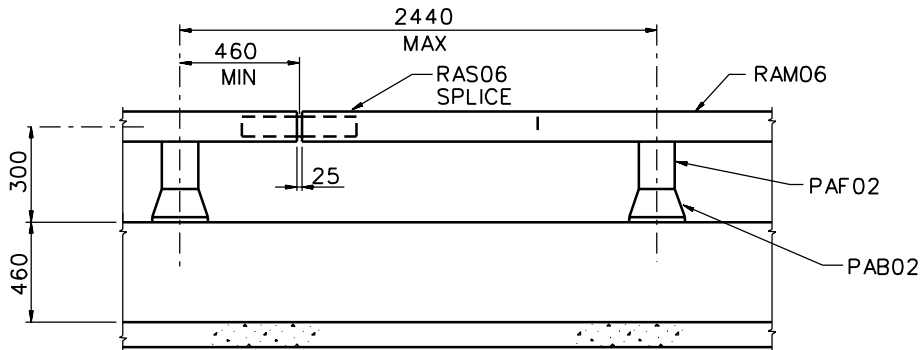
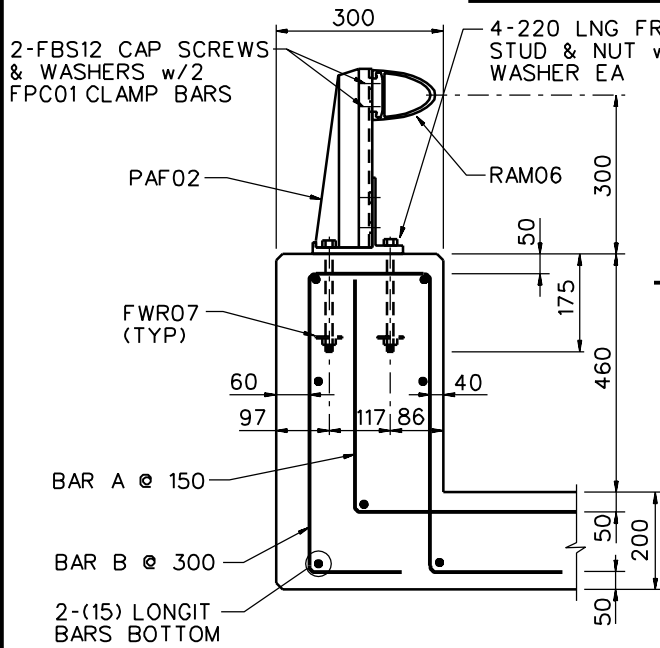


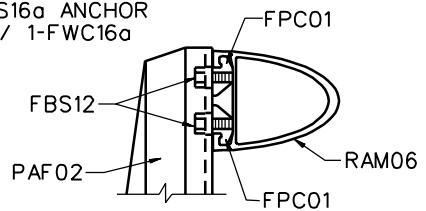
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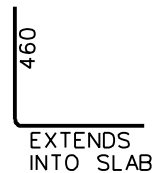
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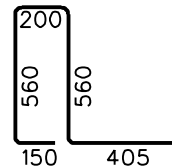
SECTION



RAIL ATTACHMENT DETAIL



BAR A (15)



BAR B (15)

BR1 TYPE C ALUMINUM BRIDGE RAILING

SBA03a

SHEET NO.

REF. NO.

1 of 2

INTENDED USE

The BR1 Type C Aluminum Bridge Railing, also known as the North Carolina Standard One-bar Bridge Railing, is suitable for AASHTO Performance Level 1 locations. It is shown as system number 13 in the 1986 FHWA memorandum on crash-tested bridge railings.

This drawing and specification address only the bridge railing and not the design or detailing of the bridge deck. Only reinforcement directly related to the bridge rail is shown. Bridge decks should be designed to develop the full strength of the bridge railing.

COMPONENTS

Concrete shall develop a minimum 28-day strength of not less than 28 MPa. The concrete shall use a cement conforming to AASHTO M85 (ASTM C150) Type I or II. Reinforcing steel shall be Grade 400 MPa and shall conform to either of the following:

- (a) Epoxy-coated deformed bars as specified in AASHTO M284M (ASTM D3963M).
- (b) AASHTO M31M (ASTM A615M) deformed and plain billet steel reinforcing bars for use with calcium nitrite corrosion inhibitor (30% calcium nitrite solution).

Unit Length = 7320

Designator	Component	Number
FBS12	Cap screw	12
FPC01	Clamp bars	6
FRS16a	Anchor stud and nuts (220 mm)	12
FWC16a	Washer	12
FWR07	Anchor plate (imbedded)	6
PAF02	Extruded aluminum post	3
RAM06	Semi-elliptic aluminum rail	1
RAS06	Splice	1

REFERENCES

R.D. Morgan, *Bridge Rails*, Memorandum to Regional FHWA Administrators, Federal Highway Administration, Washington, D.C., August 28, 1986.

M. E. Bronstad, J. D. Michie, L. R. Calcote, K. L. Hancock, J. B. Mayer, Jr., *Bridge Rail Design and Performance Standards*. Federal Highway Administration, FHWA-RD-87-049, Washington, D.C., 1987.

BR1 TYPE C ALUMINUM BRIDGE RAILING

SBA03a

SHEET NO.

DATE

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03-05-06

