**Signal Placement at Railroad Crossing (2-Lane Design)**

**Signal Placement at Railroad Crossing (4-Lane Design)**

General Notes:
1. No guardrail is proposed for signals however, some form of impact attenuation device may be specified for certain locations.
2. Advance flasher to be installed when and if called for in plans or specifications.
3. Top of foundation shall be no higher than 4" above finished shoulder grade.
4. Type of traffic control device
   1. Flashing signals
   2. Flashing signals with counteracts
   3. Flashing signals with gate
   4. Flashing signals with counteract & gate
5. Class of traffic control devices
   1. Flashing signals – one track
   2. Flashing signals – multiple tracks
   3. Flashing signals and gates – one track
   4. Flashing signals and gates – multiple tracks

Note:
Two separate foundations may be required (one for signals, one for gates), depending on type of equipment used.

* When 12' is deemed impractical the control device can be located as close as 12' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.
GENERAL NOTES
1. The location of flashing signals and stop lines shall be established based on future (or present) installation of gate with appropriate track clearances.

2. Where plans call for railroad traffic control devices to be installed in curved medians, the minimum median width shall be 12'-6".

3. Location of railroad traffic control device is based on the distance available between face of curb & sidewalk. 0'-6" Locate device outside sidewalk. Over 4'-0" Locate device between face of curb and sidewalk.

4. Stop line to be perpendicular to edge of roadway, approx. 15' from nearest roll or 8' from and parallel to gate when present.
**Railroad Crossing at TWD (2)-Lane Roadway**

1. **Future Gate Location**
   - 24" White

2. **Stop Bar Perpendicular to Edge of Travel Way**
   - Sign Location
   - 6" Diagonal Yellow

**Pavement Markings**

- **6" Diagonal Yellow**
- **24" White**
- **Reflection Tape**
- **2" Reflect Tape**

**Traffic Control Devices**

- **First Sign**
  - Location 1
  - 6" Diagonal Yellow

- **Second Sign**
  - Location 2
  - 6" Diagonal Yellow

- **Third Sign**
  - Location 3
  - 6" Diagonal Yellow

**NOTES:**

1. When computing pavement marks, quantities do not include traverse lines.

2. Placement of sign W20-1 in a residential or business district, where low speeds are prevalent, the W20-1 sign may be placed a minimum distance of 100' from the crossing. Where street intersections occur between the RR pavement marks and the tracks an additional W20-1 sign and additional pavement marking should be used.

3. A portion of the pavement markings symbol should be directly opposite the W20-1 sign.

4. Recommended location for W20-61 or W20-62 signs, 100' on the road center line. See Data Table 17.555 for sign details.

5. **Gate Length Requirements**
   - For Two-way undivided sections:
     - The gate should extend to within 1' of the center line. For multiple approaches the maximum gate length may not reach to within 1' of the center line. For those cases, the distance from the gate to the center line shall be a maximum of 4'.
   - For one-way or divided sections:
     - The gate shall be of sufficient length such that the distance from the gate stop to the inside edge of pavement is a maximum of 4'.

**Speed Limit Table**

<table>
<thead>
<tr>
<th>Speed</th>
<th>In Ft</th>
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<tbody>
<tr>
<td>60</td>
<td>400</td>
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<tr>
<td>55</td>
<td>325</td>
</tr>
<tr>
<td>50</td>
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<td>45</td>
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<td>125</td>
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<tr>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>Urban</td>
<td>85</td>
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</table>
### Railroad Gate Arm Light Spacing

<table>
<thead>
<tr>
<th>Specified Length of Gate Arm</th>
<th>Dimension &quot;A&quot;</th>
<th>Dimension &quot;B&quot;</th>
<th>Dimension &quot;C&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Ft</td>
<td>6&quot;</td>
<td>36&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>15-16 Ft</td>
<td>18&quot;</td>
<td>36&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>17-18 Ft</td>
<td>24&quot;</td>
<td>36&quot;</td>
<td>5&quot;</td>
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<td>19-20 Ft</td>
<td>28&quot;</td>
<td>41&quot;</td>
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<td>21-22 Ft</td>
<td>28&quot;</td>
<td>4&quot;</td>
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<td>25-31 Ft</td>
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<td>6&quot;</td>
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<td>32-34 Ft</td>
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<td>35-37 Ft</td>
<td>36&quot;</td>
<td>9&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>38 Ft And Over</td>
<td>36&quot;</td>
<td>10&quot;</td>
<td>10&quot;</td>
</tr>
</tbody>
</table>

### Median Signal Gates for Multilane Undivided Urban Sections

*Three or more driving lanes in one direction, 45 MPH or less*