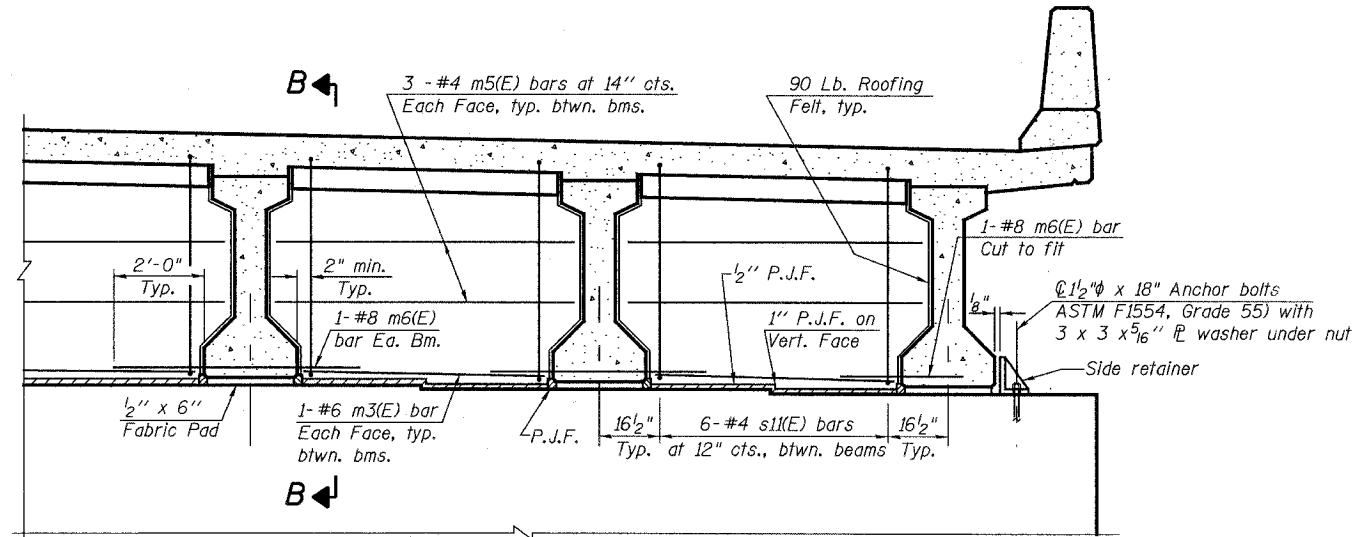


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 3887	06-00214-06-BR	KANE	55	28
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT NO. 83923

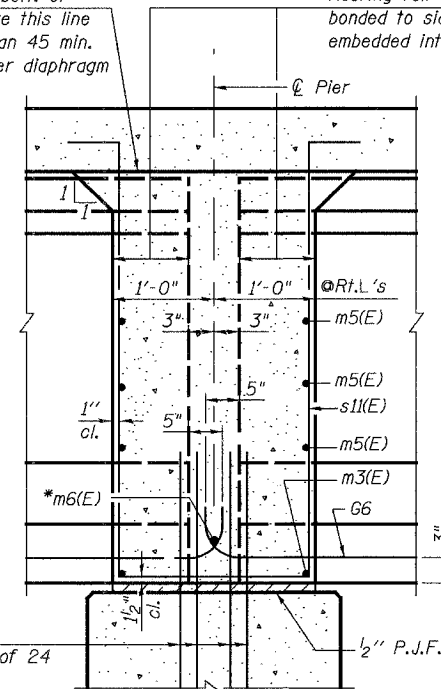
SHEET NO. 13
25 SHEETS



DIAPHRAGM ELEVATION AT PIER

Pour diaphragm flush with bott. of slab. Concrete in slab above this line shall be placed not less than 45 min. nor more than 90 min. after diaphragm has been poured.

Roofing felt shall be bonded to side of beam embedded into diaphragm.



* Tightly fasten the #8 bars together with No. 9 wire ties.

SECTION B-B

Dimensions along ϕ of beam, except as shown.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 25.

Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 25.

For details of bar s11(E), see sheet 7 of 25.

The s11(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

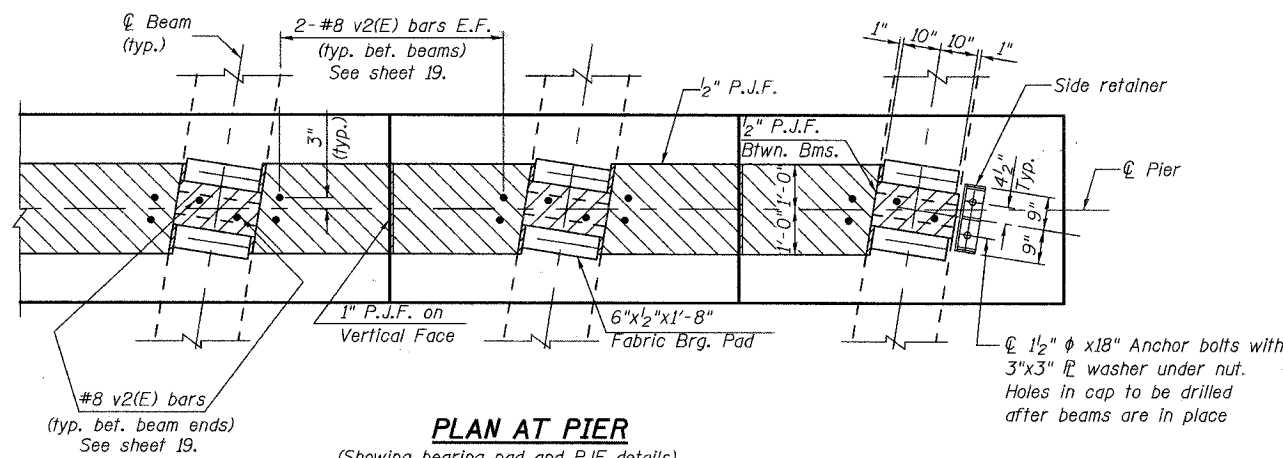
Cost of 90 Lb. roofing felt is included with Concrete Superstructure.

The side retainer shall be galvanized after shop fabrication according to AASHTO M 111. Cost of side retainer and anchor bolts shall be included with Concrete Structures.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

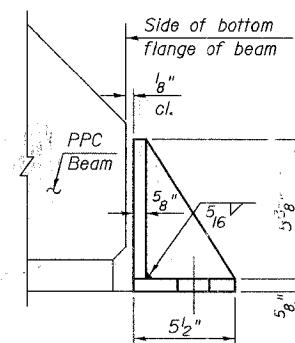
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.



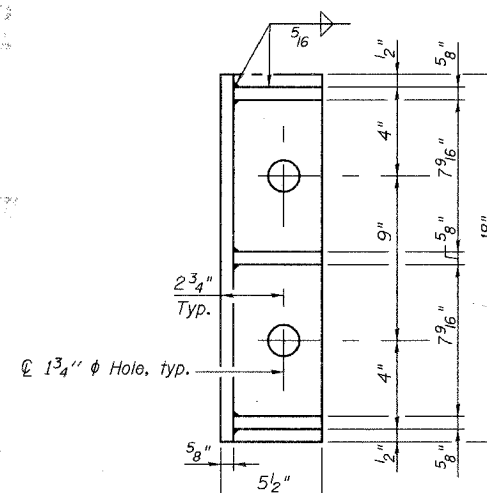
PLAN AT PIER

(Showing bearing pad and P.J.F. details)



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



\$DATE\$ \$TIME\$

DESIGNED	ASL
CHECKED	NPP
DRAWN	SOI
CHECKED	NPP

PI-2D1 & PI-2DDI 11-1-06

URS
100 South Wacker Drive,
Suite 500
Chicago, IL 60606
(312) 939-1000

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 31 OVER NEW STEARNS ROAD KANE COUNTY
NAME	DATE	
		DIAPHRAGM DETAILS AT PIER

F.A.U. 3887 STATION 113+61.11 SCALE: SECTION 06-00214-06-BR STRUCTURE NO. 045-2031 DATE: 00/00/2007