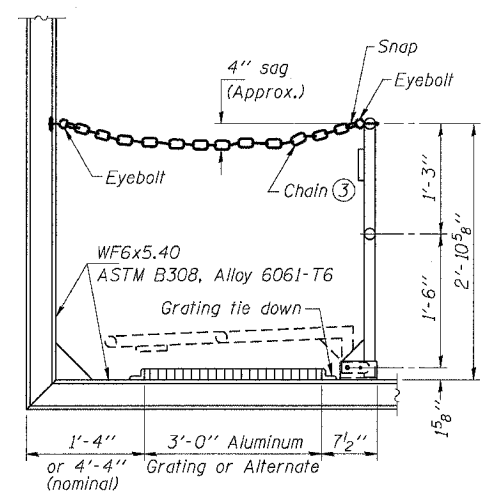


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-085 SG	WILL	28	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

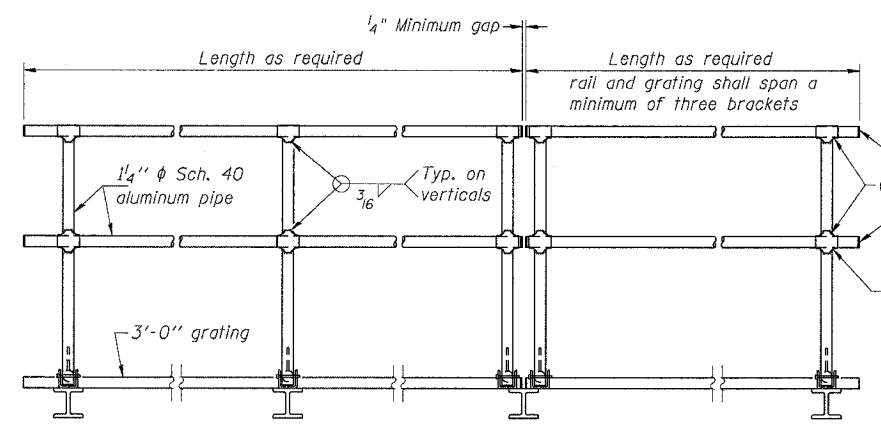
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**SIDE ELEVATION**  
(Showing safety chain w/o sign)

**HANDRAIL DETAILS**

Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

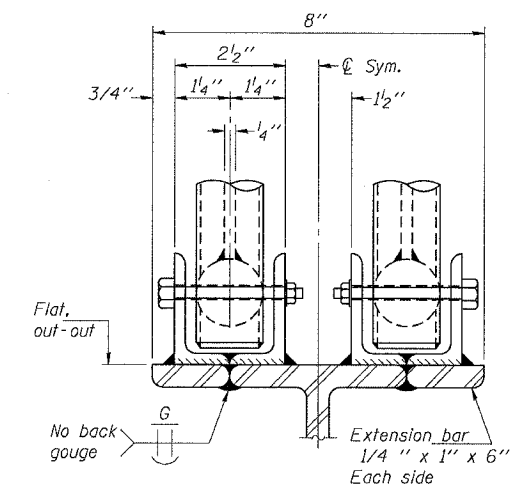


**FRONT ELEVATION**

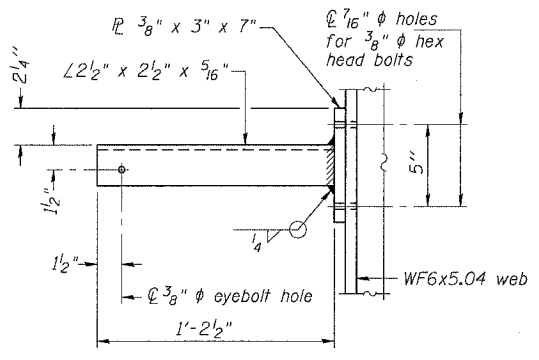
② Horizontal handrail member shall be continuous thru fitting. Provide 7/16 inch diameter hole in fitting for 3/8 inch diameter bolt. Field drill 1/16 inch diameter hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16 inch eyebolts in 7/16 inch diameter holes on top rail at ends only.)

① Install standard force-fit end caps or weld 1/2 inch end plates with 1/8 inch c.f.w. and grind smooth. (All rail ends)

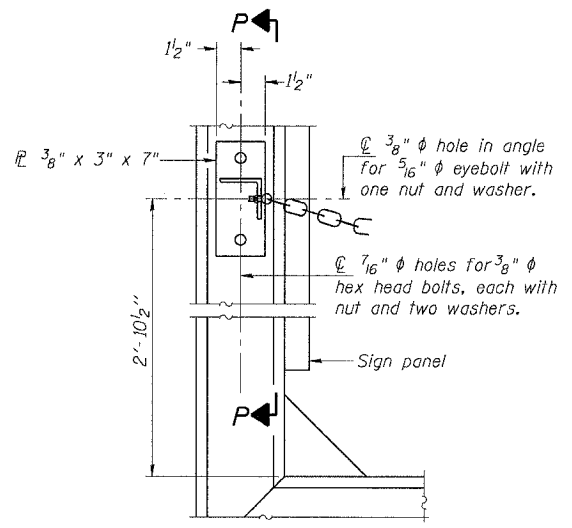
Fittings-ASTM B26, Alloy 356-T7



**ELEVATION AT HANDRAIL JOINT** ④

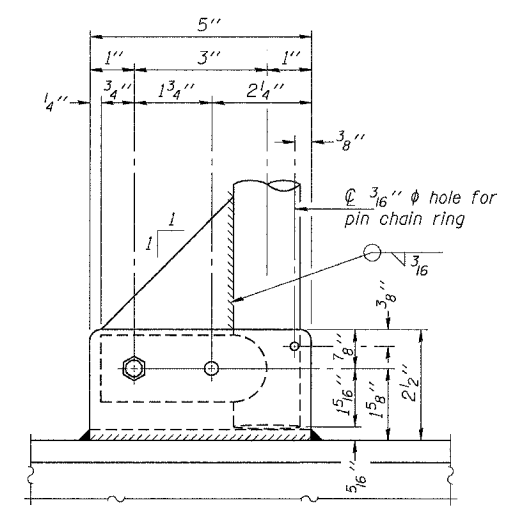


**SECTION P-P**

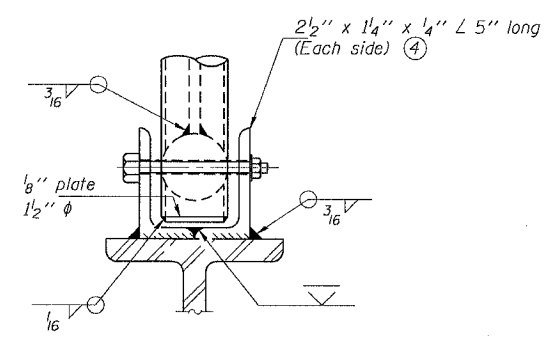


**ALTERNATE SAFETY CHAIN ATTACHMENT**  
(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

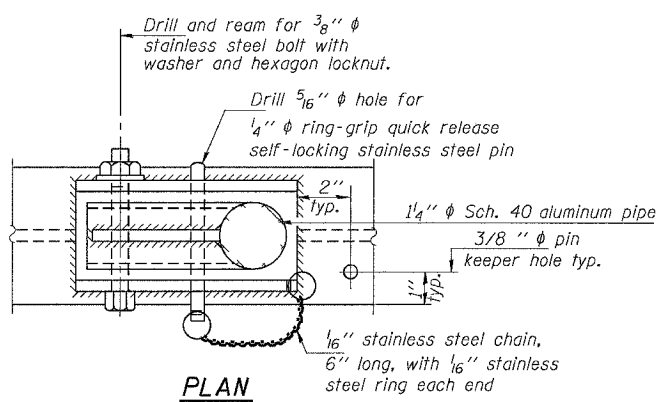


**SIDE ELEVATION**

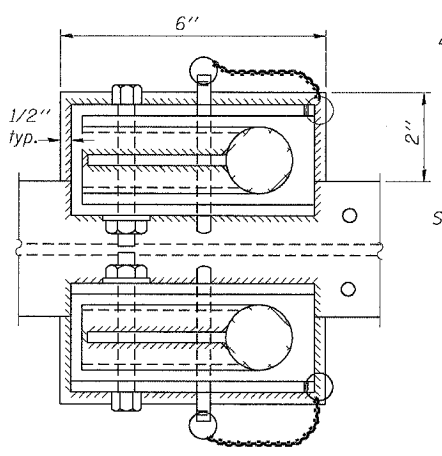


**FRONT ELEVATION**

See "ELEVATION" at right for dimensions.

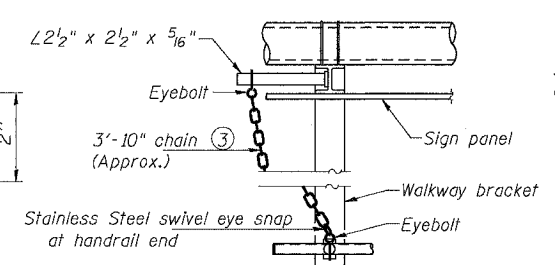


**PLAN**  
**DETAIL E HANDRAIL HINGE**



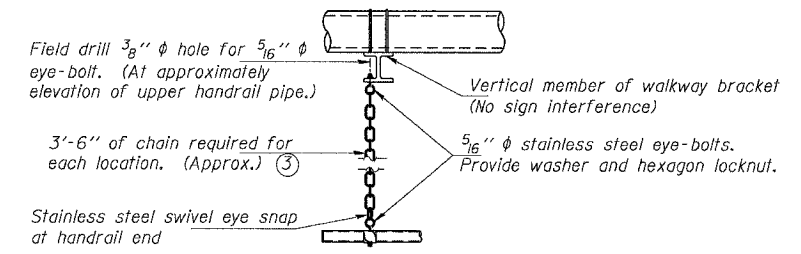
**PLAN AT HANDRAIL JOINT**

Details not shown same as "PLAN"



**ALTERNATE SAFETY CHAIN ATTACHMENT**  
Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

③ 3/16 inch type 304L stainless steel chain, approximately 12 links per foot.  
④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



**SAFETY CHAIN**

One required for each end of each walkway.

SHT. S-11 OF 15

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
FAI ROUTE 55 (I-80 TO I.I.S. 30)  
DYNAMIC MESSAGING SIGNS

**OVERHEAD SIGN STRUCTURE  
ALTERNATE ALUMINUM HANDRAIL  
DETAILS FOR DMS**

SCALE: \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
DATE: 03/27/06 CHECKED BY: MJK

**TENG** TENG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
CHICAGO, ILLINOIS

DESIGNED	19
CHECKED	ENGINEER OF BRIDGE DESIGN
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OS-A-11-DMS2 1/7/2005

PLOT DATE: 03/27/06  
 FILE NAME: S:\PROJECTS\2005\03\OS-A-11-DMS2\OS-A-11-DMS2.DWG  
 PLOT SCALE: 1/8" = 1'-0"  
 USER: KANAKIMR