Operational Instruction

5.1

Road Safety Message Signs

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Government of South Australia
Department for Infrastructure and Transport

Road Safety Message Signs - 5.1

AMENDMENT RECORD

Version	*Date*	*Section/Figure/Table*	*Amendment Description*
1	2005	All	Amended general wording
2	May 08	All	Format changes only
3	Nov 10	All	Included Driver Reviver / authorised
4	Jun 11	All	Include Drive on Left sign / Speed camera sign changes
5	Sep 13	All	Additional info for Police RSS and authorised
6	May 16	Section 4.6	Clause 4.6 Signs for International Road Users
7	Oct 17	All	Include Section 4.6 Wheelie Bin Stickers, remove Dynamic Road Safety Signs Section, Section 4.2, Appropriate Message Content
8	Apr 19	Section 4.3.1	Section 4.3.1 Signs amended, format changes
9	Dec 20	All	Format updates/changes
10	Aug 22	Section 4.4	Amendment to Section 4.4 to include fixed (post mounted) signs, and to clarify that speed feedback signs must not show any value greater than the posted speed limit
10.1	Feb 23	Section 4.4	Added information regarding deployment of mobile signs.

This document has been prepared by the Traffic Engineering Section. It has been approved and authorised for use by Department for Infrastructure and Transport and its authorised agents by:

Stephen Pascale
Manager, Traffic Services
08 / 02 / 2023

For information regarding the interpretation of this document please contact:
Traffic Services
Email : dit.tassadminsupport@sa.gov.au

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http://www.dit.sa.gov.au/standards/tass

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1. Scope

To provide guidelines to assist the Department for Infrastructure and Transport (DIT), councils and community road safety groups in providing information to road users regarding topical road safety issues on roadsides in an effective, timely and cost efficient manner.

2. Background

There have been requests from community road safety groups among others, for the provision of road safety message signs on roadsides. A suggestion to place such signs on the state borders is not desirable due to past experiences of sign proliferation at the borders. This has resulted in sign rationalisation and the construction of rest areas to display messages related to new or altered laws applying in South Australia.

In considering the provision of road safety message signs on the roadside it is important to note that a link between such signs and a road safety outcome has not been proven. In fact there is considerable doubt about the effectiveness of a program involving randomly selected messages and placement within the road network. There is also anecdotal evidence suggesting that road user distraction, the collision hazard created by an additional roadside object (particularly for unprotected roads users) and the possible resentment of some messages by those being targeted, may actually be counter-productive in the efforts to provide a safer road network.

However, when such signs form a component of a comprehensive road safety campaign involving media advertising, education and enforcement, for example the 'Speeding – Think about the Impact' program, benefits have been demonstrated with the use of signs that are strategically placed and which display a message consistent with the particular campaign on a temporary basis. Motor Accident Commission (MAC) have generally been responsible for conducting such campaigns in the past.

3. Policy

To maximise the impact and benefit, roadside road safety message signing should:

- Form one component of an organised 'campaign' of media advertising, local education, enforcement etc. organised as either a local community or statewide road safety initiative.
- Focus on a single road safety issue throughout an area.
- Be flexible, temporary and changeable as the local or statewide campaigns and initiatives develop and evolve.
- Be cost effective in regard to initial installation, flexibility and maintenance.
- Have a clearly defined delegation of ongoing responsibility and accountability for maintenance of the program.
- Be clearly different from standard regulatory, warning and guide signs used by road authorities under the requirements of the Australian Road Rules, the Code of Technical Requirements, the Australian Standards and other requirements of the Minister for Transport and the Commissioner of Highways.
- Display 'non-offensive', succinct messages designed in accordance with the Australian Standards for road signs in regard, lettering size, font style and number of words for safe comprehension (DIT to assist).

- Be spread throughout an area, including urban areas and local roads to impact upon the local community (DIT and Council to assist).

4. Signing Categories

4.1 Fatigue Signing

Due to the link between rest opportunities and fatigue, DIT has incorporated fatigue related road safety messages on the approaches to rest areas in rural areas (Figure 1).

G7-SA123-6

Figure 1: An example of fatigue messages on rest area approaches

DIT has also provided fatigue messages on the standard 5km advance township service signs. The messages on the township signs, all originally 'Drowsy Drivers Die', are now changeable and some community road safety groups have taken on the responsibility to develop new fatigue related messages and to rotate the messages (Figure 2).

Figure 2: Example of a fatigue sign for rural townships

4.2 Community Road Safety Signs

It is considered that community road safety groups are in the best position to carry out a program of community road safety signing. However, it should be noted that market research shows that there is a belief within some local communities that the road safety problem relates to those outside the community travelling through their area, a belief clearly proven to be incorrect. A campaign of signing that encourages or reaffirms this belief is likely to be counter-productive. It is therefore important that unless part of a statewide campaign, a sign strategy should address the local issues and be directed to local traffic on local roads, not just on major through highways. In fact in some cases, road signing may not be the most appropriate method to bring attention to many of the serious local issues.

Furthermore, should the State Government wish to implement a state or region wide program, a signing strategy that targets local road users could be used by the State with the support of the local communities.

Road Safety Message Signs should include content that is simple, effective and easily understood. Signs shall not:

- Be a form of advertising.
- Show or propose a speed limit, in either text or as a number with or without an annulus.
- Be or resemble or be construed as a traffic control device (defined by the Road Traffic Act 1961).
  Note: The installation of a sign that resembles a traffic control device is an offence in accordance with Section 21 of the Road Traffic Act.

Blue colour schemes including blue and white checkers may need to be cleared by SAPOL. SAPOL may also wish to comment from a road safety perspective.

Council approval, as the planning authority, will be required prior to the installation of Road Safety Message Signs.

Community Road Safety Signs can take two (2) forms, as described below.

4.2.1 Country Fire Service (CFS) hoop signs

They may make use of the standard Country Fire Service (CFS) hoop signs provided throughout most regional areas. These hoop signs are provided by the CFS and managed by local government (Figure 3). They provide details relating to the fire seasons each year and other fire prevention information.

Figure 3: An example of a CFS hoop sign

However, the information is really only relevant during the summer, allowing a considerable period of the year when these hoop signs could be available to display road safety information. This is a low cost sign, as the infrastructure is already available and the idea is likely to be of interest to DIT and local councils who would otherwise be concerned about additional roadside objects in the roadside environment (clear zone).

Some councils have similar signs installed to display other community service information, which could also be used for road safety messages on occasions (Figure 4).

Figure 4: An example of a council hoop sign

It should be noted that better consideration could be given to road user safety in the size and position of some of these hoops signs (as can be seen in Figure 3). It would be important that such factors be taken into account before any sign is used to display a road safety message and the signs concurrently relocated to a safer position. Refer to Section 4.2.5 for Sign Location details.

Some years ago the Adelaide Hills Community Road Safety Group undertook such a program using approximately 60 existing CFS hoop signs throughout the Adelaide Hills region (Figure 5).

Figure 5: An alternative use of CFS hoop sign

Note:
All Figures 3, 4 and 5 may make use of low cost disposable sign panels (such as corflute).

4.2.2 Others

There may also be signs dedicated to road safety messages of a type similar to the signs mentioned in Section 4.2.1 above.

These signs can provide an area at the top of the sign for local community road safety group name and/or space for logos of the other associated organisations (not third party advertising).

It would be necessary for local government (or DIT) to take ultimate responsibility for the signs being the landowners and road authority.

4.2.3 Sign Structure Sizes

Sign sizes (sign panel within frame area):

- 1200 x 900mm for 80km/h or greater speed zones.
- 900 x 600mm for 60km/h or lower speed zones

Preferred post size to be 50mm nominal, with a removable flanged and bolted base. For structure details refer to TES 15770 (Appendix A).

4.2.4 Message Design

So that road users can read and comprehend the message easily and with a minimum distraction from the driving task, it should comprise of a maximum of 6 words. It should also comprise words that are easily recognised and not include complex images, graphics or photographic scenes.

There is to be no private or commercial sponsor advertisements attached to the road safety sign.

All road safety messages are to be authorised by DIT. DIT has a library of road safety sign designs.

Authorisation of any new messages can be sought through DIT's Road Safety Section. Refer to Appendix B for the current approved road safety messages for community road safety hoop signs.

4.2.5 Sign Location

Signs are to conform to AS 1742.2 and AS 1743 in terms of placement. Positioning of signs must:

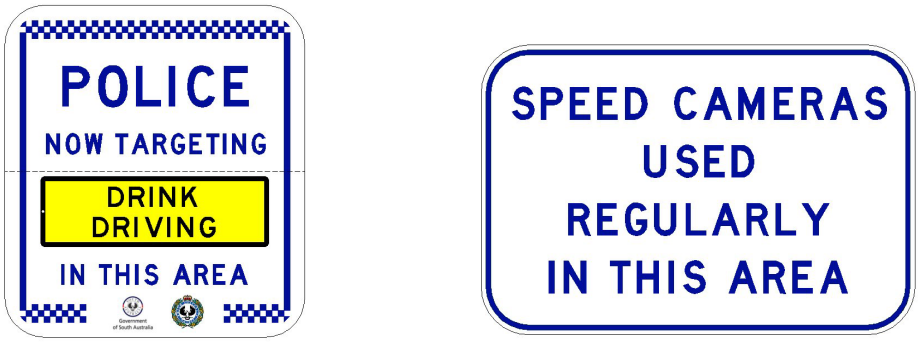
- Only be on the side of the road (not in medians, island, shoulders or areas of pedestrian movement).
- Not be placed in a kerb extension or protuberance.
- Not to become an obstruction to other traffic control devices.
- Be able to maintain the minimum recommended spacing between the subject sign and other traffic signs (e.g. 50m at 60km/h, 80m at 100/110km/h) – precedence must always be given to standard regulatory, warning and guide signs when placing educational/ advisory signs.
- Only be installed on straight road alignments.
- Not be installed in 80 km/h buffer zones leading into townships.
- Have a spacing of at least 10km on high speed roads.
- Not be within 500m of an intersection in a high speed zone (80km/h or greater).
- Assessed for roadside risk (refer to Austroads 'Guide to Road Design Part 6: Roadside Design, Safety and Barriers').
- Not obscure the view of pedestrians or other road users.

4.2.6 Installation and Maintenance

Signs would normally be installed and maintained by the local council (or their agent) on roads in incorporated areas. Where the signs are to be installed on roads under the control of DIT, the matter must be discussed with appropriate DIT Regional Officer, particularly in regards to location.

4.3 Police Road Safety Signing

There are a number of signs used for the Police, which are aimed at specific safety initiatives. These include signs at safety cameras reminding drivers to check their speed, and signs used by the Police to inform road users that they are targeting a specific road safety issue. Examples of these types of signs can be seen below. These signs are authorised and installed by DIT in partnership with SAPOL under statewide programs.

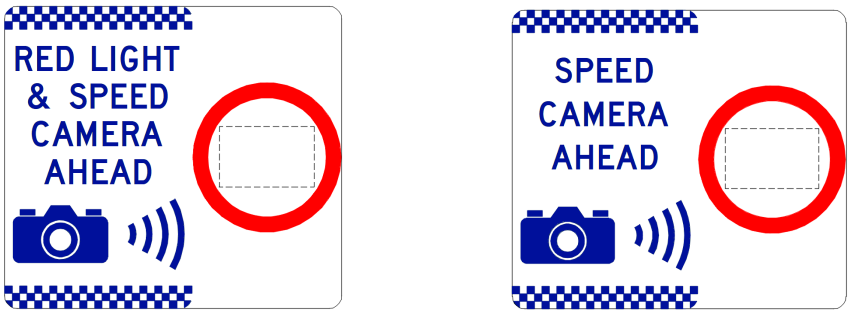


TES 15222 TES 16005

Figure 6: Examples of Police Road Safety signs

4.3.1 Safety Camera Signs

The 'Safety Camera' (TES 19687, 19689) signs are to be installed between 50m - 60m in advance of fixed speed cameras and fixed speed and red light camera locations, in a speed zone of 70 km/h or less.



TES 19687 TES 19689

Figure 7: For use on low Speed Roads

The ‘Safety Camera’ (TES 19688, 19690, 19691) signs are to be installed between 120 m – 150 m in advance of fixed speed cameras and fixed speed and red light cameras location in a speed zone of 80 km/h or greater.

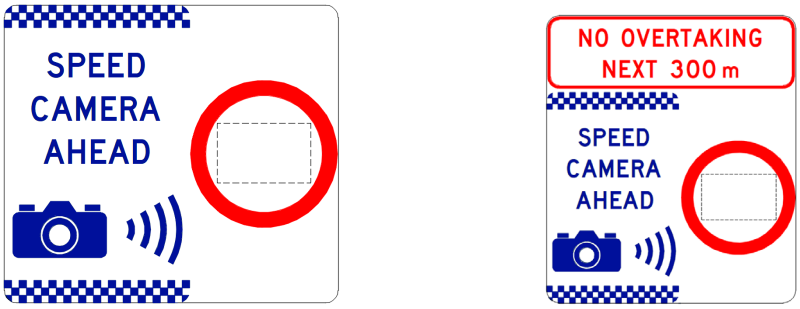
TES 19688 TES 19690 TES 19691

Figure 8: For use on High Speed Roads

4.3.2 Signs for Average Speed Camera zones

Safety Camera Ahead signs (either TES 19690 or TES 18841) shall be installed in advance of both cameras located at the beginning and end of an average speed safety camera zone, in accordance with the criteria:

- The ‘Safety Camera Ahead’ (TES 19690) sign are used in advance of average speed camera combinations and fixed cameras on dual carriageways, or where overtaking at the camera location is already prohibited through the use of barrier lines in accordance with AS1742.2 clause 5.3.3.
- If an average speed camera combination or a fixed camera is installed where barrier lines are not justified under sight restriction criteria, the ‘No Overtaking Next 300m – Safety Camera Ahead’ (TES 18841) sign shall be installed approximately 200m in advance of the camera. Barrier lines, in accordance with the DIT Pavement Marking Manual shall also be installed for a length of 300m, starting at the TES 18841 sign.



TES 19690 TES 18841

Figure 9: For use in advance of Average Speed Camera zones

The ‘Average Speed Safety Camera Zone’ sign (TES 18838) is installed approximately 100 m after the first camera, at the beginning of the zone,

and as a repeater sign at approximately 20 km intervals. Repeater signs are not used in average speed camera zones of less than 30 km in length.

TES 18838

Figure 10: Repeater sign for Average Speed Camera zones

4.4 Speed Feedback Signs and Variable Message Signs

These signs take the form of fixed (post mounted) or mobile signs (on trailers) that are self-contained units equipped with a radar unit and display.

Speed Feedback signs (also referred to as Speed Awareness Monitoring signs) measure speed and electronically display either the speed of the vehicle or a message to the motorist. If speeds are displayed they **shall not** display any value that exceeds the posted speed limit. If the measured speed is greater than the posted speed limit, then a message about exceeding the speed limit shall be displayed, not the speed itself.

Trailers with VMS capability, as well as displaying the posted speed limit, have a VMS capability to allow an electronic display of road safety messages which support specific road safety themes or initiatives.

For deployment of mobile signs on a DIT maintained road refer to DIT Operational Instruction 2.36 (Variable Message Signs) Section 5.7.

4.5 Signs for International Road Users

Overseas tourists and visitors who originate from a country in which road users drive on the right hand side of the road may need to be reminded of the need to drive on the left hand side of the road in South Australia.

Figure 11: Drive on Left sign (TES 18546)

Tourist authorities and car rental companies are encouraged to provide brochures, information packages and in-car reminder stickers targeted at

international drivers. These packages may be complimented by the strategic placement of 'DRIVE ON LEFT' signs (Figure 11) within tourist facilities (e.g. wineries) and some public road related areas (e.g. major rest areas) which are frequented by significant numbers of international tourists.

'DRIVE ON LEFT' signs shall NOT be installed on the public road network. Providing these signs within facilities ensures that drivers can concentrate on the message at a point prior to entering the road network. When drivers have entered the road, it is unlikely that they would change to drive on the other side of the road at least until a subsequent break from driving.

In contrast to typical signing practice in SA, reminder signs should be installed on the right hand side of the exit from the facility to accommodate drivers who are conditioned to observe signing on the right hand side.

If the above measures have been proven to be ineffective, then pavement arrows can be installed on sealed roads 10 metres either side of the exit point on both sides of the road to further enforce which side of the road you must drive on. Where these facilities exit on to an unsealed road, then the duplicated W4-11 sign (symbolic Two Way) can be installed on both sides of the road.

All traffic control plans shall be pre-approved by Traffic Services prior to any installation. Refer to the Traffic Engineering Standards Team of Traffic Services, for pavement arrow applications.

4.6 Wheelie Bin Stickers

Wheelie bin stickers are designed and promoted to improve the appearance of a bin (e.g. creative design, cricket stumps etc) or to communicate a message e.g. raise general awareness of vulnerable road users predominantly in local streets.

Such stickers should include content that is simple, effective and easily integrated to minimise distraction. Stickers shall not:

- Be a form of advertising.
- Show or propose a speed limit, in either text or as a number with or without an annulus.
- Be or resemble or be construed as a traffic control device (defined by the Road Traffic Act 1961).
  Note: The installation of a sticker that resembles a traffic control device is an offence in accordance with Section 21 of the Road Traffic Act.

Blue colour schemes including blue and white checkers may need to be cleared by SAPOL. SAPOL may also wish to comment from a road safety perspective.

5. Driver Reviver Road Safety Program

5.1 Background

Driver Reviver events which provide drivers with an inducement to stop (and rest) in the form of a free refreshment or snack, are generally organised and undertaken by a local community group or local road safety organisations (the

Organiser). The events are usually scheduled during peak travel periods on state rural roads (i.e. Easter and other public holidays). DIT does not organise or coordinate Driver Reviver events but may assist the Organisers with preparation and planning.

Driver Reviver events are beneficial in that they assist in raising the awareness of the need for drivers to monitor their level of alertness and to stop and rest regularly on long trips.

5.2 Planning a Driver Reviver Event

Driver Reviver events (which include the installation of roadside signs) require the acceptance of the Manager, Traffic Management Centre. The Organiser should advise the Traffic Management Centre at least 4 weeks in advance of their intention to run a Driver Reviver event. In addition the following information should be provided:

a) Proposed location of the Driver Reviver event.
b) Date and time of commencement and conclusion of the event.
c) Proposed hours of operation.
d) A sketch of the proposed layout of the event, including access
e) Points, intended traffic flow and parking areas.
f) The name and contact details of the person(s) in charge of the event.

5.3 DIT Involvement

Any request to use a DIT maintained rest area for a Driver Reviver event should not be turned down, unless there are significant safety concerns with the potential increase in volume of traffic accessing the rest area. Events should not impact adversely on rest area users.

The level of assistance provided to the Organiser by DIT will be at the discretion of the DIT Zone Managers. In all circumstances DIT shall be responsible for the supply, installation and subsequent removal of the Driver Reviver signs (refer to Section 5.7). DIT reserves the right to request that a Driver Reviver event is suspended should the associated traffic movements create a road safety hazard.

5.4 Recommended Locations

Driver Reviver events should be located at least 30 minutes travel (at normal road speed) from any preceding town or significant commercial establishment which provides rest opportunities to travellers.

The nominated site should preferably be a roadside area which will allow both Organisers and customers to park, move away from their vehicles and remain well clear of the roadway (including the shoulders).

Difficulties may arise if a Driver Reviver event is seen to be operating in ‘direct competition’ to a nearby commercial establishment which provides rest and refreshment opportunities to travellers. If an event is planned close to a commercial establishment, it will be expected of the Organiser to liaise with the operators of the establishment(s) who may be affected and obtain their acceptance for the event.

DIT encourage the use of established roadside rest ‘areas’ or ‘stops’ for undertaking Driver Reviver events.

5.5 Access Requirements

With the events usually scheduled for peak travel times on the roads, the turning into and out of the locations takes on additional risk due to the higher traffic volumes on the road. Ideally only left-in, left-out type operation should be encouraged, particularly on the busier roads where the traffic stream is continuous (i.e. very few significant breaks in traffic).

Where the event is primarily catering for traffic travelling in one direction, it should be located on the left side of the road for that traffic and only signed from this approach.

Where both directions are being catered for, the station should be set out and signed with a common entrance and exit point from either direction (Figure 12)

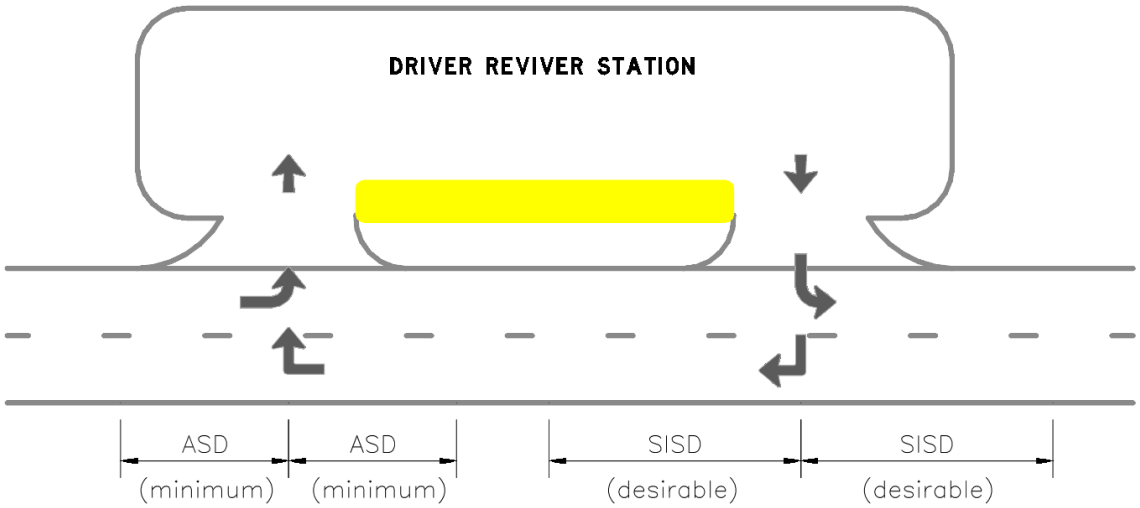


Figure 12: Rest area traffic flow and minimum sight distances

Design Speed (km/h)	Safe Intersection Sight Distance (m)	Approach Sight Distance (m)
90	215	140
100	250	165
110	285	195

Figure 13: Values of sight distance for level grades and straight alignments

*The data in the table above was sourced from Austroads 'Guide to Road Design Part 4A: Unsignalised and Signalised Intersections' (2021) Tables 3.1 and 3.2. This data is based on a reaction time of 2.0s for cars with a coefficient of deceleration of 0.36. Figures would need to be altered when considering sight distances relating to heavy vehicles.

5.6 Other Safety Precautions

Where possible it is recommended that an area for the main pedestrian activity be clearly defined and separated from traffic through the station. A defined travel path and parking area may also assist in managing the traffic through the station. People staffing the station should wear high visibility (bright coloured) clothing. Organisers and other staff should not operate near the roadway or road shoulder and under no circumstances shall any attempt be made to actively direct traffic from the roadway into the station.

5.7 Signing

Signs that can be used for Driver Reviver events are shown below (Figure 14). The signs are designed to be hinged, so that when the event is not operating the signs are in the closed (locked) position. If these signs are left in the open position when the event is not running, the initiative may lose credibility with the travelling public.

TES 12936

TES 17249

TES 11011

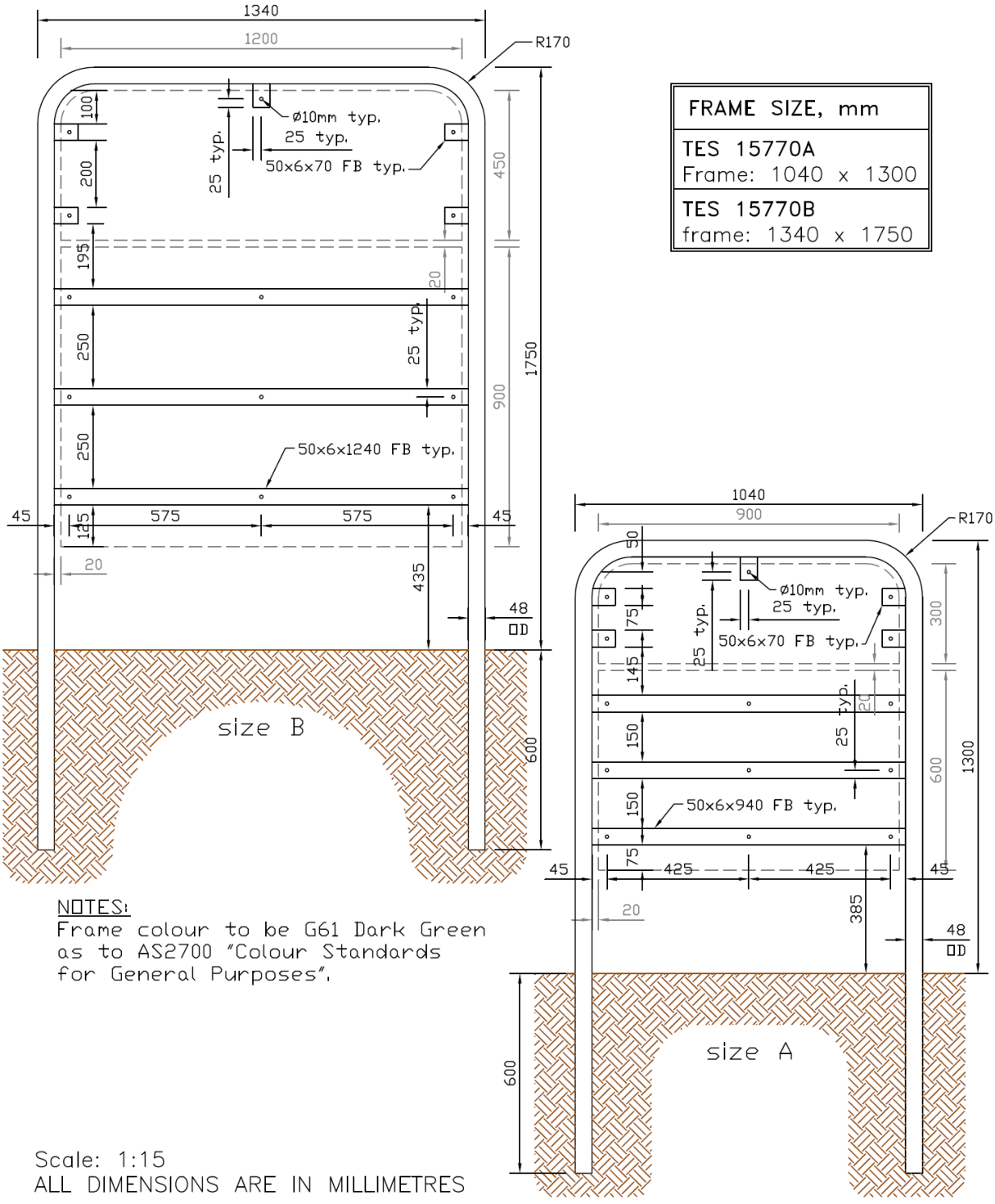
Figure 14: Driver Reviver signs

6. References

1. AS1742.2-2022: Traffic Control Devices for General Use
2. AS1743 – 2018: Road Sign Specification
3. Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, 2022
4. Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections, 2021

Appendix A: Community Road Safety Hoop Sign Structure

Transport SA
Statewide Operational Coordination Group
Specific Road Signs - Specifications, South Australia



FRAME SIZE, mm
TES 15770A Frame: 1040 x 1300
TES 15770B frame: 1340 x 1750

NOTES:
Frame colour to be G61 Dark Green as to AS2700 "Colour Standards for General Purposes".

Scale: 1:15
ALL DIMENSIONS ARE IN MILLIMETRES
Sign Type: Road Safety Sign
Location: Various

Drawn: S. Harris
Edition: A Rev: 0
14 May 2003

Authorisation:
Date:

TES15770

Appendix B: Approved Messages for Community Road Safety Hoop Signs

TES #	APPROVED MESSAGE	Graphic
15231	POLICE PATROLLING THIS HIGHWAY	X
	POLICE NOW PATROLLING THIS HIGHWAY	X
	POLICE IN THIS AREA FOR YOUR SAFETY	X
	PATROLLING THIS HIGHWAY	X
	POLICE PATROLLING IN THIS AREA	X
15566-1	SPEED KILLS. WHAT'S YOURS?	
	SEATBELTS SAVE LIVES. IS YOUR FAMILY RESTRAINED?	
	WANT TO BE A STATISTIC?	X
	HOW WILL YOU BE REMEMBERED?	X
	DRIVE SAFELY BECAUSE YOU ARE WORTH IT	
15566-2	ARRIVE ALIVE. SHARE THE DRIVE	
	ARRIVE ALIVE	
	FEELING TIRED?	
	FATIGUED?	
15566-3	TIME FOR A REST?	
	SHARE THE DRIVING?	
	REST – REVIVE – SURVIVE	
	FEELING TIRED? TIME TO REST	
15566-4	STAY AWAKE! TAKE A BREAK	
	TAKE A BREAK	
	FOR SAFETY SAKE. TAKE A BREAK	
	BE OUR GUEST TAKE A REST	
	TAKE A REST BE OUR GUEST	
15566-5	ARRIVE ALIVE. SHARE THE DRIVE	
	STAY AWAKE! TAKE A BREAK	
	FEELING TIRED? TIME TO REST	
	FOR SAFETY SAKE. TAKE A BREAK	
15965	SEE AND BE SEEN. HEADLIGHTS ON 24 HRS	X
15770	Frame Structure for 1200 x 900	
	Frame Structure for 900 x 600	
15896	Frame Structure for 2400 x 2400	