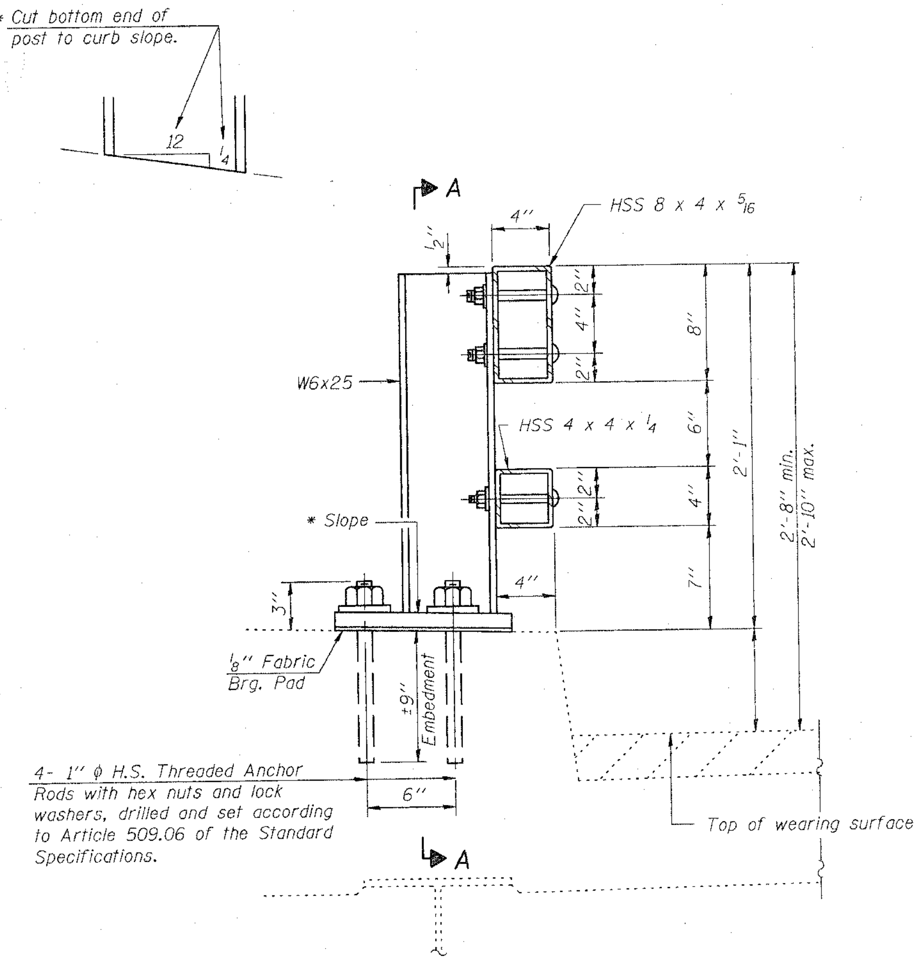
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-10HB-1	MADISON	156	126

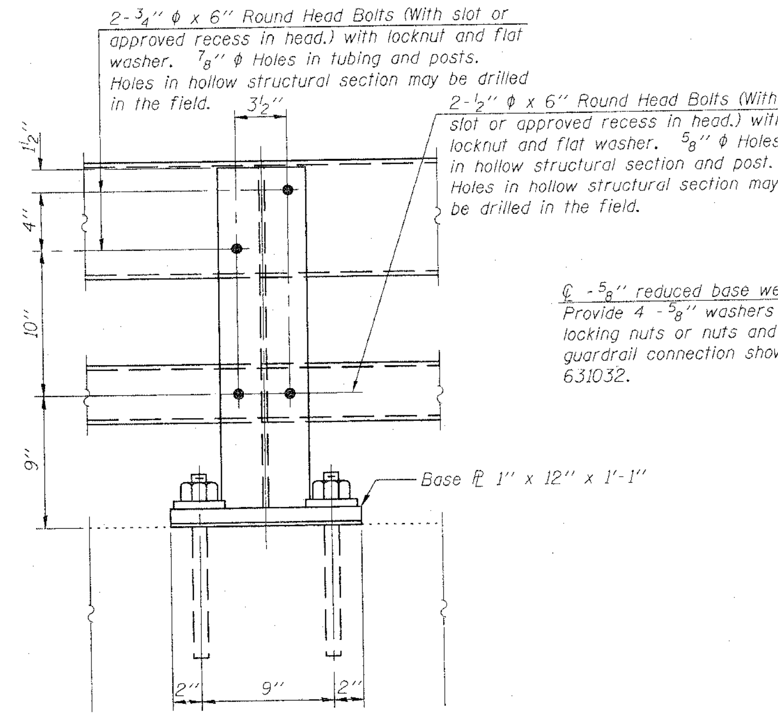
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

CONTRACT NO. 76857

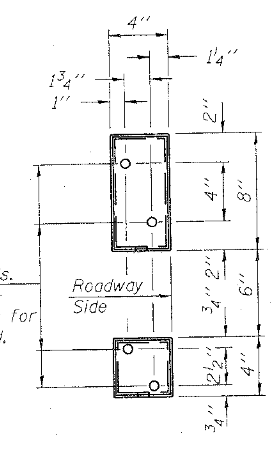
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



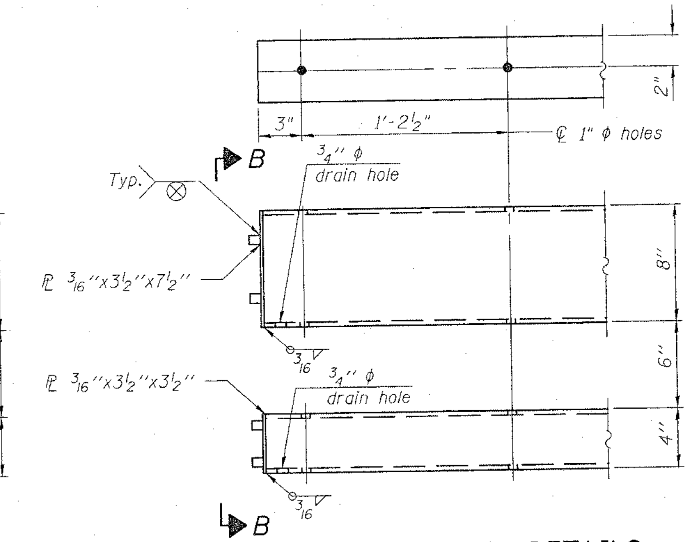
SECTION AT RAIL POST



SECTION A-A

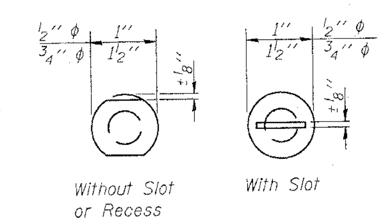


VIEW B-B

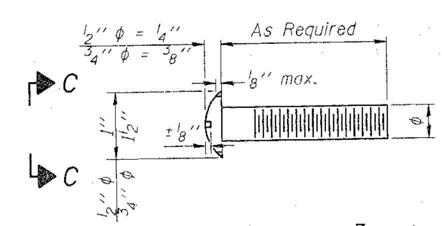


END OF RAIL DETAILS

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



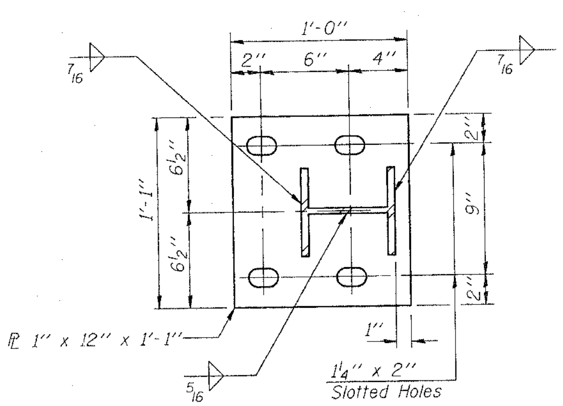
VIEW C-C



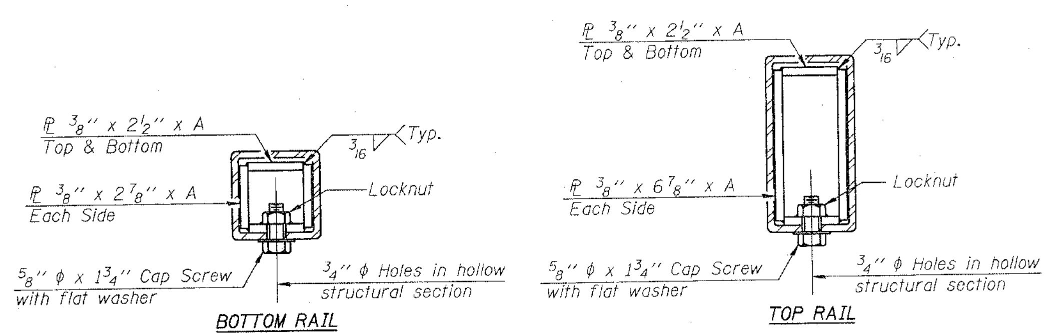
DETAIL OF ½" ϕ & ¾" ϕ ROUND HEAD BOLTS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	444



BASE PLATE DETAIL

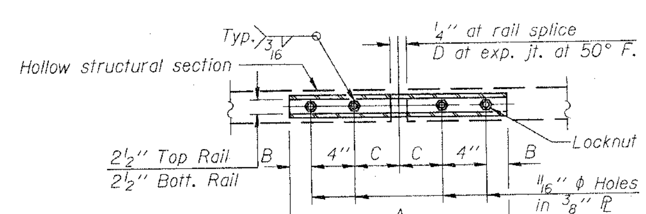


SECTIONS AT RAIL SPLICE

SPLICE DIMENSIONS

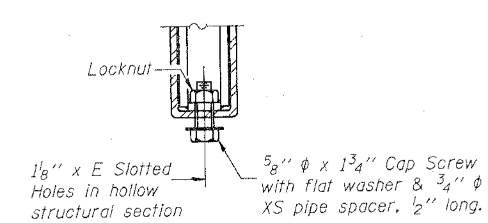
T	D	A	B	C	E
≤4"	2½"	1'-8"	2"	4"	2½"
>4" ≤6½"	3¾"	2'-0"	2½"	5½"	3½"
>6½" ≤9"	5"	2'-4"	3½"	6½"	9"
>9" ≤13"	7"	2'-10"	4½"	8½"	11"
Rail Splice	¼"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.



PLAN-BOTT. SPLICE ℙ TYPICAL

(6'-3" Maximum Post Spacing)



RAIL SPLICE CONNECTION AT EXPANSION JT.

Johnson, Depp & Quisenberry
CONSULTING ENGINEERS
Springfield, Illinois

DESIGNED: CDB	DRAWN: SJS
CHECKED: DCD	CHECKED: CDB/DCD

R-31 11-1-06

STEEL RAILING, TYPE 2399

STAUNTON ROAD (CH 21) OVER INTERSTATE 70
FAI ROUTE 70 SECTION 60-10HB-1
MADISON COUNTY
STATION 1013+34.43
STRUCTURE NO. 060-0182

FILE: J:\JDQ\10142 IL-DBV*5 I-70 Bridge Repairs\6-SN060-0182 StauntonRd\04steelbridgerail.dgn USER: DCD DATE: 01/12/2007 - 18:32:29