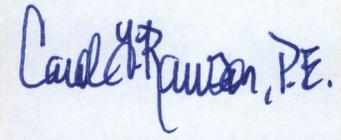




MEMORANDUM

TO: District Engineers **DATE:** August 6, 2012

FROM: Carol T. Rawson, P.E., Director
Traffic Operations Division 

SUBJECT: Traffic Control Plan (TCP) 6 Series Standard Sheets

The Traffic Operations Division has revised the standard sheets for Traffic Control Plan (TCP) – 6 series.

The standard sheets are revised to bring them into compliance with the 2011 Texas Manual on Uniform Traffic Control Devices (TMUTCD). The sheets will be applicable to all new construction projects beginning with the February 2013 letting.

Following is a summary of the changes to each standard sheet:

General

- Dimensioned longitudinal buffer space as “B” referring to new “Minimum Suggested Longitudinal Buffer Space” now shown in table below LEGEND.
- Deleted note for shadow vehicle for Construction and Maintenance contract work made redundant by other changes.
- Changed text from “Flashing Arrow Panel” to “Flashing Arrow Board” per TMUTCD.
- Added a check mark in the Typical Usage box under “Intermediate Term Stationary” except on the “Short Term Freeway Closure Sequence” standard, now TCP(6-7) – 12, previously TCP(6-8) - 98.
- Revised the spacing table to include information on 80 mph roadways.
- Removed spacings from the table for posted speeds of less than 45 mph.
- Removed the Minimum Sign Spacing “X” Distance column from the table since sign spacing is shown on the plan views.
- Showed a “30’ Min.” dimension between the work location and the protection vehicle.
- Modified the guidance for the use of shadow vehicles to include the phrase “if it can be positioned 30’ to 100’ in advance of crew exposure...”
- Included the protection vehicle in the “Work Space” since materials or equipment are not to be staged in the buffer space per the TMUTCD.
- Modified portable changeable message signs (PCMS) to show 2 Phase messages and in some cases to allow the second phase to contain appropriate messages formatted as per the Barricade and Construction (BC) 6 standard sheet.
- Removed the upper range of distances for channelizing devices from the spacing table for consistency with the TMUTCD.
- Removed the triangle symbol for optional devices from the shadow vehicle locations since shadow vehicle requirements are shown.

- Moved boxes highlighting shadow vehicle usage near the notes or title blocks.
- Updated sign nomenclature to match 2011 TMUTCD and 2012 Standard Highway Sign Designs for Texas (SHSD).
- Removed boxes requiring the use of pre-qualified products as information is on BC standards.
- Required protection vehicles with Truck Mounted Attenuators (TMAs) to have warning lights rather than the option for lights or flags.
- Added notes that allow END ROAD WORK signs shown to be omitted when they would conflict with other END ROAD WORK signs already in place for the project.
- Removed the downstream tapers to allow construction vehicles to exit the work space from a closed lane, rather than merging from a shoulder.

TCP(6-1) – 12

- Added a second shadow vehicle for the two-lane closure on TCP(6-1b) to increase worker safety.
- Changed the ROAD WORK AHEAD sign with a 1 MILE plaque, to the correct ROAD WORK 1 MILE sign.
- Modified the typical channelizing device note to include the use of 42" cones.
- Added a note allowing approved versions of signs with distances on the sign face to be used when signs (typically roll-up) are mounted at 1'.
- Reinforced the requirement for signs to be mounted at 7' for intermediate term stationary work.
- Removed the note on flags and warning lights for signs since TxDOT does not use warning lights on orange signs with our current sheeting types. Flags are allowed as per TMUTCD.
- Added recommendation for floodlights for night work zones.

TCP(6-2) – 12

- Dimensioned the 10' space between the barricade and signs at the ramp closure.
- Added the END ROAD WORK sign on TCP(6-2b) for consistency.

TCP(6-3) – 12

- Deleted note allowing omission of the Added Lane Symbol sign.
- Changed the CW4-3R Added Lane Symbol sign to a CW4-6R Added Lane Symbol sign for consistency with the TMUTCD.
- Shifted the location of the shadow vehicle on TCP(6-3b) from straddling the edgeline to the center of the closed lane to improve protection for workers.
- Moved the location of one of the R11-2bT RAMP CLOSED signs from beside the shadow vehicle to upstream of the shadow vehicle.
- Added description "Work Area Beyond Ramp" to title block.
- Moved the location of the R11-2bT RAMP CLOSED sign at the exit ramp on TCP(6-3b) from in front of the barricade to behind the barricade for consistency with other standards.
- Modified PCMS messages for consistency with BC guidance on message composition including an option for numbered exits.
- Removed the requirement to cover, remove or place EXIT CLOSED signs over existing large guide signs for work zones of such short time frames.

TCP(6-4) – 12

- Moved the location of the R11-2bT RAMP CLOSED sign at the exit ramp on TCP(6-4a) from in front of the barricade to behind the barricade for consistency with other standards.
- Shifted the location of the shadow vehicle on TCP(6-4b) from straddling the edgeline to the center of the closed lane to improve protection for workers.
- Added description "Work Area at Exit Ramp" to title block.
- Modified PCMS messages for consistency with BC guidance on message composition including an option for numbered exits.
- Added tightened channelizing device spacing adjacent to the gap for the exit ramp in TCP(6-4b) consistent with recent research recommendations.
- Removed the requirement to cover, remove or place EXIT CLOSED signs over existing large guide signs for work zones of such short time frames.

TCP(6-5) – 12

- Added dimensions for the taper that shifts exiting traffic onto the shoulder in TCP(6-5a) and for the tangent section prior to the ramp.
- Added description "Work Area Beyond Exit Ramp" to title block.
- Provided location dimensions to the E5-2 EXIT OPEN signs.

TCP(6-6) – 12

- Deleted the previous TCP(6-6) – 98A and renumbered the previous TCP(6-7) – 98A as TCP(6-6) – 12.
- Eliminated distance plaque under the CW20FY-3D FREEWAY CLOSED AHEAD sign since the distance is called for on the PCMS unit.
- Added note for additional devices or law enforcement to be used to warn of queuing if it extends beyond the advance warning signs.
- Added note for entrance ramps within the signing to be closed when possible.
- Changed CW20-5L LEFT LANE CLOSED signs prior to multiple lane closures to CW20-5aTL "X" LEFT LANES CLOSED signs for consistency with the TMUTCD.
- Shifted the second and third flashing arrow board to the beginning of the tapers for which they warn for consistency with the TMUTCD.
- Added a R11-2 ROAD CLOSED sign and a CW1-6 Large Arrow sign near the exit for consistency with the TMUTCD.

TCP(6-7) – 12

- Renumbered the previous TCP(6-8) – 98 to TCP(6-7) – 12.
- Modified the maximum short duration closure time from 20 minutes to 15 minutes based on projected queue lengths.
- Replaced flaggers at the control point with barrier vehicles with TMAs for enhanced safety for both flaggers and law enforcement.
- Added a dimension of "Varies 1000' Min." from the control point to the first warning sign.
- Added a ROAD CLOSED AHEAD sign to the advance warning for consistency with the TMUTCD.
- Removed the check mark under SHORT TERM STATIONARY from the TYPICAL USAGE table.
- Switched the sequence of the DO NOT DRIVE ON SHOULDER and the BE PREPARED TO STOP signs to provide earlier warning of the potential stopped traffic.

- Revised the Law Enforcement Officer Vehicle (LEOV) location to the shoulders at the control point to improve the officer's safety and to keep shoulders blocked.
- Revised the sequence for RELEASING STOPPED TRAFFIC showing opening from left to right by clearing LEOVs and barrier vehicles in sequence.
- Added note calling for relocation of the PCMS sign prior to executing a second closure if traffic queued past the advanced warning signs during the first closure.
- Changed the minimum number of LEOVs required to one for each lane plus one to serve as the Warning LEOV.
- Added a recommendation for an additional LEOV to be located with the Engineer's or Contractor's Point of Contact (POC) to improve communications with all LEOVs.
- Changed the distance from the Warning LEOV to 1000' to 1500' in advance of the traffic queue for consistency with the FHWA Guide for Law Enforcement Personnel in Work Zones.
- Added a note in a box for emphasis that this plan is intended for locations/times when traffic volumes are less than 1000 passenger cars per hour per lane.

The revised standard sheets are available in MicroStation and PDF formats at the following web address:

<http://www.txdot.gov/insdtdot/orgchart/cmd/cserve/standard/toc.htm>

If you have any questions, please contact Michael Chacon at (512) 416-3120 or me at (512) 416-3200.

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