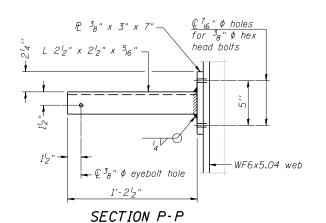


# ELEVATION AT HANDRAIL JOINT (4)

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

### HANDRAIL DETAILS

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

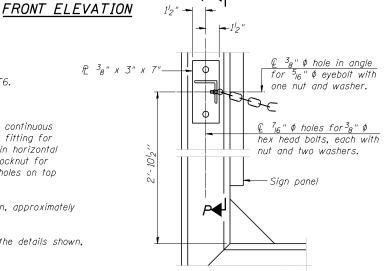


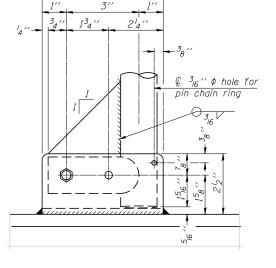
Drill and ream for  $^3\!8''$   $\phi$ stainless steel bolt with washer and hexagon locknut.

PLAN

DETAIL E HANDRAIL HINGE

- $\begin{tabular}{ll} \hline (2) & Horizontal handrail member shall be continuous \\ & thru fitting. & Provide $^7_{16}$'' $\phi$ hole in fitting for \\ $^3_8$'' $\phi$ bolt. & Field drill $^7_{16}$'' $\phi$ hole in horizontal \\ \hline \end{tabular}$ rail member. Provide washer and locknut for bolt. (Use  $^{5}_{16}$  ' eyebolts in  $^{7}_{16}$  '  $\phi$  holes on top rail at ends only.)
- (3)  ${}^{3}_{16}$  '' 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.



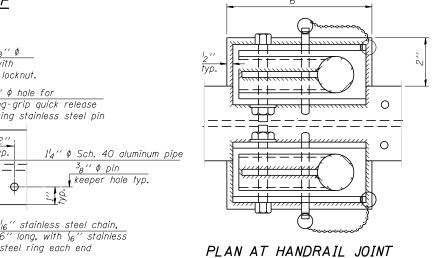


ALTERNATE SAFETY CHAIN ATTACHMENT

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

SIDE ELEVATION

## See "ELEVATION" at right for dimensions.



Details not shown same as "PLAN"

(Walkway omitted for clarity)

Field drill  ${}^{3}8^{\prime\prime}$   $\phi$  hole for  ${}^{5}16^{\prime\prime}$   $\phi$ eye-bolt. (At approximately Vertical member of walkway bracket elevation of upper handrail pipe.) (No sign interference) 3'-6" of chain required for <sup>5</sup><sub>16</sub> ′′ φ stainless steel eye-bolts. each location. (Approx.) (3) Provide washer and hexagon locknut. Stainless steel swivel eye snap at handrail end

SAFETY CHAIN

### ALTERNATE SAFETY CHAIN ATTACHMENT

-Walkway bracket

Details not shown similar to 'Safety Chain' Details One required for each end of each walkway.

# benesch

Alfred Benesch & Company 205 North Michigan Avenue, Suite 2400 Chlcago, Illinois 60601

Drill  ${}^{5}_{16}$  "  $\phi$  hole for

tvp.

l<sub>4</sub>'' φ ring-grip quick release

self-locking stainless steel pin

steel ring each end

0C- 1- 11- DUC

Job No. 10056	OS-A-11-DMS 6-	1-12
mbecker	DESIGNED - MFB	REVISED -
	CHECKED - KJN	REVISED -

STATE O	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

L 212" x 212" x 516

at handrail end

Eyebolt -

3'-10" chain 3

Stainless Steel swivel eye snap

(Approx.)

						C
OVERHEAD SIGN STRUCTURES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	000
ALTERNATE ALUMINUM HANDRAIL DETAILS FOR DMS	74	90-[14R;(14HB-4,14,14HVB)BR]	TAZEWELL	2433	1636	ì
ALILINATE ALUMINOM HAMDITALE DETAILS TON DIMS			CONTRACT	NO. 6	68620	3
SHEET NO. SS16 OF SS32 SHEETS		TILITNOTS EED AT	D PROJECT			l l

«××-68620\_16\_hr2.dgr

USER NAME = mi PLOT SCALE = DRAWN MFB REVISED PLOT DATE = 7/16/2012 REVISED CHECKED -