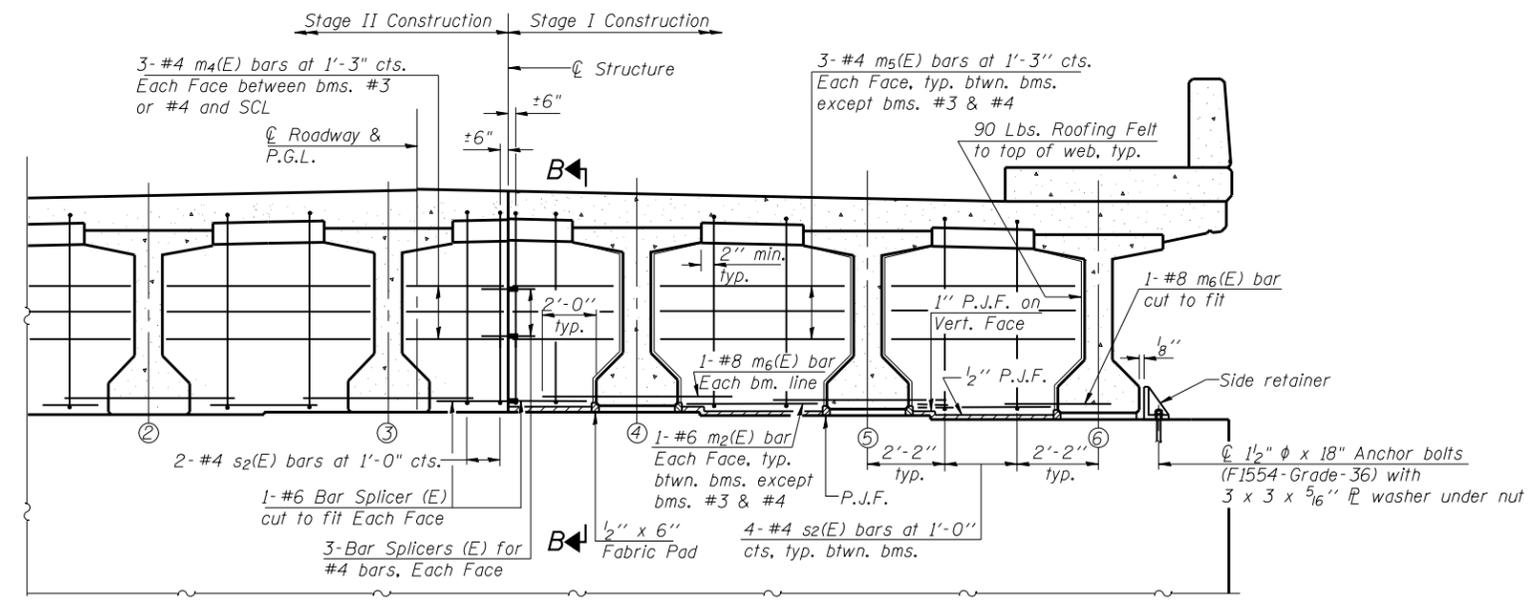


DIAPHRAGM ELEVATION AT ABUTMENT
(Looking North at N. Abut.)

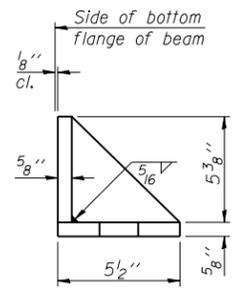
MIN. BAR LAP
#6 bar = 2'-9"



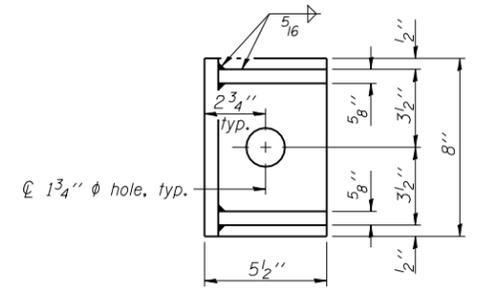
DIAPHRAGM AT PIERS
(Looking North)

DIAPHRAGM DETAILS
STRUCTURE NO. 010-0287

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 13 of 36.
Concrete in diaphragm is included with Concrete Superstructure on sheet 13 of 36.
For details of bars s(E), s₁(E) and s₂(E) see sheet 13 of 36.
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 15 of 36 for Sections A-A and B-B.
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 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 (F_y=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.



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



CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

PROJECT NO. 06027-3
SCALE
DATE 8/03/09
DESIGN BY
DRAWN BY TFG
CHECKED BY MCB

SHEET NO. 16
36 SHEETS

F.A.P. RTE. 326	SECTION (137BR)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 75	SHEET NO. 36
SN 010-0287		CONTRACT NO. 70428		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

PLOT DATE = 9/24/2009
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