

### 616.23.3.21 (TA-21) Lane Closure of Left Lane on Far Side of Intersection

| SPEED | SIGN SPACING (ft.) |             | TAPER LENGTH (ft.)         |                        | OPTIONAL BUFFER LENGTH (ft.) (B) | LONGI-TUDINAL TRANSITION (X) | CHANNELIZER SPACING (ft.) |                    |
|-------|--------------------|-------------|----------------------------|------------------------|----------------------------------|------------------------------|---------------------------|--------------------|
|       | Undivided (S)      | Divided (S) | Shoulder <sup>1</sup> (T1) | Lane <sup>2</sup> (T2) |                                  |                              | Tapers                    | Buffer/ Work Areas |
| 0-35  | 200                | 200         | -                          | 245                    | 120                              | 120                          | 15                        | 25                 |
| 40-45 | 350                | 500         | -                          | 540                    | 220                              | 270                          | 20                        | 50                 |
| 50-55 | 500                | 1000        | -                          | 660                    | 335                              | 330                          | 50                        | 100                |
| 60-70 | 1000               | 1000        | -                          | 840                    | 550                              | 420                          | 60                        | 100                |

<sup>1</sup> Shoulder taper length based on 10 ft. (standard shoulder width) offset    <sup>2</sup> Lane taper length based on 12 ft. (standard lane width) offset

| ROADWAY TYPE    | SIGN HEIGHT            | MAXIMUM WORK ZONE LENGTH (L) |
|-----------------|------------------------|------------------------------|
| URBAN           | 1' Portable<br>7' Post | 1 Mi.                        |
| RURAL DIVIDED   | 1' Portable<br>7' Post | 2 Mi.                        |
| RURAL UNDIVIDED | 1' Portable<br>5' Post | 3 Mi.                        |



This typical application is applicable to intersections with right of way control on all approaches.

A protective vehicle **shall** be used while work is in progress when space allows. The protective vehicle **should** be equipped with a TMA and positioned at least 150 ft. in advance of the work space. The protective vehicle **may** be eliminated if the roadway is posted at 45 mph or below, the work vehicle is positioned in advance of the work space, and the work vehicle uses activated rotating lights or strobe lights.

At locations where left turn movements are minimal or where the inclusion of the turning traffic with the traffic using the adjacent open lane will not affect capacity of the approach, it is acceptable to close any lane not carried through the intersection prior to the intersection. Thereby, eliminating the turn bay shown. If left-turn movements are significant, however, the left lane **may** be left open prior to the intersection but restricted to left-turn movements only. In this case, all channelization devices prior to the intersection are eliminated except those that might be used to form a temporary island emphasizing the mandatory turning movement.

If the work space extends across the sidewalk, the crosswalk **should** be closed using the information and devices shown in 616.23.3.25 (TA-25) Crosswalk Closures and Pedestrian Detours.

Buffer and taper lengths noted in table **may** be modified to fit conditions.

For short duration operations, signs and channelizers **may** be reduced or eliminated.

For mobile operations where workers are on foot and move with the operation, channelizers **may** be reduced or eliminated.

Where possible, signs **should** be provided on both sides of the affected approach when the approach is two or more lanes wide.

For high speed facilities, channelizer spacing **may** be reduced to 1/2 spacing noted in table.

Other appropriate signs **may** be used in lieu of the ROAD WORK AHEAD sign.

Supplemental warning methods **may** be used to call attention to the work zone.

For long-term operations, refer to 616.23.3.9 (TA-9) Lane Closure on Two-Lane Highways Using Traffic Control Signals and TCFO Section 616.23.2.5.1.4 Flags and Advance Warning Rail System.

