

FAS ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
-	*	STEPHENSON	14	9

ILLINOIS PROJECT BROS-0177(045)
 * 12-03120-00-BR
 CONTRACT NO. 85587

SCALE: 1"=1'-0"

NO.	DATE	REVISION

wendler
 ENGINEERING SOLUTIONS
 ENGINEERS - SURVEYORS - SCIENTISTS
 www.wendlerinc.com (PH: 815.288.2261)
 Illinois Professional Engineer No. 154-002648

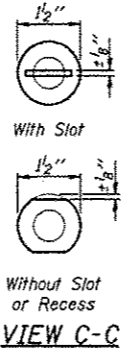
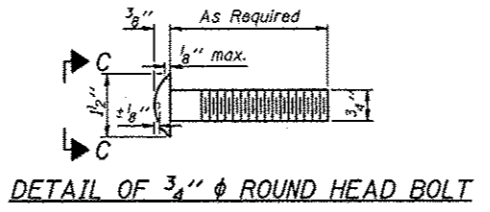
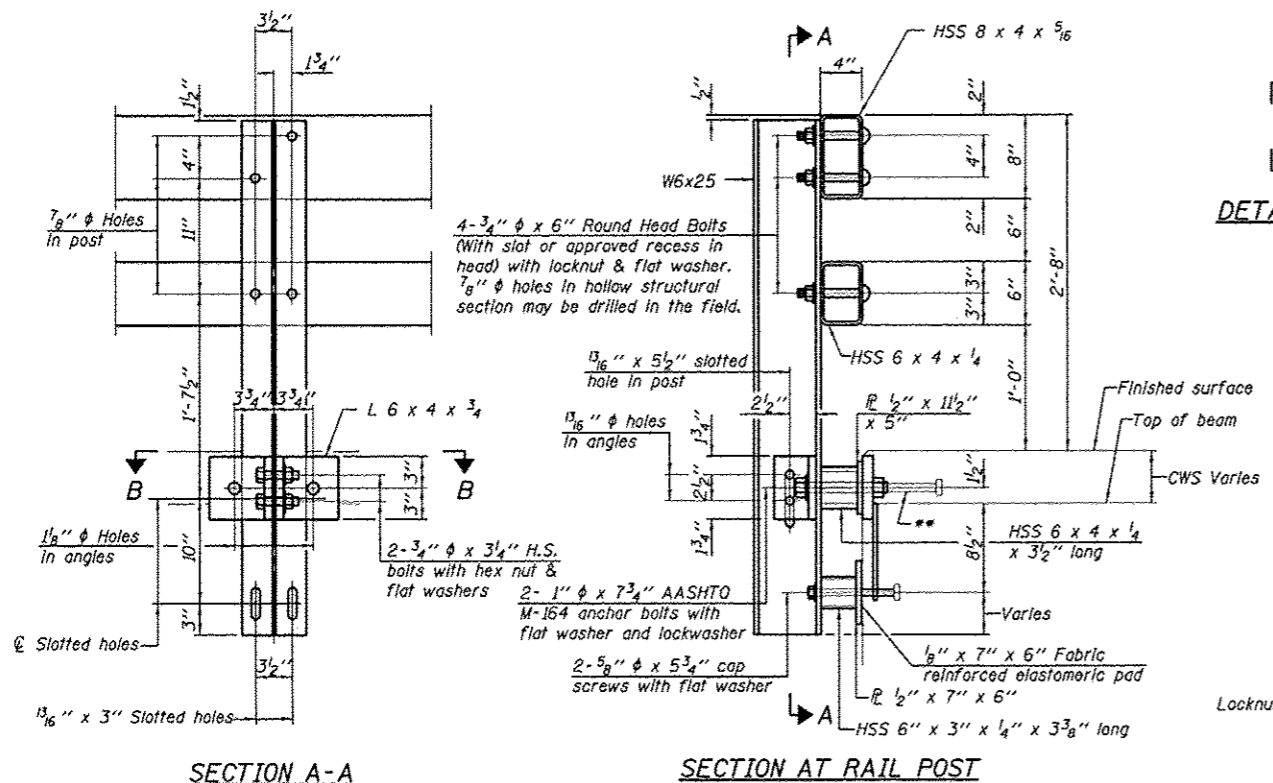
TYPE SM RAIL DETAILS
 OF
 NORTH REES ROAD BRIDGE
 FOR
 STEPHENSON COUNTY

SHEET TITLE
RAIL

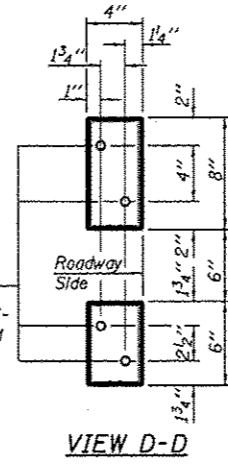
JOB NUMBER
 2120077

DATE
 3/22/2013

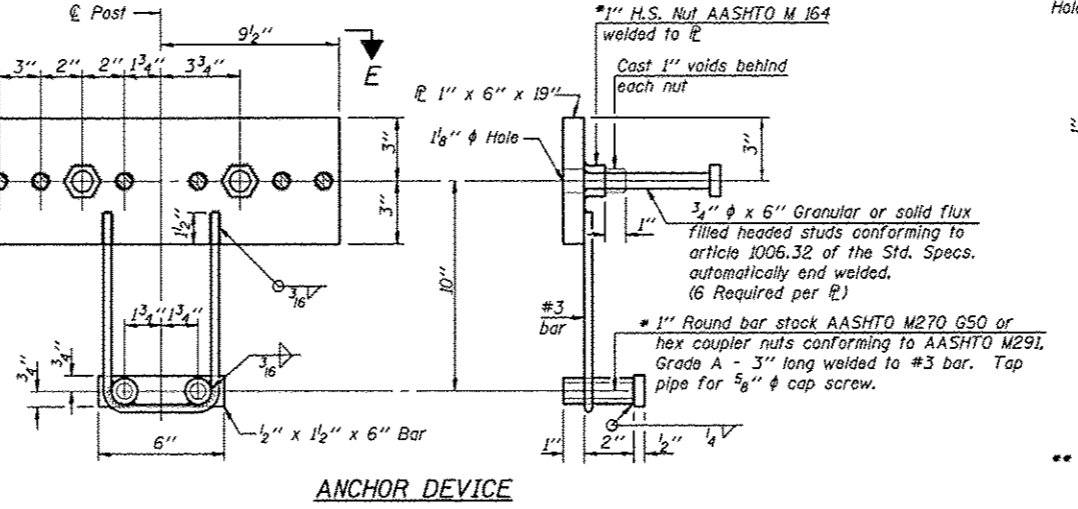
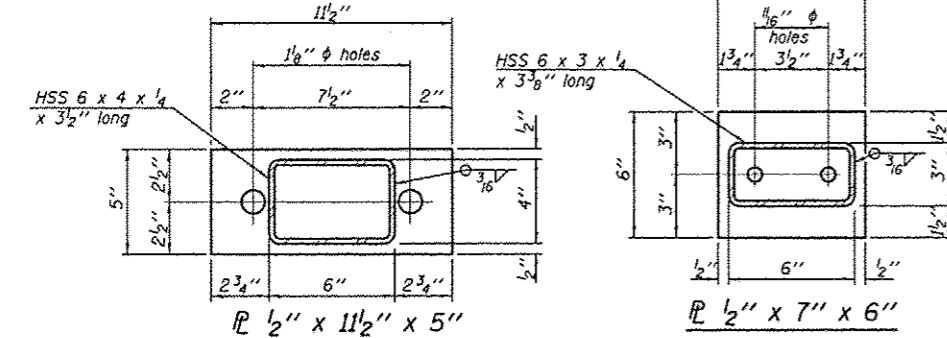
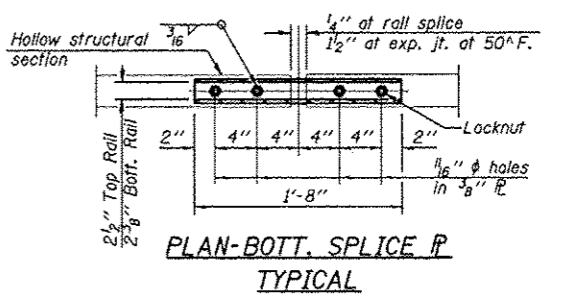
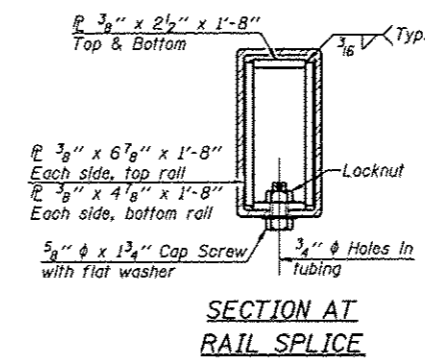
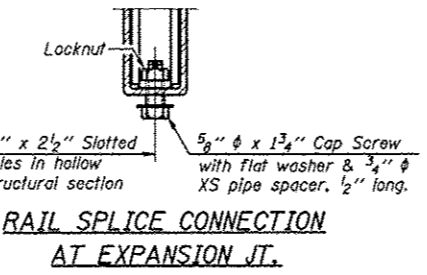
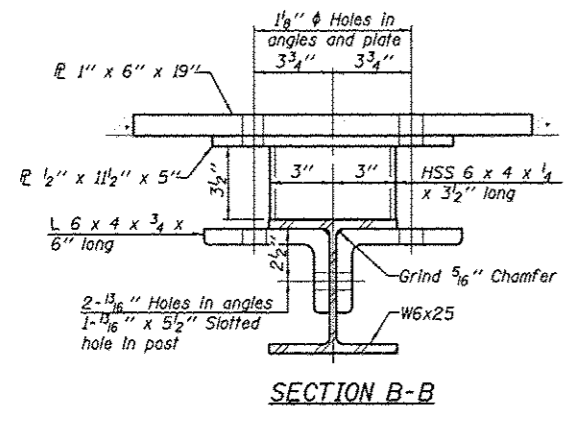
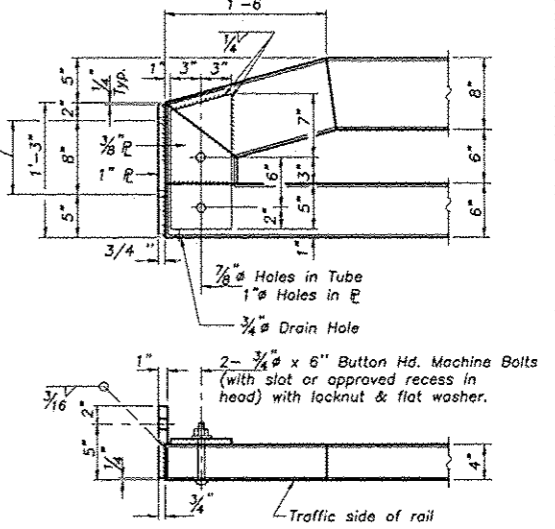
SHEET NO.
 9 of 14



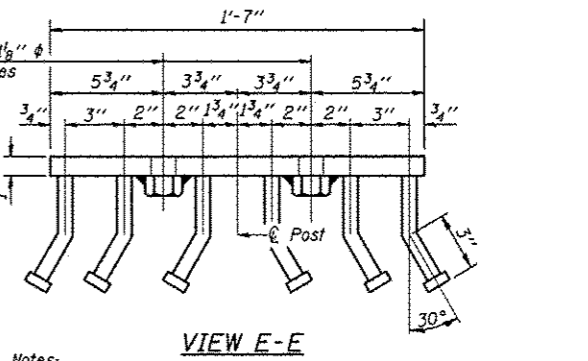
1/2" reduced base welded studs. Provide 4-5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



1/2" Holes for 1 1/2" x 4" Round Head Bolts. Provide 2 flat washers & locknuts for guard rail connection shown on Std. 2340.



*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



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.
 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.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	124

S.N. 089-3287
 TYPE SM RAIL DETAILS
 SECTION 12-03120-00-BR
 STEPHENSON COUNTY

R-34CWS (MODIFIED) (6'-3" Maximum Post Spacing) (5" minimum to 7 1/8" maximum CWS thickness)