### CONCRETE BARRIER SHY-LINE OFFSET AND FLARE RATE TABLE (SEE NOTE NO. 9 & 10)

<table>
<thead>
<tr>
<th>DESIGN SPEED MPH</th>
<th>SHY-LINE OFFSET FT</th>
<th>INSIDE SHY-LINE FT</th>
<th>AT OR BEYOND SHY-LINE</th>
<th>FLARE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>12</td>
<td>34</td>
<td>161</td>
<td>227</td>
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<td>9</td>
<td>30</td>
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<td>3</td>
<td>21</td>
<td>111</td>
<td>135</td>
</tr>
<tr>
<td>110</td>
<td>3</td>
<td>21</td>
<td>111</td>
<td>135</td>
</tr>
</tbody>
</table>

### Notes

1. PRECAST USING CLASS 400 CONCRETE. ENSURE THAT REINFORCING STEEL IS IN ACCORDANCE WITH SECTION 708 - METALS PROVIDE CONCRETE COVER OVER REINFORCING STEEL UNLESS OTHERWISE NOTED.

2. ENSURE THAT REINFORCING STEEL BENDS ARE MADE IN ACCORDANCE WITH THE LATEST AASHTO STANDARD PRACTICES AND MATERIAL SPECIFICATIONS.

3. THE DIMENSIONS SHOWN IN THE REINFORCING STEEL TABLE ARE MEASURED FROM OUTSIDE TO OUTSIDE - 10" TO 12" OF BENDS ON BAR ENDS UNLESS OTHERWISE NOTED.

4. PROVIDE A 3'-10" SCUPPER FOR DRAINAGE WHEN INDICATED ON THE PLANS.

5. TERMINATE THE BARRIER WITH A CRASHWORTHY END TREATMENT ACCEPTABLE END TREATMENTS MAY INCLUDE PLACING THE BARRIER OUTSIDE OF THE CLEAR ZONE TRANSITION TO 8'-BEAM OR 3'-BEAM GUARDRAIL, A CRASH GUSSET, OR CONNECION TO A STEEL PARAPET.

6. PIN CONNECT BARRIER UNITS WHEN POSTED HIGHWAY SPEEDS ARE 35 MPH OR HIGHER.

7. PIN CONNECTED 10' CONCRETE BARRIERS MAY BE ANGLED APPROXIMATELY 5.5° AT CONNECTIONS. SIXTEEN BARRIER UNITS, ANGLED 5.5° BETWEEN UNITS, ARE NEEDED TO COMPLETE A 90° TURN.

8. WHEN CONNECTING 10' CONCRETE BARRIER TO 20' CONCRETE BARRIER, THE EXPOSED STEEL LIP BARS MAY BE BENT MECHANICALLY, NOT WITH HEAT TO FIT.

9. OFFSET THE BARRIER TO THE SHY-LINE OFFSET OR 1'-11" FROM THE EDGE OF NORMAL SHELTER, THE SHY-LINE OFFSET DISTANCE IS MEASURED FROM THE EDGE OF TRAVELED WAY.

10. FOR SHOULDER OR OPERA INSTALLATIONS, PLACE THE BARRIER WHEN IT IS WITHIN THE SHY-LINE OFFSET. WHEN THE BARRIER IS AT OR BEYOND THE SHY-LINE OFFSET, THE BARRIER MAY BE PLACED.

11. THE BARRIER CAN BE INSTALLED WITH OR WITHOUT STACKS.

A. WHEN INSTALLED WITHOUT STACKS, ALLOW FOR 80° OF DEFLECTION BEHIND THE BARRIER.

B. WHEN INSTALLED AS A MEDIAN BARRIER BETWEEN TWO-WAY TRAFFIC ON HIGHWAYS WITH LESS THAN 24" BETWEEN THE EDGE OF TRAVELED WAY AND THE BARRIER, USE FOUR STACKS IN EVERY PANEL.

C. PLACE 3" TO 24" FROM THE EDGE OF AN EXCAVATION OR SHELTER'S EDGE POINT, USE TWO STACKS PER PANEL ALONG THE TRAFFIC SIDE.

D. ON BRIDGE DECKS, PLACE ANCHOR BOLTS OR DECK BOLTS IN LIEU OF STACKS. USE FOUR BOLTS PER BARRIER SEGMENT. WHEN THE ANCHOR BOLTS ARE EMBEDDED A MINIMUM DEPTH OF 6" OR PER THE INSTRUCTIONS FOR THE FASTENING MATERIAL.

E. DO NOT PLACE OR BOLT BARRIER UNITS THAT EXTEND OVER BRIDGE EXPANSION JOINTS.

12. THE FOLLOWING APPLY WHEN STACKS, ANCHOR BOLTS, OR DECK BOLTS ARE USED.

A. ENSURE THAT THE STACKS OR BOLTS DO NOT PROTRUDE BEYOND THE EXTERIOR FACE OF THE BARRIER SURFACE.

B. DO NOT DRILL ANCHOR HOLES INTO PRESTRESSED CONCRETE DECK PANELS.

C. ENSURE THAT BRIDGE DECK ANCHOR HOLES ARE DRILLED OR CORED SMOOTH AND ROUND.

D. DO NOT USE EXPANSION ANCHORS.

E. TIGHTEN DECK BOLTS DOWN WELL, BOLT LENGTH SHOULD ALLOW AT LEAST ONE COURSE OF THREADS TO SHOW OUTSIDE OF THE BOLT WHEN TIGHTENED.

13. DRAWINGS NOT TO SCALE.