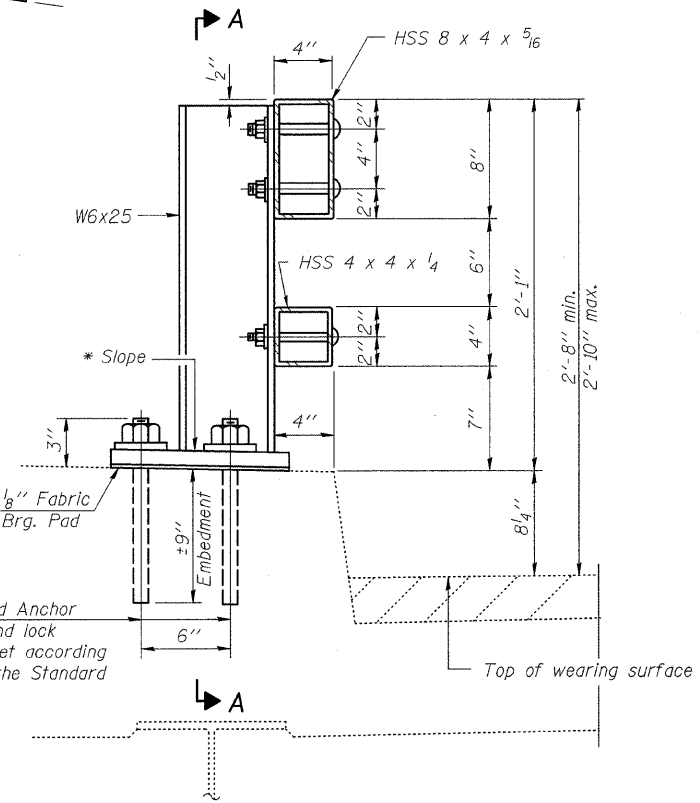
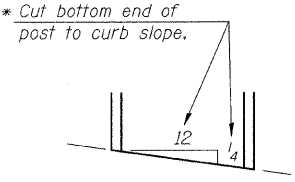
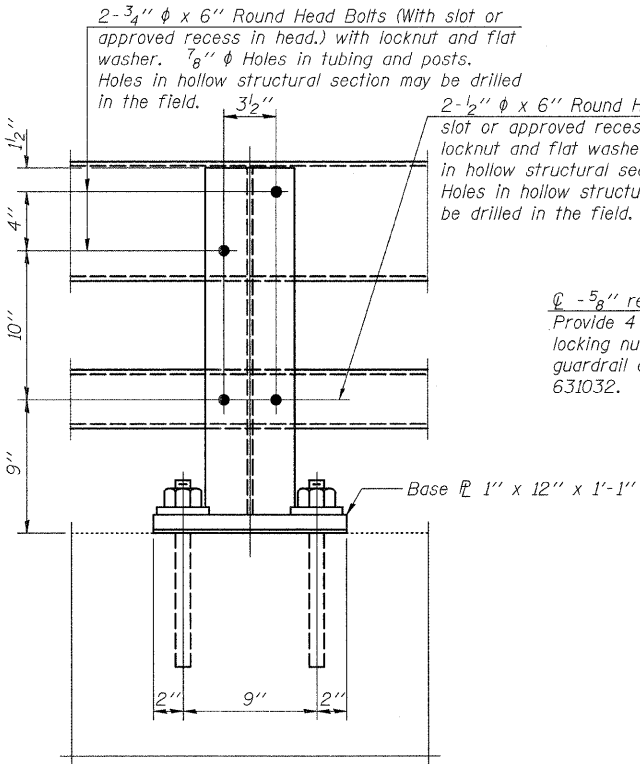


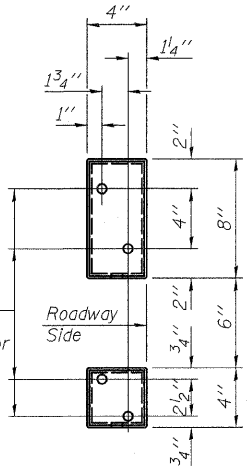
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



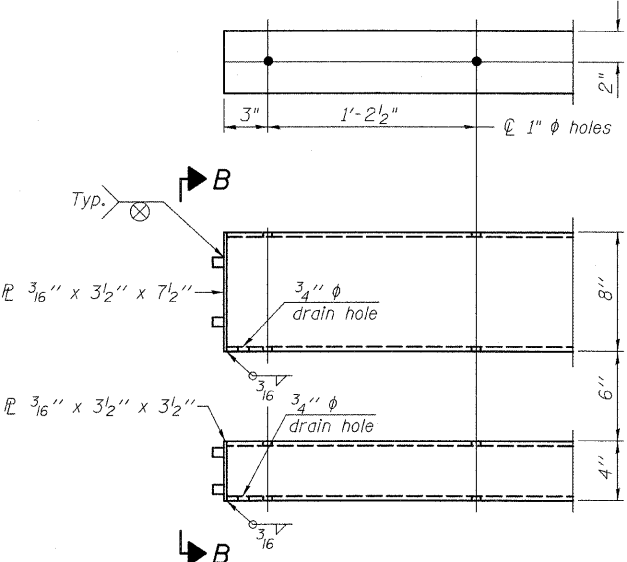
SECTION AT RAIL POST



SECTION A-A

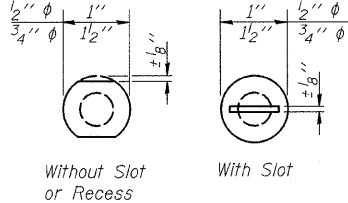


VIEW B-B



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 1/6" 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

SPLICE DIMENSIONS

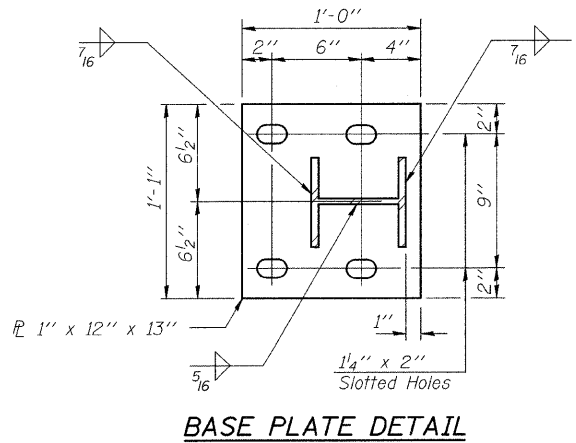
T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 1/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	4"	1'-8"	2"	4"	—

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

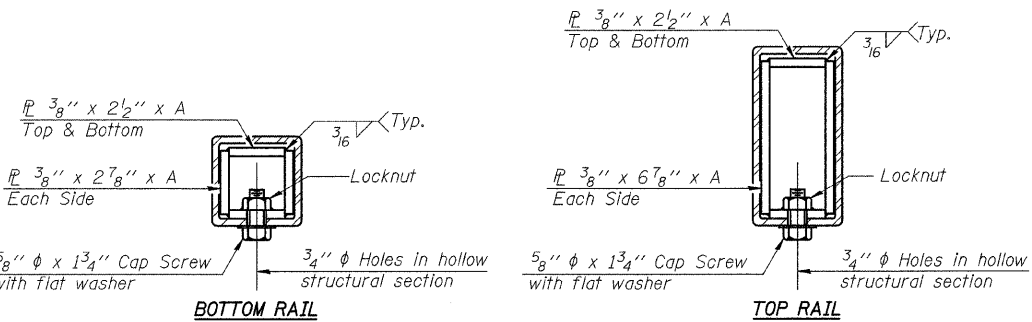
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	106

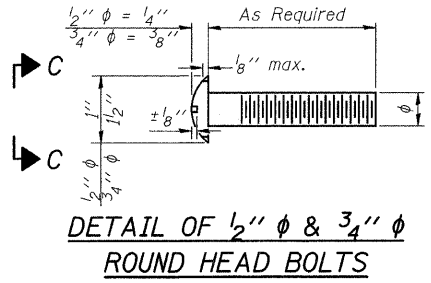
STEEL RAILING, TYPE 2399
IL 1 OVER TRIM CREEK
STA. 533+25
S.N. 099-0079



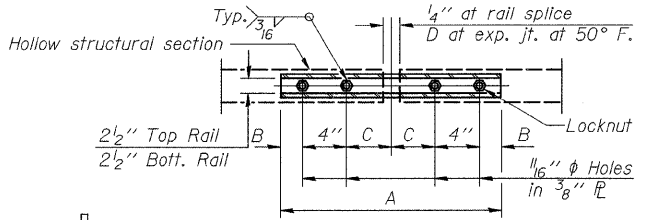
BASE PLATE DETAIL



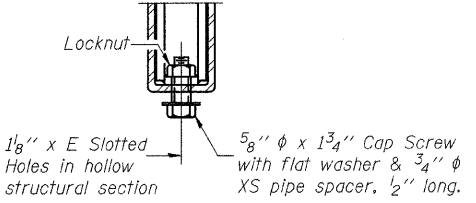
SECTIONS AT RAIL SPLICE



DETAIL OF 1/2" & 3/4" ROUND HEAD BOLTS



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

DESIGNED B. Sauter
CHECKED E. Mroczek
DRAWN R. Danley
CHECKED B. Sauter

Giorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@giorba.com

SHEET NO. S8	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S8 SHEETS	332	8 R-B-I-2	WILL	28	23
			CONTRACT NO. 60D81		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	