Manulife Investment Management

Morrisons Forest Road Safety and Traffic Impact Assessment.

Prior to harvesting commencing at Morrisons Forest in Aotea, Manulife Forest Management (MFM) Engineering and Distribution teams engaged with Waka Kotahi and the Otorohanga District Council (ODC) to identify road safety improvements that could be made to facilitate safer trucking between State Highway 31 and Morrisons Forest in Aotea.

State Highway 31 Aotea Road Intersection

The intersection of SH31 and Aotea Road was identified as an area of concern for all road users. Particularly for traffic exiting Aotea Road onto SH31.

A traffic safety site assessment was carried out by MFM and WSP engineers. A safety improvement plan was submitted to Waka Kotahi which was subsequently approved (see attached TMP & Consent to work). The following improvements to the intersection were agreed to and have been completed.

- Curved mirror installed to assist sight distances for trucks and the public exiting onto SHW 31 from Aotea road.
- 60km/hr speed restriction (sign posted) on SH31 approaches to the intersection.
- Trucks Crossing warning signs to be installed.
- Vegetation clearance to improve sight distance.

ODC were also included in this process and ODC approval was granted through Works Access Permit E839591.

Aotea Road and Morrison Road

MFM engineering manager Hamish Owen, MFM forest engineer Yingjie (Eric) Ye, MFM Distribution Supervisor Nathaniel Higgins and ODC roading engineer Lew Pulman drove the proposed trucking route from Aotea to SH31 together and the following improvements were agreed:

- Widen and strengthen road shoulders to give loaded trucks room on identified tight corners. This involves removing grass and unsuitable material and rebuilding with gap65 metal. This will improve sight distance and allow more space for trucks to turn smoothly. Attached Map shows these corners.
- Marking the centre lines around corners.
- 60 km speed limit signs for our trucks along Morrison/Aotea Rd to ensure safe travel speed for trucks. This will be monitored/enforced with a GPS geofence in our distribution management system.
- 30km speed limit signs for our trucks when they come around the corner and into Aotea township. This will also be monitored/enforced with a GPS geofence in our distribution management system.
- We will shift the forest entrance gate further into the trees to allow tracks pull off further away from road to reduce noise for residents.

In addition to this, Nathaniel Higgins completed a ride along on the local school bus to understand the safety challenges from their point of view. As a result, signs saying School Bus Turns will be installed 200m either side of the Morrisons/Aotea Road intersection.

Additional Road Safety Measures

In addition to the improvements outlined above further proposed measures include:

- Limiting operations to a maximum of 20 trucks per day. Generally, it will be around 12.
- No work on weekends or public holidays.
- No work over the Christmas/ New Year break, specifically December 20 January 7th.

Aotea / Morrison Rd



April 29, 2022

1:10,000





Level 1, Deloitte Building 24 Anzac Parade PO Box 973, Waikato Mail Centre Hamilton 3240 New Zealand **T** 64 7 958 7220 **F** 64 7 957 1437 **www.nzta.govt.nz**

COI	CONSENT TO WORK ON STATE HIGHWAY							
CA	R Apr	lication No. F	83050	1	7	Start Da	ate:	1 May 2022
			.00000	1		End Dat	te:	30/09/2022
1.	 The Parties (a) The New Zealand TRANSPORT AGENCY being a body corporate in accordance with the Land Transport Management Amend Act 2008 (b) Combined Road & Traffic Services							
2.	Atta	achments						
	Atta	chment 1 being	the Gen	eral Condition	ns applying to Work on	State Highways	5	
	Atta	chment 2 being	plan(s) .	Harvest.	Plan Aerial pdf			.approved for construction
3.	Bac	kground						
	(c)	The Applicant	wishes to	carry out th	e work described in the	Schedule heret	to whic	h involves or affects the
		State highway	('the Wo	rk')				
	(d)	The consent of	f NZTA is	s required in	accordance with its gov	verning legislatio	on and	NZTA agrees to provide
		such consent a	at the agi	eed location	and on the attached co	onations.		
4.	Ter	ms of Agreeme	nt					
	(e)	In consideration i. indemnify the work, and.	n of the l NZTA a	NZTA consei igainst all cla	nting to the work, the Aprims, losses, damages a	pplicant hereby and costs incurre	agrees ed by t	to: he NZTA in relation to the
		ii. compensate	the NZT	A for damag	e to any State highway	or structure on t	the Sta	te highway (including but
		not limited brid	ges and	safety barrie	rs) incurred in relation t	to the work.		
		iii. abide by all	the conc	litions and sp	ecifications stated und	er this consent a	and une	derstands that any
		contravention c	of the col	nsent may re	Suit in the NZ I A refusir	ng further acces	S to the	e State nignway.
Signe	ed for	and on behalf of	Com	bined Ro	ad & Traffic Servi	ces		(the Applicant)
			by		Juli]
			by	1	Jac			
Signe	ed for	and on behalf of	New Ze	aland Transp	ort Agency			
5			hu	•]
			by					
	Acting Pursuant to Delegated Authority							
Waka	Kotahi	NZ Transport Agency	y Consent	La S to Work On Sta	aura Rodriguez Garcia TMS Number 119024 Z Highwayaikato West			Version June 2021



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SCHEDULE OF WORKS

1. DESCRIPTION OF WORK

To install permanent temporary signage at the intersection of SH31 and Aotea Rd

2. LOCATION				
State Highway:031 Rout	e Position: From: 031-0	047-B/6.450	to 03	1-0047/7.100
Address: 5343 State Highway 31 Kaw	hia			
3. TIMING				
Start Date: <u>1 May 2022</u> End Date	e:	Expected Dur	ration: 4 M	1onths
Name of Applicant: Combined Road &	& Traffic Services			
20 Katoro Drive. Te N	lgae. Rotorua			
Address:	<u> </u>			
Contact Phone number: <u>0274777020</u>				
5. CONTRACTOR(S)				
1) Name: <u>Combined Road & Traf</u>	fic Services			
Address: <u>20 Katoro Drive</u> , Te Ng	ae, Rotorua			
Site Representative Name: Steve	e Wilks			
Contact Phone numbers: Day	0274777020	Night		
Responsible for: Signage supply a	nd installation	0		
2) Name: <u>Evolution Road Services</u>	3			
Address:13 Innovation Way, Horo	tiu 3288			
Site Representative Name:TE	C - Evolution Road Servic	es		
Contact Phone numbers: Day	A 0800 630 7200 D	Night	0800) 630 7200
Responsible for:Traffic Mana	CAR E839591 generat Rodriguez Garcia			
	STMS Number 119024 NZTA - Waikato West			Version lune 202
	J.7.9/			
	14 March 2022			



TRAFFIC MANAGEMENT PLAN (TMP) – FULL FORM

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 Code of practice for temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

Organisations	TMP reference:	Contractor (Worl Combined Road &	contractor (Working space): Combined Road & Traffic Services			Principal (<i>Client</i>): Hancock Forestry				
/TMP reference		Contractor (TTM): Combined Road & Traffic Services				otahi NZTA (SH 31) nga District Council (A	Aotea Rd)			
Location details	Roa	d names and sub	ies and suburb			RPs (from and to)	Road level	Permanent speed		
and road characteristics		SH 31 Aotea Rd Kawhia District	31 a Rd District			Intersection of 1 10 SH 31 & Aotea Rd 1 10 RP 031-0047-B/ 6.781 LV 10				
	AADT (info from Mo	bile Road)			Peak flo	ows				
Traffic details (main route)	SH 31 = 508 (est) VF Aotea Rd = 280 (est)	D 11.652% - Heavy VPD 5% Heavy	- Heavy eavy			No peak hour flows (Rural Area)				
Description of wo	rk activity									
Install trucks cross entering & exiting A post at headway of	Install trucks crossing & 50km/h temporary speed limit signs onto timber posts for semi-permanent advance warning of logging trucks entering & exiting Aotea Rd. Install Hit Sticks from 50k TSL to Intersection on LH side of road and install a visibility mirror onto timber post at headway of intersection.									
Planned work pro	gramme		_					-		
Start date	1 st May 2	022 Time	24 Hours	End	date	30/09/2022	Time	24 Hours		
Consider significa stages, for example or road closures detours on activity periods.	ant le: Signs out 24 ho Logging truck r	Signs out 24 hours Logging truck movements 24 hours								
Alternative dates activity delayed	if No alternative of	No alternative dates are required								
Road aspects affe	ected (delete either Y	′es or No to show w	hich aspects	are aff	ected)					
Pedestrians affected?	No	Property access a	affected?		No	Traffic lanes affec	ted?	Yes		
Cyclists affected?	No	Restricted parkin CAR E839 Trish Ande	g affected? 591 erson	D	No	Delays or queuing	j likely?	No		
Traffic control device	es manual part 8 CoP	TTM Section Eva 14 March	appendix A: T Page 2022	xp ۵۵. raffic m 1	/ <u>09/22</u> lanageme	nt plans	Editio	on 4, April 2020		



Proposed traffic mana	gement methods							
	After the TMD 9 gits a	ofety briefing the CTMC will direct 9 mar	and the installation of the TTN	1 oguinmont				
	התכו עום דואור מ סוגם סמובנץ שרובווווץ עום סדואוס אווו עוופט מ דומחמשם עום ווטנמוומנוטוו טו עום דדואו פעעוטדוופוונ.							
Installation	The installation of temporary traffic management measures shall be undertaken using a mobile operation as per diagram 01 with vehicle mounted advance warning sign and flashing beacon/s.							
(includes parking of plant and materials storage)	All signs are erected e non-traffic side or at th advance warning sign direction taking in eac	All signs are erected either in front of the work vehicle with 10m roll ahead, alongside the work vehicle on the non-traffic side or at the rear of the work vehicle with a shadow vehicle in place. The first sign erected is the advance warning sign. Remaining signs are installed by travelling around the road network in a clockwise direction taking in each side road as they are passed until the last thank you sign is installed.						
	On completion of TTM and conforms to the T	set out, the STMS shall undertake a site MP.	e inspection to check that the s	ite is safe, legal				
Attended (day)	Static site with trucks a act as permanent war	crossing & 50km/h temporary speed limi ning of site access as per diagram 02.	t signs permanently attached to	o timber posts to				
Attended (night)	Static site with trucks of act as permanent war	ks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to varning of site access as per diagram 02.						
Unattended (day)	(day) Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.							
Unattended (night)	Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.							
	No detour required							
Detour route	Does detour route go into another RCA's roading network? Not required							
	If Yes, has confirmation of acceptance been requested from that RCA? Not required Note: Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.							
	Once the works are completed the STMS will check that the worksite is left in a safe condition, and it is safe to remove the TTM equipment.							
	The removal of temporary traffic management measures shall be undertaken using a mobile operation as per diagram 01 attached with vehicle mounted advance warning sign/s and flashing beacon/s.							
Removal	All signs are removed either in front of the work vehicle with 10m roll ahead, alongside the work vehicle on the non-traffic side or at the rear of the work vehicle with a shadow vehicle in place. The first sign removed is a thank you sign. Remaining signs are removed by travelling around the road network in a clockwise direction taking in each side road as they are passed until the last advance warning sign is removed.							
	Once the site is cleare in a safe condition and	d of all TTM equipment the STMS will c no TTM equipment remains	arry out a drive through to ensu	ure the site is left				
		Trish Anderson STMS Number 53064 exp 06/09/22						
Traffic control devices ma	<i>nual</i> part 8 CoPTTM	Section E, appendix A: Traffic managem Page 2	ent plans	Edition 4, April 2020				

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14 March 2022

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	WAKA KOTAHI
-	NZ TRANSPORT AGENCY

Proposed TSLs (see TSL decision matrix for guidance)								
TSL details as required approval of Temporary Speed Limits (TSL) are in terms of Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 (List speed, length and location)	Times (From and to)	Dates (Start and finish)	Diagram ref. no.s (Layout drawings or traffic management diagrams)					
temporary maximum speed limit of 50km/h is hereby xed for motor vehicles travelling over the length of pprox 400m situated between RP 031-0047-B/6.600 – 31-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District	24 hours	1st May 2022 – 30/09/2022	02					
temporary maximum speed limit of 50km/h is hereby xed for motor vehicles travelling over the length of pprox 400m situated between RP 031-0047-B/6.600 – 31-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District	24 hours	1st May 2022 – 30/09/2022	02					
/ill the TSL be required for longer than 12 months? yes , attach the completed checklist from section I-18: G rocesses for TSLs to this TMP.	lonitoring	No						
	ee TSL decision matrix for guidance) TSL details as required proval of Temporary Speed Limits (TSL) are in terms if Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 (List speed, length and location) temporary maximum speed limit of 50km/h is hereby ed for motor vehicles travelling over the length of prox 400m situated between RP 031-0047-B/6.600 – 11-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District temporary maximum speed limit of 50km/h is hereby ed for motor vehicles travelling over the length of prox 400m situated between RP 031-0047-B/6.600 – 11-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District ill the TSL be required for longer than 12 months? yes, attach the completed checklist from section I-18: G rocesses for TSLs to this TMP.	TSL decision matrix for guidance) TSL details as required Times poproval of Temporary Speed Limits (TSL) are in terms if Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 (List speed, length and location) temporary maximum speed limit of 50km/h is hereby ed for motor vehicles travelling over the length of oprox 400m situated between RP 031-0047-B/6.600 – 11-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District temporary maximum speed limit of 50km/h is hereby ed for motor vehicles travelling over the length of oprox 400m situated between RP 031-0047-B/6.600 – 11-0047-B/7.000 and approx 130m situated between P 0.000 – 0.130 on Aotea Rd Kawhia District 124 hours 24 hours	TSL decision matrix for guidance) Times Dates Sproval of Temporary Speed Limits (TSL) are in terms filmes Dates (Start and finish) f Section 6 of Land Transport Rule: Setting of Speed (From and to) (Start and finish) (Limits 2017, Rule 54001/2017 (List speed, length and location) 24 hours 1st May 2022 – temporary maximum speed limit of 50km/h is hereby 24 hours 1st May 2022 – 10:0047-B/7.000 and approx 130m situated between 24 hours 1st May 2022 – 20:000 – 0.130 on Aotea Rd Kawhia District 24 hours 1st May 2022 – 10:0047-B/7.000 and approx 130m situated between 24 hours 1st May 2022 – 10:0047-B/7.000 and approx 130m situated between 24 hours 1st May 2022 – 10:0047-B/7.000 and approx 130m situated between 24 hours 1st May 2022 – 10:000 – 0.130 on Aotea Rd Kawhia District 24 hours 1st May 2022 – 10:000 – 0.130 on Aotea Rd Kawhia District 24 hours 1st May 2022 – 10:000 – 0.130 on Aotea Rd Kawhia District 24 hours 1st May 2022 – 10:000 – 0.130 on Aotea Rd Kawhia District 24 hours 1st May 2022 –					

Positive traffic management measures

Signs are attached to timber posts to act as permanent warning type signage on all entries and exits to intersection. All vehicles to obey normal road rules when entering & exiting intersection. Remove TTM equipment immediately after works are complete. Hit Sticks will be installed in shoulders on LH side from 50km/h TSL signs to intersection. Timber post to be painted white and 100mm*100mm

Contingency plans								
Generic contingencies for: • major incidents • incidents • pre planed detours. Remove any options which do not apply to your job	 Major Incident A major incident is described as: Fatality or notifiable injury - real or potential Significant property damage, or Emergency services (police, fire, etc) require access or control of the site. 	 Actions The STMS must immediately conduct the following: stop all activity and traffic movement secure the site to prevent (further) injury or damage contact the appropriate emergency authorities render first aid if competent and able to do so notify the RCA representative and / or the engineer under the guidance of the officer in charge of the site, reduce effects of TTM on the road or remove the activity if safe to do so re-establish TTM and traffic movements when advised by emergency authorities that it is safe to do so Comply with any obligation to notify WorkSafe. 						

	APPROVED CAR E839591 Trish Anderson STMS Number 53064 exp. 06/09/22	
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RCA consent (eg CAR/WAP) and/or RCA contract reference Incident Actions An incident is described as: The STMS must immediately conduct the following: excessive delays - real or potential stop all activity and traffic movement if required . • minor or non-inquiry accident that has the secure the site to prevent the prospect of injury or • . potential to affect traffic flow further damage structural failure of the road. notify the RCA representative and / or the • • engineer STMS to implement a plan to safely remove TTM and to establish normal traffic flow if safe to do so re-establish TTM and traffic movements when it • is safe to do so and when traffic volumes have reduced. Actions Detour If because of the on-site activity it will not be possible When it is necessary to implement the pre-planned to remove or reduce the effects of TTM once it is detour the STMS must immediately undertake the established a detour route must be designed. This is followina: likely for: Notify the RCA and / or the engineer when the excessive delays when using an alternating flow detour is to be established design for TTM Drive through the detour in both directions to check that it is stable and safe redirecting one direction of flow and / or total road closure and redirection of traffic until Remove the detour as soon as it practicable and such time that traffic volumes reduce and safe to do so and the traffic volumes have reduced and tailbacks have cleared tailbacks have been cleared. The risks in the type of work being undertaken, the Notify the RCA and / or the engineer when the • risks inherent in the detour, the probable duration of detour has been disestablished and normal traffic closure and availability and suitability of detour routes flows have resumed. need to be considered. The detour and route must be designed including: pre- approval form the RCA's whose roads will be used or affected by the detour route

Note also the requirements for no interference at an accident scene: In the event of an accident involving serious harm the STMS must ensure that nothing, including TTM

equipment, is removed or disturbed and any wreckage article or thing must not be disturbed or interfered with, except to:

- save a life of, prevent harm to or relieve the suffering of any person, or
- make the site safe or to minimise the risk of a further accident; or
- maintain the access of the general public to an essential service or utility, or
- prevent serious damage to or serious loss of property, or

ensure that TTM equipment for the detour - signs

etc are on site and pre-installed.

• follow the direction of a constable acting in his or her duties or act with the permission of an inspector.

Other contingencies to be identified by the applicant (i.e. steel plates to quickly cover excavations)	No other contingencies are required.
Juickly cover	
aveau ationa)	
excavations)	
,	

APPROVED CAR E839591 Trish Anderson

14 March 2022

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Section EWappendix A: Traffic management plans

WAKA KOTA NZ TRANSPORT AGENCY	AHI	RCA consent (and/or RCA co	eg CAR/V ntract ref	VAP) erence					
Authorisations									
Parking restriction(s)	Will controlled street parking be affected?				No	На	as approval been gra	nted?	Not required
Authorisation to work at permanent traffic signal sites	Will portable traffic signals be used or permanent traffic signals be changed?				No	На	as approval been gra	nted?	Not required
Road closure authorisation(s)	Will ful than 5	l carriageway clo minutes (or othe	sure conti r RCA stip	No	На	as approval been gra	nted?	Not required	
Bus stop relocation(s) – closure(s)	Will bu	s stop(s) be obst	ructed by	the activity?	No	На	as approval been gra	nted?	Not required
Authorisation to	Make, descri	model and ption/number	Not	required					
signals	NZTA	compliant?	Not	required					
EED									
Is an EED applicable?	Not	required	EE	D attached	? Not requ	uired			
Delay calculations/tria	al plan t	to determine po	tential ex	tent of dela	iys				
No delays are expected	d as all t	raffic lanes rema	ain open.						
Public notification pla	an								
Not required									
Public notification pla	an attac	hed? Not re	equired						
On-site monitoring pl	an								
Attended (day and/or night)	Imme If sig	ediately after set	up by STN ed/missir	MS then fror	n time to time Forest Mar	e by H nagei	lancock Forest man rs are to advise C	agers. RT immediately to	o get them
Unattended (day and/or night)	fixed From	d asap n time to time by	Hancock	Forest mana	agers.				
Method for recording	daily si	ite TTM activity	(eg CoPT	TM on-site	record)				
All minor alterations, re	quests a	and monitoring n	otes of TT	rM activity w	vill be recorde	ed ont	to the onsite record.		
Site safety measures									
All TTM staff will be equ & TMP requirements.	uipped w	vith appropriate s	afety equ	ipment. Toc	lbox meeting	held	at start of works to	brief all on site of s	ite hazards
Temporary safety	Will a te system	emporary safety to be used at this t	barrier worksite?	No	lf yes, has t designed b independer	he tei y an i htly re	mporary safety barri nstallation designer eviewed as being fit f	er system been and or purpose?	Not required
barrier system	Statem	ent from tempor	ary safety	barrier insta	l <mark>átion d</mark> esign	er att	ached	Not requir	red
			Trish An	iderson	54 exp 06/09	2/22			
Traffic control devices ma	anual pa	art 8 CoPTTM	Section E	Mappendix P Para h 2022	RtTraffic man age 5	agem	nent plans	Edition	4, April 2020



Other information

As the signs are installed onto timber posts, the responsibilities of the STMS, section A4.3.2 of COPTTM will not apply in this situation. Ie; no daily visits, no TC / STMS on site and STMS not expected to be within 30 mins of site on call. These signs are installed to act as permanent warning type signage to warn road users that there is trucks crossing access ahead. Handcock Forestry managers will monitor TTM equipment and report back to WSP as and when required.

ite specific layout diagrams					
Number	Title				
01	Mobile Operation Site Setup Removal				
02	Truck Crossing with 50km/h TSL				

		Name		24/7 contact number	CoPTTM ID	Qualifica	ation	Expiry date		
Principal	Hancock Fore	estry (Hamish O	wen)	027 477 0565	Not required	Not require	ed	Not required		
TMC (Waka Kotahi)	West Waikato	NOC (Trish And	ersen)	027 645 4855	53064	L2/3 STM	S NP	06/09/22		
TMC (Local Roads)	Otorohanga Distric	t Council (Mario	n Fleming)	027 920 3299	362	L2/3 STM	S NP	28/05/22		
Engineers' representative	Hancock Fore	estry (Hamish O	wen)	027 477 0565	Not required	Not require	ed	Not required		
Contractor	Combined Road & T	raffic Services (S	Steve Wilks)	027 477 7020	Not required	Not require	ed	Not required		
STMS	Combined Road & Tr	raffic Services (S	Simon Dufty)	021 196 7520	18707	L2/3 STM	S NP	04/12/22		
TC	Nc	ot required		Not required	Not required	Not require	ed	Not required		
Others as required	WSP (James Darge)		027 282 4938	Not required	Not require	ed	Not required		
TMP preparation	_					-				
Prenaration	Ron Whiting		04/03/2022	Mithiligg	338	TTM Planner		09/09/9999		
	Name (STMS qualified)	Date		Signature	ID no.	Qualificat	ion	Expiry date		
This TMP meets CoF	PTTM requirements	APPF	ROVED	Number of diagrams a		tached		02		
		Trish Anderso	n r 53064 evp 0	6/09/22						
Traffic control devices r	nanual part 8 CoPTTM	Section E, app	endix AstTraffic	management pla	ns		Editio	n 4, April 2020		

WAKA KOT NZ TRANSPORT AGENCY	AHI	RCA consent (eg CAR/WAP) and/or RCA contract reference	e				
TMP returned for							
correction (if required)	Name		Date	Signature	ID no.	Qualification	Expiry date
Engineer/TMC to con	nplete f	ollowing section when approva	I or acceptanc	e required			
Temporary safety barrier system	The atta as bein	ached temporary road safety barrie g fit for purpose	er design has be	en independent	ly reviewed	Yes No No	t required
	Name		Date	Signature	ID no.	Qualification	Expiry date
Acceptance by TMC (only required							
if TMP approved by engineer)	Name		Date	Signature	ID no.	Qualification	Expiry date
Qualifier for engineer	r or TM	C approval					
Approval of this TMP a	authorise	es the use of any regulatory signs	included in the	TMP or attach	ed traffic mar	nagement diagrar	ns.
This TMP is approved	on the f	ollowing basis:					
1. To the best of the a	pprovin	g engineer's/TMC's judgment this	TMP conforms	to the requiren	nents of CoP	TTM.	
2. This plan is approve applicant. Any inact	ed on th curacy i	e basis that the activity, the locati n the portrayal of this information	ion and the road is the responsib	l environment h ility of the appl	nave been co icant.	rrectly represente	ed by the
3. The TMP provides	so far a	s is reasonably practicable, a safe	e and fit for purp	ose TTM syste	em.		
4. The STMS for the a weather or other co	activity is anditions	reminded that it is the STMS's d that affect the safety of this site.	luty to postpone	, cancel or mod	dify operatior	is due to the adve	erse traffic,
Notification to TMC p	orior to	occupying worksite/Notification	n completed				
Type of notification to TMC required	Site is hours when signs notific Repo	active with signs displayed 24 per day. TMC to be notified signs are erected and when are removed by emailing ation via the Daily Activity t Spreadsheet.	Notification completed	Date Time			

	APPROVED CAR E839591 Trish Anderson STMS Number 53064 exp. 06/09/22	
oart 8 CoPTTM	Section Elvappendix AstTraffic managem	ent plans



AGENCY	TMP or generic plan refe	rence			
ON-SITE REC On-site record	CORD must be retained with TMP for 12 months.			Today's date	
Location details	Road names(s):	House number/RPs	:	Suburb:	
Working sp	ace				
Person responsible for working					
space	Name		Signature		

Where the STMS/TC is responsible for both the working space and TTM they sign above and in the appropriate TTM box below

TTM									
STMS in charge of									
TTM	Name		TTM ID Number	Warrant expir	y date	Signa	ture		Time
Worksite handover						-			
accepted by replacement	Name		ID Number	Warrant expir	y date	Signa	ture		Time
STMS	Tick to confirm handover briefing completed	I							
Delegation									
Worksite									
accepted by	Name		ID Number	Warrant expir	v date	Signa	ture		Time
TC/STMS-NP	Tick to confirm briefing complete	d			, I	0			
Temporary	speed limit			1					
Street/road na	ame (RPs or street numbers):		TSL action	Date:	Time		TSL speed:	Length of	TSL (m):
			TSL installed						. ,
		ľ	TSL remains in place						
From:	To:		TSL removed						
Street/road na	ame (RPs or street numbers):		TSL action	Date:	Time		TSL speed:	Length of	TSL (m):
			TSL installed						
			TSL remains in place						
From:	To:		TSL removed						
Street/road na	ame (RPs or street numbers):		TSL action	Date:	Time		TSL speed:	Length of	TSL (m):
		_	TSL installed						
			TSL remains in place						
From:	To:		TSL removed						
Street/road na	ame (RPs or street numbers):		TSL action	Date:	Time		TSL speed:	Length of	TSL (m):
		-	TSL installed						
			TSL remains in place						
From:	To:		JSL removed ED						
		CAR E8 Trish Ai	39591 nderson Jumber 53064 exp 06	/09/22					
Traffic control de	evices manual part 8 CoPTTM	Section	E, appendix A: Traffic m Page 8	nanagement p	lans		I	Edition 4, A	oril 2020



1 14

worksite monit	oring							
TTM to be monitored	d and 2 hourly in	spections d	ocumented below					
Items to be inspec	ted	TTM set-up	2 hourly check	2 hourly check	2 hourly check	2 hourly check	2 hourly check	TTM removal
High-visibility garme	ent worn by all?							
Signs positioned as	per TMP?							
Conflicting signs cov	vered?							
Correct delineation a	as per TMP?							
Lane widths approp	riate?							
Appropriate positive	TTM used?							
Footpath standards	met?							
Cycle lane standard	s met?							
Traffic flows OK?								
Adequate property a	access?							
Barrier deflection are	ea is clear?							
Add others as requi	red							
Time inspection co	ompleted:							
Signature:								
Comments:				I				
Time	Adjustment m	ade and re	ason for change					
			APPR	OVED				
			CAR E839591 Trish Anderson					
Troffic control doute	n monul n=+ 0 C		STMS Number 5	3064 exp 06/	09/22	20	– 1:1:	1 April 2000
Trainic control devices	s <i>manuai</i> part 8 C		Section Evappend	Page 9	anagement plar	15		4, April 2020

Addes

14 March 2022

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Reporting company	CoPTTM.incident reference:										
Reference added by	reporting company	ıy			Reference a	added by th	he CoP	TTM.Incident data	abase administrator		
REPORT ON INCIDENT AT ROADWORKS SITE											
Send to: CoPTT	<u>M.Incident@nzt</u>	ta.govt.nz a	and the RCA i	in charge	of the netwo	rk (includi	ing NZ	TA for state higl	nways)		
Date of incident				T ir	ime of ncident						
Reported by				С	ompany						
STMS name				S N	TMS lo.						
Contractor /TTM Company				C n	contact umber						
Road location (include direction and lane)											
Description of work being undertaken											
Incident type	Near mis	s V	/ehicle ente TTM	red	Vehicle ent working sp	ered bace		TMA hit	Other		
	Static		Mohile		Somi-sta	tic		Shoulder	Unattended		
Operation type	Otatic		WODIE		00111-31a	uc		Unattended			
Phase of operation		Install		Static	c, mobile, se	emi-stati	-static Removal				
Damage to	V	'ehicles			Plant			TTM	equipment		
	1										
	Number of	Enter the r each	number of peop injury category	le in	Minor		Not	ifiable	Fatal		
Injuries	Number of people in each injury	Enter the r each Roa	number of peop injury category ad workers	le in	Minor		Not	ifiable	Fatal		
Injuries	Number of people in each injury category	Enter the reach	number of peop injury category ad workers pad users	le in	Minor		Not	ifiable	Fatal		
Injuries Crash code	Number of people in each injury category From A	Enter the r each Roa Roa Appendix	number of peop injury category ad workers pad users 1 attached	le in	Minor Road user rehicle		Not	ifiable cle type	Fatal Reg. number		
Injuries Crash code If TMA hit, which TMA	Number of people in each injury category From A	Enter the r each Roa Roa Nppendix	number of peop injury category ad workers pad users 1 attached	le in F V	Minor Road user rehicle Vhich lane		Not	ifiable cle type	Fatal Reg. number		
Injuries Crash code If TMA hit, which TMA Police attended	Number of people in each injury category From A	Enter the r each Roa Ro Appendix *	number of peop injury category ad workers pad users 1 attached	le in F V	Minor Road user rehicle Which lane urther nformation	For	Not Vehio	ifiable cle type	Fatal Reg. number rnal report (contact)		
Injuries Crash code If TMA hit, which TMA Police attended Description of events	Number of people in each injury category From A	Enter the r each Roa Roa Roa Roa Roa P/number)	Approximate and the second sec	le in R V V F ir V 91 rson ber 530	Minor Road user rehicle Which lane urther nformation	For	Not Vehic	ifiable cle type	Fatal Reg. number rnal report (contact)		





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Appendix 1: Vehicle movement coding sheet

	TYPE	Α	В	С	D	E	F	G	0
A	OVERTAKING AND LANE CHANGE	PULLING OUT OR CHANGING LANE TO RIGHT	HEAD ON	CUTTING IN OR CHANGING LANE TO LEFT	LOST CONTROL (OVERTAKING VEHICLE)		LOST CONTROL (OVERTAKEN (OVERTAKEN VEHICLE)	WEAVING IN HEAVY TRAFFIC	OTHER
В	HEAD ON	ON STRAIGHT			BOTH OR UNKNOWN	LOST CONTROL ON STRAIGHT	LOST CONTROL ON CURVE		OTHER
С	LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)	OUT OF CONTROL ON ROADWAY	OFF ROADWAY TO LEFT	OFF ROADWAY TO RIGHT					OTHER
D	CORNERING	LOST CONTROL TURNING RIGHT	LOST CONTROL TURNING LEFT	MISSED INTERSECTION OR END OF ROAD					OTHER
E	COLLISION WITH OBSTRUCTION		CRASH OR BROKEN DOWN	NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)		OPENING DOOR			OTHER
F	REAR END	SLOWER VEHICLE	CROSS TRAFFIC		→ → → QUEUE				OTHER
G	TURNING VERSUS SAME DIRECTION	REAR OF LEFT TURNING VEHICLE	LEFT TURN SIDE SIDE SWIPE	STOPPED OR TURNING FROM LEFT SIDE		OVERTAKING VEHICLE	TWO TURNING		OTHER
Н	CROSSING (NO TURNS)	RIGHT ANGLE (70° TO 110°)							OTHER
J	CROSSING (VEHICLE TURNING)	RIGHT TURN RIGHT SIDE	OFPOSING RIGHT TURNS	TWO TURNING					OTHER
K	MERGING			TWO TURNING					OT HER.
L	RIGHT TURN AGAINST	STOPPED WAITING TO TURN							OTHER
Μ	MANOEUVRING	PARKING OR LEAVING	"U" TURN			ENTERING OR LEAVING FROM OPPOSITE SIDE	ENTERING OR LEAVING FROM SAME SIDE	REVERSING ALONG ROAD	OTHER
N	PEDESTRIANS CROSSING ROAD			EFT TURN	RIGHT TURN RIGHT SIDE		RIGHT TURN LEFT SIDE		OTHER
Ρ	PEDESTRIANS OTHER		WALKING FACING TRAFFIC	WALKING ON FOOTPATH	CHILD PLAYING (INCLUDING TRICYCLE)				OTHER
Q	MISCELLANEOUS	FELL WHILE BOARDING OR ALIGHTING	FELL FROM MOVING VEHICLE			EQUESTRIAN	FELL INSIDE VEHICLE		OTHER
New	Zealand Go	overnment	* = Mo) Tr S ⁻ N	vernent ap rish Anderso TMS Number ZTA - Waika	plies for le n 53064 exp to West	o6/09/22	ht hand be	ends, curve	es or turns
CoPTT	M incident re	eport – Vers	sion 1.1	Agrees	À				

C2.5 Combined level LV and level 1 worksite layout distances

Pern	nanent speed limit	or RCA -	<50	60	70	80	90	100
desi	gnated operating s	peed (km/h)	250	00	70	80	50	100
Traf	ic signs							
А	Sign visibility dist	ance (m)	50	60	70	80	90	100
В	Warning distance	e (m)	50 or 30*	80	105	120	135	150
С	Sign spacing (m)		25 or 15*	40	50	60	70	75
Safe	ty zones							
D	Longitudinal (m)	+	10 or 5*	15	30	45	55	60
E	Lateral (m) +		1	1	1	1	1	1
	Lateral behind ba	arrier installation	l l	As specifie	d by the Ir	nstallation	n Designer	
Таре	ers				-	-	-	
G	Taper length (m)	#	30	50	70	80	90	100
G	LV roads taper le	ngth (m) #	25	30	35	40	45	50
К	Distance betwee	n tapers (m)	40	50	70	80	90	100
Delir	neation devices							
Cone	e spacing in taper ((m)	2.5	2.5	5	5	5	5
Cone	e spacing: Working	space (m)##	5	5	10	10	10	10
* Li	arger minimum dis	tances apply on a	all state highw	ays and al	so on all r	nulti-lane	roads. The	e smaller
	inimum distances	may be applied o	n other roads		nodale ro	ad enviror	nment con	straints.
+ O	etain a single lane	width. Positive tra	ffic managem	es may be lent and ar	appropri	ate TSL m	nust be us	ed.
#	1. On non-stat	te highways with s	speeds 50km/	h or less, a	a 10m tap	er (with c	ones at 1r	n
	centres) ma	ay be used when t	here are road	environm	ent constr	aints (eg i	ntersectio	ns and
	2. On all roads	s where the shoul	der width is le	ss than 2.	5m and th	e activity	does not a	ffect the
	live lane, a	10m shoulder ta	per is permitt	ed (with at	least 5 co	nes at no	greater the	an 2.5m
	centres).	0		.)				
	3. A taper of a (stop/go), p	ortable traffic sigr	at 2.5m centre als or priority	s) must b give way a	e used wr are emplo	iere manu yed.	iai traffic c	ontrol
## L\	## LV roads: double the cone spacing alongside working space (eg 5 = 10, 10 = 20).							
Lane	widths (based on	permanent spee	d or TSL if app	lied)				
Spee	ed (km/h)	30 40) 50	60	70	80	90	100
F La	ane Width (m)	2.75 2.7	5 3.0	3.0	3.25	3.25	3.5	3.5
Excep	t for delineation d	evice spacings, w	hich are maxi	mum valu	es, the dis	tances sp	ecified in t	:he
above	table are minimu	m values.						

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.



Order of worksite establishment

On bi directional carriageways, signs should be erected by travelling around the road network in a clockwise direction taking in each side road as they are passed. In this way all turns in and out will be to the left which is easier and safer:

STEP 1:

Drive through the entire site checking for any unforeseen hazards or any other work sites that may interfere with ours.

STEP 2:

After the TMP & site safety briefing the STMS will direct and manage the installation of the TTM. TTM equipment will be installed as per the installation process in the TMP. Signs will be setup on the left hand side of or in front of vehicle 0.5m clear of the travelled path wherever possible. The first sign erected will be the advance warning sign. Remaining signs & TTM equipment are placed as required until the sign network is complete.

STEP 3:

Carryout a drive through check of the worksite in all directions including side roads. This check must confirm that the worksite is:

- Safe
- to the minimum standard shown in the TMP and that
- the restriction to traffic flow is reasonable
- the signs and delineation devices give clear messages to road users, and the signs and delineation devices are securely erected and will remain in their correct position under the expected traffic volumes and weather conditions.

STEP 4:

Carryout a toolbox meeting and explain identified hazards for the worksite, TMP requirements for worksite including TTM staff duties, safety zone requirements and limits.

STEP 5:

The removal of TTM measures must be as per removal process in TMP. The last sign to be removed must be the advance warning sign. Once the site is cleared of all TTM equipment the STMS will carry out a drive through to ensure the site is left in a safe condition and no hazards or TTM equipment remain

Diagram 01 Mobile Operation Site Setup / Removal





Trish Anderson STMS Number 53064 exp 06/09/22 NZTA - Waikato West

Clear site distance

(3 x posted speed)

Clear site distance

(3 x posted speed)

Anters 14 March 2022

CAR E839591



Works Access Permit

Registration Number:**E839591**Utility Reference:**N/A**



1. Details of Proposed Work

Activity: Billboard/Sign Maintenance Address: 5343 State Highway 31 Kawhia Road, Kawhia, Kawhia, 3889 Location in road: Berm WAP valid period: 01 May 2022 to 30 April 2023

2. The Parties

Otorohanga District Council being a body corporate in accordance with the Local Government Act 2002 ('the Corridor Manager;')

TAUMATA PLANTATIONS LIMITED being an approved Utility Operator in accordance with submitting a request for access in accordance with that act;

COMBINED ROAD & TRAFFIC SERVICES LIMITED being the agent of the Utility Operator submitting this request on behalf of the Utility Operator and in accordance with the Utility Operator's statutory rights ('the Applicant').

3. Attachments

Attachment 1 being the Schedule of Reasonable Conditions.

Attachment 2 being plan TMP showing the agreed service location.

4. Background

(a) The Utility Operator wishes to carry out the works stated on CAR Number E839591 and thereafter maintain the utility services established in the corridor;

(b) The Corridor Manager is required to provide a written consent in accordance with its governing legislation and to provide a schedule of reasonable conditions, if required, by the utility legislation under which the request for access has been made; and

(c) In accordance with the Code: Utilities' Access to the Transport Corridors and on behalf of the Corridor Manager, I give my written consent for access to the corridor at the agreed location and attach my schedule of reasonable conditions:

(d) In the case of State highways this Works Access Permit serves as the approvals required under sections 51 and 78 of the Government Roading Powers Act.

Marion Fleming Signed

Date 22/02/2022

Marion Fleming acting pursuant to delegated authority.





CONDITIONS

General Conditions

1. The Utility Operator must:

(a) carry out all Work in Transport Corridors in accordance with the Code and KiwiRail's Specifications for Working in Railway Corridors;

(b) undertake all Works in compliance with the Acts of Parliament and mandated codes of practice that relate to their industry and the type of Work described within the plans and methodology submitted;

(c) install assets more or less in the location shown on the attached plans, and agree the exact location and position with the Road Corridor Manager before Work commences;

(d) locate any Utility Structures in the Road Corridor in the agreed position shown on the drawings and clear of the Carriageway, Road Corridor furniture and kerbs, drains, manholes, etc. Utility Structures agreed to be within the trafficable part of the Road are to be flush with the surface and designed to withstand full heavy Traffic loading (NZTA's HN-HO-72 Traffic Loading);

(e) provide a full description of the construction methodology, reinstatement, resurfacing and compaction and agree this with the Road Corridor Manager prior to Work commencing;

(f) make the Works available at all times for inspection by any person representing the Road Corridor Manager;

(g) if requested, pay the reasonable costs of the Road Corridor Manager in connection with the processing of this notice and for the monitoring and auditing of the Works; (See NZ Transport Agency Cost Structure under Clause 23)

(h) keep a full copy of the Works Access Permit/ Permit to Enter and Reasonable Conditions on the Work Site at all times during the Works;

(i) undertake remedial action on non-conforming Work within the timeframe set by the Road Corridor Manager, where reasonable and practicable;

(j) gain all the necessary consents, approvals and permits from the relevant statutory and regulatory authorities at its own cost;

(k) keep plans of the installed Work and make them available to the Railway Corridor Manager (in all cases) and Road Corridor Manager (on request);

(I) compensate the Road Corridor Manager for any damage or costs incurred to the Road Corridor due to the Work or for costs resulting from the removal of abandoned installations, Utility Structures, components and equipment that belong to the Utility Operator;

(m) repair all Road Corridor assets damaged as a result of the Works, should the Road

Corridor Manager determine these are necessary prior to the end of the Warranty period;

(n) restore to their original condition any surface or Utility Structure that was damaged or removed as a result of the Works;

(o) control the surface water channels so as to cause minimal interference to existing flows;

(p) fully restore the surface water channels at the completion of the Works;

(q) notify the Road Corridor Manager of any maintenance Work it proposes to undertake within the two-year Warranty period: 39591

CAR Number: E839591

Marion Fleming STMS Number 362 Otorohanga District Council than Page 1 Of 3 22 February 2022

(r) have in place an approved TMP for Roads and Motorways at least two days prior to Work commencing on the Work Site;

(s) provide the Road Corridor Manager with two Working Days' notice before commencement of Work on the Work Site;

(t) ensure that the Work is carried out under the control of a warranted supervisor as required by the Code of Practice for Temporary Traffic Management and ensure that there are sufficient people on site specifically to control the flow of Traffic through the site in accordance with the TMP;

(u) comply with instructions from an officer of the NZ Police Traffic Safety Branch or a duly authorised agent of the Road Corridor Manager in respect of Traffic management and safety;

(v) complete Works in the Road Corridor in one continuous operation (suspension of Works over five continuous days requires the prior written permission of the Road Corridor Manager);

(w) protect and maintain all Road Corridor signs, markers, signals, barriers and associated marking and replace them to the appropriate industry standard where they have been damaged by the Works;

(x) complete and submit a Works Completion Notice form when the Works are complete; and

(y) stop Work as necessary to meet the requirements of section 42 of the Heritage New Zealand Pouhere Taonga Act 2014.

- 2. Work must not take place on or near a State highway during and one day either side of a public holiday or public holiday weekend.
- 3. Where otherwise required due to Traffic volumes or specific residential or Central Business District requirements, the hours of Work must be as specified in the Local Conditions and Special Conditions.
- The Warranty period starts from the date the Road Corridor Manager has given signed 4. acceptance that the Work is complete or otherwise as provided in Section 4.7.1.7 of the Code.
- 5. Unless the Works stated in the WAP have started on the Work Site, the agreement relating to the Works will only remain valid for six months from the date of approval on the Works Access Permit.
- The Road Corridor Manager must manage all applications relating to Road Corridor access in 6. accordance with the timeframes and processes in the Code.
- 7. The Corridor Manager may:

(a) assess the suitability of any action proposed by the Utility Operator during the Warranty period and impose Reasonable Conditions that will maintain the integrity of the Road assets;

(b) arrange for remedial Work to be done and recover the costs incurred from the Utility Operator, if the Utility Operator fails to take action within the agreed timeframe; and

(c) instruct the Utility Operator to stop Work and leave the Work Site (having made the site safe) if the Works are not complying with the relevant Reasonable Conditions including any plans, relevant conditions or specifications contained in the Code, or permission requirements.

CAR Number: E839591

APPROVED CAR E839591 Marion Fleming STMS Number 362 Otorohanga District Council than page 2 Of 3 22 February 2022

- 8. In granting this WAP, no vested right is created.
- 9. This WAP is not transferable without the written permission of the Road Corridor Manager.

Local Conditions

CAR Number: E839591

APPROVED CAR E839591 Marion Fleming STMS Number 362 Otorohanga District Council Marian Page 3 Of 3 22 February 2022



TRAFFIC MANAGEMENT PLAN (TMP) – FULL FORM

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 Code of practice for temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

	TMP reference:	Contracto	or (Work	king space):		Principal (Client):							
Organisations		Combined	Koad 8	k I rattic Servi	ces	Hancock	Forestry						
reference		Contracto	or (TTM)):) T (() () () () () () () () (RCA:							
		Combined	I Road 8	I rattic Servi	ces	Waka Koi	tani N∠TA (SH 31) an District Courseil (A	otos Dd\					
		ļ				Otoronan			D				
Location details	Roa	nd names a	nd subu	urb		(fr	Permanent speed						
and road		SH 37	1			Intersection of							
characteristics		Aotea F	Rd			SH 31 & Aotea Rd							
		Kawhia Di	istrict			RP 031	1-0047–B/ 6.781						
Traffic details	AADT (info from Mc	bile Road)				Peak flov	WS						
(main route)	SH 31 = 508 (est) VF	PD 11.652%	- Heavy			No peak	hour flows (Rural Are	ea)					
Description of wo	ork activity												
Install trucks	ing 8 EOlim /h town		mit -i	o onto tirata	no-1- 1		mononteduce	uning after	vina truck-				
entering & exiting A	Aotea Rd. Install a vis	ary speed li sibility mirro	r onto tir	s onto timper nber post at h	posts f leadwa	or semi-pe	ermanent advance wa	aming of log(ging trucks				
J		.,		h		,							
Planned work pro	ogramme												
Planned work pro Start date	ogramme 1st May 2	2022	Time	24 Hours	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example	ant le:	2022	Time	24 Hours	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures	ant Signs out 24 ho	2022 ours	Time	24 Hours	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for exampl • road closures • detours	pgramme 1 st May 2 ant le: Signs out 24 ho Logging truck r	2022 ours novements	Time	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity	ant le: Signs out 24 ho Logging truck r	2022 ours novements	Time	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods.	ant le: Signs out 24 ho Logging truck r	2022 ours movements	Time	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods.	ogramme 1 st May 2 ant le: Signs out 24 ho Logging truck r	2022 ours novements	Time	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for exampl • road closures • detours • no activity periods.	if No alternative of	2022 ours novements	Time 24 hour	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods. Alternative dates activity delayed	if No alternative of	2022 ours movements dates are re	Time 24 hours	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods. Alternative dates activity delayed	if No alternative of	2022 ours movements dates are re	Time 24 hours	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for exampl • road closures • detours • no activity periods. Alternative dates activity delayed	gramme 1st May 2 ant le: Signs out 24 he Logging truck r if No alternative d ected (delete either Y	2022 ours movements dates are re	Time 24 hour equired show w	24 Hours s	End	date	30 th April 2023	Time	24 Hours				
Planned work pro Start date Consider significa stages, for exampl • road closures • detours • no activity periods. Alternative dates activity delayed Road aspects affe Pedestrians affected?	egramme	2022 ours movements dates are re <i>⁄es or No to</i> Property a	Time 24 hour equired show w ccess a	24 Hours s	End are affe	date ected)	30 th April 2023	ted?	24 Hours				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods. Alternative dates activity delayed Road aspects affe Pedestrians affected? Cyclists affected?	if No alternative of the sected (delete either Y No No No	2022 ours movements dates are re <i>Yes or No to</i> Property a Restricted	Time 24 hours equired show w ccess a parking	24 Hours	End	date ected) No No	30 th April 2023 30 th April 2023	ted?	24 Hours 24 Hours Yes No				
Planned work pro Start date Consider significa stages, for example • road closures • detours • no activity periods. Alternative dates activity delayed Road aspects affe Pedestrians affected? Cyclists affected?	if No alternative of No No No	2022 ours movements dates are re <i>Yes or No to</i> Property a Restricted	Time 24 hours equired show w ccess a parking CAR E Marior STMC	24 Hours s <i>thich aspects</i> affected? g affected? g affected? Number 242	End are affe	date	30 th April 2023 Traffic lanes affec Delays or queuins	ted?	24 Hours 24 Hours Yes No				
Planned work pro Start date Consider significa stages, for exampl • road closures • detours • no activity periods. Alternative dates activity delayed Road aspects affe Pedestrians affected? Cyclists affected?	gramme 1st May 2 ant le: Signs out 24 he Logging truck r if No alternative of ected (delete either Y No Ses manual part 8 CoP	2022 ours movements dates are re <i>(es or No to</i> Property a Restricted	Time 24 hour equired show w ccess a parking CAR E Marior STMS	24 Hours s <i>hich aspects</i> affected? gaffected? gaffected? gaffected? gaffected? gaffected?	End are affe	date	30 th April 2023	ted?	24 Hours 24 Hours Yes No on 4, April 2020				



Proposed traffic mana	gement methods	
	After the TMP & site safety briefing the STMS will direct & manage the installation of the TTM equipment.	
Installation	The installation of temporary traffic management measures shall be undertaken using a mobile operation as per diagram 01 with vehicle mounted advance warning sign and flashing beacon/s.	
(includes parking of plant and materials storage)	All signs are erected either in front of the work vehicle with 10m roll ahead, alongside the work vehicle on the non-traffic side or at the rear of the work vehicle with a shadow vehicle in place. The first sign erected is the advance warning sign. Remaining signs are installed by travelling around the road network in a clockwise direction taking in each side road as they are passed until the last thank you sign is installed.	÷
	On completion of TTM set out, the STMS shall undertake a site inspection to check that the site is safe, lega and conforms to the TMP.	1
Attended (day)	Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.	0
Attended (night)	Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.	0
Unattended (day)	Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.	0
Unattended (night)	Static site with trucks crossing & 50km/h temporary speed limit signs permanently attached to timber posts to act as permanent warning of site access as per diagram 02.	0
	No detour required	
Detour route	Does detour route go into another RCA's roading network? Not required	
	If Yes, has confirmation of acceptance been requested from that RCA? Not required Note: Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.	
	Once the works are completed the STMS will check that the worksite is left in a safe condition, and it is safe remove the TTM equipment.	to
	The removal of temporary traffic management measures shall be undertaken using a mobile operation as per diagram 01 attached with vehicle mounted advance warning sign/s and flashing beacon/s.	r
Removal	All signs are removed either in front of the work vehicle with 10m roll ahead, alongside the work vehicle on the non-traffic side or at the rear of the work vehicle with a shadow vehicle in place. The first sign removed is a thank you sign. Remaining signs are removed by travelling around the road network in a clockwise direction taking in each side road as they are passed until the last advance warning sign is removed.	ıe
	Once the site is cleared of all TTM equipment the STMS will carry out a drive through to ensure the site is let in a safe condition and no TTM equipment remains	ft
	Marion Fleming STMS Number 362	

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²² February 2022

	WAKA KOTAHI
-	NZ TRANSPORT AGENCY

Proposed TSLs (see TSL decision matrix for guidance)								
	TSL details as required Approval of Temporary Speed Limits (TSL) are in terms of Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 (List speed, length and location)	Dates (Start and finish)	Diagram ref. no.s (Layout drawings or traffic management diagrams)					
Attended day/night	A temporary maximum speed limit of 50km/h is hereby fixed for motor vehicles travelling over the length of approx 400m situated between RP 031-0047-B/6.600 – 031-0047-B/7.000 and approx 130m situated between RP 0.000 – 0.130 on Aotea Rd Kawhia District	24 hours	1st May 2022 – 30th April 2023	02				
Unattended day/night	A temporary maximum speed limit of 50km/h is hereby fixed for motor vehicles travelling over the length of approx 400m situated between RP 031-0047-B/6.600 – 031-0047-B/7.000 and approx 130m situated between RP 0.000 – 0.130 on Aotea Rd Kawhia District	24 hours 30 th April 2023		02				
TSL duration	Will the TSL be required for longer than 12 months? If yes, attach the completed checklist from section I-18: G Processes for TSLs to this TMP.	No						
Attended day/night Unattended day/night TSL duration	A temporary maximum speed limit of 50km/h is hereby fixed for motor vehicles travelling over the length of approx 400m situated between RP 031-0047-B/6.600 – 031-0047-B/7.000 and approx 130m situated between RP 0.000 – 0.130 on Aotea Rd Kawhia District A temporary maximum speed limit of 50km/h is hereby fixed for motor vehicles travelling over the length of approx 400m situated between RP 031-0047-B/6.600 – 031-0047-B/7.000 and approx 130m situated between RP 0.000 – 0.130 on Aotea Rd Kawhia District Will the TSL be required for longer than 12 months? <i>If yes, attach the completed checklist from section I-18: G</i> <i>Processes for TSLs to this TMP.</i>	24 hours 24 hours Guidance on TMP M	1 st May 2022 – 30 th April 2023 1 st May 2022 – 30 th April 2023	02 02 No				

Positive traffic management measures

Signs are attached to timber posts to act as permanent warning type signage on all entries and exits to intersection. All vehicles to obey normal road rules when entering & exiting intersection. Remove TTM equipment immediately after works are complete.

Contingency plans		
Generic contingencies for: • major incidents • incidents • pre planed detours. Remove any options which do not apply to your job	 Major Incident A major incident is described as: Fatality or notifiable injury - real or potential Significant property damage, or Emergency services (police, fire, etc) require access or control of the site. 	 Actions The STMS must immediately conduct the following: stop all activity and traffic movement secure the site to prevent (further) injury or damage contact the appropriate emergency authorities render first aid if competent and able to do so notify the RCA representative and / or the engineer under the guidance of the officer in charge of the site, reduce effects of TTM on the road or remove the activity if safe to do so re-establish TTM and traffic movements when advised by emergency authorities that it is safe to do so Comply with any obligation to notify WorkSafe.





RCA consent (eg CAR/WAP) and/or RCA contract reference Incident Actions An incident is described as: The STMS must immediately conduct the following: excessive delays - real or potential stop all activity and traffic movement if required . • secure the site to prevent the prospect of injury or minor or non-inquiry accident that has the • . potential to affect traffic flow further damage structural failure of the road. notify the RCA representative and / or the • • engineer STMS to implement a plan to safely remove TTM and to establish normal traffic flow if safe to do so re-establish TTM and traffic movements when it • is safe to do so and when traffic volumes have reduced. Detour Actions If because of the on-site activity it will not be possible When it is necessary to implement the pre-planned to remove or reduce the effects of TTM once it is detour the STMS must immediately undertake the established a detour route must be designed. This is followina: likely for: Notify the RCA and / or the engineer when the excessive delays when using an alternating flow detour is to be established design for TTM Drive through the detour in both directions to check that it is stable and safe redirecting one direction of flow and / or total road closure and redirection of traffic until Remove the detour as soon as it practicable and such time that traffic volumes reduce and safe to do so and the traffic volumes have reduced and tailbacks have cleared tailbacks have been cleared. The risks in the type of work being undertaken, the Notify the RCA and / or the engineer when the • risks inherent in the detour, the probable duration of detour has been disestablished and normal traffic closure and availability and suitability of detour routes flows have resumed. need to be considered. The detour and route must be designed including: pre-approval form the RCA's whose roads will be used or affected by the detour route ensure that TTM equipment for the detour - signs • etc are on site and pre-installed. Note also the requirements for no interference at an accident scene:

In the event of an accident involving serious harm the STMS must ensure that nothing, including TTM equipment, is removed or disturbed and any wreckage article or thing must not be disturbed or interfered with, except to:

- save a life of, prevent harm to or relieve the suffering of any person, or
- make the site safe or to minimise the risk of a further accident; or

Marion Fleming

- maintain the access of the general public to an essential service or utility, or
- prevent serious damage to or serious loss of property, or
- follow the direction of a constable acting in his or her duties or act with the permission of an inspector

	• Tollow the direction of a constable acting in his of her duties of act with the permission of an inspector.
Other contingencies to be identified by the applicant (i.e. steel plates to quickly cover excavations)	No other contingencies are required.
	APPROVED



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	having 7 Page 4	
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WAKA KOT NZ TRANSPORT AGENCY	consent (eg C or RCA contra	AR/WAP) ct reference					
Authorisations							
Parking restriction(s) alteration authority	Will controlle	d street parking	g be affected?	No	Has approval been gra	nted?	Not required
Authorisation to work at permanent traffic signal sites	Will portable permanent tr	traffic signals b affic signals be	be used or changed?	No	Has approval been gra	inted?	Not required
Road closure authorisation(s)	Will full carrie than 5 minute	ageway closure es (or other RC/	continue for more A stipulated time)?	, No	Has approval been gra	inted?	Not required
Bus stop relocation(s) – closure(s)	Will bus stop	(s) be obstructe	ed by the activity?	No	Has approval been gra	inted?	Not required
Authorisation to	Make, mode description	el and /number	Not required				
signals	NZTA comp	NZTA compliant? Not required					
EED	1			-			
Is an EED applicable?	Not requir	ed	EED attached	? Not requ	ired		
Delay calculations/tria	al plan to det	ermine potent	ial extent of dela	iys			
No delays are expected	l as all traffic l	anes remain o	pen.				
Public notification pla	IN						
Not required							
Public notification pla	in attached?	Not requi	red				
On-site monitoring pl	an						
Attended (day and/or night)	Immediate	ly after setup b	y STMS then from	n time to time	by Hancock Forest mar	nagers.	
Unattended (day and/or night)	From time	to time by Han	cock Forest mana	agers.			
Method for recording	daily site TT	M activity (eg	CoPTTM on-site	record)			
All minor alterations, re	quests and m	onitoring notes	of TTM activity w	ill be recorde	d onto the onsite record		
Site safety measures							
All TTM staff will be equ & TMP requirements.	iipped with ap	propriate safet	y equipment. Too	lbox meeting	held at start of works to	brief all on site of s	site hazards
Temporary safety	Will a tempor system be us	ary safety barri sed at this work	er site?	If yes, has the designed by independent	he temporary safety barry an installation designer tly reviewed as being fit	er system been and for purpose?	Not required
Same System	Statement fro	om temporary s	afety barrier insta	làtio <mark>n des</mark> igne	er attached	Not requi	red
			Marion Fleming	362			
Traffic control devices m	<i>anual</i> part 8 C	oPTTM Sec	tion Epappend Ri 1 Marian Floming	trafficunah age 5	agement plans	Edition	4, April 2020

		~
22	February	2022



Other information

As the signs are installed onto timber posts, the responsibilities of the STMS, section A4.3.2 of COPTTM will not apply in this situation. le; no daily visits, no TC / STMS on site and STMS not expected to be within 30 mins of site on call. These signs are installed to act as permanent warning type signage to warn road users that there is trucks crossing access ahead. Handcock Forestry managers will monitor TTM equipment and report back to WSP as and when required.

Site specific layout diagrams				
Number	Title			
01	Mobile Operation Site Setup Removal			
02	Truck Crossing with 50km/h TSL			

Contact details								
	Name		24/7 contact number	CoPTTM ID	Qualific	ation	Expiry date	
Principal	Hancock Forestry (Hamish O	Hancock Forestry (Hamish Owen)				red	Not required	
TMC (Waka Kotahi)	West Waikato NOC (Trish And	ersen)	027 645 4855	53064	L2/3 STM	1S NP	06/09/22	
TMC (Local Roads)	Otorohanga District Council (Mario	n Fleming)	027 920 3299	362	L2/3 STM	1S NP	28/05/22	
Engineers' representative	Hancock Forestry (Hamish O	Hancock Forestry (Hamish Owen)				red	Not required	
Contractor	Combined Road & Traffic Services (Combined Road & Traffic Services (Steve Wilks)				Not required		
STMS	Combined Road & Traffic Services (021 196 7520	18707	L2/3 STM	1S NP	04/12/22		
TC	Not required	Not required			Not requir	red	Not required	
Others as required	WSP (James Darge)		027 282 4938	Not required	Not requir	t red	Not required	
TMP preparation		·						
Prenaration	Ron Whiting	16/02/2022	Mitheligg	338	TTM Planner		09/09/9999	
	Name (STMS qualified)	Date	Signature	ID no.	Qualificat	tion	Expiry date	
This TMP meets CoF	PTTM requirements	ROVE	Number of	diagrams at	tached		02	
	CAR E839591 Marion Fleming STMS Number 262							
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WAKA KOT NZ TRANSPORT AGENCY	RCA consent (eg CAR/WAP) and/or RCA contract reference	e						
TMP returned for								
correction (if required)	Name		Date	Signature	ID no.	Qualification	Expiry date	
Engineer/TMC to con	nplete f	ollowing section when approva	I or acceptanc	e required				
Temporary safety barrier system	The atta as bein	ached temporary road safety barrie g fit for purpose	er design has be	en independent	ly reviewed	Yes No Not required		
	Name		Date	Signature	ID no.	Qualification	Expiry date	
Acceptance by TMC (only required								
if TMP approved by engineer)	Name		Date	Signature	ID no.	Qualification	Expiry date	
Qualifier for engineer	r or TM	C approval						
Approval of this TMP a	authorise	es the use of any regulatory signs	s included in the	TMP or attach	ed traffic mar	nagement diagrar	ns.	
This TMP is approved	on the f	ollowing basis:						
1. To the best of the a	pprovin	g engineer's/TMC's judgment this	s TMP conforms	to the requirer	nents of CoP	TTM.		
2. This plan is approve applicant. Any inact	ed on th curacy i	e basis that the activity, the locat n the portrayal of this information	ion and the road is the responsib	l environment h vility of the appl	nave been co licant.	prrectly represente	ed by the	
3. The TMP provides	so far a	s is reasonably practicable, a safe	e and fit for purp	ose TTM syste	em.			
4. The STMS for the a weather or other co	activity is anditions	s reminded that it is the STMS's o that affect the safety of this site.	luty to postpone	, cancel or mod	dify operatior	ns due to the adve	erse traffic,	
Notification to TMC p	prior to	occupying worksite/Notification	n completed					
Type of notification to TMC required	Site is active with signs displayed 24 hours per day. TMC to be notified when signs are erected and when signs are removed by emailing notification via the Daily Activity Report Spreadsheet. Notification completed Date							





AGENCY	TMP or generic plan rele	rence			
ON-SITE REC	CORD must be retained with TMP for 12 months.			Today's date	
Location details	Road names(s):	House number/RPs	:	Suburb:	
Working sp	ace				
Person responsible for working					
space	Name		Signature		

Where the STMS/TC is responsible for both the working space and TTM they sign above and in the appropriate TTM box below

TTM										
STMS in charge of										
TTM	Name	1	TM ID Number	Wa	rrant expiry	/ date	Signa	ture		Time
Worksite handover										
replacement	Name	I	D Number	Wa	rrant expiry	∕ date	Signa	ture		Time
STMS	Tick to confirm handover briefing completed									
Delegation										
Worksite control										
accepted by	Name		ID Number	Wa	rrant expiry	/ date	Signa	ature		Time
TC/STIVIS-NP	Tick to confirm briefing completed									
Temporary	speed limit									
Street/road na	me (RPs or street numbers):	1	SL action	Da	Date: Time:		TSL speed:	Length of	TSL (m):	
		٦	SL installed							
		٦	SL remains in place							
From:	To:	1	SL removed							
Street/road na	me (RPs or street numbers):	1	SL action	Da	te:	Time		TSL speed:	Length of	TSL (m):
		1	SL installed							
		٦	SL remains in place							
From:	To:	1	SL removed							
Street/road na	me (RPs or street numbers):	1	SL action	Da	te:	Time		TSL speed:	Length of	TSL (m):
		٦	SL installed							
		1	SL remains in place							
From:	To:	1	SL removed							
Street/road na	me (RPs or street numbers):	1	SL action	Da	te:	Time		TSL speed:	Length of	TSL (m):
		1	SL installed							
			SL remains in place							
From:	To:	A	SL removed VED							
		CAR Mari STM	E839591 on Fleming S Number 362							

Traffic control devices manual part 8 CoPTTM

Section Epappendix A: Traffic management plans



Worksite monite	oring								
TTM to be monitored	d and 2 hourly in	spections doc	umented below.						
Items to be inspect	ted	TTM set-up	2 hourly check	2 hourly check	2 hourly check	2 hourly check	2 hourly check	TTM removal	
High-visibility garme	ent worn by all?								
Signs positioned as	per TMP?								
Conflicting signs cov	vered?								
Correct delineation a	as per TMP?								
Lane widths appropr	riate?								
Appropriate positive	TTM used?								
Footpath standards	met?								
Cycle lane standard	s met?								
Traffic flows OK?									
Adequate property a	access?								
Barrier deflection are	ea is clear?								
Add others as requi	red								
Time inspection co	ompleted:								
Signature:									
Comments:									
Time	Adjustment m	ade and reas	on for change						
			CAR E83959	1 1					
			Marion Fleming STMS Number 362						

Sec	tion E, appendix A: Traffic maile	gement plans
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Reporting company			CoPTTM.incident reference:										
Reference added by				Reference added by the CoPTTM.Incident database administrator									
REPORT ON INCIDENT AT ROADWORKS SITE													
Send to: <u>CoPTTM.Incident@nzta.govt.nz</u> and the RCA in charge of the network (including NZTA for state highways)													
Date of incident						Time of incident							
Reported by						Company							
STMS name						STMS No.							
Contractor /TTM Company						Contact number							
Road location (include direction and lane)													
Description of work being undertaken													
Incident type	Near mis	S	Vehio	cle ent TTM	ered	Vehicle e working	ntered space		TMA hit	Other			
Operation type	Static		I	Nobile		Semi-s	tatic		Shoulder	Unattended			
		Install		ľ	Sta	tic mobile	semi-s	tatic		Removal			
operation													
Damage to	V	ehicles	3			Plan	t		ТТ	ſM equipment			
	Number of	Enter t ea	he numb ach injury	er of peo categor	ople in Y	Minor		No	tifiable	Fatal			
Injuries	each injury	F	Road w	orkers									
	category		Road	Isers				\/_l-	- I	Descurrentes			
Crash code	From A	ppena	ix 1 att	acned		Road user vehicle	H	ven	ісіе туре	Reg. number			
If TMA hit, which TMA						Which lane	•			1			
Police attended	(Officer name	/numbe	er)			Further informatio	For a more detailed internal report (contac						
Description of events			CAR E Mario STMS	83959 N Flem Numb	1 ing er 362 District Cour	ncil							
CoPTTM incide	nt report – Ve	.1	haru 22 Fe	ow Flem bruary					1				





Cı	Crash diagram (or scan and attach) - photos can also be attached																													
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Appendix 1: Vehicle movement coding sheet

	TYPE	Α	В	С	D	Е	F	G	0			
A	OVERTAKING AND LANE CHANGE	PULLING OUT OR CHANGING LANE TO RIGHT	HEAD ON	CUTTING IN OR CHANGING LANE TO LEFT	LOST CONTROL (OVERTAKING VEHICLE)	SIDE ROAD	LOST CONTROL (OVERTAKEN (OVERTAKEN VEHICLE)	WEAVING IN HEAVY TRAFFIC	OTHER			
В	HEAD ON	ON STRAIGHT			BOTH OR UNKNOWN	LOST CONTROL ON STRAIGHT	LOST CONTROL ON CURVE		OTHER			
С	LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)	OUT OF CONTROL ON ROADWAY	OFF ROADWAY TO LEFT	OFF ROADWAY TO RIGHT					OTHER			
D	CORNERING	LOST CONTROL TURNING RIGHT	LOST CONTROL TURNING LEFT	MISSED INTERSECTION OR END OF ROAD					OTHER			
E	COLLISION WITH OBSTRUCTION	PARKED VEHICLE	CRASH OR BROKEN DOWN	NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)		OPENING DOOR			OTHER			
F	REAR END	SLOWER VEHICLE			→ → → QUEUE				OTHER			
G	TURNING VERSUS SAME DIRECTION	REAR OF LEFT TURNING VEHICLE	LEFT TURN SIDE SIDE SWIPE	STOPPED OR TURNING FROM LEFT SIDE		OVERTAKING VEHICLE	TWO TURNING		OTHER			
н	CROSSING (NO TURNS)	RIGHT ANGLE (70° TO 110°)							OTHER			
J	CROSSING (VEHICLE TURNING)	RIGHT TURN RIGHT SIDE	OPPOSING RIGHT TURNS	TWO TURNING					OTHER			
к	MERGING			TWO TURNING					OT HER.			
L	RIGHT TURN AGAINST	STOPPED WAITING TO TURN							OTHER			
М	MANOEUVRING	PARKING OR LEAVING	"U" TURN			ENTERING OR LEAVING FROM OPPOSITE SIDE	ENTERING OR LEAVING FROM SAME SIDE	REVERSING ALONG ROAD	OTHER			
N	PEDESTRIANS CROSSING ROAD			EFT TURN LEFT SIDE			RIGHT TURN LEFT SIDE		OTHER			
Ρ	PEDESTRIANS OTHER		WALKING FACING TRAFFIC	WALKING ON FOOTPATH	CHILD PLAYING (INCLIDING TRICYCLE)				OTHER			
Q	MISCELLANEOUS	FELL WHILE BOARDING OR ALIGHTING	FELL FROM MOVING VEHICLE				FELL INSIDE VEHICLE		OTHER			
New	<u>Zealand</u> Go	vernment	* = Mo	vementsap Marion Fle STMS Nur Otorohang	ementapplies for left and right hand bends, curves o Marion Fleming STMS Number 362 Otorohanga District Council							
oPTT	M incident re	eport – Vers	sion 1.1	harian F.	Marion Fleming							

C2.5 Combined level LV and level 1 worksite layout distances

Pern	nanent speed limit	or RCA -	<50	60	70	80	90	100				
desi	gnated operating s	peed (km/h)	230	00	70	80	50	100				
Traf	ic signs											
А	Sign visibility dist	ance (m)	50	60	70	80	90	100				
В	Warning distance	e (m)	50 or 30*	80	105	120	135	150				
С	Sign spacing (m)		25 or 15*	40	50	60	70	75				
Safety zones												
D	Longitudinal (m)	+	10 or 5*	15	30	45	55	60				
Е	Lateral (m) +		1	1	1	1	1	1				
	Lateral behind ba	arrier installation		As specifie	d by the li	nstallatior	n Designer					
Tapers												
G	Taper length (m)	#	30	50	70	80	90	100				
G	LV roads taper le	ngth (m) #	25	30	35	40	45	50				
К	Distance betwee	n tapers (m)	40	50	70	80	90	100				
Delir	neation devices											
Cone	e spacing in taper (m)	2.5	2.5	5	5	5	5				
Cone	Cone spacing: Working space (m)## 5 5 10 10 10											
* La	* Larger minimum distances apply on all state highways and also on all multi-lane roads. The smaller											
m	inimum distances	may be applied o	n other road	s to accom	modate ro	ad enviro	nment con	straints.				
+ 0	on LV roads the lor	igitudinal and late	ral safety zo	nes may be	e reduced,	or elimina	ated, in ore	der to				
re	alli a single lane	width. Positive tra	inc manage	nent and a	парргорп		iusi pe us	eu.				
#	1 On non-stat	e highways with	speeds 50km	h or less	a 10m ta r	er (with c	ones at 1r	n				
π	centres) ma	y be used when	here are roa	d environm	ent constr	aints (eg i	intersectio	ns and				
	commercial	accesses).										
	2. On all roads	where the shoul	der width is	ess than 2.	5m and th	e activity	does not a	iffect the				
	live lane, a	10m shoulder ta	per is permi	ted (with a	least 5 co	nes at no	greater the	an 2.5m				
	3 A tapar of f	30m (with cones	at 2 5m cent	oc) muct h	o usod wł	oro moni	ual traffic c	ontrol				
	(stop/go) p	ortable traffic sig	als or priorit	v dive wav	are emplo	ved						
<i>##</i> 13	(reader double th			, <u>g. e</u> ,	с. с ср.с (од Г – 10	10 - 20						
## L\	roads: double th	e cone spacing al		king space	(eg 5 = 10,	10 = 20						
Lane	widths (based on	permanent spee	d or TSL if ap	plied)	Г	[]	[]					
Spee	ed (km/h)	30 4) 50	60	70	80	90	100				
F La	ane Width (m)	2.75 2.7	25 3.0	3.0	3.25	3.25	3.5	3.5				
Excep	t for delineation d	evice spacings, w	hich are max	kimum valu	es, the dis	tances sp	ecified in t	:he				
above	table are minimu	m values.										

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.



Order of worksite establishment

On bi directional carriageways, signs should be erected by travelling around the road network in a clockwise direction taking in each side road as they are passed. In this way all turns in and out will be to the left which is easier and safer:

STEP 1:

Drive through the entire site checking for any unforeseen hazards or any other work sites that may interfere with ours.

STEP 2:

After the TMP & site safety briefing the STMS will direct and manage the installation of the TTM. TTM equipment will be installed as per the installation process in the TMP. Signs will be setup on the left hand side of or in front of vehicle 0.5m clear of the travelled path wherever possible. The first sign erected will be the advance warning sign. Remaining signs & TTM equipment are placed as required until the sign network is complete.

STEP 3:

Carryout a drive through check of the worksite in all directions including side roads. This check must confirm that the worksite is:

- Safe
- to the minimum standard shown in the TMP and that
- the restriction to traffic flow is reasonable

Clear site distance

(3 x posted speed)

CAR E839591 Marion Fleming

Marcon theming

22 February 2022

the signs and delineation devices give clear messages to road users, and the signs and delineation devices are securely erected and will remain in their correct position under the expected traffic volumes and weather conditions.

STEP 4:

Carryout a toolbox meeting and explain identified hazards for the worksite, TMP requirements for worksite including TTM staff duties, safety zone requirements and limits.

STEP 5:

The removal of TTM measures must be as per removal process in TMP. The last sign to be removed must be the advance warning sign. Once the site is cleared of all TTM equipment the STMS will carry out a drive through to ensure the site is left in a safe condition and no hazards or TTM equipment remain

Diagram 01 Mobile Operation Site Setup / Removal





