

Operational Instruction

4.10

Maximum 80 km/h Advisory Sign on Unsealed Roads

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TRAFFIC MANAGEMENT Operational Instructions

Maximum 80 km/h Advisory Sign on Unsealed Roads - 4.10

AMENDMENT RECORD

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Manager, Traffic Services
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For information regarding the interpretation of this document please contact:

Traffic Services Section, Road and Marine Services Division, DIT
Email: dit.tassadmins@sa.gov.au

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1. Introduction

In South Australia, speed limits on unsealed roads are determined in accordance with the requirements of Australian Standard *AS 1742.4 MUTCD: Speed controls*. For unsealed roads this standard states:

Speed limits signs on unsealed roads have traditionally displayed the default urban or default rural limit. Jurisdiction supplements may provide guidance if other speed limits are to be permitted within that jurisdiction.

The Operational Instruction was developed based on the 2008 version of this standard which stated:

Speed limits other than the default urban or default rural limit shall not be applied to unsealed roads. An exception to this requirement shall be the application of speed limits less than 50 km/h to roads that are not traffic routes.

South Australia's supplement, the *Speed Limit Guideline for South Australia*, does not currently provide guidance on the setting of speed limits on unsealed rural roads.

The Australian Road Rules sets a default speed limit of 100 km/h on all roads outside a built-up area. As with all speed limits, this is the maximum speed at which drivers are legally permitted to travel. Drivers need to be mindful of the road conditions and adjust their speed accordingly, particularly on rural unsealed roads.

Driver's speed choices are self regulating on unsealed roads when such factors as narrow width, poor alignment or undulating conditions create a speed environment well below the default limit of 100 km/h. On higher standard rural unsealed roads drivers are not influenced as much by these speed regulating factors, which may result in drivers choosing speeds nearer to the 100 km/h default limit. However unsealed roads by their very nature are susceptible to changes in conditions such as variability of road alignment, width, or road surface conditions, and these compromise the safety of drivers. In these cases it may be appropriate that the maximum speed be 80 km/h. The 'Gravel Roads - Maximum 80 km/h' (W1-SA101) advisory sign may be used on these roads in accordance with this Operational Instruction. This is an advisory sign only and is not a regulatory speed limit sign.



Figure 1: W1-SA101 'Gravel Roads – Maximum 80 km/h' advisory sign

The requirements provided in this instruction align with safe system principles of safer speeds by influencing drivers to choose a lower travel speed. This advisory sign was shown to reduce speeds in a seven month trial within the District Council of Yankalilla in 2014.

2. Use of signs

The 'Gravel Roads - Maximum 80 km/h' (W1-SA101) sign may be used on unsealed roads subject to the 100 km/h default speed limit when any one of these factors occurs:

- Crashes attributed to a speed unsuited to the conditions.
- The speed environment is not self regulating.
- Variability in road alignment, road width or road surface conditions.
- A maximum speed of 100 km/h is inappropriate for the level of safety.



Figure 2: Speed environment not self regulating



Figure 3: Self regulating speed environment

This sign may be installed on council roads under the general approval granted to Councils by the Minister for Transport and Infrastructure's *Instrument of General Approval* dated 22 August 2013, and on roads under the care, control and management of the Commissioner of Highways under the appropriate *Instrument of Authorisation* granted by the Commissioner of Highways. Variations to this sign to indicate a different maximum speed value are not permitted. Requests for the use of a sign indicating a value less than 80 km/h shall be submitted to the Manager, Traffic Services for consideration on a case by case basis.

3. Location of signs

Where used, the 'Gravel Roads - Maximum 80 km/h' (W1-SA101) sign shall be installed in accordance with the following requirements:

- It shall be installed at the beginning of a section of road where the speed environment is not self regulating, and drivers may be likely to drive at higher speeds. Signs may be used at the entry points to an area or network of roads where such conditions exist on most roads within that area.
- Where the road environment is consistent along the length of road, repeater signs may be installed as a general reminder to drivers at intervals of approximately 13 km (equivalent to 10 minutes of travel at 80 km/h).

- Repeater signs may be installed on the departure side of important intersections where drivers are entering from a road which is not signed with the W1-SA101 'Gravel Roads – Maximum 80 km/h' sign.
- It shall not be located closer than 200 m prior to curves, or other features where 80 km/h is not appropriate due to factors such as inadequate sight distance, narrow road width or poor quality surface.
- It shall not be located in advance of a section of residential development where the built-up area default limit of 50 km/h applies. Refer to AS 1742.4 for signing of default urban speed limit. Installation of a regulatory speed limit sign requires separate approval of the Commissioner of Highways or authorised delegate.
- It shall only be installed in advance of a section of residential development where there is consensus from all residents.
- It shall not replace the W5-SA73 'Warning – Gravel Roads – Surface Conditions Change Often' sign (refer to the Local Government Association's *Managing Unsealed Roads in South Australia* (2002) for details of its use).



Figure 4: W5-SA73 'Warning – Gravel Roads – Surface Conditions Change Often' sign

In accordance with the location and spacing requirements of Australian Standard AS 1742.2 MUTCD: Traffic Control Devices for General Use Clause D2.2, the W1-SA101 'Gravel Roads – Maximum 80 km/h' advisory sign may be located at least 60 m beyond the W5-SA73 sign.

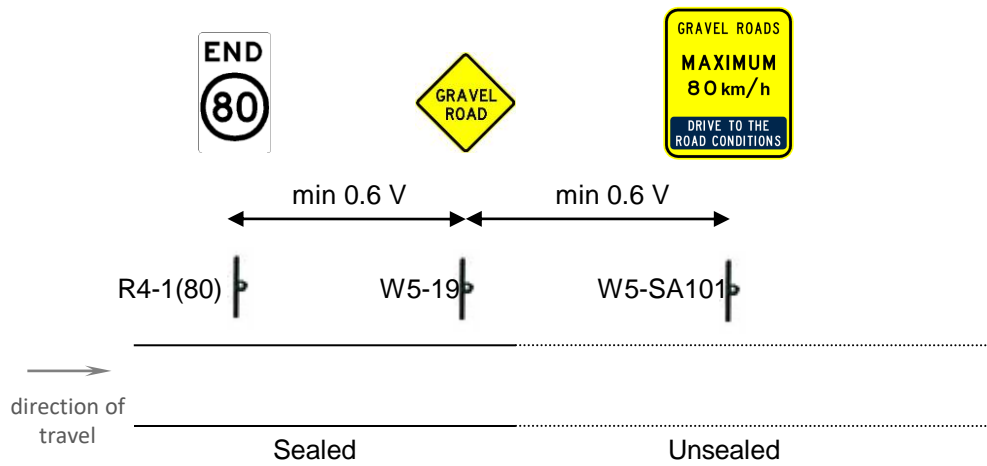
- To reduce the potential for drivers to be presented with conflicting messages which may occur at the end of a regulatory 80 km/h speed limit on a sealed section and the W1-SA101 'Gravel Roads – Maximum 80 km/h' advisory sign on an adjacent unsealed section, the R4-12 'End 80' speed limit sign shall be located prior to or at the end of the sealed section, and not within the unsealed section.



Figure 5: W5-19 'Gravel Road' sign

AS 1742.2 Clause 4.11.2.3 requires that the W5-19 'Gravel Road' sign be installed to warn drivers on the approach to a section of unsealed road. In accordance with AS 1742.2 Clause D2.2 a minimum spacing of 0.6V metres

should be provided between consecutive signs (refer Figure 6), where V is the 85th percentile speed in km/h.



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Figure 6: Example of signing end of regulatory 80 km/h speed limit / start of advisory 80 km/h

