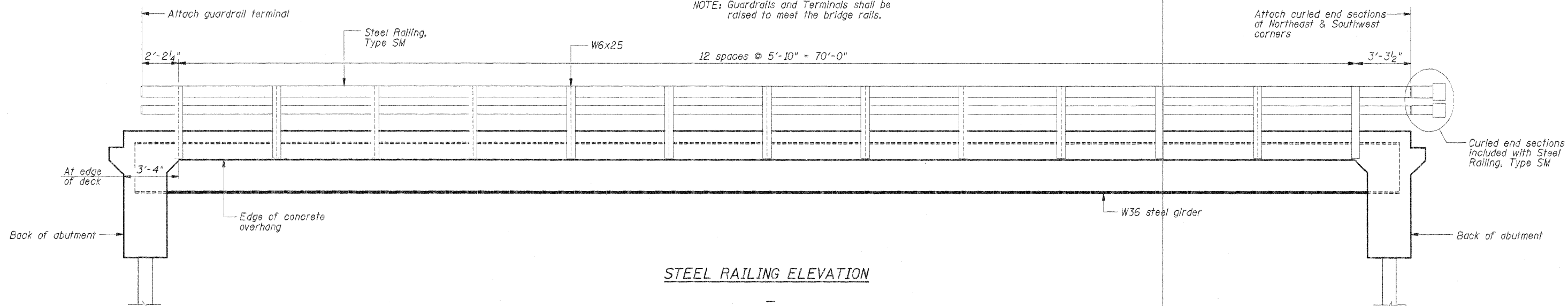


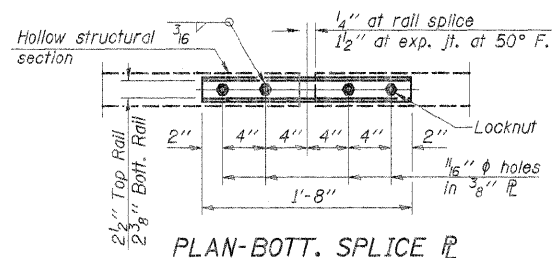
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAS1523	*	CHAMPAIGN	38	31
FED. ROAD DIST. NO. 7	ILLIN-318	FED. AID PROJECT-		

* 09-00956-00-BR
Contract No. 91452

NOTE: Guardrails and Terminals shall be raised to meet the bridge rails.



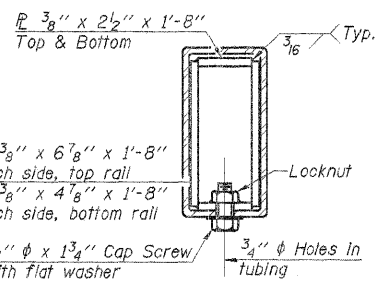
STEEL RAILING ELEVATION



PLAN-BOTT. SPLICE R

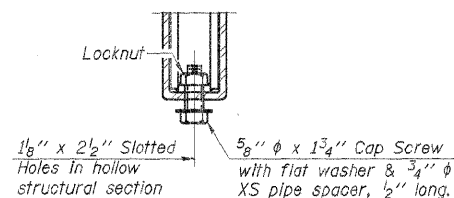
TYPICAL

Updated in Revision 1



SECTION AT RAIL SPLICE

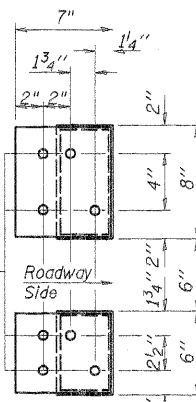
Updated in Revision 1



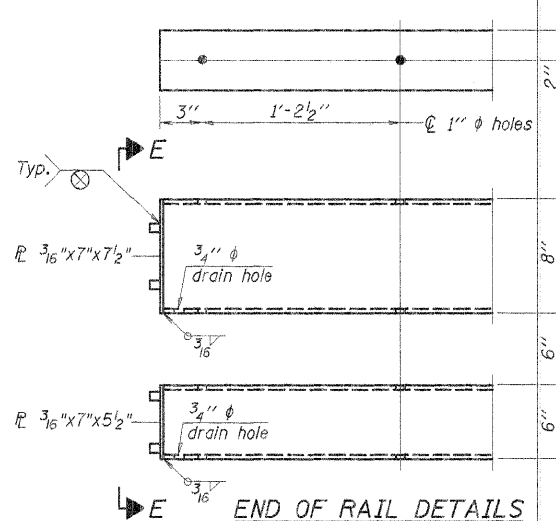
RAIL SPLICE CONNECTION AT EXPANSION JT.

Updated in Revision 1

4 - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032



VIEW E-E



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	151

NOTES

All field drilled holes shall be coated with an approved zinc rich paint before erection.

For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.

Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow ralling movement.

** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

R-34CWS

DSGN	K.J. Hoffmann				
DR	K.J. Hoffmann				
CHK	J.R. Wolf				
APVD	A. Fraunhoffer	NO.	DATE	REVISION	BY



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STEEL RAILING, TYPE SM (SHEET 2 OF 2)

FAS 1523 (CH 55) OVER UPPER SALT FORK
SEC 09-00956-00-BR
CHAMPAIGN COUNTY

SHEET 31

DWG NO. 7052SM.dgr
DATE FEB 2011
PROJ NO. 7052