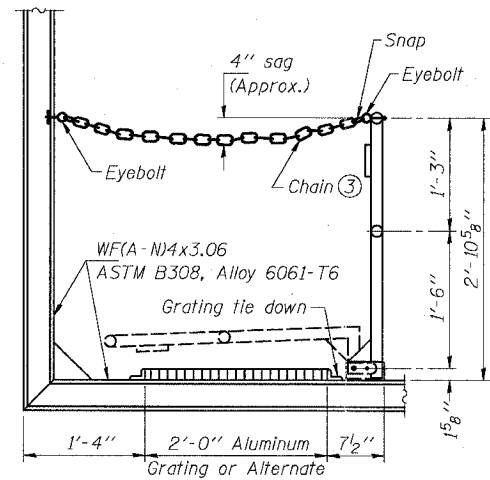
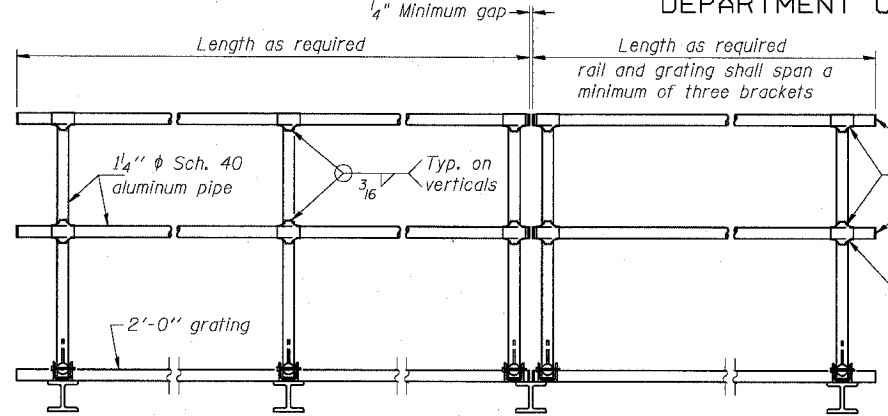


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	LIST NO.	SHEET NO.
94/90	*	COOK	598	319
FED. ROAD DIST. NO. 1		ALLIANCE	FED. AID PROJECT-	
62302 *1818, ETC. 2324.6-1PIR-9				



SIDE ELEVATION
(Showing safety chain w/o sign)

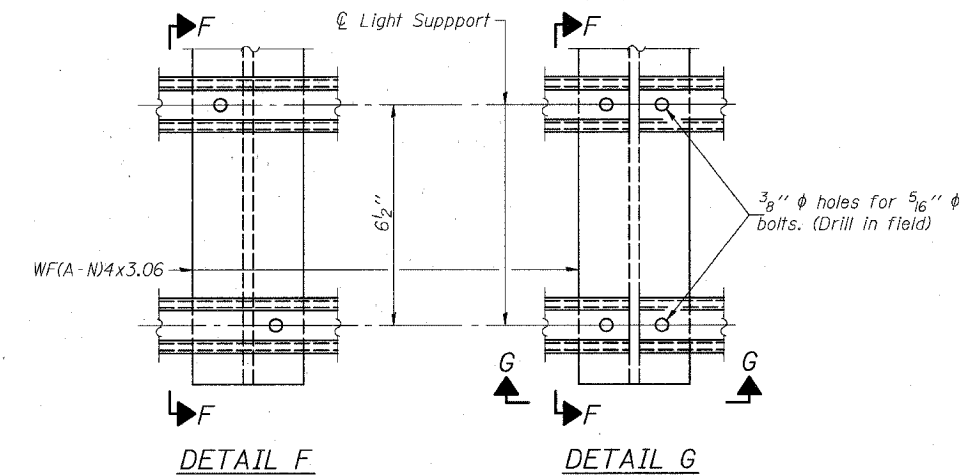


FRONT ELEVATION

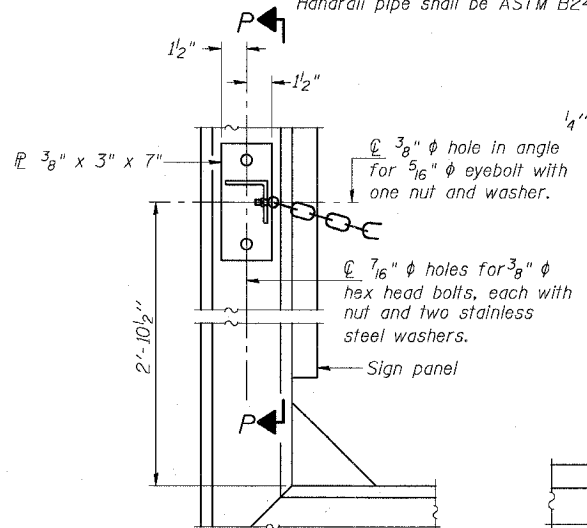
HANDRAIL DETAILS
Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

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

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

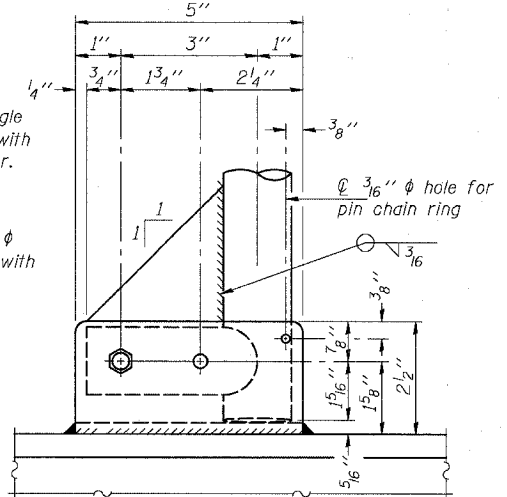


DETAIL F **DETAIL G**

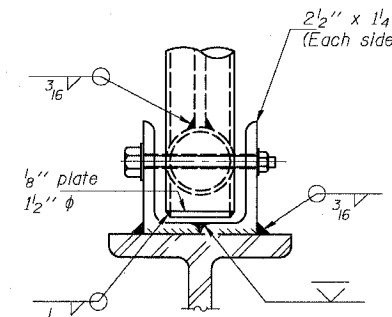


ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"

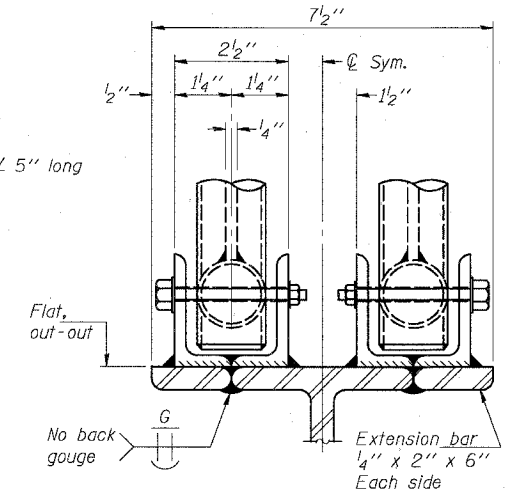


SIDE ELEVATION

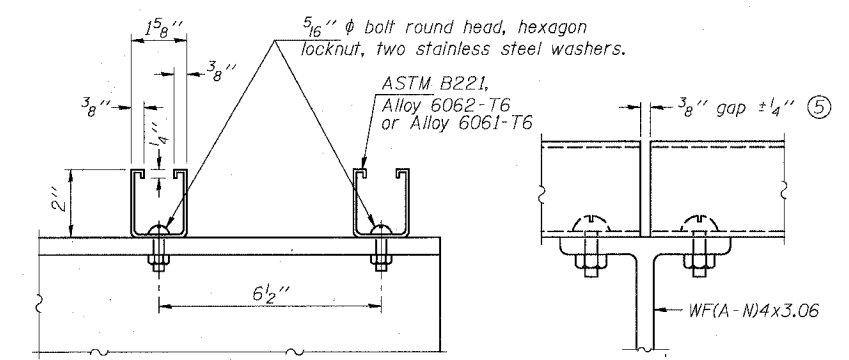


FRONT ELEVATION

See "ELEVATION" at right for dimensions.



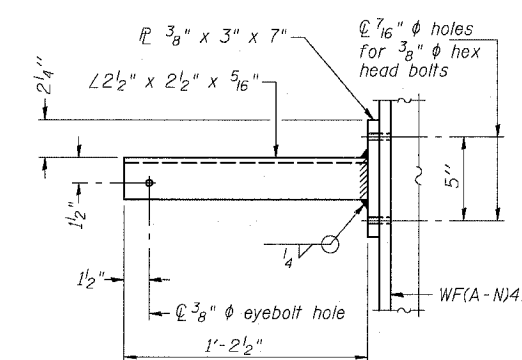
ELEVATION AT HANDRAIL JOINT ④



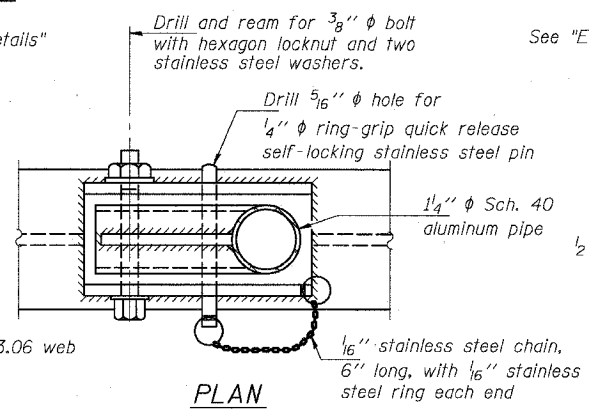
SECTION F-F **SECTION G-G**

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

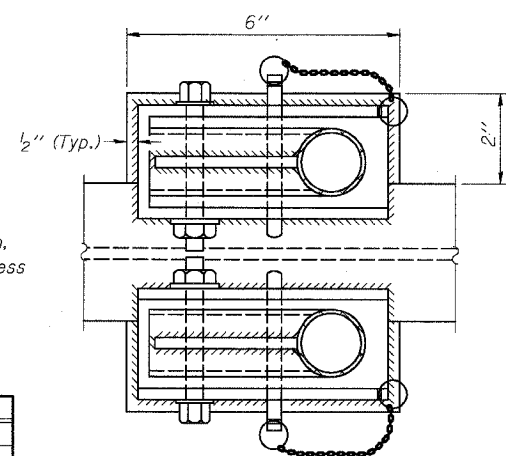
⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



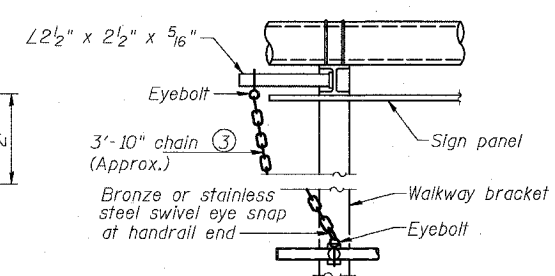
SECTION P-P



PLAN
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT
Details not shown same as "PLAN"

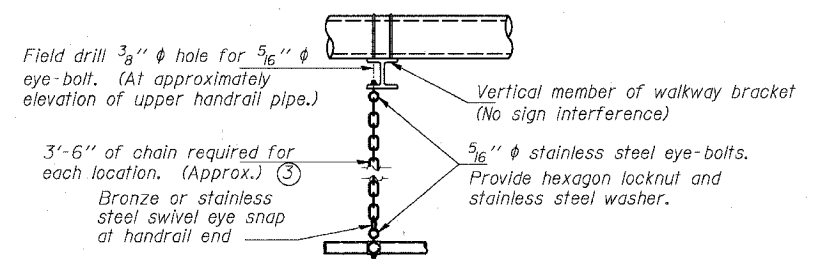


ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

③ 3/16" galvanized steel chain, approximately 12 links per foot. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.

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.

SGN-22

DESIGNED	MSA
CHECKED	AS
DRAWN	MD
CHECKED	MSA

EXAMINED	20
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
OVERHEAD SIGN STRUCTURES