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

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?

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

The Generic TMP
• layout of approved TMD for MTC
  - MTC to stop approaching vehicles
  - workman to lift lines to allow vehicles to pass underneath

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
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

Site Factors

Performance in a Safety Audit

Summery of defects rated:

<table>
<thead>
<tr>
<th>Items</th>
<th>Defect Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>sign spacing (too close)</td>
<td>13 (6 spacing’s x 2 points for each sign)</td>
</tr>
<tr>
<td>sign on wrong side</td>
<td>8 (4 signs x 2 points for each sign)</td>
</tr>
<tr>
<td>total SCR</td>
<td>20 'acceptable'</td>
</tr>
</tbody>
</table>

Additional items if Auditor had sighted TMP:

- absence of longitudinal safety zone, missing gated speed signs
- 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'
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

Use of CoPTTM 4
New Forms

GTMP checklist
- Level of road
- The shape
- Direction and protection
- Personal safety

Use of CoPTTM 4
New Forms

Onsite record
- Sign positioning
- Correct delineation
- Conflicting signs
- Worksite protection
- Positive TM

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

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

Questions?

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