**Concrete Parapet (Type P-1, TL-2)**

*Minimum parapet length on approach panel is 13'-4" with minimum of 12'-0" F503E, F504E, F505E models with accompanying appropriate parapet vertical bars, 12" max. spacing, coordinate with roadway designer to see if guardrail connection is needed. If guardrail connection is included, metal railing or fence on top of parapet. Top of parapet must terminate at least 3'-0" away from the end of the parapet.*

**Design Details**

- Coordinate with roadway designer to see if guardrail connection is needed.
- Verify that utilities or conduits placed within the parapet do not interfere with adjacent parapet vertical bars, 12" max. spacing.
- Parapet must terminate at least 3'-0" away from the end of the parapet.
- If guardrail connection is included, metal railing or fence on top of parapet.

**Approach Panel**

- Cast-in-place construction.
- Coordinates with roadway designer to see if guardrail connection is needed.
- Verify that utilities or conduits placed within the parapet do not interfere with adjacent parapet vertical bars, 12" max. spacing.

**General Notes**

- Continuously ground all metal railings. See the special provisions, refer to the electrical plan and electrical special provisions for details regarding bonding multiple electrical grounding systems.
- For slipform construction, the bent of the reinforcement bar intersections in the parapet.
- Concrete parapet w/adjacent sidewalk (based on a 6" sidewalk height).
- Joint sealant per MnDOT approved/qualified products list.

**Bill of Reinforcement**

<table>
<thead>
<tr>
<th>Bar</th>
<th>No.</th>
<th>Length</th>
<th>Shape</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Design Information**

- **Project No.:** 10'-0" max. spg.
- **State Bridge Engineer:** P.R.O.
- **Certified by:** TROWELL.

**Approvals:**

- Approved: April 09, 2020
- Plan: APPROVED
- Shop: APPROVED
- **Designated Projects:** No.
- **License No.:** 139, 254

**Submitted to:**

- Project: Bridge Superstructure
- Site: Bridge No.
- Plan: APPROVED
- Shop: APPROVED
- **Designated Projects:** No.
- **License No.:** 139, 254

**Special Notes:**

- Minimum raised sidewalk width is 6'-0".
- Joint sealant per MnDOT approved/qualified products list.
- **Crack and Joint Materials:** Silicone joint sealant.
- **Concrete Parapet Quantity:** Listed in Summary of Quantities for Superstructure.

---

**Control Joint Details**

- Joint depth 1" R.

**End View**

- Cast-in-place construction.
- Slipform construction.

**Inside Elevation of Parapet**

- Parapet meets MASH TL-2 Requirements.

**General Notes**

- Ensure all edges of parapet w/1/2" chamfer, except where otherwise noted.
- Space control joints at 10 ft. max., refer to superstructure sheet for specific spacing information.

**Approach Panel**

- Cast-in-place construction.
- Slipform construction.
- Coordinates with roadway designer to see if guardrail connection is needed.
- Verify that utilities or conduits placed within the parapet do not interfere with adjacent parapet vertical bars, 12" max. spacing.

**Approach Curb**

- 1'-6" CLR. inside elevation of parapet.

**General Notes**

- Minimum raised sidewalk width is 6'-0".
- Joint sealant per MnDOT approved/qualified products list.