

INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 22-06

April 20, 2022

TO: All Design, Operations, District Personnel, and Consultants

FROM: /s/David Boruff

David Boruff

Manager, Office of Traffic Administration

Traffic Engineering Division

SUBJECT: Revisions to Maintenance of Traffic Standards

REVISES: Indiana Design Manual (IDM) Chapter 503

EFFECTIVE: Lettings on or after September 1, 2022

The Standards Committee (SC) has just approved revisions to the standard drawing series on Traffic Control Devices (801-TCDV), Traffic Control Lane Closures (801-TCLC), Traffic Control Shoulder Closures (801-TCSC), and Traffic Control Temporary Closures (801-TCTC). Some of these revisions will affect plan detailing and pay items. Those revisions include:

- 1. The standard initial merge taper length entering the work zone for all interstate and freeway projects will be based on 70 mph speed regardless of the permanently posted speed limit. This change recognizes that in urban areas operating speeds significantly exceed the posted speed limit on a regular basis. Subsequent merges throughout the work zone will also be based on 70 mph speeds unless a variation is deemed appropriate by engineering judgment- prevailing operating speeds at the location should be considered and documented with through a level 2 design exception. Following the same reasoning, interstate and freeway shift taper lengths for a full 12 ft shift should be 420 ft. (801-TCDV-03)
- 2. Tall Cones (42" Channelizers) may be specified on interstate and freeway tangents in lieu of drums where the effective lane width with drums would be less than 10 ft. The effective lane width is the usable pavement width for a lane after adjusting for any channelizing devices or temporary traffic barrier that may be in the lane (801-TCDV-04).

Design Memo 22-06

- 3. For shifts of multiple lanes on interstates and freeways, the starting point of temporary longitudinal pavement markings edge lines and lane lines must be staggered in accordance with INDOT Standards. Unless otherwise determined by engineering judgment where 12 ft lane widths will be maintained, the stagger distance should be 40 ft from line to line, e.g., for a shift to the left the temporary lane line shift will begin 40 ft downstream of the left temporary edge line shift and then the right edge line shift will be 40 ft downstream from the temporary lane line shift. For shifts into a segment where the lane width will be reduced from 12 ft to 11 ft the amount of stagger should be 80 ft from temporary line to temporary line (801-TCLC-02)
- 4. If the entire width of a lane needs to be closed, e.g., concrete pavement patching the MOT plans should detail the channelizing devices in the adjacent, open lane with the near edge of the channelizing device shown at the permanent lane line between the closed and adjacent open lanes. (801-TCLC-04, -07, -09)
- 5. A longitudinal buffer space should be provided in advance of any interstate or freeway lane closure. The length of this space should be based on MUTCD table 6C-2. This space is to be shown immediately upstream of any shadow vehicles that are specified. (801-TCLC series, except sheet 11).
- 6. When a center lane closure is needed on an interstate or freeway with three travel lanes per direction, the left (inside) lane should also be closed. This is considered a safer and more viable method for the contractor compared to the adjacent lanes on the right and left being open to traffic (801-TCLC-08). The approved lane closure schedules in the Interstate Highway Congestion Policy are based on single lane closures so the closure of a center lane will require an exception to the policy. Long term center lane closure applications typically require type 4 temporary traffic barriers (moveable).
- 7. Shoulder closure tapers should be 1/3 L (one third the length of a merge taper) (801-TCSC-03, -04, -06).
- 8. Shoulder closures on an interstate or freeway for roadside work that will be longer than 14 days in duration will require barrier wall to protect the work area rather than channelizing devices to close the shoulder (801-TCSC-04).
- 9. Channelizing devices may be used rather than temporary barrier to close a shoulder on a two-way, non-divided highway. (801-TCSC-06)

In addition to the standard drawing revisions, the SC approved a revision to the 801 section of the Standard Specifications that stipulates payment for Worksite Speed Limits in effect continually whether the contractor is actively working or not be made with the pay item *Temporary Worksite Speed Limit Assembly, Continuous Use, each.* Worksite speed limits that are in effect only when contractor is present and working will be paid for as *Temporary Worksite Speed Limit Assembly, Intermittent Use, each.*

Design Memo 22-06 2 | Page

The corresponding revisions to the relevant IDM sections are forthcoming. Currently, the revised standard drawings are available in the final draft minutes of the meeting on the SC webpage, and can be accessed via the following link:

 $\frac{https://www.in.gov/dot/div/contracts/standards/sc/2022/mar/SC_Final\%20Draft\%20Minutes\%20220}{317.pdf}$

General questions should be directed to Dave Boruff, Office of Traffic Administration Manager, at dboruff@indot.in.gov

Design Memo 22-06 3 | Page