Superelevation details for eight lane roadway.

**TRANSITION DETAILS - TANGENT TO CURVE**

- Axis of rotation coincides with profile grade location.
- Smooth curves should be established at the time of construction at sections A-F along the profile edges of lines A-D.
- Place 30% of the runoff length within the curve.
- Place 70% of full superelevation at the PC and PT.
- Unless otherwise specified, all lengths are measured along the centerline of construction.

**TRANSITION DETAILS - SPIRAL CURVE**

- Spiral curve length coincides with runoff length (L).
- Possible Tabulation:
  - m = 30% of Runoff Length (L)
  - g = 48' Regardless of Pavement Width
  - L = Distance to Change Cross Slope from 0% to e
  - e = Superelevation Rate
  - x = Distance to Change Cross Slope from 0% to 2.5%
  - s = Normal Shoulder Slope

Refer to specific curve data contained in project plans for tangent runout length (x), runoff length (L) and full superelevation (e).

When spiral curve transitions are not required:
- Place 73% of full superelevation at the PC and PT.
- Place 30% of the runoff length within the curve.

Superelevations on this standard are shown for curves to the right. Curves to the left are a mirror image of what is shown.

Unless otherwise specified, all lengths are measured along the centerline of construction.

Axis of rotation coincides with profile grade location.

- m = 30% of Runoff Length (L)
- g = 48' Regardless of Pavement Width
- L = Distance to Change Cross Slope from 0% to e
- e = Superelevation Rate
- x = Distance to Change Cross Slope from 0% to 2.5%
- s = Normal Shoulder Slope
High Side Shoulder: Maintain normal shoulder cross slope(s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.

Low Side Shoulder: Maintain normal shoulder cross slope(s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.

Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.
CASE C (e ≤ 2.8%)  
(between sections B & C')

CASE B (2.8% < e < 3.6%)  
(between sections C' & C)

CASE A (e ≥ 3.6%)  
(between sections C & D)

LEFT ROADWAY

RIGHT ROADWAY

SECTION AT THE PC OR PT

High Side Shoulder: Maintain normal shoulder cross slope(s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% grade(s) breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.

Low Side Shoulder: Maintain normal shoulder cross slope(s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.

Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.

SECTION WHERE SHOULDER SLOPE TRANSITION BEGINS
### Table of Offsets and Drops for Left Roadway

<table>
<thead>
<tr>
<th>Location of Cross Sections</th>
<th>Offset (ft.)</th>
<th>Slope (%)</th>
<th>Drop (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Line A To Line B</td>
<td>12 12 12 12 12</td>
<td>2.5 2.5 2.5 2.5 2.5</td>
<td>0.30 0.30 0.30 0.30 0.30</td>
</tr>
<tr>
<td>From Line B To Line C</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line C To Line D</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line D To Line E</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line A To Line E</td>
<td>48 48 48 48 48</td>
<td>-0.30 -0.30 -0.30 -0.30 -0.30</td>
<td></td>
</tr>
</tbody>
</table>

*Refer to plan details for shoulder width*

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### Table of Offsets and Drops for Right Roadway

<table>
<thead>
<tr>
<th>Location of Cross Sections</th>
<th>Offset (ft.)</th>
<th>Slope (%)</th>
<th>Drop (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Line A To Line B</td>
<td>12 12 12 12 12</td>
<td>2.5 2.5 2.5 2.5 2.5</td>
<td>0.30 0.30 0.30 0.30 0.30</td>
</tr>
<tr>
<td>From Line B To Line C</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line C To Line D</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line D To Line E</td>
<td>12 12 12 12 12</td>
<td>2.0 2.0 2.0 2.0 2.0</td>
<td>0.24 0.24 0.24 0.24 0.24</td>
</tr>
<tr>
<td>From Line A To Line E</td>
<td>48 48 48 48 48</td>
<td>-0.30 -0.30 -0.30 -0.30 -0.30</td>
<td></td>
</tr>
</tbody>
</table>

*Refer to plan details for shoulder width*