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 2,000 psi.

All expansion joint seal in required. The joint in the deck shall be sawed prior to the casting of vertical concrete barrier rail.

All reinforcing steel in barrier rails shall be epoxy coated.

The #16 S3 bars shall be installed using an adhesive anchoring system. Any epoxy used for the adhesive anchoring system is not required.

Vertical grooved contraction joints, when 3 in. in depth shall be formed in all exposed faces of the vertical barrier rail in accordance with Article 825 of the Standard Specifications. The contraction joint shall be located at each third point between barrier rail expansion joints and one contraction joint is required at the midpoint of barrier rail. Only one contraction joint is required for those elements less than 50 ft in length. Vertical grooves required for those elements less than 3.5 m in length.

Vertical concrete barrier rail

For vertical concrete barrier rail only

Plan

End view

Elevation at expansion joints

Barrier rail details

Bill of material

For vertical concrete barrier rail only

Bar no. section length weight

Epoxy coated reinforcing steel

Concrete

Concrete barrier rail

End of rail details

For adhesive anchoring at sawed joints

General

Project no.

Station:

State of North Carolina

Raleigh

Department of Transportation

Standard

Vertical concrete barrier rail

No. CBR2SM

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