## CHAPTER 5

## TYPICAL TRAFFIC CONTROL LAYOUTS FOR FREEWAY WORK ZONES

| LEGEND |  |
| :---: | :---: |
| O | TUBULAR MARKER - TYPE D |
| $\bigcirc$ | CONE - TYPE A, B or C |
| P | SIGN |
| 8 | TRAFFIC CONTROL PERSON (TCP) |
|  | SHADOW, BUFFER or WORK VEHICLE |
| 当 |  |
|  | WORK AREA |
| 8 | PORTABLE LANE CONTROL SIGNAL |
| $\underset{x \rightarrow x \rightarrow x}{ } \lim _{x}$ | BARRICADES and FENCING |
| \%\%\% | FLASHING ARROW BOARD (FAB) |
| A | HIGH LEVEL WARNING DEVICE (HLWD) |

## TABLE B

Positioning of devices on freeways.

| $*$ | Regulatory <br> speed limit | $\mathbf{8 0 - 1 1 0}$ <br> $\mathbf{k m} / \mathbf{h}$ |
| :---: | :--- | :---: |
| 1 | Taper length <br> for lane closure | 165 <br> $(1: 45)$ |
| 2 | Maximum distance <br> between tubular <br> markers for (1) | 10 |
| 3 | Minimum tangent <br> distance between <br> tapers | 200 |
| 4 | Distance between <br> construction signs | 200 |

Dimensions shown are in metres and are minimums, except for $2^{*}$.
Cones and tubular markers will generally be used only in daylight but if used at night must be reflectorized. Barricades, flexible drums or temporary delineator posts are generally used during hours of darkness and must be reflectorized.
Dimensions 4* represent the minimum advance placement distance for initial signs as well as distances between subsequent signs in multi-sign series.
Downstream tapers should have a minimum length of 15 m per lane.

Figure 5.1.1 Advance Warning Area - Longer Term Work


- The same signing is required in the opposite direction only if work operations affect traffic in the opposite direction.
- Construction speed zone is shown as a typical example of legal speed reduction which should only be imposed if warranted. Any existing speed limit signs within the zone must be covered or removed.

Figure 5.3.1 Work on Shoulder - Moving and Stationary Work


- For moving operations cones may be omitted.
- When work is not in progress but the work area has not been cleared, care should be taken to isolate it from the travelled roadway with delination devices and Type A flashing yellow lights (nighttime) or Type B flashing yellow lights (daytime).

Figure 5．4．1 Continuous Slow Moving Work Without Lane Closure

－Typical applications sweeping，flushing etc．
－Distance of C－44 should not exceed 8 km ．
－C－45 or other appropriate sign displayed on rear of shadow vehicle．

Figure 5．5．1 Stationary and Intermittent Moving Work With Lane Closure


Figure 5．6．1（a）Median Cross Over（Near Side Signing）

－Signing as shown in Figure 5．6．1（b）Median Cross Over（Far Side Signing）is also required．
－Construction speed zone is shown as a typical example of speed zone reduction．
－For high volume locations concrete median barriers may be considered to separate opposing traffic．

Figure 5．6．1（b）Median Cross Over（Far Side Signing）

－Signing as shown in Figure 5．6．1（a）Median Cross Over（Near Side Signing）is also required．
－Construction speed zone is shown as a typical example of speed zone reduction．
－For high volume locations concrete median barriers may be considered to separate opposing traffic．

Figure 5.7.1 Two Lanes Closed On Three Lane Roadway


- Construction speed zone is shown as a typical example of speed zone reduction.

Figure 5.8.1 Lane Closure at Open Exit Ramp


Figure 5．9．1 Lane Closure at Open Entrance Ramp

－If there is adequate acceleration lane length，the R－2 Yield sign can be replaced with a TW－38 Merge sign．

Figure 5．10．1 Temporary Closure of Exit Ramp


