

BAR NO.	LENGTH	SHAPE	LOCATION
R501E	7.68	6" x 1" Bent	Rail Vertical
R502E	7.56	5" x 6" Bent	Rail Vertical
R703E	4	6" x 6" Bent	End Post
R704E	4	4-1/2" x 6" Bent	End Post
R705E	8	5" x 6" Bent	End Post
R407E	16	3-1/2" x 4" Subt.	Rail Long.
R408E	32	17" x 0" Subt.	Rail Long.

① 2 C/LINES, 1'-6" MIN. LAP

② S.E. & N.W. CORNERS OF BRIDGE

③ S.W. & N.E. CORNERS OF BRIDGE

④ R501E & R705E

⑤ R501E & R704E

⑥ R501E & R705E

⑦ R501E & R705E

⑧ R501E & R705E

**BILL OF REINFORCEMENT FOR RAILING**

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**GENERAL NOTES:**

Concrete Railing = 405 lbs./ft.  
Concrete Railing = .100 cu. yds./ft.

Rail to be Concrete Mix No. 3X46

Guardrail connection to be Structural Steel, Spec. 3306

Finish all edges of rail with 1/2" vee except where otherwise noted.

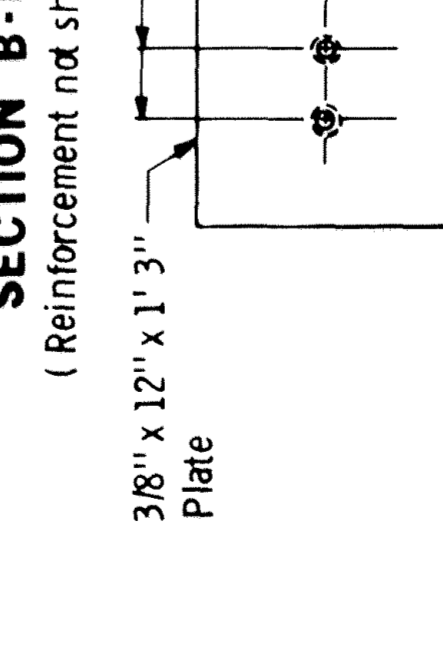
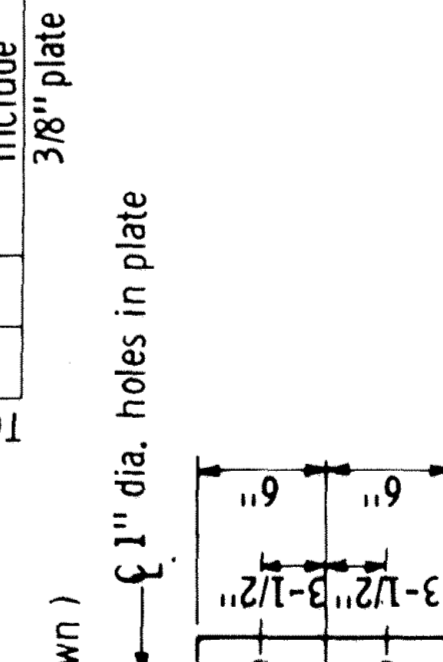
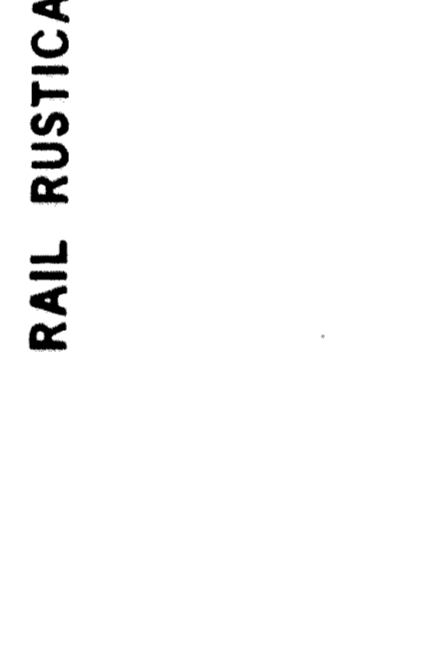
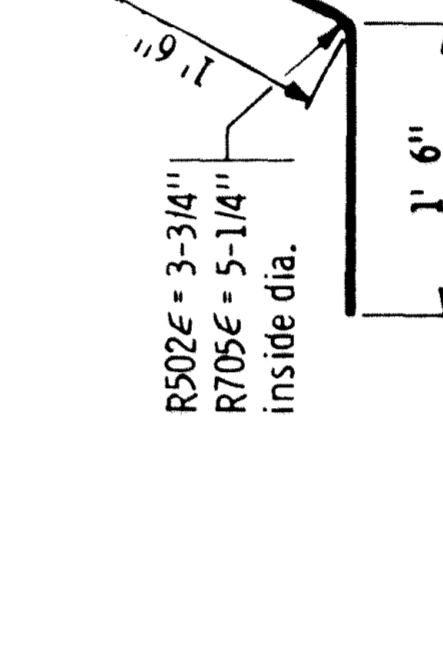
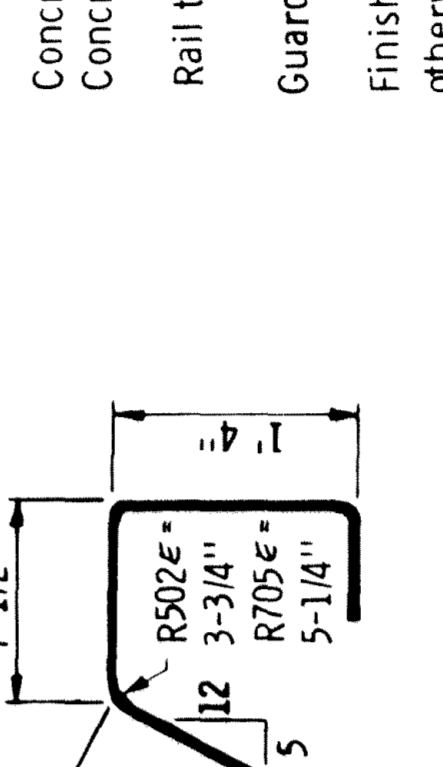
See superstructure sheet for joint spacing.

Maximum spacing of concrete deflection joints shall be 20' 0"

Guardrail connection to be included in price bid for other items.

Rail quantities are included in summary of quantities for superstructure.

Length of railing concrete to be measured for payment between outside faces of railing.



**GUARDRAIL CONNECTION DETAIL**  
Galvanize after fabrication per Spec. 3394  
Estimated Weight = 24 lbs.

**DEFLECTION JOINT DETAILS**  
ELEVATION

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**DEFLECTION JOINT DETAILS**  
ELEVATION

REVISED: NOV. 26, 1985

APPROVED: NOV. 26, 1985

DESIGNED BY: DR. 5-6-87

CHECKED BY: CHM.

TITLE: CONCRETE RAILING (TYPE J) WITH INTEGRAL END POST (Without Wearing Course)

S.A.P. 02-G-22-20

FIG. 5-397.115

Bridge No. 02548

Sheet No. 57 of 64