

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

New (SCIRT) Pro Forma – How to use Guide

Story: Pro Forma Traffic Management Plan

Theme: Construction

A guideline to show how TMP planners to use the SCIRT proforma.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz



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SCIRT Proforma v2.0 – How to Use Guide

Use the information provided below with the attached Proforma to assist you when you are filling out the SCIRT reduced Proforma. This is only a guideline but should be suitable for most situations. In this box should be:

- 1 The TMP4CHCH number. This will be added by the TMCs, however if you know the number then add it in when completing this form.
- 2 The SCIRT number for the project, this will populate it into the footer of the proformas – Item 12
- 3 The company specific project reference.
- 4 The name of all roads affected from works. This should include signed detour routes onto strategic routes and signalised intersection.
- 5 The road levels and permanent speed limits. Click to add road level and speed of affected roads. You can copy and paste these fields to add details for more roads.
- 6 The average annual daily traffic count – this information can be found on the traffic volume layer on TMP4CHCH as well as under 'information and procedures then 'general information' on TMP4CHCH.

At times the information in these locations can be incorrect due to a variety of reasons, if there are significant differences between the two sources of data then as a rule you need to use the data with the higher vehicle count.

Please note there are some mistakes in these lists, use common sense when you check the traffic counts and if needed do some onsite traffic counts to gain an accurate representation of the traffic flows.

- 7 The Peak Traffic Flow – This information must be included for all strategic route and L2 roads that have TTM setups established during peak hours.

Example:

7am **1345** vehicles 5pm **700** vehicles

This information enables an instant comparison of demand vs remaining capacity and the likelihood of delays.

The most up to date information can be found here:

<http://www.ccc.govt.nz/transport/improvements-and-planning/transport-planning/traffic-count-data/>

Please note there are some mistakes in these lists, use common sense when you check the traffic counts and if needed do some onsite traffic counts to gain an accurate representation of the traffic flows.

- 8 A brief description of what construction work you will be doing, consider all stages of the project to ensure you don't need to put in a revision to change the work types for your TMP.
- 9 The start and end dates of the work. Click to add start and end dates for the work.

- 10 The times that traffic management will be onsite – use click boxes. In the text boxes you then need to outline:
- Information about establishment/disestablishment. e.g. times.
 - If it's a longer than a day and staying in place over 1 day.
 - If your work contains various types of work that are done at different times.
- 11
- A. A more in depth description of work than provided in the 'Summary of Construction' area.
- This should include:
- Stage information.
 - TTM/basic construction methodology.
 - Specific requirements.
 - Stage dates.
 - Any other information that could cause capacity reduction.
- For strategic routes and areas that have a high concentration of work (such as Aranui or the CBD) all the details must be loaded into the FWV. If you find it easier you can extract the FWV information and add it as an additional page then reference it from this section. This information must be clearly understandable and relevant to the audience of the TMP.
- Also note:
- I. The information in FWV may change, when you do updates to the TMP you will need to ensure the TMP information aligns with the FWV at the time of submission.
 - II. The information being in the FWV does not guarantee acceptance from CTOC as it may clash with other works however it will help with the coordination of works and in turn help with the processing of your TMP.
 - III. TIM pre-approval must be referenced if available.
- B. Forward works viewer number(s) to be referenced here to make them easy to find when reviewing the TMP.
- 12 The SCIRT number for the project – This will pre populate when you fill in item 2
- 13 The total number of diagrams included in the plan (not including referenced SCIRT plans).
- 14 This area is to categorise your diagrams. It should be used as an easy way to present stages and provide basic details around the work for quick reference.
- 15
- A. Reference numbers of the SCIRT plans that you need to use with this TMP. This should also include your contingency methodology.
 - B. Reference number of the SCIRT plans that you are using for establishment/disestablishment. This is a requirement as per bulletin 34.
- 16 Proposed TSL – for both attended and unattended (if required) click if the TSL is needed for day, night or both and click the TSL proposed.

- 17 For both attended and unattended (if required) you will need to put in the location of the TSL. e.g. 292 to 354 Armagh St. You need to be specific with these details as it is a formal application.

Details of side roads will also needed to be added into this section when required.

- 18 For both attended and unattended (if required) you will need to put in the times and dates required for the TSL. You need to be specific with these details as it is a formal application.

Example:

9am - 4pm 03/08/2015 to 06/08/2015	Attended
24hrs 03/08/2015 to 06/08/2015	Unattended

- 19 The project manager details – name, contact phone number and email address.
- 20 Your details – name, contact phone number, STMS details and date TMP was designed.
- 21 The expectation of the first section is that you will confirm the general TTM concepts and principles proposed for the site. e.g. "1 lane drop through entire site, with turn lanes maintained at intersection. Normal CoPTTM minimum dimensions maintained".

If compromises to normal standards are required, then these could be covered here or in the next "Discussions of Critical Areas" section.

- 22 This section should have an explanation of compromises identified above, risks and mitigation solutions proposed.

Possible onsite issues should also be identified and explained here. e.g. an intersection might require an additional RD1 due to vehicle compliance issues leading to near miss situations.

- 23 This section should be filled out in accordance with the updated (10/11/14) SWIF flow chart to identify if a traffic impact assessment (TIA) is required. You can find details and other references about how to complete a TIA under chapter 10 of the 4th version of the CTOC LOPs.

Tick expected delays based on you TIA.

- 24 An explanation of how vehicles will get in and out of site. This information must either be in the drawing and referenced here or fully detailed in this section.

- 25 Enter specific details of monitoring regime(s) proposed for the site. In many cases this will be the same as normal CoPTTM, however the TMP designer must consider the specific needs of each site and propose a suitable regime. - Tick boxes as required.

- 26 Details of notification around the works outlined in the plan - Tick boxes to confirm if public notification is required.

If notification is require then provide details of this any other mitigation details in the boxes below. Please refer to the mitigation measures flow chart on TMP4CHCH.

Specific details must be included for VMS strategies and closure boards - this can be outlined in the drawings and referenced here.

- 27 Information of what potential issues you could see with the work and details of what will be done if these or other issues occur. For example this could be opening up a one way system with the use of steel plates or MTC - any SCIRT plans proposed for contingency need to be covered in section 15.

List of planner prompts for contingency plans:

- Working near schools or kindergartens etc.
- Working near hospitals or rest homes
- Impacting access to carparks or delivery access to businesses
- Reducing lane widths on route that have a higher proportion of large vehicles or buses
- Use of temporary traffic lights – especially when in place unattended
- Where work is time critical and there is a risk of the work not being completed within the approved TMP timeframe – cut off times etc.

This is by no means a complete lists of this that you need to consider when looking at specific contingency's for your work, as the planner, you will need to ensure you look at what possibilities could go wrong with the traffic management.

Where the work is short duration and generic in nature it can be suitable to put something in your plan to the effect of 'due to the nature of this work, there is no additional contingencies seen to be needed in the TMP, contingencies for this work will be as per the SCIRT supplementary document'.

Please be aware that TMPs may be returned to the planner if contingency plans are repetitively generic without consideration for the above prompts or onsite needs.



- 28 Confirmation of working near traffic signals - Tick if required as outlined below.
- 29 Completed the tick box section as required if you proposed work will be on and/or impacting a bus route. Where there are specific changes (such as route and stop locations) you will need to enter the details into the 'specific considerations' section.

Please ensure that Ecan is notified of these proposals when you submit the TMP – refer to SCIRT TM phone list for contact details.

Other things to consider:

When you do a full revision/amendment to the TMP all information in the proforma will need to be reviewed to ensure that is correct.

No major changes to the SCIRT proforma should be made, small things such as adding drop down boxes to automatically fill in details of your engineers / planners etc is fine.

Traffic Management Plan					TMP Proforma Version 2.0	
TMP4CHCH #	1	SCIRT #	1XXXX	2	Project Reference	3
Organisations	Contractor:		Principal:		RCA: CTOC	
						
Location Details						
Road Names		5 Road Level	Permanent Speed	AADT	Peak Volumes	
		LV <input type="checkbox"/> L1 <input type="checkbox"/> L2 <input type="checkbox"/>	PSL		AM	PM
4		LV <input type="checkbox"/> L1 <input type="checkbox"/> L2 <input type="checkbox"/>	PSL	6	7	
Summary of Construction Work						
8						
Work Programme						
START DATE: 9		Click for Date		END DATE:		Click for Date
TTM Onsite		Stages or specifics of use (e.g. establishment/disestablishment time, continuous setup, time etc.)				
Inter Peak	<input type="checkbox"/>					
Daytime (7am - 6pm)	<input type="checkbox"/>					
Night-time (6pm – 7am)	<input type="checkbox"/>	10				
All Day (24hrs)	<input type="checkbox"/>					
Program Sequence						
11a						
FWV Stage Numbers:		11b				

Site Specific Layout Diagrams		Number of Diagrams Attached: 13	
Stage #	Page #	Description	
		14	
SCIRT (TMP 24569) universal plans to be used:		15a	
Establishment/Disestablishment Mobile Operations:		15b	
Proposed TSL		<small>Approval of Temporary Speed Limits (TSL) are in terms of section 5 of Land Transport Rule: Setting of Speed Limits 2003, Rule 54001</small>	
Attended	16 Click to Select	30kph <input type="checkbox"/>	40kph <input type="checkbox"/> 50kph <input type="checkbox"/> 60kph <input type="checkbox"/> 70kph <input type="checkbox"/> 80kph <input type="checkbox"/>
Location:		Time and Dates:	
A temporary maximum speed limit is hereby fixed for motor vehicles travelling between:		17	18
Unattended	16 Click to Select	30kph <input type="checkbox"/>	40kph <input type="checkbox"/> 50kph <input type="checkbox"/> 60kph <input type="checkbox"/> 70kph <input type="checkbox"/> 80kph <input type="checkbox"/>
Location:		Time and Dates:	
A temporary maximum speed limit is hereby fixed for motor vehicles travelling between:		17	18
TSLs MUST BE REMOVED WHEN NOT REQUIRED			
Contact Details (for STMS contact details for this site, refer to company personal list or contact delivery team lead STMS)			
	Name	Contact #	Email or STMS Qualifications
Project Manger	19		
TMP Designer	20		Click for Date
		ID #	Qualification TMP Design Date

This section is to be 100% site specific - No generic information should be put in this area.

Site Specific Details	
General TTM Concept and Principles Used:	
21	
Discussions of Critical Areas: (Include PLD and TIM requirements for work)	
22	
Traffic Impact Assessment:	
23 Delays Expected None <input type="checkbox"/> < 5 Mins <input type="checkbox"/> 5 – 10 Mins <input type="checkbox"/> 10+ Mins <input type="checkbox"/>	
Site Accessing Methodology:	
24	
On-site Monitoring Plan	
Attended	25
Unattended	Required: Yes <input type="checkbox"/> No <input type="checkbox"/>
Impact Mitigation Strategy	
<input type="checkbox"/> No Public Notification Required 26	
<input type="checkbox"/> Standard Project Notifications (<i>detail below</i>)	
Mitigation Level	Site Specific Details
<input type="checkbox"/> Level 1 Mitigation	
<input type="checkbox"/> Level 2 Mitigation	
<input type="checkbox"/> Level 3 Mitigation	
<input type="checkbox"/> Level 4 Mitigation	
Contingency Plans (Must be specific to the work covered under this TMP)	
27	

Authorisations

<div style="border: 1px solid red; padding: 2px; display: inline-block;">28</div> Real Time Operations (RTO)	Real Time Operations notification required: Yes <input type="checkbox"/> No <input type="checkbox"/> All work within 50m of a signalized intersection must be notified to CTOC's RTO team. This includes sign deployment, and detouring significant volumes of traffic through signalized intersections. RTO contact details are: <ul style="list-style-type: none"> (03) 941 8620 (6am – 6pm and for emergencies) or signals@ccc.govt.nz RTO notification time frames: <ul style="list-style-type: none"> 24-48 hours before work commences (<i>email preferred</i>) At time of day deployment (<i>phone call preferred</i>) - <i>For night deployments, provide confirmation of planned deployment during the preceding business hours</i> 24-48 hours before a major site changes or disestablishment (<i>phone call preferred</i>)
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<div style="border: 1px solid red; padding: 2px; display: inline-block;">29</div> ECAN	Working on a Bus Route? Yes <input type="checkbox"/> No <input type="checkbox"/> Which Route(s)?
	What is Impacted: Nothing <input type="checkbox"/> Bus Stops <input type="checkbox"/> Bus Lane <input type="checkbox"/> Bus Route <input type="checkbox"/> Other (<i>add details below</i>) <input type="checkbox"/>
	Specific Considerations:

Engineer/TMC to complete following section when approval or acceptance is required

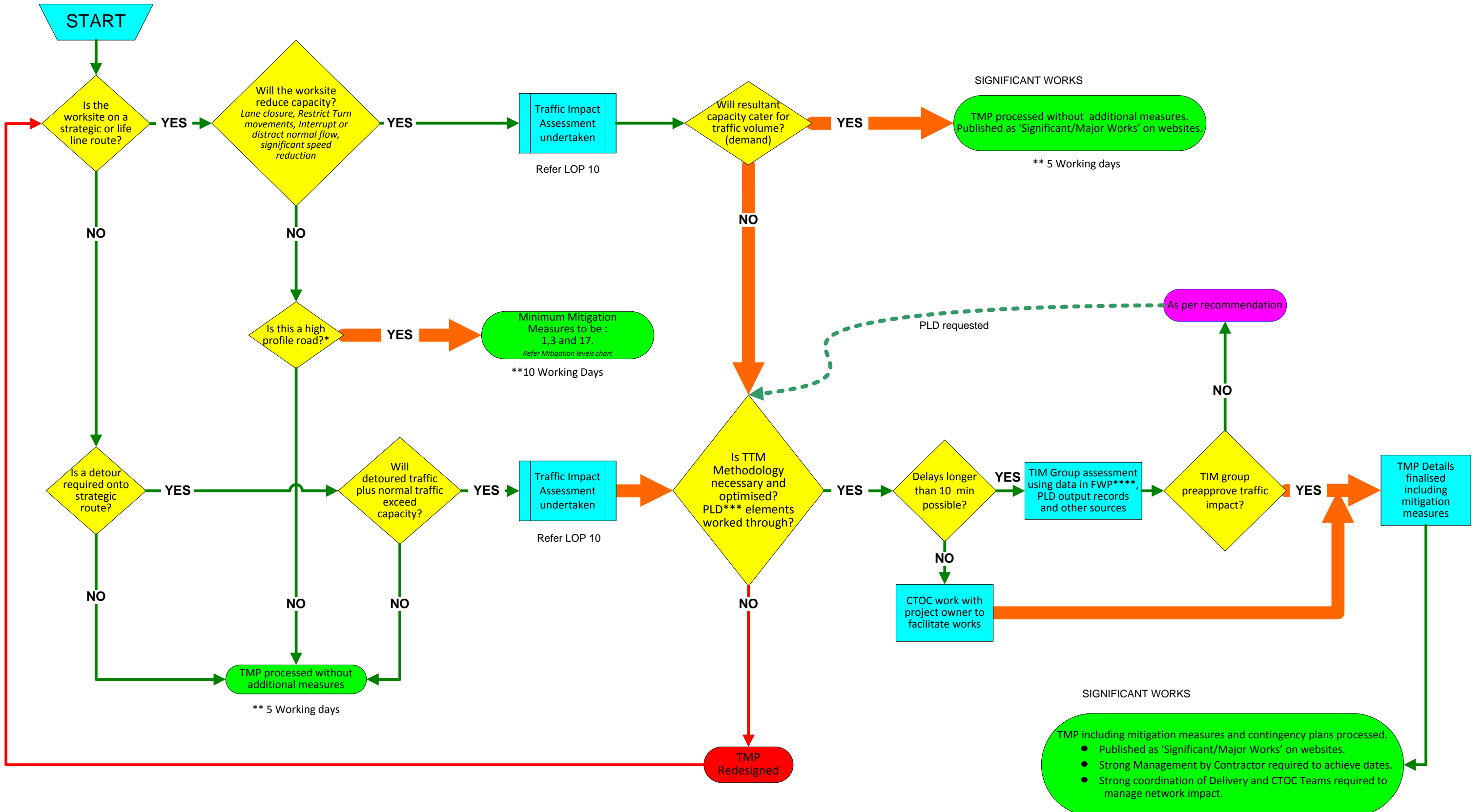
Approved by Engineer	
	<i>Name, Date, Signature. Qualification and ID no. Required</i>
Accepted by TMC	
	<i>Name, Date, Signature. Qualification and ID no. Required</i>

Qualifier for Engineer or TMC Approval

This TMP is approved on the following basis:

1. To the best of the Approving Engineer's/TMC's judgment this TMP conforms to the requirements of CoPTTM and/or CTOC LOPs
2. This plan is approved on the basis that the activity, the location and the road environment have been correctly represented by the applicant. Any inaccuracy in the portrayal of this information is the responsibility of the applicant.
3. The STMS is reminded that it is the STMS's duty to postpone, cancel or modify operations due to adverse traffic, weather or other conditions that affect the safety of this site.
4. If this TMP interacts / overlaps with another TMP, contact between STMSs must occur, to ensure agreement on: (i) what work activities can viably occur concurrently (ii) what the TTM configuration will be (iii) who is responsible for each Working Space (iv) who is responsible for maintaining / managing each TTM component. The objective is for all parties to work collaboratively together, without compromising safety or traffic efficiency. Agreements must be documented, and updated as necessary as work progresses. If agreement cannot be reached, then CTOC must be contacted to resolve the issue.
5. The Site Specific details in this TMP are supplemented by information contained in the SCIRT supplementary TMP document. This supplementary document must be treated as part of the TMP and be onsite/presentable at all times.

Significant Works Identification (SWIF)



* Roads highly visible by influential stakeholders and general public e.g. Arterial roads beside Government agency offices, Main Road to Sumner.
 ** Working days indicated are minimum timeframes required for CTOC processing of TMPs
 *** Project Level Discussion
 **** Forward Works Programme administered by Land Information New Zealand
 ➔ Involve CTOC representative in concept / detailed TTM development