout plans shall be read in conjunction with Clause 2.1 (a) of this Supplement (including Figures 3, 4, 5 and 6). They establish the level of signing required for a particular intersection or interchange.

Where there are differences between the figures here and AS 1742.15 Clause 3.9, the Victorian figures in this Clause generally take precedence.

Regulatory, warning and other non-direction sign requirements for these intersections are given in AS 1742.2 and the VicRoads Supplement to AS 1742.2:2009 (in particular Clause 3.8). AS 1742.2 (and its Supplement) also sets out the requirements for linemarking, pavement marking and raised retroreflective pavement markers.

The Victorian versions of AS 1742.15 Clause 2.6 figures are:

Figure 3.9 Example of Signs at an Exit and Entry on Rural Expressway:

- Figure 28: Rural interchange signing full diamond
- Figure 33: Freeway exit signs for municipal road exit

Figure 3.10 Example of Signs at a Single Lane Exit and Entry on an Urban Expressway

- Figure 30: Urban interchange single lane exit
- Figure 33: Freeway exit signs for municipal road exit

Figure 3.11 Example of Signs at Two-Lane Exit from an Urban Expressway

Figure 34

Figure 3.12 Examples of Signs at Closely Spaced Exits 1.2 km or Less Apart

Figure 35 (for exits 0.8 to 1.2 km apart and exits less than 0.8 km apart)

Figure 3.13 Example of Signs at Approaches to Ramp Terminals

- Figure 28: Rural interchange signing full diamond
- Figure 29: Rural interchange signing half diamond
- Figure 30: Urban interchange single lane
- Figure 31: Urban interchange
- Figure 32: Interchange with roundabout terminal

Other Victorian figures include:

- Figure 36: Freeway terminals
- Figure 37: Rural freeway/M Route at-grade intersection
- Figure 38: Direction signs for minor at-grade intersection with rural freeway/M Route (cross road)
- Figure 39: Direction signs for minor at-grade intersection with rural freeway/M Route (side road with median opening)
- Figure 40: Direction signs for minor at-grade intersection with rural freeway/M Route (side road, left-in left-out)
- Figure 41: Freeway to freeway interchange signing terminus
- Figure 42: Freeway to freeway interchange signing continuous

Rural Single Lane Entry and Exit Ramps

Figure 28 and Figure 29 shows the layout of direction signs for a typical rural full diamond interchange and half diamond interchange.

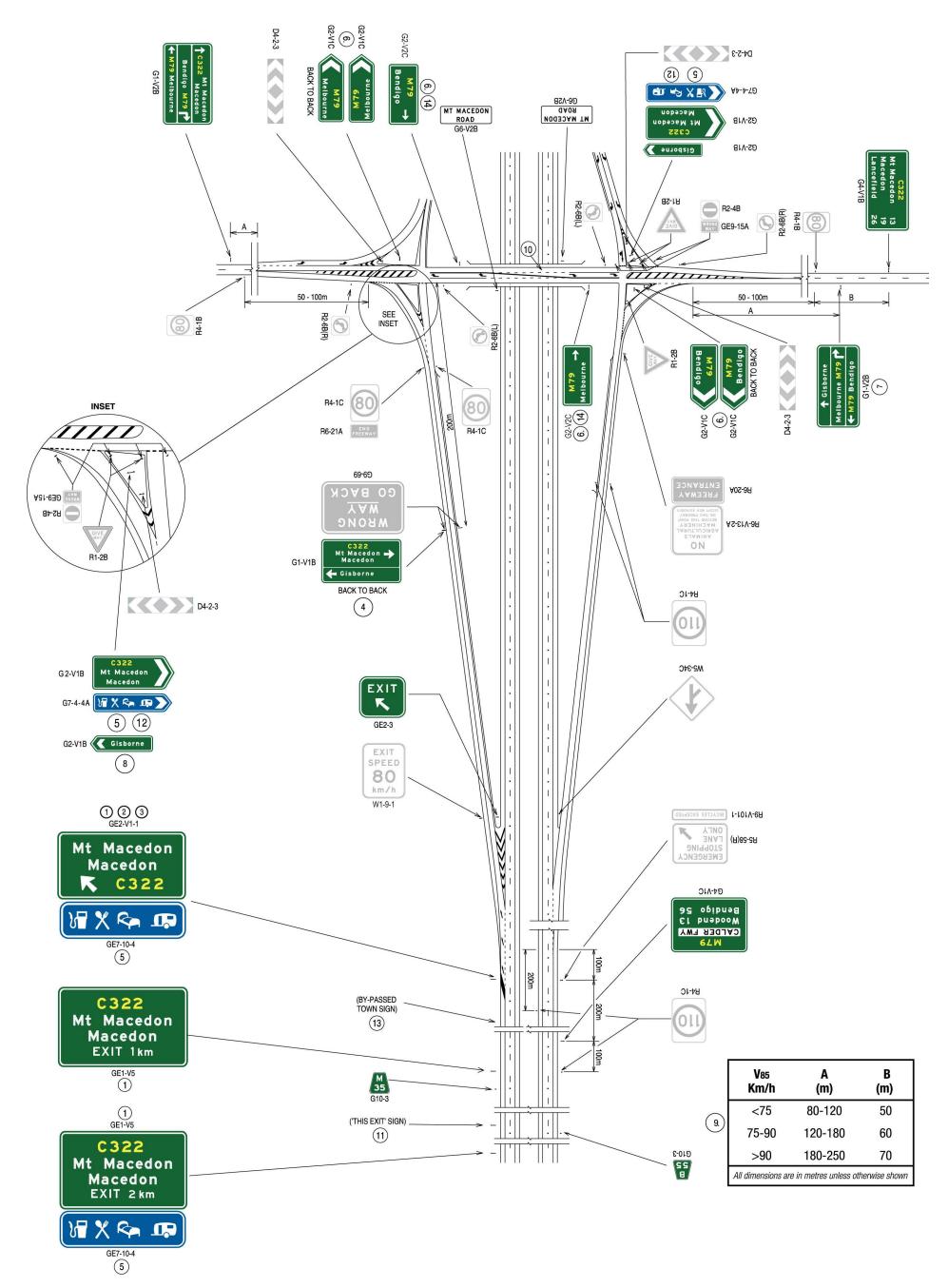


Figure 28: Rural interchange signing – full diamond

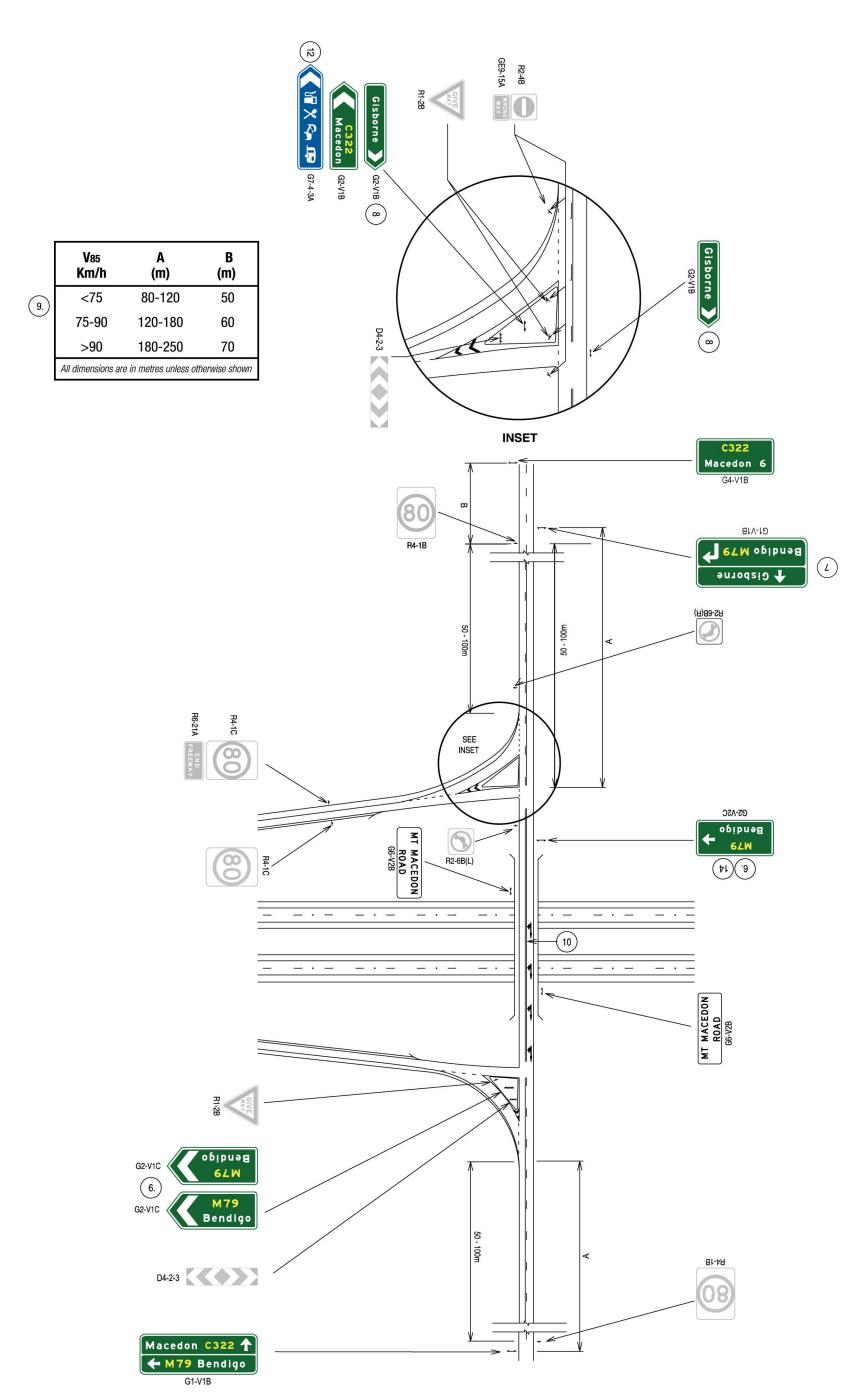


Figure 29: Rural interchange signing – half diamond

Notes Figure 28 and Figure 29:

- 1. Advance exit and exit direction signs are shown for a single lane exit. Refer to Table 12 for variations.
- 2. The exit direction sign (side mounted) is placed at the start of the ramp taper.
- 3. Use a cantilever sign where warranted (refer to Clause 3.2 (a) of this Supplement). A cantilever or gantry sign, if warranted, is also placed at this location. Refer to Figure 30 for alternative gantry location.
- 4. If one of the departures does not have a standard through destination or route number, then the name of the road shall be shown in a road name panel, refer to Clause 3.3.2 (a) of this Supplement.
- 5. Services signs shall be installed in accordance with AS1742.6. If used, the services panel (GE7-10) is always located below the first advance exit sign and below the exit direction sign.
- 6. B size version of these signs may be used at minor or very low volume rural interchanges.
- 7. If the road ahead does not have a standard through destination or route number, then the name of the road ahead shall be shown in a road name panel, refer to Clause 3.3.2 (a) of this Supplement.
- 8. For a municipal road departure that does not have a standard through destination, this sign shall be in the G3-V5 format (size B). Refer to Figure 33 for further information.
- 9. V85 = 85th percentile approach speed measured 300 to 500 m in advance of the intersection.
- 10. Where the cross road is divided, refer to Figure 31 and adopt the treatment from the urban case. Note that side mounted signs are normally used unless overhead mounting is warranted (refer to Clause 3.7.2 (a) of this Supplement).
- 11. "THIS EXIT" (GE1-8/V8 series) sign is located midway between "EXIT 2 km" and "EXIT 1 km" signs and may be required to indicate either a distant town or a major tourist attraction or combination of both (refer to Clause 3.5.1 of this Supplement).
- 12. Tourist signs may be required as part of this assembly. Refer to the Supplement to AS1742.6:2014.
- 13. By-passed Town Sign is located midway between the "EXIT 1 km" sign and exit direction sign. For description and requirements for use of this sign refer to Clause 3.5.2 of this Supplement.
- 14. Locate these direction signs well beyond the exit ramp so that drivers are not directed into the exit ramp.
- 15. For different types of advance and intersection direction signs to be used along the cross road and on the exit ramp, refer to Clause 3.7.1 and Clause 3.7.2 of this Supplement.

Urban Single Lane Entry and Exit Ramps

Figure 30 and Figure 31 shows the layout of direction signs for a typical urban full diamond interchange and half diamond interchange.

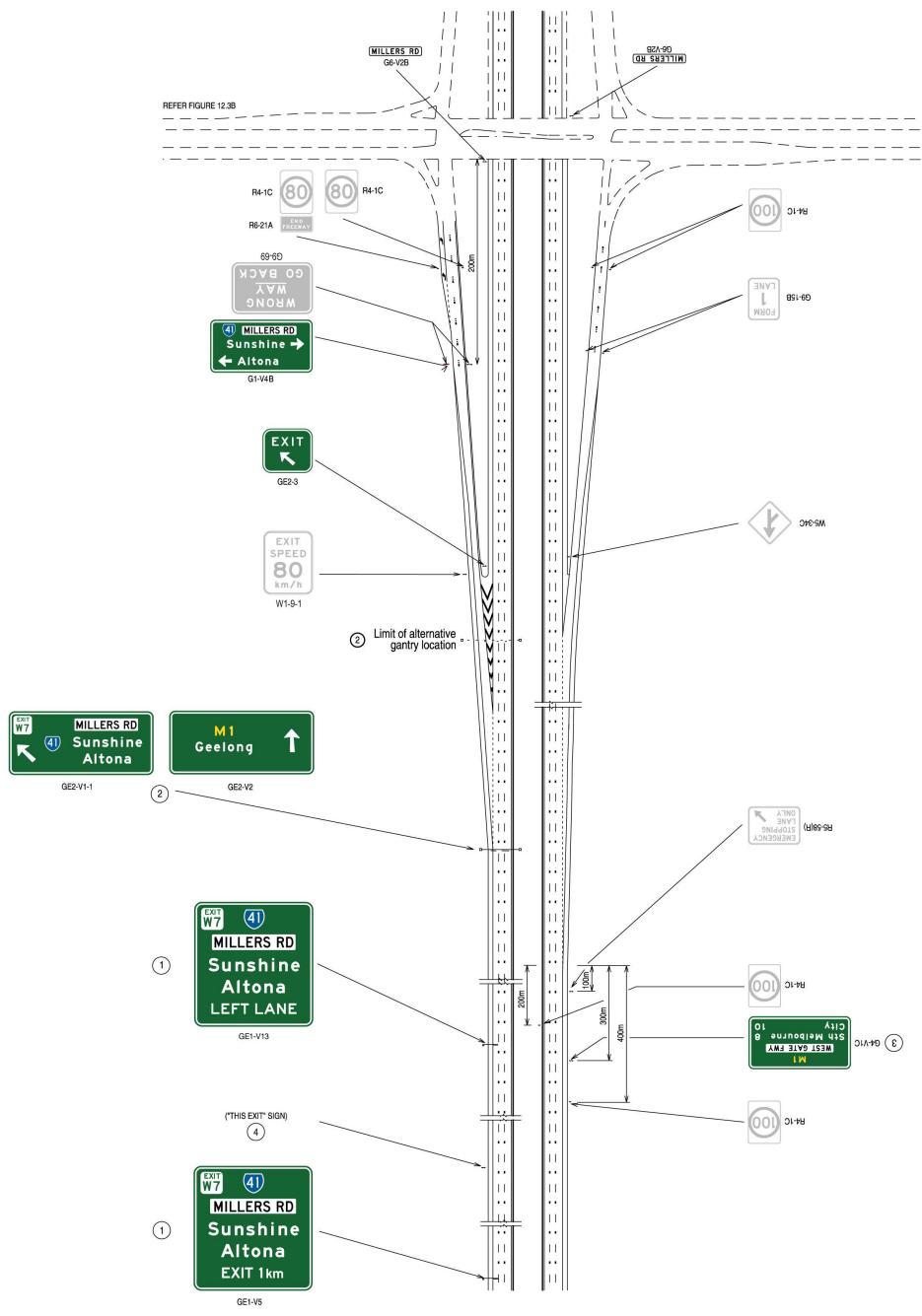


Figure 30: Urban interchange – single lane exit

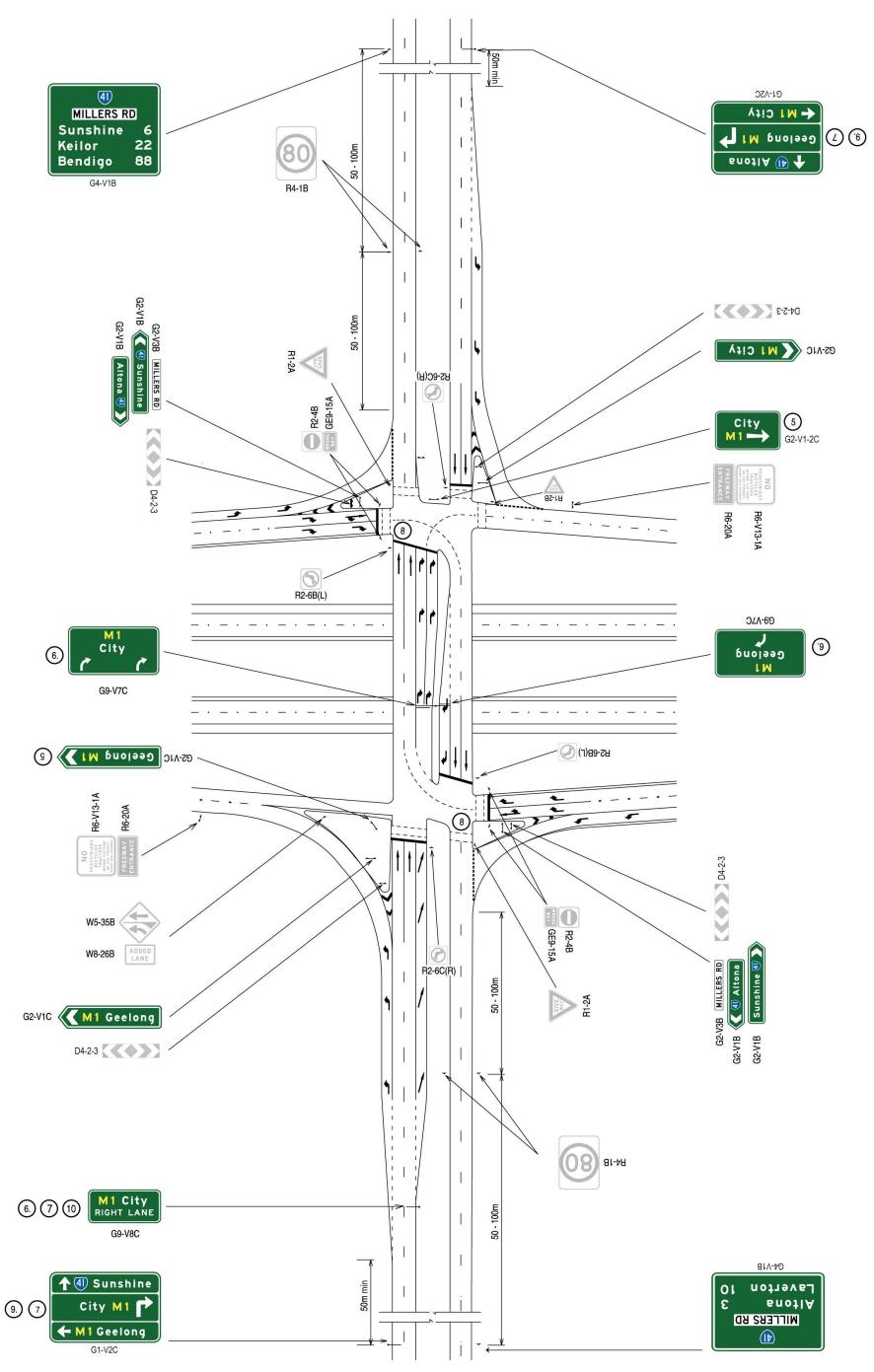


Figure 31: Urban interchange – signing on cross road

Notes to Figure 30 and Figure 31:

- 1. Advance exit signs normally require cantilever mounting (refer to Appendix D3 of AS 1742.15, Clause 3.2 (a) and Table 12 of this Supplement). They may be mounted on an overpass structure if available at/about the required chainage.
- 2. The GE2-V1-1 exit direction sign mounted on a gantry is preferably placed at the start of the ramp taper. However, the gantry may need to be located in the gore area (limited to half way along the gore area) in cases where:
 - The exit sign is too wide to be positioned over the left hand lane
 - Additional signs are required, e.g. for closely spaced exits, refer to Figure 35; or the left lane ends immediately downstream of the exit ramp, refer to Clause 4.7.5.2 of the Supplement to AS1742.2:2009 (whereby a 'LANE ENDS MERGE RIGHT' sign is installed).

Refer to Clause 3.2 (a) and Table 12 for conditions where a cantilever or side mounted sign is permitted.

The right edge of the rightmost sign on the gantry sign assembly should not extend past the right edge of the right shoulder; while the left edge of the leftmost sign should not extend past the left edge of the left shoulder.

- 3. Reassurance direction signs are provided in accordance with Clause 3.6.1 and Clause 3.6.2 of this Supplement.
- 4. "THIS EXIT" (GE1-8/V8 series) sign may be installed for signing to major traffic generators or where a remote suburb is required to be signed (refer to Clause 3.5.1 of this Supplement).
- A different type and location for the intersection direction sign is illustrated for each of the right turns onto the freeway. The type and/or location are chosen according to site conditions. Refer to Clause 3.7.2 (c) of this Supplement.
- Refer to Clause 3.7.2 (b) of this Supplement regarding the use of lane indication signs.
- 7. Where the approach has three or more lanes, advance signs are generally overhead mounted. Side mounting may be considered where the approach is less than three lanes and sign prominence is assured.
- If the intersection is not signalised, care is required that signs will not obscure intersection sight distance for turning traffic.
- 9. Where an unusual interchange or intersection layout is provided (e.g. parclo interchange), diagrammatic advance direction signs should be used.
- 10. This additional sign may be required where the right turn lane develops well before the ramp terminal intersection to inform drivers that the right turn lane is for freeway access.
- 11. For different types of advance and intersection direction signs to be used along the cross road and on the exit ramp, refer to Clause 3.7.1 and Clause 3.7.2 of this Supplement.

Interchange with Roundabout Terminal

Figure 32 shows the layout of signs for a typical interchange where entry ramps begin and exit ramps terminate at a roundabout. Figure 32 illustrates where one ramp terminates at a roundabout with a full circulating roadway and where one ramp ends at a 'teardrop' roundabout.

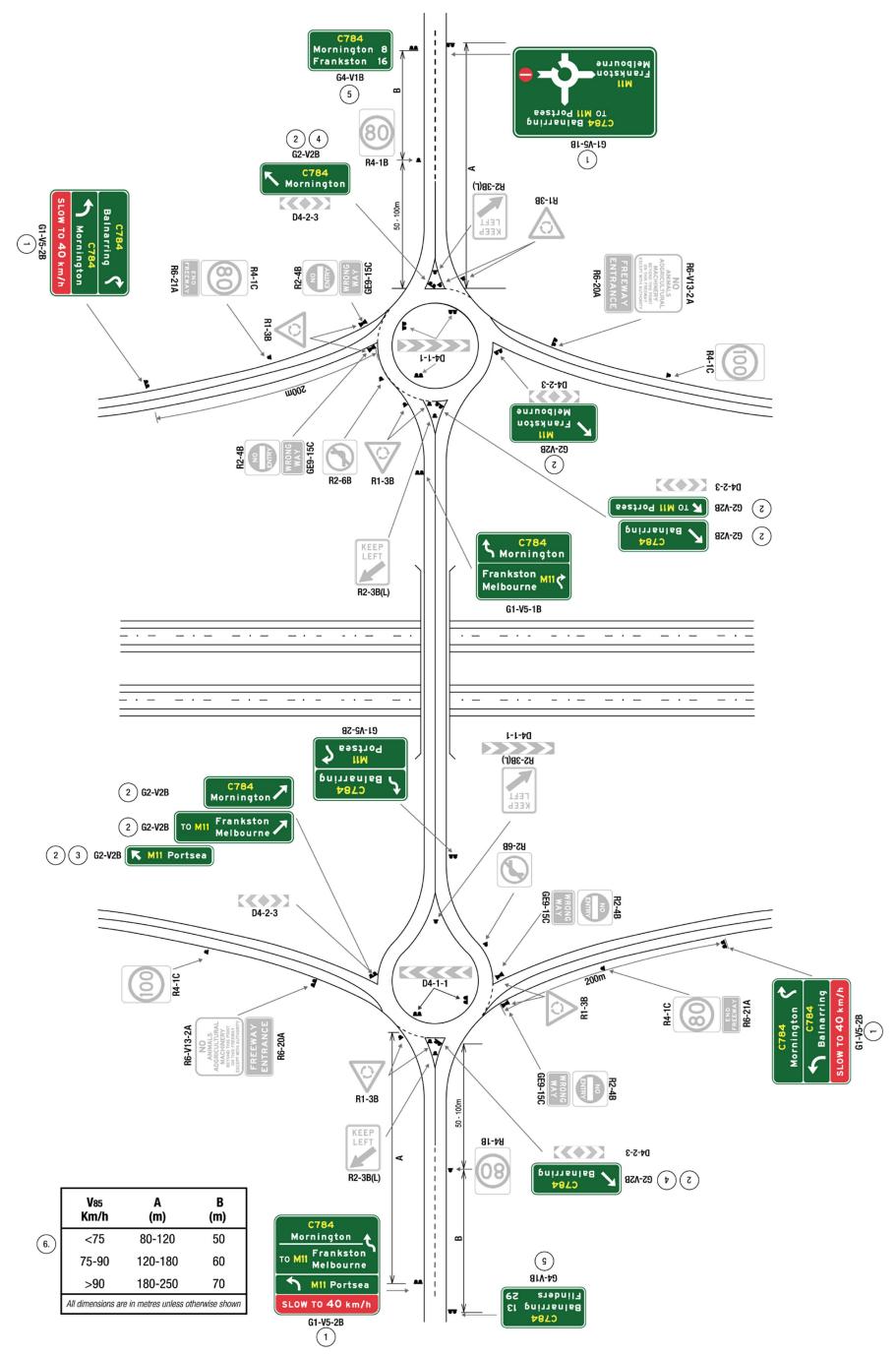


Figure 32: Interchange with roundabout terminal

Notes to Figure 32:

- 1. Narrow format direction signs, refer to Clause 3.7.1 of this Supplement, may be required in urban or other situations where lateral space restrictions or sight distance problems exist.
 - Where a G1-V5-2 sign (narrow format, non-diagrammatic) is used, a roundabout warning sign shall be provided. Refer to Clause 2.9.3 (a) of AS1742.2:2009.
 - G1-V5-3 signs (with W8-V104 supplementary advisory speed panel) shall be used in accordance with Clause 2.2.2 (b) of this Supplement.
- Intersection direction signs are located on the island for better visibility to circulating traffic, provided sight distance for traffic entering on that approach is not obscured. Otherwise, place the sign on left side of the exit, using a straight arrow placed at the edge of the sign closest to the edge of kerb.
 - For alternative designs of intersection direction signs, refer to Clause 3.7.1 of this Supplement.
- 3. For roundabouts without a full circulating roadway (e.g. 'teardrop' roundabout), the intersection direction signs for the entry ramp and continuing road departures are placed on the same assembly, in the nose area between the two departures. The intersection direction signs indicating the different directions shall be installed so that a horizontal offset is achieved as per Figure 9.
- 4. When the departure is a municipal road without a standard through destination, use a G3-V8 road name sign design. Refer to Clause 2.4.3 and Figure 18 of this Supplement.
- A free standing route number sign is required when a reassurance direction sign is not warranted, e.g. when a reassurance direction sign at the next intersection is within minimum spacing; refer to Clause 2.5.3 of this Supplement.
- 6. V85 = 85th intersection percentile approach speed measured 300 to 500 m in advance of the intersection.

Interchange with Municipal Roads

Figure 33 shows the direction sign arrangement for an exit to a municipal road that does not have standard through destinations. For details on other signage requirements, refer to Figure 28 and Figure 29 for rural interchanges and Figure 30 and Figure 31 for urban interchanges.



Figure 33: Freeway exit signs for municipal road exit

Notes to Figure 33:

- 1. Advance exit signs normally require cantilever mounting (refer to Appendix D3 of AS 1742.15, Clause 3.2 (a) and Table 12 of this Supplement). They may be mounted on an overpass structure if available at/about the required chainage.
- 2. Advance exit and exit direction signs are shown for a single lane exit. Refer to Table 12 for variations. These signs are usually side mounted in rural areas (refer to Clause 3.2 (a) of this Supplement).
- 3. The exit direction sign (side mounted) is placed at the start of the ramp taper. Use a cantilever sign where warranted (refer Clause 3.2 (a) and Table 12). A cantilever or gantry sign, if warranted, is also placed at this location, refer to note 4 below for alternative location of gantry.
- 4. The GE2-V1-1 exit direction sign mounted on a gantry is preferably placed at the start of the ramp taper. However, the gantry may need to be located in the gore area (limited to half way along the gore area) in cases where:
 - The exit sign is too wide to be positioned over the left hand lane.
 - Additional signs are required, e.g. for closely spaced exits, refer to Figure 35; or the left lane ends immediately downstream of the exit ramp, refer to Clause 4.7.5.2 of the Supplement to AS1742.2:2009.

Refer to Clause 3.2 (a) and Table 12 for conditions where a cantilever or side mounted sign is permitted.

The right edge of the rightmost sign on the gantry sign assembly should not extend past the right edge of the right shoulder; while the left edge of the leftmost sign (usually the GE2-V1-1 sign) should not extend past the left edge of the left shoulder.

- 5. A GE2-V2 through direction sign is required to be erected over the through lanes on the same gantry as the GE2-V1 exit direction sign. Refer to Clause 3.4.3 of this Supplement.
- 6. Details on G3-V5 and G3-V8 signs can be found in Clause 2.4.3 of this Supplement.
- 7. The G3-V5 sign for the right turn may be repeated at the end of the ramp if additional navigational information is required.

Two Lane Entry and Exit Ramps

Figure 34 shows the layout of signs for a typical two lane entry and exit. Where these arrangements are in combination with closely spaced ramps, effective signing can be difficult and the advice of the Manager – Network Standards should be sought.

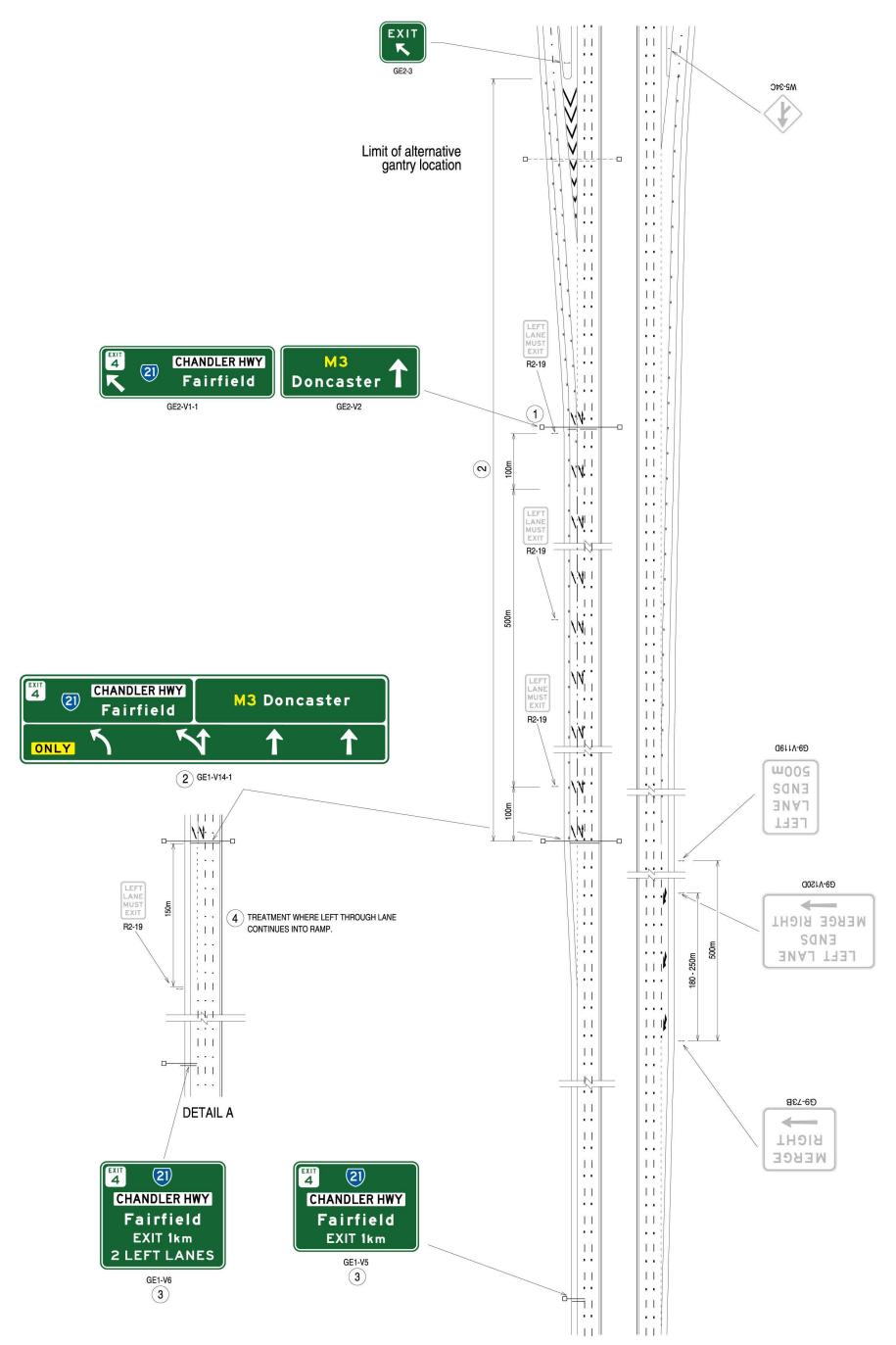


Figure 34: Treatment at two-lane exits and entries

Notes to Figure 34:

- 1. This gantry is preferably located at the start of the taper. The GE2-V1-1 exit direction sign is mounted over the left exit lane and shall not extend over the combined through/exit lane. The right edge of the sign shall be offset a minimum of 500 mm from the right edge of the left exit lane; refer to Clause 3.4.3 of this Supplement. The GE2-V2 through direction sign is centred over the combined through/exit and remaining through lanes.
 - If there is a requirement to locate the gantry further into the gore area (limited to half way along the gore area), then the GE2-V1-1 exit direction sign is centred over the two exiting lanes when they are fully developed.
- 2. The second advance exit sign is located at the beginning of the auxiliary lane. This GE1-V14 series sign contains an arrow for every lane. Where the auxiliary lane length is 750 m or longer, this sign shall be located up to 100 m into the auxiliary lane to provide a minimum of 300 m between the first advance direction sign which is located approximately 1 kilometre from the exit.
 - These signs shall be located to ensure that the first advance exit sign does not obscure visibility of this sign. Refer to Clause 3.4.5 of this Supplement for further information.
- 3. Guidelines for the selection of advance exit signs are located in Clause 3.4.5 of this Supplement.
 - Use sign GE1-V5 where the left exiting lane develops to the left of the through lane but has not yet done so at the first advance exit sign.
 - Use sign GE1-V6 with the legend "2 LEFT LANES" where the through lane becomes the left exiting lane. Distance indication shown on this sign may need to be altered based on the length of the auxiliary lane, refer to note 2 above.
 - Where there is a high volume of exiting traffic, consider using a GE1-V14-2 lane allocation sign instead.
- 4. Detail A is an alternative treatment where the left lane becomes a trap lane for the exit.

Closely Spaced Exit Ramps

Figure 35 shows the layout of signs for single lane, closely spaced exits. The first advance exit sign should be the diagrammatic type showing both exits (sign GE1-V11-1 – refer to Clause 3.4.6 of this Supplement). Only where there is insufficient room for this sign to be side mounted should the alternative of a cantilevered non-diagrammatic sign (GE1-V5 or GE1-V6) be used for the first advance exit sign.

If the cross road overpass at the first interchange is at least 0.8 km from the second exit nose, the centre sign in the assembly at the first exit (GE1-V5) is desirably located on the overpass structure or on a cantilever support just in advance of it, refer to Figure 35 Option A. Likewise, if the freeway goes over the cross road, the location of this sign on a cantilever not less than 0.8 km in advance of the second exit is also preferred. If this is the case, then the gantry may be located at the start of the taper.

Exit ramps less than 0.8 km apart should be avoided wherever practicable. However, where they exist, the exit sign assembly at the first ramp is split. The second advance exit sign for the second exit is located beyond the exit gore of the first exit so that the "LEFT LANE" information for the second exit is not confused with the first exit ramp, refer to Figure 35 Option B.

Placement of direction signs just beyond a structure over a freeway should be avoided as the distance over which the sign can be read will be limited. Refer to Appendix D3 of AS 1742.15 for further details on the placement of overhead signs.

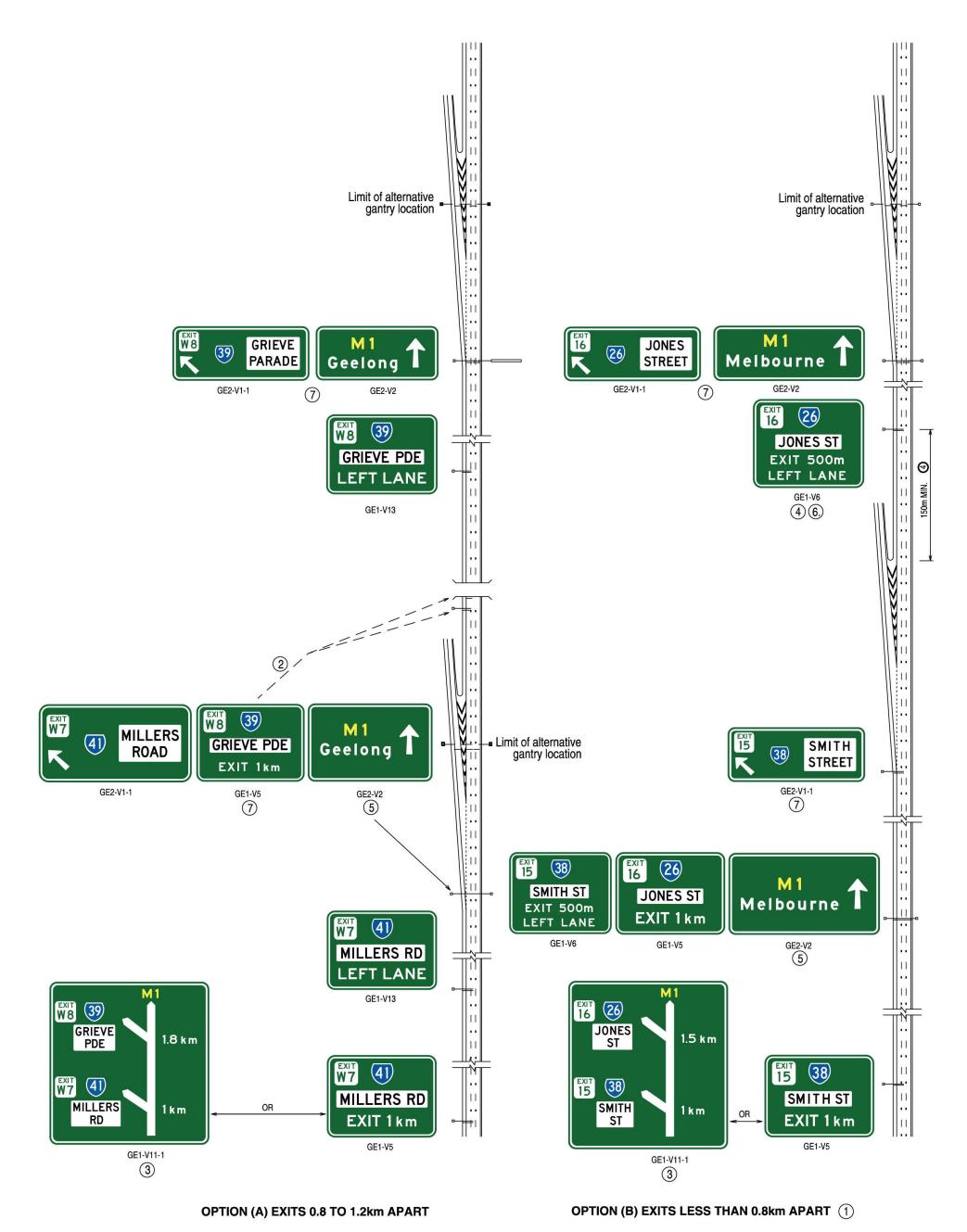


Figure 35: Closely spaced exit ramps

Notes to Figure 35:

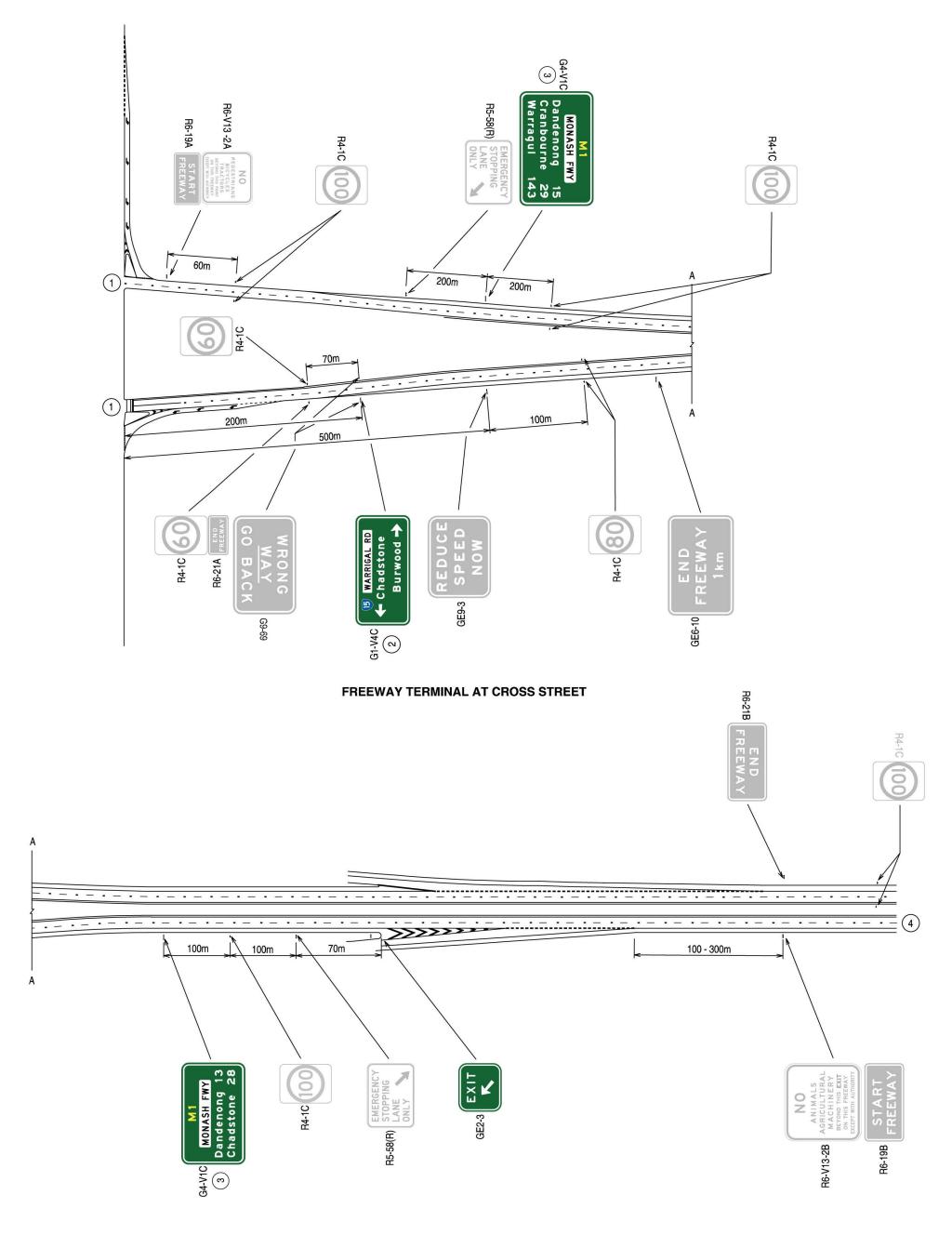
- 1. Exits less than 0.8 km apart should be avoided in freeway design wherever practicable. Furthermore, closely spaced, two lane exits should be avoided in freeway design as operational problems and excessively complex signing arrangements can result. The use of an auxiliary carriageway should be considered in these cases.
 - Where exclusive or trap exit lanes occur with closely spaced exits, the principles in Clauses 3.4, 3.4.1 and 3.4.5 of this Supplement should be considered for these complex arrangements.
- 2. The preferred alternative location for the advance exit sign (GE1-V5) is on an overhead bridge where one is available at least 0.8 km in advance of the exit nose to which the sign refers. Alternatively, if the overpass is highly skewed or signs would adversely affect its appearance, the sign(s) may be mounted on a cantilever or gantry placed immediately in advance of the overpass. Note that diagrammatic signs, if used, are typically side mounted.
- 3. A GE1-V11 series sign illustrates the successive exits and is therefore preferred over sign GE1-V5. In providing a GE1-V11 series sign, the following shall be considered:
 - The size of the sign will almost certainly prohibit overhead mounting.
 - If side mounted, the visibility of the sign may be restricted, particularly on three or more lane carriageways. The roadway alignment, traffic volumes and traffic mix (e.g. heavy vehicles) should be taken into account.

Refer to Clause 3.4.6 of this Supplement for further information.

- 4. In the vicinity of the first exit, the GE1-V6 sign is located a minimum of 150 m beyond the exit nose to avoid drivers being confused that "LEFT LANE" on this sign refers to the first exit ramp.
- 5. Where the width of the gantry limits the number of signs that can be mounted, the through direction sign may be deleted at this location.
- 6. At closely spaced exits where this cantilever would obscure the visibility of the downstream sign, the gantry at the second exit may be located back towards the gore area (limited to half way along the gore area).
- 7. Cantilever and gantry signs at exit ramps are normally placed at the start of the exit taper. However, gantries may be located up to half way along the painted gore if additional width is required for erection of signs, refer to Clause 3.4.3 of this Supplement.

Freeway Terminals

Figure 36 shows the layout of signs for a typical freeway terminal. The top part of the figure is where the freeway alignment terminates at a cross road and the bottom part of the figure is where the road continues, but not with freeway conditions.



FREEWAY TERMINATES BUT DIVIDED ROAD CONTINUES

Figure 36: Freeway terminals

Notes to Figure 36:

- 1. Cross road signing is to be adapted from:

 - Figures 28 and 29 for a rural environment Figures 30 and 31 for an urban environment.
- 2. This is the minimum treatment for advance direction signing and conditions may warrant cantilever or overhead signing.
- 3. Refer to Clause 3.6.1 of this Supplement for guidance on the use of reassurance direction signs.
- 4. In the case where an interchange is located near the start of a freeway, it is normally treated with all the required freeway advance exit signs and exit direction signs. The advance exit signs are placed on the non-freeway section of the route.

Intersections on Rural Freeways and M Routes

Figure 37 shows the layout of signs for a typical at-grade intersection on a rural freeway or M Route. It is important that they be signed and marked to a high standard, given the potential for conflicts is greater than at a grade separated interchange. For safety reasons, these treatments are strictly limited to low volume intersecting roads on rural freeways and M Routes that have wide medians.

For details on advance direction signs, refer to 'Advance direction signs at freeway/M Route at-grade intersections' in Clause 2.2.2 (a), 'G2-V5 signs at M Route at-grade intersections' in Clause 2.4.2, and Clause 2.4.3 of this Supplement.

Figures 38, 39 and 40 shows the direction sign arrangement for when the intersection is exclusively with a municipal road that does not have standard through destinations.

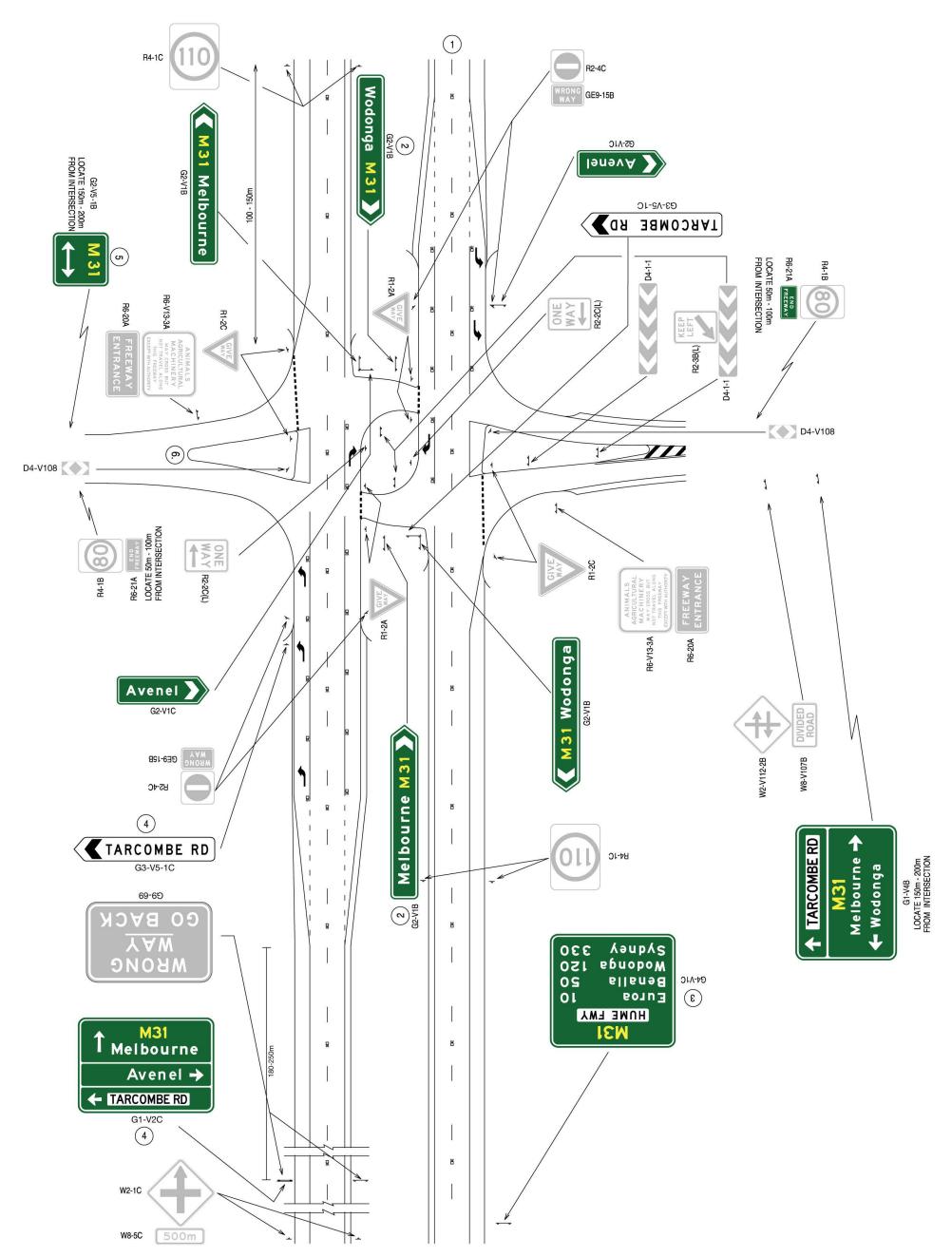


Figure 37: Rural freeway/M Route at-grade intersection

Notes to Figure 37:

- 1. Advance direction signs on this approach are similar to those shown on the opposing approach.
- 2. These signs must be located where they do not obstruct driver sight lines. An alternative location of the intersection direction sign is on the far side of the carriageway, especially in situations where it is deemed that placement of the sign in the median may lead to drivers inadvertently turning into the incorrect carriageway.
- 3. Refer to Clause 3.6.1 of this Supplement for guidance on the use of reassurance direction signs.
- 4. Where at least one of the side roads has a destination:
 - The through destination of the M Route/freeway is always shown.
 - The side road destination is shown.
 - If one leg does not have a destination, then the road name (in a road name panel) of that side road is used.
- The G2-V5-1 sign is used as an advance sign on minor road approaches where the minor road has no allocated destination (either from the M Route or from a prior intersection along the minor road). Refer to Clause 2.4.2 for further information.
- 6. Refer to 'Advance direction signs at freeway/M Route at-grade intersections' in Clause 2.2.2 (a) for further information on the use of advance direction signs at these intersections.

Minor/municipal road at-grade intersections with rural freeways and M Routes

Figures 38, 39 and 40 shows the layout of direction signs for typical at-grade intersections on a rural freeway or M Route with municipal roads that do not have a standard through destination.

The preferred location for the advance direction sign is:

- on the median, if there are both left and right turns
- on the left, if there is only a left turn
- on the median, if there is only a right turn.

However, placement to achieve best visibility should override this preference.

Where the intersecting municipal road has a standard through destination, refer to Figure 37 for signing arrangements.

Notes for Figures 38, 39 and 40 are found after Figure 40.

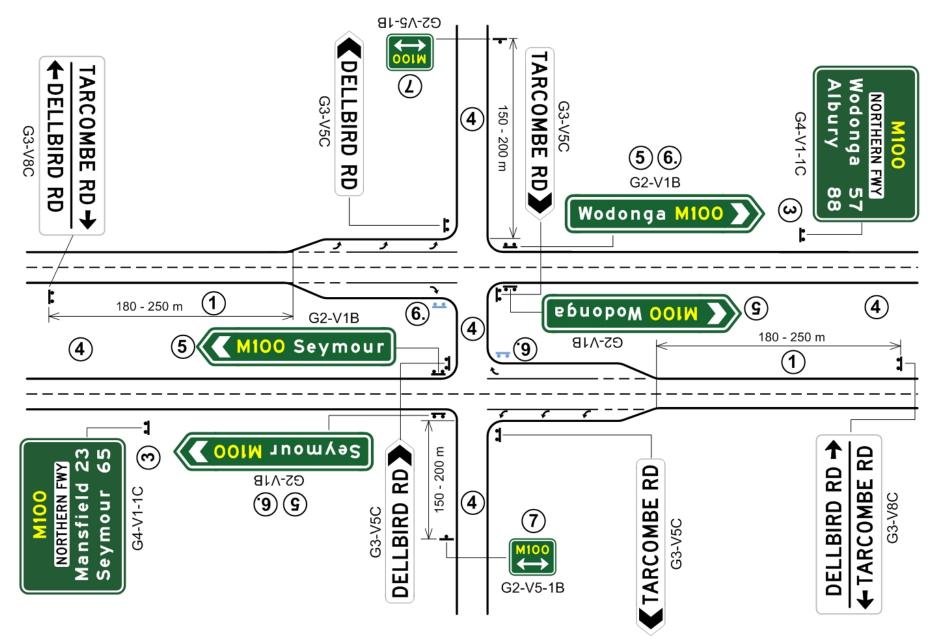


Figure 38: Direction signs for minor at-grade intersection with rural freeway/M Route (cross road)

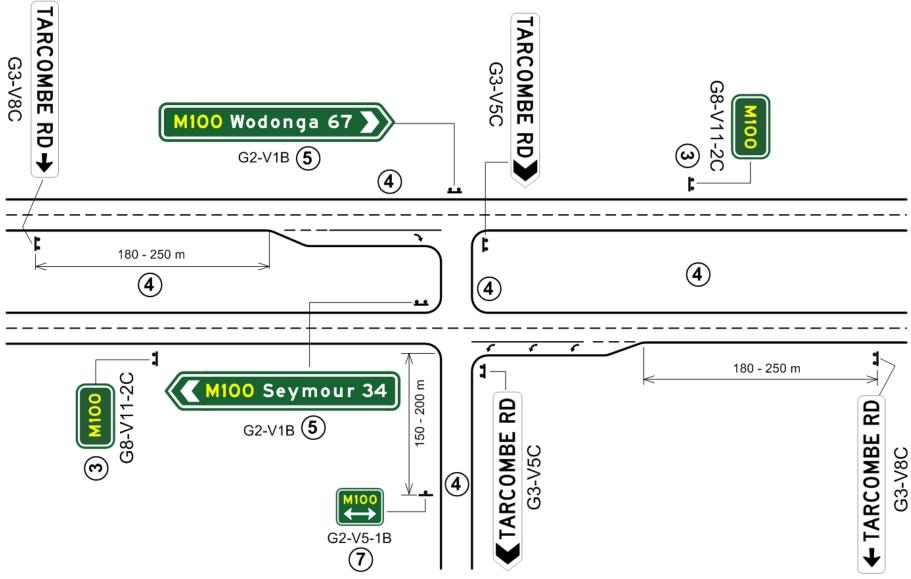


Figure 39: Direction signs for minor at-grade intersection with rural freeway/M Route (side road with median opening)

Figure 40: Direction signs for minor at-grade intersection with rural freeway/M Route (side road, left-in left-out)

Notes to Figure 38, Figure 39 and Figure 40:

- 1. A G3-V8 sign is to be installed 180 to 250 m before the start of the fully developed left or right turn bay, whichever starts first.
- 2. Install a G3-V8 sign if there is a particular need for advance navigational information. If used, locate 180 to 250 m before the start of the fully developed left turn bay or intersection, whichever is encountered first.
- 3. Reassurance direction signs or free standing route number signs may be required after the intersection, refer to Clause 2.5.3, Table 11 and Clause 3.6.1 of this Supplement. Generally, they are installed where there is a lack of through direction information (facing through traffic) along the freeway/M Route or to meet spacing requirements for reassurance direction signs and free standing route number signs (refer to Table 11).
- 4. For details on linemarking, geometric and other signage (regulatory, warning, etc.) requirements, refer to AS 1742.2:2009 (and VicRoads Supplement).
- 5. Distances on intersection direction signs are required where there is no reassurance direction sign for that departure. These signs must be located where they do not obstruct driver sight lines.
- 6. This intersection direction sign may be placed in the median or on the far side of the carriageway (as shown in the figure). The far side of the carriageway location may be more suitable in situations where it is deemed that median placement of the sign may lead to drivers inadvertently turning into the incorrect carriageway.
- 7. Refer to note 8 of Figure 4 for alternative advance signing options.

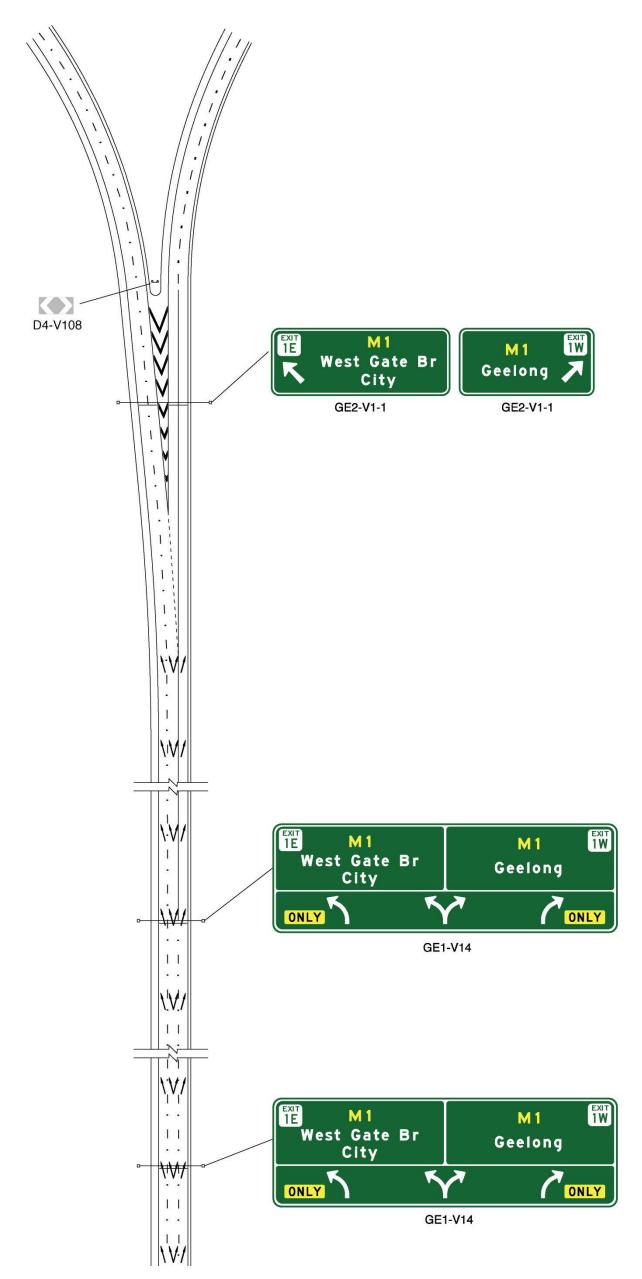


Figure 41: Freeway to freeway interchange signing - terminus

Notes to Figure 41:

1. Refer to 'Freeway to freeway interchanges' in Clause 3.4 of this Supplement for details on signing arrangements.

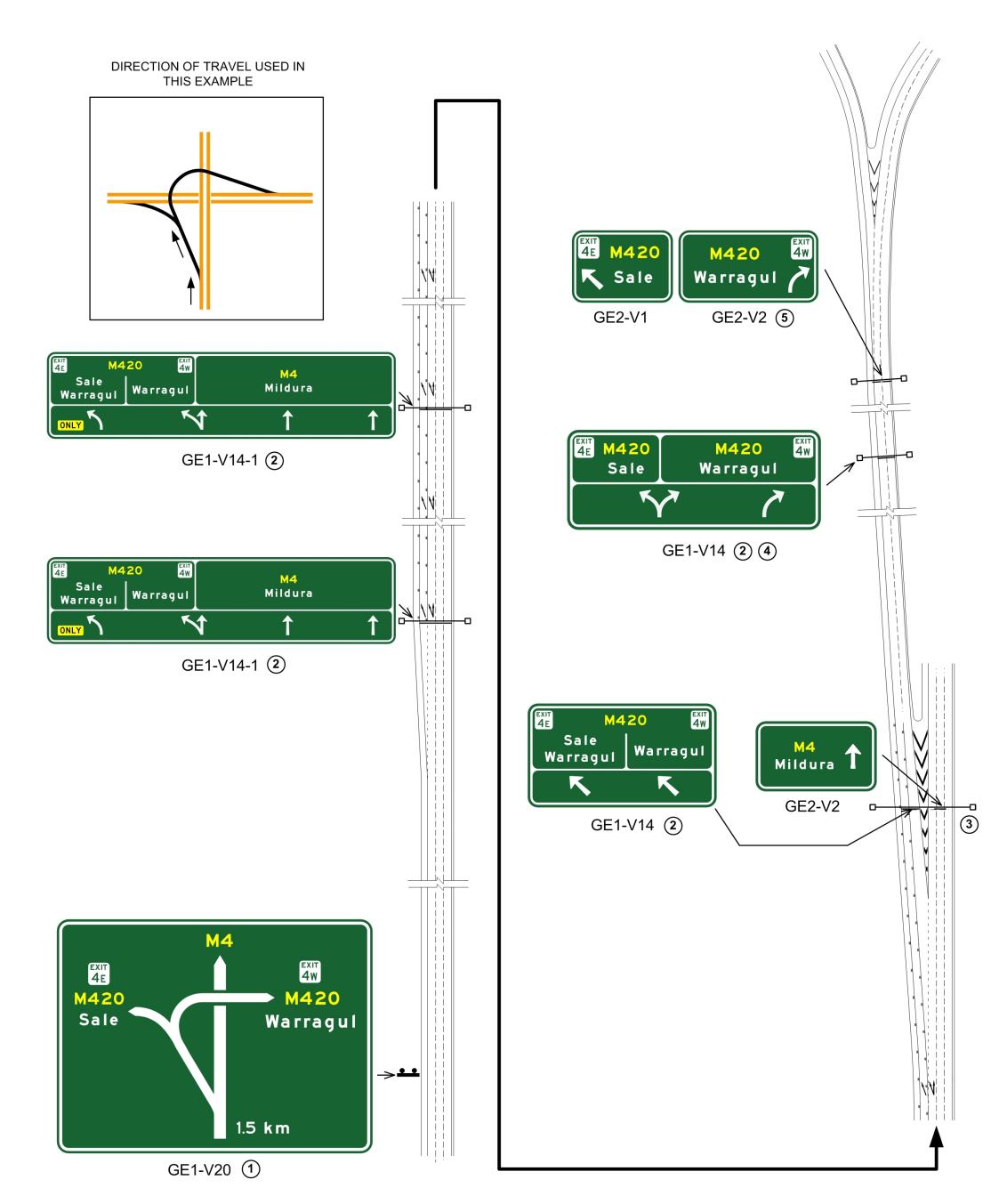


Figure 42: Freeway to freeway interchange signing - continuous

Notes for Figure 42:

- 1. Refer to Clause 3.4.2 of this Supplement for details on the use of GE1-V20 diagrammatic signs.
- 2. Refer to Clause 3.4.5 of this Supplement for details on the use of GE1-V14 series signs at two-lane exits.
- 3. The exit gantry has been moved into the gore area to accommodate the exit direction sign. As the exit direction sign is a lane allocation sign, it is required to be over the relevant lanes at a location where there is only one movement possible (i.e. the sign cannot be used at the exit taper as at this point drivers in the second left lane can either exit or continue on the freeway (which would be contrary to the arrow shown on the sign).
- 4. This lane allocation sign is generally required when the offramp is of considerable length, there is a large volume of exiting vehicles or where additional signage is required to improve lane discipline. The arrows used on this sign can be modified (e.g. using 45 degree angled arrows instead) to suit the exit movement or ramp geometry.
- 5. A curved arrow is shown on this sign to reflect the curved through movement after the gore area refer to Clause 3.4.3 (b) of this Supplement.
- 6. Refer to 'Freeway to freeway interchanges' in Clause 3.4 of this Supplement for further details on signing arrangements.

Clause 4.1 - GENERAL PRINCIPLES

Administration of route numbering schemes is a responsibility of the Network Standards group. Deletion or addition of a route shall be approved by the Manager – Network Standards.

Clause 4.2 – TYPES OF ROUTE NUMBERING

The following are additional route numbering schemes used in Victoria:

- Metropolitan Route Numbering Scheme (MRNS) consists of a blue background shield with white numerals and border. This system is limited to the Melbourne metropolitan area. Details on this system can be found below in (a).
- National Route Numbering System consists of a white background shield with black numerals and border. These routes were designated by Austroads and the former National Association of Australian Road Authorities as having interstate significance and were provided across Australia. However, since the introduction of the Statewide Route Numbering System, only a remnant section exists in metropolitan Melbourne. Details on this system can be found below in (b).

Historically, three types of route shields were used on direction signs throughout Victoria. They included:

- State Route shields (1985 1996) These were mainly three-digit routes designated by the Road Construction Authority/VicRoads in consultation with other State and local government authorities as having major significance. These shields had a white legend and border with a blue background.
- National Highway shields (1974 2009) These were designated 'National Highways' for which
 funding for the construction and maintenance was provided by the Federal Government. These shields
 had a yellow legend and border with a standard green background.
- Freeway Route shields (1970 1987) These routes were designated on Melbourne metropolitan freeways. These shields had a white legend and border with a 'freeway green' background. Route numbers were prefixed with an 'F'.

a) The Metropolitan Route Numbering Scheme

General

The Metropolitan Route Numbering Scheme is confined to the Melbourne metropolitan area, consisting of one or two digit route numbers contained within a blue route shield. The system provides a network of signed traffic routes between all suburbs, and generally incorporates VicRoads declared roads across the Melbourne metropolitan area.







G8-V8 series

There are two types of shields which are detailed in Clause 4.4.3 of this Supplement and the VicRoads Supplement to AS1743:

- **G8-V8-1:** For use as free standing route number signs (these signs can be accommodated with a G8-V3 arrow plate, see Clause 4.4.3 of this Supplement).
- **G8-V8-2:** For use within direction signs.

The letter series (font) used for the numerals (Series E, D or C) varies depending on the route number; refer to Clause 1.6.8 (e) of this Supplement.

Refer to Clause 4.2.5 of this Supplement regarding reserving space around route shields to allow for a future alphanumeric route number overlay.

Refer to Figure 43 and Figure 44 for the network of routes.

Numbering Principles

The following principles have been adopted in assigning route numbers:

- Metropolitan Route numbers range from 3 to 89, with the exception of those numbers used for National Routes.
- Generally odd numbers are used for north south routes, while even numbers are used for east west routes.

b) National Routes

The National Routes shield consists of a white background with a black legend and border. As a result of the introduction of the Statewide Route Numbering Scheme and changes to the road network, the only remaining National Route is Alternative National Route 1 along Princes Highway East between Narre Warren and South Melbourne.



G8-V1 series

There are two types of shields which are detailed in Clause 4.4.3 of this Supplement and the VicRoads Supplement to AS1743:

- **G8-V1-1:** For use as free standing route number signs (these signs can be accommodated with a G8-V2 arrow plate, see Clause 4.4.3 of this Supplement).
- **G8-V1-2:** For use within direction signs.

Figure 43 and Figure 44 shows the alignment of Alternative National Route 1.

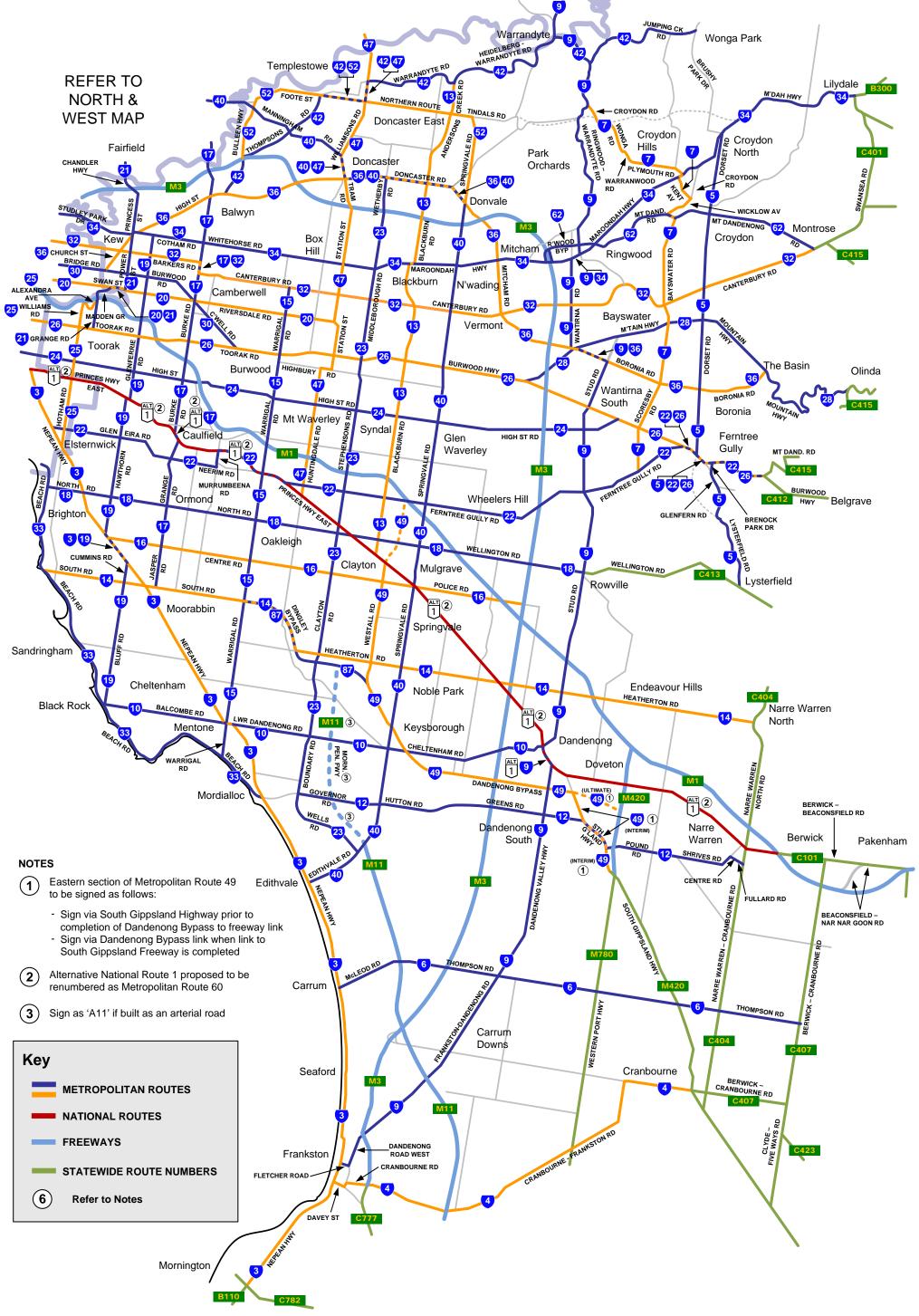


Figure 43: Melbourne Metropolitan Route Numbering - South East Metropolitan Region

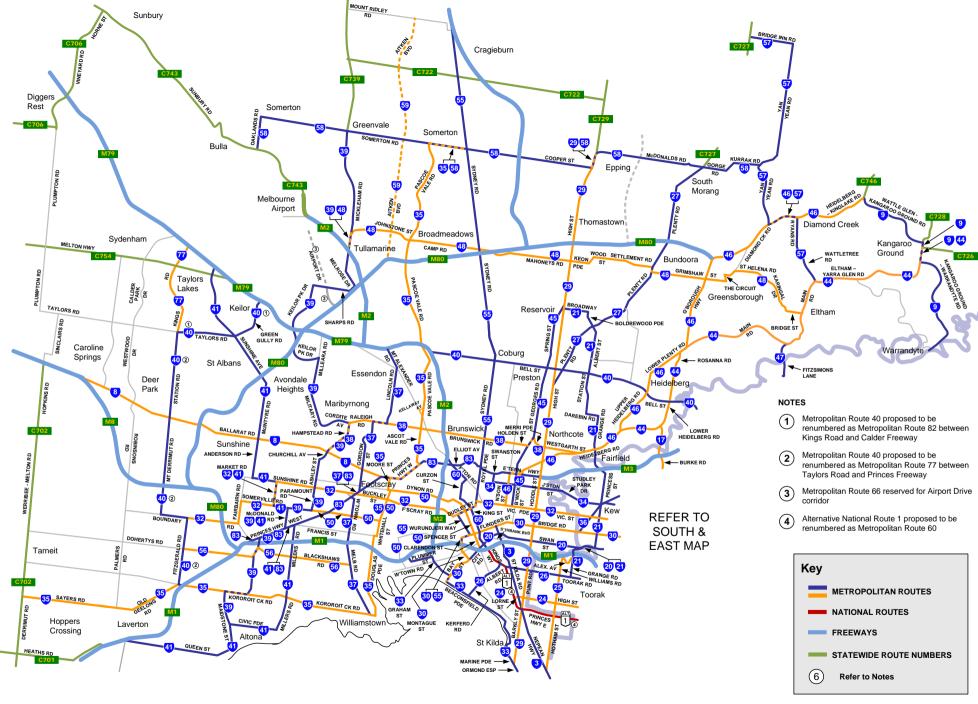


Figure 44: Melbourne Metropolitan Route Numbering - North West Metropolitan Region

Clause 4.2.1 – The alphanumeric system

In Victoria, the alphanumeric system is known as the Statewide Route Numbering Scheme (SRNS). An overview of the system is shown in Figure 45 (further details are shown in the figures in Attachment A of this Supplement).

The SRNS is intended to help drivers to navigate, particularly in unfamiliar areas, and is of particular benefit to tourists. Through the letter prefix, the scheme also aims to inform drivers of likely driving conditions so they can plan their trip accordingly. It should be noted that a number of routes in western and northern Victoria have been extended into South Australia and New South Wales under their respective alphanumeric route numbering schemes.

To ensure prominence, the alphanumeric route number:

- is located in a standard position on the sign face for the various sign types, refer to Clause 1.6.2, Clause 2.2.2 (a), Clause 2.4.2, Clause 2.5 and Clause 4.4.3 of this Supplement
- has the same legend height as the principal legend on the sign
- · does not contain a route shield.

A complete list of SRNS route numbers is available from the Network Standards group. Approval from the Manager – Network Standards will be required for any proposed additions, deletions or modifications of route numbers.

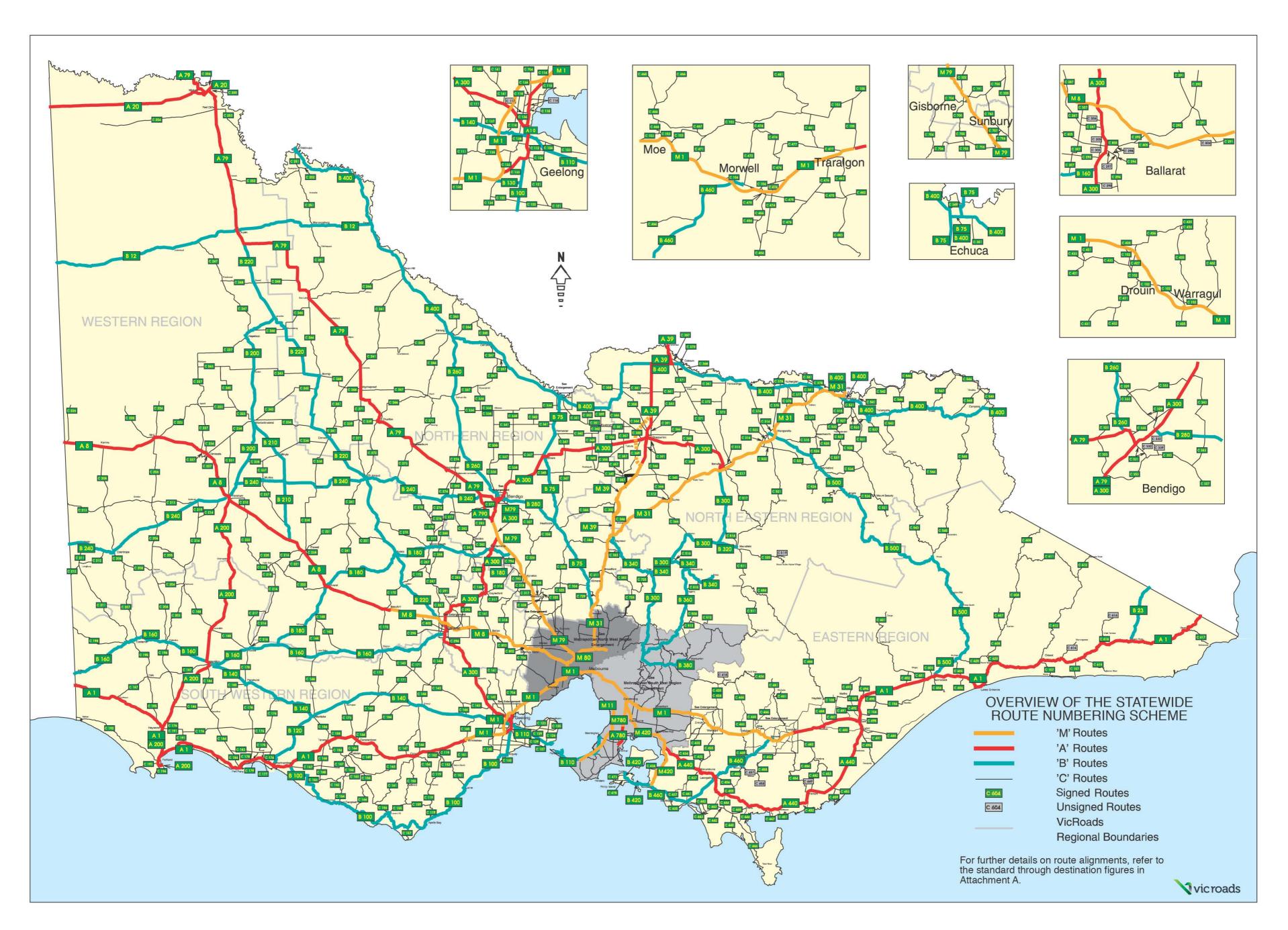


Figure 45: Statewide Route Numbering Scheme overview

Clause 4.2.3 – Overdimensional load routes

Overdimensional load route signs are erected and maintained by VicRoads, specifically to guide drivers of overdimensional vehicles.

Overdimensional vehicles travel under permits issued by VicRoads, and overdimensional routes are determined by VicRoads in consultation with local councils. OD Routes are managed by the VicRoads Road Transport Policy team.

Advance guidance markers (G8-V108) are used in advance of important intersections where the route turns and traffic volumes, speeds, carriageway width, etc. are such that advance warning of the turn is needed by drivers of heavy vehicles.

Intersection guidance markers (G8-V107) with a chevron end are located close to or within each intersection at which the route turns.

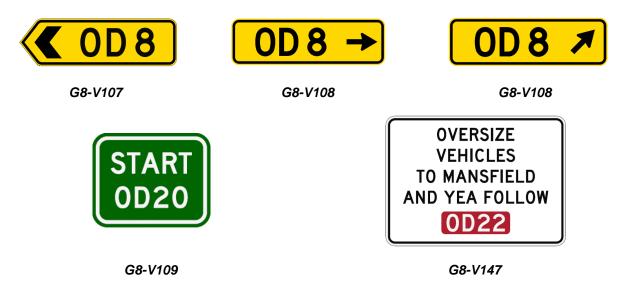
Directional information on the OD route markers shall be in the same form as the accompanying direction sign, i.e. chevron or arrow style of sign.

G8-V109 START and END signs are always used at the beginning and end of each route.

Where advance warning is required, generally in rural areas, a sign similar to the G8-V147 sign may be provided.

As far as is practicable, the markers are mounted at a height of approximately 4 m on existing service poles or in conjunction with existing direction sign assemblies.

OD route markers are always erected as standalone signs and, whilst they are often attached above or below direction signs, they are not incorporated into the sign face of other signs (e.g. direction signs).



Colour scheme for OD Routes

The colour schemes for OD Routes are as follows:

- For all new routes, they will be black legend, chevron and arrow on a white background surrounded by a black border and outer white edge strip.
- Other existing routes are as follows:

Table 13: Colour schemes for OD Routes 1 to 22

OD Route	Colour scheme	
1, 11, 16 & 22	White legend, chevron, arrow and border on red background	
2, 7, 12 & 17	White legend, chevron, arrow and border on green background	
3, 6, 13 & 18	White legend, chevron, arrow and border on black background	
4 & 19	White legend, chevron, arrow and border on brown background	
5, 9, 14 & 20	White legend, chevron, arrow and border on blue background	
8 & 13	Black legend, chevron, arrow and border on yellow background with yellow edge strip	

Clause 4.2.5 – Maintaining existing shield systems

DEPARTURE

Free standing route markers will continue to be used in Victoria (e.g. free standing G8-V8-1 Metropolitan Route number signs).

On all advance, intersection and reassurance direction signs, space shall be reserved around the Metropolitan Route and National Route shield to accommodate a future three character alphanumeric route number overlay. The widest three character route number is 'A44'.

Clause 4.3.2 – Number selection

DEPARTURE

Subclause (b) does not apply to Victoria. Reducing the occurrence of route number changes simplifies navigation for drivers especially in areas with a large number of different routes.

The following principles have been adopted in assigning alphanumeric route numbers:

All routes

- All declared freeways and arterial roads outside the Melbourne metropolitan urban boundary are to be
 allocated an alphanumeric route number wherever practical. In some cases, new declared roads may
 be short, and the route number may not need to be shown on direction signs. Refer to 'Short sections
 of road' in 'C Routes' below.
- Route numbers are to be a maximum of three digits.
- The Statewide Route Numbering Scheme is divided into the following numbering zones:
 - o 2 99: Reserved for future use in metropolitan Melbourne
 - o 100 199: South Western Victoria
 - 200 299: Western and North Western Victoria
 - o 300 399: North Central and Northern Victoria
 - o 400 499: West Gippsland and outer east metropolitan Melbourne
 - 500 599: North Eastern Victoria
 - o 600 699: East Gippsland
 - o 700 789: Outer north and west metropolitan Melbourne, Mornington Peninsula
 - Exceptions to this principle are:
 - 'Loop routes' as their numbering is based on their parent route number (refer to Clause 4.3.3 of this Supplement).
 - Routes which retained their previous National Route number.
- Wherever possible, route numbers are allocated within their own numbering zone.
- Route numbers are as sequential as possible connecting logical destination points.
- Single digit alphanumeric route numbers are to be reserved for current and future Melbourne metropolitan freeways.

M, A and B Routes

- M, A & B Routes which are continuous across State borders retain their former National Route or Highway number. These are as follows:
 - o M1 A1 Princes Freeway/Highway, Monash Freeway, West Gate Freeway, CityLink
 - M8 A8 Western Freeway/Highway
 - o B12 Mallee Highway
 - o A20 Sturt Highway
 - o B23 Monaro Highway
 - M31 Hume Freeway
 - o M39 A39 Goulburn Valley Freeway/Highway
 - o B75 Northern Highway
 - o M79 A79 Calder Freeway/Highway.
- The use of National Highway shields for routes M8/A8, A20, M31, M39/A39 and M80 has been discontinued. They are now signed in the same way as other alphanumeric routes (fluorescent yellow alphanumeric number on a standard green background).
- Route numbers for A and B Routes that do not cross state borders are readily distinguishable, ending
 in a zero.
- Principal tourist routes end in two zeros, e.g. the Great Ocean Road is the B100.

C Routes

- C routes are in the same 'series' of numbers as nearby A and B Routes wherever possible.
- The routes include the use of loop roads off M, A and B Routes; see Clause 4.3.3 of this Supplement.
- The C Route network is comprised primarily of the less important declared arterial roads. All C Routes are signed, with the following exceptions:
 - o urban roads some routes are located in built up environments, where the road name is more relevant than a route number. These routes are only used for local access, and do not perform any significant connector function between other routes in the SRNS network. Such routes may be provided with signs that do not have route numbers
 - short sections of road some arterial roads are short (less than 5 km), and are only used for limited access
 - limited use roads roads in remote areas not used by general traffic may have the route number unsigned.

Clause 4.3.3 – Alternative and by-pass routes

DEPARTURE

In Victoria, these routes are also known as 'loop routes'. The first two digits relate to the parent route number, and the third digit indicates the sequence of the loop road, e.g. C313 (Former Hume Highway through Euroa) is the third loop route off the M31. Loop route numbers increase with travel away from Melbourne.

Clause 4.3.4 – Dual numbering

DEPARTURE

All route numbers are to be shown on direction signs, regardless of the length of the dual numbered (duplex) section.

An A Route shall be shown along part of an M Route in situations where the A Route is required to share the same length of road as the M Route. This ensures that motorists following the A Route can successfully do so, as having numbering gaps will cause confusion over the continuing status of the A Route.

For the display of dual route numbers, refer to Clause 4.4.1 of this Supplement. For the display of associated destinations, refer to Clauses 1.6.2 and 4.4.1 of this Supplement.

At intersections where the intersecting road has combined route numbers, it may be appropriate to install two separate chevron ended intersection direction signs listing each route number and associated destination separately; refer to Clause 2.4.2 (i) of this Supplement.

Clause 4.4.1 – Form of display and visual prominence

DEPARTURE

Legend size for alphanumeric route numbers shall follow Clause 1.6.8 (e) of this Supplement.

Alphanumeric route numbers in Victoria are in fluorescent yellow.

For dual route numbers, they shall be displayed as follows:

- For the SRNS, the more important route shall be listed first. For example, A79 is a more important route than the A300 and the combined route number shall therefore be shown as the A79/A300. If routes are of equal importance, list the lowest numerical value route first. The rural system has a maximum of two overlapping route numbers. Refer to sign G8-V11-3 in VicRoads Supplement to AS1743
- For the Metropolitan Route Numbering Scheme, the lowest number shall be shown first.
- A forward slash:
 - should follow the G8-V11-3 standard drawing found in the VicRoads Supplement to AS 1743
 - should not be used between a route number in a shield and an alphanumeric route number when shown together or between shielded route numbers (e.g. two Metropolitan Route shields).
- It is desirable to locate each route number and destination on the same line within a panel. Otherwise,
 where there are site width restrictions, the destinations may be listed under the route numbers in order
 to reduce the width of the sign (see below). Refer to Clause 1.6.2 of this Supplement for details on how
 associated destinations are then displayed.







Preferred display style of dual route numbers and associated destinations

Alternative display style of dual route numbers and associated destinations

Figure 46: Display of dual route numbers

The above principles also apply to where there are more than two route numbers to be shown.

Clause 4.4.3 – Display as free standing markers or supplementary plates

Additional signs used in Victoria are shown in Table 14.

DEPARTURE

Sign G8-V11-2 is used in Victoria instead of sign G8-11-2.

Table 14: Additional signs to AS1742.15 Table 4.2

Sign	Sign number	Size, mm
METROPOLITAN ROUTE NUMBER END	G8-V16	B size: 750 x 1000
SIGN		C size: 1000 x 1200
METROPOLITAN ROUTE FREE	G8-V3	B size: 410 x 265
STANDING ARROWS		C size: 550 x 355
METROPOLITAN ROUTE SHIELD FREE	G8-V8-1	B size: 500 x 480
STANDING		C size: 667 x 640
STATEWIDE ROUTE NUMBER	G8-V11-2	A size: 700 x 400 (1) or 900 x 400 (2)
FREE STANDING		B size: 1000 x 540 (1) or 1200 x 540 (2)
		C size: 1300 x 720 (1) or 1500 x 720 (2)
STATEWIDE ROUTE NUMBERING	G8-V102	A size: 700 x 380 (1) or 900 x 380 (2)
SCHEME FREE STANDING ARROWS PLATES		B size: 700 x 460 (1) or 1135 x 460 (2)
ALTERNATIVE NATIONAL ROUTE SHIELD	G8-V1-1 ('1' shield)	B size: 414 x 480
FREE STANDING		C size: 551 x 640
	G8-V2-7 ('ALT' plate)	B size: 414 x 254
		C size: 551 x 348
ALTERNATIVE NATIONAL ROUTE SHIELD	G8-V2	B size: 414 x 254
FREE STANDING ARROWS		C size: 551 x 348
METROPOLITAN ROUTE TOP KNOT	G8-V114-1	A size: 500 x 300
		B size: 600 x 390
		C size: 800 x 490
STATEWIDE ROUTE NUMBERING	G8-V103	A size: varies
SCHEME TOP KNOT		B size: varies
		C size: varies

Notes to Table 14:

- 1. For one and two digit alphanumeric route numbers.
- 2. For three digit alphanumeric route numbers.

Metropolitan Route Numbering Scheme - END sign (G8-V16)

In the Melbourne metropolitan area, the G8-V16 END route number sign shall be located at the end of every Metropolitan Route, as a free standing sign just in advance of the intersection where the route ends.

If free standing advance route numbers for the intersecting route are in existence at that location, the END route number sign shall be placed in a suitable location approximately midway between any free standing advance route marker assembly or advance direction sign, and the intersection.



G8-V16

Metropolitan Route Numbering Scheme – free standing marker (G8-V8-1)

Free standing route markers are used to confirm the Metropolitan Route number currently being travelled. They are installed:

- on the departures from intersections, in accordance with Figure 3 in Clause 2.1 (a) of this Supplement and typical intersection arrangement diagrams in Clause 2.6 of this Supplement. Generally, they should be installed up to 100 m from the intersection, but not closer than 50 m.
- as intermediate signing along numbered roads in the Melbourne metropolitan area. The spacing for the placement of intermediate signs is shown in Table 11 of this Supplement.

The legend size for G8-V8-1 signs is given in Clause 1.6.8 (e) of this Supplement and in the G8-V8-1 standard drawing in the VicRoads Supplement to AS 1743.

Where multiple route numbers are to be signed, they shall be signed separately as individual G8-V8-1 signs.



G8-V8-1

Statewide Route Numbering Scheme – END sign (G8-10)

In addition to the requirements listed in Clause 4.4.3 (b) of AS 1742.15:2007, the following circumstances require the installation of a G8-10 sign where a route terminates:

- not at an intersection (i.e.at a bridge)
- on the through leg of a T-intersection where none of the other departure legs have route numbers
- at a cross intersection or roundabout where none of the other departure legs have route numbers
- at any other location where the route terminus is not obvious.

Statewide Route Numbering Scheme – free standing sign (G8-V11-2)

DEPARTURE

The Victorian version of the G8-11-2 sign is the G8-V11-2. The Victorian version of the sign caters for the standardised signs sizes as per Clause 1.6.8 of this Supplement.

In addition to the 'reassurance markers' principles listed in Clause 4.4.3 (a) of AS 1742.15:2007, free standing route number signs shall be installed in accordance with Clause 2.1 (a) of this Supplement. Typically these are placed:

- beyond signed intersections where a reassurance direction sign is not warranted
- as intermediate markers between intersections
- with kilometre plates (refer to Clause 5.2.2 of this Supplement)
- at any other location where reassurance of the route number being travelled is required.

The spacing for the placement of free standing markers is shown in Table 11.

Where multiple route numbers are to be signed, they shall be signed separately as individual G8-V11-2 signs.

The legend size for these signs is given in Clause 1.6.8 (e) and Figure 4 of this Supplement.

The G8-V11-2 standard drawing is contained in the VicRoads Supplement to AS 1743.



G8-V11-2

National Route Numbering System – free standing sign (G8-V1-1)

Free standing route number signs are used to confirm the Princes Highway's National Route number between South Melbourne and Narre Warren. The marker consists of a National Route 1 shield with an ALT plate above.

They are installed:

- on Princes Highway departures from intersections, in accordance with Figure 3 in Clause 2.1 (a) of this Supplement and typical intersection arrangement diagrams in Clause 2.6 of this Supplement
- as intermediate markers along the Princes Highway through the Melbourne metropolitan area. The spacing for the placement of intermediate signs is shown in Table 11 of this Supplement.

The legend size for G8-V1-1 signs is given in Clause 1.6.8 (e) of this Supplement and in the G8-V1-1 standard drawing in the VicRoads Supplement to AS 1743.



G8-V1-1

Free standing route numbers with arrow plates

The guidance given in AS 1742.15:2007 Clause 4.4.3 (a) also applies to the Metropolitan Route Numbering Scheme and National Route Numbering System.

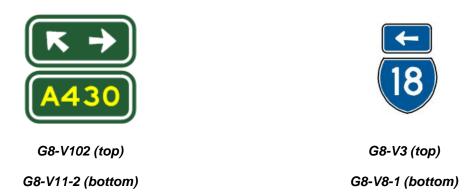
Free standing route numbers with arrow plates are installed on:

- side road approaches where advance and intersection direction signs are not provided in accordance with Clause 2.1 (a) of this Supplement
- to show the continuity of a route through an intersection where the path through the intersection is not straight and advance and intersection direction signs are not provided.

Where a free standing route number sign is unlikely to be prominent enough to provide the directional information, a sign in the G1 or G2 series should be installed instead.

The legend size for these signs is given in Clause 1.6.8 (e) of this Supplement. However, it should be noted that the legend series used on these signs can vary to make best use of the available standard sign widths, as shown on standard drawings contained in VicRoads Supplement to AS 1743.

Examples of free standing route marker signs with arrow plates:



Sign G8-V11-2 with G8-V102 arrow plate is used in Victoria instead of sign G8-11-1 (as shown above).

Location of free standing route number signs with arrow plates

Advance markers are typically located:

- 100 to 150 m in advance of the intersection in rural areas
- 20 to 50 m in advance of intersections in metropolitan areas.

Intersection markers are used within the intersection facing traffic entering from the side road and may be mounted on the same assembly as the T-junction sight boards.

Where two or more route number signs are required on one assembly, the order of display from top to bottom is:

- the straight ahead movement is located above the turn movement
- the numerically lower number is above the higher number

However, where there are two route numbers for one direction group, they are listed:

- for route numbers in a shield and alphanumeric route numbers of the same letter class, the numerically lower number above the higher number
- for alphanumeric route numbers of different letter classes, in order of road importance i.e. M above A, A above B, B above C.

Typical signing arrangements at intersections are shown in Clause 2.6 of this Supplement.

Route Number Top Knot Metropolitan Route (G8-V114-1) and Statewide Route Numbering Scheme (G8-V103)

Where a route number is to be added to an existing sign, the sign should be replaced with a design compliant with these guidelines. However, if full replacement is impractical, then a top knot sign may be used.



The top knot sign is generally installed above the existing direction sign as follows:

- on the left side of the sign when the route number applies to the left departure
- on the right side of the sign when the route number applies to the right departure
- at the centre of the sign when the route number applies to two departures (e.g. left and right).



Figure 47: Installation location for top knots

Where installation of the top knot above the existing direction sign is not possible, the top knot may be installed below the sign where the minimum mounting distance between the ground and bottom of the top knot can still be satisfied (refer to Clause D2.3.4 and D2.3.5 of AS 1742.15:2007).

The sign size of the top knot shall match the sign size of the existing or parent sign.

The arrow used in the top knot shall match the arrow used in the existing direction sign for the relevant departure (e.g. if a 45 degree arrow is used, then the top knot will also use a 45 degree arrow, see Figure 47).

Clause 5.1.4 - Legend

The standard sizes to be used are as follows:

- 160 mm on M Routes and freeways
- 140 mm on other roads.

For Town Name signs:

- 160 mm on roads with two lanes or less in one direction
- 200 mm on roads with three lanes or more in one direction.

DEPARTURE

Uppercase Series D should be used for the legend. However, Series E may be used for short names to increase the legibility. Series C should not be used on these signs as this narrower font may be difficult to read at high speed.

Clause 5.1.5 – Types of signs

In addition to the signs listed in AS 1742.15:2007 Clause 5.1.5, the following signs are also used in Victoria. Given that the formats of these signs are identical, the standard drawing for G6-V2 series signs (found in the VicRoads Supplement to AS 1743) may be used for all G6 series signs that use a single legend size.

A G6-V2-1 sign is used for a single line name; a G6-V2-2 is used for a two-line name.

Cross Road Name

The name of the road which crosses over or under a freeway/M Route shall be named on the freeway overpass or underpass through the use of G6-V2 series signs. The principles below should be followed:

- Where direction signs for the cross road include the display of the road name, then this name will be used
- Where a road name is not used on direction signs, then the most recognisable name is used (usually the name used in street directories, see below).
- Often roads have a declared road name (e.g. Glenrowan Myrtleford Road) and a local name (e.g. Snow Road) it is the local name which should be shown on the sign. In some cases, a road might have more than one local name if so, the most common name should be signed, and this should be a name shown in prominent street directories (e.g. VicRoads Country Street Directory).

- In situations where a road has a different road name on each side of the freeway, the most prominent road should be named. As an alternative, it is acceptable to sign the locality, provided this description is completely unambiguous. An example of this is 'Gordon Interchange' on the M8 Western Freeway.
- Where the one road crosses the freeway twice, additional information needs to be shown on the signs so that each overpass is uniquely identified, e.g. 'Wangaratta Road Southern Interchange' and 'Wangaratta Road Northern Interchange'.
- The alphanumeric route number or route shield of the cross road is not included on the G6-V2 series sign as this may confuse motorists into thinking that they are travelling that route.
- The sign be located on the left side of the road/freeway. If there is insufficient installation space on the left side, the sign may be mounted on the bridge structure.

Typical installation locations for cross road signs at freeway interchanges can be found in Clause 3.9 of this Supplement.





G6-V2-1

G6-V2-2

Bridge Name

Where a bridge is a prominent landmark along a road, and it is deemed significant enough to warrant signing, then the name of the bridge may be signed above the stream name sign (G6-2).

JAMES PATERSON BRIDGE

G6-V2-2

Clause 5.1.6 – Town Name (G6-1)

Town Name signs should be installed for suburbs or towns that appear as destinations on direction signs.

DEPARTURE

Within urban areas, this sign should not be installed for suburbs unless the above applies or there is an overwhelming need to do so (e.g. the suburb contains a widely recognised cultural facility).

Generally, the sign should be installed on the left side of the road at the entrance to the town or at the suburb boundary. However, this sign may instead be installed near or at the suburb/town centre (usually the business or commercial centre) if the suburb or town centre is the most prominent feature of the suburb or town.

The legend size for Town Name signs shall follow Clause 5.1.4 of this Supplement.

Clause 5.2.1 - General

VicRoads installs kilometre plates on freeways, major arterial roads (highways) and other selected declared roads (e.g. tourist roads) for the benefit of travellers to indicate distances to principal towns and cities.

Kilometre plates are not generally use in the Melbourne metropolitan area as the increased prevalence of reassurance direction signs is sufficient to inform drivers of distances to major destinations, refer to Clause 5.2.3 of this Supplement.

Administrative kilometre posts

VicRoads installs administrative kilometre post markers on the declared road system for its own administrative purposes, and for the benefit of other authorities needing to identify locations on the road system.

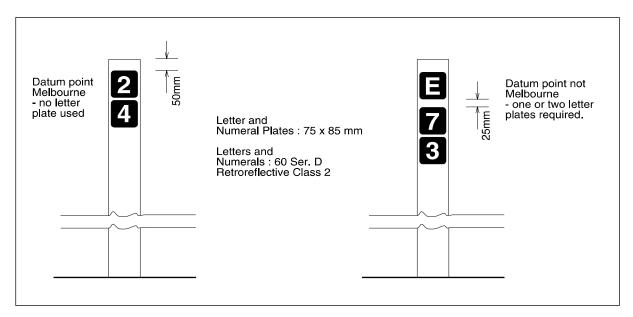


Figure 48: Administrative kilometre post marker

For administrative purposes, VicRoads uses a Standard Road Reference System (SRRS). Administrative kilometre post markers are installed based on the administrative datum for the declared road, or road section, and are generally used in SRRS as control reference points.

Administrative kilometre post markers may be installed as follows:

- in rural areas on all declared roads at a minimum of 5 km intervals except as noted below
- in urban areas (including provincial cities) on:
 - o all freeways at 0.2 km intervals
 - o all major arterial roads (highways) at 1 km intervals.

Markers are not typically installed on arterial roads in the inner metropolitan urban areas as there are sufficient cross road intersections to enable referencing for administrative purposes. In locations where there are insufficient road features, signage, assets, existing tools and/or practices etc. to enable referencing for administrative purposes as deemed by the relevant Regional Director, the installation of administrative kilometre post markers may be considered.

These markers comprise a standard guide post (refer to Clause 4.2.4.2 of AS1742:2009) to which is attached numeral plates as illustrated in Figure 48. The numerals indicate the true distance from the administrative datum for the declared road or road section. The same administrative distance is displayed to both directions of travel at each location. In inner urban areas, it is generally not practical to install guide posts and an alternative approved permanent form of kerbside or pavement marker shall be used.

The installation of markers is illustrated in Figure 50. Where the datum town is other than Melbourne, letter plates are added above the numerals to indicate the initial letter(s) of the datum town.

Location and spacing of administrative kilometre posts

Administrative kilometre post markers are located on the left side of each carriageway on divided roads, and on the left side of a two-way carriageway when travelling in the direction of increasing distance. They will therefore be single sided on divided roads and double sided (two sets of numerals plus letter plates if required on one post) on two-way carriageways. Note that guide post types used require a flat surface to enable double sided numerals to be displayed.

The longitudinal location of markers is fixed by an accurate odometer survey and as far as practicable they should be installed to within 5 m of the true position. If this is not possible on account of an

intervening bridge structure, intersection pavement, etc. the marker should be omitted and an approved style of identifying mark should be made on the intersection pavement, structure kerb, etc. Numeral plates may be affixed on structures at these points if required.

Clause 5.2.2 – Kilometre plates (G10-3, G10-4, G10-5)

DEPARTURE

Signs G10-4 and G10-5 are not used in Victoria, following the cessation of the AusLink federal government program.



G10-3

Kilometre plates indicate the distance in kilometres to the nominated focal point town or city being approached. The letter shown is the initial letter of the focal point town or city. Two letters are used where towns having the same initial letter are in close enough distance to create confusion, or the town name consists of two words.

Focal point towns and cities shown on Figure 50 comprise those used for standard through destinations (refer to Attachment A of this Supplement) together with towns meeting the following criteria:

- towns located at major route junctions and terminals
- additional towns necessary to ensure that there is generally not more than about one hour of travel time between focal points.

The distance is normally measured to the recognised centre of the signed destination, including cases where this location is reached via a turnoff to another road. In such cases, distance indications to the next town beyond will commence immediately beyond the intersection or interchange at which the turnoff occurs, as illustrated in Figure 50. Kilometre posts are not normally continued along the access road into the town unless it is also an arterial road.

Where separate routes have a common length of road, kilometre plates along the common length refer only to the focal point town on the continuation of the route that has the same name as the common length.

At every 15 km interval, a free standing route number sign (sign G8-V11-2) is included and located above the kilometre plate on M and A Routes. The free standing route number sign may be omitted if there is a direction sign or other free standing route number sign on the M or A Route showing the route number within 1 km of the kilometre plate (see Clause 2.5.3 of this Supplement).



G8-V11-2 (top)

G10-3 (bottom)

For information regarding administrative guide posts, refer to Clause 5.2.1 of this Supplement.

Clause 5.2.3 – Location and spacing

In Victoria, it is considered good practice to install kilometre plates at 5 km intervals on the left side of the carriageway, considering each direction of travel separately (as shown in Figure 50), preferably within 5 m of its true location. They are erected on a single post. If this is impracticable on account of an intervening bridge structure, intersection pavement etc., the kilometre plate marker should be located in the nearest suitable position on the left side of the road.

Kilometre plates are not usually installed in metropolitan Melbourne or in provincial cities. On freeways and major arterial roads (highways) that continue into the Melbourne metropolitan area, the use of kilometre plates shall cease once the road crosses the urban growth boundary (refer to Clause 3.1 of this Supplement).

The use of additional kilometre plates requires the approval of the Manager - Network Standards.

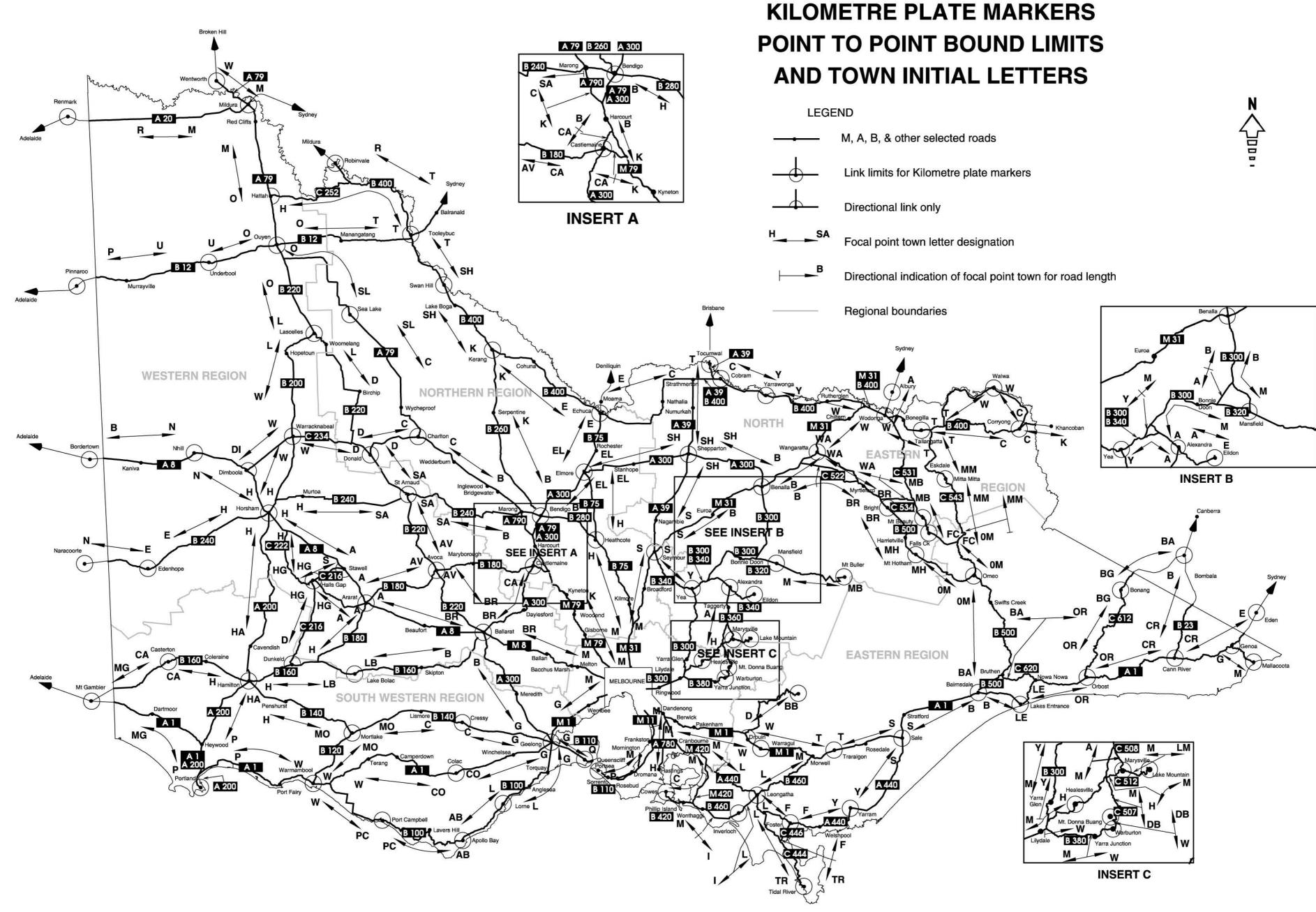


Figure 49: Kilometre plates point to point bound limits and town initial letter

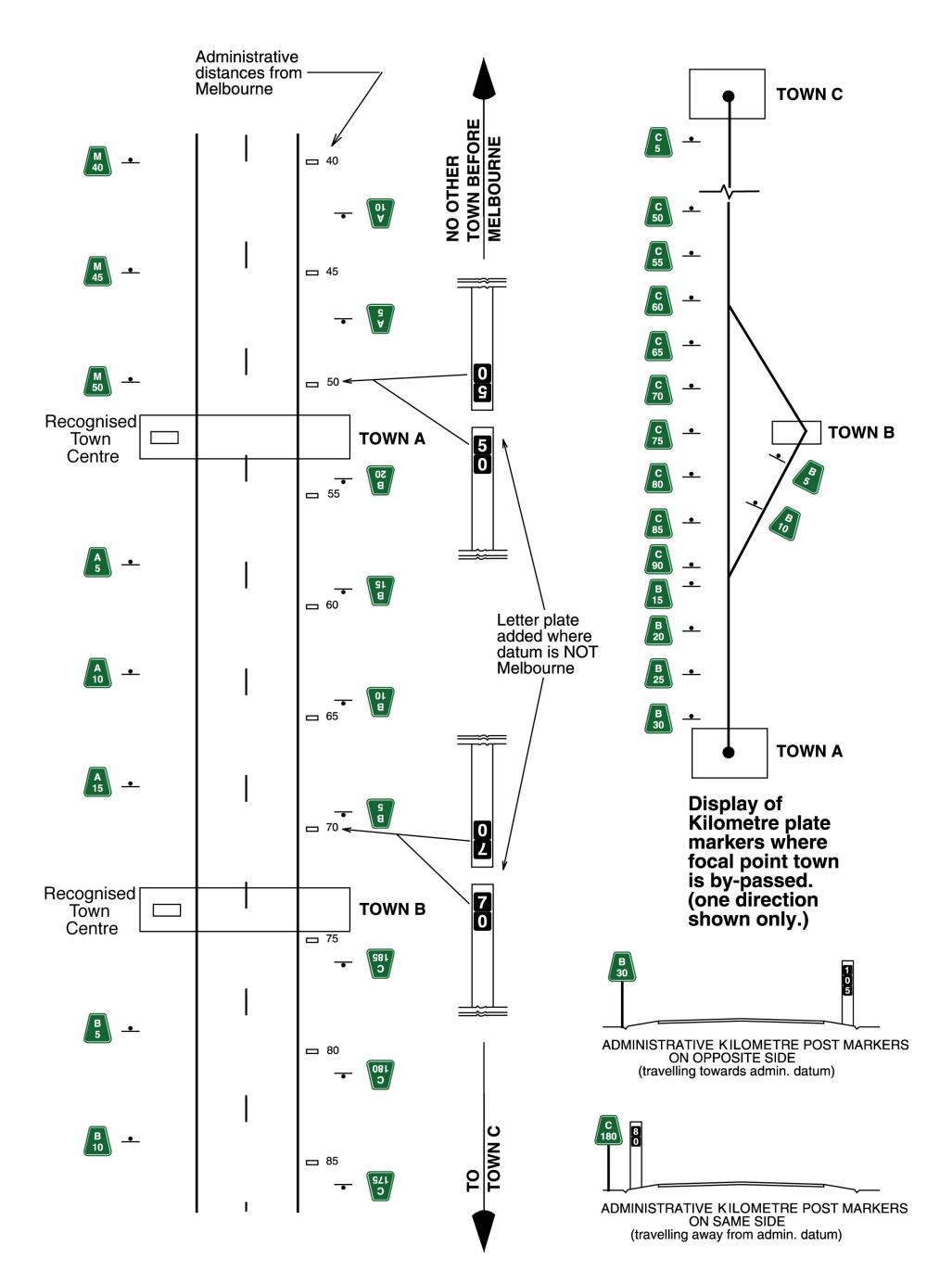


Figure 50: Kilometre plate and administrative kilometre post layout

Clause 5.3.1 - General

Refer to Clause 1.6.11 of this Supplement.

Clause 5.3.2 - Sign design

It should be noted that even when all the design rules are obeyed, a sign may not "look right". Visual balance may sometimes need to be undertaken by adjustment to sign elements such as spacing and arrow types. The following points should be noted:

- Cramping of legend is to be avoided.
- Try to avoid large areas of blank panel, particularly blank areas not symmetrically disposed across the panel unless a directional enhancement is being sought.
- If there are two lists side by side, e.g. as on reassurance sign, it is necessary to left justify the left list and right justify the right list.
- Elements such as arrows and symbols may sometimes have to be larger than the accompanying principal legend would normally require (e.g. due to the element relating to several lines of legend).

Sign face designs shall show sufficient detail to enable the sign to be manufactured, which shall include the following features:

- legend type and size, e.g. '180 E Mod'
- · details of arrows, route shields, etc. usually by reference to standard drawings
- details of any diagrammatic symbols or features
- overall dimensions of all elements and spacing between these elements to enable positioning on the sign face relative to one edge of the sign
- · details of border widths, edge strips and corner radii
- class and colour of sign face materials.

Figure 51 shows a typical sign face design with the above features.

For special one-off signs, rounding of spacing is normally required to enable standard sign board sizes to be used. For direction signs, the sign face design is carried out using standard dimensions with no rounding. Rounding may be carried out by the sign manufacturer in accordance with tolerances specified in Clause 9 of AS1743:2001 to enable standard aluminium blanks to be used.

Design hints for direction signs are included under the relevant sign types in Clause 1.6.2, Clause 2.2.2 (a), Clause 2.3, Clause 2.4.2, Clause 2.5 and Clause 4.4.3 of this Supplement.

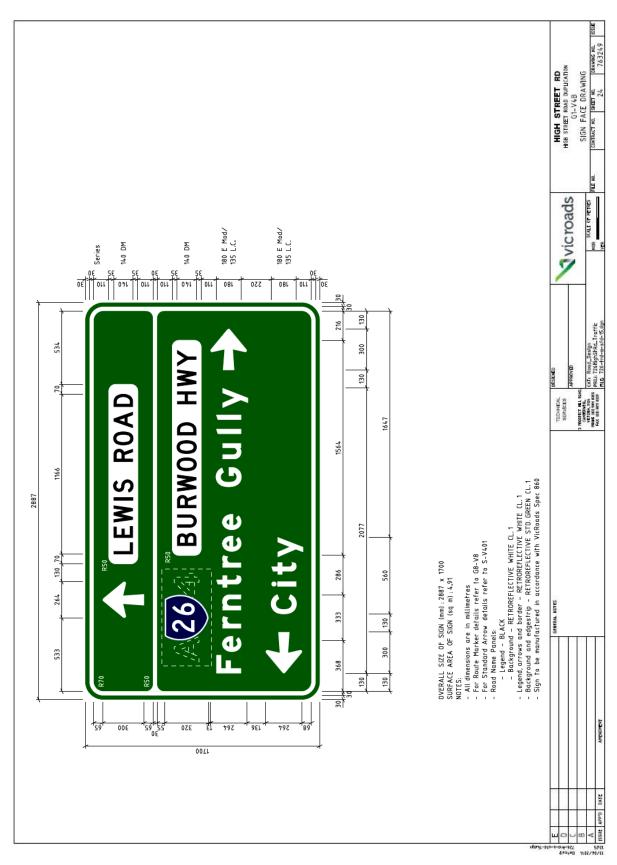


Figure 51: Typical sign face design- advance intersection direction sign

APPENDIX A

Standard letter sizes to be used on direction sign are detailed in Clause 1.6.8 of this Supplement.

APPENDIX B2(d)

DEPARTURE

The details of borders, edge strips and corners on Victorian direction signs shall follow the standard drawings found in the VicRoads Supplement to AS 1743.

APPENDIX C4

Retroreflective sign sheeting materials

All retroreflective road signs shall comprise an approved VicRoads sheeting material as specified in Road Design Note 06-11 (https://www.vicroads.vic.gov.au/~/media/files/technicaldocuments/standards-and-supplements/roaddesignnote061-acceptedretroreflectivesheetingmaterials.ashx).

APPENDIX D2.1

For VicRoads accepted frangible post systems, refer to Road Design Note 06-09 (https://www.vicroads.vic.gov.au/~/media/files/technicaldocuments/standards-and-supplements/roaddesignnote0609acceptedfrangiblepostsystems.ashx).

Erection of signs shall conform to the requirements of VicRoads Standard Specification Section 714 - Sign Installation (available on the VicRoads website: http://webapps.vicroads.vic.gov.au/VRNE/csdspeci.nsf/).

APPENDIX D3

Where a number of signs are erected on a gantry, the outer edges of signs shall not extend beyond the outer edges of shoulders. If this cannot be achieved with the gantry in its preferred location (i.e. at start of exit taper), or additional signs need to be accommodated, the gantry may be shifted longitudinally towards the gore area (refer to Figure 30 and Figure 35 of this Supplement). At locations where arrows are used on overhead signs to indicate lane discipline, they shall be positioned over the relevant lanes as described in Clause 1.6.9 of this Supplement.

APPENDIX D4

Additional comments for the Notes to Figure D3 of AS 1742.15:2007:

 On RIGHT HAND curves, the sign is placed on the normal to the road at the sign position, except for very large curves (e.g. R>1500mm) which are treated the same as straights.

Attachment A - Standard Through Destinations

Introduction

The figures in this Attachment outline the standard through destinations that shall be used on direction signs on VicRoads arterial roads and freeways, including on approach roads. The figures here provide route numbering and destination signing guidance for freeways and arterial roads in rural areas, provincial cities and in the Melbourne metropolitan area.

These figures have been prepared in accordance with Clauses 1.6, 2.2.3 and 3.3.2 of this Supplement.

The destinations on these maps are managed by the Network Standards group. Changes to standard through destinations require approval from the Manger - Network Standards. Destinations on direction signs shall be restricted to standard through destinations except as permitted in Clause 2.2.3 of this Supplement.

Where destination signing is the responsibility of the local municipal council and is not covered by the figures here, councils should follow the principles outlined in this Attachment and in Clauses 1.6 and 2.2.3 of this Supplement.

Standard through destination maps

The following figures below outline the standard through destinations to be used on direction signs across Victoria. In addition, these figures can also be used to determine the appropriate destinations to use on reassurance direction signs.

Standard through destinations for metropolitan Melbourne:

- Figure 59: Standard through destinations on arterial roads Melbourne Centre and West
- Figure 60: Standard through destinations on arterial roads Melbourne North
- Figure 61: Standard through destinations on arterial roads Melbourne South and East

Standard through destinations for Melbourne metropolitan freeways:

- Figure 62: North and West metropolitan freeways
- Figure 63: South and East metropolitan freeways

Standard Through Destinations for rural areas and provincial cities:

- South Western Region:
 - Figure 64: Geelong metropolitan area
 - Figure 65: Western section (including Portland)
 - o Figure 66: Eastern section
- Western Region
 - Figure 67: North-western section (including Mildura)
 - Figure 68: South-western section (including Horsham)
 - Figure 69: Eastern section (including Ballarat)
- Northern Region
 - o Figure 70: North-western section
 - Figure 71: Central section (including Bendigo and Echuca)
 - o Figure 72: Southern section

- North Eastern Region
 - Figure 73: North-western section
 - Figure 74: South-western section
 - Figure 75: Eastern section (including Wodonga)
- Eastern Region
 - o Figure 76: East Gippsland
 - Figure 77: Central Gippsland (including Latrobe Valley)
 - Figure 78: South and West
 Gippsland (including Drouin and Warragul)
- Metropolitan South East Region (outer areas)
 - Figure 79: Outer south-east section
 - Figure 80: Mornington Peninsula
 - Figure 81: Dandenong Ranges and Yarra Valley
- Metropolitan North West Region (outer areas)
 - o Figure 82: Outer north section
 - o Figure 83: Outer west section

Explanation of key features on the figures

a) General

Some towns/suburbs are standard through destinations for one direction of travel only (refer to Figure 52). These selected towns/suburbs are shown as destinations on advance, intersection and reassurance direction signs for the direction indicated (unless otherwise specified, refer to (c) below).

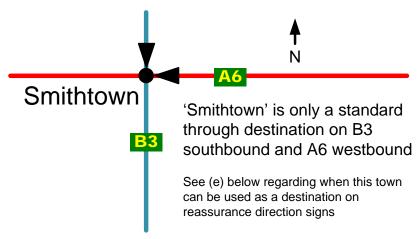
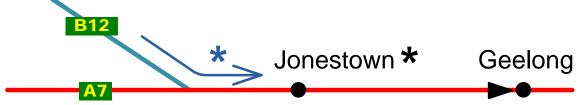


Figure 52: Signing of a standard through destination in one direction only

For some destinations, an asterisk (*) has been used to indicate the standard through destination. This is used when the destination is located on another numbered route, and that destination is not nominated as a standard through destination on that route; see Figure 53.



The standard through destination on B12 is 'Jonestown', which is located on another road – the A7.

However, 'Jonestown' is not a standard through destination on the A7 (it is 'Geelong')

The arrow with the asterisk indicates that direction signs on the B12 at prior intersections and at the intersection with the A7 will need to have 'Jonestown' shown as the standard through destination.

Note: At the intersection with the A7, 'Jonestown' should be shown in conjunction with A7's standard through destination ('Geelong'), unless otherwise specified.

Figure 53: Signing of a standard through destination which is on another route

b) Ultimate and intermediate standard through destinations

There are two types of standard through destinations marked on the figures. They are:

- an 'ultimate' standard through destination marked by a solid arrowhead at the town/suburb
- an 'intermediate' standard through destination marked by an open arrowhead at the town/suburb.

The use of the 'ultimate' and 'intermediate' standard through destinations refers to where a town/suburb before the 'ultimate' destination is significant enough to warrant co-signing as an 'intermediate' destination.

Both the 'ultimate' and 'intermediate' destinations are shown on advance, intersection and reassurance direction signs (see Figure 54).

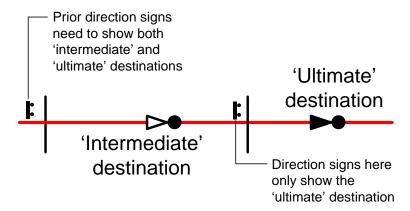


Figure 54: Signing of 'ultimate' and 'intermediate' standard through destinations (as shown on rural figures)

c) Special destination signing treatments

Where there are different destination(s) to be signed for a departing leg from an intersection, this is marked using an arrow with a closed circle at the bottom of the shaft. Guidance is then provided in regards to what destination should be signed instead.

The guidance provided overrides any other destination signing requirements at that particular intersection.

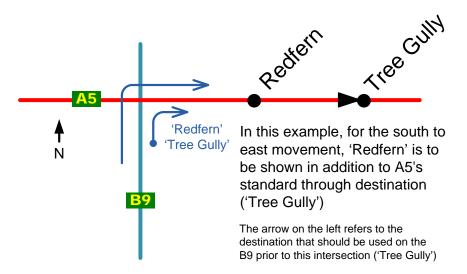


Figure 55: Example of a special destination signing treatment

d) Signing of additional destinations

At certain intersections and interchanges, there may be a need to sign additional destinations to the standard through destinations. Examples include:

- use of 'THIS EXIT' GE1-8 series signs at freeway interchanges
- on a non-freeway road, installation of a standalone sign in between the intersection and advance direction sign showing a remote destination (which is not the standard through destination).

These signing directions are shown with an arrow with a box at the bottom of the shaft.



Figure 56: Signing of additional destinations

e) Destinations to use on reassurance direction signs

Destinations to use on reassurance direction signs include:

- towns/suburbs which are used as standard through destinations (ultimate and intermediate) along the route
- towns/suburbs along the route which are not standard through destinations, marked by a circle (closed rural; open metropolitan Melbourne) with no arrowhead shown for the direction of travel
- other minor towns/suburbs which predominately appear on commercial maps

The selection and use of destinations on reassurance direction signs shall follow the guidance in Clause 2.5.2 of this Supplement

f) Use of 'City' and 'City Centre'

Within the urban boundary of provincial cities, the name of the city may be alternatively signed as 'City Centre'.

On the outskirts of provincial cities, the name of the city may be signed in the format '[City Name] City Centre' (e.g. 'Geelong City Centre') where guidance to the central business district is required. Where another destination is to be shown on the same sign, care shall be taken so that the two separate destinations are not misread as one.

On inbound radial routes in the Melbourne metropolitan area (including on freeways), 'City' is always used as the destination from designated points, as shown on the metropolitan Melbourne figures (arterial roads and freeways).

g) Metropolitan Melbourne

Arterial roads

Suburbs marked for use as destinations (standard through destination or otherwise) in the metropolitan Melbourne figures are shown with an open circle.

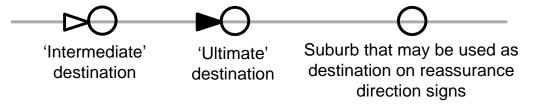
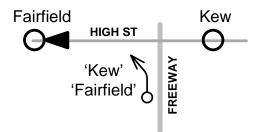


Figure 57: Display of destinations on metropolitan Melbourne figures

At freeway interchanges, on the freeway approach, the freeway advance exit signs and exit direction signs may include destinations, as per Clause 3.3.2 (c) of this Supplement. Where the normal destinations of the cross road are not to be used, this is marked by an arrow with an open circle listing the destinations that shall be used instead.

Note that direction signs on the offramp may include other destinations in addition to what was shown on the prior freeway exit signs (e.g. the standard through destination of the cross road that was excluded on the freeway exit signs).



For freeway exit signs for High Street, the destinations shown are 'Kew' and 'Fairfield'. Note 'Kew' is not a standard through destination of High Street.

Affected signs: GE1-V5/V6, GE2-V1, GE1-V14 and other diagrammatic signs

Signs on offramp may include additional destinations.

Figure 58: Special freeway exit signing for a cross road

In the metropolitan area, no additional destinations should be introduced along the roads shown in the figures, unless with approval from the Manager – Network Standards. Along secondary arterial roads or major municipal traffic routes not shown on the destination figures, additional destination signing may be provided where:

- Signing to a destination named on the figures is appropriate.
- The road leads directly to the focal point of a well-defined locality.

Freeways

The standard through destinations to use on freeway through direction signs and exit signs to other freeways are shown in the Melbourne metropolitan freeways figures.

Destinations to use for arterial and municipal road interchanges can be determined from the arterial road figures (also see Figure 58 above).

No additional destinations should be introduced along the freeways shown on the destination figures, unless with approval from the Manager – Network Standards

h) Duplex Routes (road with two route numbers)

Where a departure has two route numbers, generally each standard through destination(s) from each of the two routes are required to be displayed, however additional destinations may need to be included. For further details, refer to Clauses 2.2.3 (f) and 4.4.1 of this Supplement.

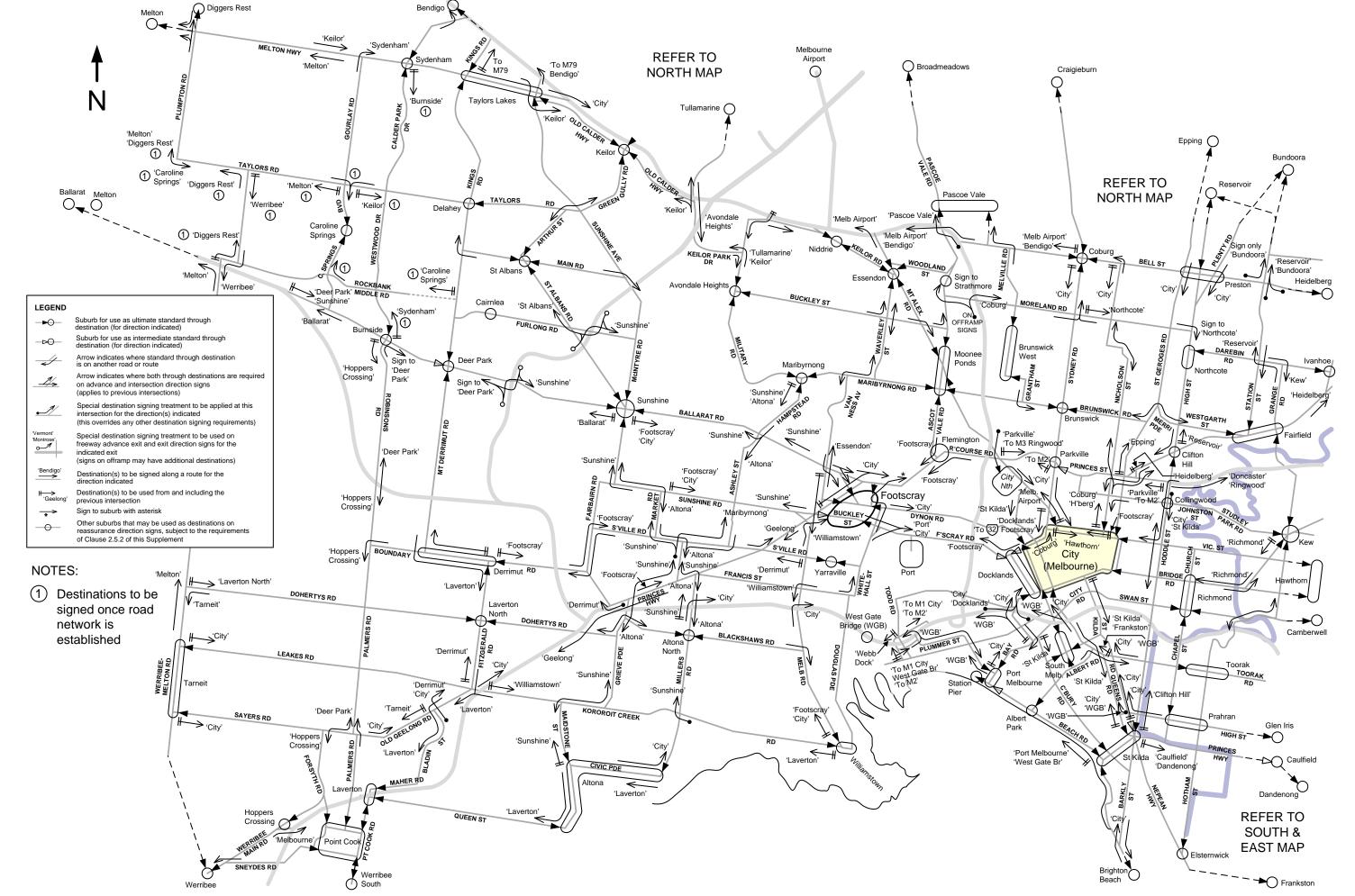


Figure 59: Standard through destinations on arterial roads - Melbourne Centre and West

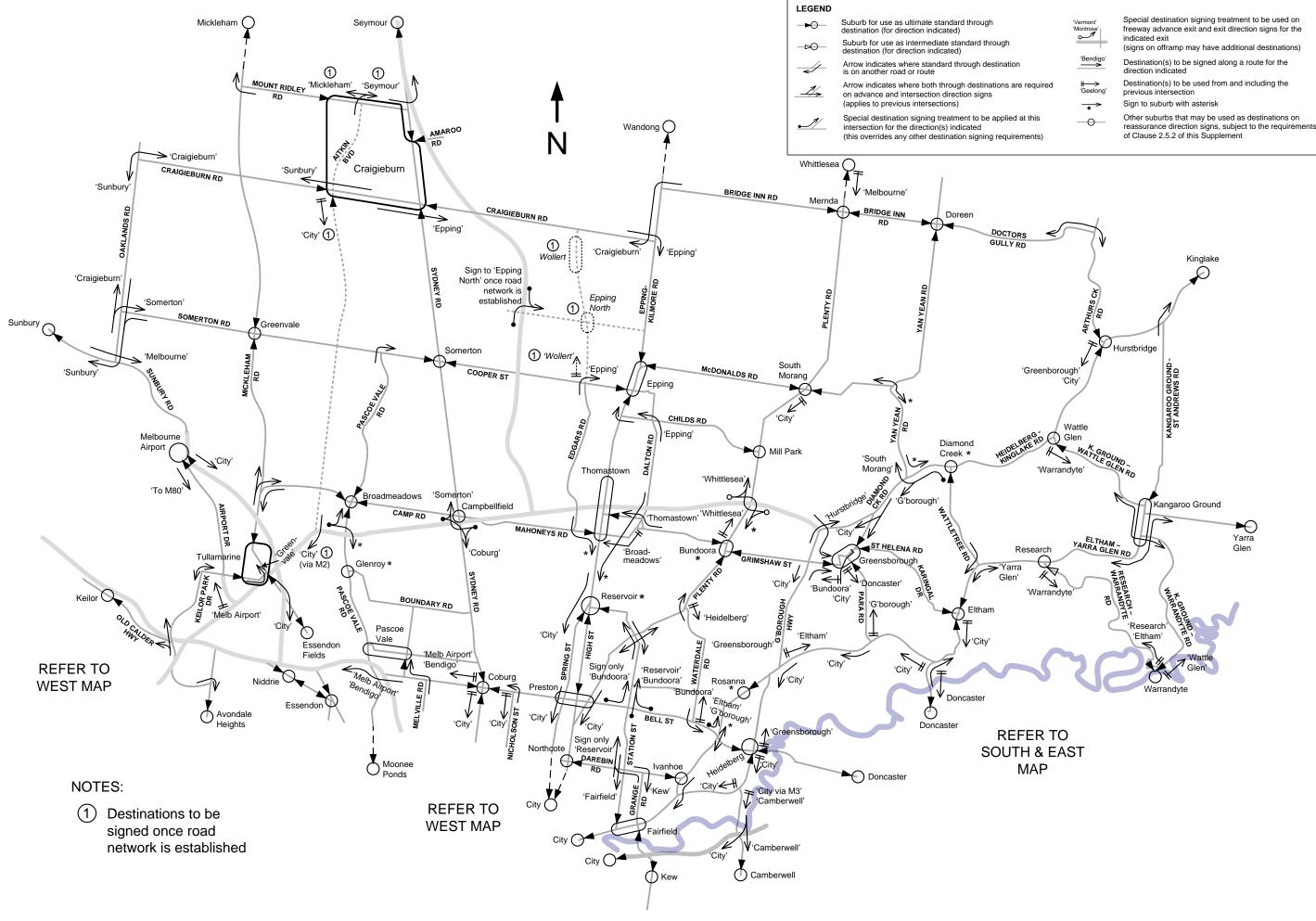


Figure 60: Standard through destinations on arterial roads - Melbourne North

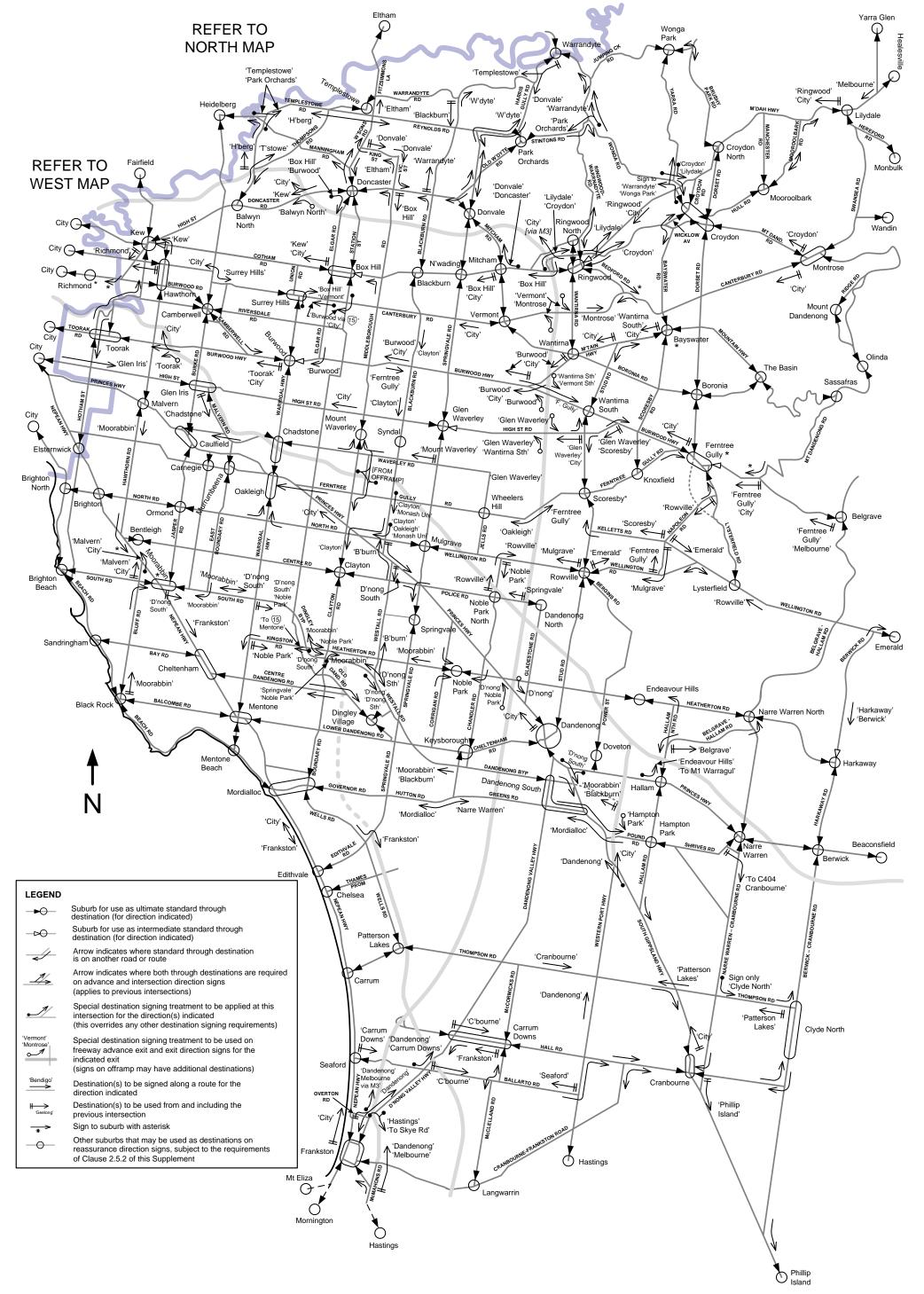


Figure 61: Standard through destinations on arterial roads - Melbourne South and East

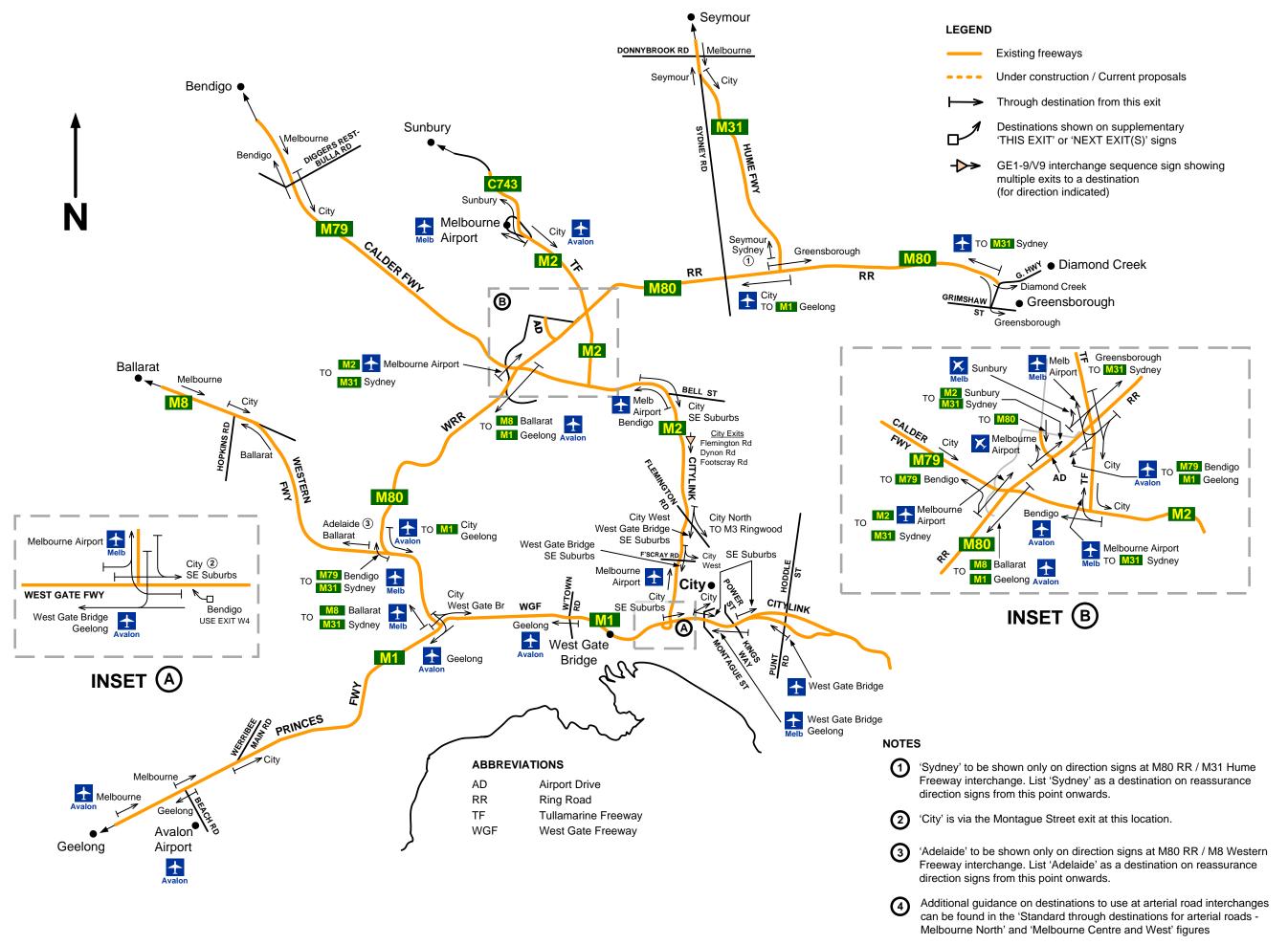


Figure 62: Standard through destinations on freeways - north and west metropolitan freeways

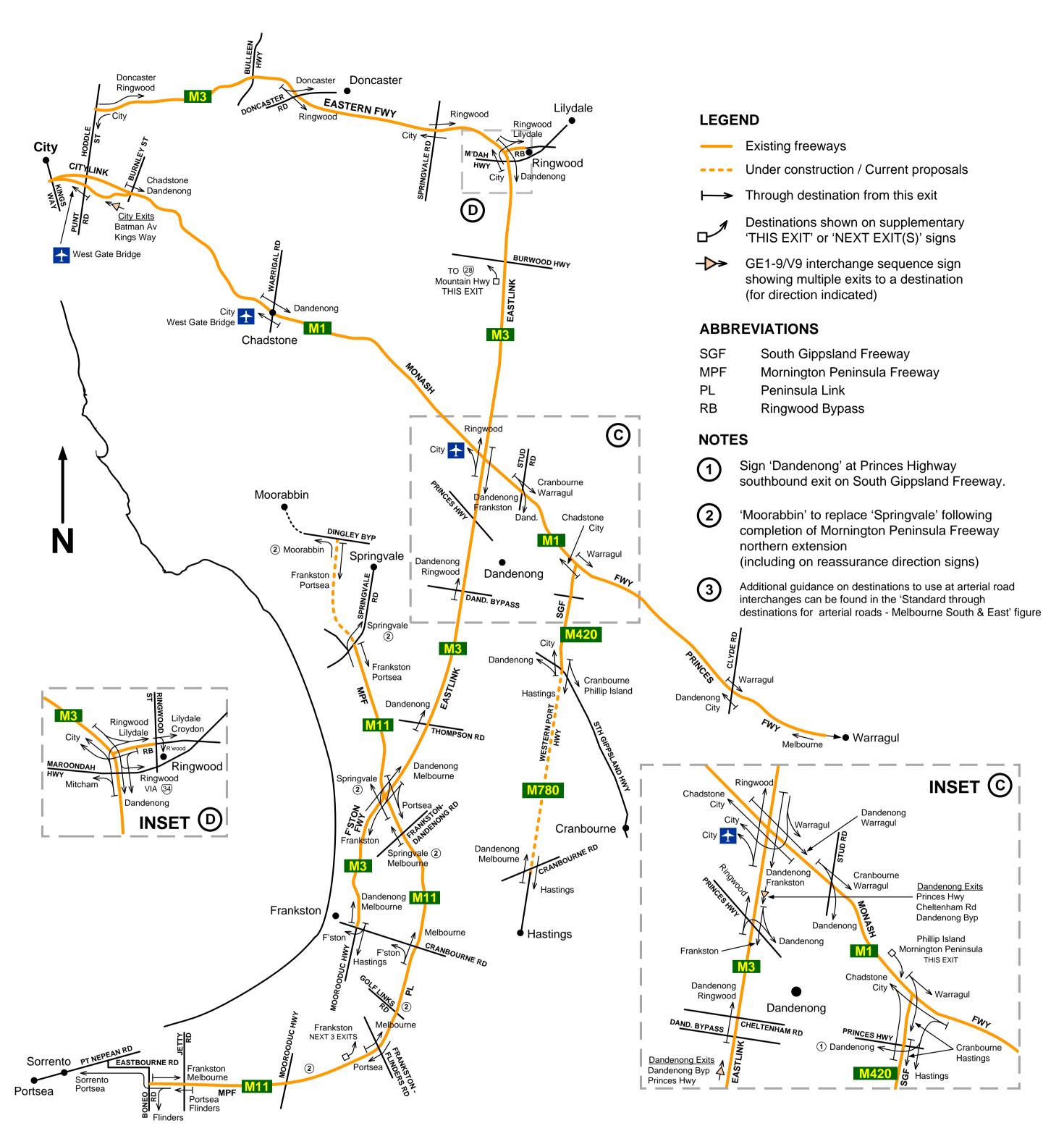


Figure 63: Standard through destinations on freeways – south and east metropolitan freeways

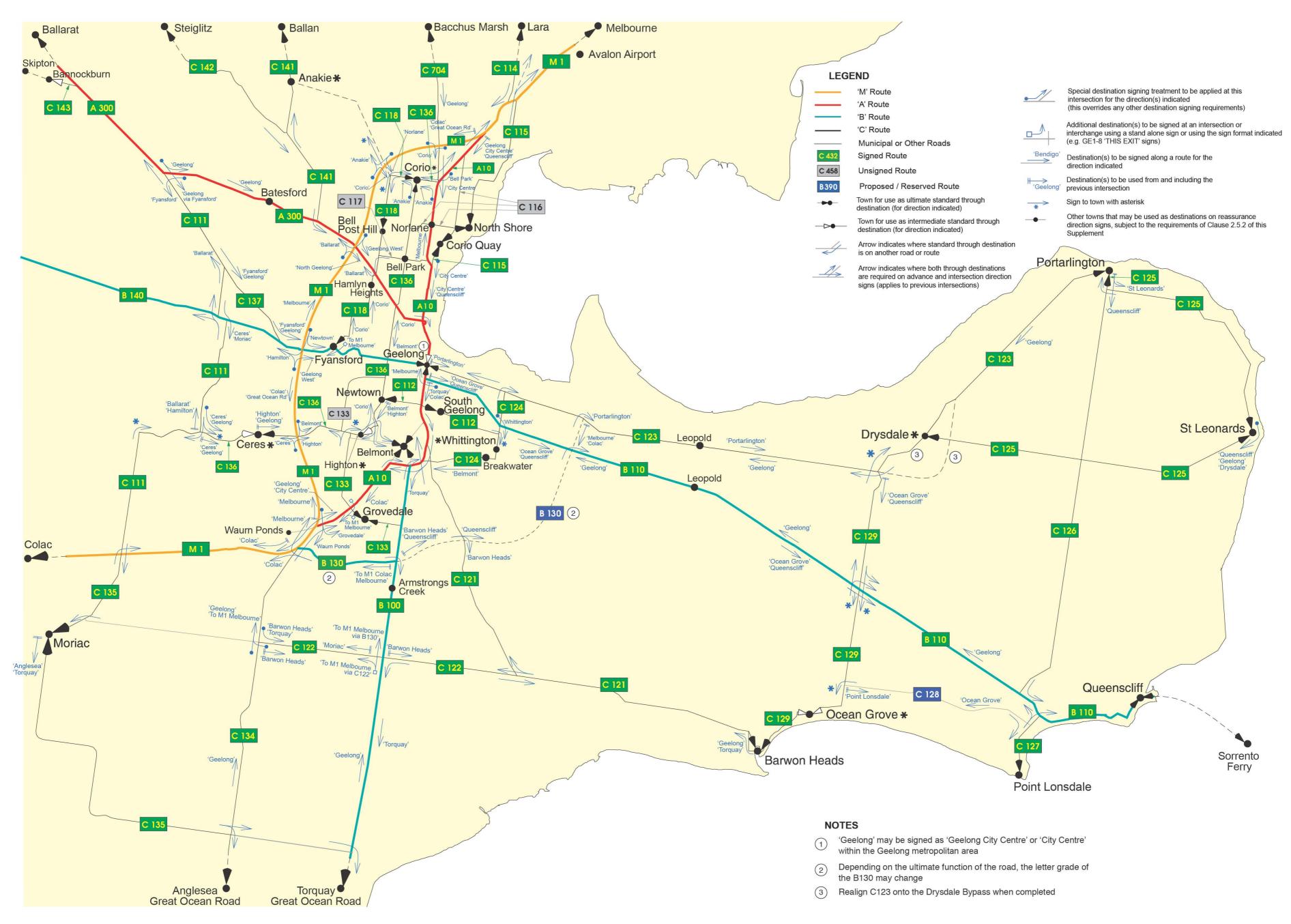


Figure 64: South Western Region - Geelong metropolitan area

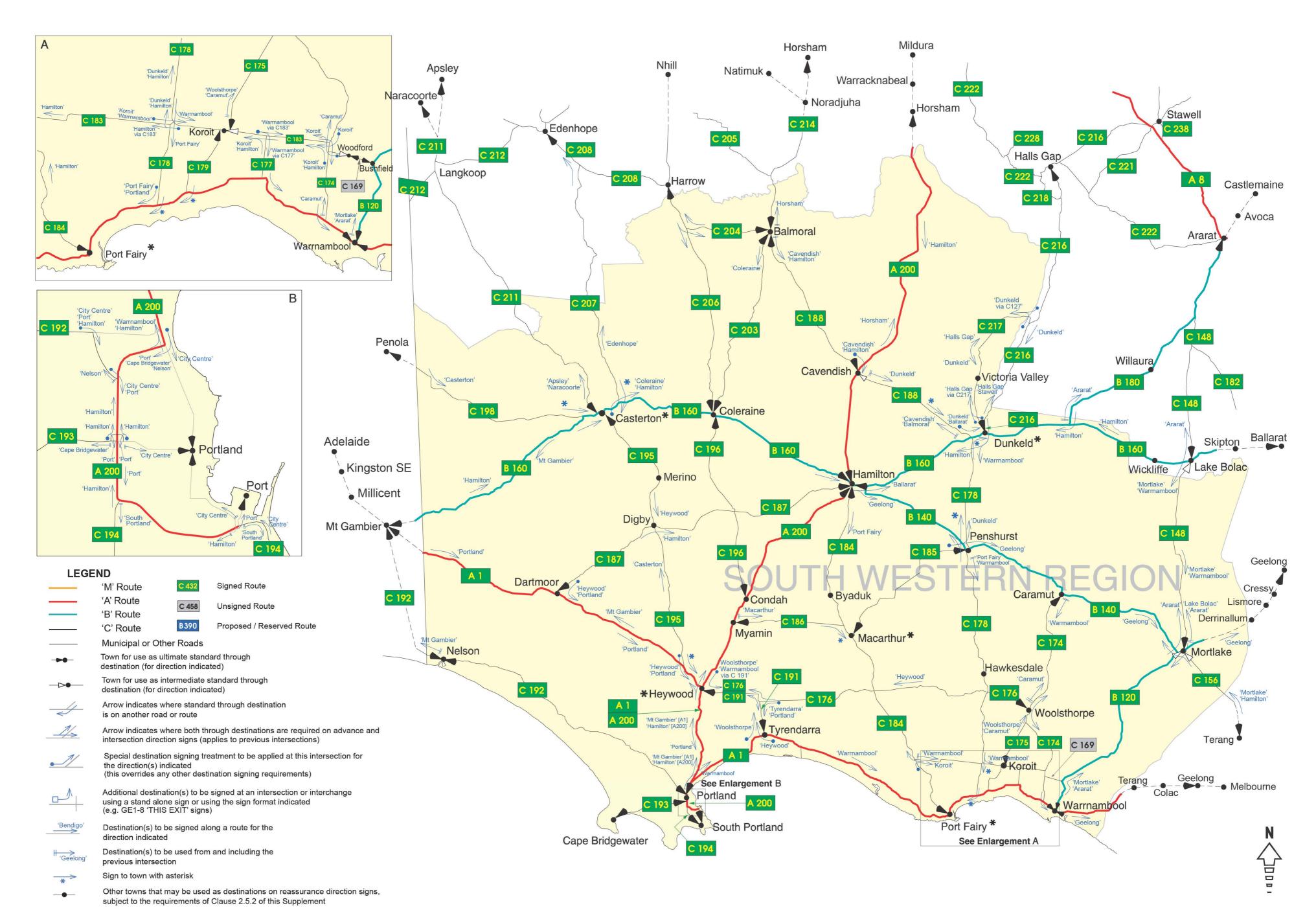


Figure 65: South Western Region - western section

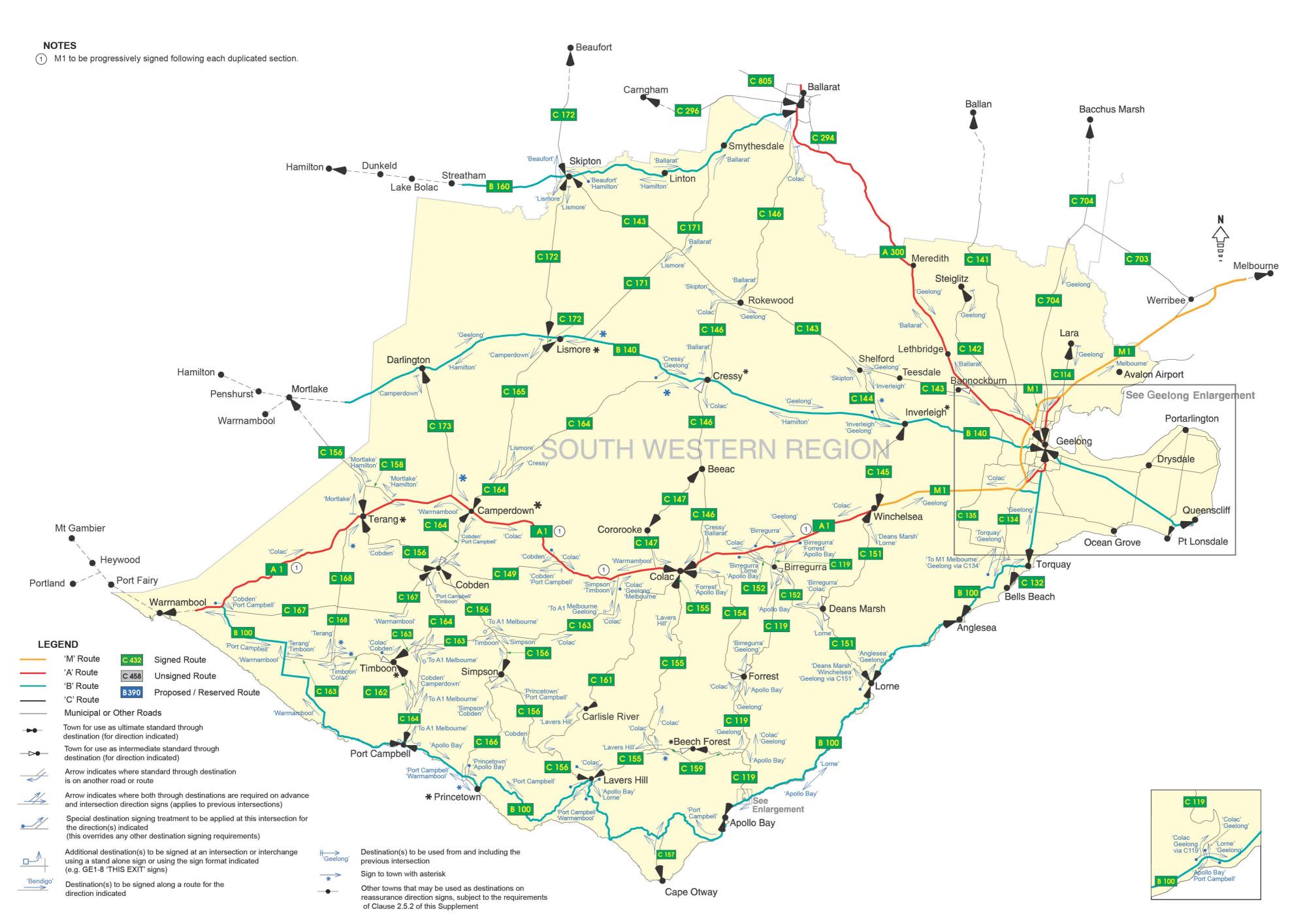


Figure 66: South Western Region – eastern section

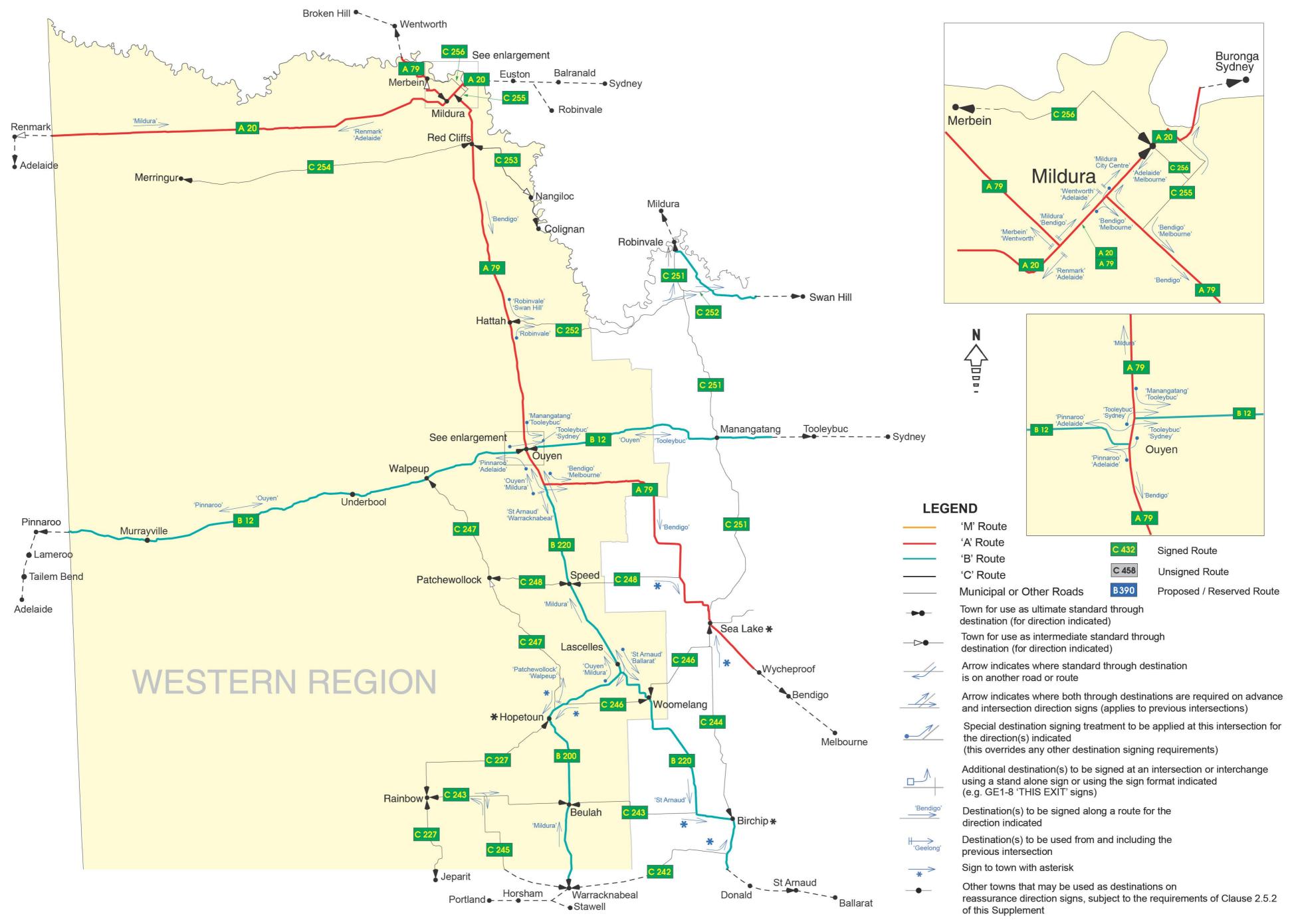


Figure 67: Western Region – north-western section

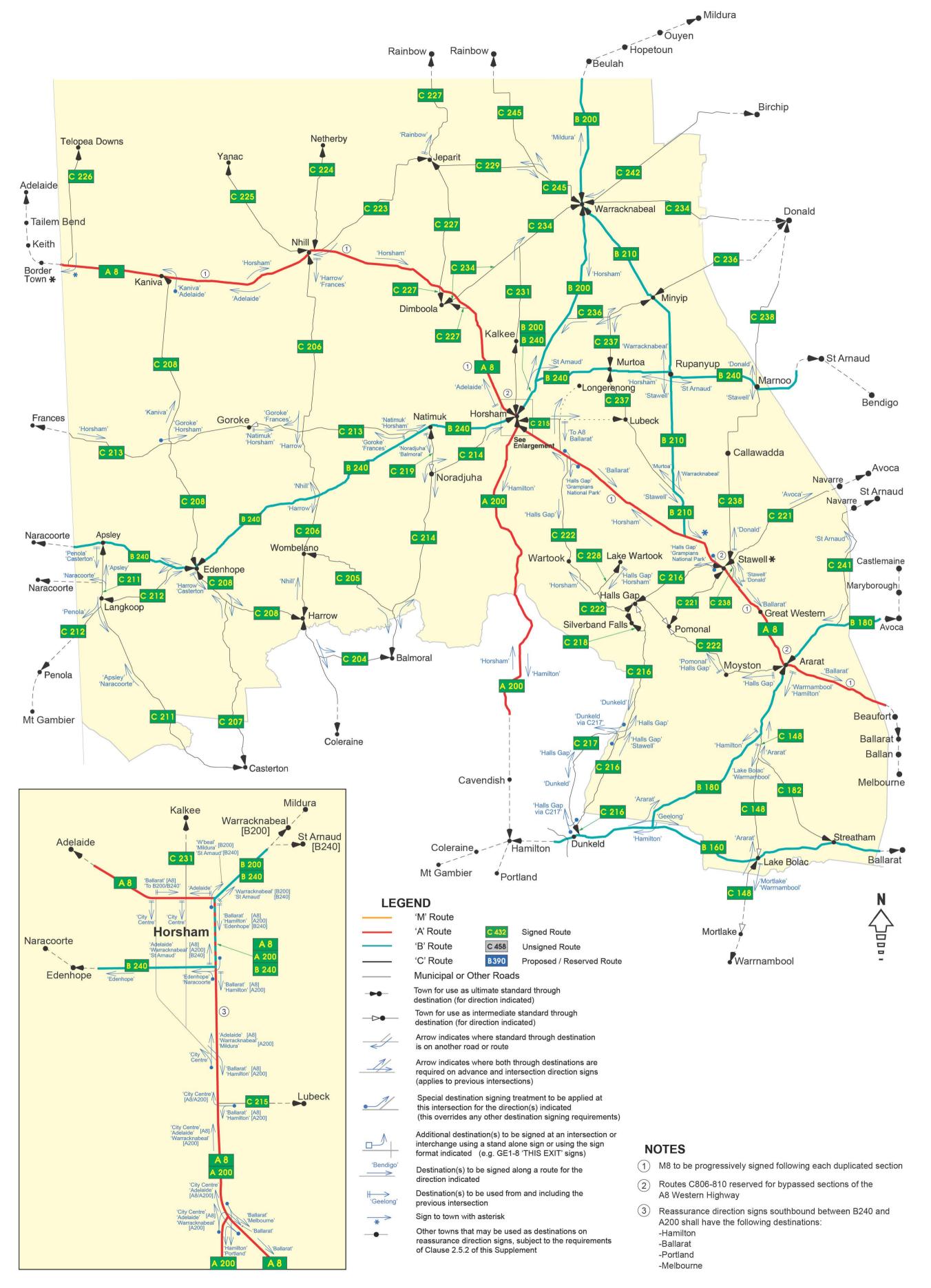
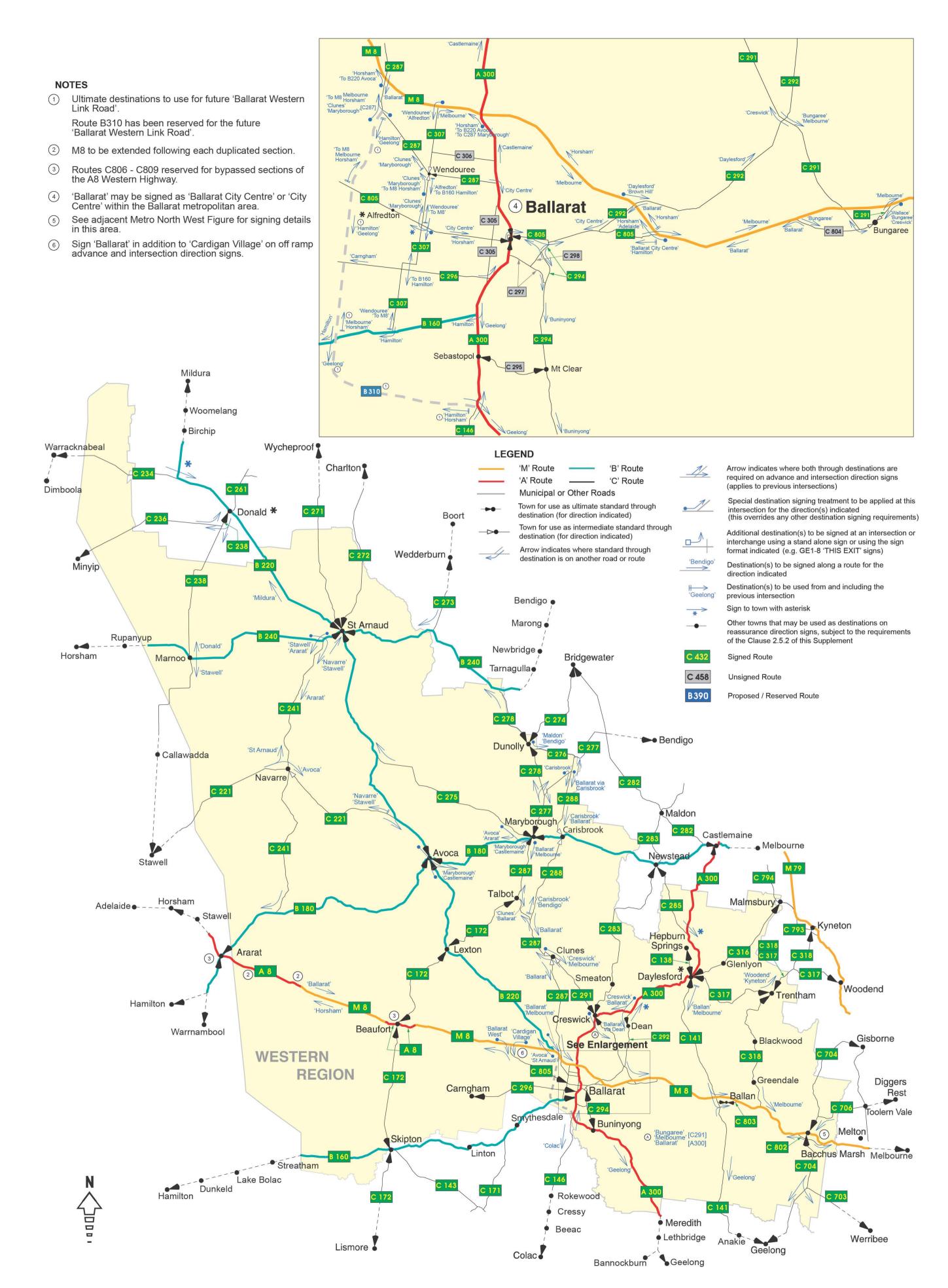


Figure 68: Western Region – south-western section



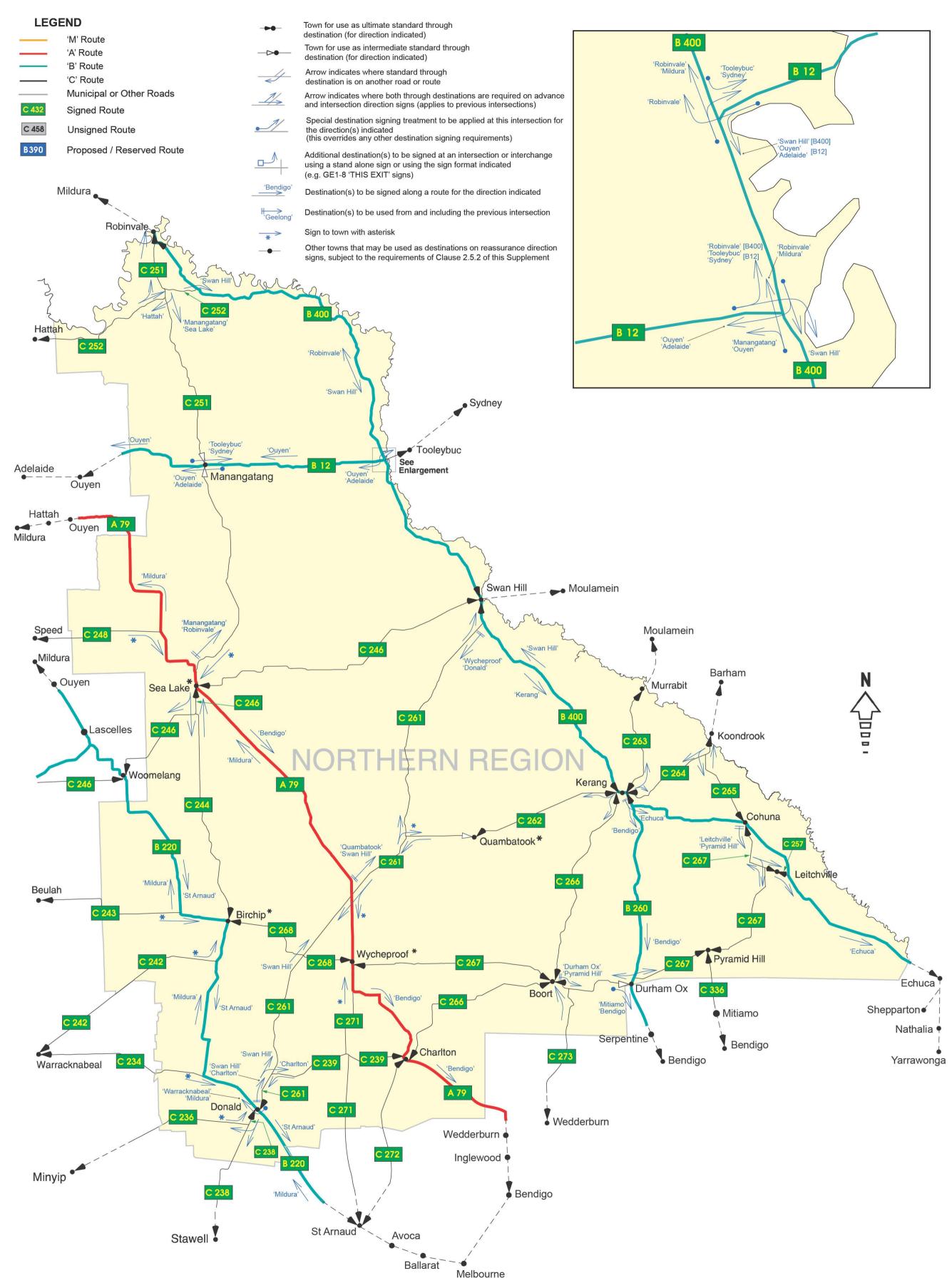


Figure 70: Northern Region – north-western section

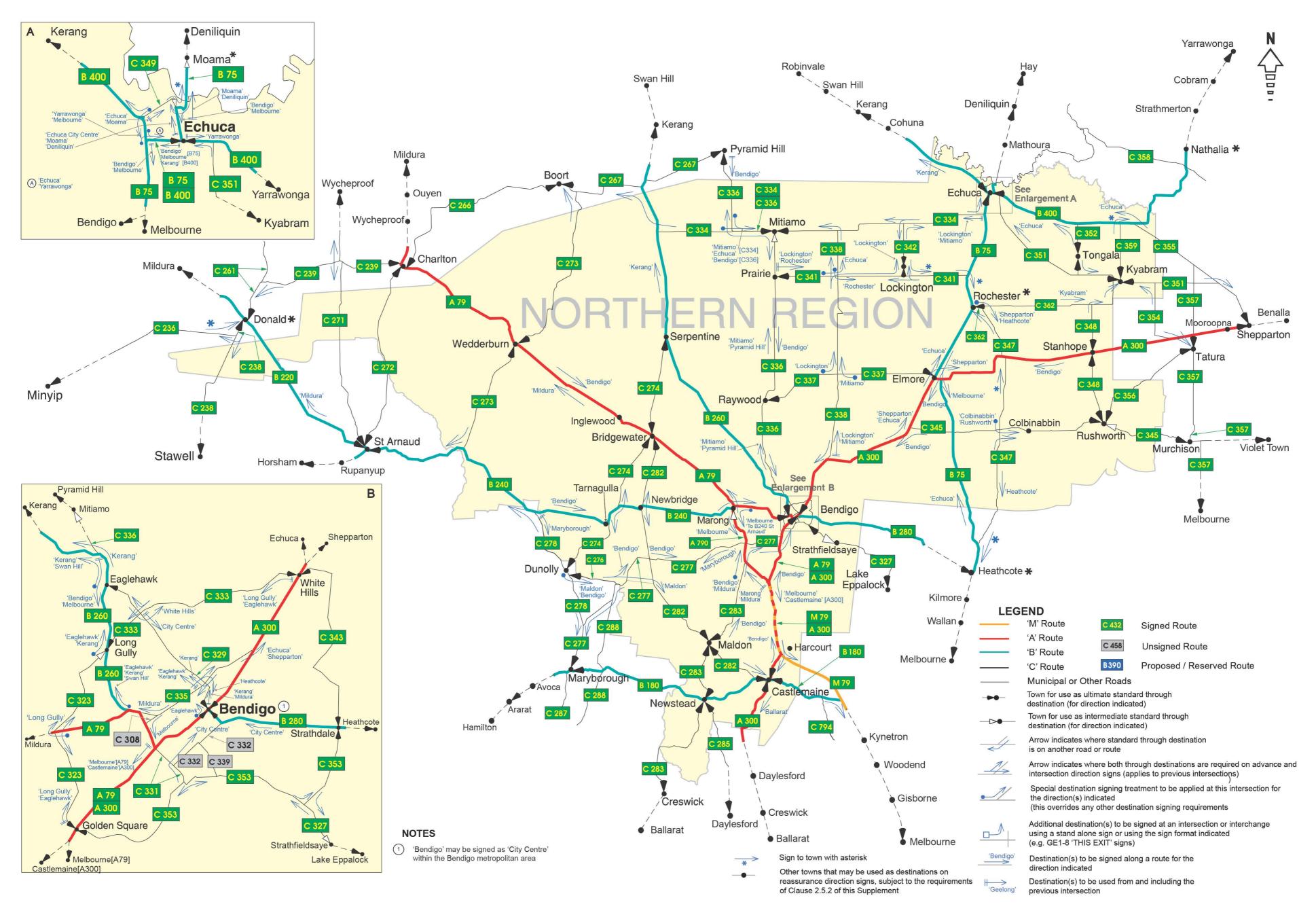


Figure 71: Northern Region – central section

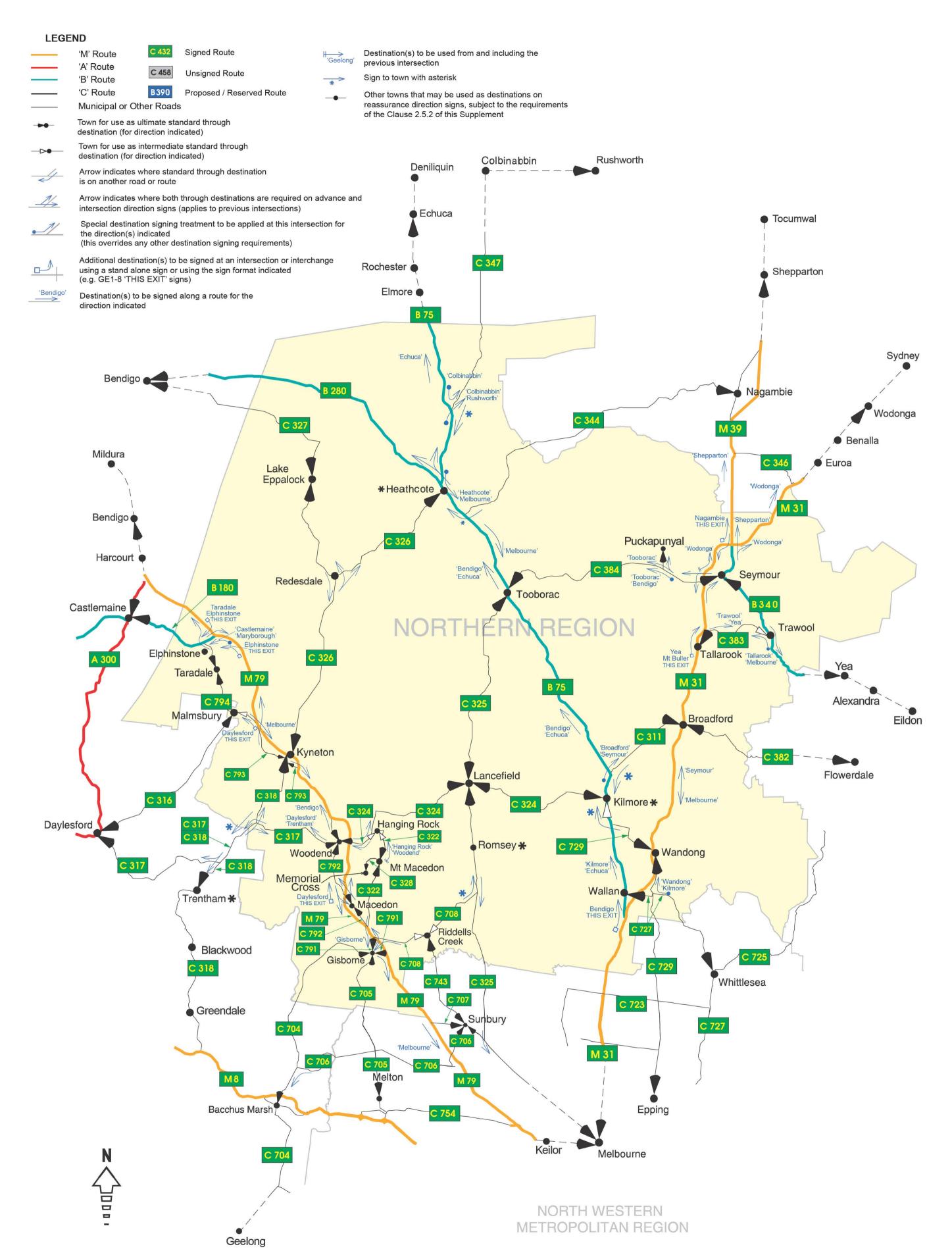
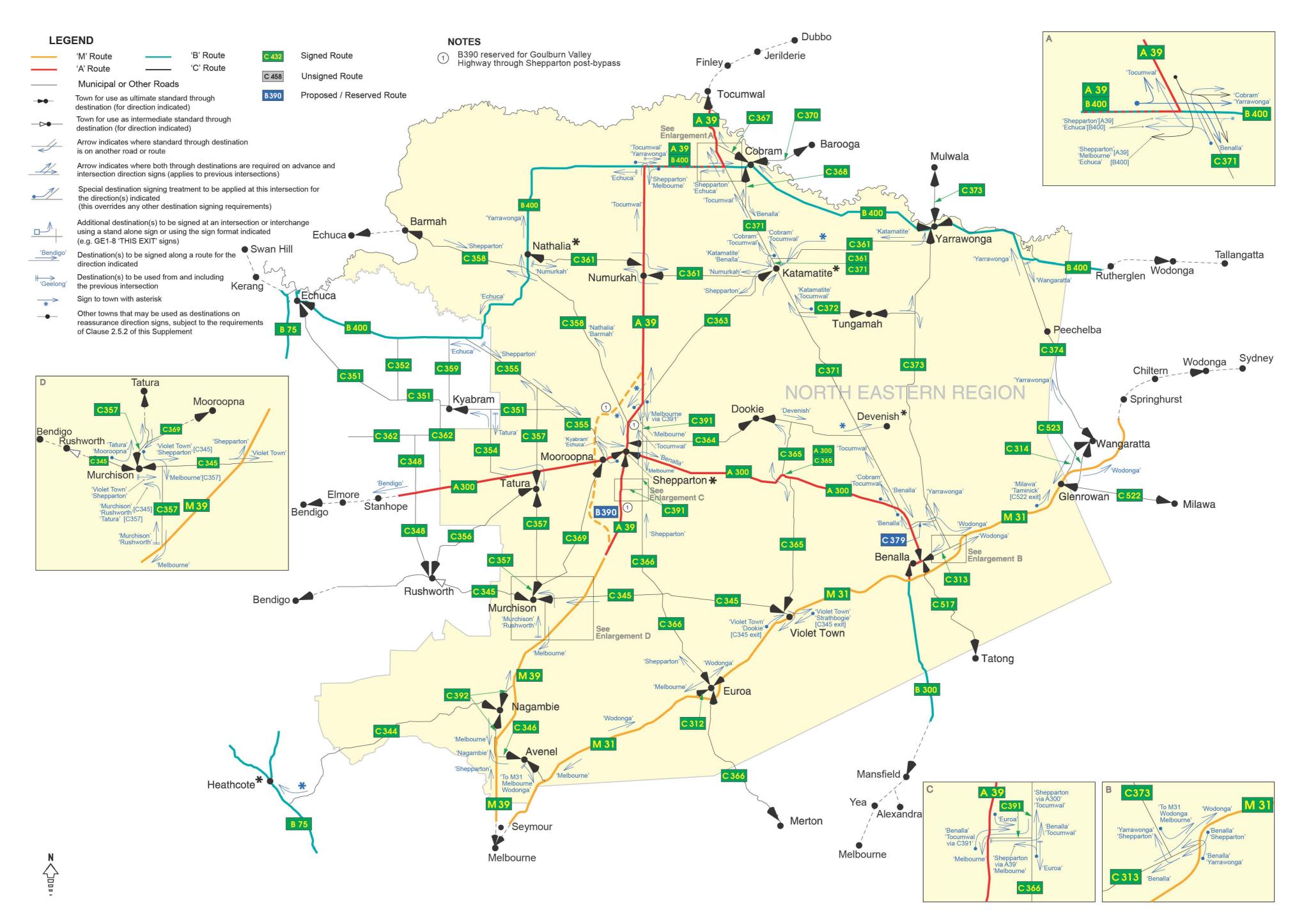
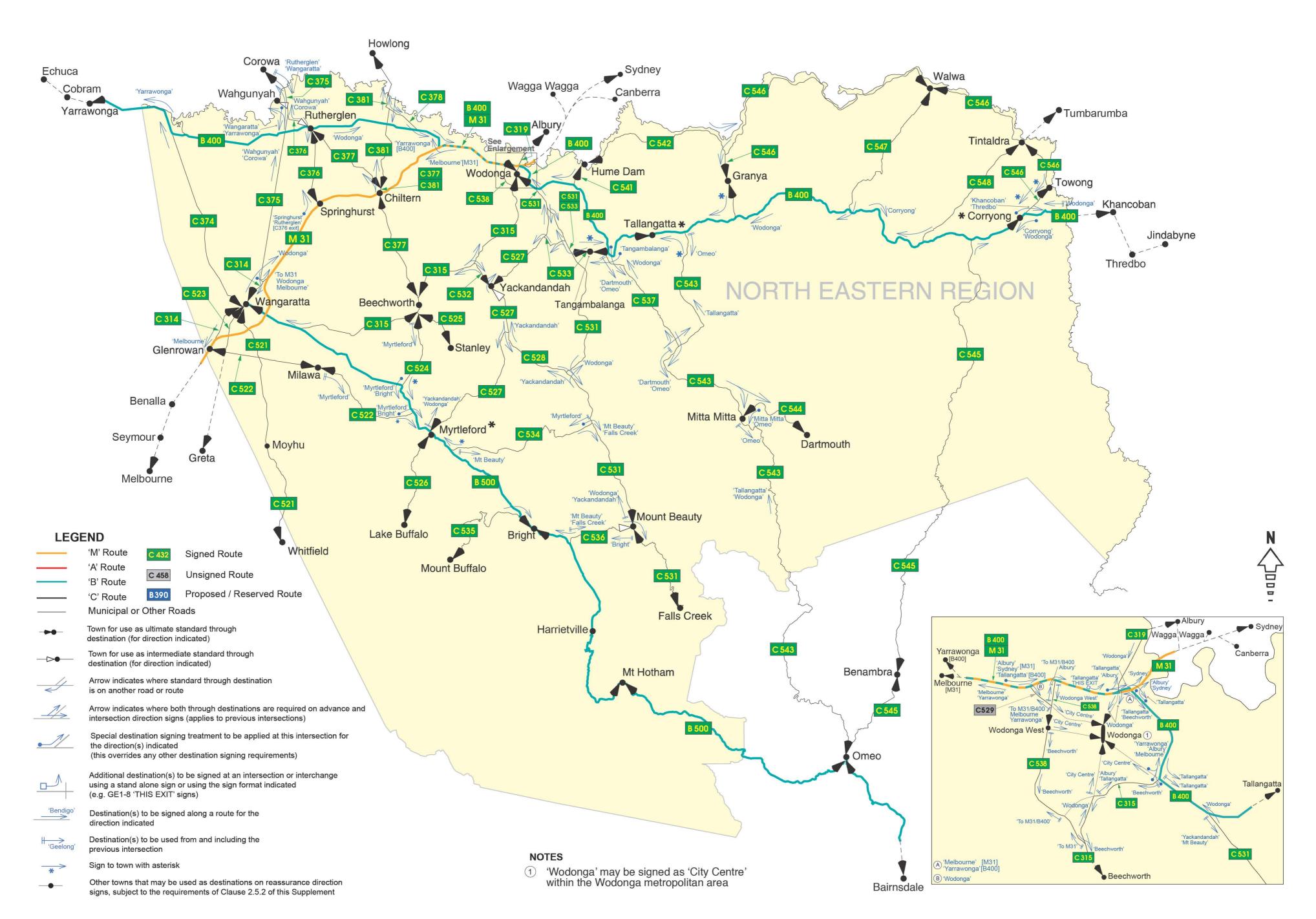


Figure 72: Northern Region – southern section



LEGEND 'M' Route C 432 Signed Route 'A' Route C 458 **Unsigned Route** Wangaratta 'B' Route Wodonga B390 Proposed / Reserved Route 'C' Route Municipal or Other Roads Benalla (Town for use as ultimate standard through destination (for direction indicated) Town for use as intermediate standard through destination (for direction indicated) Swanpool Arrow indicates where standard through destination is on another road or route Arrow indicates where both through destinations are required on advance and intersection direction signs (applies to previous intersections) Tatong Special destination signing treatment to be applied at this intersection for the direction(s) indicated (this overrides any other destination signing requirements) Euroa C 517 Whitfield Additional destination(s) to be signed at an intersection or interchange using a stand alone sign or using the sign format indicated (e.g. GE1-8 'THIS EXIT' signs) Destination(s) to be signed along a route for the 'Benalla' Shepparton direction indicated Destination(s) to be used from and including the previous intersection Sign to town with asterisk * Tolmie Other towns that may be used as destinations on reassurance direction signs, subject to the requirements of Clause 2.5.2 of this Supplement Merton Seymour Tallarook Trawool C 383 Mount Stirling 'Mansfield' [B300] 'Benalla' [B340] 'Alexandra' [B340] Mount Buller Alexandra Broadford Eildon 'Mansfield' C 311 C 725 Jamieson Flowerdale **Taggerty** Wandong Wallan Buxton 'Melbourne C 727 C 512 Beveridge Lake Mountain C 729 Whittlesea Kinglake 'Lake Mountain' Woods Point Healesville Yarra Glen Warburton Lilydale Ringwood

Figure 74: North Eastern Region – south-western section



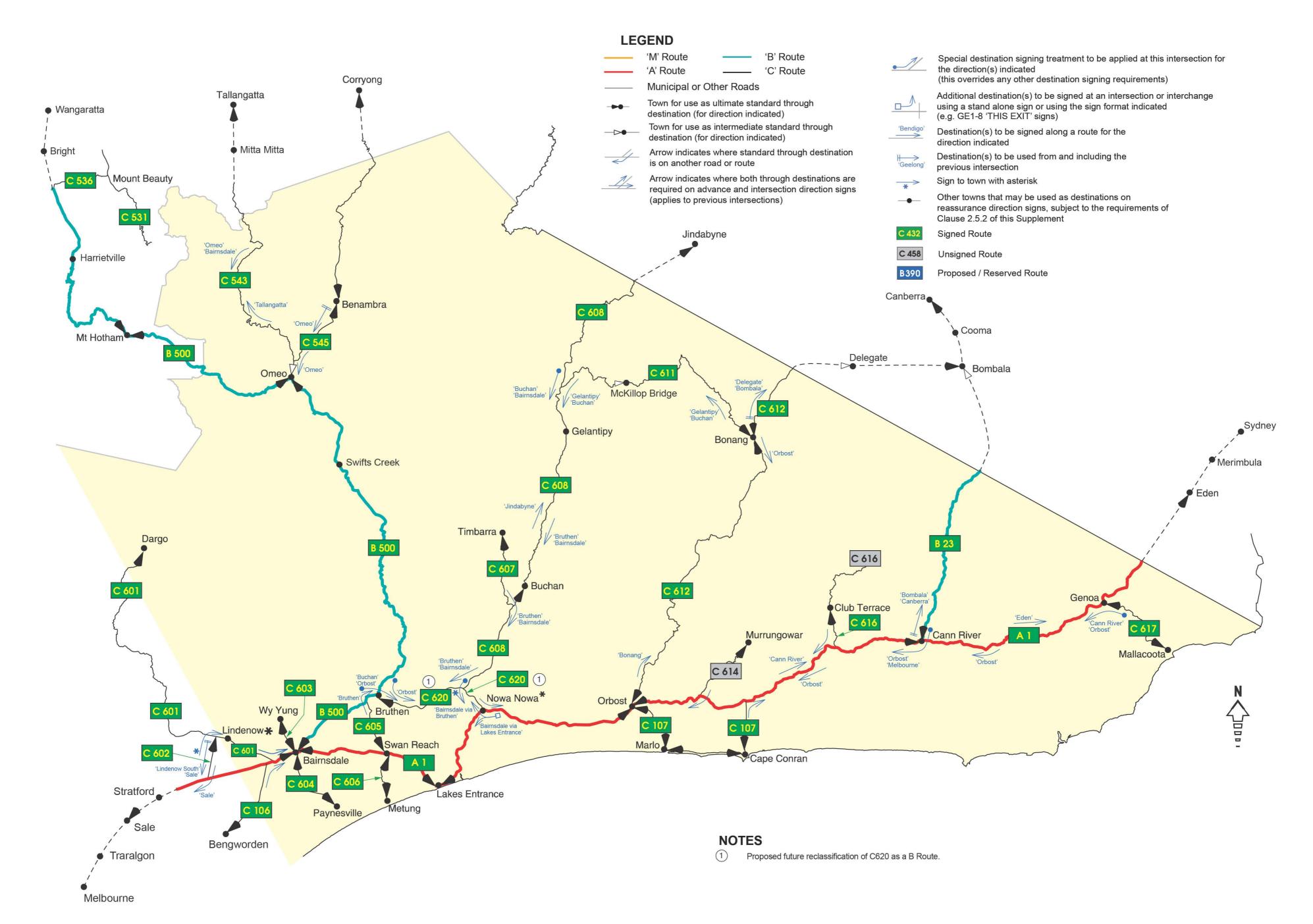


Figure 76: Eastern Region – East Gippsland

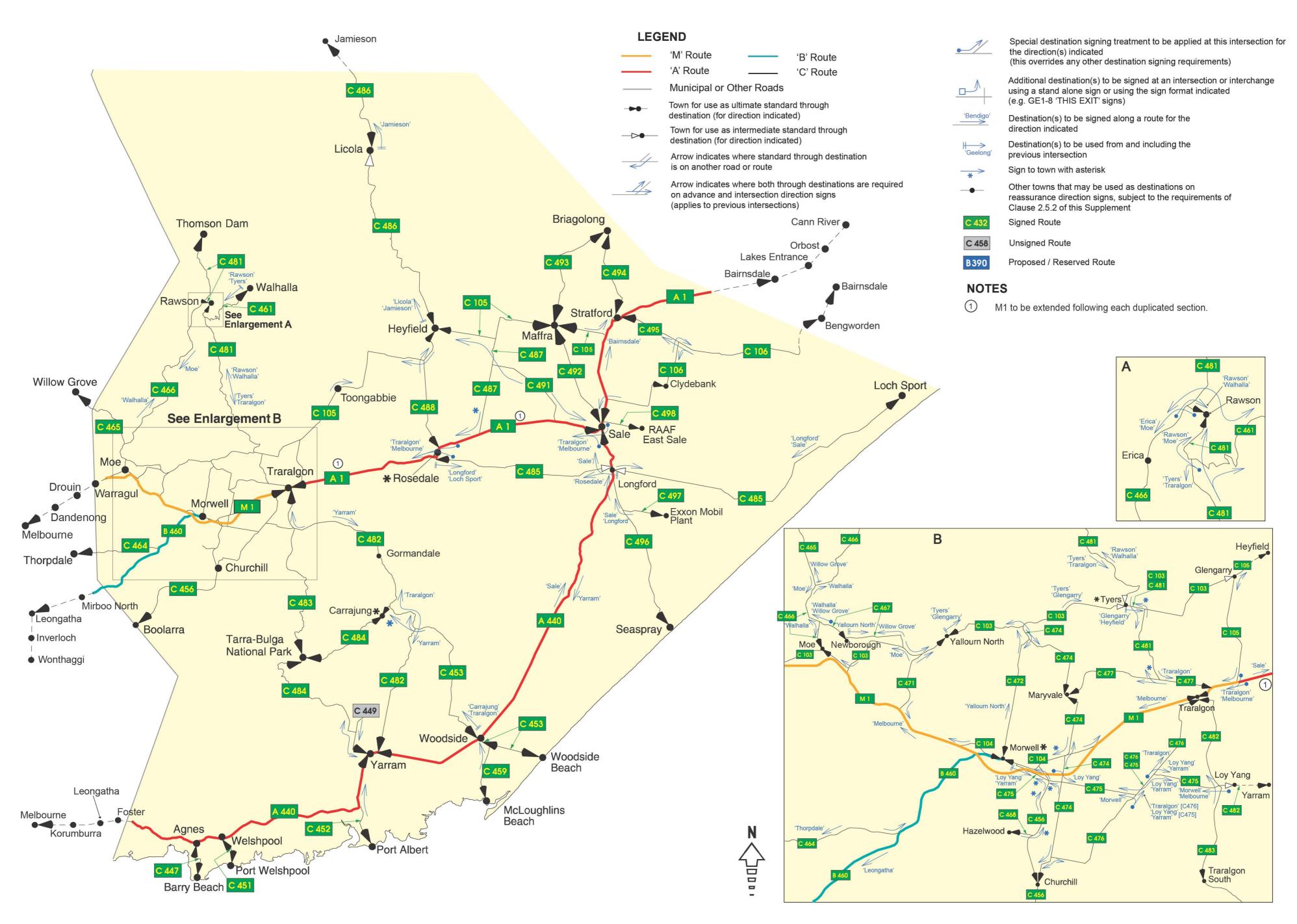


Figure 77: Eastern Region – Central Gippsland

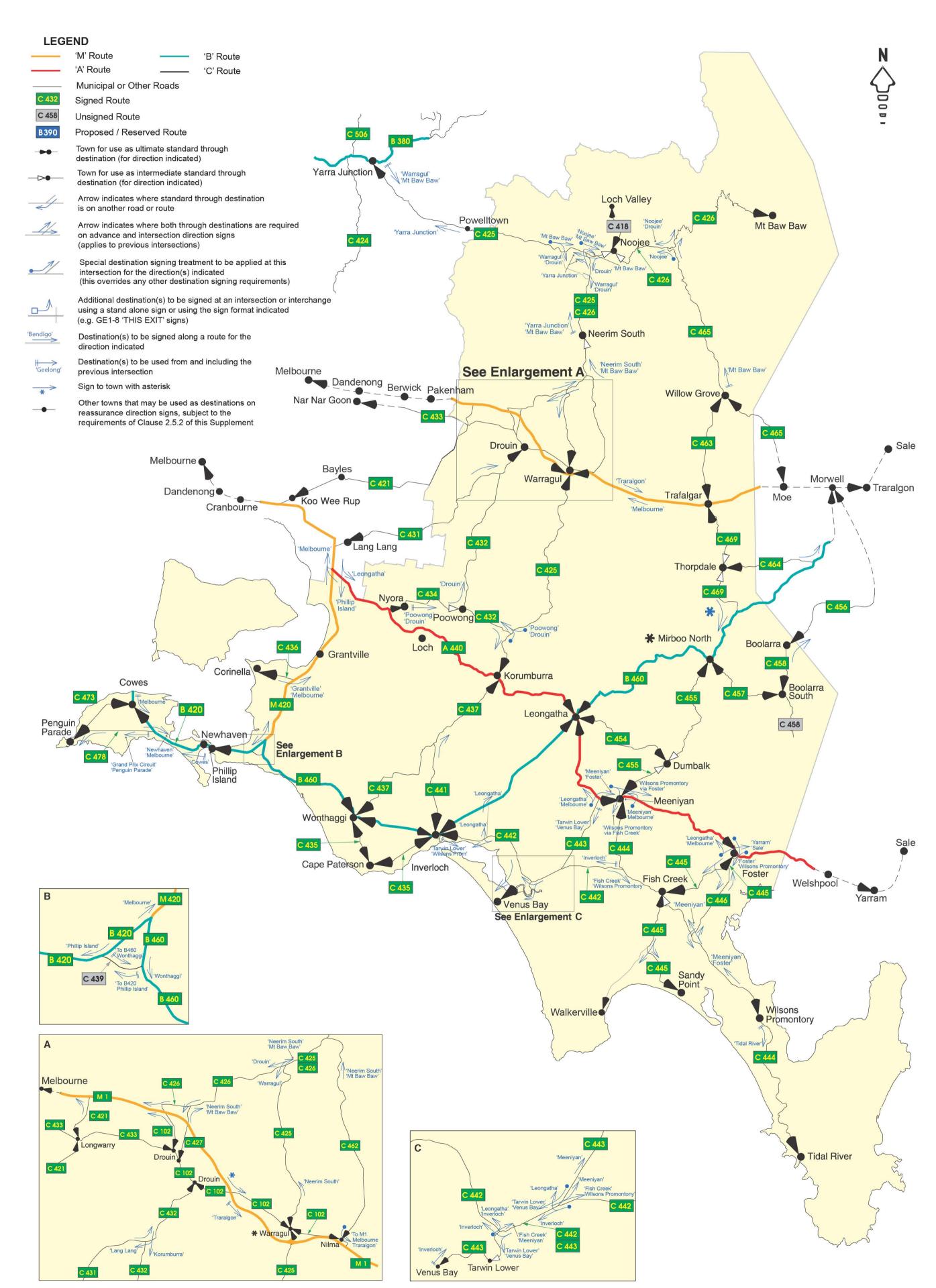


Figure 78: Eastern Region – South and West Gippsland

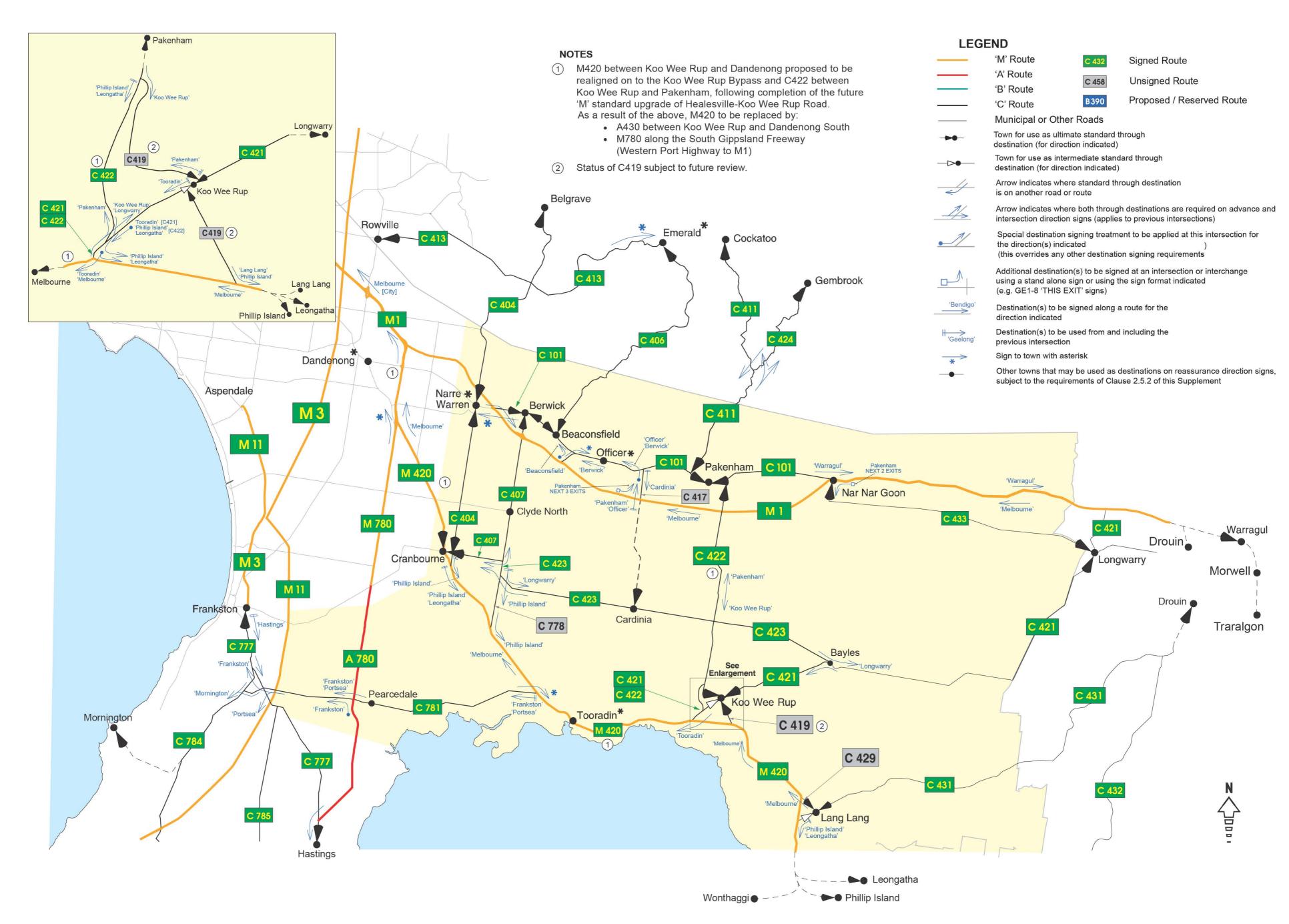


Figure 79: Metropolitan South East Region – outer south-east section

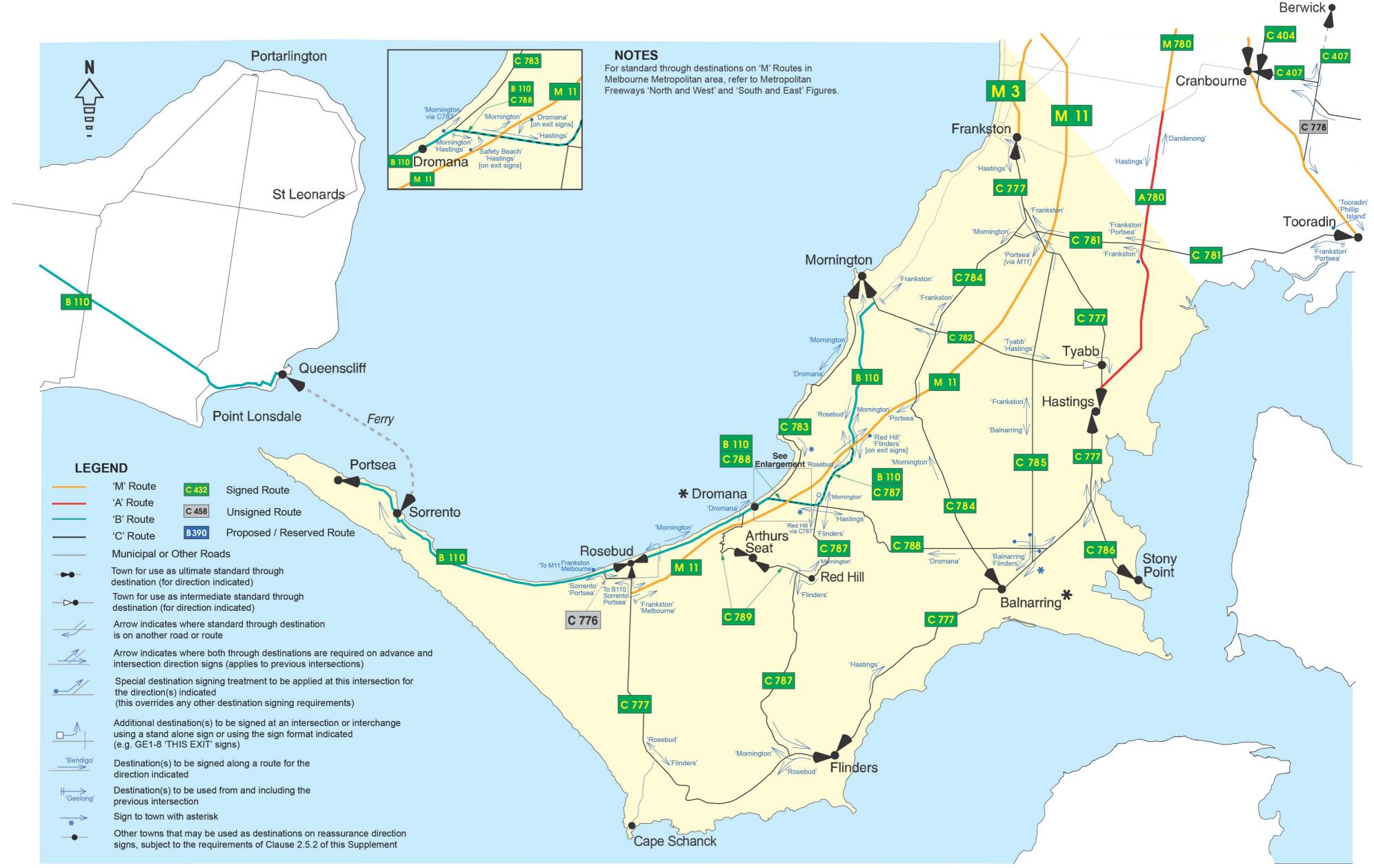


Figure 80: Metropolitan South East Region – Mornington Peninsula

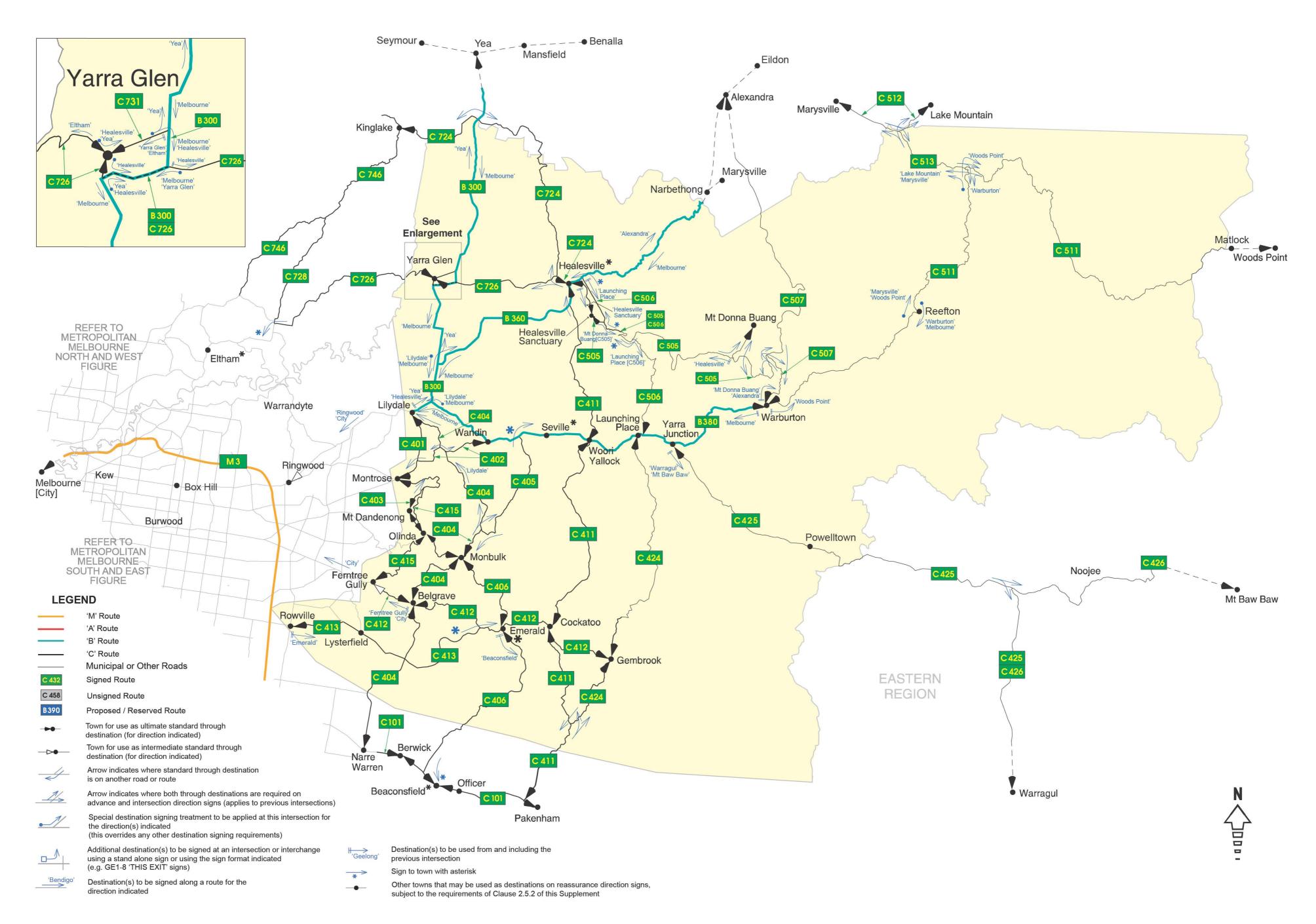


Figure 81: Metropolitan South East Region – Dandenong Ranges and Yarra Valley

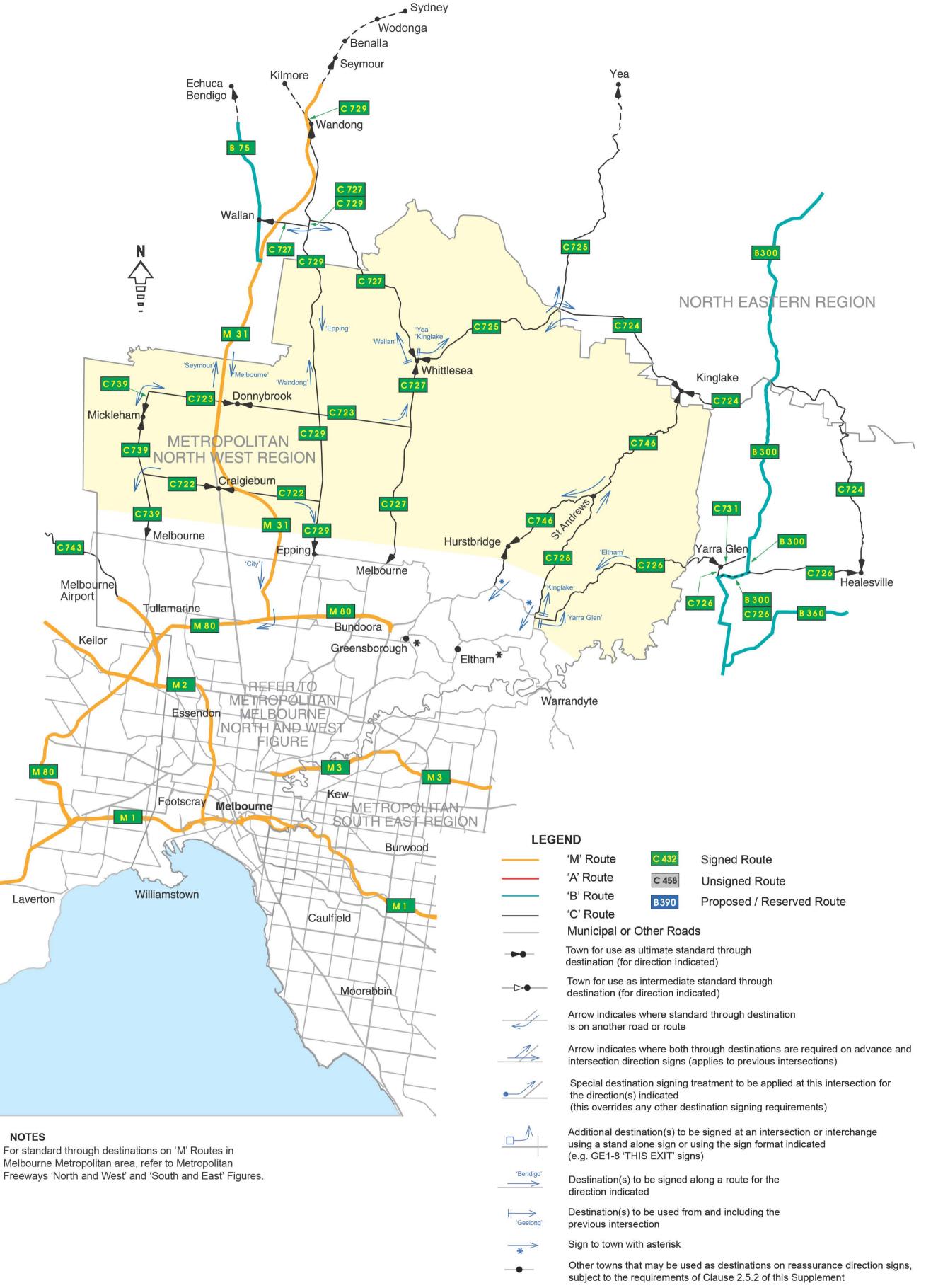
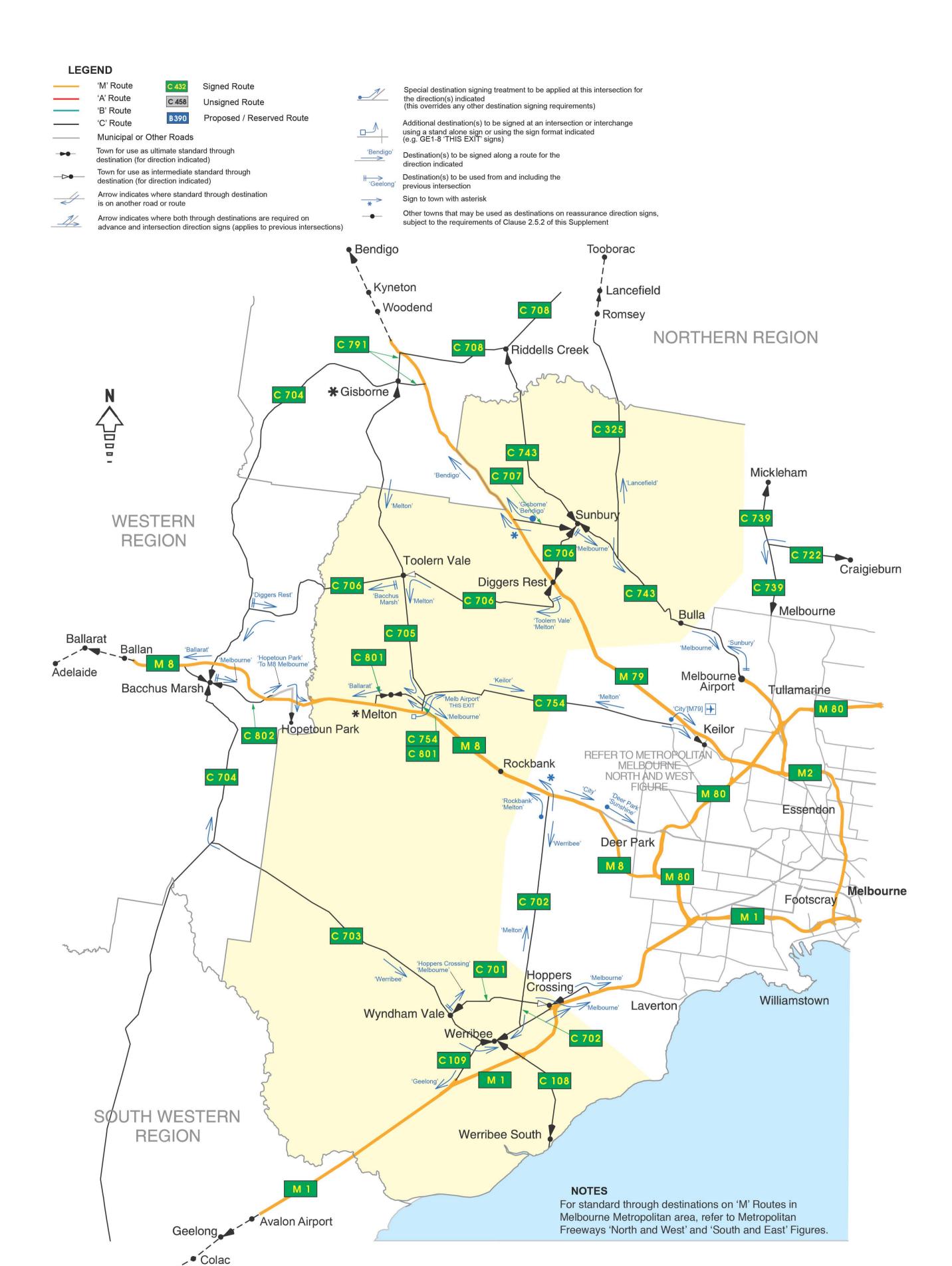


Figure 82: Metropolitan North West Region – outer north section



Warrnambool •

4. Additional Information – Other Information Signs

Roadworks Project Information Signs

Major Project Signs

Sign P1-V122 is used to indicate the location of land set aside for large projects, such as freeways or major bridges where the alignment has been determined and some property acquisition has taken place, but construction of the facility is not likely to commence for some time. The signs may be erected so as to be visible to passing traffic and on the approximate line or direction of the proposed facility where raising community awareness of the site is required. The signs are removed when raising community awareness of the site is no longer required or the project commences.



P1-V122

State Funded Road Projects

To introduce consistent and effective use of Victorian Government branding tools across a range of communications, the Victorian Government has developed the Victorian Government Branding and Authorisation Guidelines (2014). These guidelines aim to increase community recognition and awareness of the Victorian Government brand and ensure appropriate co-branding with government and non-government bodies.

Information relating to community information billboards (previously known as project information signs) can be found in the "Victorian Government Branding and Authorisation Guidelines" which are available under 'Guidelines' on the Victorian Department of Premier and Cabinet (DPC) website: http://www.dpc.vic.gov.au/index.php/communication/policies-and-guidelines.

The above guidelines state that general enquiries about the application of these guidelines should be directed to the relevant departmental officer in the first instance. For VicRoads, these enquiries should be directed to the Manager Marketing, Digital and Brand, VicRoads Communications and Stakeholder Engagement Department. The document also provides additional contacts for specific enquiries about the guidelines and their application including specific enquiries about designs.

Section 52.05 of the Victorian Planning Provisions shall be considered when assessing the suitability of these signs.

Safe System Road Infrastructure Program Projects (SSRIP)

Projects funded under Safe System Road Infrastructure Program (SSRIP) costing \$100,000 or more require the erection of a project information sign. Reference should be made to the signing requirements in the SSRIP Project Development Guidelines which is available from the VicRoads Network Programs department.

Section 52.05 of the Victorian Planning Provisions shall be considered when assessing the suitability of these signs.

Federally Funded Road Projects

The requirement for project information signs are covered in the signage guidelines located on the Department of Infrastructure and Regional Development website: http://investment.infrastructure.gov.au/publications/administration

Further advice in relation to project signs for federal funding should be directed to Senior Marketing Advisor, VicRoads Communications and Stakeholder Engagement Department.

Section 52.05 of the Victorian Planning Provisions shall be considered when assessing the suitability of these signs.

Federally Funded Blackspot Projects

The requirement for project information signs are covered in the signage guidelines located on the Department of Infrastructure and Regional Development website: http://investment.infrastructure.gov.au/publications/administration

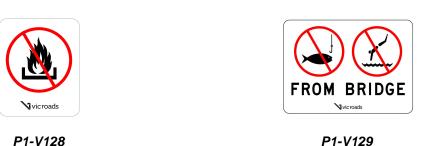
Section 52.05 of the Victorian Planning Provisions shall be considered when assessing the suitability of these signs.

Roadside Notices

The following notices may be erected on the road reserve where appropriate either facing traffic travelling along the road or located parallel to the road, depending on the purpose of the sign and the intended audience.

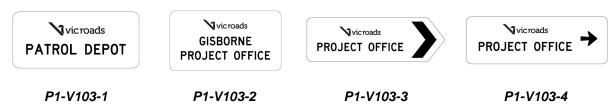
Wherever practicable, a standard sign shall be used. For a particular case, a special sign may be designed following agreement from the Manager – Network Standards.





Signing to Depots, Site, Project and Regional Offices

P1-V103 style signs are erected at or near the entrances to permanent or semi-permanent VicRoads establishments. For establishments such as patrol depots, site and project offices, the number of lines of legend should be limited to two, as far as practicable. However, an arrow may be added where a sign is remote from the entrance to the establishment. The inclusion of a geographical name is normally limited to the name of the regional, project or site office.



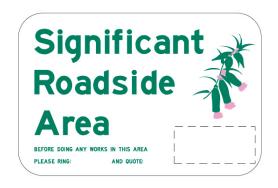
Adopt-A-Roadside, Significant Roadside Area, Revegetation and Landcare Signs

The Adopt-a-Roadside scheme enables communities and organisations to contribute to the maintenance, preservation and enhancement of the roadside.

Sign P1-V142 may be installed and positioned at each end of the "adopted section" by the relevant VicRoads Region as recognition for participating groups.

Significant Roadside Area signs (P1-V116) may be installed to inform travellers, road construction, maintenance and service authorities that a roadside area is important for its regional or local conservation value. The message on the sign includes the municipality or VicRoads Region as the contact.

In addition to Significant Roadside Area signs, smaller environmental marker signs (P1-V117) may be installed to indicate sites of special significance in order to ensure survival of the area.





P1-V116 P1-V117



P1- V142

Safety Camera Signs

Safety Camera (speed and red light camera) signs are installed to promote safe driving habits and alert drivers of the possible presence of enforcement devices. These signs include the following:

Speed and Red Light Cameras Operate Throughout Victoria (P2-V100)

This sign is generally installed at major state border entry points into Victoria (including air and sea access), on arterial roads in the urban areas, and on freeways and 'A' Roads in rural areas. They are erected at locations where the Police and Regional Director consider that the signs will promote safer driving habits.

SPEED & RED LIGHT CAMERAS OPERATE THROUGHOUT VICTORIA

P2-V100

Road Safety Cameras Operate in this Area (P2-V111 series)

This sign may be erected in areas in which fixed speed, red light or combination cameras have been installed. Approval of the Police and VicRoads should be sought prior to the use of these signs.



P2-V111 series

Speed Cameras Operate in this Area (P2-V103)

This sign may be installed after consultation with Police, Council and VicRoads in areas where there is a significant level of non-compliance with speed zones. The signs should only be erected where an initial police presence is established with a high level of enforcement. Enforcement may be reduced once compliance is established.



P2-V103

Speed Cameras Used in Construction Zones (P2-V105) Roadwork Speed Limits Enforced in Victoria (P2-V106)

The ROADWORK SPEED LIMITS ENFORCED IN VICTORIA (P2-V106) sign may be used at strategic locations and/or in construction zones to make drivers aware that police enforce construction speed zones in Victoria. The signs are erected at construction sites where non-compliance to speed zones is a safety concern.

The SPEED CAMERA S USED IN CONSTRUCTION ZONES sign is installed where it is intended to enforce roadworks speed limits by the use of speed cameras.

CFA Fire Restriction Sign

The CFA "Fire Restrictions Now in Force" signs (P4-V100) are erected during periods of fire restrictions. The signs are installed in accordance with guidelines issued by the CFA. On VicRoads managed roads, the signs shall be located at sites approved by the relevant VicRoads Regional Director.



P4-V100

EPA Signs

There are a number of EPA related signs which are erected to inform motorists of various messages, such as illegal dumping or littering. The signs are installed in accordance with guidelines issued by the EPA. On VicRoads managed roads, the signs shall be located at sites approved by the relevant VicRoads Regional Director.



P4-V108

Municipal Boundary and Welcome to Township Signs

General

VicRoads, under Section 66 of the Road Management Act 2004, has the power to control advertising, signs and bills on roads which VicRoads is the coordinating road authority. As such, Municipal Boundary signs and Welcome to (Township) signs require VicRoads written consent.

Furthermore, VicRoads must consider regulation 508 of the Road Management (General) Regulations 2005 when considering whether to give consent to these signs. This is in relation to the road safety implication of the sign. Further conditions that VicRoads has on these types of signs are described below.

Welcome to (Township) Signs

a) Urban and Rural Freeways

On freeways, erection of "Welcome to Township" signs is not permitted.

b) Declared Roads

The Regional Director may approve erection of "Welcome to (Township)" signs at township boundaries typically erected within 60 km/h or 70 km/h speed zones, or in 100 km/h to 60 km/h buffer zones associated with the town. The sign showing the township name shall have a total area not more than 3.0 sq m and may include part or all of the following design requirements:

- the legend "Welcome to Township of _ _ _ " in 200 mm maximum letter size
- municipal/region crest or district logo of maximum size of 350 mm square
- a municipal/region/township publicity phrase adopted by the council/region and limited to a maximum of 5 words, with a maximum letter size of 140 mm for capitals and 105 mm for lower case
- the legend "TOWNSHIP POP" or "POPULATION" in 120 mm maximum height letters and numerals may also be included.

The legend shall be not greater than:

- Township Name: 180 mm
- Name of Municipality: 140 mm

The municipal logo may be included on the sign.

Township boundary signs may be of the standard Town Name sign format (refer to Clause 5.1.6 of this Supplement) when it is considered larger style signs are not warranted.

Municipal Boundary Signs

a) Urban Freeways

On urban freeways, erection of municipal boundary signs is not permitted.

b) Rural Freeways and declared roads

Regional Directors may approve erection of municipal boundary signs, showing the municipal/region name (these signs face oncoming traffic and are different to sign G6-5). The signs shall not exceed 3.0 sq m in area and shall comply with the following design requirements:

- The legend "Welcome to the City/Shire of _ _ _ _ " with maximum letter size:
 - o Rural Freeway: 240 mm
 - o Declared Road: 200 mm
- Municipal crest or district logo of maximum size in the order of:
 - o Rural Freeway: 500 mm square
 - o Declared Road: 350 mm square
- A municipal publicity phrase adopted by the council and limited to a maximum of 5 words, and a maximum letter size of 140 mm for capitals and 105 mm for lower case.
- The legend "MUNICIPAL/REGIONAL POP" or "POPULATION" in 120 mm maximum height letters and numerals may also be included.

Other Requirements

The following additional conditions should be adhered to for Municipal Boundary signs and Welcome to (Township) signs:

The sign shall be of a shape that could not be confused with regulatory or warning signs.
 Rectangular, arched, and depending on colour selection, circular shapes are considered satisfactory.

- The colour scheme used on the sign could not be mistaken for a traffic sign (regulatory, warning, direction or other standard road sign).
- The signs shall be reflectorised.
- The signs, complete with posts and fittings, are to be supplied by the municipality at the municipality's cost. VicRoads approval is required for the erection of the sign and the sign shall be installed by the municipality to the satisfaction of VicRoads.
- The signs shall be erected on frangible posts and at an angle to the roadway which takes into account requirements for specular reflection.
- The number of signs erected shall be limited to one per approach to the town, and shall be located as near as practical to the Municipal or Township boundary as appropriate.
- The siting of signs shall not impact on the sight distance requirements at intersections, traffic signs or devices, or visibility to other road users, such as pedestrians.
- If any other size or type of sign is requested by a municipality, the Region should assess this proposal in consultation with the Network Standards group.
- Sign maintenance, replacement and removal costs are borne by the municipality.

Signs for or requested by other organisations

Section 52.05 of the Victorian Planning Provisions outlines the legal requirements for advertising and promotion signs that may be requested by a range of different organisations. Section 52.05 describes what types of signs require a permit, how the sign application is assessed, maximum display time and further requirements of the sign within certain environments.

Section 52.05 provides information on the legal requirements of the following signs (but not limited to):

- Signs in relation to elections
- Signs for government department and public authorities
- An advertising sign for a business
- Signs for special events
- · Signs for construction works on the land

VicRoads, under Section 66 of the Road Management Act 2004, has the power to control advertising, signs and bills on roads which VicRoads is the coordinating road authority. As such, signs listed in Section 52.05 of the Victorian Planning Provisions require VicRoads written consent.

Furthermore, VicRoads must consider regulation 508 of the Road Management (General) Regulations 2005 when considering whether to give consent to these signs. This is in relation to the road safety implication of the sign. Further conditions that VicRoads has on these types of signs are described below.

Sign Design and Location

Signs should be rectangular and comprise of a colour scheme that does not conflict with other traffic signs (black letters on a white background is preferred), with the background reflectorised. Only the essential wording, arrows, etc. will be permitted (i.e. the shortest message or name sufficient to convey the necessary information). Other requirements in Section 52.05 shall also be adhered to.

It should be noted for some particular signs, Section 52.05 outlines the maximum sign face area as well as other sign design requirements.

Signs with directional information

For signs that provide directional message to motorists, the guidance below should also be followed.

a) Advance Signs

Generally only a position sign (see (b) below) is allowed and is installed at or close to the entrance of the site or venue. Advance signs shall only be considered where, from a road safety perspective, it is beneficial to warn motorists of the upcoming site or venue (e.g. the turnoff is not readily visible) and not purely as a way for further advertising of the site or venue.

Where advance signs are permitted, the following shall be adhered to:

(Name of venue and/or event: 2 lines max: 15 letters/line max) 200m ON (LEFT OR RIGHT)

In advance of an entrance to the venue directly from the declared road:

The distance shown shall be in multiples of 50 m, and as a guide should be as follows:

- Speed zones above 80 km/h 300 m
- Speed zones up to 80 km/h 150 to 200 m

Advance signs may be provided in advance of a turn-off from a declared road via an unclassified or municipal road to the site or venue, which is not more than 2 km (urban) or 10 km (rural) away from the turn-off.

b) Position Signs

Position signs are installed at the entrance to the venue where signs on the property are insufficient to adequately direct visitors to the venue (including any necessary signs at a median opening on a divided road).

The sign design is the same as for advance signs, except that the bottom line is replaced by a horizontal arrow.

The legend on the sign shall be in Series D in accordance with AS 1744 and shall be of the following size:

- Approach speeds above 80 km/h 140mm
- Approach speeds up to 80 km/h 120mm.

In other respects, the layout of the legend on the signboard shall conform to the principles given in AS 1743.

VicRoads Administrative Requirements

The application requirements of Section 52.05 are used by VicRoads in assessing sign applications.

As part of the approval process:

- Proposals as to the number, type, size and location of signs shall be submitted to the relevant road authority for approval.
- For applications on VicRoads managed roads, the Regional Director will provide the organisation with a written approval indicating:
 - o the number and general description of the signs approved
 - the approved locations
 - o the day or days on which the signs are permitted to be displayed
 - that signs are to be erected to the satisfaction of a nominated VicRoads officer, and whether that officer is to be in attendance on the day the signs are first erected
 - that all costs associated with the supply, erection and removal of the sign, including any costs incurred by VicRoads as a result of the organization's failure to meet the required conditions, shall be met by the organisation
 - whether the Regional Director requires that additional traffic direction or control is to be provided, e.g. more signs than proposed, police control.
- Where an event recurs at regular intervals, the Regional Director may include in his letter of approval an indication that signs may continue to be displayed at the nominated times without further approval subject to the other requirements being met on each occasion.
- The signs are to be covered by a public risk liability insurance policy to a minimum of \$20 million indemnifying VicRoads from any liabilities should their presence or dislocation cause accident or injury.

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For enquiries regarding this supplement, please contact the VicRoads – Network Standards team via tem@roads.vic.gov.au or 9854 2417.