NOTE:
1. See Details C617-80 and C617-81 for timber, structural steel, and hardware details.
2. Extend the fill widening a minimum of 5 feet behind the guardrail, unless otherwise directed by the CO.
3. The guardrail flare shown in the plan view is the minimum length and rate required. As directed by the CO, flare the guardrail so that the terminal section is outside the clear zone.
   If the terminal section cannot be located outside the clear zone, it should be flared as far as practical from the road at the maximum rate indicated on the Guardrail Flare Rates table.

GUARDRAIL FLARE RATE TABLE

<table>
<thead>
<tr>
<th>Design Speed (mph)</th>
<th>Shy line offset (ft)</th>
<th>Flare rate inside shy line (a:b)</th>
<th>Flare rate outside shy line (a:b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>8.0</td>
<td>26:1</td>
<td>14:1</td>
</tr>
<tr>
<td>50</td>
<td>6.5</td>
<td>21:1</td>
<td>11:1</td>
</tr>
<tr>
<td>40</td>
<td>5.0</td>
<td>16:1</td>
<td>8:1</td>
</tr>
<tr>
<td>30 and less</td>
<td>4.0</td>
<td>11:1</td>
<td>7:1</td>
</tr>
</tbody>
</table>

APPROACH & DEPARTURE FLARE WITH FLARED ANCHOR TERMINAL (FAT)

ELEVATION

CONCRETE ANCHOR

SECTION A-A

STEEL BEARING PLATE

ANGLED STEEL SPLICE PLATE
General Information
- All graphics and text will be in the sheet model.
- **Appropriate Applications.**
  Steel-backed timber (SBT) guardrail is an aesthetic roadside barrier.

<table>
<thead>
<tr>
<th><strong>Crash Test Criteria</strong></th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Level</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>FHWA Eligibility Letter</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>TF 13 Designator</strong></td>
<td>Not posted</td>
</tr>
<tr>
<td><strong>Crash Test Report</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

- **Limitations.**
  Need to flare the terminal outside the clear zone since this is a non-crashworthy terminal.

- **Layout Guidance.**
  See AASHTO *Roadside Design Guide*
  Use the FLH Barrier Length of Need Calculator available at
  [https://flh.fhwa.dot.gov/resources/design/tools/Barrier-LON.xlsx](https://flh.fhwa.dot.gov/resources/design/tools/Barrier-LON.xlsx)

Applicable SCRs
- None

Typical Pay Item Used
- **NO PAY ITEM in list yet**

Updates
- **February 2019**
  - New Detail drawing
- **September 2021**
  - Updated for OpenRoads Designer