

Case study of a Crash at a Manual Traffic Control Worksite using a Generic Traffic Management Plan



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Introduction



- worksite crash
- manual traffic control worksite
- lines company was removing a power line
- generic traffic management plan

Parties involved will be referred to as the Lines Company, Contractor & Council

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Overview of Case Study

The case study considers:

- the GTMP
- set up at the worksite
- the crash and site factors
- comparison with CoPTTM requirements
- performance in a Safety Audit
- would the use of the new CoPTTM 4th Edition forms have added value & safety?



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The Generic TMP



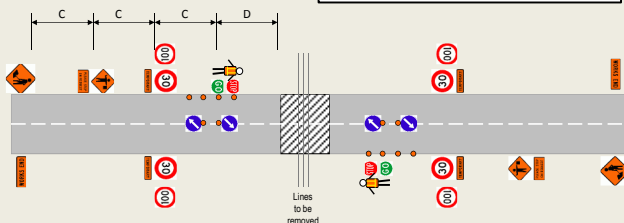
- **project scope**
 - removal of a redundant power line
 - crossing a number of Council roads
 - required permission & approval of a TMP from Council
- **use of a GTMP**
 - number of sites & over a 12 month period
 - based on CoPTTM 3rd Edition
 - included TMD's

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The Generic TMP

- layout of approved TMD for MTC

- MTC to stop approaching vehicles
- workman to lift lines to allow vehicles to pass underneath

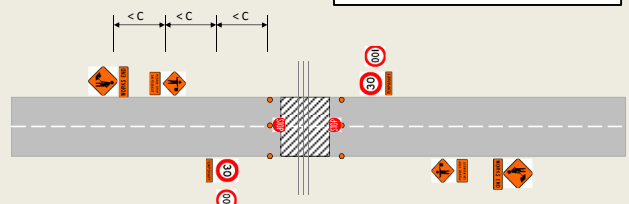


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Set Up at the Worksite

- low volume road, leniencies were made on site

- no longitudinal safety zone
- stop/go paddles placed in cones



- STMS set up & conducted the worksite as a one person operation

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The Crash

An approaching driver failed to stop:

- hit stop/go paddle
- crashed into the lines which were lowered across the road
- assessed speed of the vehicle 70km/h
- crash was non injury however potential for serious harm



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Site Factors



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Performance in a Safety Audit

Summary of defects rated:

Items	Defect Points
sign spacing (too close)	12 (6 spacing's x 2 points for each sign)
sign on wrong side	8 (4 signs x 2 points for each sign)
Total SCR	20 'acceptable'

Additional items if Auditor had sighted TMP:

- absence of longitudinal safety zone, missing gated speed signs

Items unable to rated:

- placing of paddle in cone, absence of MTC & cone threshold

Would the site rate differently using CoPTTM 4?

- based on sighting of TMP the result is **'dangerous'**

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CoPTTM 4th Edition

- Provides clarification:
 - minimum of five cones in the cone threshold
 - 'MTCs should maintain direct control of the stop/go paddle at all times (i.e. the MTC must not insert the paddle in a cone and walk away)'
 - New forms
 - GTMP checklist
 - Onsite record



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Use of CoPTTM 4 New Forms

GTMP checklist

- ✓ level of road
- ✓ the shape
- ✓ direction and protection
- ✓ personal safety

Checking process for generic TMPP

This form or a similar company record must be completed prior to set up of a generic TMPP or used as an on-site record.

Section	Y	N	Comments/Signatures
Location details			
Road name:			
House number/PPFs:			
Suburb:			
Generic TMPP reference no.:			
Category			
Road level:			
Shape:			
Direction and protection:			
Proposed speed restrictions:			
Plant and equipment:			
Personal safety:			
Layout diagrams:			
RCA notification:			
Completed by:			
STMS/MTC in charge of works:	Name	Signature	Date
QC (to be signed and submitted to the site set up):	Name	Signature	Date

Use of CoPTTM 4 New Forms

Onsite Record

- ✓ sign positioning
- ✓ correct delineation
- ✓ conflicting signs
- ✓ worksite protection
- ✓ positive TM

On-site record
(To be used if information below not covered in company documentation)

Location details	Road Name(s)	House numbers / PPFs	Suburb:
STMS in charge of works:	Name	Signature	Date
QC (to be signed and submitted to the site set up):	Name	Signature	Date

SITE MONITORING

Note: All work vehicles must be parked either in the work area or legally parked and protected elsewhere.

Monitoring	Notes	Time	Sign	Time	Sign
Site set up					
2 hourly					
2 hourly					
2 hourly					
2 hourly					
2 hourly					
2 hourly					
Site removal					

TEMPORARY SPEED LIMIT - It is a legal requirement to record the placement and removal of TSLs.

Date installed	Time installed	Placement (PPs or street numbers)	Length of TSL (m)	Date removed	Time removed
		From: To:			
		From: To:			
		From: To:			
		From: To:			

On-site record must be retained with TMPP for 12 months

Conclusions

Issues identified as factors:

- Use of a GTMP rather than Site Specific TMP
- Previous signs left out contributing to driver complacency
- Nature of the project (lines across the road)
- STMS did not follow 'Best Practice':
 - incorrect use of GTMP and TMD
 - Poor site set up
 - Lack of monitoring



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Conclusions

Use of CoPTTM 4 would have benefited the operation:

- the new GTMP checking form
- the new On-site monitoring record
- requirement for a min. of 5 cones on approach threshold

In addition focus is provided in training material on:

- the use of the new forms
- record keeping requirements
- correct procedure for MTC operation

CoPTTM 4 adds Value and Safety

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Questions?



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