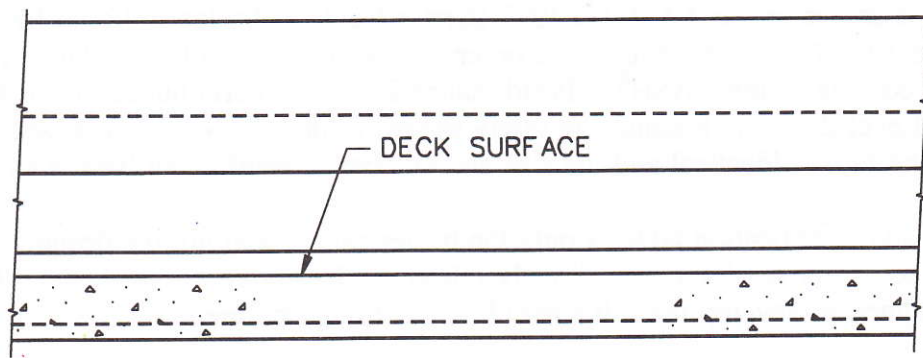
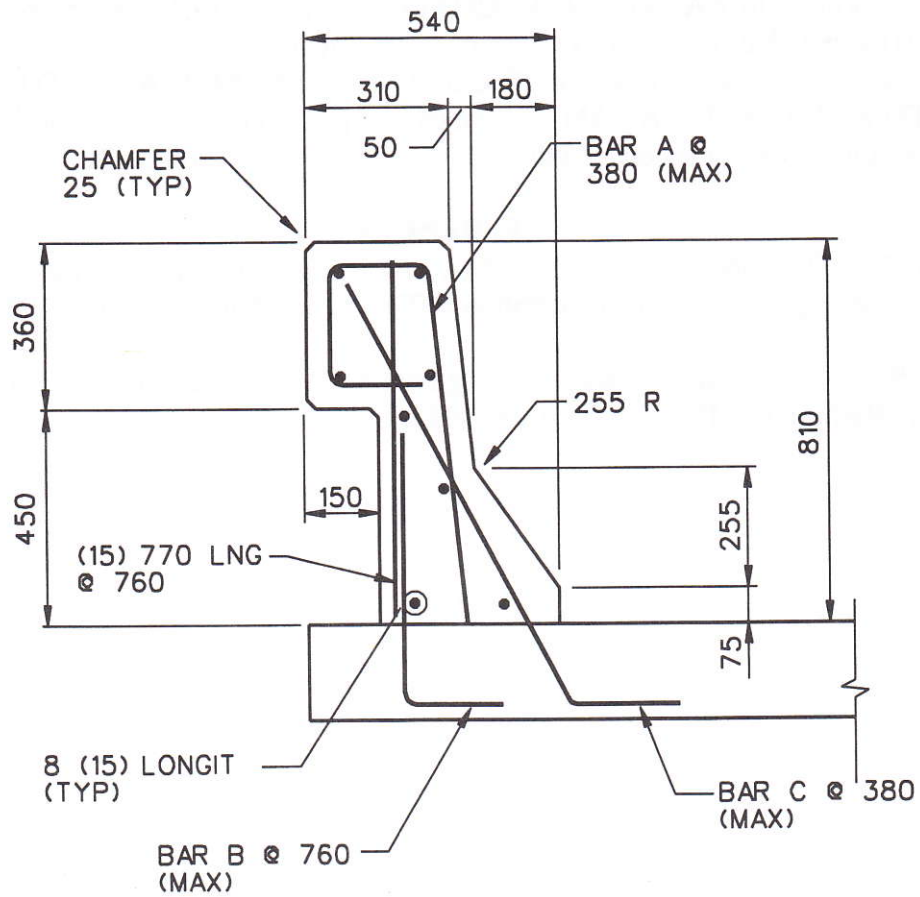


NOTE: USE 40 CONCRETE COVER THROUGHOUT.



ELEVATION



SECTION

1994

SAFETY-SHAPE CONCRETE BRIDGE RAILING



SBC06b

SHEET NO.

REF. NO.

1 of 4

INTENDED USE

This cast-in-place bridge railing is a general purpose AASHTO Performance Level 1 or 2 system that has been extensively used in California. It is also known as the California Type 25 bridge railing and it is shown in the AASHTO 1977 Barrier Guide as bridge rail type BR1. This system is listed in the 1986 FHWA Memorandum on crash tested bridge railings. This system has not been tested according to the AASHTO Performance Level 2 criteria but is shown as a Performance Level 2 system because the safety shaped bridge rail (SBB05b) passed these tests and the shape of the face is identical and the size and number of reinforcing bars is similar.

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).

REFERENCES

Hayes E. Ross, Jr., *Guide for Selecting, Locating, and Designing Traffic Barriers*, American Association of State Highway and Transportation Officials, Washington, D.C., 1977.

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

SAFETY-SHAPED CONCRETE BRIDGE RAILING

SBC06b

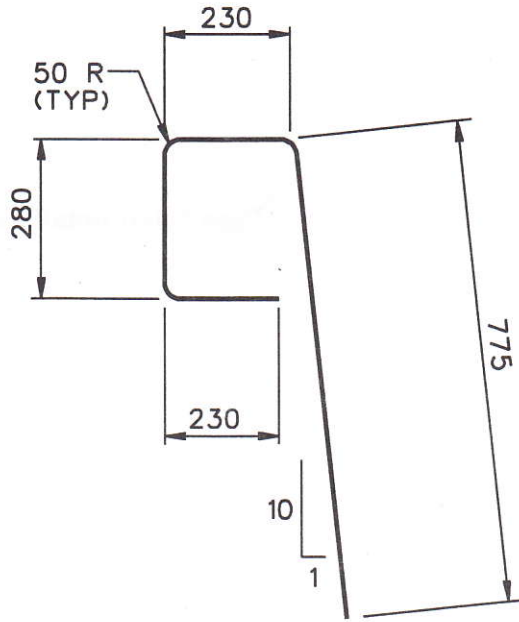
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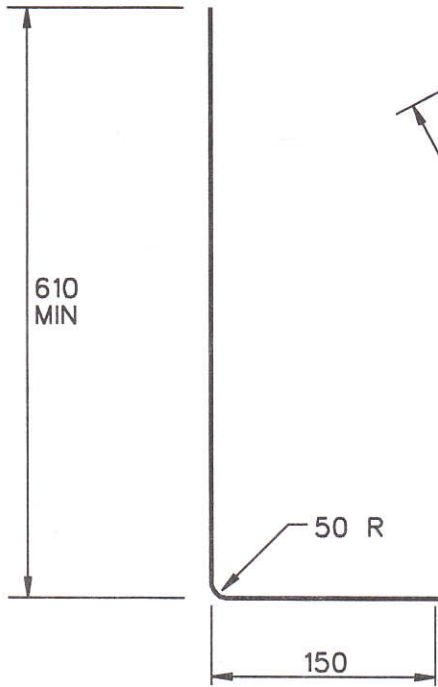
2 of 4

04-08-95

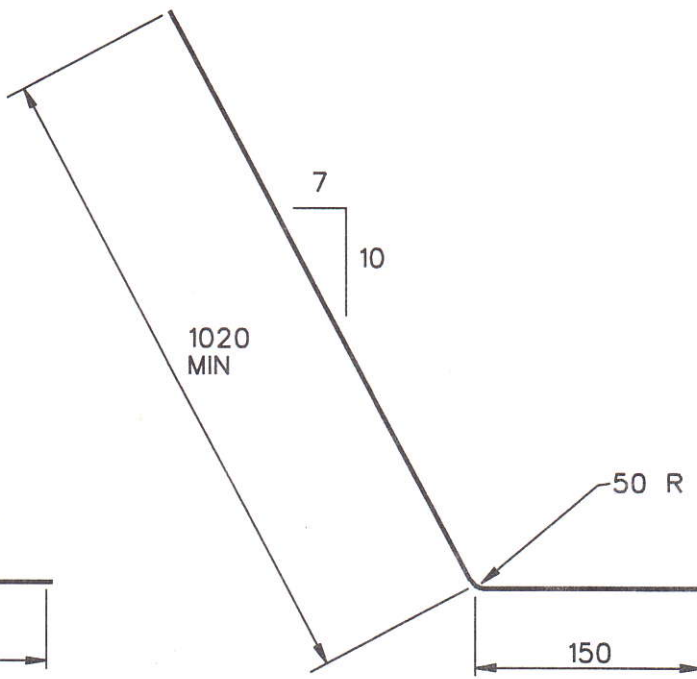




BAR A (15)



BAR B (15)



BAR C (15)

1994

SAFETY-SHAPE CONCRETE BRIDGE RAILING



SBC06b

SHEET NO.

REF. NO.

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SAFETY-SHAPED CONCRETE BRIDGE RAILING

SBC06b

SHEET NO.

DATE

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04-08-95

