Bill of Material

<table>
<thead>
<tr>
<th>NO.</th>
<th>TYPE</th>
<th>SIZE</th>
<th>LENGTH</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S1</td>
<td>#16</td>
<td>300mm</td>
<td>813</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>#16</td>
<td>300mm</td>
<td>813</td>
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<td>3</td>
<td>S3</td>
<td>#16</td>
<td>300mm</td>
<td>813</td>
</tr>
<tr>
<td>4</td>
<td>S4</td>
<td>#16</td>
<td>300mm</td>
<td>813</td>
</tr>
</tbody>
</table>

*All bar dimensions are out to out.*

**NOTES**

- The barrier rail in each span shall not be cast until all slab concrete in that span has been cast and has reached a minimum compressive strength of 70 MPa.
- All compression joint seal or expansion joint seal, if required, shall be cast prior to the casting of barrier rail.
- All reinforcing steel in barrier rails shall be epoxy coated.
- The #16 S3 and #16 S4 bars shall be installed using an adhesive anchoring system, after casting the slab, the field bond for the #16 S3 and #16 S4 bars is 82.7 kN of field tensile testing for the bonding system is not required.
- Ground construction joints, when in slab shall be bonded by all exposed faces of the barrier rail, in accordance with Article 620 of the Standard Specifications. The compression joint shall be located at each third point between barriers and expansion joints. Only the compression joint shall be placed at slabs over 2 meters in length or construction joints are required for those segments less than 2 meters in length.

**END OF RAIL DETAILS**

For adhesive anchoring at sawed joints.

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**END VIEW LEVEL**

- Beam building sheath
- Earthing sheath
- Concrete level
- Beam building sheath
- Earthing sheath
- Concrete level

**SECTION THRU RAIL**

- Concrete level
- Beam building sheath
- Earthing sheath
- Concrete level
- Beam building sheath
- Earthing sheath
- Concrete level

**ELEVATION AT EXPANSION JOINTS**

**BARRIER RAIL DETAILS**

- Concrete barrier rail

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*All bar dimensions are out to out.*

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**PROJECT NO.**

**STATION:**

**COUNTY:**

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**DEPARTMENT OF TRANSPORTATION**

**STANDARD**

**CONCRETE BARRIER RAIL**

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**STDS. No. CB91SM**