NZ TRANSPORT AGENCY
WAKA KOTAHI

Part 8 of the Traffic Control Devices Manual (TCD Manual)

Code of Practice for Temporary Traffic Management (CoPTTM)

(CoPTTM) - (SP/M/010)

Fourth Edition – Update Note November 2018

Prepared By:	Stuart Fraser for National Traffic and Safety Manager
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Circulation	Regional Operations Managers, holders of the Code of Practice for Temporary Traffic Management and NZTA website. Please forward to your consultants and contractors
Objective	To update the January 2015 version of the Fourth Edition of the CoPTTM.
Effective Date	1 February 2019
Status	This document is a guideline for use by the roading industry, road controlling authorities, network utility operators and event holders.
Implications	The majority of amendments are clarifications to the fourth edition. Some relaxations have been included in this update. The August 2018 version of CoPTTM is available online.
Reminder for all holders	It is important to keep holders of our documents up to date. Holders can update by copying the relevant sections from the NZTA website: www.nzta.govt.nz/copttm
Additional Copies	These may be downloaded from NZTA's website, free of charge or purchased direct from our distributor either via the website, or directly to NZ Print, PO Box 2491, Wellington, 6140

Key to changes	Additional text	Highlighted in yellow
	Deleted text	~~Red strike through~~
	Comments about the change	*Italic text*

Reference in 4th Edition	CoPTTM Feb 2017	Change in CoPTTM August 2018	Comment
Glossary of terms **Crash**	*Currently no definition in glossary*	Any incident resulting in damage to any installed TTM equipment, vehicles, plant or injury to a person.	*Definition relocated from A5.7.3 Definition of a crash*
Glossary of terms **SID**	*Not defined*	See *Speed information device*	*Clarification*
Glossary of terms **Speed information device (SID)**	*Not defined*	An electronic sign helping to reduce the number of road users exceeding the speed limit at or through road work sites. The SID can also be used in combination with other devices such as a variable message sign or arrow board to create a speed control system.	*Clarification*
Glossary of terms **Temporary speed limit (TSL)**	A speed limit that is in force for a period of less than six months and is set under the Land Transport Rule: Setting of Speed Limits 2003 by the RCA.	A speed limit that is in force for a period of less than ~~six~~12 months and is set under the Land Transport Rule: Setting of Speed Limits ~~2003~~2017 by the RCA.	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
A4.5.1 Explanation of level 3 roads	RCAs need to have a contiguous length of road of at least 50km before level 3 TTM is considered.	~~RCAs need to have a contiguous length of road of at least 50km before level 3 TTM is considered.~~	*Covered in A4.6.1*
A5.2.1 Default by the contractor – work under contractual agreement	Where general conditions of contract are used (eg New Zealand Standard 3910:2003 *Conditions of contract for building and civil engineering construction* or New Zealand Standard 3915: 2005 *Conditions of contract for building and civil engineering construction (where no person is appointed to act as engineer to the contract)* or NEC3), these conditions must be modified	Where general conditions of contract are used for example the current versions of: ~~(eg~~ • New Zealand Standard 3910:~~2003~~ *Conditions of contract for building and civil engineering construction*~~,~~ ~~or~~ • New Zealand Standard 3915: ~~2005~~ *Conditions of contract for building and civil engineering construction*	*Reduces changes to CoPTTM in the future - we don't have to update each time a new version of a contract is issued*

	as follows:	*(where no person is appointed to act as engineer to the contract)~~, or~~* • New Zealand Standard 3917: *Conditions of contract for building and civil engineering - Fixed term* • ~~NEC43),~~ • NEC4 *Engineering & Construction Contract* these conditions must be modified as follows:	
A5.2.3 Eliminate~~, isolate~~ or minimise the hazard	**A5.2.3 Eliminate, isolate or minimise the hazard**	**A5.2.3 Eliminate~~, isolate~~ or minimise the hazard**	*Minor edit*
A5.5.1 TMC's responsibilities	• approving TSLs within a TMP and ensuring the renewal of any TSLs extending beyond six months (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	• approving TSLs within a TMP and ensuring the renewal of any TSLs extending beyond ~~six~~12 months (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	*Incorporating the* ***Technical*** *Note Change to Land Transport Rule - Setting of Speed Limits 2017*
A5.6.1 Engineer's responsibilities	• approving TSLs within a TMP and ensuring the renewal of any TSLs extending beyond six months (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	• approving TSLs within a TMP and ensuring the renewal of any TSLs extending beyond ~~six~~12months (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	***Incorporating*** *the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
A5.7.1 Contractor's responsibilities	Contractors are responsible for: • ensuring they have the authorisation of the RCA to carry out work or other activity in the road reserve or affecting the road reserve	Contractors are responsible for: • ensuring they have the authorisation of ~~the~~ each RCA ~~to carry out~~ affected by the work or other activity in the road reserve or affecting the road reserve	*Requires contractors to get approval from each RCA affected by the work or activity*

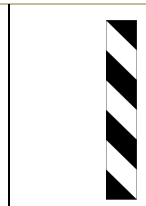
A5.7.1 Contractor's responsibilities	• ensuring that any TSLs are approved in the TMP and renewed if required within the six month timeframe (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	• ensuring that any TSLs are approved in the TMP and renewed if required within the ~~six~~12 month timeframe (Refer to section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits)	*Incorporating the* ***Technical*** *Note Change to Land Transport Rule - Setting of Speed Limits 2017*
A5.7.3 ~~Definition of a crash~~ Notification to WorkSafe	A crash is defined as any incident resulting in damage to any installed TTM equipment, vehicles, plant or injury to a person. Any crash resulting in either the death of a person, or a notifiable injury or illness, or a notifiable event or incident (any immediate or imminent exposure to a serious risk to a person's health or safety) must be reported to WorkSafe NZ as soon as possible after the crash becomes known to: • an employer • a self-employed person, or • the principal. Crashes and any notifiable events and incidents must also be reported to copttm.incident@nzta.govt.nz using the CoPTTM Incident Report form available on the CoPTTM pages of the NZTA website. For the definition of notifiable injury or illness or event see sections 23-25 of the Health and Safety at Work Act 2015. If WorkSafe is notified of the crash, reasonable steps must be taken to ensure the site is not disturbed until authorised by an inspector.	~~A crash is defined as any incident resulting in damage to any installed TTM equipment, vehicles, plant or injury to a person.~~ Any crash resulting in either the death of a person, or a notifiable injury or illness, or a notifiable event or incident (any immediate or imminent exposure to a serious risk to a person's health or safety) must be reported to WorkSafe NZ as soon as possible after the crash becomes known to: • an employer • a self-employed person, or • the principal. ~~Crashes and any notifiable events and incidents must also be reported to copttm.incident@nzta.govt.nz using the CoPTTM Incident Report form available on the CoPTTM pages of the NZTA website.~~ For the definition of notifiable injury or illness or event see sections 23-25 of the Health and Safety at Work Act 2015. If WorkSafe is notified of the crash, reasonable steps must be taken to ensure the site is not disturbed until authorised by an inspector.	*Text shifted to* ***A5.7.4 Recording crashes and briefing the TMC, the RCA (and for an RCA construction project the engineer to the project)***

A5.7.4 Recording crashes and briefing the TMC, the RCA (and for an RCA construction project the engineer to the project)	The contractor must record all crashes at worksites and, within 24 hours of any crash, brief the TMC, the RCA (and for an RCA construction project the engineer to the project) on the details of the crash, including the following: • a copy of the signed and approved TMP for the worksite • details of the incident including a diagram showing the layout of the worksite at the time of the crash. The diagram must also show any relevant crash details such as vehicle travel paths, skid marks, etc • photographs of the crash site. Minor incidents, such as one or two cones being struck, do not need to be recorded unless there appears to have been potential for a serious incident to have occurred.	The contractor must record all crashes at worksites and, within 24 hours of any crash, brief the TMC, the RCA (and for an RCA construction project the engineer to the project) on the details of the crash, including the following: • a copy of the signed and approved TMP for the worksite • details of the incident including a diagram showing the layout of the worksite at the time of the crash. The diagram must also show any relevant crash details such as vehicle travel paths, skid marks, etc • photographs of the crash site. Minor incidents, such as one or two cones being struck, do not need to be recorded unless there appears to have been potential for a serious incident to have occurred. To aid the ongoing improvement of CoPTTM, crashes and any notifiable events and incidents must also be reported to copttm.incident@nzta.govt.nz using the CoPTTM Incident Report form available on the CoPTTM pages of the NZTA website. This is in addition to any other Health and Safety reporting requirements.	
A5.8.3 STMS's general responsibilities on level LV, 1, 2 and 3 roads	Where one worksite interferes with another operation, ie any signs or other devices overlap on the same piece of road, the STMS seeking to undertake activity on the affected piece of road must meet with the STMS of the established operation. They should establish whether both worksites can co-exist under jurisdiction of one TC/STMS. If necessary, a new TMP should be drawn up by the STMS remaining in charge.	~~Where one worksite interferes with another operation, ie any signs or other devices overlap on the same piece of road, the STMS seeking to undertake activity on the affected piece of road must meet with the STMS of the established operation.~~ ~~They should establish whether both worksites can co-exist under jurisdiction of one TC/STMS. If necessary, a new TMP should be drawn up by the STMS remaining in charge.~~	*Clarification - Provides more guidance for STMS where there are overlapping worksites*

	If the STMS cannot resolve the matter, the issue must be referred to the TMC or RCA for a decision.	~~If the STMS cannot resolve the matter, the issue must be referred to the TMC or RCA for a decision.~~ Where the TTM for one worksite interferes with the TTM of another worksite (eg any signs or other devices overlap on the same piece of road) the STMS seeking to undertake activity on the affected piece of road must meet with the STMS of the established worksite. They should establish whether both worksites can co-exist by adjusting the TMP and agreeing either: • one STMS takes responsibility for the TTM (eg the other organisation works within the existing worksite) • each STMS remains responsible for their section of the worksite (to be recorded on each on-site record). If the TMPs cannot be easily adjusted on site to accommodate the two worksites a new TMP must be drawn up. Conditions and responsibilities within the works access permit (WAP) remain with the WAP applicant for each working space. If the matter cannot be resolved the issue must be referred to the TMC or RCA for a decision.	
A6.8.2 Type of course	**Level 2** /3 STMS-NP certificate will not include the STMS warrant. To become a fully qualified **level 2** /3 STMS, and hence be able to undertake full responsibility for all aspects of TTM, the applicant must undertake and pass a field assessment.	**Level 2/3** STMS-NP certificate will not include the STMS warrant. To become a fully qualified l**evel 2/3** STMS, and hence be able to undertake full responsibility for all aspects of TTM, the applicant must undertake and pass a field assessment. Prior to the field assessment the candidate must competently install, manage and remove 3 verified worksites. A verifier will confirm the candidate's	*Clarification*

		work.	
A7.1.1 About TMPs	Depending on the size, duration and location of the worksite multiple TMPs (or a TMP with multiple TMDs) may be required for various stages of the work.	*Added additional paragraph* Depending on the size, duration and location of the worksite multiple TMPs (or a TMP with multiple TMDs) may be required for various stages of the work. TMPs must include local RCA requirements (RCAs must be consulted as they may have local requirements for managing pedestrians, cyclists and parking). Where regulatory parking and stopping areas are to be affected by the works additional consultation time may be required during planning for the activity.	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
A7.2 Application and approvals procedure	***RCA gives consent for the activity*** Applicant requests authority from the RCA to carry out activity on road reserve.	***RCA gives consent for the activity*** Applicant requests authority from ~~the~~ each affected RCA to carry out activity on road reserve.	
B1.3.2.3 900mm warning and regulatory signs for shoulders, medians and roadside areas	Where shoulders, medians and roadside areas will not accommodate a full size sign, a 900mm warning or regulatory sign including a speed limit sign may be used with the RCA's permission.	Where shoulders, medians and roadside areas will not accommodate a full size sign, a 900mm warning or regulatory sign including a speed limit sign may be used with the RCA's permission. These 900mm signs must not be used at other worksites without the approval of the RCA.	*Restriction to stop smaller sized signs which have been approved for use at a specific worksite being inappropriately used at other worksites*
B1.4.2 Direction and protection **Speed limit** TEMPORARY **Requirements for use**	The TG1 temporary plate must be used in conjunction with RS1 regulatory speed signs to restrict traffic speeds at worksites to give protection to workers, the road surface and road structures in an emergency. The temporary speed limit must be at least 20km/h less than the normal speed limit for that section of	The TG1 temporary plate must be used in conjunction with RS1 regulatory speed signs to apply a temporary speed limit (TSL) and restrict traffic speeds. ~~at worksites to give protection to workers, the road surface and road structures in an emergency.~~	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*

	road. On all roads, except Level LV roads, the TG1 signs must be gated (ie a sign on both sides of the road). Repeater TSLs are only required on the left hand side only at 400m intervals. Level 1- 750mm minimum diameter for static operations. TEMPORARY supplementary plate – minimum 900mm x 300mm (TCD rule allows a minimum of 800mm x 250mm. This size is not recommended as it will not fit stands). Level 2 and 3 – 1200mm minimum diameter for static operations.	A TSL is used when there is a risk of danger to a worker or the public, or a risk of damage to a road due to: physical work occurring on or adjacent to a road an unsafe road surface or structure a special event an emergency. The ~~temporary speed limit~~TSL must be 80 km/h or less and at least ~~20km/h~~10km/h less than the normal speed limit for that section of road. On all roads, except Level LV roads, the TG1 signs must be gated (ie a sign on both sides of the road). Repeater TSLs are only required on the left hand side ~~only~~ at 400m intervals. Level 1- 750mm minimum diameter for static operations. TEMPORARY supplementary plate – minimum 900mm x 300mm (TCD rule allows a minimum of 800mm x 250mm. This size is not recommended as it will not fit stands). Level 2 and 3 – 1200mm minimum diameter for static operations.		
B1.4.2 Direction and protection	*No equivalent wording*	NO ENTRY	RD2	 This sign can only be used after formal authorisation by the controlling authority. It is used for temporary traffic management where there is a partial road closure and approaching vehicles are not permitted to enter a road section eg one direction closed and the carriageway is temporarily made into a one-way road.	*Allows use of the RD2 permanent sign for temporary traffic management*

					RD2 signs must be augmented with T1A/B road works signs and TD-type detour direction indicator signs used to indicate the shortest alternative route with an adequate width and no height restrictions. Level 1 - 750mm minimum diameter for static operations. Level 2 - 900mm minimum diameter for static operations. Level 3 - 1200mm minimum diameter for static operations.		
B1.4.2 Direction and protection	**Bridge end markers**	*No sign reference*		~~**Bridge end markers**~~ **Width marker**	WYBL		*Bridge end markers now referred to as width markers* *Added sign references*
		No sign reference			WYBR		
	Hazard marker	*No sign reference*		**Hazard marker**	WYHM		
B1.4.3 End of works				Speed limit 110km/h	RS4		*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
B2.1.1 Manufacture	To enable manufacturers and suppliers time to make the changes required, such devices made to			~~To enable manufacturers and suppliers time to make the changes required, such devices made to~~			*Removes redundant*

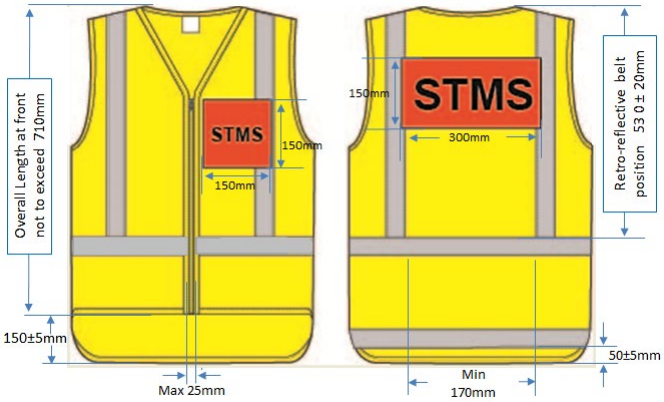
and supply	the previous specification will remain compliant until 1st January 2016. After this date all items manufactured and sold must be compliant to the revised specifications included in this edition.	~~the previous specification will remain compliant until 1st January 2016. After this date all items manufactured and sold must be compliant to the revised specifications included in this edition.~~ All items claiming conformance with CoPTTM ~~manufactured and sold~~ must be compliant to the revised specifications included in this edition.	*information*
THROUGHOUT Section B3	On label Garment compliance for the 4th Edition 2017 has been confirmed using **TTMC-W**	On label Garment compliance for the 4th Edition 2017 should become **TTMC-W17**	*Incorporating the Technical Note High Visibility Garments*
B3.1.2 Retro-reflectivity *1st paragraph*	The retro-reflective material must comply with the specification for Class 'R' material as noted in Section 3 and Table 3.2 of AS/NZS1906.4:2010.	~~The~~ All retro-reflective material must comply with the specification for Class 'R' material as noted in Section 3 and Table 3.2 of AS/NZS1906.4:2010.	*Incorporating the Technical Note High Visibility Garments*
B3.2 Logos *1st paragraph*	Garments must not display any lettering, symbols or logos on any compliant high visibility material except within an area located on the upper front left side of the garment.	Garments must not display any lettering, symbols or logos on any compliant high visibility material except within an area located on the wearer's upper front left side of the garment.	*Incorporating the Technical Note High Visibility Garments*
Clause B3.2 Logos *4th paragraph*	Where required for related safety reasons a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm2) to the upper front right side of a garment.	Where required for related safety reasons a fabrics technical recognition I.D. may be added in an area not exceeding 30mm x 30mm (900mm2) to the wearer's upper front right side of a garment.	*Incorporating the Technical Note High Visibility Garments*
B3.3 Garment compliance *1st paragraph*	Garment compliance is based on the Australian and New Zealand Standard AS/NZS 4602.1:2011 *High visibility safety garments Part 1: Garments for high risk applications* and the additional subsections that follow herein. Because all background high visibility material must comply	Garment compliance is based on the Australian and New Zealand Standard AS/NZS 4602.1:2011 *High visibility safety garments Part 1: Garments for high risk applications* including Amendment 1:2016 and the additional subsections and Figures that follow herein. ~~Because all~~ All background high	*Incorporating the Technical Note High Visibility Garments*

	with the wet test, as specified in subsection B3.1.1 Colour, new compliance letters 'TTMC-W' of a practicable size must be included on the garment label to confirm that the garment meets the requirements and is compliant with section B3. Note: Refer also to subsection B3.4.7 Exemption for extra small size garments.	visibility material must comply with the wet test, as specified in subsection B3.1.1 Colour~~, new compliance letters 'TTMC-W' of a practicable size must be included on the garment label to confirm that the garment meets the requirements and is compliant with section B3. Note: Refer also to subsection B3.4.7 Exemption for extra small size garments.~~ In order to confirm compliance with Section B3 new compliance letters '***TTMC-W17***' of a practicable size must be included on the garment label. Note: i. Refer also to subsection B3.4.7 Exemption for extra small size garments. ii. Hereafter, mention of the AS/NZS 4602.1 Standard or Amendments refers to both the Standard plus amendments.	
B3.3 Garment Compliance *2nd paragraph*	All retro-reflective material applied to garments, including extra small size garments complying with subsection B3.4 Garment design must be in strips no less than 50mm wide. Hoops must completely encircle the torso with no breaks except for the permitted front opening. Braces or the rear cross configuration must meet at the top of the shoulder and at the hoops.	All retro-reflective material applied to garments, including extra small size garments complying with subsection B3.4 Garment design must be in strips no less than 50mm wide. ~~Hoops must completely encircle the torso with no breaks except for the permitted front opening.~~ With the exception of the Overall garment (refer to subsection B3.4.4 Overall garment) hoops must completely encircle the torso with no breaks except for the permitted front opening. The 'waist' hoop for the overall garment may include additional breaks no greater than 50mm at each side to enable pocket openings. Braces or the rear cross configuration must meet at the top of the shoulder and at the hoops. Vertical measurement for the positioning of the	*Incorporating the Technical Note High Visibility Garments*

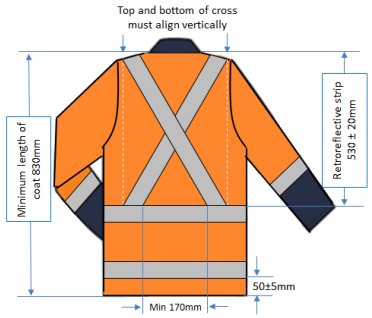
		'waist' hoop is now taken from the shoulder high point to harmonise with Amendment 1 (Refer to garment Figures).	
B3.3 Garment Compliance *3rd paragraph*	Garment compliance must be achieved for a recognised small garment designed for a size 92-95cm body chest measurement. This design must remain consistent throughout the garment size range, grading increasing or decreasing proportionately with the design integrity of the compliant small size.	Garment compliance must be achieved for a ~~recognised small garment designed for a size 92-95cm~~ garment size designed to fit a 100-105cm body chest measurement. This design must remain consistent throughout the garment size range, grading increasing or decreasing proportionately with the design integrity of the compliant size. Hereafter, mention of the **Test Size** refers to the garment size designed to fit a body chest measurement 100-105cm.	*Incorporating the Technical Note High Visibility Garments* .
B3.4 Garment design	The Australian and New Zealand standard AS/NZS 4602.1:2011 has now been amended by Amendment 1:2016. This amendment has created a variation between CoPTTM and AS/NZS 4602.1. Only one measurement is involved and the implications of this amendment remain under discussion. We are hopeful of having a resolution by 1 May 2017. A CoPTTM Technical Note will be published in the CoPTTM section of the NZ Transport Agency website.	~~The Australian and New Zealand standard AS/NZS 4602.1:2011 has now been amended by Amendment 1:2016. This amendment has created a variation between CoPTTM and AS/NZS 4602.1. Only one measurement is involved and the implications of this amendment remain under discussion. We are hopeful of having a resolution by 1 May 2017. A CoPTTM Technical Note will be published in the CoPTTM section of the NZ Transport Agency website.~~ The publication of Amendment 1:2016 to the Australian and New Zealand Standard AS/NZS 4602.1:2011 has required the amendment of the CoPTTM section B3 in order to maintain harmony with the 4602.1:2011 Standard. In order to provide manufacturers and suppliers sufficient time to incorporate design changes, effective immediately and for a period until February 28th 2019, garments complying with CoPTTM Edition 4 February 2017 will be adjudged equally compliant.	*Incorporating the Technical Note High Visibility Garments*

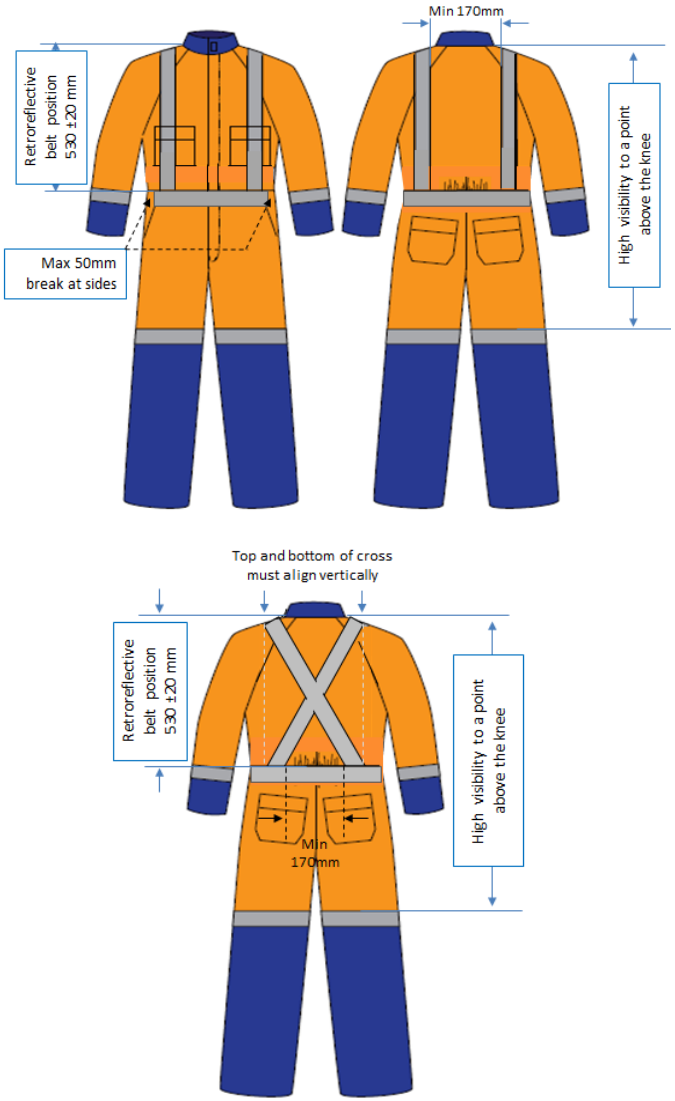
		From 1st March 2019, all garments manufactured must comply with the TTMC-W17 specifications.	
B3.4.1.1 Sleeveless vest requirements *1st Paragraph*	The sleeveless vest design must comply with the Australian and New Zealand standard AS/NZS 4602.1:2011 and the following additional requirements:	The sleeveless vest design ~~must comply with~~, based on the Australian and New Zealand Standard AS/NZS 4602.1:2011 ~~and~~ must include the following additional requirements:	*Incorporating the Technical Note High Visibility Garments*
B3.4.1.1 Sleeveless vest requirements *1st bullet point*	• when calculating the area of high visibility background material as specified in clause 6.4.2 in AS/NZS 4602.1:2011 the measurement rectangle shown in clause 6.4.5 and Appendix A may be extended below waist level to the bottom of the garment providing such extension for the small size does not exceed 680±5mm at the front	• when calculating the area of high visibility background material as specified in clause 6.4.2 in AS/NZS 4602.1:2011 Amendment 1:2016 the measurement rectangle shown in ~~clause 6.4.5~~ Figure 1 and Appendix A Figure A1 may be extended below 'waist' level to the bottom of the garment providing such extension for the ~~small size does not exceed 680±5mm at the front~~ 100-105cm test size does not exceed 710mm at the front	*Incorporating the Technical Note High Visibility Garments*
B3.4.1.1 Sleeveless vest requirements *5th bullet point*	• the minimum qualifying area measurement of background high visibility material for the recognised small size vest not covered by retro-reflective material or printing must be: i. Front of garment 0.21m^2 ii. Rear of garment including the 150mm shirt tail 0.27m^2	• the minimum qualifying area measurement of background high visibility material for the recognised ~~small~~ 100-105cm test size vest not covered by retro-reflective material or printing must be: i. Front of garment ~~0.21m^2~~ 0.24m^2 ii. Rear of garment including the 150mm shirt tail ~~0.27m^2~~ 0.3m^2	*Incorporating the Technical Note High Visibility Garments*

B3.4.1.1 Sleeveless vest requirements *Figure 1*	*Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the amended Figure shown.*	 	*Incorporating the Technical Note High Visibility Garments*
Also caption for Figure 1	Figure1: Sleeveless vest (small size)	Figure 1: Sleeveless vest (~~small size~~ 100-105cm test size)	
B3.4.1.2 *5th bullet point*	The effective date for the introduction of the cross configuration will be 1 October 2016.	~~The effective date for the introduction of the cross configuration will be 1 October 2016.~~	*Incorporating the Technical Note High Visibility Garments*

B3.4.2.1 STMS Sleeveless vest	*Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the amended Figure shown.*		*Incorporating the Technical Note High Visibility Garments*
Also Caption for Figure 2A	Figure 2A: STMS Sleeveless vest (small size)	Figure 2A: STMS Sleeveless vest (~~small size~~ 100-105cm test size)	
B3.4.2.2 Optional MTC Garment Sleeve	*Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the amended Figure shown.*		*Incorporating the Technical Note High Visibility Garments*

Also caption for Figure 2B	Figure 2B: Optional MTC sleeve for Stop/Go operator	Figure 2B: Optional MTC sleeve for Stop/Go operator (100-105cm test size)	
B3.4.3 Long-sleeve coat *2nd bullet point*	• the minimum qualifying area measurement of background high visibility material for the recognised small size coat not covered by retro-reflective material or printing must be measured in the same way as the sleeveless vest specified in subsection B3.4.1 Sleeveless vest except that the measurement rectangle must extend a minimum of 830mm at the front and back. Sleeves are not included in this area	• the minimum qualifying area measurement of background high visibility material for the recognised ~~small~~ 100-105cm test size coat not covered by retro-reflective material or printing must be measured in the same way as the sleeveless vest specified in subsection B3.4.1 Sleeveless vest except that the measurement rectangle must extend a minimum of 830mm at the front and back. Sleeves are not included in this area	*Incorporating the Technical Note High Visibility Garments*
B3.4.3 Long-sleeve coat *3rd bullet point*	• the area of background material must be determined as follows: i. Front of garment 0.3m^2 ii. Rear of garment 0.3m^2	• the area of background material must be determined as follows: i. Front of garment ~~0.3m^2~~ 0.35m^2 ii. Rear of garment ~~0.3m^2~~ 0.35m^2	*Incorporating the Technical Note High Visibility Garments*
B3.4.3 Long sleeve coat. *Figure 3*	*Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the NEW amended Figure shown.*		*Incorporating the Technical Note High Visibility Garments*

			
Also caption for Figure 3	Figure 3: Long sleeve coat (small size)	Figure 3: Long sleeve coat (~~small size~~ 100-105cm test size)	
B3.4.3 Long-sleeve coat *NEW bullet point* *Bullet point 11*	**New** final bullet point to recognise use of black eyelets in place of a full underarm gusset approved via AS/NZS 4602.1:2011. *It is very difficult to find coloured eyelets.*	• The long sleeve coat which may incorporate an underarm gusset as described in AS/NZS 4602.1:2011 may alternatively form a gusset using up to three 10mm (max) eyelets per sleeve to provide underarm ventilation for garments designed for wet weather. Gusset fabric need not be a compliant fabric but must be same colour as the garment. Eyelets should preferably match the colour of the garment.	*Incorporating the Technical Note High Visibility Garments*
B3.4.4 Overall garment *2nd bullet point*	• the minimum qualifying area measurement of background high visibility material for the recognised small size garment not covered by retro-reflective material or printing must be measured in the same way as the sleeveless vest specified in subsection B3.4.1 Sleeveless vest except that the measurement rectangle must be extended to a point on the leg above the knee. Sleeves are not included in this area	• the minimum qualifying area measurement of background high visibility material for the recognised ~~small~~ 100-105cm test size garment not covered by retro-reflective material or printing must be measured in the same way as the sleeveless vest specified in subsection B3.4.1 Sleeveless vest except that the measurement rectangle must be extended to a point on the leg above the knee. Sleeves are not included in this area	*Incorporating the Technical Note High Visibility Garments*

B3.4.4 Overall garment *Figure 4*	*Figure set not posted.* *Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the amended Figure shown.*		*Incorporating the Technical Note High Visibility Garments*
Also caption for Figure 4	Figure 4: Overall garment (size small)	Figure 4: Overall garment (~~size small~~ 100-105cm test size).	

B3.4.4 Overall garment *3rd bullet point*	• the minimum area of background material must be determined as follows: i. Front of garment 0.3m^2 ii. Rear of garment 0.3m^2	• the minimum area of background material must be determined as follows: i. Front of garment ~~0.3m^2~~ 0.35m^2 ii. Rear of garment ~~0.3m^2~~ 0.35m^2	*Incorporating the Technical Note High Visibility Garments*
B3.4.4 Overall garment *5th bullet point*	• compliant retro-reflective material on the torso must be positioned to comply with the pattern in Figure 4	• compliant retro-reflective material on the torso must be positioned to comply with the pattern in Figure 4. **Note:** A break in the 'waist' hoop of no more than 50mm on each side is permitted. (refer subsection B3.3 Garment compliance)	*Incorporating the Technical Note High Visibility Garments*
B3.4.5 Miscellaneous garment *1st bullet point*	• the minimum qualifying area measurement of background high visibility material for the recognised small size garment not covered by retro-reflective material or printing must be: I. Front of garment 0.21m^2 II. Rear of garment including the 150mm shirt tail is 0.24m^2 **Note**: Sleeves are not included in this area	• the minimum qualifying area measurement of background high visibility material for the recognised ~~small~~ 100-105cm test size garment not covered by retro-reflective material or printing must be: i. Front of garment ~~0.21m^2~~ 0.24m^2 ii. Rear of garment including the 150mm shirt tail is ~~0.24m^2~~ 0.3m^2 **Note**: Sleeves are not included in this area	*Incorporating the Technical Note High Visibility Garments*
B3.4.5 Miscellaneous garment *Figure 5*	*Previous Figure 1 referenced measurements relative to the smaller 92-95 "small size".* *Delete in favour of the amended Figure shown.*		*Incorporating the Technical Note High Visibility Garments*

			
Also caption for Figure 5	Figure 5: Miscellaneous garment size small Long Sleeve Polo	Figure 5: Miscellaneous garment ~~size small~~ Long Sleeved Polo (100-105cm test size).	
B3.4.6 Fire Service Garments *2nd paragraph*	Whilst carrying out routine maintenance operations such as hydrant testing for a local council high visibility garments must be TTMC-W compliant.	Whilst carrying out routine maintenance operations such as hydrant testing for a local council high visibility garments must be TTMC-W17 compliant.	*Incorporating the Technical Note High Visibility Garments*
B3.4.6 Fire Service Garments *6th paragraph*	Fire Service personnel attending such emergencies within the roading network are exempted from wearing TTMC-W compliant high visibility vests in the following circumstances:	Fire Service personnel attending such emergencies within the roading network are exempted from wearing TTMC-W17 compliant high visibility vests in the following circumstances:	*Incorporating the Technical Note High Visibility Garments*
B3.4.7 Exemption for extra small size garments *1st paragraph*	Dispensation for an extra small fitting garment will be permitted provided it meets the requirements of the compliant recognised small size garment with the following exceptions:	Dispensation for an extra small fitting garment will be permitted provided it meets the requirements of the compliant recognised ~~small~~ 100-105cm test size garment with the following exceptions:	*Incorporating the Technical Note High Visibility Garments*
B3.4.7 Exemption for extra small size garments *1st bullet point*	• if on an extra small sized garment designed to fit a chest size of less than 92cm where it is not possible to accommodate the minimum specified area of high visibility background material, the garment must be deemed to comply provided the garment design grading decreases proportionately without affecting	~~• if on an extra small sized garment designed to fit a chest size of less than 92cm where it is not possible to accommodate the minimum specified area of high visibility background material, the garment must be deemed to comply provided the garment design grading decreases proportionately without affecting~~	*Incorporating the Technical Note High Visibility Garments*

	the design integrity of the compliant small size of the garment range	~~the design integrity of the compliant small size of the garment range~~ • if any extra small garment in a compliant design range is unable to meet the minimum 0.21m^2 (front) and 0.24m^2 (rear) area of compliant high visibility background material the garment will be deemed to comply provided the design grading decreases proportionately without affecting the design integrity of the compliant 100-105cm test size of the garment range.	
B3.4.7 Exemption for extra small size garments *2nd bullet point*	• such extra small size garment must maintain the same configuration of compliant retro-reflective material as specified for the recognised small size of the design.	• such extra small size garment must maintain the same configuration of compliant retro-reflective material as specified for the recognised ~~small~~ 100-105cm test size of the design.	*Incorporating the Technical Note High Visibility Garments*
B3.4.7 **Exemption for extra small size garments** **Figure 6**	TTMC-W **Extra Small Size** **Warning** Reduced visibility Where practicable avoid work in high risk areas	***TTMC-W17*** **Extra Small Size** **Warning** Reduced visibility Where practicable avoid work in high risk areas	*Incorporating the Technical Note High Visibility Garments*
B12.1.2 Performance standards	Table below summarises the required barrier system performance test levels for the operating speed of adjacent traffic. Barrier system performance levels	Table below summarises the required barrier system performance test levels for the ~~operating~~ permanent speed limit of the road ~~of adjacent traffic~~. Barrier system performance levels	*Change required to align with section C18.2.1 which refers to the permanent speed*

	<table><tr><th>Test Level</th><th>Operating speed</th></tr><tr><td>1</td><td>50km/h or less</td></tr><tr><td>2</td><td>50km/h to 70km/h</td></tr><tr><td>3</td><td>greater than 70km/h</td></tr></table> Temporary road safety barrier hardware must meet or exceed the test level required for the operating speed of adjacent traffic.	<table><tr><th>Test level</th><th>~~Operating~~ Permanent speed</th></tr><tr><td>1</td><td>50km/h or less</td></tr><tr><td>2</td><td>50km/h to 70km/h</td></tr><tr><td>3</td><td>greater than 70km/h</td></tr></table> Temporary road safety barrier hardware must meet or exceed the test level required for the ~~operating~~ permanent speed limit of the road ~~adjacent traffic~~.	
C2.3 Level LV worksite layout distances	On all roads where shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	On all roads where the shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	*Minor editing*
	Lane widths	**Lane widths** (based on permanent speed or TSL if applied)	*Clarification*
	LV/low-risk roads Working on roads designated as LV/low risk (less than 250 vehicles per day (vpd) - less than 20 vehicles per hour), with clear sight distance to the operation and an operating speed of less than 65km/h: • use an appropriate advance warning sign (static installation) and amber flashing beacon on working vehicle when on the shoulder • consider stop/go or give way control of traffic when activity encroaches onto lane. If the above requirements cannot be achieved, the operation must be modified to comply with the requirements of a higher risk rating.	**LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour)** When on the shoulder: • *If CSD **not** available*: Advance warning sign and base to be installed with sign visibility distance and warning distance in place • *If CSD available:* Advance warning sign may be attached to the rear of a work vehicle which has an amber flashing beacon(s) and is visible to approaching road users from the rear. When the activity encroaches onto a live lane consider alternating flow controls. If the above requirements cannot be achieved, the operation must be modified to comply with the appropriate level LV or level 1 requirements.	*Clarification - Amendment aligns LV/LR requirements to TMD F1.2*

		~~LV/low-risk roads~~ ~~Working on roads designated as LV/low risk (less than 250 vehicles per day (vpd) - less than 20 vehicles per hour), with clear sight distance to the operation and an operating speed of less than 65km/h:~~ • ~~use an appropriate advance warning sign (static installation) and amber flashing beacon on working vehicle when on the shoulder~~ • ~~consider stop/go or give way control of traffic when activity encroaches onto lane.~~ ~~If the above requirements cannot be achieved, the operation must be modified to comply with the requirements of a higher risk rating.~~	
C2.4 Level 1 worksite layout distances	On all roads where shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	On all roads where the shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	*Minor editing*
	Lane widths	**Lane widths** (based on permanent speed or TSL if applied)	*Clarification*
C2.5 Combined level LV and level 1 worksite layout distances	On all roads where shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	On all roads where the shoulder width is less than 2.5m and the activity does not affect the live lane, a 10m shoulder taper is permitted (with at least 5 cones at no greater than 2.5m centres).	*Minor editing*
	Lane widths	**Lane widths** (based on permanent speed or TSL if applied)	*Clarification*

	LV/low risk roads Working on roads designated as LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour), with clear sight distance to the operation and an operating speed of less than 65km/h: • use an appropriate advance warning sign (static installation) and amber flashing beacon(s) on working vehicle when on the shoulder • consider stop/go or give way control of traffic when activity encroaches onto lane. If the above requirements cannot be achieved, the operation must be modified to comply with the requirements of a higher risk rating.	**LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour)** When on the shoulder: • *If CSD **not** available*: Advance warning sign and base to be installed with sign visibility distance and warning distance in place • *If CSD available:* Advance warning sign may be attached to the rear of a work vehicle which has an amber flashing beacon(s) and is visible to approaching road users from the rear. When the activity encroaches onto a live lane consider alternating flow controls. If the above requirements cannot be achieved, the operation must be modified to comply with the appropriate level LV or level 1 requirements. ~~LV/low risk roads~~ ~~Working on roads designated as LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour), with clear sight distance to the operation and an operating speed of less than 65km/h:~~ • ~~use an appropriate advance warning sign (static installation) and amber flashing beacon(s) on working vehicle when on the shoulder~~ • ~~consider stop/go or give way control of traffic when activity encroaches onto lane.~~ ~~If the above requirements cannot be achieved, the operation must be modified to comply with the requirements of a higher risk rating.~~	*Amendment aligns LV/LR requirements to TMD F1.2*
C2.6 Level 2	**Layout distances**		

worksite layout distances

Permanent/TSL (km/h)		≤50	60	70	80	90/100
Traffic signs						
A	Sign visibility distance (m)	60/50+	70/60+	80	100	120
B	Warning distance (m)	100/75+	120/90+	140	160	200
C	Sign spacing (m)	50/35+	60/45+	70	80	100
Safety zones						
D	Longitudinal (m)*	15	20	30	45	60
E	Lateral (m)					
	1. Behind cones	1	1	1	1	1
	2. Behind barrier installations	As specified by the Installation Designer				
Tapers						
H	Initial taper length per lane (m)**	90/50+	100/60+	120	150	180
I	Subsequent taper length per lane (m)	50	60	70	80	100
K	Minimum distance between tapers (m)	50	60	70	80	100
Delineation device						
Spacing (centres)	All tapers (m)	2.5	2.5	2.5	2.5	2.5
Spacing (centres)	Cones parallel to the lane (eg between tapers and alongside the working space) (m)	5	5	10	10	10
Spacing (centres)	At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points	2.5m for 10m either side of a change in alignment		2.5m for 20m either side of a change in alignment		

* A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite.

** Taper length is based on a single lane shift of 3.5m.

\+ The longer distance is the desirable distance, the shorter distance is the minimum distance required. The longer distances must be used wherever possible. The shorter distances may only be used where there are road environment constraints.

Lane widths

Speed (km/h)		30	40	50	60	70	80	90	100
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above tables are minimum values.

Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.

Lane widths

Permanent/TSL (km/h)		≤50	60	70	80	90	100 /110
Traffic signs							
A	Sign visibility distance (m)	60/50+	70/60+	80	100	120	120
B	Warning distance (m)	100/75+	120/90+	140	160	200	200
C	Sign spacing (m)	50/35+	60/45+	70	80	100	100
Safety zones							
D	Longitudinal (m)*	15	20	30	45	60	60
E	Lateral (m)						
	1. Behind cones	1	1	1	1	1	1
	2. Behind barrier installations	As specified by the Installation Designer					
Tapers							
H	Initial taper length per lane (m)**	90/50+	100/60+	120	150	180	180
I	Subsequent taper length per lane (m)	50	60	70	80	100	100
K	Minimum distance between tapers (m)	50	60	70	80	100	100
Delineation device							
Spacing (centres)	All tapers (m)	2.5	2.5	2.5	2.5	2.5	2.5
Spacing (centres)	Cones parallel to the lane - eg between tapers and alongside working space (m)	5	5	10	10	10	10
Spacing (centres)	At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points	2.5m for 10m either side of a change in alignment		2.5m for 20m either side of a change in alignment			

* A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite.

** Taper length is based on a single lane shift of 3.5m.

\+ The longer distance is the desirable distance, the shorter distance is the minimum distance required. The longer distances must be used wherever possible. The shorter distances may only be used where there are road environment constraints.

Lane widths (based on permanent speed or TSL if applied)

Speed (km/h)		30	40	50	60	70	80	90	100/110
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above tables are minimum values.

Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.

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Lane widths (based on permanent speed or TSL if applied)

Clarification

C2.7 Level 3 worksite layout distances

Layout distances

Permanent/TSL (km/h)		◆80	100
Traffic signs			
A	Sign visibility distance (m)	100	120
C ❖	Sign spacing (m) - **Desirable**	160	200
	Sign spacing (m) - **Minimum**	80	100
Safety zones			
D	Longitudinal (m)*	45	60
E	Lateral (m)		
	1. Behind cones etc	1	1
	2. Behind barrier installations	As specified by the Installation Designer	
Tapers			
H	Initial taper length per lane (m)**	150	180
I	Subsequent taper length per lane (m)	80	100
K	Minimum distance between tapers (m) ***	80	100
Delineation devices			
Spacing (centres)	All tapers (m)	2.5	2.5
	Cones parallel to the lane (eg between tapers and alongside the working space) (m)	10	10
	At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points	2.5m for 20m either side of a change in alignment	

◆ For temporary and permanent speeds less than 80km/h use the **Error! Reference source not found. Error! Reference source not found.** table.

❖ The desirable sign spacing distance must be used wherever possible. The minimum sign spacing distance may only be used where there are road environment constraints.
Where only one sign is erected in advance of the start of a cone taper the distance from the sign to the start of the taper must be 2xC.

* A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite. Refer subsections H1.17 and H1.18.

** Taper length is based on a single lane shift of 3.5m.

*** Must be altered if required to meet the supplementary TLS distance.

Lane widths									
Speed (km/h)		30	40	50	60	70	80	90	100
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above table are minimum values. Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.

Permanent/TSL (km/h)		≤50	60	70	80	90	100/110
Traffic signs							
A	Sign visibility distance (m)	60/50+	70/60+	80	100	120	120
C +	Sign spacing (m) - **Desirable**	50	60	70	160	200	200
	Sign spacing (m) - **Minimum**	35	45	70	80	100	100
Safety zones							
D	Longitudinal (m)*	15	20	30	45	60	60
E	Lateral (m)						
	1. Behind cones etc	1	1	1	1	1	1
	2. Behind barrier installations	As specified by the Installat on Desi ner					
Tapers							
H	Initial taper length per lane (m)**	90/50+	100/60+	120	150	180	180
I	Subsequent taper length per lane (m)	50	60	70	80	100	100
K	Minimum distance between tapers (m) ***	50	60	70	80	100	100
Delineation devices (all speeds)							
Spacing (centres)	All tapers (m)	2.5	2.5	2.5	2.5	2.5	2.5
	Cones parallel to the lane (eg between tapers and alongside the working space) (m)	5	5	10	10	10	10
	At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points	2.5m for 10m either side of a change in alignment		2.5m for 20m either side of a change in alignment			

\+ The longer distance is the desirable distance, the shorter distance is the minimum distance allowed. The desirable distances must be used wherever possible. The minimum distances may only be used where there are road environment constraints.
Where only one sign is erected in advance of a taper the distance from the sign to the taper is 2xC.

* A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite. Refer subsections H1.17 and H1.18.

** Taper length is based on a single lane shift of 3.5m.

*** Must be altered if required to meet the distance shown on the TLS supplementary plate.

Lane widths (based on permanent speed or TSL if applied)									
Speed (km/h)		30	40	50	60	70	80	90	100/110
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above table are minimum values. Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.

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Minor correction to layout distances table included in the technical note for speeds 70km/h and less

Minor edit to first relaxation under the table of distances to align wording to the level 2 table

Minor edit to the last relaxation to make it easier to understand

	Lane widths	**Lane widths** (based on permanent speed or TSL if applied)	*Clarification*
C2.8 Lane widths	The temporary lane width is a function of the speed limit applied at a worksite. The temporary lane widths for all levels of road for TTM are:	The temporary lane width is a function of the speed limit applied at a worksite. The temporary lane widths ~~for all levels of road~~ for TTM are:	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*

	<table><tr><th colspan="2">Permanent/ TSL(km/h)</th><th>30</th><th>40</th><th>50</th><th>60</th><th>70</th><th>80</th><th>90</th><th>100</th></tr><tr><td>F</td><td>Lane width (m)</td><td>2.75</td><td>2.75</td><td>3.0</td><td>3.0</td><td>3.25</td><td>3.25</td><td>3.5</td><td>3.5</td></tr></table>	<table><tr><th colspan="2">Permanent/ TSL(km/h)</th><th>30</th><th>40</th><th>50</th><th>60</th><th>70</th><th>80</th><th>90</th><th>100</th><th>110</th></tr><tr><td>F</td><td>Lane width (m)</td><td>2.75</td><td>2.75</td><td>3.0</td><td>3.0</td><td>3.25</td><td>3.25</td><td>3.5</td><td>3.5</td><td>3.5</td></tr></table>	
C3.3.2 Positioning of signs	Subject to application via a TMP and approval by the RCA, median barrier brackets may be used to support TTM signs. **Note:** When a sign on a barrier is removed, the bracket must also be removed. Details of any variations to the standard placement of signs must be specified by the site traffic management supervisor (STMS) on the TMP where applicable, or associated on-site record and hazard identification form.	*Added new paragraphs* Subject to application via a TMP and approval by the RCA, median barrier brackets may be used to support TTM signs. **Note:** When a sign on a barrier is removed, the bracket must also be removed. The standard spacing for permanently fixed no stopping (PN11) signs is 100 metres. This spacing can be extended to 500 metres on roads with a speed limit greater than 70km/h. RCAs may require a sign spacing less than 100 metres for a temporary situation. There is no minimum legal mounting height for no stopping (PN11) signs. They must be installed so that they are visible to the approaching road users, legible and allow adequate time for the intended response from the road user. Details of any variations to the standard placement of signs must be specified by the site traffic management supervisor (STMS) on the TMP where applicable, or associated on-site record and hazard identification form.	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
C3.6.1 Covering existing signs	All permanent signs that no longer apply during the activity phase must be covered, removed, or temporarily modified. However, for short-term operations, overhead gantry signs do not need to be	All permanent signs (including no stopping signs) that no longer apply during the activity phase must be covered, removed, or temporarily modified. However, for short-term operations, overhead gantry signs do	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*

	covered unless required by the RCA.	not need to be covered unless required by the RCA.	
C4.1.1 Purpose	The installation of a TSL helps to control traffic at temporary hazards and for special events. The TSL gives positive direction and guidance and, if set at an appropriate level, should receive a good level of compliance.	The installation of a TSL helps to control traffic at temporary hazards and for special events. ~~The TSL gives positive direction and guidance and, if set at an appropriate level, should receive a good level of compliance.~~	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
C4.1.2 Land Transport Rule: Setting of Speed Limits ~~2003~~2017	The TSL requirements in CoPTTM are in accordance with the Land Transport Rule: Setting of Speed Limits 2003 and subsequent amendments.	The TSL requirements in CoPTTM are in accordance with the Land Transport Rule: Setting of Speed Limits ~~2003~~ 2017and subsequent amendments.	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
C4.1.4 General	• have a drop in speed from the existing permanently gazetted speed limit as follows: greater than 50km/h, at least 20km/h less than the permanent speed limit 50km/h or less, at least 10km/h less than the permanent speed limit	• ~~have a drop in speed from the existing permanently gazetted speed limit as follows:~~ ~~greater than 50km/h, at least 20km/h less than the permanent speed limit~~ ~~50km/h or less, at least 10km/h less than the permanent speed limit~~ • be 80km/h or less and at least 10km/h below the permanent speed limit	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
C4.2.2 TSL decision matrix worksheet	Transfer the lowest possible TSL to the bottom circle. The lowest TSL should be applied if it is: at least 20km/h less than the permanent speed limit on roads greater than 50km/h at least 10km/h less than the permanent speed limit on roads 50km/h or less.	Transfer the lowest possible TSL to the bottom circle. The lowest TSL should be applied if it is 80km/h or less and at least 10km/h below the permanent speed limit ~~at least 20km/h less than the permanent speed limit on roads greater than 50km/h~~ ~~at least 10km/h less than the permanent speed limit on roads 50km/h or less.~~	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*

C4.4.2 Duration	TSLs must be removed as soon as the circumstances under which the speed restriction was imposed no longer exist. TSLs can only be installed for up to six months. Should a TSL be required for more than six months, the RCA must review the TSL, and if it is still required, a new TMP must be approved. Suggested processes to install a bring-up can be found in section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits. *Explanation* *Under the Land Transport Rule Setting of Speed Limits 2003 (Rule 54001) the definition of a temporary speed limit means speed limit that is in force for a period of less than six months and is set under this rule.* *Under section 5.1 of this rule it states a temporary speed limit applies from the time a temporary speed limit is installed.* *An authority to use a temporary speed limit by way of a TMP can be for a longer period. It is only the installation period that is limited to less than 6 months.*	TSLs must be removed as soon as the circumstances under which the speed restriction was imposed no longer exist. ~~TSLs can only be installed for up to six months.~~ TSLs cannot be installed for a continuous use of longer than 12 months. Should a TSL be required for more than ~~six~~ 12 months, the RCA must review the original decision for use of the TSL, and if it is still required, a new TMP must be approved. Suggested processes to install a bring-up can be found in section I-18: Guidance on TMP Monitoring Processes for Temporary Speed Limits. ~~*Explanation*~~ ~~*Under the Land Transport Rule Setting of Speed Limits 2003 (Rule 54001) the definition of a temporary speed limit means speed limit that is in force for a period of less than six months and is set under this rule.*~~ ~~*Under section 5.1 of this rule it states a temporary speed limit applies from the time a temporary speed limit is installed.*~~ ~~*An authority to use a temporary speed limit by way of a TMP can be for a longer period. It is only the installation period that is limited to less than 6 months.*~~	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
C4.4.3 Long-term performance deficiencies	A TSL would **not** normally be used where a road has a long-term deficiency not caused by road works (eg poor alignment or slippery surface). It is more appropriate in these circumstances to use a permanent warning sign with a yellow background (eg WR3).	A TSL ~~would **not** normally~~ may be used where a road has a long-term deficiency not caused by road works (eg ~~poor alignment or~~ slippery surface). ~~It is more appropriate in~~ In these circumstances it may be appropriate to also ~~to~~ use a permanent warning sign with a yellow background (eg	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*

		WR3).	
C6.2.4 Overhead safety zones	The maximum legal vehicle height permitted on roads is 4.25m but road users often illegally exceed this limit.	The maximum legal vehicle height permitted on roads is ~~4.25m~~ 4.3m but road users often illegally exceed this limit.	*Change in legal requirements*
C10.1.1 General	Positive traffic management measures must be used when installing TSLs of: • **less than 70km/h** in areas with permanent posted speed limits of **100km/h**, or • **less than 50km/h** in areas with a permanent posted speed limit of **70** or **80km/h.**	Positive traffic management measures must be used when installing TSLs of: • **less than 80km/h** in areas with permanent speed limits of **110km/h**, or • **less than 70km/h** in areas with permanent ~~posted~~ speed limits of **100km/h**, or • **less than 50km/h** in areas with a permanent ~~posted~~ speed limit of **70** or **80km/h.**	*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*
C10.1.2 Types of positive traffic management	These include, but are not limited to: • narrowing lane widths adjacent to the working space by the use of cones or other delineation devices to increase the phenomenon known as 'Side Friction' • close spacing of delineation devices • using flashing beacons, flares, or illuminated signs • using temporary speed humps • placing cones from the TSL to the taper • cone offset delineation (where cones are placed either side of a lane(s), the cones on one side are placed longitudinally offset from the other by a half cone spacing) • when approaching the MTC position, the cone threshold is an example of side friction.	These include, but are not limited to: • narrowing lane widths adjacent to the working space by the use of cones or other delineation devices to increase the phenomenon known as 'Side Friction' • close spacing of delineation devices • using flashing beacons, flares, or illuminated signs • using approved traffic control devices (eg flashing beacons, flares, illuminated signs) • ~~using flashing beacons, flares, or illuminated signs~~ • using a speed information sign • using temporary speed humps • placing cones from the TSL to the taper • cone offset delineation (where cones are placed either side of a lane(s), the cones on one side are placed longitudinally offset from the other by a half cone spacing)	*Include an additional option for positive traffic management*

		• when approaching the MTC position, the cone threshold is an example of side friction.	
C10.2.10 Cyclists impacted by MTC operation	Cyclists tend to move slower and in a manner different to other traffic. If the route is narrow or rough, consider one of the following options for dealing with cyclists impacted by the MTC operation: • **Separate cyclists from the other traffic by time.** This can be achieved by releasing the other traffic first with the cyclists following and ensuring that no traffic follows behind them until they have cleared the area of stop/go operation. This will require additional communication between the MTC and the cyclists/drivers to ensure they understand the process • **Create a temporary cycle lane.** If there is sufficient road width a temporary cycle lane may be established for the cyclists	Cyclists tend to move slower and in a manner different to other traffic. If the route is narrow or rough, consider one of the following options for dealing with cyclists impacted by the MTC operation: • **Create a temporary cycle lane.** If there is sufficient road width a temporary cycle lane may be established for the cyclists • **Separate cyclists from the other traffic by time.** This can be achieved by releasing the other traffic first with the cyclists following and ensuring that no traffic follows behind them until they have cleared the area of stop/go operation. This will require additional communication between the MTC and the cyclists/drivers to ensure they understand the process • ~~**Create a temporary cycle lane.** If there is sufficient road width a temporary cycle lane may be established for the cyclists~~	*Reversed the order of these options to show 'separation of cyclists by space' before 'separation by time' as the former option provides more controlled and continuous safety segregation than the time separation option*
C11.1.1 General	The installation of traffic management signs and devices must be undertaken so that it: • does not conflict with information on any warning signs already erected	The installation of traffic management signs and devices must be undertaken so that it: • does not conflict with information on any ~~warning~~ signs already erected	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
C11.2.1 Order of worksite establishment	On single direction carriageways signs must be deployed on the left side of the road first, and then on the right hand side of the road, if required.	~~On single direction carriageways signs must be deployed on the left side of the road first, and then on the right hand side of the road, if required.~~ On single direction carriageways signs may be	*Change designed to increase safety for road users and crew*

		deployed on either: • the left hand side of the road first then on the right hand side of the road • the right hand side of the road first then on the left hand side of the road. The deployment option chosen must reflect the safety of the installation crew and the safety of road users when approaching the signs and installation vehicles.	
C11.2.10 Courtesy tow of vehicle		*Added additional sub section* **C11.2.10 Courtesy tow of vehicle** RCAs have different policies and procedures for courtesy towing of a vehicle. Notification to the vehicle owner of the courtesy tow requirement, in advance of the installation of TTM, may be required. Contact the RCA to confirm local policies and procedures.	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
C13.1.1 General		*Added additional paragraph* Consult with RCA(s) for local requirements relating to the management of pedestrians and cyclists.	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
C13.2.1 General	Pedestrians, including those with impaired vision or wheelchair users must be considered as part of the design, preparation, approval and implementation of the TMP.	~~Pedestrians, including those with impaired vision or wheelchair users must be considered as part of the design, preparation, approval and implementation of the TMP.~~ Provisions for footpath users with sight, hearing or mobility issues must be included in the design, preparation, approval and implementation of the TMP.	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*

	Location	Minimum width	Comments	Location	Minimum width	Comments	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*
	Residential/ Rural	0.9m	Where the length of the temporary footpath exceeds 20m, these widths may have to be increased so pedestrians do not have to wait to pass.	~~Residential/ Rural~~	~~0.9m~~	~~Where the length of the temporary footpath exceeds 20m, these widths may have to be increased so pedestrians do not have to wait to pass.~~ An existing footpath width may be used when it is narrower than the minimums shown. Where the length of the temporary footpath exceeds 20m a pedestrian	
	Suburban centre	1.2m		Residential/Rural /Suburban centre	1.2m		
	Central business district (CBD) and commercial zones. Commercial zones include shops, schools, visually impaired routes, aged persons homes, hospitals, tourist attractions, bus stops, libraries.	2.0m		Central business district (CBD) and commercial zones. Commercial zones include shops, schools, ~~visually impaired routes,~~ aged persons homes or facilities, hospitals, tourist attractions, bus stops, libraries.	2.0m		

						passing bay may be required.	
C13.2.3 Alternative routes	Where the activity impacts a footpath and minimum footpath widths cannot be maintained, alternative routes with a firm smooth surface and no trip hazards are to be provided in the following order of preference: 1. onside of road reserve away from the carriageway, or 2. between the working space and carriageway (but not into the live lane), or 3. into the carriageway (either in a parking lane or a suitably delineated and protected section of the existing traffic lane) 4. across the carriageway to a footpath on the opposite side with delineation of the crossing points and kerb ramps to assist mobility vehicles and pushchairs **Note:** This option is strongly discouraged and is not to be used if options 1, 2 or 3 are feasible (only use where there is a pedestrian or a signalised crossing **or** on a level LV or level 1 road with a			Where the activity impacts a footpath and minimum footpath widths cannot be maintained, alternative routes with a firm smooth surface and no trip hazards are to be provided in the following order of preference: 1. onside of road reserve away from the carriageway, or 2. between the working space and carriageway (but not into the live lane), or 3. into the carriageway (either in a parking lane or a suitably delineated and protected section of the existing traffic lane) 4. use footpath controllers to guide pedestrians around the operation **Note:** This option may be combined with any of the other options to increase safety for pedestrians ~~Only use this method when there is no alternative temporary footpath safely available.~~ 5. across the carriageway to a footpath on the		*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*

	speed of less than 65km/h). 5. use footpath controllers to guide pedestrians around the operation **Note:** Only use this method when there is no alternative temporary footpath safely available.	opposite side with delineation of the crossing points and kerb ramps to assist mobility vehicles and pushchairs **Note:** This option is strongly discouraged and is not to be used if options 1, 2 or 3 are feasible (only use where there is a pedestrian or a signalised crossing **or** on a level LV or level 1 road with a speed of less than 65km/h). ~~use footpath controllers to guide pedestrians around the operation~~ ~~**Note:** Only use this method when there is no alternative temporary footpath safely available.~~	
C13.2.4 Footpath controller	Where there is no alternative footpath safely available, sufficient footpath controllers are to be provided to guide pedestrians through the activity. A footpath controller may be used to manage pedestrians, cyclists or other road users, and road workers entering and leaving working spaces, including people involved in events. They can also be used to guide pedestrians where appropriate footpath widths cannot be achieved. **Note:** Footpath controller's duties do not include duties of an MTC. A footpath controller is suitable for footpath duties alongside a level LV or level 1 road but must have a minimum of a level 1 TC qualification for level 2 footpath controller duties. RCAs may require footpath controllers to be used if there are known pockets of elderly or children in the area, that is, if activity is near rest homes or schools. The footpath controller must be briefed by the STMS/TC.	The role includes the following: • stopping pedestrians until the way is clear and safe for them to proceed • guiding pedestrians past or through the site • managing pedestrians, cyclists, other road users and road workers entering and leaving working spaces (including people involved in events) • giving information to interested parties relating to the activity (being an ambassador for the site). Where there is a low number of pedestrians the footpath controller may carry out another role relative to the work activity but must be available to carry out the footpath controller role when required. ~~Where there is no alternative footpath safely available, sufficient footpath controllers are to be provided to guide pedestrians through the activity. A footpath controller may be used to manage pedestrians, cyclists or other road users, and road workers entering and leaving working spaces, including people involved in~~	*Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party*

	The briefing must cover: • all duties required of the person • a record for any incidents observed • use of two way radios where these are necessary, and • any hazards on site and mitigation methods. The briefing is to be recorded and both parties are to sign to the effect that the briefing has been delivered satisfactorily and fully understood. The person selected for this duty must be someone with satisfactory people skills, sufficient competency for the task described and a mature attitude.	~~events.~~ ~~They can also be used to guide pedestrians where appropriate footpath widths cannot be achieved.~~ **Note:** Footpath controller's duties do not include duties of an MTC. A footpath controller is suitable for footpath duties alongside a level LV or level 1 road but must have a minimum of a level 1 TC qualification for level 2 footpath controller duties. ~~RCAs may require footpath controllers to be used if there are known to be pockets of elderly or children in the area, that is, if the affected footpath activity is near rest homes or schools.~~ RCAs may require footpath controllers to be used if there are known to be school age children, the elderly, mobility impaired persons and sight impaired persons in the area. The footpath controller must be briefed by the STMS/TC. The briefing must cover: • all duties required of the person • a record for any incidents observed • use of two way radios where these are necessary, and • any hazards on site and mitigation methods. The briefing is to be recorded and both parties are to sign to the effect that the briefing has been delivered satisfactorily and fully understood. The person selected for this duty must be someone with satisfactory people skills, sufficient competency for the task described and a mature attitude.	

<table>
<tr>
<td>C13.2.5 Protecting pedestrians from the working space</td>
<td colspan="2">
<table>
<tr><th>Option</th><th>When used</th></tr>
<tr><td>Safety fences</td><td>Long-term or unattended worksites where there are hazards present</td></tr>
<tr><td>Cones connected with cone bars</td><td>Attended worksites.
Note: Cone bars are not recommended where heavy equipment (eg a digger) is being used. A safety fence is preferred in these cases.</td></tr>
</table>
</td>
<td colspan="2">
<table>
<tr><th>Option</th><th>When used</th></tr>
<tr><td>Safety fences</td><td>Long-term or unattended worksites or where a significant risk is present ~~where there are hazards present~~</td></tr>
<tr><td>Cones connected with cone bars</td><td>Attended worksites where:
• no significant risk has been identified as being present, or
• access to all identified significant risk is managed by a person who is in the immediate vicinity of and in control of the risk(s).
Note: Cone bars are not recommended where heavy equipment (eg a digger) is being used. A safety fence is preferred in these cases.</td></tr>
</table>
</td>
<td>Amended as a result of recommendations from Pedestrians, Cyclists and Parking working party</td>
</tr>
<tr>
<td>C15.2.1 Signing of access points</td>
<td colspan="2">The site access must be identified by the TZ1L/R SITE ACCESS _m advance warning sign and the TZ2L/R Access Direction sign.</td>
<td colspan="2">Entry and exit to the closure should be via a clearly signed and delineated site access point.
The site access must be identified by the TZ1L/R SITE ACCESS _m advance warning sign and the TZ2L/R Access Direction sign.</td>
<td>Minor edit
Text relocated form C15.2.2 MTCs at site access points</td>
</tr>
<tr>
<td>C15.2.3 Location</td>
<td colspan="2">
<table>
<tr><th>*Permanent/ temporary speed limit</th><th>50 km/h</th><th>60 km/h</th><th>70 km/h</th><th>80 km/h</th><th>100 km/h</th></tr>
<tr><td>Minimum distance between a site access and any intersection, on- or off-ramp,</td><td>50m</td><td>60m</td><td>70m</td><td>80m</td><td>100m</td></tr>
</table>
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<td>Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017</td>
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</table>

<table>
<tr><td></td><td>taper or obstruction.</td><td>intersection, on- or off-ramp, taper or obstruction.</td><td></td></tr>
<tr><td>C16.2.5 Examples of simple delay calculations</td><td>Example 2
Delays of more than five minutes are not unreasonable while the activity is in progress because the threshold of 1000vph for lanes more than 200m from an intersection is not likely to be exceeded.</td><td>Example 2
Delays of more than five minutes are not ~~unreasonable~~ expected while the activity is in progress because the threshold of 1000vph for lanes more than 200m from an intersection is not likely to be exceeded.</td><td>Clarification</td></tr>
<tr><td>C18.4 End treatments
C18.4.1 General</td><td>Minimum barrier end offsets
<table><tr><th>Permanent posted speed (km/h)</th><th>50</th><th>60</th><th>70</th><th>80</th><th>100</th></tr><tr><td>Distance between unprotected barrier end and edgeline (m)</td><td>3</td><td>4</td><td>6</td><td>8</td><td>9</td></tr></table></td><td>Minimum barrier end offsets
<table><tr><th>Permanent ~~posted~~ speed (km/h)</th><th>50</th><th>60</th><th>70</th><th>80</th><th>90</th><th>100</th><th>110</th></tr><tr><td>Distance between unprotected barrier end and edgeline (m)</td><td>3</td><td>4</td><td>6</td><td>8</td><td>9</td><td>9</td><td>10</td></tr></table></td><td>Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017</td></tr>
<tr><td>C18.4.2 Flares</td><td>Recommended flare rates
<table><tr><th>Permanent posted speed (km/h)</th><th>50</th><th>60</th><th>70</th><th>80</th><th>100</th></tr><tr><td>Barrier inside shy line</td><td>1:18</td><td>1:18</td><td>1:21</td><td>1:24</td><td>1:30</td></tr><tr><td>Rigid barrier outside shy line</td><td>1:12</td><td>1:12</td><td>1:14</td><td>1:16</td><td>1:20</td></tr><tr><td>Non-rigid barrier outside shy line</td><td>1:10</td><td>1:10</td><td>1:11</td><td>1:12</td><td>1:15</td></tr></table></td><td>Recommended flare rates
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</table>

		Non-rigid barrier outside shy line | 1:10 | 1:10 | ~~1:11~~ 1:10 | ~~1:12~~ 1:15 | 1:15 | 1:15 | 1:15	
C18.7 Delineation	Where barrier systems are used on roads with permanent speed limits higher than 65km/h the primary means of delineation must be chevrons and road marking or cones placed on the traffic side of the barrier. When the barrier is removed the temporary road markings must be removed by water blasting, or another removal technique approved by the engineer. Section B12 Barrier systems provides the recommended delineation layout. When barriers are installed complete with delineation chevrons at 10m centres and with temporary road markings in place the need to also install cones for delineation is removed.	Where barrier systems are used on roads with permanent speed limits higher than 65km/h the primary means of delineation must be chevrons at 10m centres. The chevrons must be accompanied by ~~and~~ road marking or other delineation (eg cones) placed on the traffic side of the barrier. When barriers are installed complete with chevrons at 10m centres and with temporary road markings in place, the need to also install other delineation (eg cones) is removed. When the barrier is removed the temporary road markings must be removed by water blasting, or another removal technique approved by the engineer. Section B12 Barrier systems provides the ~~recommended delineation layout.~~ required chevron layout. ~~When barriers are installed complete with delineation chevrons at 10m centres and with temporary road markings in place the need to also install cones for delineation is removed.~~	*Provides more clarity on the requirements for the use of chevrons and other delineation (eg cones)*
D1.5.1 Use of amber flashing beacons	The amber flashing beacon(s) must meet the requirements of subsection B14.1 flashing beacons and they must be visible in all directions at all times.	The amber flashing beacon(s) must meet the requirements of subsection B14.1 flashing beacons and they must be visible in all directions at all times. Indicator lights are not to be used as hazard warning lights while amber flashing beacons are operating. The indicator lights should be reserved for indicating changes of direction.	

D1.5.1 Use of amber flashing beacons	The beacons on all vehicles in a mobile operation: • must remain turned on and operational until the vehicles are safely inside a work area, or until they have reached a speed similar to other vehicles on the road when exiting a work area • may be turned off and the vehicles hazard lights turned on when they are within work areas that are clearly separated from live lanes by delineation devices, and must be kept on at all times when undertaking a mobile operation.	The beacons on all vehicles in a mobile operation~~:~~ • ~~must remain turned on and operational until the vehicles are safely inside a work area, or until they have reached a speed similar to other vehicles on the road when exiting a work area~~ • ~~may be turned off and the vehicles hazard lights turned on when they are within work areas that are clearly separated from live lanes by delineation devices, and~~ must be kept on at all times. ~~when undertaking a mobile operation.~~	*Removed requirements that have been covered in section* ***C14.1.3 Vehicle-mounted flashing beacons*** *and* ***C15.1.1 General*** *relating to a work vehicle entering and exiting a static worksite*
D1.7.1 LAS requirements	Also, if the traffic is required to follow the TMA truck then the RD6 L/R must not be displayed. Where the RD6L/R is not to be used, the arrow component is not to be visible to road users.	Also, if the traffic is required to follow the TMA truck then the RD6 L/R must not be displayed. Where the RD6L/R is not to be used, the arrow component is not to be visible to road users. Retrofit covers which partially obscure the arrow may be used until 31 December 2020, after which date the NZTA would require them to be replaced by a system that does not adopt the down arrow position. 	*Sets effective date for the phase out of the retrofit covers that only partially obscure the RD6 component of the LAS display*
D5.4.5 Summary of requirements for level 2 mobile closures	Level 2 selector diagrams do not include references to all of the mobile operation TMDs for level 2	Revised level 2 selector diagrams include reference to all of the mobile operation TMDs for level 2 Minor edits on some of the notes on the selector diagram graphics	*Requested by L2/3 trainers*
D7.3.1 Kerbside refuse and recycle collections	*Not currently included in CoPTTM*	Kerbside collection is a service provided to households and businesses, typically in urban and suburban areas, where households' and businesses' refuse and recyclables, left at the kerbside in wheeled bins, crates or bags, are collected by personnel.	*Defines kerbside collection* *Added at the request of WasteMINZ*

<table>
<tr><td>E1.2 Example of traffic management plan (TMP) – short form (and Guidelines)</td><td colspan="2"><table><tr><td>TSL duration</td><td>Will the TSL be required for longer than six months?
If yes, attach the completed checklist from section I-18: Guidance on TMP Monitoring Processes for TSLs to this TMP.</td><td>Yes No</td></tr></table></td><td colspan="2"><table><tr><td>TSL duration</td><td>Will the TSL be required for longer than 12 months?
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<tr><td>E1.3 Guidelines for completion of TMP – short form</td><td>Engineers' representative</td><td>Independent person employed by engineer whose responsibilities include TTM</td><td>Engineers' representative</td><td>Detail optional - Independent person employed by engineer whose responsibilities include TTM</td><td>Clarification that Engineers details are optional</td></tr>
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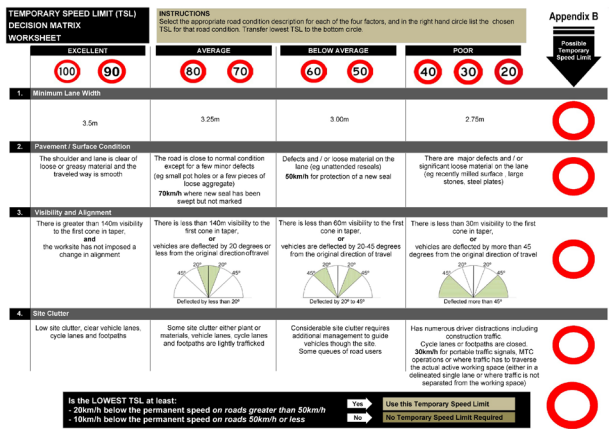
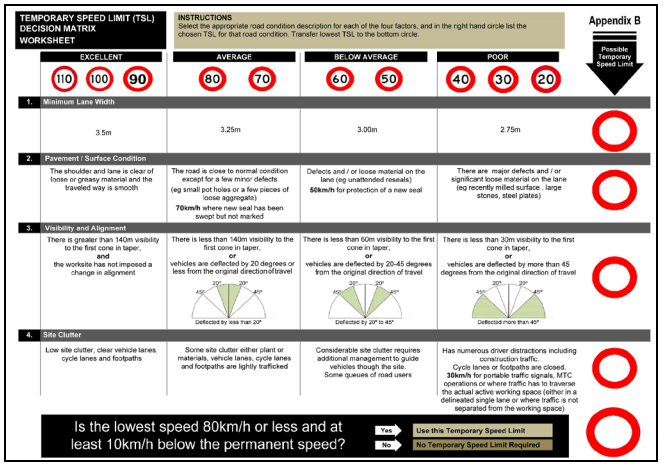
<tr><td>E1.8 Example of checking process for generic traffic management plans (TMPs)</td><td colspan="2"><table><tr><td colspan="6">Checking process for generic TMPs</td></tr><tr><td colspan="6">This form, or a similar company record, must be completed prior to set up of a worksite where a generic TMP is used.</td></tr><tr><td colspan="6">Location details</td></tr><tr><td>Road name(s):</td><td></td><td>House number/RP(s):</td><td></td><td>Suburb:</td><td>Generic TMP reference no.:</td></tr></table></td><td colspan="2">Added extra space for location details and added extra line for TMP and TMD details<table><tr><td colspan="6">Checking process for generic TMPs</td></tr><tr><td colspan="6">This form, or a similar company record, must be completed prior to set up of a worksite where a generic TMP is used.</td></tr><tr><td colspan="6">Location details</td></tr><tr><td>Road name(s)</td><td></td><td>House number/RP(s)</td><td></td><td rowspan="2">Suburb</td><td rowspan="2"></td></tr><tr><td>Road name(s)</td><td></td><td>House number/RP(s)</td><td></td></tr><tr><td>Generic TMP reference no.</td><td></td><td>TMD no(s).</td><td></td><td colspan="2">Note: The checking process must include all the TMDs to be used</td></tr></table></td><td>Amended based on user feedback</td></tr>
</table>

E2 Appendix B: Temporary speed limit (TSL) decision matrix worksheet			*Incorporating the Technical Note Change to Land Transport Rule - Setting of Speed Limits 2017*

Reference in 4th Edition	Change in CoPTTM August 2018	Comment
Section E Appendix C: Procedures for safety audit/review of worksites	*This amendment replaces the existing section E3 with the following. This revision:* • *Clarifies the basis for audit* • *Provides links to audit resources which have been added to the CoPTTM page on the NZTA website* • *Provides guidelines for when the TMP and on-site record are to be sighted* • *Clarifies who can be issued a notice of non-conformance (NNC) and introduces the procedure for organisational NNCs* • *Introduces a new full audit SCR form* • *Introduces 3 new categories of site condition rating; Unacceptable [other], Unacceptable, Unacceptable [multiple issues]* • *Replaces previous guidelines for completion of the SCR with new guidelines* • *Includes amendments to the technical Note since it was issued in September 2017.*	Incorporates the Technical Note *Revised Temporary Traffic Management (TTM) Safety Audit/Review Procedures*

E3 Appendix C: Procedures for safety audit/review of worksites

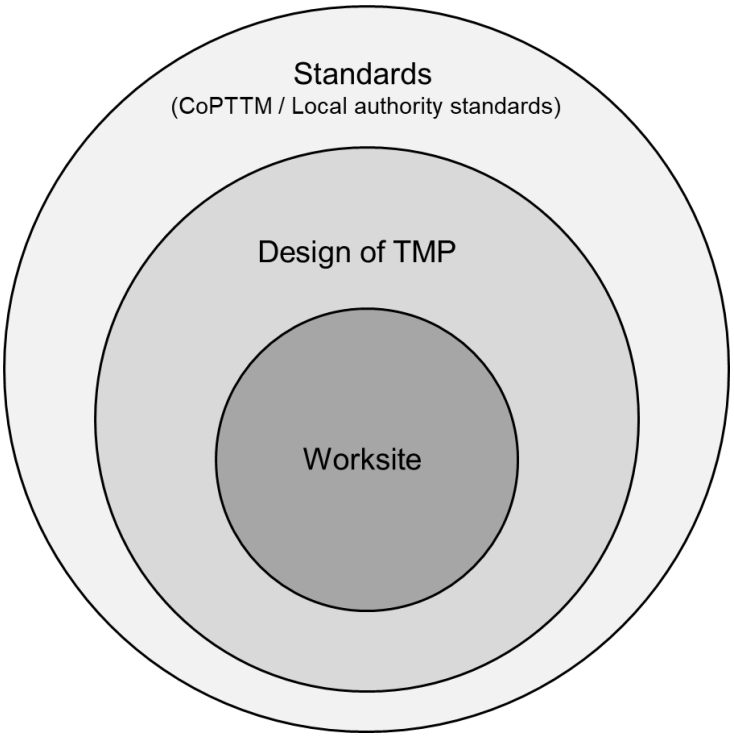
E3.1 Introduction

E3.1.1 Focus for auditor/reviewer

The initial focus for the auditor/reviewer is the worksite.

The auditor/reviewer also assesses:

- the design of the TMP
- application of CoPTTM and Local authority standards.



E3.1.2 Audit principles

Key principles that underpin all audits/reviews are:

- auditors/reviewers are consistent in their approach
- audits/reviews are fair
- where required, auditors/reviewers reference the relevant standard (either CoPTTM or local authority standards) when explaining issues
- auditors/reviewers take time to educate and encourage high standard/acceptable TTM work activities.

E3.1.3 Audit/review resources

Audit/review forms are available from the CoPTTM pages of the NZTA website (refer to Forms used for traffic management).

Audit/review resources are also available in section I: 21 Audit/review resources of the CoPTTM pages of the NZTA website.

E3.2 TTM safety audit/review methodology

E3.2.1 General methodology

An audit/review includes the following:

- a review of the worksite
- completion of the site condition rating (SCR) form
- a review of the TMP and onsite record (where required).

The general methodology recommended for using these procedures is:

- proceed through the worksite (including intersecting roads) making note of issues and recording them on the SCR form. Photographs or videos are recommended to record items of interest

  If at any stage the auditor/reviewer considers the worksite to be of high risk to road users/workers, immediate corrective action must be initiated

- review the on-site documentation (TMP and on-site record) as required. Refer to appendix C, subsection E3.4 Sighting TMPs
- rework the SCR to reflect any approved variances to the CoPTTM and local authority standards
  Note: Where there are issues with the design and/or approval of the TMP, these are recorded on the SCR for follow-up
- establish the site condition rating:
  - for the full audit/review:
    - SCR is based on the total accumulated points for the worksite and other worksite aspects
  - for the short audit:
    - total the number of scores for each rating given against each standards category
- take appropriate actions with respect to SCR outcomes (refer appendix C, subsection E3.5 Actions following SCR).

A copy of the SCR is to be provided to the STMS and the company responsible for the TTM. A copy may also be provided to the company responsible for the working space and the principal if required.

E3.3 SCR for full and short audit/review

E3.3.1 Full audit/review - site condition rating

The SCR evaluates temporary traffic management (TTM) compliance with the minimum requirements of the CoPTTM and Local Authority standards.

Each element of non-compliance is given a value that reflects its importance in terms of TTM at the worksite and is tallied to give the SCR.

E3.3.1.1 SCR categories

High standard	Acceptable	Needs improvement
0 - 10	11 - 25	26 - 50

Unacceptable (Other)	Unacceptable	Unacceptable (multiple issues)
SCR **under 51** and item(s) in OTHER WORKSITE ASPECTS are **marked N**	SCR **51+** and Item(s) in OTHER WORKSITE ASPECTS are **marked Y**	SCR **51+** and item(s) in OTHER WORKSITE ASPECTS are **marked N**

Dangerous
51+ and LOW RISK? is **rated No**

A notice of non-conformance may be issued when the worksite is rated Unacceptable (Other), Unacceptable, Unacceptable (multiple issues) or Dangerous. Refer to appendix C, subsection E3.4 Sighting TMPs and subsection E3.6 Notice of non-conformance.

E3.3.2 Short audit - site condition rating

The SCR evaluates TTM compliance with the minimum requirements of the CoPTTM and Local Authority standards.

Short audit ratings are as follows:

- Acceptable
- Needs improvement
- Dangerous.

If an item is rated dangerous it must be rectified at once.

If there are one or more dangerous ratings the auditor/reviewer must consider issuing a notice of non-conformance.

In the case of issuing a notice of non-conformance, the auditor/reviewer must either provide a detailed report, and if possible photographs, or a SCR using the full audit/review.

E3.4 Sighting TMPs

E3.4.1 When to site onsite documentation

Reviewing the onsite documentation (TMP and on-site record) confirms that:

- there is an approved TMP for the worksite
- the worksite layout complies with the approved TMP (including any engineering exception decisions (EEDs) approved for the worksite)
- the TMP, which may include an EED, is appropriate to the actual situation
- any authorised TSLs are appropriate to the worksite and activity
- the on-site record has been completed and is correct.

Guidelines for when to review the onsite documentation are set out below:

For both attended and unattended worksites	
High standard (0 – 10)	**Optional**
Acceptable (11 – 25)	**Optional** (unless worksite SCR is high risk)
Needs improvement (26 – 50)	**Optional** (unless worksite SCR is high risk)
Unacceptable	**Must check documentation**
Dangerous	**Must check documentation**

RCAs may establish their own policies for when onsite documentation is to be reviewed.

E3.5 Actions following SCR

E3.5.1 SCR of high standard or acceptable

The auditor/reviewer need not take any action on site when the SCR is either within the High Standard or Acceptable categories. It is recommended however, that the STMS be advised of these good audit/review results at the time of the audit/review.

E3.5.2 SCR of needs improvement

Where the SCR is Needs improvement, the STMS must be informed of the audit/review result immediately. The auditor/reviewer must discuss the TTM features that are non-complying with the STMS and make recommendations as to how the worksite safety can be improved.

The STMS must undertake remedial action as soon as possible and has a maximum of four hours to bring the SCR to an Acceptable standard or better.

E3.5.3 SCR of Unacceptable (Other)	Where the SCR is Unacceptable (Other) the STMS and/or organisation must be informed of the audit/review result immediately. The auditor/reviewer will advise the STMS/Contractor as to expected actions. This may include anything from the STMS implementing immediate remedial actions through to the ceasing of all activity/work and making the site safe until such time as the TTM is improved to Acceptable SCR or better. A stop works order (SWO) may be issued in some circumstances such as where no approval exists for the activity/TMP.
E3.5.4 SCR of Unacceptable, Unacceptable (multiple issues) and Dangerous	Where the SCR is Unacceptable, Unacceptable (multiple issues) or Dangerous the STMS and/or organisation must be informed of the audit/review result immediately. A rating of Dangerous is grounds for the issuing of a SWO. In some circumstances, a rating of Unacceptable, or Unacceptable (multiple issues) could also result in the issuing of a SWO such as where the STMS and/or organisation is unable to or unwilling to voluntarily implement the required corrective actions. Where a SWO has been issued, the activity/work may not recommence at the worksite until the auditor/reviewer (or appropriately RCA authorised person) is satisfied that the site TTM is appropriately managed and releases the SWO. During the period the SWO is in effect, the contractor may only undertake actions that maintain or improve the safety of the site. Where no SWO has been issued, all work activity must cease immediately and the TTM be improved to an Acceptable SCR or better as determined by the STMS in consultation with the auditor/reviewer. If the TTM cannot be improved to the required rating, the worksite must be cleared and the road left in a safe condition. A notice of non-conformance may be issued against the STMS and/or any other responsible party for worksites with an SCR of Unacceptable (Other), Unacceptable, Unacceptable (multiple issues) or Dangerous. Where there are widespread and/or consistent issues with the TTM provided by an organisation an Organisational NNC may be applied (see E3.6.2 About Org NNC). ~~Where it can be shown there is a systemic failure and the company/organisation is complicit in the non-conformance an Organisational NNC may be applied (see E3.6.2 About Org NC).~~ It may be necessary to supplement the SCR form with an attached memo or coversheet on which the auditor/reviewer may add additional comments regarding the audit/review. Where an auditor/reviewer issues a notice of non-conformance a copy of the NNC and of the SCR form must be forwarded to the senior traffic and safety engineer (CoPTTM) for consideration and be recorded in the NZTA's database.

E3.5.5 Non-compliance with TMP principles

Where non-compliance with TMP principles is recorded and forwarded to the contractor (and principal if required) in accordance with appendix C, subsection E3.2 TTM safety audit methodology, the contractor must either make prompt changes to address the issues raised or forward reasons why the issues should not be addressed to the TMC within 24 hours.

E3.5.6 Appropriate action for non-complying TTM

E3.5.6.1 If the TTM is being completed under contract

Appropriate action for identified non-complying and/or unsafe TTM may include the following:

- issue a NNC to contractor detailing non-compliance(s) and expected corrective action(s)
- replacement of the contractor's nominated STMS
- arrange for another TTM contractor to make the worksite safe
- apply liquidated damages
- close the worksite down.

E3.5.6.2 If the activity is not being completed under contract to the RCA

Safety standards must still be met. The authorisations for activities on roads must require the appropriate standard for traffic management to be met.

Actions for identified non-compliance may include the following:

- issue an advisory note requiring a corrective action plan
- issue a notice to the person carrying out the activity detailing the non-compliance and expected corrective action
- close down the worksite as an unauthorised worksite
- lay a complaint with the police
- lay a complaint with WorkSafe NZ
- arrange for another contractor to make the worksite safe.

E3.6 Notice of non-conformance

E3.6.1 Who can be issued a notice of non-conformance (NNC)

A rating of Unacceptable (Other), Unacceptable, Unacceptable (multiple issues) or Dangerous is grounds for the issue of a notice of non-conformance.

A NNC can be issued to:

- The STMS and/or delegate in charge of the worksite
- The designer of the TMP

Continued non-conformance from a company/organisation may result in the issue of an organisational NNC (Org NNC).

E3.6.2 About Org NNC

~~An Org NC applies if there is a systemic failure where the company/organisation is complicit in the non-conformance. An Org NC may be issued by the RCA for a one-off incident or for multiple failures.~~

An Org NNC applies if there are widespread and/or consistent issues with the TTM provided by an organisation. The RCA may issue an Org NNC for a one-off incident or for multiple failures.

A 3 strikes approach is used with sanctions being applied if 3 strikes have been issued within ~~a 12-month period~~ 12 months of the issue of the first strike. Strikes 1 and 2 will lapse if no further strike is issued ~~within 1 year~~ within 12 months of the issue of the first strike.

Any warnings and sanctions ~~are applied at the branch level of a company~~ may be applied:

- at the branch level of a company
- within an RCA boundary.

Where subcontractors receive an Org NNC a 'please explain' letter will be sent to the principal contractor asking how they propose to overcome the failure(s).

Appeals may be submitted to the Senior Traffic and Safety Engineer (CoPTTM), NZ Transport Agency National Office, Private Bag 6995, Wellington 6141.

E3.6.3 Org NNC 3 strikes process

Strike 1 Org NNC Warning	• The RCA notifies the company/organisation that it will be applying a **Strike 1 Org NNC**. Notification is also sent to NZTA. • On receipt of **Strike 1 Org NNC**, NZTA registers the event and sends a warning letter to the company/organisation/subcontractor to warn of the consequences of continued non-compliant activity • The company/organisation submits a plan to the RCA detailing actions to prevent reoccurrence of the non-compliant activity
Strike 2 Org NNC Final warning	• A similar process is followed for the issue of a **Strike 2 Org NNC**. • On receipt of a **Strike 2 Org NNC** ~~within 1 year~~ within 12 months of the issue of the first strike, NZTA sends a final warning letter to the

	company/organisation/subcontractor also outlining the consequences of continued non-compliant activity • The company/organisation submits a plan detailing actions to prevent reoccurrence of the non-compliant activity

Strike 3 Org NNC Apply sanctions	• On receipt of **Strike 3 Org NNC** ~~within 1 year~~ within 12 months of the issue of the first strike, NZTA sends a letter ~~to the company/organisation/subcontractor detailing the sanctions to be applied and the time period for these sanctions~~ detailing the sanctions to be applied and the time period for these sanctions to the branch manager and CEO of the company/organisation/subcontractor. A copy of the letter is also sent to the relevant RCA **Specific NZTA sanctions** • This non-conformance will affect an organisation's NZTA Pre-Qualification status • The information will be forwarded to the appropriate standards organisation and may affect the company/organisation's ISO9000 or TQS1 quality rating. **Other sanctions which may be applied by RCAs include but are not limited to the following:** • Denied access to the road network for a period of time • The company/organisation may not be allowed to provide their own TTM for their and their clients worksites and will be required to employ an RCA approved TTM provider for their and their client's worksites on the network for a period of time • Undergo retraining for CoPTTM warrants • ~~Contract penalties~~

E3.7 Example of site condition rating (SCR) form – full audit/review

TTM SITE CONDITION RATING FORM

SITE DETAILS			
RCA			
Suburb			
Road name			
CAR/WAP number		Road ID	
Date/Time		TTM level	

OPERATIONAL DETAILS	
Activity description	
TTM method	
TTM Contractor	
Contractor- working space	
Client / Principal	

SIGNS			Weighting	Tally	Total
A1	Missing	Sign	5		
A2	Position	Sign	2		
A3	Not visible/fallen over	Sign	5		
A4	Wrong sign	Sign	5		
A5	Condition unacceptable	Sign	4		
A6	Permanent sign	Sign	5		
A7	Unapproved sign used / too small	Sign	4		
A8	Non-compliant support / sign too low	Support	2		
				Subtotal	

MOBILE & SEMI STATIC			Weighting	Tally	Total
B1	Tail pilot vehicle/AWVMS omitted or incorrect location	Vehicle	30		
B2	Lead pilot vehicle omitted or incorrect location	Vehicle	20		
B3	Shadow vehicle omitted or incorrect location	Vehicle	26		
B4	TMA missing or non compliant	TMA	26		
B5	AWVMS/arrowboard non compliant	Vehicle	26		
				Subtotal	

PEDESTRIANS / CYCLISTS			Weighting	Tally	Total
C1	Inadequate provision for pedestrians	Feature	10		
C2	Inadequate provision for cyclists	Feature	10		
				Subtotal	

DELINEATION			Weighting	Tally	Total
D1	Missing or ineffective taper	Leading taper	26		
D2	Tapers too short	Leading taper	15		
D3	Taper too short or missing	Trailing taper	5		
D4	Spacing in taper	Taper	5		
D5	Spacing along lanes	Per 100m	3		
D6	Missing or ineffective delineation along lanes	Per section	10		
D7	Condition unacceptable	Device	2		
D8	Using non-approved device	Device	4		
D9	Road marking incorrect at long term level 2 or 3 roads	Site	30		
D10	Inadequate/missing site access	Access	10		
				Subtotal	

MISCELLANEOUS			Weighting	Tally	Total
E1	Working in live lanes	Individual	20		
E2	Missing or ineffective controller	Individual	20		
E3	Safety zone compromised	Individual	10		
E4	High visibility garment not acceptable	Individual	5		
E5	Marginal surface condition (carriageway only)	Occasion	15		
E6	Unacceptable surface condition (peds, cyclists or carriageway)	Occasion	30		
E7	Barrier defects (missing or incorrect components)	Component	10		
E8	Unsafe or redundant TTM	Equipment	5		
E9	VMS message incorrect or inappropriate	VMS	15		
E10	Flashing beacons / indicator lights not used or ineffective	Vehicle	3		
E11	Parking / stopping features not relocated	Feature	5		
E12	Unsafe and illegal parking of plant/equip.	Feature	20		
E13	Marginal items (signs, delineators, Hi vis garments)	Feature	1		
				Subtotal	

OTHER WORKSITE ASPECTS		
G1	Qualified person on site *[refer to A5 of CoPTTM]*	Yes / Unacceptable
G2	TSL appropriate *[refer to C4 of CoPTTM]*	Yes / Unacceptable
G3	Road user flow acceptable	Yes / Unacceptable
G4	On-site record *[form must include STMS authority, 2 hourly checks and TSL details]*	Yes / Unacceptable
G5	TMP approved?	Yes / Unacceptable
G6	Approved TMP sighted?	Yes / Unacceptable
G7	Approved TMP applicable?	Yes / Unacceptable
G8	TTM in accordance with approved TMP?	Yes / Unacceptable

FINAL RESULT				
Score	✓ Rating		✓ Rating	
		High standard (0-10)		**Unacceptable** (51+ **only**)
		Acceptable (11-25)		**Unacceptable – Multiple** (both 51+ and Other Aspects)
		Needs Improvement (26-50)		**DANGEROUS** (LOW RISK? rated NO)
		Unacceptable - **Other** (Other Aspects **only**)		
Actions planned by STMS			**Site activity ceased by**	
Site fixed?	Yes / No			

KEY POINTS	Complaint callout?	Site activity status	Attended/Unattended	Notification to RCA *[does not affect score]*	Yes/No	TMP design issues?	LOW RISK?	Yes / No
	Yes / No	Audit/review	Planned/Unplanned	Good site induction? *[does not affect score]*	Yes/No	Yes / No		

ACTIONS TO BE TAKEN

AUDITED / REVIEWED BY			
Signature			
Auditor/Reviewer name			
Qualifications		NZTA ID No.	
Auditor mobile number			

STMS DETAILS			
Received by / signed		SCR left onsite?	Yes / No
STMS name			
Qualifications		NZTA ID No.	
STMS mobile number			

In submitting this form, the auditor/reviewer specified above agrees that they have explained the significant issues and proposed remedies to the relevant parties specified above and have provided these parties a physical copy of the audit (does not apply for unattended sites)

E3.8 Full audit/review site condition rating (SCR) – defect descriptions

Multiple deficiencies relating to one item of TTM may only be recorded as a single defect assigned against the rating that is the highest. For example, a sign which is concealed by a tree and is in the wrong position is to be assigned as 'Not visible/fallen over' as this item has a rating higher than the 'Position' item.

E3.8.1 Signs

A1	**Missing**	Any signs that should have been erected that are missing. A sign and supplementary plate combination is to be counted as one sign eg T1A plus T144. If either the sign or a supplementary plate is missing from a combination when required, then, it is counted as one sign missing.
A2	**Position**	Any signs where the spacing is too close or too far from other signs or the working space. Refer to CoPTTM worksite layout distance tables. Also includes signs that are too close or too wide apart across the road (eg gated speed signs that are placed on the back berm); signs that are offset by more than the approved allowance ~~allowed~~ (eg TSL signs offset by more than 20m); signs blocking bus stops, cycle lanes or footpaths. Minor amendments should be noted on the TMP. Movement of TSL signs should be notified to RCA to maintain legality.
A3	**Not visible / fallen over**	Any TTM sign that should be erected at the worksite, which is not visible (eg knocked down or visibility blocked by a parked vehicle, vegetation or street furniture). ~~Signs on a vertical lean outside the minimum permitted in the CoPTTM~~. If obstruction is noted in on-site record and best endeavours have been made, do not include in tally.
A4	**Wrong sign**	The wrong sign has been used, eg TL2L or TL2R sign showing the wrong lane being closed. Inappropriate signage. Incorrect TSL signage (eg TSL reinstatement incorrect for permanent speed limit). Wrong use of the sign~~s~~ from its intended purpose including detour arrows, ~~no entry~~ NO ENTRY instead of ~~road closed~~ ROAD CLOSED, or use of a sign with similar message but not the ~~right~~ correct sign as per CoPTTM definition of use. Non-standard signs should be approved as part of TMP.
A5	**Condition unacceptable**	Refer to CoPTTM Section C19 Maintenance Standards. Includes signs unreadable at sign visibility distance and graffiti affecting the message of the sign. Marginal signs not included in the tally but must be advised to STMS.
A6	**Permanent sign**	Permanent signs that have not been covered and are no longer relevant to road users because of the activity. Includes curve advisory if advisory speed higher than TSL (chevron must be left visible), permanent speed limits, permanent lane advisory signs, passing lane advisory signs and permanent signs removed from site to facilitate works but still required. Consider suitability of sign coverage (eg must not affect the reflectivity of the sign when cover is removed). Includes permanent signs blocked by temporary signs. Parking features when relocated but signs not covered recorded under E11.

	A7	**Unapproved sign used / too small**	Signs used that are not approved for use at worksites, includes using level 1 signs at level 2 and 3 TTM worksites. Also includes using signs not approved in TMP (excludes applicable CoPTTM sign where appropriate) and use of a small sign when full sign could be implemented when not approved on TMP or use of small sign in combination with full sized sign (eg small main sign with full size supplementary plate). RD6 sign - CoPTTM does not include use of cone mounted single arrow, twin disc preferred, not counted in SCR but advise ~~to~~ TTM provider to phase out use. If smaller sign is required due to environmental factor this should be ~~referenced~~ approved in the TMP.
	A8	**Non-compliant support / sign too low**	Using ~~banned supports or~~ supports that fail to meet the requirements of subsection B1.3.4 Sign stands and supports. Also includes signs mounted lower than the accepted minimum as described in the CoPTTM, stop/go paddles not in direct physical control ~~of~~ by the MTC, attaching a sign to a regulatory sign pole or street furniture where it will cause obstruction or damage to the asset. Also includes signs not being appropriately delineated.
E3.8.2 Mobile & semi static	B1	**Tail pilot vehicle / AWVMS omitted or incorrect location**	Missing when required or location (lateral or longitudinal) is incorrect. **Note:** if arrow is incorrect record under E9.
	B2	**Lead pilot vehicle omitted or incorrect location**	Missing when required or location (lateral or longitudinal) is incorrect.
	B3	**Shadow vehicle omitted or incorrect location**	Missing when required or location (lateral or longitudinal) is incorrect. **Note**: If arrow is incorrect record under E9. When shadow vehicle is missing and requires a TMA record in both B3 and B4.
	B4	**TMA missing or non compliant**	TMA not on mobile operation vehicle(s) when required. TMA is being used correctly but does not meet the certification for compliance as per the test level stated in ~~the United States National Cooperative Highway Research Program~~ NCHRP 350 and section B11 Truck~~-~~mounted attenuators ~~in the CoPTTM~~ including the tare weight requirements for the vehicle. Crash cushion not deployed when ~~it should be~~ required. Also includes TMA in centre lane with no additional TMAs to close ~~additional~~ adjacent lanes.
	B5	**AWVMS / arrowboard non compliant**	AWVMS, European arrow board or horizontal arrow board ~~or European arrow board~~ not displaying the correct message (eg the right lane is closed but the arrow is directing traffic to the right). Also includes arrow board not fitted or is not used on mobile operation vehicles when it is required.

E3.8.3 Pedestrians/ cyclists	C1	**Inadequate provision for pedestrians**	Footpath obstructed by activity and neither temporary path nor direction to alternative pedestrian facilities provided. Features (recorded individually) include footpath width, ramps, gradient (including cross fall), visibility, location, any obstructions from exiting environment (low hanging tree branches, street furniture blocking path etc.). Ramp surface must be non-slip, must not move around and must be of sufficient width. Surface of footpath to be recorded under E6. Signs and delineation for pedestrian management covered under the other relevant sections in A and B.
	C2	**Inadequate provision for cyclists**	Work in a cycle lane or a high cycle use area and temporary facilities for cyclists ~~cycle lanes~~ have not been provided. Features (recorded individually) include cycle lane width, ramps, gradient (including cross fall), visibility, location, any obstructions from existing environment (low hanging tree branches, street furniture blocking etc.). Surface of cycle lane to be recorded under E6. Signs and delineation for cyclist management covered under the other relevant sections in A and B.
E3.8.4 Delineation	D1	**Missing or ineffective taper – leading taper (including chicane)**	Where leading taper delineation is missing which is required for traffic to shift from normal alignment. If due to environmental factors a short taper is required (but not allowed by the layout distances tables) then it ~~should~~ must be included in the approved TMP with appropriate EED and mitigation measures. If 75% of the taper is installed it would be marked as too short rather than ineffective. Any less than 75% installed is ineffective. Also includes if there are too few cones installed to form the taper.
	D2	**Tapers too short – leading taper**	Taper has been formed but is too short. CoPTTM requires that two thirds of a taper must be visible. Refer to spacing tables for length requirements.
	D3	**Taper too short or missing – trailing taper**	Taper has been formed but is too short. CoPTTM requires that two thirds of a taper must be visible. Refer to spacing tables for length requirements.
	D4	**Spacing in taper**	Taper has been formed but spacing of delineation devices is too great (eg ~~between~~ 1 to ~~1.5x~~ 1.5 x the spacing required in CoPTTM). If more than ~~1.5x~~ 1.5 x record under ineffective. Refer to spacing table for requirements.
	D5	**Spacing along lanes**	~~Cones~~ Delineation placed in rows, which are generally parallel to the centreline, but spacing of delineation devices is too great (eg 1 to ~~1.5x~~ 1.5 x spacing required in the CoPTTM). If stop/go centreline delineation is missing ~~to be~~ record~~ed~~ in D6. Refer to spacing tables for requirements. Refer to D6 for ineffective where spacing is greater than ~~1.5x~~ 1.5 x spacing required.
	D6	**Missing or ineffective delineation along lanes**	Where delineation is missing or where the delineation is ineffective at separating lanes or ensuring the road user continues on the desired travel path, misleads traffic or provides conflicting message (eg traffic is required to travel on right but left side ~~looks~~ appears open and ~~cones~~ delineation does not effectively keep traffic in the ~~right~~ correct lane). Refer to spacing tables for requirements. Refer to D5 for spacing in lanes. **Note:** Requirements ~~around~~ for chip seal and paving operations ~~with allowance to~~ allows double cone spacing.

	D7	**Condition unacceptable**	Refer to section C19 Maintenance Standards, specifically C19.3.4. Includes punctures, large areas of staining, and significant area of missing or stained reflective material. **Note:** Non-compliant logos may be considered unacceptable if visible to vehicles. Auditor/reviewer to note marginal devices and advise STMS but not ~~to be~~ include~~d~~ in the SCR result.
	D8	**Using non-approved device**	Delineation or channelling devices that fail to meet the criteria specified in the CoPTTM. Includes marker posts, drums and barriers or other devices used in the place of ~~cones~~ compliant delineators.
	D9	**Road marking incorrect at long term level 2 or 3 roads**	Road marking not correctly adjusted at long term level 2 and 3 TTM static worksites where alterations are required as part of the approved TMP and other delineation is not implemented. **Note:** Consider if TTM is applicable for the construction methodology in which case record in "other checks". Where it is not identified in the TMP, a ~~closure~~ worksite will be considered as long term where the ~~site~~ closure is in a continuous configuration for more than 72 hours.
	D10	**Inadequate / missing site access**	Inadequate site access where required as defined in the CoPTTM. No site access visible for level 2 and 3 sites (exception is re-surfacing operations where site access is frequently moved). Site access in poor location. Vehicles accessing site in unapproved manner including against the flow of traffic or impeding traffic flow in unacceptable manner. Signs missing recorded under missing signs. Delineation of site access recorded under D5. Location and spacing of access gap recorded in D10.
E3.8.5 Miscellaneous	E1	**Working in live lanes**	Personnel ~~People~~ associated with the activity are in the live lane outside the established working space and established safety zones. **Note:** If personnel cross the road without any equipment this is not classified as working in live lane but if carrying or moving equipment/materials from one side of the carriageway to the other, then this is classified as working as their full focus is not on task of crossing road. If there is no traffic flowing, then it is permissible for personnel to cross the road (not allowed on a level 3 road). **Note:** Consider proximity to pedestrian crossing if available but not used. Traffic must not be expected to slow down or stop for personnel to cross the road. If under stop/go operation and MTCs change flow to stop/stop for all traffic approaches then lanes are not to be considered as live. If MTC needs to speak to motorist this should be done via the vehicle passenger side.
	E2	**Missing or ineffective controller**	Manual traffic controller not at stop/go position, footpath controllers not available to manage pedestrian movements where identified as required in the TMP, or spotter not being used when required for inspection activities. Also includes where the MTC is on the right hand side of approaching traffic rather than the left hand side to stop traffic. **Note:** It is acceptable for a cone to be placed in front of the first vehicle provided the MTC remains on the left hand side of the road until the vehicle has come to a complete stop prior to ~~re-~~positioning the cone. The cone must only be retrieved ~~while~~ whilst the stop paddle remains ~~on stop~~ in place. The MTC must be able to easily reach the paddle if required (eg to prevent the paddle from turning in the wind). If SCR result is High Standard or Acceptable consideration to be given to "road user flow acceptable" in Other Checks.

E3	**Safety zone compromised**	Where either the lateral or longitudinal safety zone is insufficient (eg too small or missing). ~~Score points for~~ Tally each zone compromised ~~and on~~ for each occasion ~~and~~ whether for ~~both~~ plant, materials ~~and~~ or personnel. **Note:** This is not applicable if under a stop/go operation and all traffic flows are on stop.
E4	**High visibility garment not acceptable**	Refer to section C19 Maintenance Standards, specifically B3, C19.3.6, C19.3.7, C19.4.2 and C19.4.3. Includes garments not done up, torn garments, large areas of staining, and significant area of missing or stained reflective material. Also includes STMS not wearing STMS garment (exception A5.8.7).
E5	**Marginal surface condition (carriageway only)**	Surface is rough and likely to be dangerous for any type of road user for the temporary or permanent speed limit~~, temporary or permanent posted,~~ at the worksite. Marginal to be applied if advised speed on site is 1 step higher than the speed determined by using the TSL decision matrix. ~~If a TSL is not implemented when required due to surface condition record in this section but if a TSL is implemented when it is not required record in G2. For example a 100km rural road with chip seal surface not swept with no TSL recorded as marginal surface condition recorded in E5 however 100km rural road with swept chip seal and line marked with 50 TSL in place recorded in G2.~~ **Note:** If a TSL is not implemented when required due to surface condition, record in this section but if a TSL is implemented when it is not required record in G2. For example, record in E5 as marginal surface condition a 100km/h rural road with chip seal surface not swept with no TSL. Record in G2 a 100km/h rural road with swept chip seal and line marked with 50km/h TSL in place. Also includes steel plates used to protect excavation but not appropriately secured in place.
E6	**Unacceptable surface condition (peds, cyclists or carriageway)**	Surface is unacceptably rough and likely to be dangerous for any type of road user for the temporary or permanent speed limit~~, temporary or permanent posted,~~ at the worksite. Unacceptable if advised speed on site is 2 steps higher than the speed determined by using the TSL decision matrix. For pedestrians and cyclists this includes trip hazards, wet concrete, obstructions, or soft/impaired surfaces (including weather affected).
E7	**Barrier defects (missing or Incorrect components)**	Includes missing or incorrect end treatments on barriers, non-compliant barriers, end flares too sharp, barrier too close to live lane, barriers not linked, barriers not pinned where required and barrier not used when required. **Note:** Multiple defects for this item must be counted individually. Also includes device that is being used as a barrier but does not meet the CoPTTM requirements and barriers deployed not in accordance with manufacturer's specifications (eg water filled barriers not filled with water). Component are defined as leading terminal, trailing terminal (if required), flare if not terminal end, barrier alongside work site, linkage of barriers, installation in accordance with manufacturers specifications, damage to individual units (eg Leaking water filled barrier, cracked concrete barrier sufficient to compromise integrity of barrier etc.). Consideration should also be given to the surface the barriers are installed on if the surface would prevent the barrier

		performing as expected (eg on or in front of a kerb). Delineation of barriers to be recorded under delineation. If barriers not needed but deployed incorrectly record as redundant TTM.
E8	Unsafe or redundant TTM	Redundant TTM to be removed from site if not to be used within 48 hours (eg site reviewed on Friday with signs not required for unattended site stored on site, but further works taking place Sunday night, therefore time between active sites extends past the 48 hours permitted so signs should be removed). TTM equipment ~~non-compliantly~~ stored inappropriately on site when not required for an active closure. Also includes when TTM equipment is stored in front berm, frame and base left upright with sign panel on ground, or frame and base left upright with signs turned to have back panel facing traffic or the sign turned 90° to the ~~travelling~~ travelled path. Includes signs/stands/bases in cycle lanes or footpaths, cones stacked to side not required for unattended sites, TTM equipment left in manner which causes hazard to road user (eg equipment not ~~delineating~~ delineated ~~equipment~~). Hierarchy for storing TTM equipment: remove from site, then back berm, finally front berm if permanent speed limit is under 65km/h and there is a kerb and channel. Footpaths must not be impacted by the storage of equipment regardless of the width of the footpath available. Storage is only permitted in suburban or commercial areas but not near schools or shopping areas. To be recorded for each sign/stand/base that is unsafe or redundant and once for every 10 delineation devices. Also includes barriers when deployed but not needed.
E9	VMS message incorrect or inappropriate	VMS displaying incorrect messages in relation to activities or VMS board message not approved by RCA.
E10	Flashing beacons / indicator lights not used or ineffective	Amber flashing beacons are not in operation or have been omitted from vehicles where required or do not comply with the CoPTTM requirements. Record in E10 if ~~hazard lights used~~ vehicle indicator lights used in hazard mode to access/exit site. **Note:** Vehicle indicators ~~Only indicators~~ should only be used to give direction to road users of a pending site access movement.
E11	Parking / stopping features not relocated	Work encroaches on parking or stopping feature~~,~~ which has not been relocated to a position clear of the worksite. Such features could include bus/transit lane, clearway (during enforceable timeframes), taxi stands, bus stops, bus parking locations, loading zones, mobility spaces and/or drop off areas. This SCR element is different to E12 where the feature is being used to park in but not as part of work site. E11 refers to feature being within work site but not appropriately relocated.
E12	Unsafe and illegal parking of plant / equipment	Plant and equipment is unsafely parked or illegally parked. Includes plant and equipment parked outside of designated work area on footpaths, cycle lanes, broken yellow lines, clearways, bus/transit lanes, bus stops, bus parking spaces, loading zones, taxi stands, mobility spaces, or restricted parking spaces. Also includes plant and equipment on site when unattended and not appropriately protected from public (for example ~~miller~~ milling machine with no shoulder closure

			protection). Consideration to be given to the manner in which plant or equipment is parked ~~for example~~ eg if forcing road user across ~~the~~ a centreline. Vehicles must be parked in the direction of ~~travel~~ traffic flow. Shoulder closures to protect parked plant/equipment ~~should~~ must be approved as part of the TMP. Parked plant and equipment ~~should~~ must be visible to drivers of vehicles, cyclists and pedestrians so they can see the hazard. **Note:** While a vehicle may be legal under the Land Transport Rule to be on the road it may be classified differently under the Health and Safety at Work Act.
	E13	**Marginal items (signs, delineators, Hi vis garments)**	Refer to section C19.3 Evaluation for classification of TTM devices. **Note:** Non-compliant logos may be considered unacceptable if visible to ~~vehicles~~ approaching road users. A sign is marginal if there are many surface abrasions throughout the sign face and many are within the individual letters or symbol of the message; the surface is marked by material (such as asphalt, bitumen, cement slurry or dirt) not obscuring the lettering or symbol; some colour fading is evident, the background colour and reflectivity are still apparent; the message is legible and matches the approved design as per section B1 Signs. A ~~cone~~ delineator is marginal if the surface is marked by material (such as asphalt, bitumen, cement slurry or dirt) and cannot be readily cleaned; the reflective bands have numerous tears and scratches; the reflective bands are largely free of residue. A high-visibility garment is marginal if the garment has numerous tears and scratches; the garment has some marks (from materials such as asphalt splattering, bitumen, dirt or cement slurry) and may not be readily cleaned due to abrasion or discoloration. However, it is free of large areas of residue or missing reflective material.

E3.8.6 Other worksite aspects

G1	**Qualified person on site [refer to A5 of CoPTTM]**	The worksite ~~Site~~ must be under the control of an STMS or briefed TC for level Low Volume and level 1 sites and an STMS L2/3 Practising or a briefed STMS NP (where allowed) for level 2 and 3 sites. If ~~site~~ control of the worksite has been delegated by the STMS, there must be correct documentation of the delegation and or handover including time and briefing. Briefing must include reference to site specific details such as delivery movements or any minor amendments made to the TMP. Delegated STMS-NP/TC ~~should~~ must be satisfied with the site condition they are taking responsibility for prior to accepting delegation. STMS delegating the site must ensure that the person they are delegating to is suitably qualified. ~~Consideration should be given to handover process for when physical handover is not practical (eg if STMS off sick)~~ Auditor/reviewer should allow some flexibility if the physical handover of the site has not been possible, eg if the STMS in control of the site has gone home sick. Auditor/reviewer should allow time for the STMS to be away for auditing purpose (to gain access to the start of the site and while conducting site checks).
G2	**TSL appropriate [refer to C4 of CoPTTM]**	The TSL ~~should~~ must be appropriate in accordance with the CoPTTM TSL decision matrix. The speed limit, including de-restriction, is not appropriate for the physical works or correct for permanent speed limit derestriction. If the TSL is too low (refer to subsection G4.4.6 Excessive

		or inappropriate use of TSLs), a notice of non-conformance is issued. Consideration should also be given if the speed limit is too high (eg if a 70km/h TSL has been installed however the CoPTTM TSL decision matrix determines a 50km/h is appropriate). Also refer to notes under E5.
G3	**Road user flow acceptable**	~~When road user flow is acceptable road~~ Road users are flowing appropriately through the site~~,~~ ~~and~~ any queues do not extend past first advance warning sign~~,~~ and there are no unreasonable delays or delays in excess of five minutes or durations as approved ~~by the RCA~~ in the TMP. Unacceptable flows include~~s~~ any instances of vehicular conflict ~~for example~~ eg two directions of traffic sent on "go" during a stop/go operation or where minimum lane widths are not maintained. G3 can be used to record ~~if~~ where access ~~to~~ for residents or businesses are not maintained or alternative solutions have not been agreed with the relevant parties, including the RCA. **Note:** 5 minute delay is to be in addition to the normal traffic flow on the road for that time period.
G4	**On-site record [form must include STMS authority, 2 hourly checks and TSL details]**	On-site record available on site which includes information required under the CoPTTM example form. **Note:** This does not need to be the CoPTTM form. Required checks have been conducted in accordance with approved TMP and CoPTTM and are appropriate to the time of the audit/review (eg not completed ahead of the time of the audit/review). Site checks should be robust and provide a high level of confidence in the effective management of the site. Any TSL implementation must be recorded correctly including the installation start time and all individual street names with defined TSL and derestriction sign~~s~~ locations recording where the TSL signs are positioned on that street (eg driveway for a street number or fixed identifying location). If a TSL is not required the STMS should record N/A for the TSL section of the documentation.
G5	**TMP approved?**	~~TMP~~ TTM documentation must be at all attended worksites and include TMP proforma, diagrams and other attachments eg the WAP including RCA conditions~~, Conditions, TMP proforma, diagrams and other attachments~~. Documents must be stamped with the CAR approval stamp and the CAR reference applicable to the TMP must match for all documents. Where applicable documentation must be available for time extensions. Verifiable information is acceptable (eg if approval is via a phone call and there is a record of the date, time and who was involved in the conversation thus allowing confirmation of the approval to take place where required). ~~so the agreement can be confirmed with that party).~~
G6	**Approved TMP sighted?**	~~TMP~~ TTM documentation must be at all attended worksites and include TMP proforma, diagrams and other attachments eg the WAP including RCA conditions~~, Conditions, TMP proforma, diagrams and other attachments~~. A copy of the TMP must be available on site (within 30 minutes of request from auditor/reviewer). ~~Physical hard~~ Hard copies or electronic copies are acceptable however if using electronic format consideration should be given to a charging device and a mechanism for being able to record information including induction information, on-site record and TSL requirements etc.
G7	**Approved TMP**	The approved TMP accurately reflects the road environment including

	applicable?	lane configurations, pedestrian features (including signalised crossings, zebra crossings and refuge islands), bus stops, parking features and other site specific features. If not, minor amendments are accurately recorded and notified to the RCA with evidence available of this notification (eg email or phone call with record of who was spoken to, time of conversation and agreed mitigation). Amendments of a significant nature may require submission of a revised TMP for approval. If the TMP is not applicable this is followed up off site with the TMP designer and/or CAR Manager who approved the TMP.
G8	**TTM in accordance with approved TMP?**	The TTM measures implemented on site match the approved TMP. Minor amendments, as long as they are noted on TMP, with the date, time and signature are acceptable if for reasons of improving road user safety or traffic flow. Minor amendments must not be for benefit of cost or ease of construction. Any significant changes must have been agreed with the RCA and correctly documented and approved (refer G7). ~~Examples of unacceptable amendments a stop/go approved but contraflow implemented or a shoulder closure upgraded to contraflow with no documented evidence of approval~~ **Note:** Example of an unacceptable amendment being a shoulder closure upgraded to contraflow with no documented evidence of approval. Significant changes must be agreed ~~in~~ following consultation with the ~~RCA / TMC / CAR Manager~~ RCA/TMC/CAR Manager~~, not just notified, so they can be agreed~~ prior to implementation.

E3.9 Example of site condition rating (SCR) form – short audit

SITE CONDITION RATING FORM (SHORT AUDIT)						
Street name(s)		**RCA permit reference**		**Attended / Unattended**		
Number *(from/to)*		**Principal**				
Employer of site STMS		**Audit commences**	am / pm	**Date**		
Rating	**A** = Acceptable	**NI** = Needs improvement		**D** = Dangerous		

SUMMARY OF STANDARDS		**A**	**NI**	**D**	**ACTION NEEDED**
1. Responsible party	**STMS / TC at attended site?** Name: Registration number:				
2. TMP	On site? Appropriate to situation?				
3. High-visibility garments	Worn by all? Done up? Condition acceptable?				
4. Signs	All necessary signs present? Correct positions? Sand bagged for expected wind? Conflicting signs covered? Signs in good condition? Other:				
5. Delineation	Protects working space/other features? Taper lengths compliant? Correct spacing of cones? Sufficient positive traffic control? Other:				
6. Pedestrian needs	Footpath widths OK? Safe passage for pedestrians? Surfaces / ramps OK? Other:				
7. Cyclist needs	Cycle widths OK? Safe passage for cyclists? Surfaces OK? Other:				
8. Traffic needs	Lane widths OK? Speed limit appropriate? No significant delays? Surfaces OK? Other:				
9. Property access	Property access OK?				
10. Site scores	**Number in each rating**				
		A	**NI**	**D**	
Action agreed by STMS/TC					

Auditor				**STMS/TC**	
	(Name)	*(Warrant Number)*	*(Signature)*		*(Signature)*

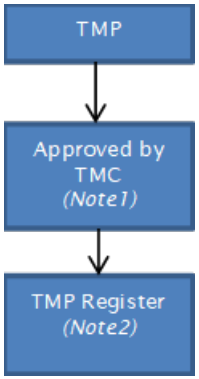
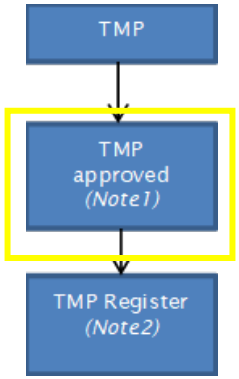
CONTRACTOR COPY *– Hand to contractor once audit has been completed* **Audit finished** **am / pm**

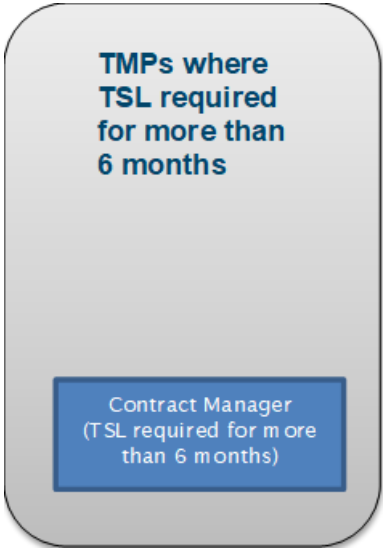
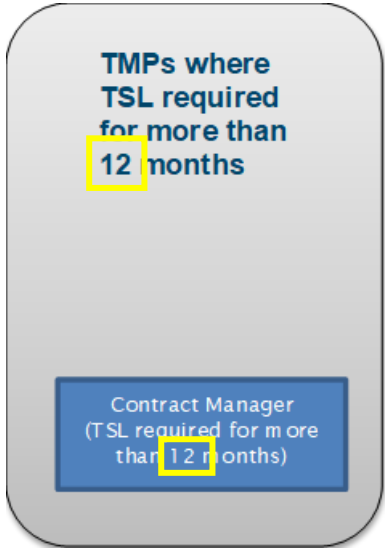
E3.10 Examples of ratings (short audit)

EXAMPLES OF RATINGS (SHORT AUDIT)			
ASPECT	**A = Acceptable** (Standard met)	**NI = Needs improvement** (Moderate risk)	**D = Dangerous** (High risk)
1. Responsible party	• STMS/TC is at attended site	• TC at attended site but STMS arrives after allowed time limit	• No STMS/TC at attended site, or • No STMS responsible for the site
2. TMP (only for attended sites)	• TMP on site, and • Appropriate to the situation	• TMP on site, and • Appropriate to the situation, but • There are some safety issues	• TMP not on site, or • TMP not appropriate to situation
3. High-visibility garment	• Worn by all • Done up • Condition acceptable	• Worn by all, and • All high-visibility garments done, and • Condition of high-visibility garments marginal	• Not everyone wearing high-visibility garments, or • Some high-visibility garments not done up, or • High-visibility garments have unacceptable condition
4. Signs	• All necessary signs present • Correct order and distances • Conflicting signs covered	• Some signs are either missing, of poor quality, or inadequate distance and visibility, but • An adequate message given to motorists, or • Some conflicting signs not covered, or • Some signs not well supported	• Some signs are either missing, not visible or conflict with other signs, or blown over, or • Motorists are not reasonably warned; causing a hazard to road users
5. Delineation	• Protects working space/other features • Taper lengths compliant • Spacings of cones close enough • Sufficient positive traffic control	• Protects working space/other features but could be better, or • Taper lengths should be longer, or • Cone spacings need to be reduced, or • Not sufficient positive traffic control	• Does not protect working space/other features, or • Does not provide sufficient positive traffic control
6. Pedestrian needs	• Footpath widths OK • Surfaces and ramps in place • Appropriate protection provided	• Safe passage for pedestrians but footpath width could be greater, ramps and surfaces could be better, entry point could be more obvious	• Insufficient footpath widths, or • No safe passage for pedestrians, or • Surfaces not suitable for pedestrians, or • Pedestrians forced onto road close to fast traffic or past a dangerous site without sufficient protection • Pedestrians not using option provided
7. Cyclist needs	• Cycle widths OK • Surfaces OK • Safe passage provided	• Safe passage provided for cyclists, but • Widths need to be greater, or • Surfaces need to be better, or • Signage more appropriate	• Cycle widths not acceptable, or • No safe passage for cyclists provided, or • Surfaces not suitable for cyclists, or • No positive traffic management to enable cyclists to merge
8. Traffic needs	• Sufficient lane widths OK • Speed limit appropriate • No significant delays • Surfaces OK	• Lane widths not narrow enough for positive traffic management needs, or • Too narrow and causing a nuisance, or • Some unnecessary delays • Surfaces rough and uneven	• Lane widths causing hazard by failing to positively control traffic, or • Speed limit not appropriate to site, or • Surfaces unacceptably rough
9. Property access	• Occupants well catered for and informed	• Some minor access difficulties	• Serious access difficulties

<table>
<tr><th>Reference in 4th Edition</th><th>CoPTTM Feb 2017</th><th>Change in CoPTTM August 2018</th><th>Comment</th></tr>
<tr><td>E11 Appendix K: Report on incident at roadworks site</td><td><table><tr><th>Road user vehicle</th><th>Vehicle type</th><th>Reg. number</th></tr><tr><td></td><td></td><td></td></tr></table></td><td>Minor amendment to name of fields to promote collection of relevant information<table><tr><th>Road user</th><th>Vehicle/road user type</th><th>Reg. number</th></tr><tr><td></td><td></td><td></td></tr></table></td><td>Amendment made because of user feedback</td></tr>
<tr><td>E11.1 Appendix K: Guidelines for completion of Report on incident at roadworks site</td><td>No guidelines for completion of the Report on incident at roadworks site</td><td>Added guidelines for completion of the Report on incident at roadworks site</td><td>Guidelines added because of user feedback</td></tr>
<tr><td>Section F speed reinstatements</td><td>Currently shows RS1/RS2/RS3 for all speed reinstatements</td><td>Amended to show RS1, RS2 or RS3</td><td>Clarification</td></tr>
<tr><td>TMD F1.2</td><td>1. If a static advance warning sign is installed, use sign visibility and warning distance
2. Advance warning sign may be attached to rear of a work vehicle if CSD is available
3. CSD is 3 X permanent speed in meters, or 75m on a level LV or level 1 non state highway with a permanent speed limit of less than 55km/h</td><td>~~1. If a static advance warning sign is installed, use sign visibility and warning distance~~
~~2. Advance warning sign may be attached to rear of a work vehicle if CSD is available~~
1. If CSD is not available, advance warning sign and base to be installed with sign visibility and warning distance
2. If CSD is available, advance warning sign may be attached to rear of a work vehicle which has an amber flashing beacon(s)
3. CSD is 3 X permanent speed in meters, or</td><td>Aligns notes to requirements for LV low risk roads in the layout distances tables:
C2.3 Level LV worksite layout distances
C2.5 Combined level LV and level 1 worksite layout distances</td></tr>
</table>

Reference in 4th Edition	CoPTTM Feb 2017	Change in CoPTTM August 2018	Comment
		75m on a level LV or level 1 non state highway with a permanent speed limit of less than 55km/h	
TMD F2.26	TMD does not show optional cones for one sign spacing past the TSL as part of positive traffic management	Added optional cones for one sign spacing past the TSL as part of positive traffic management	Clarification
TMD F2.28	TMD does not show optional cones for one sign spacing past the TSL as part of positive traffic management	Added optional cones for one sign spacing past the TSL as part of positive traffic management	Clarification
TMD F4.10	No TMD for inspection activity on level 1 road	Added TMD for inspection activity on level 1 road	Transferred TMD from section J to section F with minor edits
TMDs F3.3, F4.4 and F4.9		*Added following note to each of the following TMDs - F3.3, F4.4 and F4.9* If using static advance warning signs and the operation is on the lane, then static advance warning signs must also be placed on any intersecting roads	Alignment with change to section D3.1 General
Section G speed reinstatements	Currently shows RS1/RS2/RS3 for all speed reinstatements	Amended to show RS1, RS2 or RS3	Clarification
TMD G2.15	No TMD for inspection activity on level 2 road	Added TMD for inspection activity on level 2 road	Transferred TMD from section J to section F with minor edits

Reference in 4th Edition	CoPTTM Feb 2017	Change in CoPTTM August 2018	Comment
TMDs G2.4, G2.6, G2.9, G2.11, G2.13		*Added following note to each of the following TMDs - G2.4, G2.6, G2.9, G2.11 and G2.13* If using static advance warning signs and the operation is on the lane, then static advance warning signs must also be placed on any intersecting roads/ramps	Alignment with change to section D3.1 General
Section H speed reinstatements	Currently shows RS1/RS2/RS3 for all speed reinstatements	Amended to show RS1, RS2 or RS3	Clarification
TMD H2.8	No TMD for inspection activity on level 3 road	Added TMD for inspection activity on level 3 road	Transferred TMD from section J to section F with minor edits
Section I:18 Guidance on TMP Monitoring Processes for Temporary Speed Limits (TSL)			Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*

Reference in 4th Edition	CoPTTM Feb 2017	Change in CoPTTM August 2018	Comment
			Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
	1. If the TMP is site specific and contains a TSL, provision must be made for the contractor to resubmit prior to a continuous exposure of the TSL for a period of 6 months. Unless this bring up provision is made the TMP should not be approved by the Traffic Management Coordinator (TMC).	2. If the TMP is site specific and contains a TSL, provision must be made for the contractor to resubmit prior to a continuous exposure of the TSL for a period of ~~6~~ 12 months. Unless this bring up provision is made the TMP should not be approved ~~by the Traffic Management Coordinator (TMC)~~.	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
	TSLs required for more than 6 months A permanent speed limit change should be implemented if the review identifies that a speed limit change is now the best solution.	**TSLs required for more than ~~6~~ 12 months** ~~A permanent speed limit change should be implemented if the review identifies that a speed limit change is now the best solution.~~	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*

Reference in 4th Edition	CoPTTM Feb 2017	Change in CoPTTM August 2018	Comment
	TSL Compliance Checklist The following checklist is to be completed for any TSL which will be required for more than 6 months. The completed checklist is to be attached to the TMP.	**TSL Compliance Checklist** The following checklist is to be completed for any TSL which will be required for more than ~~6~~ 12 months. The completed checklist is to be attached to the TMP.	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
	Temporary Speed Limit Compliance Checklist *To be completed and attached to the TMP if TSL required for more than 6 months.* ***Note:** You are responsible for ensuring that any installed TSLs abide by the laws established under the Setting of Speed Limits Rule.*	**Temporary Speed Limit Compliance Checklist** *To be completed and attached to the TMP if TSL required for more than ~~6~~ 12 months.* ***Note:** You are responsible for ensuring that any installed TSLs abide by the laws established under the Setting of Speed Limits Rule.*	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
	Is the TSL required for more than 6 months?	**Is the TSL required for more than ~~6~~ 12 months?** *If yes, provision must be made for the contractor to resubmit TMP prior to a continuous exposure of the TSL for a period of 12 months.*	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
	If the permanent speed limit is: **a. *greater than 50 km/h*, is the TSL at least 20km/h less than the permanent speed?** **b. *50 km/h or less*, is the TSL at least 10km/h less than the permanent speed?**	~~**If the permanent speed limit is:**~~ ~~**a. *greater than 50 km/h*, is the TSL at least 20km/h less than the permanent speed?**~~ ~~**b. *50 km/h or less*, is the TSL at least 10km/h less than the permanent speed?**~~ ***Is the TSL 80 km/h or less and at least 10 km/h less than the permanent speed limit?***	Incorporating the Technical Note *Change to Land Transport Rule - Setting of Speed Limits 2017*
TMD J2.26a	Less than 2.5 x tree height	Less than ~~2.5~~ 2 x tree height	Correction
TMD J2.26b	Notes 6. Keep road users away from trees when felling (2.5 x	Notes 6. Keep road users away from trees when felling (~~2.5~~ 2	Correction

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	tree height distance	x tree height distance	
TMD J2.26c	TMD shows work vehicle and shadow vehicle on the lane Note on TMD reads: **2m debris clear zone - No debris to full past this point**	Shifted work vehicle and shadow vehicle off the lane Amended note on TMD to read **2m debris clear zone - No debris to fall into this clear zone** Added the following note: This TMD must not be used if debris falls within 2m of the edgeline. Use alternating flow (eg Stop/Go) if this happens	Correction and clarification