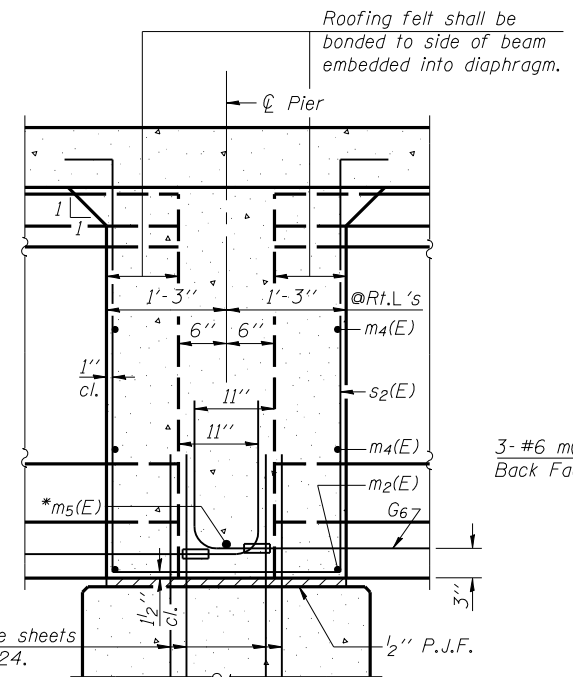
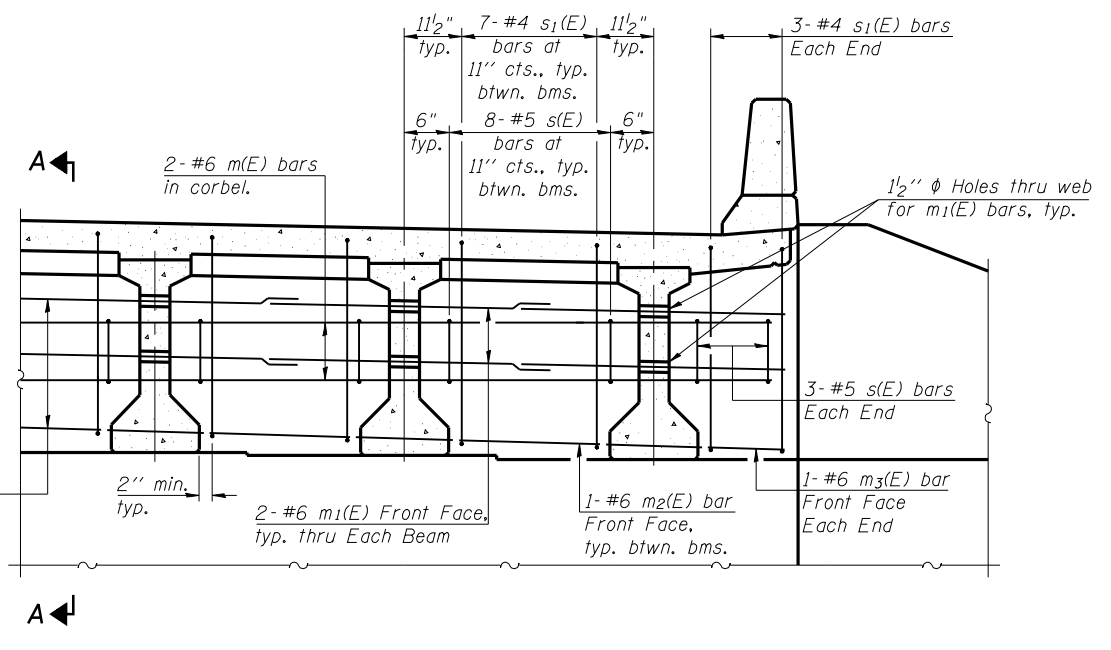


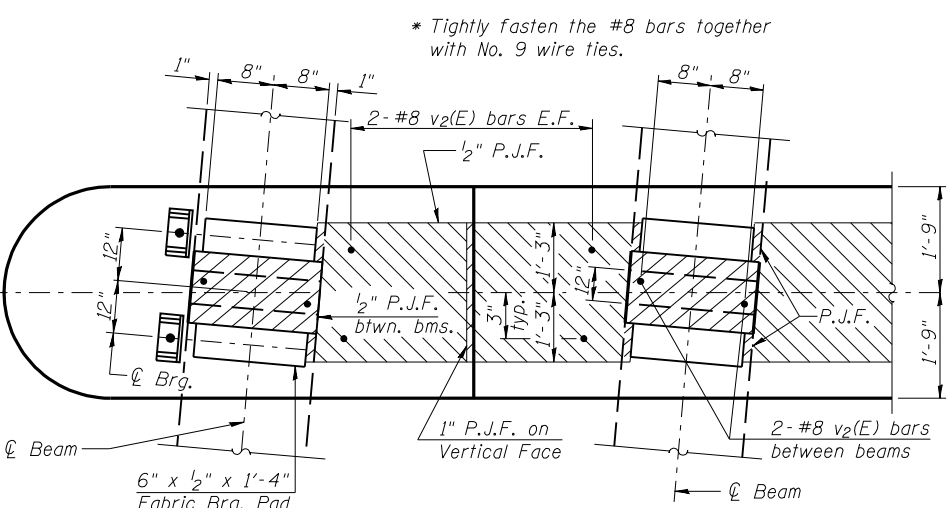
**SECTION A-A**  
Dimensions at right angles to abutment, except as shown.



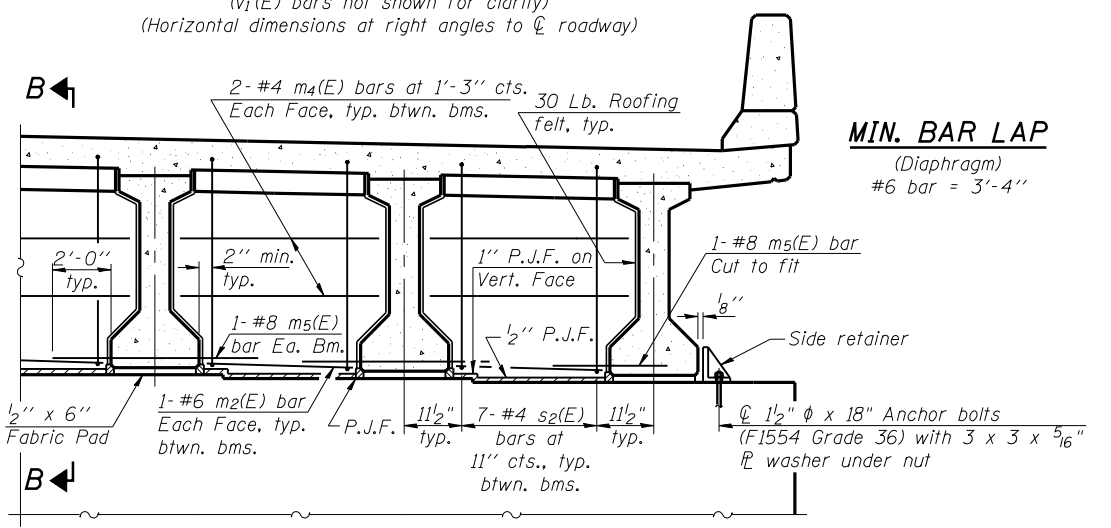
**SECTION B-B**  
Dimensions along centerline of beam, except as shown.



**DIAPHRAGM ELEVATION AT ABUTMENT**  
(v1(E) bars not shown for clarity)  
(Horizontal dimensions at right angles to centerline roadway)



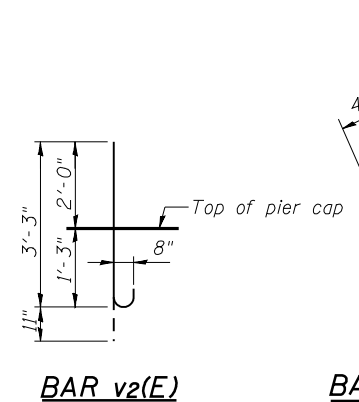
**PIER DETAIL**  
(Showing bearing pad and P.J.F. details)



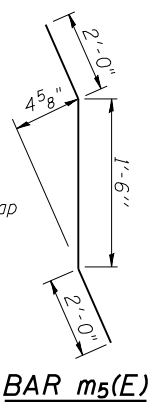
**DIAPHRAGM AT PIER**  
(v2(E) bars not shown for clarity)  
(Horizontal dimensions at right angles to centerline roadway)

**Notes:**  
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 24.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 24.  
For details of bars s(E), s1(E) and s2(E) see sheet 8 of 24.  
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.  
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. See sheet 7 of 24 for location of Sections A-A and B-B.

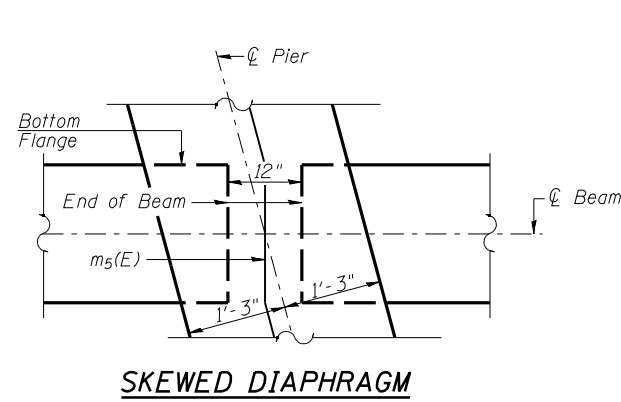
**MIN. BAR LAP**  
(Diaphragm)  
#6 bar = 3'-4"



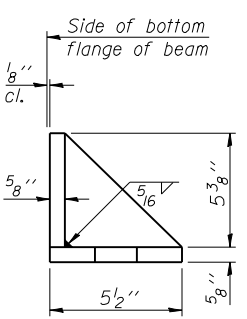
**BAR v2(E)**



**BAR m5(E)**



**SKEWED DIAPHRAGM**



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

