1. TAPER LENGTH FORMULAS

- **FOR SPEEDS OF 40 MPH AND LESS**
  - \( L = 90 - \frac{S}{2} \)
  - \( W = 90 - \frac{S}{2} \)

- **FOR SPEEDS OF 45 MPH AND GREATER**
  - \( L = 125 - \frac{S}{2} \)
  - \( W = 125 - \frac{S}{2} \)

2. CHANNELIZING DEVICES

- **A** - Merging and Shift Tapers: Use a minimum of 1 device per ft of lane closure width, plus 1 additional device to start.
- **B** - Shoulder, One-Lane Two-Way, and Downstream Tapers: Use a minimum of 1 device per 3 ft of width or portion thereof, plus 1 additional device to start.
- **C** - On Tangent: \( L = 2 \times \frac{S}{2} \) = spacing up to 120 ft maximum.
- **D** - Length of Buffer Zone (BZ) is the distance from end of lane closure taper to work space, or any obstruction prior to work space.

**TRAFFIC CONTROL DEVICE LEGEND**
- **Sign (Fixed or Portable)**
- **Channelizing Device (See Std Dwg TC 2A)**
- **Drums or Directional Indicator Barricade**
- **Flagging Station**
- **Arrow Board**
- **Barrier**
- **Direction of Traffic**
- **Type III Barricade**
- **Direction of Work Vehicle**

**REDUCED SPEED SHOULDER WORK ZONE SIGNING**

**NOTES:**
1. **Use the Pre-Construction Posted Speed Limit Prior to Work Zone to Compute the Sign Spacing**, Taper Length, Buffer Zone, and Work Clear Zone Distances. Use the Work Zone Reduced Speed Limit to Determine the Taper Spacing for Channelizing Device.
2. **Remove or Cover All Work Zone Speed Limit Assemblies (RS2-1a) with a Reduced Speed Limit and the Work Zone Reduced Speed Limit Ahead (WZRS2-1A) Signs When No One Is Working. Except As Approved By the Region Traffic Engineer.**
3. **Additional Signs May Be Used in the Work Zone for Supplemental Notification of the Work Zone Speed Limits.**
4. **Use Supplemental Left Side Signage for High-Speed Divided Highways.**
5. See TC 40 Series STD DWGS For Sign Design/Sign and Layout.
6. **Fines Double (RS2-6a) and Fines Double With Fine Notification (RS2-6d) Signs May Be Used Interchangeably.**
7. **Place Additional Work Zone Speed Limit Assemblies (RS2-1a), Fines Double (RS2-6a), and/or Fines Double With Fine Notification (RS2-6d) Signs at All Major Intersections and Interchanges Within the Project When Reduced Speeds and/or the Fines Double or Fines Double With Fine Notification Signing Option Is Used.**

**DEVICE LEGEND**

<table>
<thead>
<tr>
<th>ROAD TYPE</th>
<th>POSTED SPEED MPH (S)</th>
<th>MINIMUM TAPER LENGTH(L)</th>
<th>LENGTH OF BUFFER(BZ)</th>
<th>MINIMUM SIGN SPACING (SS)</th>
<th>ONE LANE TWO-WAY FLAGGING</th>
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**EXAMPLE ONLY. NOT TO SCALE. SETUP TO BE SITE SPECIFIC.**

**WORK SPACE**

**REDUCED SPEED WORK ZONE SIGNING**

**NOTES:**
1. **Use the Pre-Construction Posted Speed Limit Prior to Work Zone to Compute the Sign Spacing**, Taper Length, Buffer Zone, and Work Clear Zone Distances. Use the Work Zone Reduced Speed Limit to Determine the Taper Spacing for Channelizing Device.
2. **Remove or Cover All Work Zone Speed Limit Assemblies (RS2-1a) with a Reduced Speed Limit and the Work Zone Reduced Speed Limit Ahead (WZRS2-1A) Signs When No One Is Working. Except As Approved By the Region Traffic Engineer.**
3. **Additional Signs May Be Used in the Work Zone for Supplemental Notification of the Work Zone Speed Limits.**
4. **Use Supplemental Left Side Signage for High-Speed Divided Highways.**
5. See TC 40 Series STD DWGS For Sign Design/Sign and Layout.
6. **Fines Double (RS2-6a) and Fines Double With Fine Notification (RS2-6d) Signs May Be Used Interchangeably.**
7. **Place Additional Work Zone Speed Limit Assemblies (RS2-1a), Fines Double (RS2-6a), and/or Fines Double With Fine Notification (RS2-6d) Signs at All Major Intersections and Interchanges Within the Project When Reduced Speeds and/or the Fines Double or Fines Double With Fine Notification Signing Option Is Used.**