SECTION A-A

Dimensions at right angles to abutment, except as shown.

Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 23.

Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 23.

For details of bars s(E), $s_1(E)$ and $s_2(E)$ see sheet 9 of 23. The s(E), $s_1(E)$ and $s_2(E)$ bars shall be placed parallel to the beams.

Spacing for these bars shall be at right angles to the beams. See sheet 8 of 23 for Sections A-A and B-B. Cost of 30 Lb. roofing felt is included with Concrete Superstructure.

The side retainer shall be galvanized after shop fabrication according to AASHTO M 111.

Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications.

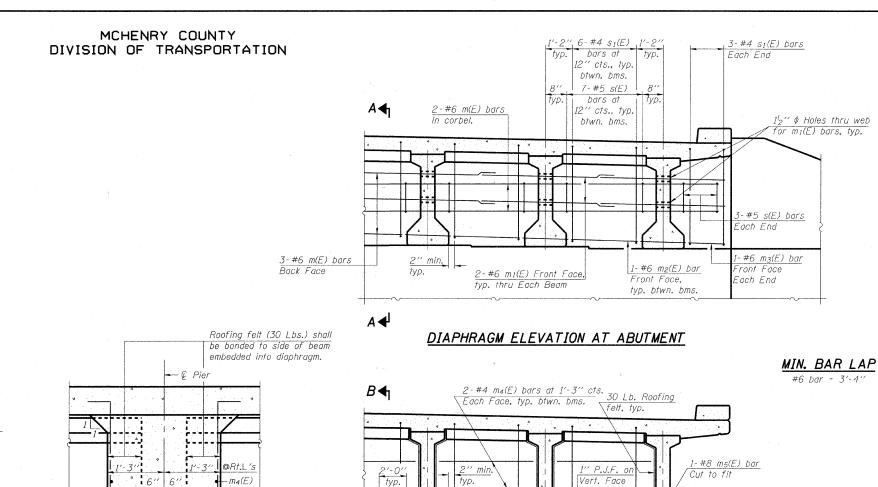
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of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

Anchor bolts for side retainers may be either cast in place or installed in holes drilled after the supporting member is in place and prior to pouring the deck.

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

Cost of side retainer and anchor bolts shall be included with Concrete Structures.

DESIGNED BLB CHECKED AS DRAWN CHECKED BLB



DIAPHRAGM AT PIER

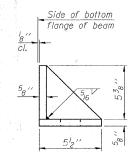
typ.

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

Holes in cap to be drilled

after beams are in place

B◀



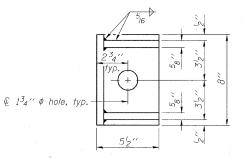
1-#8 ms(H

bar Ea. E

#6 m2(E) bar,

Each Face, typ.

btwn. bms.



-Side retainer

 $Q 1_2^{\prime\prime} \phi \times 18^{\prime\prime}$ Anchor bolts (F1554 Grade 36) with

 $3'' \times 3'' \times \frac{5}{16}''$ P washer under nut

SIDE RETAINER

-#4 s₂(E) 1'-2"

bars at

12" cts., typ.

btwn. bms.

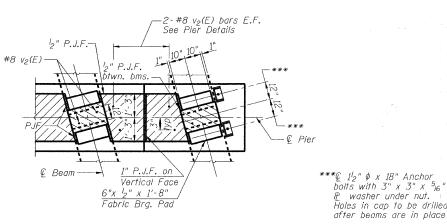
(2 required each side of pier, Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

DIAPHRAGM DETAILS STRUCTURE NO. <u>056-3178</u>

	SHEET NO. 10	F.A.S. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEE NO.
		0034	06-00320-02-BR			MCHENRY	65	35
		CONTRACT NO. 63536						536
		JOB NO.	. C-91-140-11	ILLINOIS	FED. A	AID PROJECT B	RS-0034(10)7)

-s2(E) $m_A(F)$ $-m_2(E)$ v₂(E) bars See sheet 19 of @Rt.L's SECTION B-B

Dimensions along & of beam, except as shown.



PLAN AT PIER