NOTE:
1. Unless otherwise specified, use any of the options shown as required to meet project-specific conditions.
2. Use consistent guardrail post material throughout the length of the guardrail run.
3. If applicable, conversion of the 8-inch wide G4 blockout to the 12-inch wide MGS blockout may occur anywhere within the length of the G4 to MGS transition shown on this sheet.
4. See Details C617-10, C617-11, C617-31, or C617-32 for other assembly details.

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

9'-4½" omitted post

6'-3" (typ.)

Standard G4 posts
and blocks

Edge of pavement or ground line
at face of rail as applicable

OMITTED POST OPTION

Guardsrail splice at post

Guardsrail splice mid-span

Standard MGS posts
and blocks

6'-3" (typ.)

25' rail height transition

3'-1½"

6'-3" (typ.)

Standard G4 posts
and blocks

Edge of pavement or ground line
at face of rail as applicable

HALF-POST SPACING IN MGS OPTION

Guardsrail splice at post

Guardsrail splice mid-span

Standard MGS posts
and blocks

6'-3" (typ.)

25' rail height transition

3'-1½"

6'-3" (typ.)

Standard G4 posts
and blocks

Guardsrail splice at post

Guardsrail splice mid-span

Edge of pavement or ground line
at face of rail as applicable

HALF-POST SPACING IN G4 OPTION

Guardsrail splice at post

Guardsrail splice mid-span

Standard MGS posts
and blocks

6'-3" (typ.)

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

Pay limits for MGS

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)

5½" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

27¾" (min.)

40'-7½" total guardrail transition length

25' rail height transition

3'-1½"

6'-3" (typ.)
G4 to MGS W-Beam Guardrail Transition

General Information

**Appropriate Applications.**
- This drawing is used to transition the rail height from G4 (27¾” to 29” mounting height) to MGS (31” mounting height) and to transition the location of the splice (G4 has the splice at the post, and MGS has the splice mid-span)

<table>
<thead>
<tr>
<th>Crash Test Criteria</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Level</td>
<td>None</td>
</tr>
<tr>
<td>FHWA Eligibility Letter</td>
<td>None</td>
</tr>
<tr>
<td>TF 13 Designator</td>
<td>Not posted</td>
</tr>
<tr>
<td>Crash Test Report</td>
<td>MwRSF Report No. TRP-03-335-17</td>
</tr>
</tbody>
</table>

**Limitations**
- No crash testing has been performed for this installation. The drawing is based on recommendations from MwRSF.

**Layout Guidance.**
- See the FLH Midwest Guardrail System FAQ document for more information.

**Applicable SCRs**
- Section 563 (if weathering agent applied to galvanized elements)
- Section 617
- Section 710
- Section 725 (if weathering agent applied to galvanized elements)

**Typical Pay Item Used**
- 61701-4500 Guardrail system MGS, type 2, class A steel posts [LNFT] for galvanized steel, steel post
- 61701-4550 Guardrail system MGS, type 2, class A wood posts [LNFT] for galvanized steel, wood post
- 61701-5100 Guardrail system MGS, type 4, class B steel posts [LNFT] for weathering steel, steel post
- 61701-5150 Guardrail system MGS, type 4, class B wood posts [LNFT] for weathering steel, wood post
Note: Use the same pay item as roadside rail.

**Updates**
February 2019
- New Detail drawing