### LEVEL 2 DIAGRAMS LIST

#### STATIC OPERATIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>LEVEL 2 ROADS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>FOOTPATH</strong></td>
</tr>
<tr>
<td>G1.1</td>
<td>Footpath diverted onto berm behind working space</td>
</tr>
<tr>
<td>G1.2</td>
<td>Footpath diverted onto berm between working space and carriageway</td>
</tr>
<tr>
<td>G1.3</td>
<td>Footpath diverted onto carriageway</td>
</tr>
</tbody>
</table>

|     | **SHOULDER AND BERM**                             |
| G1.4| Work on berm and or footpath                      |
| G1.5| Shoulder closure                                  |

|     | **CYCLE LANE**                                     |
| G1.6| Traffic crossing road centre                       |
| G1.7| Diverted cycle lane - coned lane control           |

|     | **TWO-WAY TWO-LANE ROAD**                          |
| G1.8| Traffic crossing road centre                        |
| G1.9| Single-lane alternating flow                        |
| G1.10| Manual traffic control (Stop/Go or Stop/Slow)       |
| G1.11| Work in centre of road                             |
| G1.12| New-chip seal or road construction                  |
| G1.13| Road closure - detour route                        |
| G1.14| Two-lane diversion                                 |

|     | **Unattended worksites**                            |
| G1.15| New seal                                           |
| G1.16| Unattended and/or unswept worksite                 |

|     | **SITE ACCESS**                                     |
| G1.17| Forms part of a larger worksite                     |

|     | **ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD**       |
| G1.18| Left-lane closure                                   |
| G1.19| Right-lane closure                                  |
| G1.20| One-lane closure                                    |

|     | **TWO-WAY FOUR-LANE ROAD**                          |
| G1.21| Left-lane closure                                   |
| G1.22| Two-lane closure                                    |
| G1.23| Centre-lane closures                                |

|     | **ONE-WAY THREE-LANE DIVIDED OR THREE-LANE ROAD**   |
| G1.24| One-lane closure                                    |
| G1.25| One-lane closure                                    |
| G1.26| Two-lane closure                                    |
| G1.27| Two-lane closure                                    |
| G1.28| Two-lane closure                                    |

|     | **Road closures and detours**                       |
| G1.13| Road closure - detour route                         |
| G1.14| Flooding, washout, slip, slippery surface           |

|     | **Other hazard**                                    |
| G1.15| New seal                                            |
| G1.16| Unattended and/or unswept worksite                  |

|     | **SUPERSEDED**                                      |

---

*Traffic control devices manual part 8 CoPTTM Section G 4th edition, July 2013*
## MOBILE OPERATIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>LEVEL 2 ROADS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TWO-WAY TWO-LANE ROAD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2.1</td>
<td>Work vehicle is more than five (5) metres from the edgeline</td>
<td>Any speed</td>
<td></td>
</tr>
<tr>
<td>G2.2</td>
<td>Work vehicle is between two (2) and five (5) metres of the edgeline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2.3</td>
<td>Work vehicle is between two (2) and five (5) metres of the edgeline</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.4</td>
<td>Work vehicle is between zero (0) and two (2) metres of the edgeline</td>
<td>Permanent speed under 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.5</td>
<td>Work vehicle is between zero (0) and two (2) metres of the edgeline</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.6</td>
<td>Work vehicle on live lane</td>
<td>Permanent speed less than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.7</td>
<td>Work vehicle on live lane</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.8</td>
<td>Personnel on the live lane</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2.9</td>
<td>Work vehicle is between zero (0) and two (2) metres from the edgeline</td>
<td>Permanent speed less than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.10</td>
<td>Work vehicle is between zero (0) and two (2) metres from the edgeline</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.11</td>
<td>Work vehicle is on the live lane</td>
<td>Permanent speed less than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.12</td>
<td>Work vehicle is on the live lane</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.13</td>
<td>Part or all of lane occupied – Semi-static closure (work for up to 1 hour)</td>
<td>Permanent speed less than 65km/h</td>
<td></td>
</tr>
<tr>
<td>G2.14</td>
<td>Part or all of lane occupied – Semi-static closure (work for up to 1 hour)</td>
<td>Permanent speed greater than 65km/h</td>
<td></td>
</tr>
</tbody>
</table>
READING A TMD

Usually contractors place the signs on left-hand side of the road first with the TMD the right way up. When signs are placed for the right-hand side of the road the contractor tips the TMD upside down and reads which signs have to be placed for that side of the road.

To make this process easier:

- signs going up the page are shown closest to the road
- signs going down the page are shown further away from the road
- sign icons and sign numbers for layout down the road (from top to bottom of the TMD) are
## LEVEL 2 LAYOUT DISTANCES TABLE

<table>
<thead>
<tr>
<th>Permanent/TSL (km/h)</th>
<th>≤50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90/100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traffic signs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Sign visibility distance (m)</td>
<td>60/50*</td>
<td>70/60*</td>
<td>80</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>B Warning distance (m)</td>
<td>100/75*</td>
<td>120/90*</td>
<td>140</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>C Sign spacing (m)</td>
<td>50/35*</td>
<td>60/45*</td>
<td>70</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td><strong>Safety zones</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Longitudinal (m)*</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>45</td>
<td>60</td>
</tr>
<tr>
<td>E Lateral (m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Behind cones</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Behind concrete barrier</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>3. Behind other barriers</td>
<td>As recommended by manufacturers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tapers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Initial taper length per lane**</td>
<td>90/50*</td>
<td>100/60*</td>
<td>120</td>
<td>150</td>
<td>180</td>
</tr>
<tr>
<td>I Subsequent taper length per lane</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>K Minimum distance between tapers</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td><strong>Delineation devices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All tapers</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Approaches, between tapers and around the working space</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Spacing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points</td>
<td>2.5m for 10m either side of a change in alignment</td>
<td>2.5m for 20m either side of a change in alignment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Lane widths</th>
</tr>
</thead>
<tbody>
<tr>
<td>(km/h)</td>
</tr>
<tr>
<td>F Lane width (m)</td>
</tr>
</tbody>
</table>

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

Approach signage, the initial taper and longitudinal safety zone must be based on the permanent speed limit. The layout of the remainder of the worksite, including any subsequent tapers, is based on the TSL.
Notes
1. Minimum pedestrian footpath widths:
   - Residential/Rural - 0.9m
   - Suburban Centre - 1.2m
   - CBD - 2m
2. Where the length of the working space exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass.
3. Temporary footpath surfaces must be suitable for footpath users.
4. Use safety fence to enclose the working space, or at attended worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time. Refer C13.2.5 Protecting pedestrians from the working space.
5. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane.
Notes
1. Minimum pedestrian footpath widths:
   - Residential/Rural - 0.9m
   - Suburban Centre - 1.2m
   - CBD - 2m
2. Where the length of the working space exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass.
3. Temporary footpath surfaces must be suitable for footpath users.
4. Use safety fence to enclose the working space, or at attended worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time. Refer C13.2.5 Protecting pedestrians from the working space.
5. Use barrier or safety fence to delineate the traffic side of the footpath. For barrier requirements refer to C18 Temporary road safety barrier systems. For safety fence requirements refer to C13.2.6 Footpath diverted into carriageway.
6. There must be a lateral safety zone between the traffic side of the footpath and the live lane:
   - 0.5m for barrier
   - 1m for safety fence
7. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane.
FOOTPATH
Footpath diverted onto carriageway
Third preference

**Notes**

1. Minimum pedestrian footpath widths:
   - Residential/Rural - 0.9m
   - Suburban Centre - 1.2m
   - CBD - 2m

2. Where the length of the working space exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass.

3. Use safety fence to enclose the working space, or at attended worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time. Refer C13.2.5 Protecting pedestrians from the working space.

4. Use barrier or safety fence to delineate the traffic side of the footpath. For barrier requirements refer to C18 Temporary road safety barrier systems. For safety fence requirements refer to C13.2.6 Footpath diverted into carriageway.

5. There must be a lateral safety zone between the traffic side of the footpath and the live lane:
   - 0.5m for barrier
   - 1m for safety fence or cone bars

6. Use kerb ramps to assist mobility vehicles, pushchairs, etc.

7. At nighttime, corners of safety fence may be illuminated with flashing amber warning lights.

8. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane.

**EXAMPLE ONLY**

This drawing must not be used as a TMP diagram.
SHOULDER AND BERM
Work on berm and or footpath
Permanent speed less than 65km/h

Notes
1. Where work is carried out on the berm or footpath and a work vehicle is parked in a legal parallel car park, provided the vehicle is only accessed from the off traffic side, advance warning T1B and WORKS END TG2 are optional.
2. The work vehicle can have a registration classification of either Class MA, MB, MC or NA.
3. Traffic management must be provided where footpath users or cyclists are affected.
4. This layout may only be used during daylight hours.
5. Refer to section C13 Pedestrians and cyclists and C8 Shoulder and lane closures for further information.

EXAMPLE ONLY
This drawing must not be used as a TMP diagram.
Notes
1. A 10m taper is allowed where shoulder width is less than 2.5m.
2. The taper is a minimum of 4 cones at 2.5m centres.
3. For shoulders exceeding 2.5m width, apply the calculation of taper length for lateral shift of less than 3.5m:
   \[ W \times \frac{H}{3.5} \]
   \( W \) = Width of lateral shift
   \( H \) = Taper length in metres from the level 2 layout distance table.
Notes
1. Minimum cycle lane width must be:
   - 1m - 50km/h or less
   - 1.5m - 60km/h or more
2. A minimum cycle lane width of 1.5m is required if the temporary cycle lane is uphill
3. Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times H \]
   \[ 3.5 \]
   \[ W = \text{Width of lateral shift} \]
   \[ H = \text{Taper length in metres from the level 2 layout distance table} \]
4. Use TSLs if required by TSL decision matrix

EXAMPLE
This drawing must not be used as a TMP diagram
Notes
1. Cones are required on edge of live lane opposite closure if road edge is not well defined
2. Return taper at end of closure may be reduced using the calculation of taper length for lateral shift of less than 3.5m:
   \[ W \times H \]
3.5
   \[ W = \text{Width of lateral shift} \]
   \[ H = \text{Taper length in metres from the level 2 layout distance table} \]
3. Use PN11 No Stopping signs, if necessary
4. Use TSLs if required by TSL decision matrix

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Notes

1. Extend or place extra advance warning signs towards on-coming traffic beyond the end of any expected traffic queues.
2. A 30m return taper at the end of the closure is mandatory.
3. Cones are required on edge of live lane opposite closure if road edge is not well defined.
4. Use PN11 no stopping signs, if necessary.
5. MTC with RP4/RP41 STOP/GO or RP4/RP42 STOP/SLOW paddle on road shoulder located between 1st and 2nd cone closest to the working space.
6. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
7. Refer to C10.2.3 MTC essentials for further information.

This drawing must not be used as a TMP diagram.
Notes
1. Closure period not to exceed the limit set or approved by the RCA
2. Extend or place extra advance warning signs towards on-coming traffic beyond any expected traffic queues
3. MTC with RP4/RP41 STOP/GO or RP4/RP42 STOP/SLOW paddle on road shoulder located between 1st and 2nd cone closest to the working space
4. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
5. MTCs must show same message to oncoming traffic (e.g., STOP/STOP or GO/GO)
6. Refer to C10.2.3 MTC essentials for further information
7. Work vehicle movement must cease whenever road users are moving through the site unless there is full delineation between the worksite and the traffic
**Notes**

1. Provide details of make and model of portable traffic signals in the TMP.
2. Install temporary limit lines (must be able to be removed upon completion) or use RP61/RP62 signs.
3. Approved temporary speed humps may also be used.
4. A 30m return taper at the end of the closure is mandatory.
5. Cones are required on edge of live lane opposite closure if road is not well defined.
6. The STMS should monitor queues during the worksite operation and extend or place extra advance warning signs towards on-coming traffic beyond the end of any expected traffic queues.
7. Use PN11 No Stopping signs, if necessary.
8. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
Notes
1. Cones are required on edge of live lane opposite closure if road is not well defined
2. Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times H \]
   \( W = \) Width of lateral shift
   \( H = \) Taper length in metres from the level 2 layout distance table
3. Use PN11 No Stopping signs, if necessary
4. Use TSLs if required by TSL decision matrix
Notes
1. This diagram is used to enhance the finished product by moving the cone lines at regular intervals across the road to ensure it is evenly trafficked.
2. Cone movements start in the longitudinal safety zone (refer to C14.2.2 Operating mobile operations within an established static site).
3. This diagram only to be used during daylight hours with on site monitoring at all times.
4. Refer to diagram G1.15 for unattended worksites.
5. This diagram is a form of positive traffic management.
6. Use TSLs if required by TSL decision matrix.
7. TSLs to be repeated at 400m maximum centres.

Static operations
TWO-WAY TWO-LANE ROAD
New-chip seal or road construction
Attended worksite

EXAMPLE ONLY
This drawing must not be used as a TMP diagram.

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Notes
1. Block access to road with barricade
2. If a longer term site, use chevron sight board to direct traffic
3. On multilane roads the detour directional arrows (e.g., TDA1) signs will need to be gated
4. Cover any conflicting control signage at intersections
5. Use TSLs if required by TSL decision matrix

Traffic control devices manual part 8 CoPTTM  Section G  4th edition, July 2013
Notes
1. This layout should only be used for shallow flooding that vehicles can traverse while remaining in their correct lane(s)
2. This diagram is for initial response only. Appropriate long term TTM must be installed as soon as practical
3. The advance warning sign may be any one of the following:

   - **T2B**: Other hazard
   - **T211**: Flooding
   - **TR1LR**: Slips
   - **TR2**: Slippery Surface
   - **TR4**: Uneven Surface

4. If necessary, erect TG4 DRY YOUR BRAKES sign
5. Delineate hazard if hazard extends onto lane
6. Use TSLs if required by TSL decision matrix

---

**Static operations**

**TWO-WAY TWO-LANE ROAD**

**Other hazard**

**Flooding, slip, slippery surface**

---

This drawing must not be used as a TMP diagram

---

Traffic control devices manual part 8 CoPTTM  Section G  4th edition, July 2013
Notes
1. Use cones to form a threshold treatment at the start of the new seal. Minimum of 10 cones at 5m centres.
2. Cones on the trafficked side of signs for sites to be left unattended overnight.
3. Worksites may need additional positive traffic management to ensure all road users travel at the TSL.
4. Use TSLs if required by TSL decision matrix.
5. TSLs to be repeated at 400m maximum centres.

EXAMPLE ONLY

This drawing must not be used as a TMP diagram.

Traffic control devices manual part 8 CoPTTM  Section G  4th edition, July 2013
Notes
1. It is intended that this diagram forms part of a larger worksite.
2. Cones immediately before and after the site access to be spaced at 2.5m centres for 20m (nine cones).
Notes
1. C* - the TL2L/TLS signs are to be either 100m or 200m in advance of the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times H \]
   \[ 3.5 \]
   W = Width of lateral shift
   H = Taper length in metres from the level 2 layout distance table
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Use TSLs if required by TSL decision matrix
Static operations

ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD
Right-lane closure

Notes
1. C* - the TL2R/TLS signs are to be either 100m or 200m in advance of the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times H \]
   H = Taper length in metres from the level 2 layout distance table
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Use TSLs if required by TSL decision matrix

G1.18
Level 2

This drawing must not be used as a TMP diagram

SUPERSEDED
Static operations

ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD
Right-lane closure
One-lane temporary diversion

Notes
1. The longitudinal safety zone is based on the temporary speed limit
2. C* - the TL2R/TLS signs are to be either 100m or 200m from the start of the taper
3. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
4. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times (H \text{ or } I) \]
   \[ W = \text{Width of lateral shift} \]
   \[ H \text{ or } I = \text{Taper length in metres from the level 2 layout distance table} \]
5. Cones are required on edge of live lane opposite closure if road edge is not well defined
6. Use TSLs if required by TSL decision matrix

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Static operations

ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD

One-lane closure

Two-lane temporary diversion

Notes

1. C* - the TL5R/TLS signs are to be either 100m or 200m in advance of the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is: 
   \[ W \times (H \text{ or } I) \]
   3.5
   
   W = Width of lateral shift
   
   H or I = Taper length in metres from the level 2 layout distance table
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Use TSLs if required by TSL decision matrix

EXAMPLE

This drawing must not be used as a TMP diagram

Traffic control devices manual part 8 CoPTTM Section G 4th edition, July 2013
Notes

1. C* - the TL2R/TLS signs are to be either 100m or 200m in advance of the start of the taper

2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)

3. *Calculation of taper length for lateral shift of less than 3.5m is: W x (H or I)

4. Use TSLs if required by TSL decision matrix

5. TSLs to be repeated at 400m maximum centres

This drawing must not be used as a TMP diagram

EXAMPLE ONLY
Notes
1. If the closure is on a passing lane, the start of the taper must be greater than 600m after the start of the passing lane (if this cannot be achieved then close the passing lane completely and cover all permanent passing lane signs)
2. If the end of the closure is within 600m of the end of a passing lane, continue to close the centre lane to the end of the passing lane
3. C* - the TL2R/TLS signs are to be either 100m or 200m from the start of the taper
4. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
5. *Calculation of taper length for lateral shift of less than 3.5m is: W x (H or I)
6. Use TSLs if required by TSL decision matrix
7. TSLs to be repeated at 400m maximum centres

TWO-WAY FOUR-LANE ROAD
Two-lane closure
One-lane contraflow

Repeat signs from opposite end of the worksite.
Change TL2R sign to TL2L sign

Signs to be repeated at opposite end of the worksite.
Change TL2R sign to TL2L sign

This drawing must not be used as a TMP diagram

EXAMPLE ONLY
Notes

1. C* - the TL3L/TLS signs are to be either 100m or 200m from the start of the taper
2. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times \frac{H}{3.5} \]
   \( W \) = Width of lateral shift
   \( H \) = Taper length in metres from the level 2 layout distance table
3. Cones required opposite closure if road edge not clearly defined
4. Use PN11 no stopping signs, if necessary
5. Use TSLs if required by TSL decision matrix

Static operations

TWO-WAY FOUR-LANE ROAD
Centre-lane closures

EXAMPLE ONLY

This drawing must not be used as a TMP diagram

Traffic control devices manual part 8 CoPTTM Section G 4th edition, July 2013
Notes
1. C* - the TL3L/TLS signs are to be either 100m or 200m from the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is: 
   \[ W \times H \]
   \[ W = \text{Width of lateral shift} \]
   \[ H = \text{Taper length in metres from the level 2 layout distance table} \]
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Full end taper may be added if required
6. Use TSLs if required by TSL decision matrix
Notes
1. C* - the TL33/TLS signs are to be either 100m or 200m from the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times H \]
   Where:
   - \( W \) = Width of lateral shift
   - \( H \) = Taper length in metres from the level 2 layout distance table
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Full end taper may be added if required
6. Use TSLs if required by TSL decision matrix

EXAMPLE ONLY

This drawing must not be used as a TMP diagram

SUPERSEDED
Notes

1. C* - the TL3L/TLS signs are to be either 100m or 200m from the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times (H \text{ or } I) \]
   \[ W = \text{Width of lateral shift} \]
   \[ H \text{ or } I = \text{Taper length in metres from the level 2 layout distance table} \]
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Full end taper may be added if required
6. Use TSLs if required by TSL decision matrix
7. TSLs to be repeated at 400m maximum centres

EXAMPLE ONLY

This drawing must not be used as a TMP diagram
Static operations

ONE-WAY THREE-LANE DIVIDED OR THREE-LANE ROAD
Two-lane closure
Right and centre lanes

Notes

1. C* - the TL33/TLS signs are to be either 100m or 200m from the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is: \[ W \times (H \text{ or } I) \]
   \[ W = \text{Width of lateral shift} \]
   \[ H \text{ or } I = \text{Taper length in metres from the level 2 layout distance table} \]
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Full end taper may be added if required
6. Use TSLs if required by TSL decision matrix
7. TSLs to be repeated at 400m maximum centres

This drawing must not be used as a TMP diagram

EXAMPLE ONLY

This drawing must not be used as a TMP diagram

Traffic control devices manual part 8 CoPTTM  Section G  4th edition, July 2013

SUPERSEDED
Static operations

ONE-WAY THREE-LANE DIVIDED OR THREE-LANE ROAD
Two-lane closure
Two-lane temporary diversion

Notes
1. C* - the TL3L/TLS signs are to be either 100m or 200m from the start of the taper
2. Cones from TSL to taper are mandatory at over 65km/h (for positive traffic management)
3. *Calculation of taper length for lateral shift of less than 3.5m is: W x (H or I)
4. 3.5
   W = Width of lateral shift
   H or I = Taper length in metres from the level 2 layout distance table
4. Cones are required on edge of live lane opposite closure if road edge is not well defined
5. Use TSLs if required by TSL decision matrix
6. TSLs to be repeated at 400m maximum centres

EXAMPLE ONLY
This drawing must not be used as a TMP diagram

Traffic control devices manual  part 8 CoPTTM  Section G  4th edition, July 2013
Mobile operations

TWO-WAY TWO-LANE ROAD
Work vehicle is more than five (5) metres from the edgeline
Any speed

Notes
1. This layout will also apply to a multiple laned two-way road without a permanent median barrier.

G2.1
Level 2

EXAMPLE
ONLY

This drawing must not be used as a TMP diagram.

SUPERSEDED
Notes
1. This layout may also be used on multiple laned roads
2. Rear visibility is more than clear sight distance or rear visibility is less than clear sight distance with the permanent speed of less than 65km/h
3. The T1B sign and supplementary plates must be repeated throughout the length of the worksite at intervals no greater than 4km
4. The static signs may be replaced by an AWVMS if used as a tail pilot

For non-state highways
5. The static signs may be replaced by a tail pilot vehicle with T1B and RD6R/L signs

Rear visibility equal to, or greater than, clear sight distance

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Notes
1. This layout will also apply to a multiple lane two-way road without a permanent median barrier.

EXAMPLE ONLY

This drawing must not be used as a TMP diagram.

TWO-WAY TWO-LANE ROAD
Work vehicle is between two (2) and five (5) metres of the edgeline
Permanent speed greater than 65km/h
TWO-WAY TWO-LANE ROAD
Work vehicle is between zero (0) and two (2) metres of the edgeline
Permanent speed less than 65km/h

Notes
1. This layout may also be used on multiple laned roads
2. The T1B sign and supplementary plates must be repeated throughout the length of the worksite at intervals no greater than 4km
3. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6/LR
4. The static signs may be replaced by an AWVMS if used as a tail pilot

For non-state highways
5. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS
6. The static signs may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6/R/L signs

EXAMPLE ONLY
This drawing must not be used as a TMP diagram

Traffic control devices manual part 8 CoPTTM Section G 4th edition, July 2013
Notes
1. This layout may also be used on multiple laned roads
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6R/L
3. Where the work is on a two-lane two-way road the leading work vehicle must be fitted with a front-mounted TV2 ROAD WORKS sign unless a lead pilot is required

For non-state highways
4. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS
5. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Notes
1. This layout may also be used on multiple laned roads
2. The T1B sign and supplementary plates must be repeated throughout the length of the worksite at intervals no greater than 4km
3. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R
4. The static sign may be replaced by an AWVMS if used as a tail pilot

For non-state highways
5. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS
6. The static sign may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Notes
1. A lead pilot vehicle must be used on undivided two-way roads with permanent speed limits greater than 65km/h when:
   - visibility to the work vehicle is less than CSD continuously for more than 1km, or
   - the operation crosses the centre line
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R
   For non-state highways
3. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS
4. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs

Mobile operations
TWO-WAY TWO-LANE ROAD
Work vehicle on live lane
Permanent speed greater than 65km/h
Notes
1. A lead pilot vehicle must be used on undivided two-way roads with permanent speed limits greater than 65 km/h when:
   - visibility to the work vehicle is less than CSD continuously for more than 1km, or
   - the operation crosses the centre line.
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
   
   **For non-state highways**
   3. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrow board and a TV4 PASS WITH CARE sign instead of the LAS.
   4. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs.

---

**EXAMPLE ONLY**

This drawing must not be used as a TMP diagram.
Notes
1. The T1B sign and supplementary plates must be repeated throughout the length of the worksite at intervals no greater than 4km.
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
3. The static sign may be replaced by an AWVMS if used as a tail pilot.

For non-state highways
4. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS.
5. The static signs may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs.

Traffic control devices manual part 8 CoPTTM Section G 4th edition, July 2013
Notes
1. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
2. If a hard central shoulder exists the AWVMS is to be positioned at least 2m clear of the edgeline.
3. With a right hand closure where there is no available shoulder on the right hand median, the AWVMS can be positioned on the left hand side clear of the edgeline showing a right hand lane drop.

For non-state highways
4. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrow board and a TV4 PASS WITH CARE sign instead of the LAS.
5. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6L/R signs.
Notes
1. The T1B sign and supplementary plates must be repeated throughout the length of the worksite at intervals no greater than 4km
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R
3. The static signs may be replaced by an AWVMS if used as a tail pilot

For non-state highways
4. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS
5. The static signs may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
Notes
1. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
2. If a hard central shoulder exists the AWVMS is to be positioned at least 2m clear of the edgeline.
3. With a right hand closure where there is no available shoulder on the right hand median, the AWVMS can be positioned on the left hand side clear of the edgeline showing a right hand lane drop.

For non-state highways
4. With the relevant RCA's permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS.
5. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6R/L signs.

This drawing must not be used as a TMP diagram.
ONE-WAY TWO-LANE DIVIDED OR TWO-LANE ROAD
Part or all of lane occupied – Semi-static closure (work for up to 1 hour)
Permanent speed less than 65km/h

Notes
1. This layout applies when the work activity can be completed within one hour (excluding TTM set up and TTM removal from the worksite).
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
3. The static signs may be replaced by an AWVMS.

For non-state highways
4. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrow board and a TV4 PASS WITH CARE sign instead of the LAS.
5. The static sign on the right-hand side of the road may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6L sign.

This drawing must not be used as a TMP diagram.
Notes
1. This layout applies when the work activity can be completed within one hour (excluding TTM set up and TTM removal from the worksite).
2. The shadow vehicle must be fitted with a TMA and the R3-13.3 sign consisting of the red and white delineation, the RD6T (light arrow) and the blue disk and white arrow RD6L/R.
3. The AWVMS can be located either side of the road depending on availability of space to park the AWVMS.
4. If a hard central shoulder exists the AWVMS is to be positioned at least 2m clear of the edgeline.
5. With a right hand closure where there is no available shoulder on the right hand median, the AWVMS can be positioned on the left hand side clear of the edgeline showing a right hand lane drop.
6. Where an AWVMS is used, a cone taper (H) is not required.

For non-state highways
7. With the relevant RCA’s permission, the TMA shadow vehicle may have a horizontal arrowboard and a TV4 PASS WITH CARE sign instead of the LAS.
8. The AWVMS may be replaced by a tail pilot vehicle with a TMA, horizontal arrow board, T1B and RD6L sign.

EXAMPLE
This drawing must not be used as a TMP diagram.
Note:
This page is to be used as the layout distances table for the level 2 static and mobile diagrams.
Print this page on A3 paper and fold it to fit an A4 page.
Unfold this page when you want to view the layout distances table and a diagram at the same time.

**LEGEND FOR DIAGRAMS**

**WORKING SPACE**

- Solid black line: Edge of work area
- Dotted line: Edge of edge of trafficable lane

**CONES**

- Orange circle: Solid black line
- Yellow triangle: Solid black line

**OPTIONAL**

- Cones
- Signs

**SAFETY ZONES**

- Solid black line: Behind edge of trafficable lane
- Yellow triangle: Behind concrete barrier

**LEVEL 2 LAYOUT DISTANCES TABLE**

<table>
<thead>
<tr>
<th>Traffic signs</th>
<th>Permanent/TSL (km/h)</th>
<th>≤50/60</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90/100</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sign visibility</td>
<td>60/50*</td>
<td>70/60*</td>
<td>80</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>B</td>
<td>Warning distance</td>
<td>100/75*</td>
<td>120/90*</td>
<td>140</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>C</td>
<td>Sign spacing</td>
<td>50/35*</td>
<td>60/45*</td>
<td>70</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

**SAFETY ZONES**

- Lateral (m)
- 1. Behind edges 1 1 1 1 1
- 2. Behind concrete barriers 0.5 0.5 0.5 0.5 0.5
- 3. Behind other barriers As recommended by manufacturers

**TAPERS**

- Initial taper length per lane**      | 90/50*| 100/60*| 120| 150| 180
- Subsequent taper length per lane    | 50   | 60   | 70 | 80 | 100
- Minimum distance between tapers     | 50   | 60   | 70 | 80 | 100

**DETECTION DEVICES**

- All tapers                        2.5 2.5 2.5 2.5 2.5
- Approaches, between tapers and around the working space 5 5 10 10 10

- At merge and diverge points for ramps and slip lanes, intersecting road entry and exit points, and worksite access points 2.5m for 10m either side of a change in alignment 2.5m for 20m either side of a change in alignment

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

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

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

** Lane widths**

<table>
<thead>
<tr>
<th>Lane width (m)</th>
<th>2.75</th>
<th>2.75</th>
<th>3.0</th>
<th>3.0</th>
<th>3.25</th>
<th>3.25</th>
<th>3.5</th>
<th>3.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible speed limit</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

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

Approach signage, the initial taper and longitudinal safety zone must be based on the permanent speed limit. The layout of the remainder of the worksite, including any subsequent tapers, is based on the TSL.