| SPEED | SIGN SPACING (ft.) |  | TAPER LENGTH (ft.) |  | OPTIONALBUFFERLENGTH (ft.)(B) | CHANNELIZER SPACING (ft.) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Undivided (S) | Divided <br> (S) | Shoulder ${ }^{I}$ (T1) | Lane ${ }^{2}$ (T2) |  | Tapers | Buffer Work Areas |
| 0-35 | 200 | - | 70 | 245 | 120 | 35 | 50 |
| 40-45 | 350 | - | 150 | 540 | 220 | 40 | 100 |
| 50-55 | 500 | - | 185 | 660 | 335 | 50 | 100 |
| 60-70 | 1000 | - | 235 | 840 | 550 | 60 | 100 |
| 1 Shoulder taper length based on 10 ft . (standard shoulder width) offset $\quad 2$ Lane taper length based on 12 ft . (standard lane width) offset |  |  |  |  |  |  |  |


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


| $\square$ | Channelizer | $\square$ | Truck Mounted Attenuator (TMA) |
| :---: | :---: | :---: | :---: |
| $\underline{L}$ |  | Ebr | Protective Vehicle |
| $\varnothing$ | Truck or Trailer <br> Mounted Arrow Panel |  | Work Space |

A protective vehicle shall be used while work is in progress. The protective vehicle should be equipped with a TMA and flashing arrow panel 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.

Channelizer spacing may be reduced to discourage turning traffic from entering the two-way left turn lane.

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.

Additional warning signs shall be erected at each intersection with another state highway within the work zone. Upon the discretion of the supervisor, additional warning signs may be erected at other intersections within 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 616.23.2.5.1.4 Flags and Advance Warning Rail System.

