

Appendix A – Traffic management planning templates and tools

INFORMATIONAL APPENDIX

A.1 Scope

This Appendix provides a number of templates that may be used by project teams in relation to temporary traffic management planning. While every attempt has been made to align these templates with the requirements of this Technical Manual, the templates are examples only. The use of these templates might not necessarily fulfil all of the relevant requirements of this Technical Manual. And thus, pertaining to each work site, it remains the obligation of project teams to ensure all relevant requirements of this Technical Manual have been met regardless of the content of these example templates.

Additionally, this Appendix also provides a template that may be used by practitioners who wish to propose general departures to the requirements of this document.

A.2 TMP development templates

A.2.1 General

The templates provided in this Section may be used for temporary traffic management planning. The templates comprise:

- Temporary traffic management strategy template;
- Temporary traffic management plan and approval template; and
- Temporary barrier design statement template.

A.2.2 Temporary traffic management strategy template

For the risk associated with temporary traffic management to be effectively managed, it is important that the conditions and constraints associated with the works are understood. For this to be achieved, the client must collect the relevant data and information and transfer this to the delivery partner to ensure an informed TMP is developed.

MANDATORY INFORMATION

An electronic version of this template is provided [here](#).

Prepared by			
Name:		Role:	
Division:			
Signature:		Date:	
Persons consulted in the development of the traffic management strategy			
Name:		Role:	
Division:		Signature	
Name:		Role:	
Division:		Signature	
Name:		Role:	
Division:		Signature	

Site related information	
Project	
Activity / work	

Location				
Current Project Phase	<input type="checkbox"/> Strategic design	<input type="checkbox"/> Concept Design	<input type="checkbox"/> Detailed Design	<input type="checkbox"/> Other _____

Site related data		
Attach a cross section and photo / aerial of location of works		
Cross section details	<i>Describe unique features of the cross section</i>	
Setting of works	<input type="checkbox"/> Urban <input type="checkbox"/> Rural	
Existing speed limit/s	<i>(provide examples:</i> <i>Road name 1: limit</i> <i>Road name 2: limit)</i>	
Traffic volumes	Traffic volumes (ADT): _____	Traffic volumes (AADT): _____
	Peak times AM: _____	Peak times PM: _____
Traffic composition	<input type="checkbox"/> OSOM <input type="checkbox"/> Heavy vehicles _____ (%) <input type="checkbox"/> Permit vehicle routes	
<i>If yes provide details</i>	Details	
Details of crash history at location	<i>Provide details of crash history and comment on any patterns of crashes</i>	

Site related data			
Are intersections impacted by the project length?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<i>If yes provides details</i>	Details		
Vulnerable road users and other facilities	<input type="checkbox"/> On-street parking	<input type="checkbox"/> Transport facilities (bus stops)	<input type="checkbox"/> Clearways
	<input type="checkbox"/> Cycle paths	<input type="checkbox"/> Pedestrian paths	<input type="checkbox"/> Other
<i>If yes provides details</i>	Details		

Constraints			
Significant traffic generators	<input type="checkbox"/> Community facilities	<input type="checkbox"/> Events	<input type="checkbox"/> Schools
<i>If selected provide details</i>	<input type="checkbox"/> Mines	<input type="checkbox"/> Other:	
	Location		
	Duration / time restrictions:		
	Impacts:		
Road environment constraints	<i>Heritage, utilities, cuttings, significant cut/fills, bridges, guardrails, limited shoulders, environmental constraints (threatened species)</i>		

Other considerations or comments

Other considerations

Provide additional relevant information not included in the above

OPTIONAL INFORMATION

An electronic version of this template is provided [here](#).

Options assessment			
Option 1:			
<input type="checkbox"/> Around <i>An around should be considered as the first option.</i>	Description:	<i>Provide detail of around strategy, if none available this should also be detailed</i>	
Is this option feasible?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If no, provide justification here</i> <i>If yes, complete information below to the best of your ability</i>	
Benefits		Constraints	Estimated option cost
<i>Include potential cost/time benefits</i>			
Duration of works	Hours of operation		Other considerations
<i>Days</i>	<i>Day / night Or hours (if known)</i>		<i>Including provision for works traffic etc.</i>
<i>Weeks</i>			
<i>Months</i>			
Consultation required			Approvals required

Options assessment			
Option 2:			
<input type="checkbox"/> Around	<input type="checkbox"/> Past	Description:	<i>Provide detail of around strategy, if none available this should also be detailed</i>
Is this option feasible?		<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If no, provide justification here</i> <i>If yes, complete information below to the best of your ability</i>
Benefits		Constraints	Estimated option cost
<i>Include potential cost/time benefits</i>			
Duration of works		Hours of operation	Other considerations
	<i>Days</i>	<i>Day / night Or hours (if known)</i>	<i>Including provision for works traffic etc.</i>
	<i>Weeks</i>		
	<i>Months</i>		
Consultation required			Approvals required

Options assessment			
Option 3:			
<input type="checkbox"/> Around	<input type="checkbox"/> Past	Description:	<i>Provide detail of around strategy, if none available this should also be detailed</i>
Is this option feasible?		<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If no, provide justification here</i> <i>If yes, complete information below to the best of your ability</i>
Benefits		Constraints	Estimated option cost
<i>Include potential cost/time benefits</i>			
Duration of works		Hours of operation	Other considerations
	<i>Days</i>	<i>Day / night Or hours (if known)</i>	<i>Including provision for works traffic etc.</i>
	<i>Weeks</i>		
	<i>Months</i>		
Consultation required			Approvals required

If additional options are required use Options 2 and 3 as a template for completion

THIS PAGE LEFT INTENTIONALLY BLANK

Recommendation	
Recommended option	
Justification	
Critical risks and considerations	
Additional comments	

A.2.3 Traffic management plan and approval template

Prepared by			
Name:		Role:	
Card number:		Organisation:	
Signature:		Date:	

Location of works	
Project	
Activity / work	
Location	
Dates relevant for TMP work	<i>DD/MM/YY – DD/MM/YY</i>

Traffic Management Strategy (TMS) Verification	
Has the TMS been received and attached to this TMP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If "no" has been selected a TMP should not be developed until TMS information is obtained</i>
Provide updated information regarding TMS if required	
Current existing speed limit/s	<i>(Road name 1: limit</i> <i>Road name 2: limit)</i>

Traffic Management Strategy (TMS) Verification			
Updated traffic data	Traffic volumes (ADT):		Traffic volumes (AADT): if available
	Hourly traffic volumes :		Operating speed
	Peak times AM:		Peak times PM:
Traffic composition	<input type="checkbox"/> OSOM	<input type="checkbox"/> Heavy vehicles _____ (%)	<input type="checkbox"/> Permit vehicle routes
If yes provide details	Details:		
Site and work specific considerations	<i>Additional to TMS, additional time, with environment or community concerns</i>		
Additional options available	<i>For additional options identified, the process of assessment outlined in the TMS must be completed</i>		

Decision point: Temporary Traffic Management Method	
Was an options assessment completed by the client?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, review and provide summary below If no, undertake an assessment
Summary of TMS options	
TTM method	<input type="checkbox"/> Around <input type="checkbox"/> Past <input type="checkbox"/> Through Option Selected: <i>nominate option selected from TMS</i>

Decision point: Temporary Traffic Management Method

Justification	
---------------	--

Traffic Management Planning

TTM type	<input type="checkbox"/> Mobile	<input type="checkbox"/> Low impact	<input type="checkbox"/> Static
Will lane or shoulder widths need to be modified?	<input type="checkbox"/> Yes		<input type="checkbox"/> No
	<i>If yes provide justifications and drawings:</i>		
Specific road users impacted	<input type="checkbox"/> Pedestrians	<input type="checkbox"/> Cyclists	<input type="checkbox"/> Motorcyclist
	<input type="checkbox"/> Freight Industry	<input type="checkbox"/> Persons with disability, prams or children	<input type="checkbox"/> Public transport e.g. bus, tram.
	<input type="checkbox"/> OSOM	<input type="checkbox"/> Other	
<i>If one or more groups selected provide details of impacts and considerations:</i>			
Additional location specific requirements to be considered?			

Risk assessment

Undertake and attach to this TMP a risk assessment of the proposed works with the determined strategy.

List of sources of information used in risk assessment				
--	--	--	--	--

Has the risk assessment considered?	<input type="checkbox"/> Proximity of traffic	<input type="checkbox"/> Queued traffic	<input type="checkbox"/> High traffic volume	<input type="checkbox"/> Traffic speed and compliance behaviour
	<input type="checkbox"/> Traffic composition	<input type="checkbox"/> Exposure and proximity of workers to live traffic	<input type="checkbox"/> Length of delays for road users	<input type="checkbox"/> Traffic generating land use (hospital, mine, school)
	<input type="checkbox"/> Non-compliance with temporary speed limits	<input type="checkbox"/> Reduced lane and shoulder widths	<input type="checkbox"/> Compromised access points	<input type="checkbox"/> Site vehicle access and egress points
	<input type="checkbox"/> Horizontal (curves) and vertical (crests/sags) alignment	<input type="checkbox"/> Utilities including above and below services	<input type="checkbox"/> Crash history	<input type="checkbox"/> Topographical constraints
	<input type="checkbox"/> Sight distances	<input type="checkbox"/> Emergency services	<input type="checkbox"/> Car parking impacted	<input type="checkbox"/> Transport services (bus stops etc)
	<input type="checkbox"/> Access to private and commercial properties	<input type="checkbox"/> Local road access	<input type="checkbox"/> Special events or high risk venues	<input type="checkbox"/> Other _____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Key risks identified as a result of works:				
---	--	--	--	--

Risk assessment			
Specific controls required:			
Protection of workers	<input type="checkbox"/> Barriers	<input type="checkbox"/> Delineation	<input type="checkbox"/> Other
	Provide details:		
Will a speed restriction be required?	<input type="checkbox"/> Yes		<input type="checkbox"/> No
	<i>If yes provide justifications and drawings:</i>		
End queue management strategy:	<i>Provide details of:</i> <i>Calculated end-of-queue length</i> <i>Control required</i> <i>Sight distances</i>		
Delineation of site	<i>Detail how site must be delineated: e.g. reflectivity, non-contradictory signs, devices and delineation</i>		
Emergency service access and notification	<i>Provide details of emergency service strategy for site and who has been contacted</i>		

Relevant Documentation		
Have the following mandatory documents been provided as part of the overall TMP?		
<input type="checkbox"/> All approved TGS required	<input type="checkbox"/> Road Occupancy Licence	<input type="checkbox"/> Plans showing access to local properties or side roads
<input type="checkbox"/> WHS documentation	<input type="checkbox"/> Approved list of TTM personnel and contacts	<input type="checkbox"/> Vehicle movement plans
<input type="checkbox"/> Traffic incident plans		
STOP: <i>If one of the above documents has not been selected the TTMP cannot be approved</i>		

Relevant Documentation

Other documents provided

<input type="checkbox"/> Traffic staging arrangements including Traffic Staging Plans	<input type="checkbox"/> Speed Zone Authorisation
<input type="checkbox"/> Design drawings	<input type="checkbox"/> Council permits
<input type="checkbox"/> Pedestrians and cyclists movement plans	<input type="checkbox"/> Consultation with public transport operator
<input type="checkbox"/> Other:	

Monitoring activities required

Person responsible for monitoring *daily* TTM work activities

Name:		Role:	
Unit:		Division:	
Qualification:		Card Number:	
Comments:			

Person responsible for TTM works

Name:		Role:	
Unit:		Division:	
Qualification:		Card Number:	
Comments:			

Review activities required			
Activity	Required		Frequency or details
Shift inspections	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Weekly Inspections	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
TMP review	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Road safety audit	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Comments:			

Endorsed by (when a Principal Contractor undertaking the work)			
Name:			
Role:		Organisation	
Signature:		Date:	

Approval			
<i>I have reviewed the relevant documents for the works and approve works to be completed in accordance with the TTM Plan.</i>			
Name:			
Qualification:		Card Number:	
Unit:		Division:	
Signature:		Date:	

A.2.4 Temporary barrier design statement

Temporary safety barrier design statement template			
TMP Reference #		TMD Reference #	
Site Details	Location	Direction	Barrier Placement
Risk/risk mitigation	Description of the risk(s)		
Barrier systems <i>Hardware must be compliant with the Transport Specification R132</i>	Barrier Type(s)		Terminal(s)
	Transitions (including overlap of different systems)		
	Specific relevant considerations/restrictions		

Temporary safety barrier design statement template							
Design requirements – multiple systems will require multiple copies of this table							
System 1		System Deflection* (m)	Minimum Length (m)	Length of Need (LoN) (m)	MASH* Test Level (TL) (1-4)	Minimum Curve Radius	Clear Zone
System name	Required Value <i>From manufacturer's information / R132</i>						
	Designed Value <i>What has been designed</i>						
System 2		System Deflection* (m)	Minimum Length (m)	Length of Need (LoN) (m)	MASH* Test Level (TL) (1-4)	Minimum Curve Radius	Clear Zone
System name	Required Value <i>From manufacturer's information / M23</i>						
	Designed Value <i>What has been designed</i>						
<p><i>*Where applicable – MASH test results must be used. If NCHRP-350 data is utilised (not yet approved under MASH) this must be stated. All devices deployed after 31st December 2020 must be MASH compliant.</i></p>							

Temporary safety barrier design statement template					
Design Variations					
Equipment and Hardware required <i>List the required hardware including terminal and barrier components</i>	Hardware/Eqpt	Type/notes			Qty
	Delineation (Barrier System)				
	Delineation (End Treatment)				
	Water (litres)				
Installation programme	Sequence				
Installation programme	Installation/Removal				
Installation Designer Declaration	This design has been prepared in accordance with Waka Kotahi Specification M23 and associated technical memoranda and standard drawings.				
Installation Designer					
	<i>Name</i>	<i>Date</i>	<i>Signature</i>	<i>Safety Barrier Qualification</i>	<i>Date of Qual</i>
Installed/ Inspected by					
	<i>Name</i>	<i>Date</i>	<i>Signature</i>	<i>Safety Barrier Qualification</i>	<i>Date of Qual</i>

Temporary safety barrier design statement template

Attachments

A.3 General departures template

Location of works	
Project	
Activity / work	
Location	
Dates relevant for TMP work	<i>DD/MM/YY – DD/MM/YY</i>

Step 1: Details of Departure and risk assessment			
Details of departure			
TCAWS requirement clause reference		Requirement summary	
Location requirement not suitable			
Why is the requirement not suitable?			
Proposed variation to the requirement			
Proposed mitigation measure/s			
Risks introduced as a result of the proposed variation			
Alternative options investigated			

Step 1: Details of Departure and risk assessment				
Supporting Information such as drawings, correspondence etc.	<i>Describe and include attachments if required</i>			
Risk assessment (to be attached to this form)				
New standard being applied:	<input type="checkbox"/> Alternate Standard / national Practice <input type="checkbox"/> Risk Based determination			
Standard applied	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 10%; text-align: center;">Details</td> <td style="width: 40%;"></td> </tr> </table>		Details	
	Details			
Residual risk rating				
Additional controls required				