Traffic Control Devices Manual
Part 8

Code of practice for temporary traffic management (CoPTTM)
manual number: SP/M/010

Section H

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Code of practice for temporary traffic management

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More information
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### LEVEL 3 ROADS

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1.1</td>
<td>Shoulder closure</td>
<td>No temporary speed limit</td>
</tr>
<tr>
<td>H1.2</td>
<td>Other hazard</td>
<td>Flooding, slips, slippery surface</td>
</tr>
<tr>
<td>H1.3</td>
<td>Right-lane closure</td>
<td></td>
</tr>
<tr>
<td>H1.4</td>
<td>Two-lane closure</td>
<td>One-lane temporary diversion</td>
</tr>
<tr>
<td>H1.5</td>
<td>Left-lane closure</td>
<td>Chicane layout</td>
</tr>
<tr>
<td>H1.6</td>
<td>Site access</td>
<td></td>
</tr>
<tr>
<td>H1.7</td>
<td>Right-lane closure</td>
<td></td>
</tr>
<tr>
<td>H1.8</td>
<td>Left-lane closure</td>
<td>Chicane layout</td>
</tr>
<tr>
<td>H1.9</td>
<td>Right and centre lane closure</td>
<td></td>
</tr>
<tr>
<td>H1.10</td>
<td>Left and centre lane closure</td>
<td>Chicane layout</td>
</tr>
<tr>
<td>H1.11</td>
<td>Right and centre lane closure</td>
<td>Two lane temporary diversion</td>
</tr>
<tr>
<td>H1.12</td>
<td>Left-lane closure</td>
<td>On-ramp within worksite</td>
</tr>
<tr>
<td>H1.13</td>
<td>Left-lane closure</td>
<td>Off-ramp within worksite</td>
</tr>
<tr>
<td>H1.14</td>
<td>Off-ramp closure</td>
<td></td>
</tr>
<tr>
<td>H1.15</td>
<td>Road closure</td>
<td>Detour via off ramp</td>
</tr>
<tr>
<td>H1.16a</td>
<td>Closure example</td>
<td>On-ramp within worksite</td>
</tr>
<tr>
<td>H1.16b</td>
<td>Closure example</td>
<td>Low accessed site</td>
</tr>
<tr>
<td>H1.16c</td>
<td>Closure example</td>
<td>High accessed site</td>
</tr>
<tr>
<td>H1.16d</td>
<td>Closure example</td>
<td>Off-ramp within worksite</td>
</tr>
<tr>
<td>H1.17</td>
<td>Long-term closure</td>
<td>Left-lane closure - barrier</td>
</tr>
<tr>
<td>H1.18</td>
<td>Long-term closure</td>
<td>Right-lane closure - barrier</td>
</tr>
</tbody>
</table>

### MOBILE OPERATIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2.1</td>
<td>Work vehicle is more than five (5) metres from the edgeline - Zone A</td>
<td>Rear visibility is GREATER than the clear sight distance</td>
</tr>
<tr>
<td>H2.2</td>
<td>Work vehicle is between two (2) and five (5) metres from the edgeline - Zone B</td>
<td>Rear visibility is LESS than the clear sight distance</td>
</tr>
<tr>
<td>H2.3</td>
<td>Work vehicle is between zero (0) and two (2) metres from the edgeline - Zone C</td>
<td>No available shoulder width for AWVMS within 1,600m of work vehicle</td>
</tr>
<tr>
<td>H2.4</td>
<td>Work vehicle on live lane - Zone C</td>
<td>Personnel on the live lane</td>
</tr>
<tr>
<td>H2.5</td>
<td>Work vehicle on live lane or within 2m from live lane - Zone C</td>
<td>Left-lane closure</td>
</tr>
<tr>
<td>H3.1</td>
<td>Semi-static closure</td>
<td>Right and centre lane closure</td>
</tr>
<tr>
<td>H3.2</td>
<td>Semi-static closure</td>
<td></td>
</tr>
</tbody>
</table>
**LEGEND FOR DIAGRAMS**

<table>
<thead>
<tr>
<th>Working space</th>
<th>Mandatory:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cones</td>
</tr>
<tr>
<td></td>
<td>Signs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety zones</th>
<th>Optional:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cones</td>
</tr>
<tr>
<td></td>
<td>Signs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Edgeline or edge of trafficable lane (indicated by solid black line)</th>
<th>Hazard area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edgeline or edge of trafficable lane</td>
<td></td>
</tr>
<tr>
<td>Edgeline or edge of trafficable lane</td>
<td></td>
</tr>
<tr>
<td>Edgeline or edge of trafficable lane</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Edge of Seal (indicated by dotted line next to solid black line)</th>
<th>Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge of seal</td>
<td></td>
</tr>
<tr>
<td>Edge of seal</td>
<td></td>
</tr>
<tr>
<td>Edge of seal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Superseded</th>
<th>Chevron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## LEVEL 3 LAYOUT DISTANCES TABLE

<table>
<thead>
<tr>
<th>Traffic signs</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Sign visibility distance (m)</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>C Sign spacing (m) - Desirable</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>Sign spacing (m) - Minimum</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

### Safety zones

<table>
<thead>
<tr>
<th></th>
<th>45</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>D Longitudinal (m)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Lateral (m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Behind cones etc</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Behind barrier installations</td>
<td>As specified by the Installation Designer</td>
<td></td>
</tr>
</tbody>
</table>

### Tapers

<table>
<thead>
<tr>
<th></th>
<th>150</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>H Initial taper length per lane (m)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Subsequent taper length per lane (m)</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

### Delineation devices

<table>
<thead>
<tr>
<th></th>
<th>2.5</th>
<th>2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>K Minimum distance between tapers (m) ***</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

### Spacing (centres)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All tapers (m)</td>
<td></td>
</tr>
<tr>
<td>Cones parallel to the lane (eg between tapers and alongside the working space) (m)</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 20m either side of a change in alignment</td>
</tr>
</tbody>
</table>

- For temporary and permanent speeds less than 80km/h use the C2.6 Level 2 worksite layout distances table.
- The desirable sign spacing distance must be used wherever possible. The minimum sign spacing distance may only be used where there are road environment constraints.
- Where only one sign is erected in advance of the start of a cone taper the distance from the sign to the start of the taper must be 2xC.
- A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite. Refer subsections H1.17 and H1.18
- Taper length is based on a single lane shift of 3.5m.
- Must be altered if required to meet the supplementary TLS distance.

### Lane widths

<table>
<thead>
<tr>
<th>Speed (km/h)</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>F Lane width (m)</td>
<td>2.75</td>
<td>2.75</td>
<td>3.0</td>
<td>3.0</td>
<td>3.25</td>
<td>3.25</td>
<td>3.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Except for delineation device spacings, which are maximum values, the distances specified in the above table are minimum values. Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.

* Superseded

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Superseded
Notes

1. A 10m taper, with a minimum of 5 cones, is allowed where shoulder width is 2.5m or less.

2. If a 10m taper is used, an RD6R is only required at the head of the taper.

3. *For shoulders exceeding 2.5m width, apply the calculation of taper length for lateral shift of less than 3.5m:

   \[
   W \times H \\
   3.5
   \]

   \(W\) = Width of lateral shift
   \(H\) = Taper length in metres from the level 3 layout distance table.
1. This diagram is for initial response only. Appropriate long term TTM must be installed as soon as practical.

2. This layout should only be used for shallow flooding that vehicles can traverse while remaining in their correct lane(s).

3. A 10m taper, with a minimum of 5 cones, is allowed where shoulder width is 2.5m or less.

4. The advance warning sign may be any one of the following:

5. If necessary, erect TG4 DRY YOUR BRAKES sign.

6. If TSLs are not required, the warning distance must be at least 2 x C.

This drawing must not be used as a TMP diagram.
Notes
1. TSLs to be repeated at 400m maximum centres
2. C.4.3.1 - On level 3 roads cones are required from the TSL sign to the start of the taper or hazard area where no taper is installed. Where the edgeline is well defined (ie by a clean kerb and channel) the line of cones is not required.
Notes
1. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times I \]
   \[ W = \text{Width of lateral shift} \]
   \[ I = \text{Taper length in metres from the level 3 layout distance table} \]
2. TSLs to be repeated at 400m maximum centres
3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite
4. Where there is a lane shift, a 10m minimum offset should be used to enable heavy vehicles to make the shift
5. C.4.3.1 - On level 3 roads cones are required from the TSL sign to the start of the taper or hazard area where no taper is installed. Where the edgeline is well defined (ie by a clean kerb and channel) the line of cones is not required
### Notes

1. *Calculation of taper length for lateral shift of less than 3.5m is:
   
   \[ W \times \frac{I}{3.5} \]

   where:
   - \( W \) = Width of lateral shift
   - \( I \) = Taper length in metres from the level 3 layout distance table

2. TSLs to be repeated at 400m maximum centres

3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

4. Where there is a lane shift, a 10m minimum offset should be used to enable heavy vehicles to make the shift

---

**EXAMPLE ONLY**

This drawing must not be used as a TMP diagram
Notes
1. This diagram is designed to show only the site access to a closure

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

Cones at 2.5m for 20m

Cones at 2.5m for 20m

Cones at 2.5m for 20m

C

20m
Notes
1. TSLs to be repeated at 400m maximum centres
2. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

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

1. *Calculation of taper length for lateral shift of less than 3.5m is:

   \[ W \times \frac{I}{3.5} \]

   \( W = \) Width of lateral shift

   \( I = \) Taper length in metres from the level 3 layout distance table

2. TLSs to be repeated at 400m maximum centres

3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

4. Where there is a lane shift, a 10m minimum offset should be used to enable heavy vehicles to make the shift

5. For the centre median, tubular delineators temporarily fixed to the surface may be used, or for a long term situation a new centreline may be applied

This drawing must not be used as a TMP diagram

EXAMPLE ONLY

Superseded
Notes

1. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times I \]
   \[ W = \text{Width of lateral shift} \]
   \[ I = \text{Taper length in metres from the level 3 layout distance table} \]

2. TSLs to be repeated at 400m maximum centres

3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

4. Refer C.4.3.1 - On level 3 roads cones are required from the TSL sign to the start of the taper or hazard area where no taper is installed

---

**EXAMPLE ONLY**

This drawing must not be used as a TMP diagram
Notes

1. *Calculation of taper length for lateral shift of less than 3.5m is:
   \[ W \times \frac{I}{3.5} \]
   \[ W = \text{Width of lateral shift} \]
   \[ I = \text{Taper length in metres from the level 3 layout distance table} \]

2. TSLs to be repeated at 400m maximum centres

3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

4. Where there is a lane shift, a 10m minimum offset should be used to enable heavy vehicles to make the shift

5. Refer C.4.3.1 - On level 3 roads cones are required from the TSL sign to the start of the taper or hazard area where no taper is installed

---

EXAMPLE ONLY

This drawing must not be used as a TMP diagram
**Notes**

1. *Calculation of taper length for lateral shift of less than 3.5m is:*
   \[ \frac{W \times I}{3.5} \]
   - \( W \) = Width of lateral shift
   - \( I \) = Taper length in metres from the level 3 layout distance table

2. TSLs to be repeated at 400m maximum centres

3. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite

4. Where there is a lane shift, a 10m minimum offset should be used to enable heavy vehicles to make the shift

5. For the centre median, tubular delineators temporarily fixed to the surface may be used, or for a long term situation a new centreline may be applied

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Notes
1. This diagram is designed to show only the on-ramp within the worksite.
2. Secondary row of cones in front of the longitudinal safety zone are to be placed at 1m centres.
3. A TSL sign may be used to cover the permanent speed sign on the approaches to the main carriageway.

Static operations

ONE-WAY MULTI-LANE ROAD
Left-lane closure
On-ramp within worksite

H1.12
Level 3

This drawing must not be used as a TMP diagram

EXAMPLE ONLY

This drawing must not be used as a TMP diagram

Superseded
Notes
1. This diagram is designed to show only the off-ramp within the closure.
2. Secondary row of cones in front of the longitudinal safety zone are to be placed at 1m centres.
3. A TSL sign may be used to cover the permanent speed sign on the off-ramp.

For work in this area, close off-ramp. See H1.14.

Match existing exit taper.

See diagram H1.8 for left lane closure details.
Notes
1. A 10m taper, with a minimum of 5 cones, is allowed where shoulder width is 2.5m or less
2. If a 10m taper is used, an RD6R is only required at the head of the taper
3. *For shoulders exceeding 2.5m width, apply the calculation of taper length for lateral shift of less than 3.5m:
   \[ W \times H \]
   \[ 3.5 \]
   \[ W = \text{Width of lateral shift} \]
   \[ H = \text{Taper length in metres from the level 3 layout distance table} \]
4. Cones used to close off-ramp to be placed at 1m centres
5. Secondary line of cones at end of longitudinal safety zone to be placed at 1m centres
6. Block access to road with barricade/barrier
Static operations

ONE-WAY MULTI-LANE ROAD
Road closure
Detour via off-ramp

Notes

1. A 10m taper, with a minimum of 5 cones, is allowed where shoulder width is 2.5m or less
2. If a 10m taper is used, an RD6R is only required at the head of the taper
3. Block access to road with fence
4. At the beginning of the working space place three lines of cones 40m apart across lanes and shoulder. Cones to be placed at 1m centres. Leave a 2.5m gap in opposite ends of each line of cones to allow site access
5. TSLs to be repeated at 400m maximum centres
6. If delays are likely, add a T143 DELAYS POSSIBLE sign either 1km or 2km in advance of the worksite
7. C.4.3.1 - On level 3 roads cones are required from the TSL sign to the start of the taper or hazard area where no taper is installed. Where the edgeline is well defined (ie by a clean kerb and channel) the line of cones is not required

Example Only

This drawing must not be used as a TMP diagram

Superseded
Notes

1. This diagram is part of a series of diagrams providing example diagrams for a motorway closure:
   - H1.16a - Closure of on-ramp within worksite
   - H1.16b - Closure example low accessed site
   - H1.16b - Closure example high accessed site
   - H1.16d - Closure of off-ramp within worksite

2. Where a motorway is completely closed to traffic in one or both directions, any on or off ramps impacted must also be closed.

3. Cones across the on-ramp to be placed at 1m centres.
Notes
1. This diagram is part of a series of diagrams providing example diagrams for a motorway closure:
   - H1.16a - Closure of on-ramp within worksite
   - H1.16b - Closure example low accessed site
   - H1.16b - Closure example high accessed site
   - H1.16d - Closure of off-ramp within worksite
2. Where the motorway is completely closed to traffic in one direction or both directions, the normal application of road closure signs, cones, barriers, fences or barricades at on and off ramps must be reinforced by a double line of cones at a normal warning distance from the working space
3. The double lines of cones must be either continuous or chicaned
4. TMA vehicles parked outside this inner cordon must be parked with their attenuators down and facing the expected direction of traffic. Vehicles inside the cordoned worksite are not subject to this requirement
5. Cones in tapers and across road to be placed at 1m centres

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

ONE-WAY MULTI-LANE ROAD
Closure example
High accessed site within worksite

Notes
1. This diagram is part of a series of diagrams providing example diagrams for a motorway closure:
   - H1.16a - Closure of on-ramp within worksite
   - H1.16b - Closure example low accessed site
   - H1.16b - Closure example high accessed site
   - H1.16d - Closure of off-ramp within worksite
2. Where the motorway is completely closed to traffic in one direction or both directions, the normal application of road closure signs, cones, barriers, fences or barricades at on and off ramps must be reinforced by a double line of cones at a normal warning distance from the working space
3. The double lines of cones must be either continuous or chicaned
4. TMA vehicles parked outside this inner cordon must be parked with their attenuators down and facing the expected direction of traffic. Vehicles inside the cordoned worksite are not subject to this requirement
5. Where there are oversized vehicles being used, the 20m gap in the chicanes may be increased
6. This is a secondary safety element for the worksite
7. Cones in chicanes to be placed at 1m centres

EXAMPLE
ONLY

This drawing must not be used as a TMP diagram

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Notes

1. This diagram is part of a series of diagrams providing example diagrams for a motorway closure:
   - H1.16a - Closure of on-ramp within worksite
   - H1.16b - Closure example low accessed site
   - H1.16b - Closure example high accessed site
   - H1.16d - Closure of off-ramp within worksite

2. Where a motorway is completely closed to traffic in one direction or both directions, any on or off ramps impacted must also be closed

3. Cones across the on-ramp to be placed at 1m centres
Notes

1. Barrier end treatment depends on its distance from the edgeline. Refer C18.4 for details.

2. A black/white right-hand bridge end marker post must be used to delineate the approach end of the barrier at its narrowest point.

3. Offset depends on speed ie 100km/h = 9m

4. Total length of barrier flare depends on:
   a) the offset from the live lane line
   b) the width of lane and shoulder closed
   c) barrier flare rates, and
   d) the offset of the barrier end from the edgeline.

5. Hazard marker must be used to delineate the barrier terminal.
Notes

1. Barrier end treatment depends on its distance from the edgeline. Refer C18.4 for details.

2. A black/yellow right-hand bridge end marker post must be used to delineate the approach end of the barrier at its narrowest point.

3. Total length of barrier flare depends on:
   - the offset from the live lane line
   - the width of lane and shoulder closed
   - barrier flare rates, and
   - the offset of the barrier end from the edgeline

4. Hazard marker must be used to delineate the barrier terminal.
Notes
1. Worksite can be managed by a level 2/3 STMS-NP

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 static signs may be replaced by an AWVMS. In this case CSD will be required (see H2.3).

ONE-WAY MULTI-LANE ROAD
Work vehicle is between two (2) and five (5) metres from the edgeline - Zone B
Rear visibility is GREATER than the clear sight distance

EXAMPLE ONLY
This drawing must not be used as a TMP diagram
ONE-WAY MULTI-LANE ROAD
Work vehicle is between two (2) and five (5) metres from the edgeline - Zone B
Rear visibility is LESS than the clear sight distance

Notes
1. Always try to use the shortest distance where a range is displayed (eg 100m to 1,600m, try for 100m)

Superseded
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 RD6LR.
2. Always try to use the shortest distance where a range is displayed (eg 100m to 1,600m, try for 100m).
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 RD6 (light arrow) and the blue disk and white arrow RD6/L/R
2. Always try to use the shortest distance where a range is displayed (eg 100m to 1,600m, try for 100m)

100m to 1,600m (approx. 5 to 55 seconds travel time)

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

1. To provide advance warning, the AWVMS may be located more than 1,600m from the work vehicle.

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 RD6LR.

3. Always try to use the shortest distance where a range is displayed (e.g., 100m to 1600m, try for 100m).

4. AWVMS may be up to 3km behind shadow vehicle where there is insufficient shoulder width within 1,600m.

EXAMPLE

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. Always try to use the shortest distance where a range is displayed (eg 100m to 1,600m, try for 100m).

EXAMPLE

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

10m roll ahead distance

1m lateral safety zone

Working space

100m to 1,600m (approx. 5 to 55 seconds travel time)

This drawing must not be used as a TMP diagram
Traffic control devices manual part 8 CoPTTM

ONE-WAY MULTI-LANE ROAD
Semi-static closure
Left-lane closure

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. The AWVMS may be replaced by T1B signs installed on both sides of the road
3. Where an AWVMS is used, cone taper (H) is optional
4. Always try to use the shortest distance where a range is displayed (e.g. 100m to 1,600m, try for 100m)

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

100m to 1,600m (approx. 5 to 55 seconds travel time)

H3.1 Level 3
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. The AWVMS may be replaced by T1B signs installed on both sides of the road
3. Where an AWVMS is used, cone taper (H) is optional
4. Always try to use the shortest distance where a range is displayed (e.g. 100m to 1,600m, try for 100m)

ONE-WAY MULTI-LANE ROAD
Semi-static closure
Right and centre lane closure

### Mobile operations

**H3.2**
Level 3

**EXAMPLE ONLY**

This drawing must not be used as a TMP diagram

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

100m to 1,600m (approx. 5 to 55 seconds travel time)
**LEVEL 3 LAYOUT DISTANCES TABLE**

<table>
<thead>
<tr>
<th>Working space</th>
<th>Mandatory:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Cones</td>
</tr>
<tr>
<td></td>
<td>• Signs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety zones</th>
<th>Optional:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Cones</td>
</tr>
<tr>
<td></td>
<td>• Signs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Edgeline or edge of trafficable lane (indicated by solid black line)</th>
<th>Hazard area</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Edge of Seal (indicated by dotted line next to solid black line)</th>
<th>Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edgeline or edge of seal</td>
<td></td>
</tr>
<tr>
<td>Edgeline or edge of trafficable lane</td>
<td></td>
</tr>
<tr>
<td>Edgeline or edge of trafficable lane</td>
<td></td>
</tr>
</tbody>
</table>

**LEVEL 3 LAYOUT DISTANCES TABLE**

<table>
<thead>
<tr>
<th>Traffic signs</th>
<th>Permanent/TSL (km/h)</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sign visibility distance (m)</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>C</td>
<td>Sign spacing (m) - Desirable</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Sign spacing (m) - Minimum</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety zones</th>
<th>Longitudinal (m)*</th>
<th>45</th>
<th>60</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Optional:</th>
<th>Lateral (m)</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Behind cones etc</td>
<td>As specified by the Installation Designer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Behind barrier installations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tapers</th>
<th>Initial taper length per lane (m)**</th>
<th>150</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Subsequent taper length per lane (m)</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>K</td>
<td>Minimum distance between tapers (m)***</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delineation devices</th>
<th>All tapers (m)</th>
<th>2.5</th>
<th>2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cones parallel to the lane (eg between tapers and alongside the working space) (m)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

- **For temporary and permanent speeds less than 80km/h use the C2.6 Level 2 worksite layout distances table.**
- **The desirable sign spacing distance must be used wherever possible. The minimum sign spacing distance may only be used where there are road environment constraints. Where only one sign is erected in advance of the start of a cone taper the distance from the sign to the start of the taper must be 2xC.**
- A longitudinal safety zone is not required when a barrier completely protects the approach end of the worksite. Refer subsections H1.17 and H1.18
- **Taper length is based on a single lane shift of 3.5m.**
- **Must be altered if required to meet the supplementary TLS distance.**

<table>
<thead>
<tr>
<th>Lane widths</th>
<th>Speed (km/h)</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Lane width (m)</td>
<td>2.75</td>
<td>2.75</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.25</td>
<td>3.25</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Except for delineation device spacings, which are maximum values, the distances specified in the above table are minimum values. Approach sign distances and spacings, the initial taper(s) and any longitudinal safety zone associated with that taper must be based on the permanent speed limit. The layout distances of the remainder of the worksite, including any subsequent tapers, may be based on the TSL, provided the TSL is applied prior to the first taper.