Manual

**Queensland Guide to Temporary Traffic Management Part 4: Mobile Works** 

July 2022



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# About this document

This document supplements the Austroads *Guide to Temporary Traffic Management Part 4 Mobile Works*, which has been prepared to assist with mobile worksites, in accordance with Austroads best practice. It provides general information about the context and components of designing temporary traffic guidance schemes at mobile worksites.

#### How to use this document

This document is designed to be read and applied together with Austroads *Guide to Temporary Traffic Management Part 4: Mobile Works* (AGTTM04-21 Edition 1.1). You must have access to the Guide to understand what applies in Queensland.

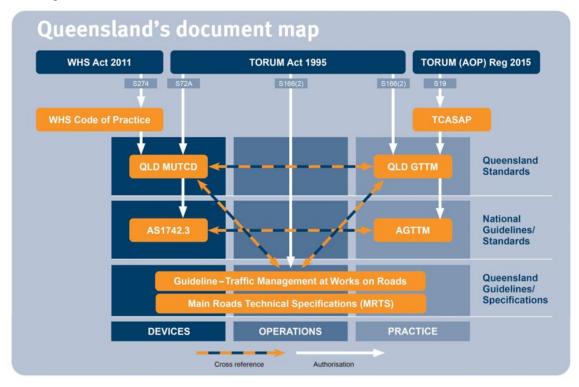
This document:

- sets out how AGTTM04-21 applies in Queensland
- has precedence over AGTTM04-21 when applied in Queensland
- has the same section and clause numbering and headings as AGTTM04-21.

The following table summarises the relationship between AGTTM04-21 and this document:

Applicability	Meaning
Accepted	The Guide 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 Guide.
Not accepted	The Guide section or clause is not accepted.

A summary of the documents relevant to TTM practice in Queensland, and their links, is provided following:



# References

The following references apply when reading AGTTM04-21.

Reference to	Means
AGTTM04-21	Austroads <i>Guide to Temporary Traffic Management Part 4 Mobile</i> <i>Works</i> , as amended by this document: for example, a reference to AGTTM04-21 means you must refer to the <i>Queensland Guide to</i> <i>Temporary Traffic Management</i> (QGTTM) Part 4.
	Throughout AGTTM04-21, references are made to other parts of the Guide (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 QGTTM. Check the applicability of the equivalent Part in the QGTTM <b>before</b> referring to the referenced Austroads Guide Part.
AGTTM	Austroads Guide to Temporary Traffic Management
AS 1742	Australian Standard AS 1742 Manual of Uniform Traffic Control Devices
Queensland (Q) series / Traffic Control (TC) signs	MUTCD (Q) series and TC signs.
Queensland MUTCD	Queensland Manual of Uniform Traffic Control Devices which supplements AS 1742.

Sec	tion	Description	Applicability
1	Introduction		
	1.1	Purpose	Accepted
	1.2	Structure of AGTTM	Accepted
	1.3	Scope of Part 4	Accepted
	1.4	Application of Part 4 to New Zealand	Accepted
	1.5	Definitions	Accepted
	Design P	Process	
	2.1	General	Accepted
	2.2	Risk Assessment	Accepted, with amendments
	2.2.1	Risk considerations	Accepted
	2.3	Design Steps	Accepted
	2.4	Design Balance	Accepted
2	2.5	Essential Design Principles	Accepted
2	2.5.1	Worksite layout	Accepted
	2.5.2	Sight distance	Accepted
	2.5.3	Signs	Accepted, with amendments
	2.5.4	Road categories	Accepted
	2.5.5	Traffic volume	Accepted
	2.5.6	Speed	Accepted
	2.5.7	Variations to design	Accepted, with amendments
	TGS Design for Mobile Works		
	3.1	General	Accepted
	3.2	Activities	Accepted
	3.2.1	Class 1	Accepted
3	3.2.2	Class 2	Accepted
	3.2.3	Class 3	Accepted
	3.3	Step 1 – Confirm the Works can be Defined as Mobile Works	Accepted
	3.4	Step 2 – Identify the Works Location	Accepted

Relationship table (harmonised to AGTTM04-21 Edition 1.1)

Section		Description	Applicability
3.5	5	Step 3 – Determine the Needs of the Works Convoy	Accepted
3.5	5.1	Lead vehicle	Accepted
3.5	5.2	Work vehicle	Accepted
3.5	5.3	Shadow vehicle	Accepted with amendments
3.5	5.4	Advance warning vehicle	Accepted
3.5	5.5	Vehicle positioning	Accepted
3.6	5	Step 4 – Determine the Works Convoy Spacing	Accepted
3.7	7	Step 5 – Determine the Signs and Devices to use	Accepted
3.7	7.1	Advance warning	Accepted with amendments
3.7	7.2	Signs mounted on vehicles	Accepted
3.7	7.3	Works within a shoulder	Accepted
3.7	7.4	Works within a lane	Accepted
3.7	7.5	Works involving a side street, signalised intersection, freeway on-ramp or off-ramp	Accepted
3.8	3	Step 6 – Identify the Operational Procedures to be Followed	Accepted
3.8	3.1	Reduced sight distance	Accepted
3.8	3.2	Signs	Accepted
3.8	3.3	Advance warning	Accepted
3.8	3.4	Mobile temporary speed zone	Accepted with amendments
3.8	3.5	Workers on foot	Accepted
3.8	3.6	Work convoy arrangements	Accepted
3.8	3.7	Maintaining traffic flow	Accepted
3.8	3.8	Communication	Accepted
3.8	3.9	Pedestrians and cyclists	Accepted
3.8	3.10	Road marking & line marking	Accepted
3.8	3.11	Kerbside collection and street sweeping	Accepted
3.8	3.12	Rolling blocks	Accepted
3.8	3.13	Unsealed roads	Accepted
3.9	)	Step 7 – Design the Traffic Guidance Scheme and Document the Notes for Field Staff	Accepted

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# 2 Design Process

# 2.2 Risk Assessment

#### **Difference**

Replace:

It is important to note that a Design Exceptions Report shall be approved by the relevant Road Infrastructure Manager (RIM) and road authority if design exceptions are made or published standards or the AGTTM are not adhered to.

with:

Where variations to the requirements of the Queensland MUTCD Part 3 or the QGTTM are required, they shall be documented by a risk assessment certified in accordance with the Clause 1.9 of Queensland MUTCD Part 3.

# 2.5 Essential Design Principles

#### 2.5.3 Signs

#### **Difference**

Replace the following dot point:

 signs that are not relevant during works must be removed or covered as it is essential that all signs at the worksite or varied travel route accurately represent the prevailing conditions at all times.

with:

• vehicle-mounted signs that are not relevant (during works or after works) must be removed or covered as it is essential that all vehicle-mounted signs accurately represent the prevailing conditions at all times.

# Addition

It is important to consider the impact of existing static signs on the mobile works operations and while it may not always be practicable or possible as part of mobile works operations to remove or cover existing static signs, any existing static signs which may cause conflict or a safety issue for the mobile works operations should be treated, especially if the mobile works operation is stationary for a period. Subject to a risk assessment, existing static signs along a route may remain in place during mobile works operations.

# 2.5.7 Variations to Design

# Addition

Refer to Clause 1.9 of the Queensland MUTCD Part 3.

#### 3 TGS Design for Mobile Works

#### 3.5 Step 3 – Determine the Needs of the Works Convoy

#### 3.5.3 Shadow vehicle

#### Addition

In subsection **Truck mounted attenuators**, add the following sentence after the 3<sup>rd</sup> paragraph:

Only TMAs included on the current list of accepted products in the Transport and Main Roads <u>Accepted Road Safety Barrier Systems and Devices</u> document shall be used at roadwork sites in Queensland.

#### 3.7 Step 5 – Determine the Signs and Devices to Use

#### 3.7.1 Advance warning

#### Addition

Add the following notes to Figure 3.9:

The 40 m roll ahead distance shall be kept free of workers on foot and items of plant.

The distance between the advance warning vehicle and shadow vehicle is 90 metres for this example.

#### 3.8 Step 6 – Identify the Operational Procedures to be Followed

#### 3.8.4 Mobile temporary speed zone

#### **Difference**

Replace the entire Section 3.8.4 with the following:

To improve the safety of road workers and road users, a temporary speed limit may be applied to mobile works. When mobile works involve workers on foot or using small ride-on plant within the lane or within 1.2 m of traffic, a temporary speed limit of 40 km/h must be applied.

The mobile work zone must be established using Speed Restriction signs or Speed Limit AHEAD signs located on vehicles in the mobile works convoy. Temporary speed limits must also be terminated on the vehicles in the mobile convoy. Depending on the works convoy arrangements and speed limit requirements, the work vehicle (or plant item) and the shadow vehicle may be used to display speed limit signs.

On undivided roads where traffic travels past the mobile convoy in both directions, temporary speed limits for the safety of road workers or road users must be applied for both directions of travel. In this case, at a minimum, the speed zone must be implemented between the work and shadow vehicles.

For works where a lead vehicle is not required, at a minimum, the speed zone must be implemented between the work vehicle (or plant item) and the shadow vehicle.

All temporary speed limits require a risk assessment to determine the appropriate speed limit. If a risk assessment indicates an unusually high risk to workers at a particular site, a speed limit lower than 40 km/h may be required.

When the need for the temporary speed limit is no longer applicable, the speed limit should be removed or altered to an applicable value; for example, when a 40 km/h speed zone is implemented for workers on foot or using small ride-on plant within the lane or within 1.2 m of traffic and workers are

no longer in this area, the temporary speed limit implemented for them must be removed and, if applicable, an alternative speed limit for the safety of road workers and road users may be implemented.

Ensure that the temporary speed zone is terminated by a Speed Restriction or END Speed Limit sign. The END Speed Limit sign will trigger the default built up or open road speed limit.

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