**Bridge Superstructure**

**Control Joint Details**

- Space Control Joints at 10 ft. maximum.
- For additional requirements, refer to "Waterproof Expansion Device" standard plans for superstructure.
- Expansion Joint Design.

**Inside Elevation of Barrier**

- Barrier meets NCHRP 350 TL-4 Requirements on Bridge Deck and TL-3 on Approach Panel.

**General Notes**

- Measure payment length between the outside edges of the barrier from the E8 joint.
- Concrete barrier = 638 lbs./ft. (0.157 cu. yds./ft.)
- Finish all edges of barrier with 1/8" chamfer except where otherwise noted.
- Space control joints at 10 ft. maximum. Refer to superstructure sheet for specific spacing information.
- Barrier quantities are listed in summary of quantities for superstructure.

**Bill of Reinforcement for Barrier**

- Place bar on top of bottom reinforcement mat in deck.
- Use approved products list of crack and joint materials as per MnDOT approved/qualified products list.
- Refer to "Waterproof Expansion Device" standard plans for cover plate details.

**Design Notes**

- Design notes and requirements for additional needs regarding barrier placement.
- Verify length of barrier on Approach Panel (remove prior to plotting final plan).
- Refer to memo to designers (2016-01) for additional requirements regarding barrier placement.

**Detailing**

- Use slipform construction for cast-in-place construction.
- Finish over groove completely hiding the extrusion.
- Extrusion into groove to a depth 1/8" below the surface finish over groove completely hiding the extrusion.

**Slipform Construction**

- For slipform construction, immediately after concrete is placed and while it is still not completely set, one inch thick expansion groove is cut in the surface.