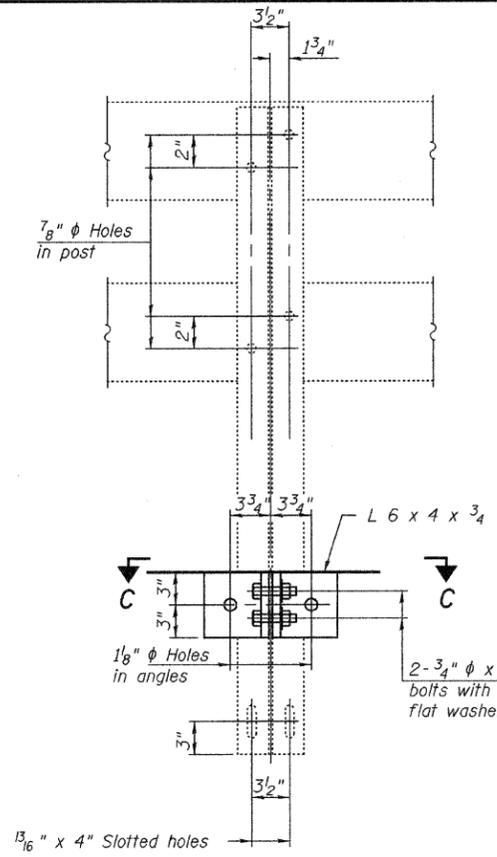


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 3 SHEETS
		Lawrence	11	11	
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT-		

Contract Number: 74290



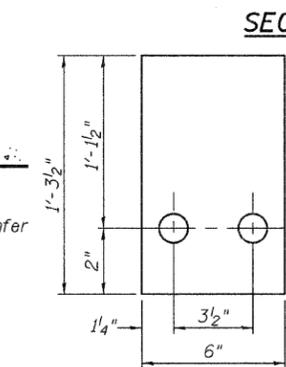
SECTION B-B

2- 3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.

2- 3/4" ϕ x 3 3/4" H.S. bolts with hex nut & flat washers

2- 1" ϕ x 3 3/4" AASHTO M-164 anchor bolts with flat washer and lockwasher
2- 5/8" ϕ x 1 3/4" cap screws with flat washer

Cost of anchor devices and accessories are included with PPC Deck Beam (33" Depth)



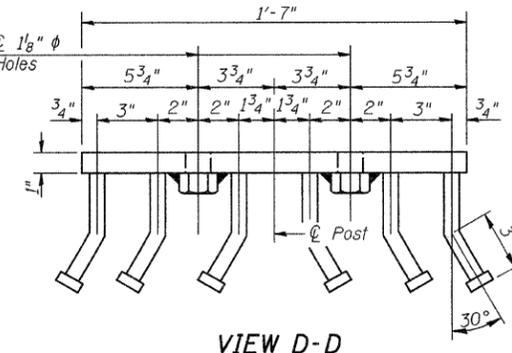
SECTION AT RAIL POST

Span	Span Length	11 Rail Post spaces at	Span Length
Span 2	3'-4 1/2"	6'-4" = 69'-8"	2'-7 1/2"
Span 3	3'-10"	6'-3" = 68'-9"	3'-1"
Span 4	3'-1"	6'-3" = 68'-9"	3'-10"
Span 5	2'-3 1/2"	6'-4" = 69'-8"	3'-4"
Span 6	2'-11"	6'-4" = 69'-8"	2'-10 1/4"

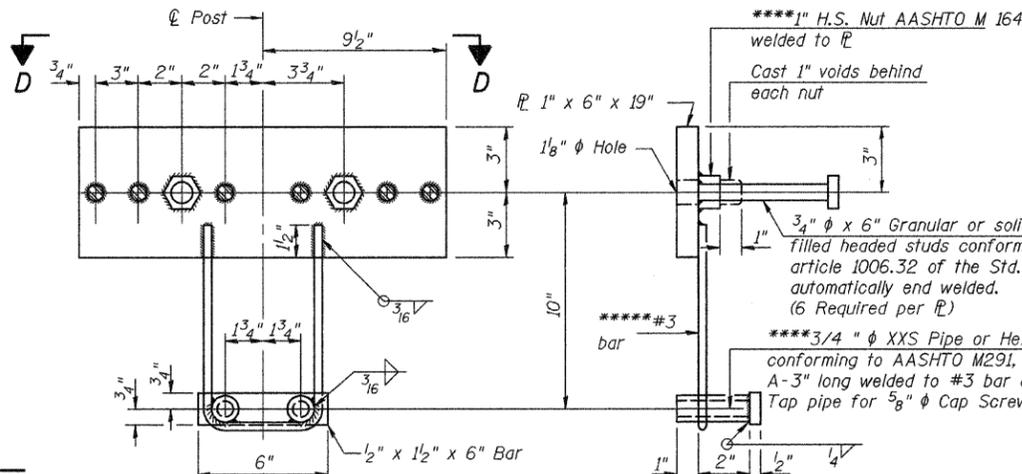
RAIL POST SPACING
(Showing inside face of rail)

1/4" SHIM P

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 Furnishing and Erecting Structural Steel.
All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
Cost of anchor devices and accessories and the cost of removing and reinstalling rail is included with Furnishing and Erecting Structural Steel.
***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.



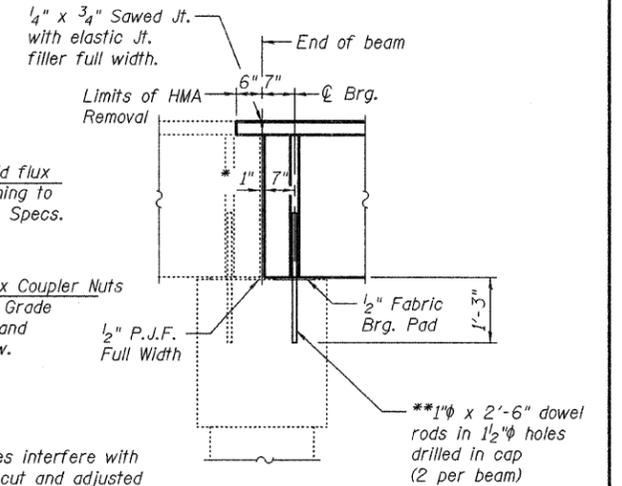
VIEW D-D



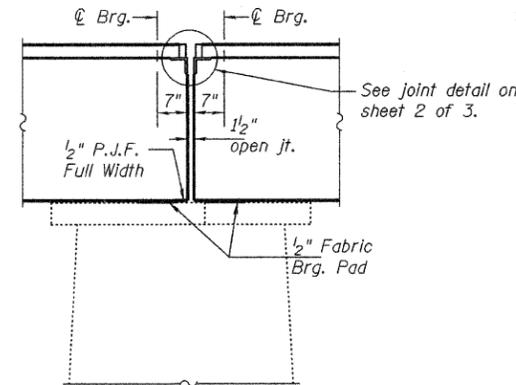
ANCHOR DEVICE

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

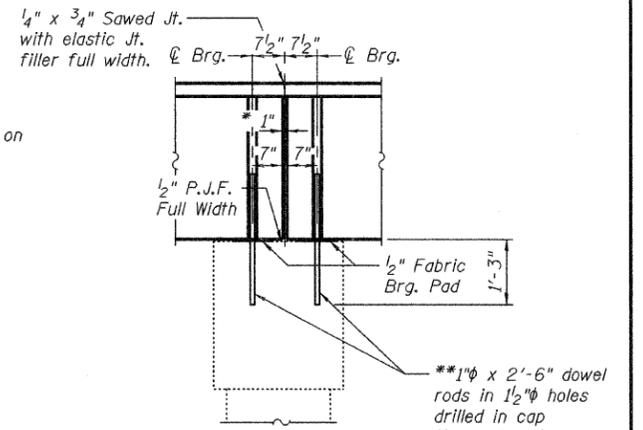
***1" H.S. Nut AASHTO M 164 welded to P
Cast 1" voids behind each nut
3/4" ϕ x 6" Granular or solid flux filled headed studs conforming to article 1006.32 of the Std. Specs. automatically end welded. (6 Required per P)
***3/4" ϕ XXS Pipe or Hex Coupler Nuts conforming to AASHTO M291, Grade A-3" long welded to #3 bar and Tap pipe for 5/8" ϕ Cap Screw.



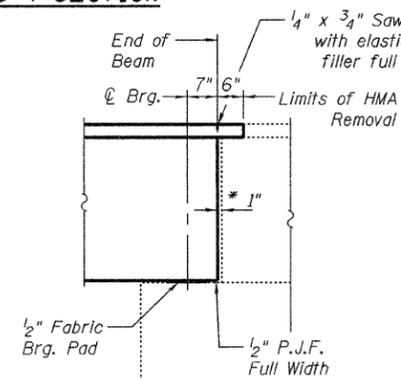
PIER 1 SECTION



PIER 2 AND 4 SECTION



PIER 3 AND 5 SECTION



TYPICAL NORTH ABUTMENT SECTION

*1" Joint shall be filled with non-shrink grout. Dimension may vary to accommodate tolerance in beam lengths.
**Existing dowel rods are to be burned off, ground flush, and sealed with epoxy prior to placement of new beams. Cost included in Removal of Existing PPC Deck Beams. After beams have been erected holes shall be drilled into cap and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys.

BEAM AND RAIL DETAILS
S.B.I. RT. 1 / EMBARRAS RIVER
LAWRENCE COUNTY
SN 051-0006

DESIGNED	A.T.H.
CHECKED	A.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. A.J.B.

February 22, 2008
EXAMINED <i>Carl Francis</i>
PASSED <i>Ralph E. Anderson</i>