Impact locations are measured from the centerline of post no. 15. Impact for the 2270P crash test is located 12'-0" [3658] upstream of the centerline of the post.

Install 3 static posts near impact.

Notes:

1. Impact locations are measured from the centerline of post no. 15. Impact for the 2270P crash test is located 12'-0" [3658] upstream of the centerline of the post.

2. The BCT anchor posts are placed in 3' [914] holes.

3. Critical region located between post nos. 9 and 19.

4. Install 3 static posts near impact.
Alternate Blockout Option – 6"x4"x14 1/4" [152x102x362] Blockout with 6"x8"x14 1/4" [152x203x362] Blockout
Note: (1) 6x25 IWRC IPS cables meet the minimum breaking strength of 42.7 kips [190 kN] and may be substituted for the 6x19 IWRC IPS cables.

**Anchor Cable Bearing Plate**

**Part b6**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot;</td>
<td>0.625&quot;</td>
</tr>
<tr>
<td>16&quot;</td>
<td>406.4 mm</td>
</tr>
<tr>
<td>8&quot;</td>
<td>203.2 mm</td>
</tr>
<tr>
<td>203&quot;</td>
<td>5100 mm</td>
</tr>
<tr>
<td>4&quot;</td>
<td>101.6 mm</td>
</tr>
<tr>
<td>102&quot;</td>
<td>2590 mm</td>
</tr>
<tr>
<td>5&quot;</td>
<td>127 mm</td>
</tr>
<tr>
<td>1270&quot;</td>
<td>32200 mm</td>
</tr>
<tr>
<td>8&quot;</td>
<td>203 mm</td>
</tr>
<tr>
<td>2032&quot;</td>
<td>51584 mm</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>19 mm</td>
</tr>
<tr>
<td>6x19 IWRC IPS Cable</td>
<td></td>
</tr>
</tbody>
</table>

**BCT Cable Anchor Assembly (FCA01) Part b4**

**Threaded Entire Length**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>15&quot;</td>
<td>381 mm</td>
</tr>
<tr>
<td>7&quot;</td>
<td>178 mm</td>
</tr>
<tr>
<td>5&quot;</td>
<td>127 mm</td>
</tr>
<tr>
<td>1 1/4&quot;</td>
<td>32 mm</td>
</tr>
</tbody>
</table>

**DETAIL I SCALE 1:4**

- 1"-8UNC [M24] Stud Entire Length
- Standard Swaged Fitting

**Anchor Cable Bearing Plate Part b6**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot;</td>
<td>15.9 mm</td>
</tr>
<tr>
<td>1 1/8&quot;</td>
<td>29 mm</td>
</tr>
</tbody>
</table>

**MGS Southern Yellow Pine Wood Posts**

**BCT Anchor Cable**

**Midwest Roadside Safety Facility**

**DRAWN BY: MDM/JGP/DMH**

**DATE:** 09/27/2011

**SHEET:** 7 of 10

**REV. BY: KAL/JCH/CLM**

**UNITS:** In.[mm]

**SCALE:** 1:4
6’-3” [1905] W-Beam Section, 12 gauge [2.7]  
Part a5

12’-6” [3810] W-Beam Section, 12 gauge [2.7]  
Part a3

12’-6” [3810] W-Beam Section, 12 gauge [2.7], End Section  
Part a4

MGS Southern Yellow Pine Wood Posts  
Rail Section Details
<table>
<thead>
<tr>
<th>Item No.</th>
<th>QTY.</th>
<th>Description</th>
<th>Material Specification</th>
<th>Hardware Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>25</td>
<td>6&quot;x8&quot;x72&quot; [152x203x1829] Southern Yellow Pine Wood Post</td>
<td>SYP Grade No.1 or better</td>
<td>PDE02</td>
</tr>
<tr>
<td>a2</td>
<td>25</td>
<td>6&quot;x12&quot;x14 1/4&quot; [152x305x362] MGS Timber Blockout</td>
<td>SYP Grade No.1 or better</td>
<td>PDB11a</td>
</tr>
<tr>
<td>a3</td>
<td>12</td>
<td>12'-6&quot; [3810] 4–Space W–Beam Guardrail</td>
<td>12 gauge [2.7] AASHTO M180</td>
<td>RWM04a</td>
</tr>
<tr>
<td>a4</td>
<td>2</td>
<td>12'-6&quot; [3810] BCT Terminal Rail Section</td>
<td>12 gauge [2.7] AASHTO M180</td>
<td>–</td>
</tr>
<tr>
<td>a5</td>
<td>1</td>
<td>6'-3&quot; [1905] W–Beam Spacer Guardrail</td>
<td>12 gauge [2.7] AASHTO M180</td>
<td>RWM01a</td>
</tr>
<tr>
<td>a6</td>
<td>25</td>
<td>16D Double Head Nail</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>b1</td>
<td>4</td>
<td>72&quot; [1829] Long Foundation Tube</td>
<td>ASTM A500 Gr. B</td>
<td>PTE06</td>
</tr>
<tr>
<td>b2</td>
<td>4</td>
<td>BCT Timber Post–MGS Height</td>
<td>SYP Grade No.1 or better</td>
<td>PDF01</td>
</tr>
<tr>
<td>b3</td>
<td>2</td>
<td>Strut and Yoke Assembly</td>
<td>ASTM A36 Steel Galvanized</td>
<td>–</td>
</tr>
<tr>
<td>b4</td>
<td>2</td>
<td>BCT Cable Anchor Assembly</td>
<td>φ3/4&quot; 6x19 IWRC IPS Galvanized Wire Rope</td>
<td>FCA01–02</td>
</tr>
<tr>
<td>b5</td>
<td>2</td>
<td>Guardrail Anchor Bracket</td>
<td>ASTM A36 Steel</td>
<td>FPA01</td>
</tr>
<tr>
<td>b6</td>
<td>2</td>
<td>8&quot;x8&quot;x5/8&quot; [203x203x16] BCT Bearing Plate</td>
<td>ASTM A36 Steel</td>
<td>FPB01</td>
</tr>
<tr>
<td>b7</td>
<td>2</td>
<td>2.3/8&quot; [60] O.D.x 6&quot; [152] Long BCT Post Sleeve</td>
<td>ASTM A53 Grade B Schedule 40</td>
<td>FMM02</td>
</tr>
<tr>
<td>b8</td>
<td>112</td>
<td>5/8&quot; Dia. x 1 1/4&quot; [M16x32] Long Guardrail Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBB01</td>
</tr>
<tr>
<td>b9</td>
<td>4</td>
<td>5/8&quot; Dia. x 10&quot; [M16x254] Long Guardrail Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBB03</td>
</tr>
<tr>
<td>b10</td>
<td>25</td>
<td>5/8&quot; Dia. x 22&quot; [M16x559] Long Guardrail Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBB07</td>
</tr>
<tr>
<td>b11</td>
<td>16</td>
<td>5/8&quot; Dia. x 1 1/2&quot; [M16x38] Long Hex Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBX16a</td>
</tr>
<tr>
<td>b12</td>
<td>4</td>
<td>5/8&quot; Dia. x 9 1/2&quot; [M16x241] Long Hex Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBX16a</td>
</tr>
<tr>
<td>b13</td>
<td>69</td>
<td>5/8&quot; [16] Dia. Plain Round Washer</td>
<td>ASTM F844 or Grade 2 Steel</td>
<td>FWC16a</td>
</tr>
<tr>
<td>b14</td>
<td>4</td>
<td>7/8&quot; Dia. x 7 1/2&quot; [M22x191] Long Hex Bolt and Double Recessed Nut</td>
<td>Bolt ASTM A307 or Grade 2 Steel/ Nut ASTM A563 A</td>
<td>FBX22a</td>
</tr>
<tr>
<td>b15</td>
<td>8</td>
<td>7/8&quot; [22] Dia. Plain Round Washer</td>
<td>ASTM F844 or Grade 2 Steel</td>
<td>FWC22a</td>
</tr>
</tbody>
</table>