**TRAFFIC RAILING/NOISE WALL NOTES**

1. This railing has been structurally evaluated to be equivalent or greater in strength to a safety shape/Noise Wall combination railing which has been crash tested to NCHRP Report 350 TL-4 Criteria.

2. CONSTRUCTION REQUIREMENTS: Construct the Traffic Railing/Noise Wall and joints plumb, do not construct the Traffic Railing/Noise Wall perpendicular to the roadway surface. Slip forming is not permitted.

3. CONCRETE: Use Class II concrete for slightly aggressive environments. Use Class IV concrete for moderately or extremely aggressive environments. Concrete will be in accordance with Specification Section 396.

4. Construct 3/8" Open Joints plumb and perpendicular or radial to Gutter Line. Provide at 90'-0" maximum intervals as shown. 3/8" Open Joint locations are to coincide with 3/8" Expansion Joints in footings.

5. Construct 3/8" V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between 3/8" Open Joints and/or Begin or End Traffic Railing/Noise Wall. V-Groove locations are to coincide with V-Groove locations in footings.

6. 14'-0" Noise Wall End Taper is required when Railing/Noise Wall is adjacent to an 8'-0" Traffic Railing/Noise Wall. Noise Wall End Taper may be used when an 8'-0" Traffic Railing/Noise Wall End Taper is provided (see Index No. 5210 for details). See Roadway Plans for Traffic Railing/Noise Wall End Treatment.

7. Work this Standard Drawing with Index No. 5210 - Traffic Railing/Noise Wall (8'-0") and one or more of the following:
   a. Index No. 5213 - Traffic Railing/Noise Wall T-Shaped Spread Footing.
   b. Index No. 5214 - Traffic Railing/Noise Wall L-Shaped Spread Footing.
   c. Index No. 5215 - Traffic Railing/Noise Wall_Trench Footing.

---

**TRAFFIC RAILING/NOISE WALL (14'-0")**

**INDEX NO.** 5211

---

**DESCRIPTION:**

This railing has been structurally evaluated to be equivalent or greater in strength to a safety shape/Noise Wall combination railing which has been crash tested to NCHRP Report 350 TL-4 Criteria.

**CONSTRUCTION REQUIREMENTS:**

- Construct the Traffic Railing/Noise Wall and joints plumb, do not construct the Traffic Railing/Noise Wall perpendicular to the roadway surface.
- Slip forming is not permitted.

**CONCRETE:**

- Use Class II concrete for slightly aggressive environments.
- Use Class IV concrete for moderately or extremely aggressive environments. Concrete will be in accordance with Specification Section 396.

**DETAIL A:**

- Provides the location of End Taper.
- See Plans for location of End Taper.

---

**ELEVATION OF INSIDE FACE OF TRAFFIC RAILING/NOISE WALL**

- Reinforcing Steel not shown for clarity.
- T-Shaped Spread Footing Shown, L-Shaped Spread Footing and Trench Footing Similar.

---

**TERMS AND CONDITIONS:**

- Slip forming is not permitted.
- Construction details shown are for general guidance and may vary based on specific project requirements.

---

**REVISED:**

07/01/13

**DESIGN STANDARDS:**

FDOT 2014

**SHEET NO.** 1 of 3
ELEVATION OF TRAFFIC RAILING/NOISE WALL REINFORCING STEEL
(Bars 5S1 in Railing not shown for clarity)

NOTES:
1. Field Cut Bars 5S & 5S1 in Noise Wall End Taper as required to maintain minimum cover.
2. See Index Nos. 5213, 5214 and 5215 for footing reinforcement.
3. 3/8" Open Joint may be omitted when 8'-0" Traffic Railing/Noise Wall End Taper is adjacent to a
   14'-0" Traffic Railing/Noise Wall End Taper as shown on Sheet 1. See Index No. 5210 for
   reinforcement details and spacing. Bars 5S2 are not required when 3/8" Open Joint is omitted.
4. Bar spacing shown is along the Gutter Line.

ELEVATION OF TRAFFIC RAILING/NOISE WALL END TAPER
(Bars 5S1 in Railing not shown for clarity)
DESCRIPTION:

1. See Index Nos. 5213, 5214 and 5215 for footing reinforcement.
2. At ½" open joints, plug the lower 3" portion of the open joint by filling it with mortar in accordance with Specification Section 400.
3. Fire hose access holes are required at or near fire hydrant locations. Field cut reinforcement as required to maintain 2" minimum cover at access holes. Locate fire hose access holes at least 10'-0" from ½" open joints when possible.

NOTES:

1. See Index Nos. 5213, 5214 and 5215 for footing reinforcement.
2. At ½" open joints, plug the lower 3" portion of the open joint by filling it with mortar in accordance with Specification Section 400.
3. Fire hose access holes are required at or near fire hydrant locations. Field cut reinforcement as required to maintain 2" minimum cover at access holes. Locate fire hose access holes at least 10'-0" from ½" open joints when possible.

REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5</td>
<td>5'7&quot;</td>
</tr>
<tr>
<td>R</td>
<td>5</td>
<td>13'9&quot;</td>
</tr>
<tr>
<td>S1</td>
<td>5</td>
<td>AS REG.</td>
</tr>
<tr>
<td>S2</td>
<td>5</td>
<td>7'-3&quot;</td>
</tr>
</tbody>
</table>

BARS S51 & S52

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. Bars SR may be continuous or spliced at construction joints. Lap splices for Bars SR and S51 will be a minimum of 2'-2".
4. 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.

ESTIMATED TRAFFIC RAILING BARRIER/NOISE WALL QUANTITIES

ITEM | UNIT | QUANTITY |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete (Traffic Railing (Excluding any thickening)</td>
<td>LF/FT</td>
<td>103.43</td>
</tr>
<tr>
<td>Concrete (Noise Wall, excluding any thickening)</td>
<td>LF/FT</td>
<td>0.302</td>
</tr>
<tr>
<td>Reinforcing Steel (Railing/Noise Wall) (Typical, excluding footing reinforcement)</td>
<td>LF/FT</td>
<td>103.43</td>
</tr>
<tr>
<td>Additional Reinforcement @ Open Joint (Railing/Noise Wall)</td>
<td>LF</td>
<td>761.91</td>
</tr>
</tbody>
</table>

CROSS REFERENCE:

For locations of Section A-A and Detail "A", see Sheet 1.