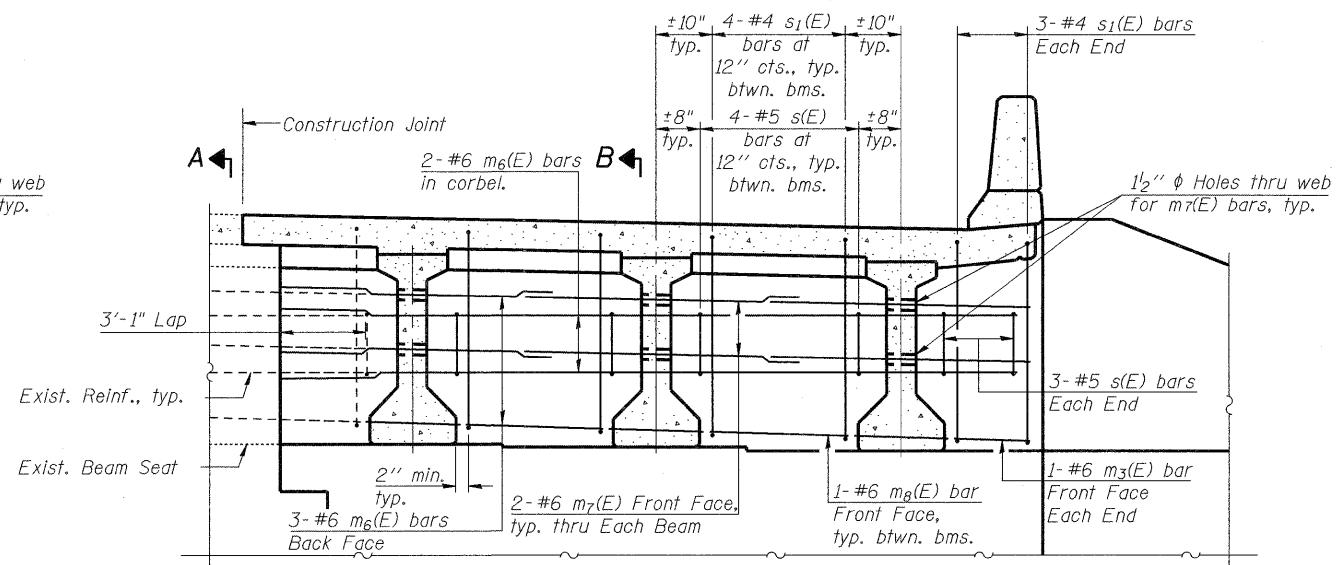
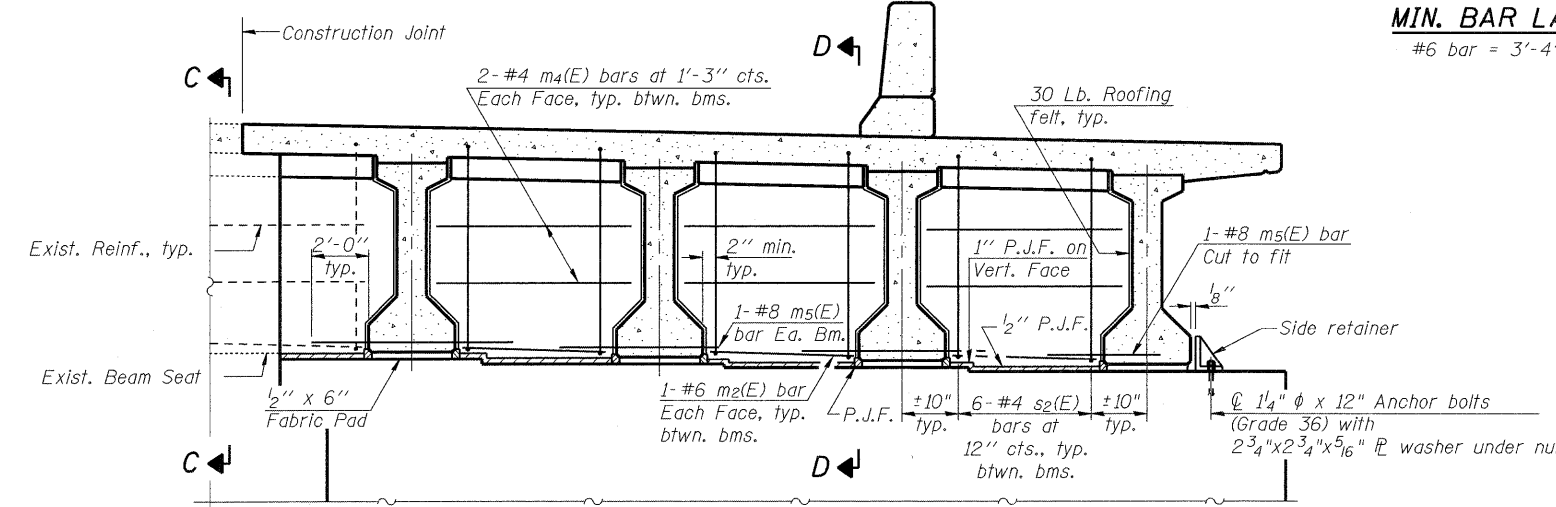


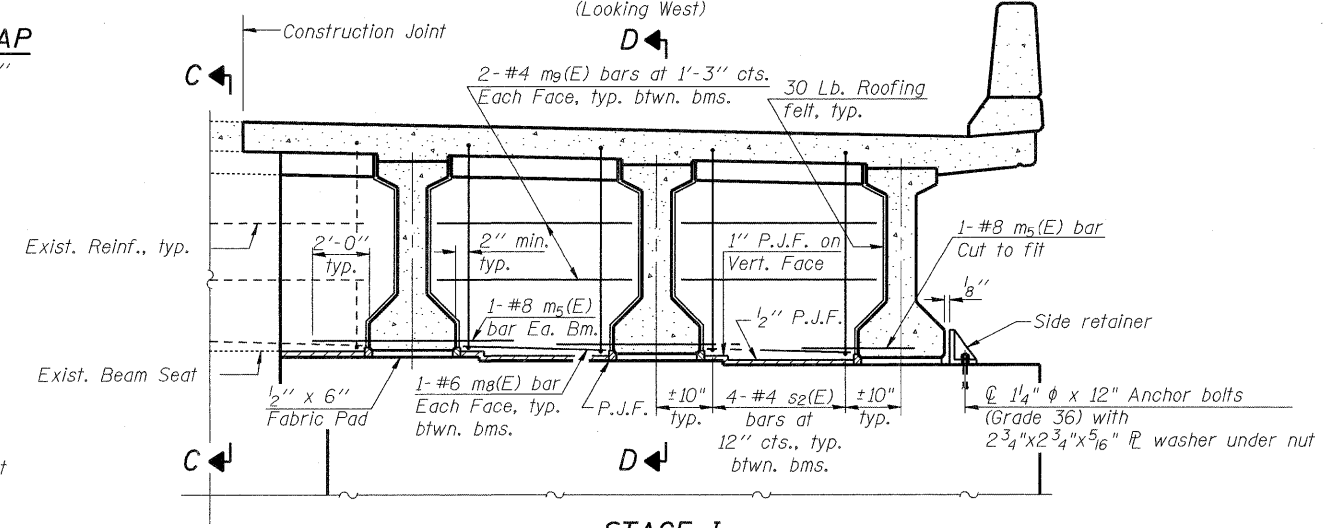
**STAGE IA**  
**DIAPHRAGM ELEVATION AT ABUTMENT**  
(Looking East)



**STAGE I**  
**DIAPHRAGM ELEVATION AT ABUTMENT**  
(Looking West)

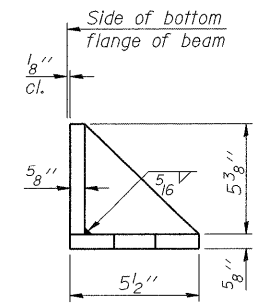


**STAGE IA**  
**DIAPHRAGM AT PIER**  
(Looking East)

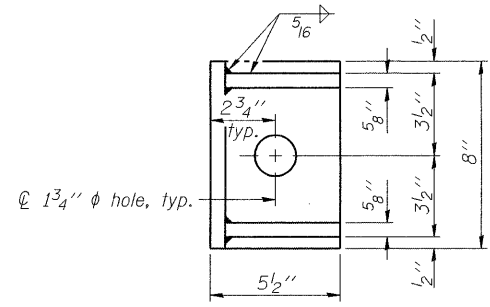


**STAGE I**  
**DIAPHRAGM AT PIER**  
(Looking West)

**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.



**NOTES:**

Reinforcement bars in diaphragm are billed with superstructure on sheet S-15.  
Concrete in diaphragm is included with Concrete Superstructure on sheet S-15.  
For details of bars s(E), s1(E) and s2(E) see sheet S-15.  
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 S-16 for Sections A-A, B-B, C-C, and D-D.  
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.

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.  
All side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

COMPANY NAME: SEC GROUP, INC.  
PROJECT CONTACT: Robert G. Davies  
CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION  
DATE PLOTTED: 10/14/2011 11:09:35 AM  
FILE NAME: 0470051-SS04.dgn  
PLOT DATE: 10/14/2011  
PEN TABLE: Struct 22,34,41

**SEC Group, Inc.**  
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USER NAME = whood	DESIGNED - MGH	REVISED -
PLOT SCALE =	CHECKED - SSM	REVISED -
PLOT DATE = 10/14/2011	DRAWN - WJH	REVISED -
	CHECKED - RGD	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 047-0051**  
SHEET NO. S-17 OF S-43 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
591	14BR-1	KENDALL	429	267
			CONTRACT NO. 66995	
ILLINOIS FED. AID PROJECT				