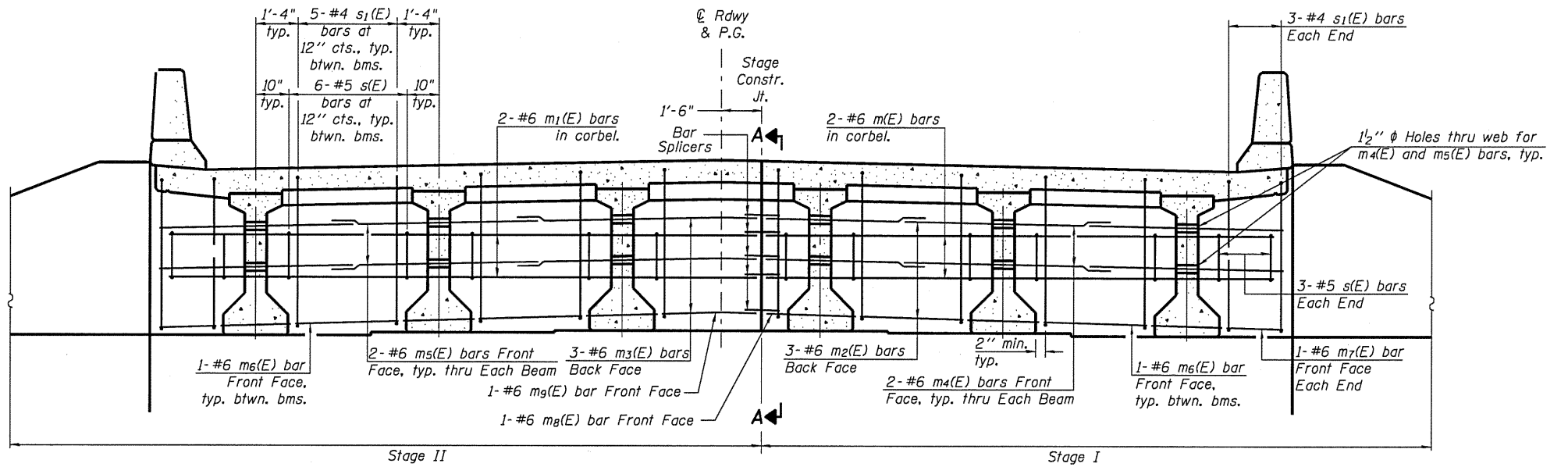
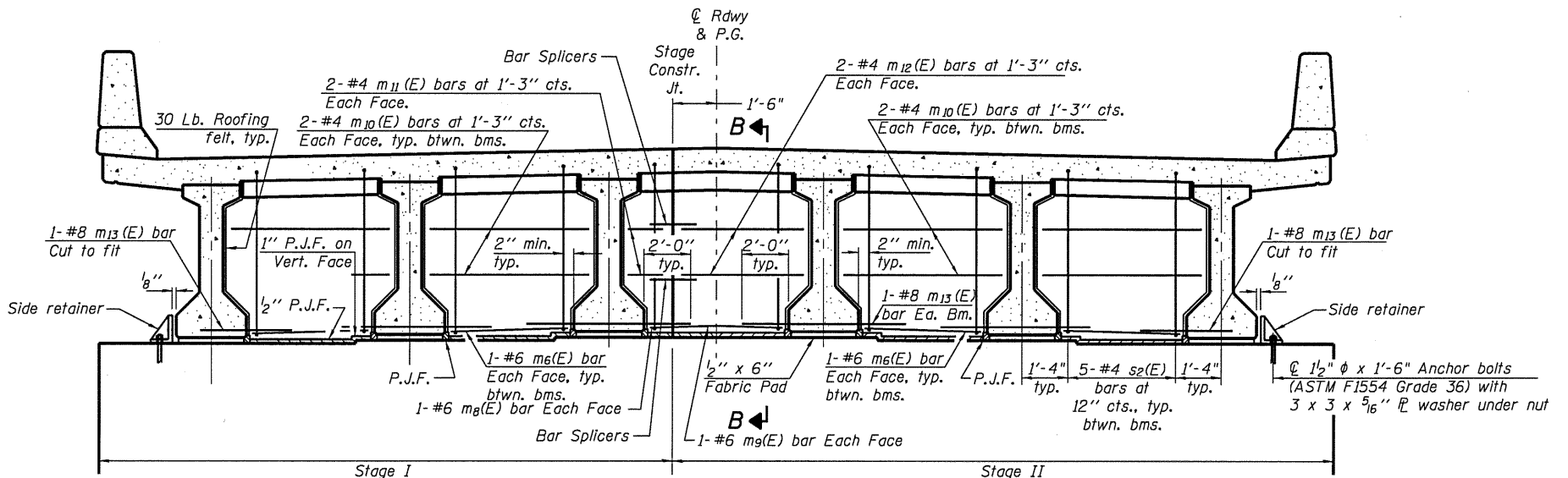


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

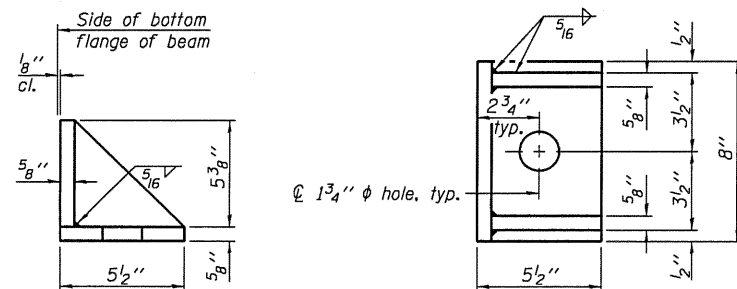


DIAPHRAGM ELEVATION AT NORTH ABUTMENT-LOOKING NORTH
(South Abutment Similar)



DIAPHRAGM AT PIER
(Looking South)

MIN. BAR LAP
#6 bar = 3'-4"



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

DIAPHRAGM DETAILS
STRUCTURE NO. 086-0505

Bar Splicers - Each Abutment
3 - Bar Splicers (E) for #6 m2(E) bars
2 - Bar Splicers (E) for #6 m(E) bars
2 - Bar Splicers (E) for #6 m4(E) bars

Bar Splicers - Pier
4 - Bar Splicers (E) for #4 m11(E) bars
2 - Bar Splicers (E) for #6 m8(E) bars

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 26.
Concrete in diaphragm is included with Concrete Superstructure on sheet 10 of 26.
For details of bars s(E), s1(E) and s2(E) see sheet 10 of 26.
The s(E), s1(E) and s2(E) bars shall be placed parallel to the beams.
Spacing for these bars shall be at right angles to the beams.
See sheet 12 of 26 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	C.M.W.
CHECKED	J.S.A.
DRAWN	T.J.W.
CHECKED	C.M.W.

HE
HOELSCHER ENGINEERING
Fairview Heights, IL
Springfield, IL
Champaign, IL

PI-2DI

7-1-10

SHEET NO. 11 of 26 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	566	1(B-2)	SCOTT	77	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 72B91		