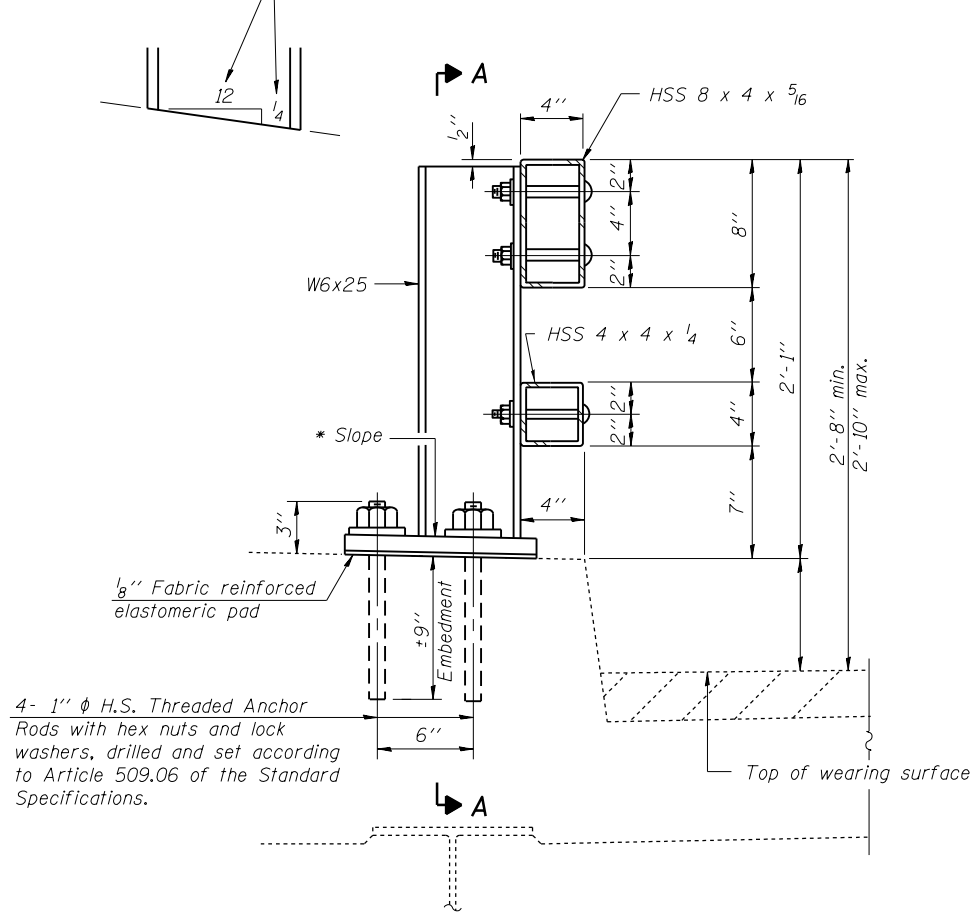
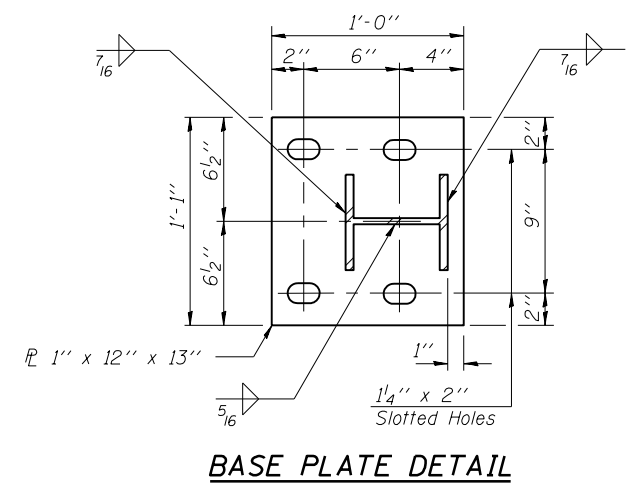


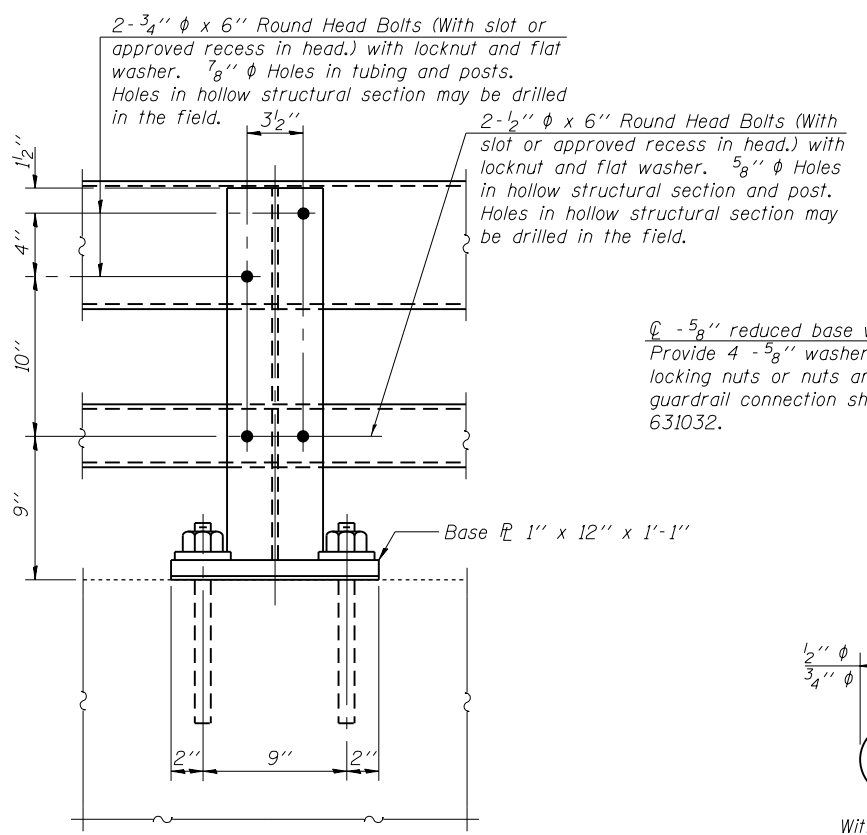
\* Cut bottom end of post to curb slope.



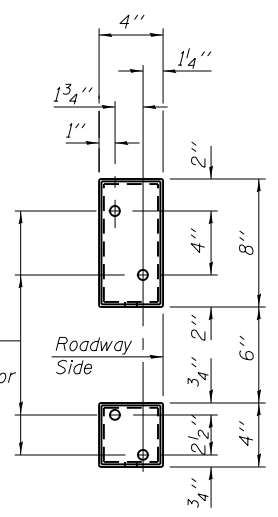
**SECTION AT RAIL POST**



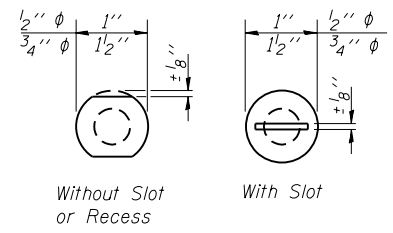
**BASE PLATE DETAIL**



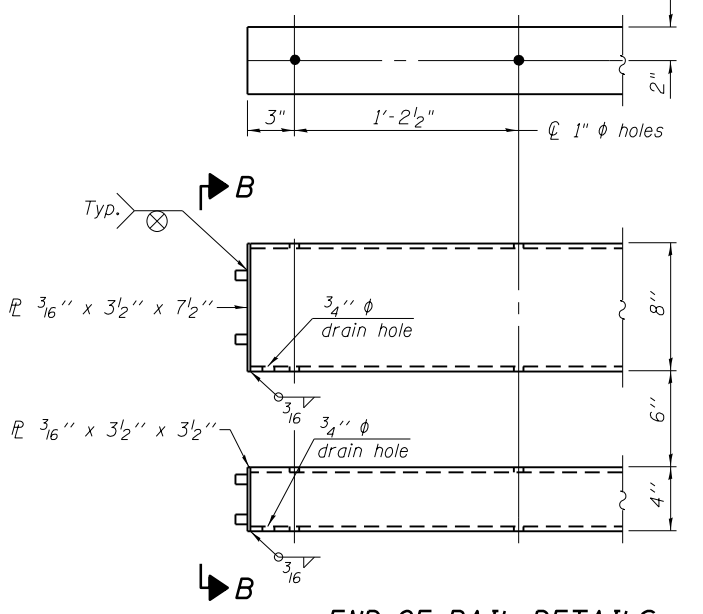
**SECTION A-A**



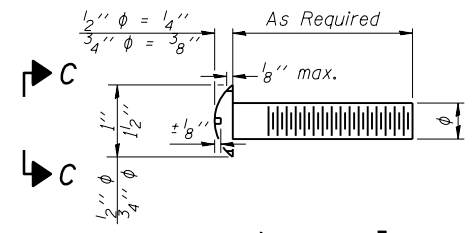
**VIEW B-B**



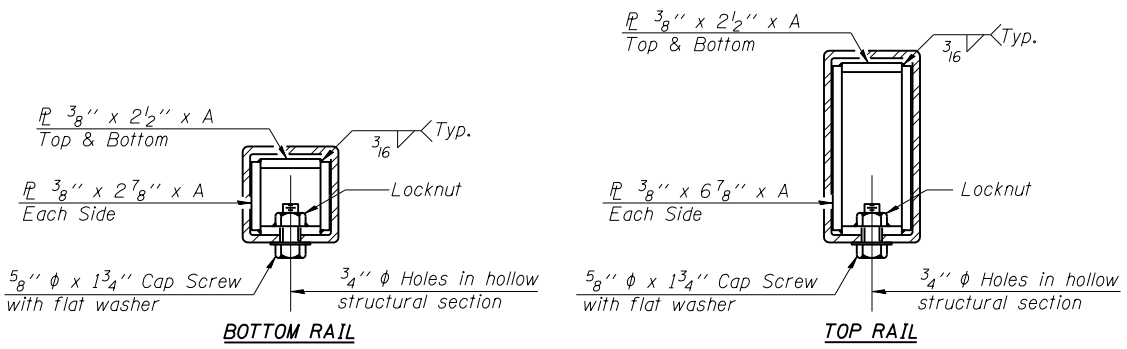
**VIEW C-C**



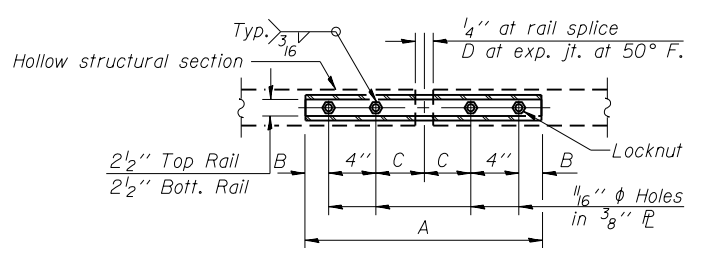
**END OF RAIL DETAILS**



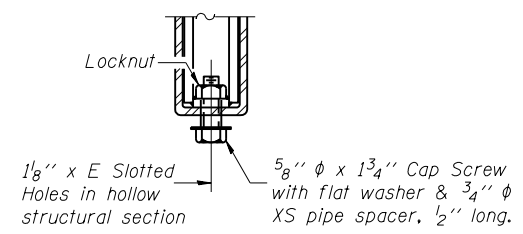
**DETAIL OF 1/2" & 3/4" ROUND HEAD BOLTS**



**SECTIONS AT RAIL SPLICE**



**PLAN-BOTT. SPLICE TYPICAL**



**RAIL SPLICE CONNECTION AT EXPANSION JT.**

**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.

**SPLICE DIMENSIONS**

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	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	1/4"	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	462.0

R-31

7-1-10

(6'-3" Maximum Post Spacing)

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -
ei:\pw\work\p\idot\swartzw\d0186577\077469-sht-details.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 6/5/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING, TYPE 2399  
 STRUCTURE NO. 026-0079**

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

•EFFINGHAM & FAYETTE			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS SHEET NO.
70	(26-5,26-5-1,25-1-1)R		92 63
CONTRACT NO. 74469			
ILLINOIS FED. AID PROJECT			