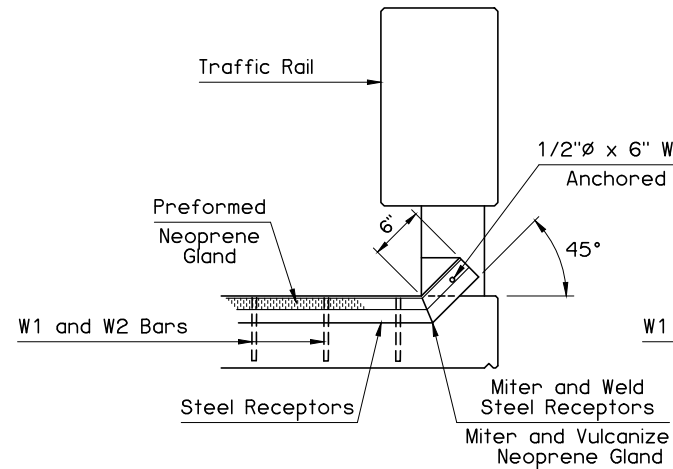
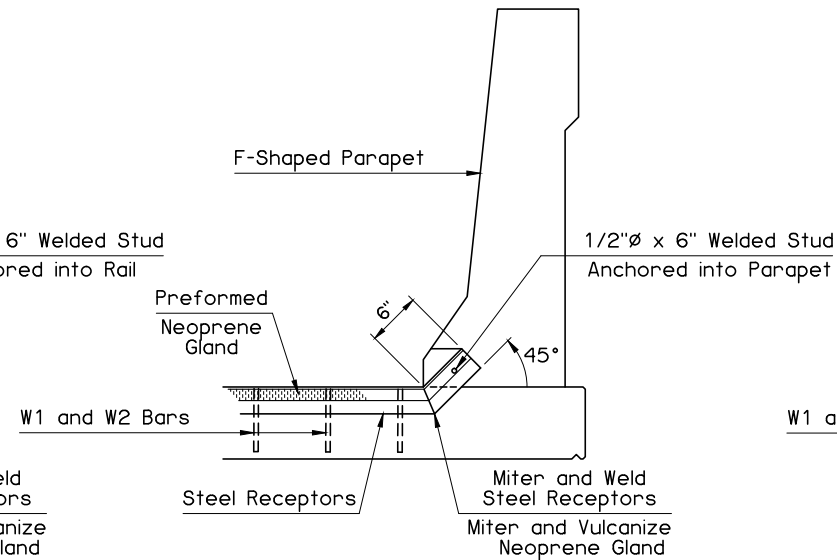


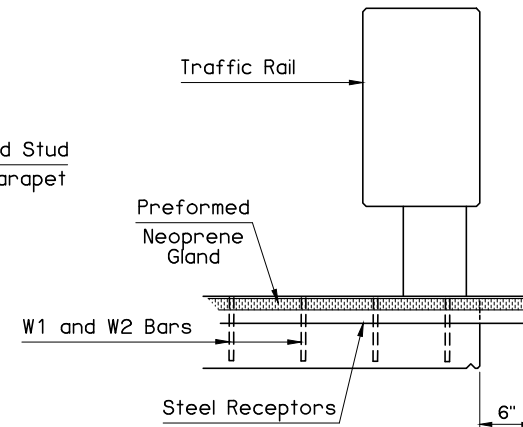
**ELEVATION  
WITHOUT OPENINGS**



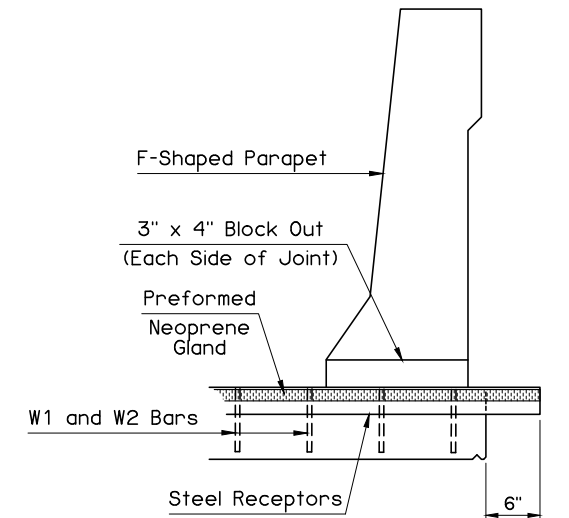
**SECTION AT TRAFFIC RAIL  
WITHOUT OPENINGS**



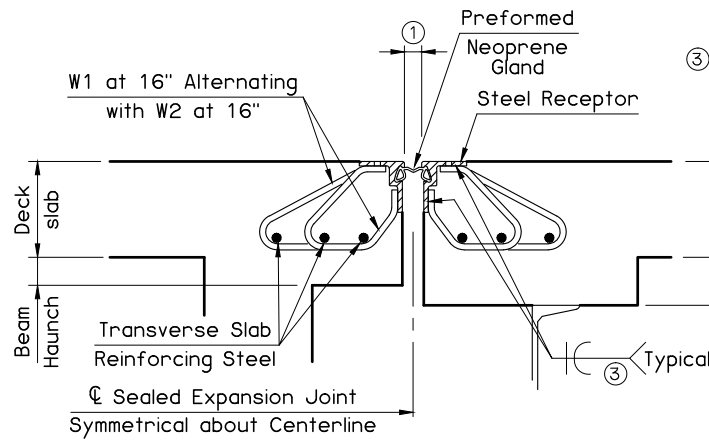
**SECTION AT F-SHAPED PARAPET  
WITHOUT OPENINGS**



**SECTION AT TRAFFIC RAIL  
WITH OPENINGS**



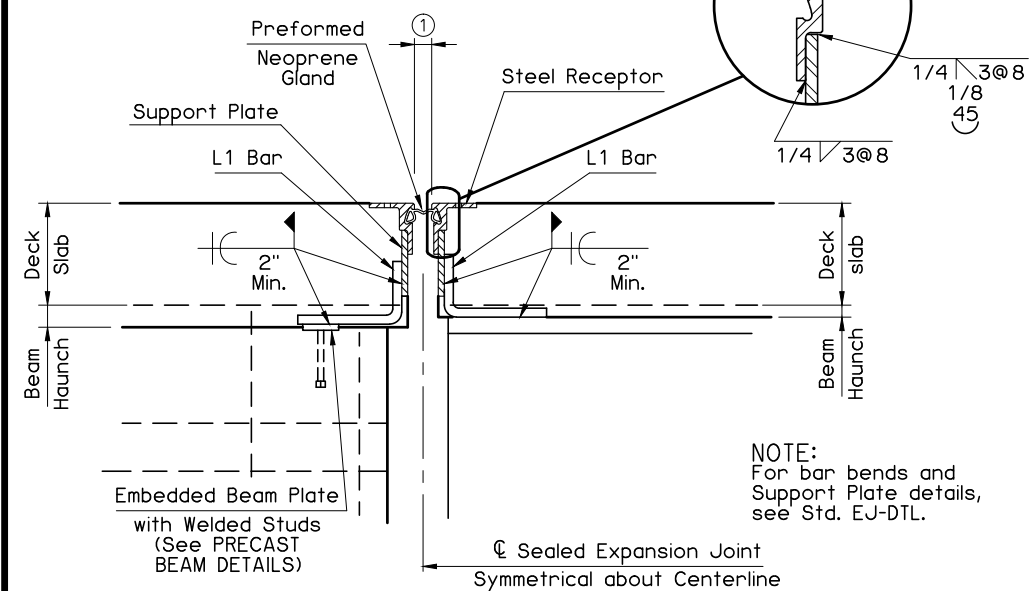
**SECTION AT F-SHAPED PARAPET  
WITH OPENINGS**



**P.C. BEAMS**

**ROLLED BEAMS AND  
PLATE GIRDERS**

**SECTION A-A**



**P.C. BEAMS**

**ROLLED BEAMS AND  
PLATE GIRDERS**

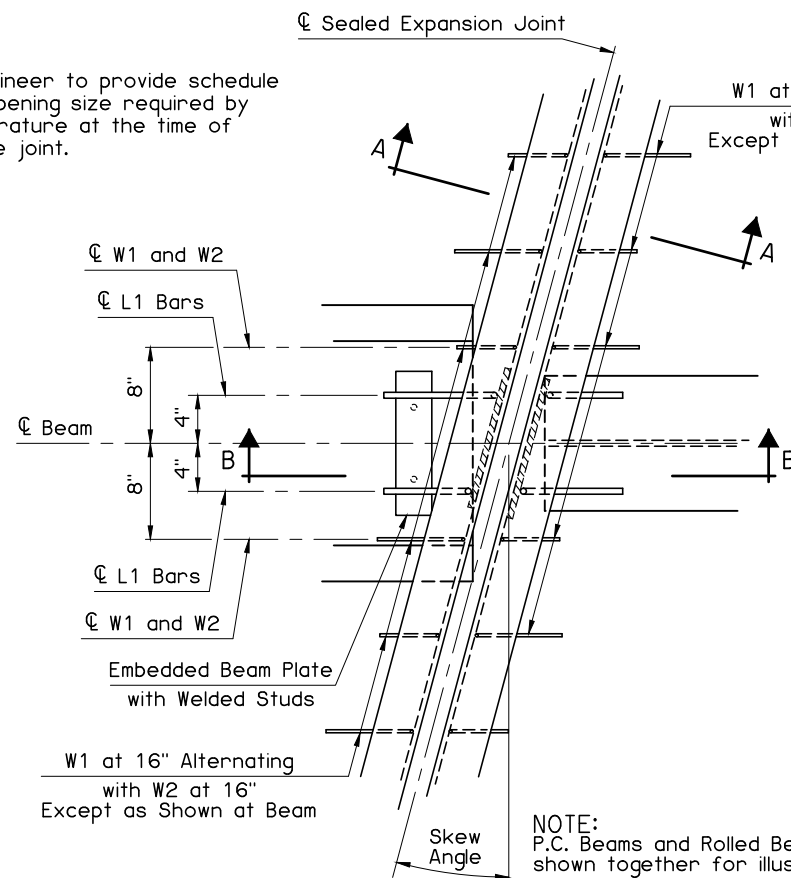
**SECTION B-B**

③ 1 1/2" min. for Type Q Receptor.  
1" min. for Type SSCM-OK Receptor.

BEAM TYPE	TOTAL EXPANSION LENGTH				
	100'	200'	300'	400'	500'
CONCRETE	17.3°F	8.7°F	5.8°F	4.3°F	3.5°F
STEEL	16.0°F	8.0°F	5.3°F	4.0°F	3.2°F

② Table is for assisting in determining joint opening size. A nominal 2" joint opening corresponds to 43°F for new prestressed concrete beams and 60°F for steel beams. Decrease opening as temperature rises and increase as temperature drops. Measure change in bridge length parallel to beams. For change in joint opening size measured normal to joint, divide temperature change by cosine of skew angle.

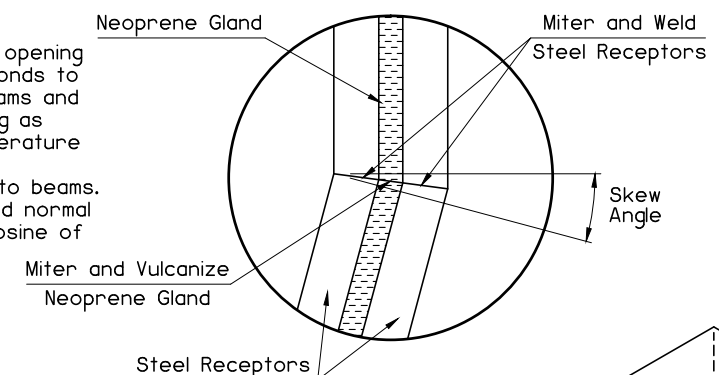
① Design Engineer to provide schedule of joint opening size required by the temperature at the time of setting the joint.



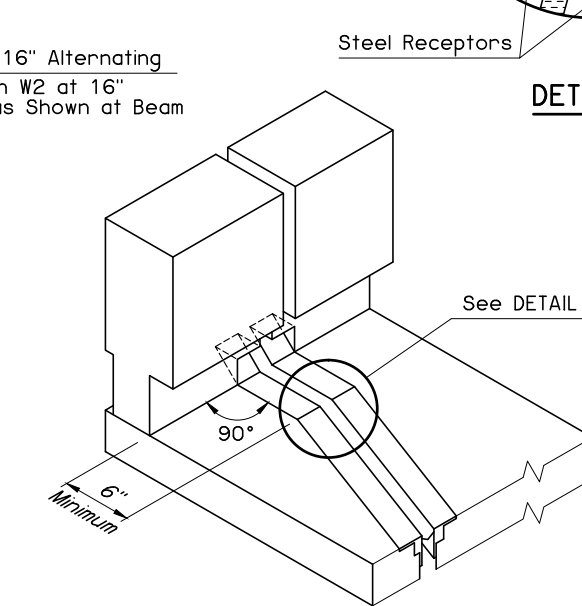
**P.C. BEAMS**

**ROLLED BEAMS AND  
PLATE GIRDERS**

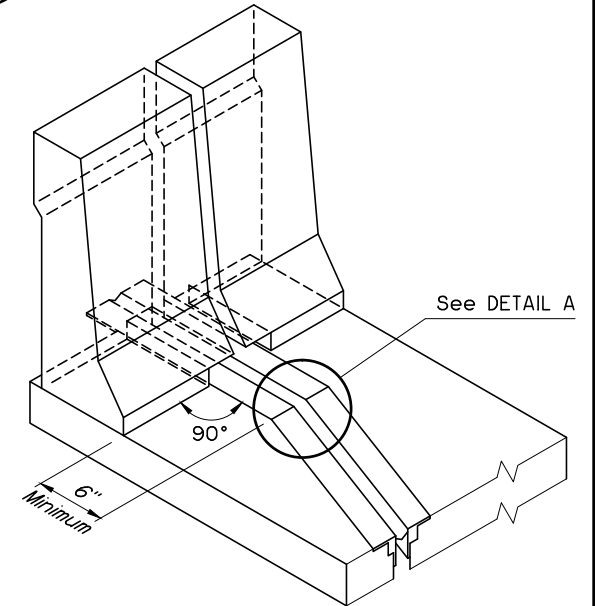
**PLAN**



**DETAIL A**



**PICTORIAL VIEW OF SEALED JOINT AT  
TRAFFIC RAIL WITHOUT OPENINGS  
(F-SHAPED PARAPET SIMILAR)**



**PICTORIAL VIEW OF SEALED JOINT AT  
F-SHAPED PARAPET WITH OPENINGS  
(TRAFFIC RAIL SIMILAR)**

APPROVED BY BRIDGE ENGINEER *Sto. J.* DATE 12-20-16

OKLAHOMA DEPT. OF TRANSPORTATION  
BRIDGE STANDARD (ENGLISH)

**SKewed SEALED EXPANSION JOINT  
CONVENTIONAL**

2009 SPECIFICATIONS

EJ-SK

04E

B-09E