

# **Queensland Manual of Uniform Traffic Control Devices**

## **Part 4: Speed controls**

**November 2022**

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## About this document

This document sets out the principles for the implementation of speed control.

## How to use this document

This document is designed to be read and applied together with AS 1742.4-2020 *Manual of Uniform Traffic Control Devices Part 4* (AS 1742.4-2020). You must have access to the Australian Standard to understand what applies in Queensland.

This document:

- sets out how AS 1742.4-2020 applies in Queensland
- has precedence over AS 1742.4-2020 when applied in Queensland
- has the same section and clause numbering and headings as AS 1742.4-2020.

The following table summarises the relationship between AS 1742.4-2020 and this document:

Applicability	Meaning
Accepted	The Australian Standard section or clause is accepted.
Accepted, with amendments	Part or all of the section or clause has been accepted with additions, deletions or differences.
New	There is no equivalent section or clause in the Australian Standard.
Not accepted	The Australian Standard section or clause is not accepted.

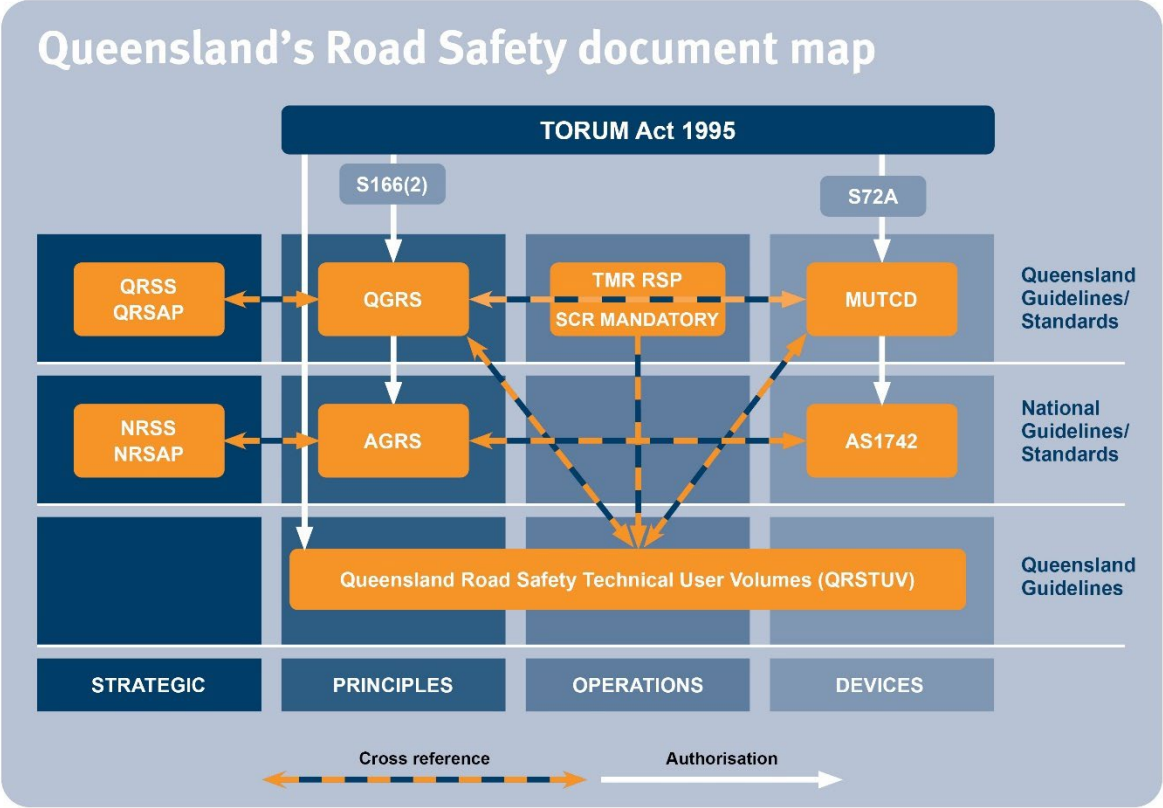
## Definitions

The following references apply when reading AS 1742.4-2020.

Reference to...	Means
AS 1742.4-2020	AS 1742.4-2020, as amended by this document For example, a reference to AS 1742.4-2020 means you must refer to the <a href="#">Australian Standard</a> Part 4, <b>and</b> Part 4 of the Queensland <i>Manual of Uniform Traffic Control Devices</i> (Queensland MUTCD). Throughout AS 1742.4-2020, references are made to other parts of the Australian Standards (for example, when reading Part 4, you may be referred to Part 3 for further information.) In this case, you must refer to the equivalent Part within the Queensland MUTCD first. Check the applicability of the equivalent Part in the Queensland MUTCD <b>before</b> referring to the referenced Australian Standard Part.
MUTCD	Queensland <a href="#">Manual of Uniform Traffic Control Devices</a>
QGRS	<a href="#">Queensland Guide to Road Safety</a>
QRSTUV	<a href="#">Queensland Road Safety Technical User Volumes</a>
<a href="#">Queensland (Q) series / Traffic Control (TC) signs</a>	Queensland (Q) series signs provide some additional examples of the Australian Standard signs used for Queensland.

This document is designed to be read and applied together with the MUTCD Part 4, AS 1742.4-2020, QGRS, AGRS and the QRSTUV. You must have access to these documents to understand what applies in Queensland.

A summary of the documents relevant to road safety practice in Queensland and their interrelationships follows:



## Relationship table

Section	Clause	Description	Applicability
	<b>Preface</b>		Accepted
	<b>Introduction</b>		Accepted with amendments
<b>1</b>	<b>Scope and general</b>		
	1.1	Scope	Accepted with amendments
	1.2	Normative references	Accepted
	1.3	Terms and definitions	
	1.3.1	<i>Expressway type road</i>	Accepted
	1.3.2	<i>Local area</i>	Accepted
	1.3.3	<i>Local street</i>	Accepted
	1.3.4	<i>May</i>	Accepted
	1.3.5	<i>Shall</i>	Accepted
	1.3.6	<i>Should</i>	Accepted with amendments
	1.3.7	<i>Speed limit</i>	Accepted
	1.3.8	<i>Speed zone</i>	Accepted
	1.3.9	<i>Traffic control device</i>	Accepted
	1.3.10	<i>Traffic route</i>	Accepted
	1.3.11	<i>85<sup>th</sup> percentile speed</i>	Accepted
	1.3.12	<i>Registered Professional Engineer of Queensland (RPEQ)</i>	New
	1.3.13	<i>Innovative treatments</i>	New
	1.4	Variation to treatments and Registered Professional Engineer of Queensland certification	New
1.5	Responsibility and authority for sign installation	New	
<b>2</b>	<b>Speed management</b>		
	2.1	General	Accepted with amendments
	2.1.1	<i>Objective of speed management</i>	Accepted with amendments
	2.1.2	<i>General principles</i>	
	2.1.2.1	Determining speed limits	Accepted with amendments
	2.1.2.2	Installation of speed limit signs	Accepted
	2.2	Types of speed zones	Accepted
	2.2.1	<i>Default speed limits</i>	Accepted with amendments
	2.2.2	<i>Speed zones</i>	Accepted with amendments
	2.2.3	<i>Length of linear speed zone</i>	Accepted with amendments
	2.2.4	<i>Time based speed zones</i>	Accepted with amendments
	2.2.5	<i>Offset speed zones</i>	Accepted with amendments

Section	Clause	Description	Applicability
3	<b>Speed limit signing</b>		
	3.1	Speed limit signs	
	3.1.1	<i>General</i>	Accepted
	3.1.2	<i>Sign size</i>	Accepted
	3.1.3	<i>Signs for linear speed zones and defaults speed limits</i>	Accepted with amendments
	3.1.4	<i>Signposting of linear speed limits</i>	Accepted with amendments
	3.1.5	<i>Signposting of default limits</i>	Accepted
	3.1.6	<i>Repeater signs</i>	Accepted with amendments
	3.1.7	<i>Typical applications of speed limit signs</i>	Accepted
	3.1.8	<i>Area speed zones</i>	Accepted
	3.1.9	<i>School zones</i>	Accepted with amendments
	3.1.10	<i>Shared zones</i>	Accepted
	3.1.11	<i>Supplementary plates</i>	Accepted with amendments
	3.1.12	<i>Variable speed limits</i>	Accepted with amendment
	3.1.13	<i>Speed limit reductions in high crash zones (black links)</i>	New
	3.1.14	<i>Speed reduction on approaches to controlled high-speed rural intersections</i>	New
	3.1.15	<i>Arterial roads through rural towns</i>	New
	3.1.16	<i>Hospital zone</i>	New
	3.1.17	<i>110km/h speed zones</i>	New
	3.1.18	<i>Speed limits at bridges or floodway due to structural deficiencies</i>	New
	3.1.19	<i>Placement of speed limit awareness signs on local streets</i>	New
	3.1.20	<i>New limit signage</i>	New
3.1.21	<i>25 km/h Personal Mobility Device footpath speed zone signage and pavement markings</i>	New	
3.2	Conflict with advisory speed signs	Accepted	
3.3	Pavement markings	Accepted with amendments	
3.3.1	<i>School pavement markings</i>	New	

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## Introduction

### Difference

Replace the reference to the *Guide to Road Safety, Part 3: Speed Limits and Speed Management* with *Guide to Road Safety, Part 3: Safer Speeds*.

### Addition

In the fifth paragraph, second sentence, add ", with the addition of 25 km/h speed limits being applicable for use on footpaths".

## 1 Scope and General

### 1.1 Scope

#### Addition

In the second sentence, following "temporary speed limits" add the words "at works on roads".

### 1.3 Terms and definitions

#### 1.3.6 Should

##### Addition

Where the word 'should' is used, it is considered to be recommended usage, but not mandatory. Any recommendation that is not applied must be based on sound traffic engineering judgement and documented."

#### 1.3.12 Registered Professional Engineer of Queensland (RPEQ)

##### New

A person who is registered as a Registered Professional Engineer of Queensland (RPEQ), under the *Professional Engineers Act 2002* (Queensland) with the Board of Professional Engineers of Queensland.

#### 1.3.13 Innovative Treatments

##### New

Innovative treatments that provide improved safety, efficiency, and/or value-for-money outcomes are encouraged. Such treatments may include:

- a) innovative use of current devices,
- b) alternative device layouts using existing and/or improved devices, and/or
- c) new devices or practices.

New or improved devices, treatments, or practices require approval by the Department of Transport and Main Roads (see Clause 1.19 for guidance about variations to optimal treatments) prior to their use or adoption.

For trials of new or innovative traffic control devices, treatments or practices, a submission in accordance with the requirements of the Queensland *Manual of Uniform Traffic Control Devices* (Queensland MUTCD) Part 1 Clause 1.13 shall be submitted to

[TrafficEngineering.Support@tmr.qld.gov.au](mailto:TrafficEngineering.Support@tmr.qld.gov.au).



#### **1.4 Variation to treatments and Registered Professional Engineer of Queensland certification**

##### New

This Part of the *Manual* contains mandatory requirements (*shall*), recommendations (*should*) and options (*may*). The application of these mandatory requirements and recommendations is intended to provide the optimal level of safety and traffic efficiency. It is acknowledged that, in some instances, variations to these requirements and recommendations may be necessary and, as such, variations to these requirements and recommendations may be undertaken as follows:

- a) Where recommendations (*should*) are not adopted, a risk assessment shall be undertaken and certified by a Registered Professional Engineer of Queensland (RPEQ).
- b) Where mandatory requirements (*shall*) are not adopted, a risk assessment shall be undertaken and certified by an RPEQ.

Notifications of variations to mandatory requirements (including all relevant information) shall be emailed to [TrafficEngineering.Support@tmr.qld.gov.au](mailto:TrafficEngineering.Support@tmr.qld.gov.au) for information purposes and for the benefit of identifying potential future practice changes – not for approval or endorsement. These variations may include learnings that may be attributed to the variation of a shall requirement, such as operational, cost or safety impacts.

- c) Where innovative treatments (see Clause 1.3.13) that are outside the scope of the Queensland MUTCD are proposed to be adopted, a risk assessment shall be undertaken and certified by an RPEQ.

All proposed innovative treatments require approval by Transport and Main Roads prior to their use or adoption. Requests for approval of innovative treatments (including all relevant information) shall be emailed to [TrafficEngineering.Support@tmr.qld.gov.au](mailto:TrafficEngineering.Support@tmr.qld.gov.au). As part of an approval to use or trial an innovative treatment, Transport and Main Roads may require that the application provides a detailed evaluation report on the performance and effectiveness of the treatment. Transport and Main Roads may use the results of the evaluation to identify potential future practice changes to this Part of the *Manual*.

- d) The use of options (*may*) is not a variation to the optimal treatment and does not require certification by an RPEQ.

#### **1.5 Responsibility and authority for sign installation**

##### New

Responsibility and authority for installation, removal or change of official traffic signs, have been specified in MUTCD Part 2. Procedures for the recording of regulatory signs on roads controlled by the Department of Transport and Main Roads, are given in the Queensland MUTCD Part 1 *General introduction and index of signs* Appendix B. Form M994 (available on the departmental website) is one of the available tools to capture sign changes on departmental controlled roads. Requirements for recording procedures of regulatory signs on roads not controlled by Transport and Main Roads, shall be sought from the relevant local government. Minimum items to keep on records shall be the sign type, road name, location, direction of travel, date and time of change, person who authorised the change and person who implemented the change. Other information might be required to be captured as there may be several changes on a road that require additional information to demonstrate that the record is of a specific sign.

## **2 Speed Management**

### **2.1 General**

#### Addition

Refer to the *Queensland Guide to Road Safety Part 3: Safer Speeds* for the process of setting speeds limits in Queensland.

#### **2.1.1 Objective of speed management**

##### Addition

Speed limit setting shall consider the movement and place functions of a road and its users.

#### **2.1.2 General Principles**

##### **2.1.2.1 Determining speed limits**

###### Difference

Replace this entire clause with relevant section in the *Queensland Guide to Road Safety Part 3: Safe Speed*.

### **2.2 Types of speed zones**

#### **2.2.1 Default speed limits**

##### Difference

Replace this entire clause with relevant section in the *Queensland Road Safety Technical User Volumes (QRSTUV): Guide to Speed Management*.

#### **2.2.2 Speed zones**

##### Difference

Replace this entire clause with relevant section in the QRSTUV: *Guide to Speed Management*.

#### **2.2.3 Length of a linear speed zone**

##### Difference

Replace this entire clause with relevant section in the QRSTUV: *Guide to Speed Management*.

#### **2.2.4 Time based speed zones**

##### Difference

Replace this entire clause with relevant section in the QRSTUV: *Guide to Speed Management*.

#### **2.2.5 Offset speed zones**

##### Difference

Replace this entire clause with relevant section in the QRSTUV: *Guide to Speed Management*.

### 3 Speed limit signing

#### 3.1 Speed limit signs

##### 3.1.3 Signs for linear speed zones and default speed limits

###### Difference

Replace the last paragraph of item (c) with the below:

The Speed Limit AHEAD sign (G9-79) shall be used to inform drivers of the speed limit they are about to enter where there is a reduction in speed limit of more than 20 km/h.

Where the Speed Limit AHEAD sign is used, signs shall be installed as follows:

- a) The Speed Limit AHEAD (G9-79) sign shall be installed along linear speed zones only and not for speed limit areas.
- b) The Speed Limit AHEAD (G9-79) sign shall be installed at least 300 m in advance of the start of the lower speed zone.
- c) Where installed on a divided road, the Speed Limit AHEAD (G9-79) sign and the Speed Limit (R4-1) sign shall be duplicated on the central median.
- d) The size of the signs shall comply with the requirements of Table 3.2.

The Speed Limit AHEAD (G9-79) sign may also be installed where:

- i) there is insufficient sight distance to the Speed Limit (R4-1) sign demarcating the start of a lower speed zone
- ii) the start of the lower speed zone is on a downhill approach
- iii) under normal driving expectations, the change in speed zone may not be apparent to the motorist, and/or
- iv) a speed limit has been established on a speed zone with a High Road Risk Metric (RRM) as identified in Stage 3 of the Speed Limit Review process described in the *Queensland Road Safety Technical User Volumes (QRSTUV): Guide to Speed Management*.

Buffer zones are not used in Queensland. Where there is a reduction in speed limit exceeding 20 km/h and there is no change in the speed environment leading up to the lower speed zone, the Speed Limit AHEAD (G9-79) sign shall be installed at least 300 m in advance of the reduced speed zone.

##### 3.1.4 Signposting of linear speed limits

###### Addition

It is important that Speed Limit (R4-1) signs are installed at locations where they are not obstructed by other signage, roadside furniture, overhanging branches or vegetation and are visible to drivers.

Distance from intersections, mounting height and lateral displacement of signs are all very important as correct placement of signs assists in maintaining uniformity in travel speeds and greater compliance with the posted speed limit. Speed Limit (R4-1) signs should be installed 30–50 m from intersections in urban areas and 80–100 m from intersections in rural areas. The distance is from the intersection or if merge lanes exist from the end of the taper. For further information regarding the placement and mounting height of signs, see Part 1 of this *Manual*.

At the boundaries of non-built-up areas, built-up areas and at all changes in speed zones, Speed Limit (R4-1) signs shall be provided. Speed signs are normally erected on the left side of the roadway, except on a divided road where the signs may be duplicated on the median. In special circumstances, signs may be duplicated on the right-hand side of the roadway on two-lane roads where specified herein.

At expressway, freeway and motorway ramps where the length and/or geometry of the ramp does not permit the installation of a Speed Limit AHEAD (G9-79) sign and the change in speed limit exceeds 40 km/h, Speed Limit (R4-1) signs shall be 'C' size minimum.

A change from a lower to a higher zoned speed limit should not occur just in advance of a section of low speed value alignment or a hazard or other feature requiring a speed reduction. The lower limit should be carried through or past the section or feature.

On divided roads, Speed Limit (R4-1) signs at the start and end of linear speed zones shall be provided on both sides of the roadway. While they are located in pairs, the signs may be separated by up to 200 m.

Where necessary on undivided roads, Speed Limit (R4-1) signs at the start and end of linear speed zones should be provided on both sides of the roadway, particularly where there is a reduction in speed limit.

On expressways, freeways, and motorways, only the largest Speed Limit (R4-1C and R4-1D) signs appropriate to the application shall be used. The location of each sign is a matter for special consideration.

### **3.1.6 Repeater signs**

#### Difference

The following replaces that in the Standard:

Repeater signs are provided to reinforce signed speed limits. These signs are typically positioned on the left-hand side of the road (except for divided and one-way roadways) as follows:

- a) in signed linear speed zones, as per Table 3.1.6
- b) within area speed zones, where required, to remind road users of the area speed limit
- c) at intersections of major traffic carrying roads, for the benefit of traffic which has turned, these signs should be placed at a suitable distance beyond the intersection or beyond the end of the taper if merge lanes exist
- d) repeater signs should be placed on both sides of the roadway on divided roads and one-way roadways; while they are usually located in pairs, the repeater signs may be separated longitudinally by up to 200 m
- e) consideration should also be given to installing repeater signs past each rest area.

In linear speed zones, repeater signs shall be Size B Speed Limit (R4-1B) signs except in the following situations:

- a) expressways, freeways, and motorways where Size C Speed Limit (R4-1C) signs are generally used, Size D Speed Limit (R4-1D) signs may be used where greater need exists for sign prominence due either to competing visual stimuli or the need to emphasise the message, or where there is excessive lateral displacement of the sign.

- b) in urban areas with a 70 km/h or less speed limit, Size B Speed Limit (R4-1B) signs should be used, but Size A Speed Limit (R4-1A) signs may also be used, provided it is sufficiently conspicuous against the urban visual background.
- c) in local, low speed environment roads with 50 km/h or less, Size A Speed Limit (R4-1A) signs may be used.
- d) where the zoned speed may be different from that which drivers might expect, such as by virtue of street lighting or roadside environment, consideration should be given to more frequent installation of repeater signs.
- e) for the first repeater sign in the lower speed zone, which should be installed 300 m into the speed zone.
- f) where variable speed limit signs have been used at the start of the speed zone, where repeater signs shall also be variable speed limit signs.
- g) a repeater sign, which should be installed if offset speed zones have permitted U-turns.

**Table 3.1.6 – Spacing of speed limit repeater signs**

Speed Limit (km/h)	Spacing of repeater signs
40	300 m <sup>1</sup>
50	300 m
60	1.0 km
70	1.5 km
80	3.0 km
90	3.0 km
100	17.0 km
110	18.5 km

Notes

<sup>1</sup> Length of speed zones in this speed environment is generally too short (for example, school zone), where repeater signs are rarely needed.

### 3.1.9 School zones

#### Difference

The following replaces that in the Standard.

A standard SCHOOL ZONE (R4-Q01) sign designates the start of a school zone. It is installed to regulate the speed of traffic during the school zone times, as shown in Figure 3.1.9(a).

Where a school zone begins at an intersection and the normal speed limit on the road is 60 km/h or higher, a Speed Limit (R4-1) sign need not be installed in advance of the SCHOOL ZONE (R4-Q01) sign. At major intersections or where a significant volume of non-local traffic is expected, a Speed Limit (R4-1) sign should be installed.

Where the length of a school zone is greater than 300 m, or where there are intersections within the school zone, or the environment does not give sufficient cues to the driver that they have already entered a school zone, repeater school zone signs should be installed at appropriate locations through the zone to remind drivers of the school zone speed limit. Where enhanced school zone signs are installed at the start of the school zone, standard school zone signs (R4-Q01) should be installed as repeater signs, unless length of school zone is greater than 500 m.

The end of a school zone is indicated by a Speed Limit (R4-1) sign, showing the speed limit applying beyond the zone, unless the road ends at a T-intersection or in a cul-de-sac – in which case, a Speed Limit (R4-1) sign is not installed.

For school zones in 90 to 110 km/h zones only, a SCHOOL ZONE AHEAD (R4-Q03) sign shall be installed at least 300 m in advance of the school zone on each approach. In situations where the sign is not clearly visible, these signs (SCHOOL ZONE (R4-Q01) and SCHOOL ZONE AHEAD (R4-Q03)) should be installed on both sides of the road.

Where a side road intersects within a school zone, a school zone sign is not installed on the side road on the approach to the school zone (see Note 3 on Figure 3.1.9(b)). In this instance, the SCHOOL ZONE (R4-Q04) sign is installed opposite the terminating street for the benefit of vehicles that are turning into the school zone. If infrastructure or private accesses precludes the installation of the SCHOOL ZONE (R4 Q04) sign, repeater SCHOOL ZONE (R4-Q01) signs should be installed.

**Figure 3.1.9(a) – School zone signs approved for use in Queensland**

**Standard school zone sign**



*R4-Q01*

This sign is installed at most school on two-lane roads and is also used as a repeater sign in school zones

**School zone sign with double arrow**



*R4-Q04*

This sign is installed opposite terminating roads within school zones

**Enhanced school zone sign**



*TC1783*

This sign is used at:

- split-campus schools
- schools on multilane roads
- schools that operate outside the standard school zone times
- at schools assessed as having higher risk

**School zone ahead sign**



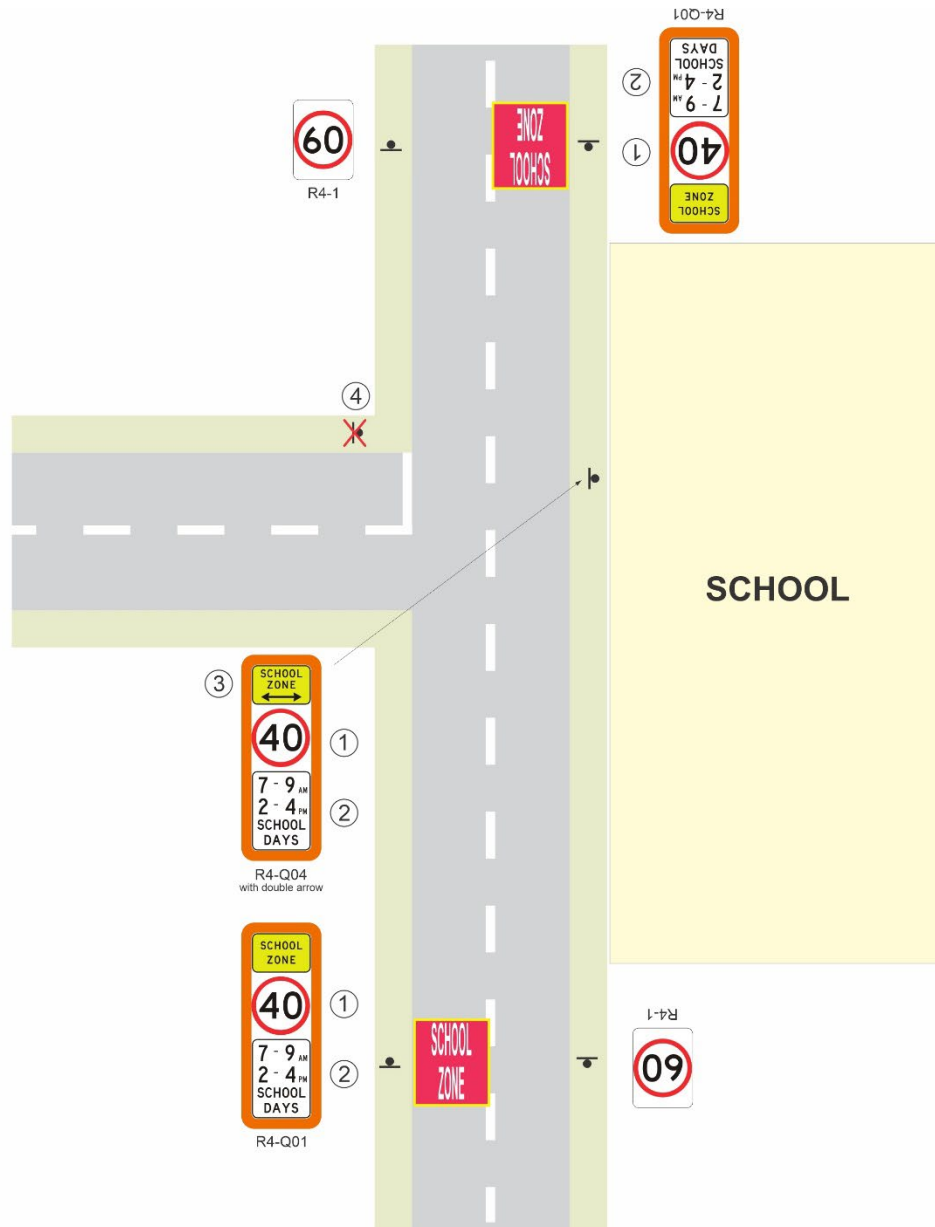
*R4--Q03*

This sign is used on high speed roads 90 to 110 km/h speed zones in advance of the school zone.

A black annulus is used with this sign.

A typical layout for a school zone on a two-lane road is shown in Figure 3.1.9(b).

**Figure 3.1.9(b) – Typical school zone signing treatment**



**Notes:**

1. For appropriate school zone speed limit, refer to QRSTUV: *Guide to Speed Management* Section 7.1.4.
2. For times of operation, refer to QRSTUV: *Guide to Speed Management* Section 7.1.5.
3. The double ended arrow is added to the SCHOOL ZONE (R4-Q04) sign when used opposite a terminating road. Refer to Figure 3.1.9(a).
4. SCHOOL ZONE (R4-Q01) signs are not generally installed on side roads on approach to an intersection within a school zone.

**3.1.11 Supplementary plates**

**Addition**

For dot point C, add the following at the end of the first paragraph:

Speed limit signs should be provided only on the left-hand side of ramps.



Speed limit signs should be provided only on the left-hand side of ramps, except on multi-lane ramps where the Speed Limit (R4-1) sign shall be duplicated on the right-hand side and the sign (R9-17) shall also be installed.

For the single lane ramps, any existing speed limit signs provided on the right-hand side should be relocated to the left-hand side. In situations where these signs are duplicated, the sign on the right-hand side should be removed.

### **3.1.12 Variable speed limits**

#### Addition

For signage installation details of VSLS on roads operating in motorway, long bridge and tunnel environments, see the [Queensland Guide to Traffic Management](#) Part 10 *Transport Control – Types of Devices* Clause 7.7 *Electronic speed limit signs*.

### **3.1.13 Speed limit reductions in high crash zones (black links)**

#### New

This clause describes signage requirements of a Black Links speed zone as described in QRSTUV: *Guide to Speed Management*.

The Speed Limit (HAZARD) (TC1797) sign at the start of the speed zone shall be a minimum 'B' size (refer Table 3.1.13(a)).

Speed Limit (HAZARD) (TC1797) signs, including all repeater signs, will be on high visual impact (fluorescent orange) target board.

In some instances, it may be necessary to supplement the Speed Limit (HAZARD) (TC1797) sign at the start of the speed zone with pavement markings (numerals).

Advance warning of the change in speed limit shall be provided by installing a Speed Limit AHEAD (G9-79) sign a minimum distance of 300 m in advance of the start of the speed zone. At the start of the speed zone and at regular intervals, Special Warning Sign TAKE CARE HIGH CRASH ZONE NEXT ... km (TC1559\_1 and TC1559\_2) signs should also be installed to inform motorists of the reason for the reduced speed limit.

On two-lane two-way roads, all signs shall be installed on the left-hand side of the roadway facing traffic in the direction of travel. On divided roads where the width of the median permits, signs shall be duplicated on the right-hand side in the median. Where there are intersections and junctions within the speed zone that have high traffic volumes, repeater speed limit signs shall be spaced so that they are installed close to the intersection for the benefit of turning traffic.

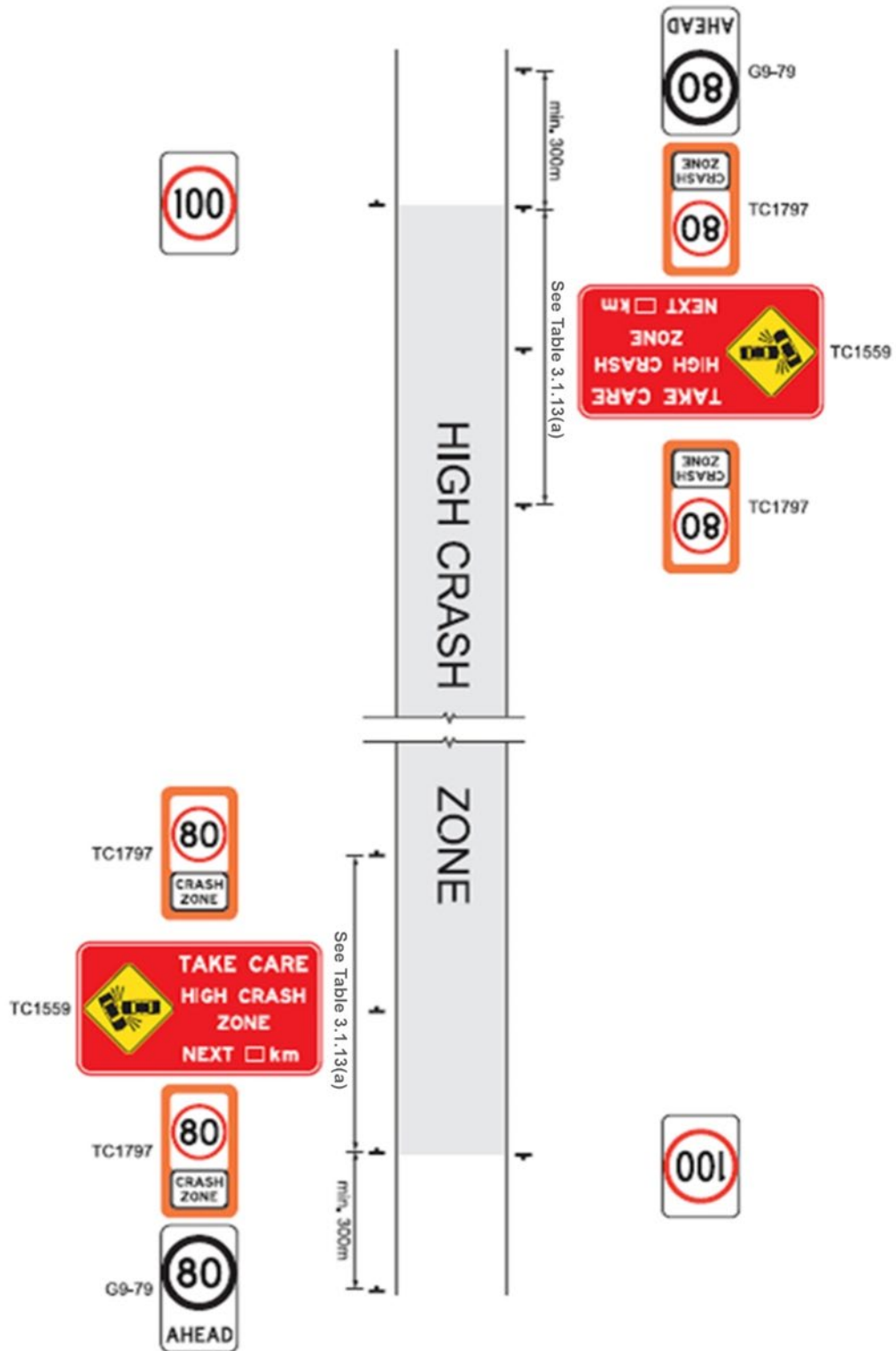
**Table 3.1.13(a) – Sign size and location**

<b>Speed limit</b>	<b>Equal to or greater than 70 km/h</b>
Size of Speed Limit AHEAD (G9-79) sign	B
Size of Speed Limit (HAZARD) (TC1797) sign at start of speed zone	B
Size of signs on on-ramps	B
Size of repeater speed limit signs	B
Location of first repeater sign within speed zone	300 m
Location of subsequent repeater signs	1 km

To ensure drivers are able to differentiate between the speed environment in the reduced speed zones and the speed environment in a regular speed zone, specific signage should be installed to warn drivers that they are entering a speed zone where the speed limit has been reduced due to the poor safety performance of the section of road.

A typical signage treatment at high crash zone is shown in Figure 3.1.13.

Figure 3.1.13 – High Crash Zone



### **3.1.14 Speed reduction on approaches to controlled high-speed rural intersections**

#### New

Where the speed limit on approaches to rural intersections with either a high crash history or a high potential crash risk is reduced in accordance with QRSTUV: *Guide to Speed Management*, the following requirements apply:

- 'B' sized Speed Limit (Hazard) (TC1797) signs shall be installed
- signs shall be duplicated on both sides of the roadway
- signs shall have a fluorescent orange target board
- the length of the speed zone shall not exceed 300 m
- Speed limit AHEAD (G9-79) signs shall be used in accordance with Clause 3.1.3.

Additional warning signs, such as TAKE CARE HIGH CRASH SITE (TC1558) on the approaches may be installed.

Appropriate road lighting in accordance with Transport and Main Roads [Technical Specifications](#) shall be considered.

#### **3.1.14.1 Implementation on approaches to controlled high-speed rural intersections**

##### New

The length of the speed zone shall not exceed 300 m and Speed Limit AHEAD (G9-79) signs shall be used in accordance with Clause 3.1.3. Where an adjacent section will be left with a short speed zone (refer to Section 3.4 of QRSTUV: *Guide to Speed Management*), the reduced speed limit determined in accordance with this clause may be extended beyond 300 m to avoid frequent changes in speed zones.

The size of the Speed Limit (HAZARD) (TC1797) signs shall be determined in accordance with Table 3.1.13(a). Where installed on an uncontrolled approach, these signs shall be duplicated on both sides of the roadway and shall have a fluorescent orange target board. Where installed on a controlled approach, the signs may be duplicated.

It may be necessary to install additional warning signs on the approaches to the reduced speed zones to warn drivers of the reason for the speed limit reduction (guidance on supplementary signs can be obtained from Transport and Main Roads' Safer Roads Team at Engineering and Technology branch via email [saferroads@tmr.qld.gov.au](mailto:saferroads@tmr.qld.gov.au)).

### **3.1.15 Arterial roads through rural towns**

#### **3.1.15.1 Signing requirements**

##### New

Where a speed limit less than 60 km/h is applied to arterial roads through rural towns, the following apply:

- 'C' size Speed Limit (R4-1) sign shall be installed on the left-hand side of the carriageway at the start of the speed zone, and
- supplementary pavement markings may be installed, and

- the Speed Limit AHEAD (G9-79) sign shall be installed 300–500 m in advance of the start of the speed zone in accordance with the requirements of Clause 3.1.3.

The road authority may sign speed limits at entrances to rural towns with Township Entry Treatments (TETs). Guidance on the implementation of TETs is available in [Technical Note TN170 Township Entry Treatments \(TETs\)](#) in the Road Safety category.

### **3.1.16 Hospital zone**

#### New

A hospital zone is a High Active Transport User Areas (HATUA) zone, where the speed limit applied to a linear section of road or area is associated with the presence of a hospital. A hospital zone shall be indicated by use of the Speed Limit (R4-1) sign indicating the speed limit with a supplementary sign (R4-Q07) with the words 'Hospital Zone'.

### **3.1.17 110 km/h speed zones**

#### New

Signing of 110 km/h speed zones shall comply with special requirements as specified in the QRSTUV: *Guide to Speed Management*.

The Speed Limit (R4-1) sign should be installed on the left-hand side of the carriageway to indicate the start of the 110 km/h speed zone. R4-1 repeater signs shall be installed at regular intervals not exceeding the distance given in QRSTUV: *Guide to Speed Management* Table 3.4 and past important intersections for the benefit of turning traffic.

At the end of the 110 km/h speed zone, Speed Limit (R4-1) signs shall be installed on both sides of the roadway to indicate the start of the lower speed zone. Pavement numerals supplementing the Speed Limit (R4-1) signs may be used at the start of the lower speed zone.

Speed Limit AHEAD (G9-79) signs shall be installed 300–500 m in advance of the start of the lower speed zone and shall be duplicated on both sides of the roadway.

### **3.1.18 Speed limits at bridges or floodway due to structural deficiencies**

#### New

The Speed Limit (R4-1) sign with a BRIDGE DAMAGE CONTROL (R4-Q09\_1) sign is used in accordance with Clause 4.6.6.4 in Part 2 of this *Manual*. The signs shall be installed on a highly visible fluorescent orange target board for increased conspicuity. The target board shall be the same shape as the traffic sign it highlights.

Advance warning of the change in speed limit shall be provided by installing a Speed Limit AHEAD (G9-79) sign at a minimum distance of 300 m in advance of the start of the BRIDGE DAMAGE CONTROL (R4-Q09\_1) sign in accordance with Clause 3.1.3.

On two-lane two-way roads, the BRIDGE DAMAGE CONTROL (R4-Q09\_1) sign shall be duplicated on both sides of the road unless exceptional circumstances prevent installation on the right-hand side.

The minimum size of the BRIDGE DAMAGE CONTROL (R4-Q09\_1) sign shall be size 'B' unless there are footway / verge width constraints that only permit size 'A' signs.

The typical sign layout for damaged bridge speed limit reduction has been illustrated in R4-Q09\_2.

In some instances, it may be necessary to install pavement markings; for example, Wide Centre Line Treatment (WCLT) to narrow the lane width and influence the speed changes. If the WCLT is required, it shall be installed in accordance with the [Road Planning and Design Manual Volume 3: Guide to Road Design](#).

### 3.1.19 Placement of speed limit awareness signs on local streets

#### New

Where the criteria are met in Section 13.10 of QRSTUV: *Guide to Speed Management*, the speed limit reminder sign (TC1638) may be approved for use on wheelie bins by the relevant road authority. Installation of this sign is to be in accordance with the approved condition on Wheelie Bin speed limit reminder sign (TC1638) without variation.

### 3.1.20 New limit signage

#### New

The communication of new speed limits to motorists is an important speed management activity to promote compliance with speed limits. Additional signage may be temporarily used to supplement Speed Limit (R4-1) signs for linear speed zones, and Speed Limit AREA (R4-10) signs for area speed zones.

If used, the following temporary signs shall be installed concurrent to the new speed limit signs for a period no longer than three months:

- a) NEW LIMIT (TC2352)



TC2352

The NEW LIMIT (TC2352) supplementary sign may be installed below a speed limit sign where the speed limit is being reduced to a speed limit not otherwise expected by motorists.

- i. The NEW LIMIT (TC2352) supplementary sign shall be installed on, and under, the first speed limit sign at the start of the new speed zone.
- ii. Where the start of the new speed zone is displayed on both sides of a road, the NEW LIMIT (TC2352) supplementary sign shall be installed on both speed limit signs.
- iii. The NEW LIMIT (TC2352) supplementary sign may be installed under repeater speed limit signs in the newly created speed zone past major intersections or where it is deemed necessary.
- iv. NEW SPEED LIMIT AHEAD (TC2353) sign, when used, is to be installed in advance of NEW LIMIT (TC2352) sign.

b) NEW SPEED LIMIT AHEAD (TC2353)



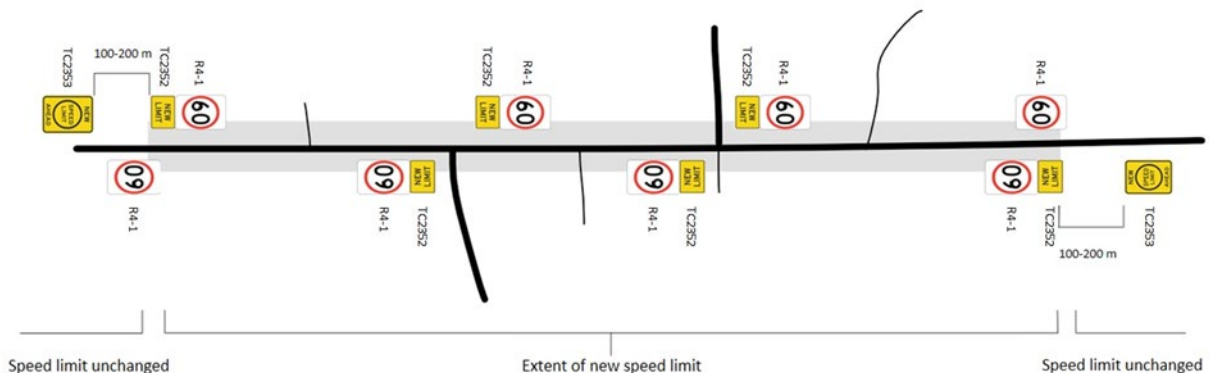
TC2353

The NEW SPEED LIMIT AHEAD (TC2353) sign may be installed in advance of the NEW LIMIT (TC2352) sign at the start of a new linear or area speed zone. The NEW SPEED LIMIT AHEAD (TC2353) sign shall not be installed without the NEW LIMIT (TC2352) sign at the start of the new speed zone.

- i. The NEW SPEED LIMIT AHEAD (TC2353) sign shall be installed 100–200 m in advance of the start of the new speed limit in each direction of travel.
- ii. The NEW SPEED LIMIT AHEAD (TC2353) sign shall not be installed ahead of repeater signs in the newly created speed zone.

Figure 3.1.20 shows example layouts for new speed limit signage, showing both linear and area speed limit signage.

**Figure 3.1.20 – Example layouts of new speed limit signage for a linear speed zone**



**3.1.21 25 km/h Personal Mobility Device (PMD) footpath speed zone signage and pavement markings**

New

The Queensland Road Rules allows a 25 km/h PMD speed limit for a footpath or shared path to be designated by either, or both, a PMD speed limit sign or road marking. For the PMD footpath speed zone signage. See Figure 3.1.21 below.

Figure 3.1.21 – 25 km/h PMD footpath speed zone signage



Under the Queensland Road Rules, a 25 km/h PMD speed limit starts at the PMD speed limit sign or road marking and ends at the nearest of the following:

- an end PMD speed limit sign or road marking, or
- a speed limit sign or road marking applying to the path with a different speed limit, or
- where the path intersects with a road or another path.

If the 25 km/h speed limit for PMDs is to continue beyond any intersecting road or path, a new PMD speed limit sign or pavement marking shall be installed.

### 3.3 Pavement markings

#### Difference

The following replaces that in the Standard:

Where the pavement surface is suitable, painting of elongated numerals adjacent to the Speed Limit (R4-1) sign may be used in the following circumstances:

- at the start of a lower speed zone where the difference in adjacent speed zones is 20 km/h or higher, with the exception of the start of a school zone or other variable speed zone
- at repeater signs at major intersections
- on undivided multilane roads, at the start of the speed zone
- at repeater signs on undivided multilane roads
- on divided multilane roads with three or more lanes in one direction, at the start of the speed zone, or
- at repeater signs on divided multilane roads with three or more lanes in one direction.

Such markings shall only be used to supplement Speed Limit (R4-1) signs and shall not be used alone. Their use is generally restricted to locations where the provision of signs alone is not adequate: for example, where the impact of the sign is reduced by the nature of the roadside environment, and it is considered that the sign needs to be augmented to increase road user perception.



With the exception of school zones and other time-based speed zones, the use of pavement markings is encouraged at the start of HATUA. Painted numerals shall not be used to indicate the speed limit on local streets.

A separate set of numerals shall be painted in each traffic lane.

The numeral markings shall be as prescribed in the Part 2 of this *Manual* and shall meet the skid resistance level given in *MRTS45 Road Surface Delineation*.

### 3.3.1 School zone pavement markings

#### New

Pavement messages may be used in association with school zone signs at sites where driver awareness of the school zone may be reduced by the alignment of the road or by the volume or type of traffic.

The use of pavement messages in advance of pedestrian facilities at schools should be restricted to sites where driver awareness of the facility may be reduced by the horizontal or vertical alignment of the road or by volume of traffic, particularly during the peak periods when children are likely to be present on the road.

SCHOOL ZONE is the only pavement message approved for use with a school zone sign. Pavement markings indicating the speed limit or the times of operation of a school zone speed limit are not approved for use in Queensland. The SCHOOL ZONE pavement message may be incorporated with a threshold treatment for added emphasis at the discretion of the road authority.

Pavement markings indicating the school zone speed limit or times of operation are not permitted as the school zone speed limit only applies during the school zone times and the pavement marking may confuse motorists.

Table 3.3.1 provides guidance on use of pavement messages at schools.

**Table 3.3.1 – Pavement messages**

Sign	Associated pavement message
SCHOOL ZONE (R4-Q01 and TC1783) sign	SCHOOL ZONE

