REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

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<tr>
<th>MARK</th>
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<th>LENGTH</th>
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<tbody>
<tr>
<td>A (8'-0&quot; NW)</td>
<td>5</td>
<td>6'-1&quot;</td>
</tr>
<tr>
<td>A (14'-0&quot; NW)</td>
<td>5</td>
<td>8'-1&quot;</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>AS REQ'd</td>
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<tr>
<td>T</td>
<td>5</td>
<td>4'-3&quot;</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>3'-10&quot;</td>
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DOWEL

- 1" Ø Smooth Bar 2'-0"

BAR 5B

1" Ø DOWEL

REINFORCING STEEL NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. All reinforcing steel at the open joints will have a 2" minimum cover.
3. Lap splices for Bars 5B will be a minimum of 2'-2".
4. Lap splices for Bars 5V and 5S will be a minimum of 2'-8".
5. The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of Deformed wire meeting the requirements of Specification Section 931.

EXPANSION JOINT Spacing

- (50'-0" Min., 1'-0"
- 14'-0"
- NW)

Spacing 1" Ø Dowels

FRAGRACING STEEL BENDING DIAGRAMS

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APPLICATION DETAILS:

1. CONSTRUCTION REQUIREMENTS: Construct the Trench Footing and expansion joint bars plumb, do not construct the Trench Footing perpendicular to the roadway surface. Slip forming is not permitted.
2. CONCRETE: Use Class III concrete for slightly aggressive environments. Use Class V concrete for moderately or extremely aggressive environments. Concrete mix be in accordance with Specification Section 350.
3. DOWELS: Dowel Load Transfer Devices will be hot-dip galvanized ASTM A36 smooth round bar or GFRP smooth round bars with a minimum shear strength of 22ksi in accordance with ASTM C7617.
4. Install Dowel Load Transfer Devices in accordance with Specification Section 350.
5. Shear Keys in footing are required when GFRP bars are used for Dowel Transfer Devices. Provide at 30'-0" maximum intervals as shown.
6. Construct 1" V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between 1/2" Expansion Joints and/or Begin or End Trench Footing. V-Groove locations are to coincide with V-Groove locations in the Railing/Noise Wall.
7. Expansion Joint Spacing. Expansion Joint Spacing are to be a minimum of 2'-0" on both sides for the entire depth of the Trench Footing. See Typical Section for details.
8. Match Cross Slope of Travel Lane or Shoulder.
9. Spacing shown is along the Gutter Line.
10. Work this Standard Drawing with one or both of the following:
   a. Index No. 5210 - Traffic Railing/Noise Wall (8'-0"
   b. Index No. 5211 - Traffic Railing/Noise Wall (14'-0"

CONCRETE:

- Use Class II concrete for slightly aggressive environments.

FILL REQUIREMENTS:

- Fill is required a distance of 4'-0" on both sides of the entire depth of the Trench Footing. See Typical Section for details.

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<td>Reinforcing Steel (Typical)</td>
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<td>Additional Rein. @ Expansion Joint</td>
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ITEMS FOR ESTIMATED TRENCH FOOTING QUANTITIES:

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BAR 5A

BAR 5T

BAR 5V

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