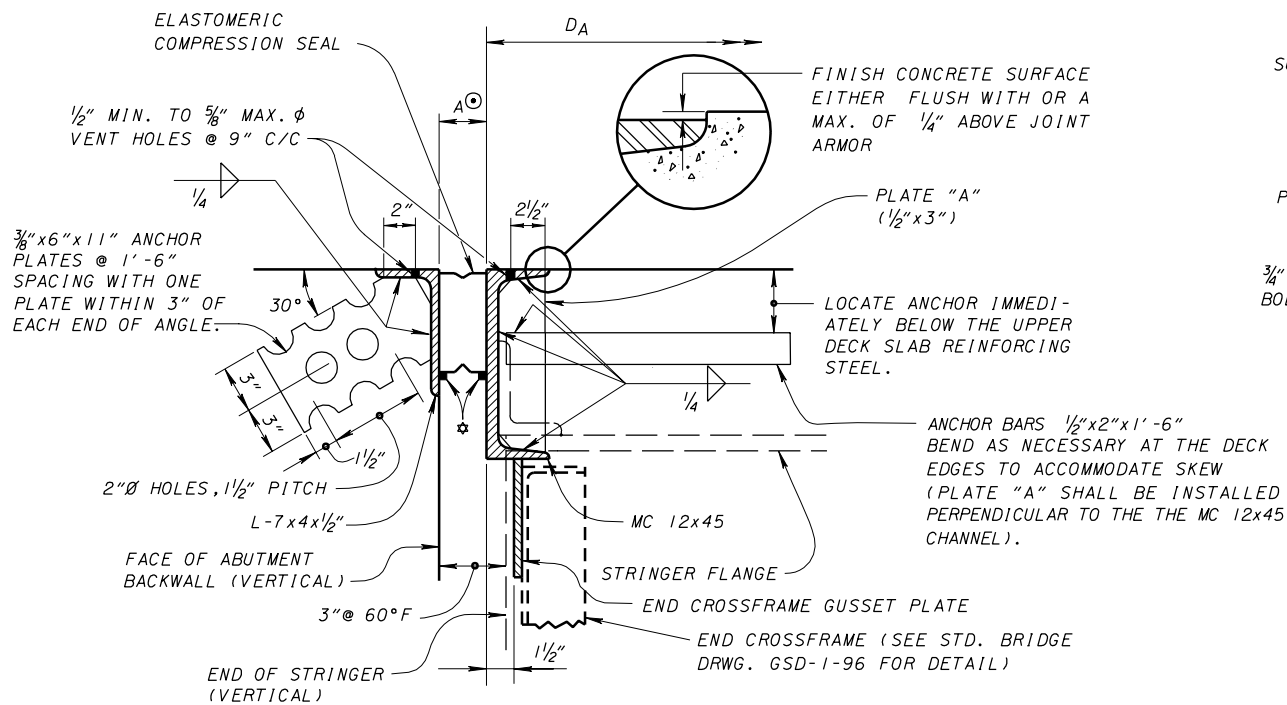


**PART PLAN AT ABUTMENT**

FOR BRIDGES WITH DEFLECTOR PARAPET RAILING  
(BR-1 RAILING SHOWN, SBR-1-99 SHALL BE SIMILAR)

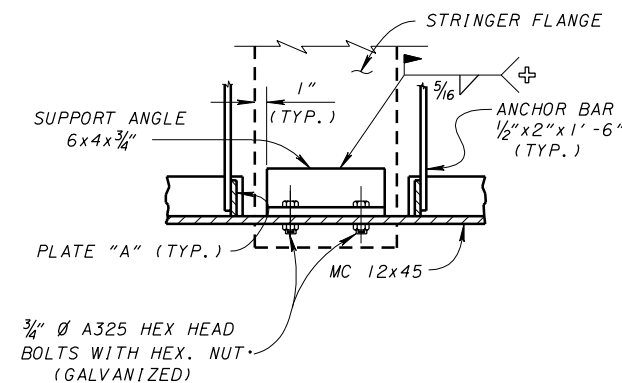


**SECTION C-C**

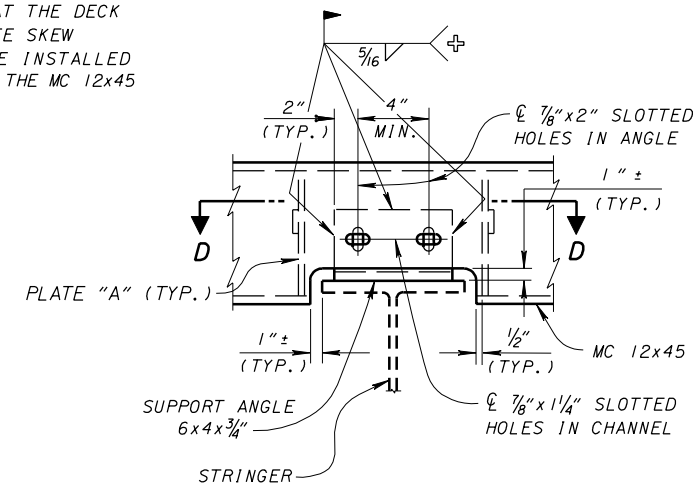
WITH ROADWAY GRADIENT OF 2% OR LESS SHOWN

NOTE: FOR DIMENSIONS A<sup>⊙</sup>, D<sub>A</sub>, ADDITIONAL NOTES AND DETAILS SEE SHEETS 2/3 AND 3/3.

⊙ - 1/2" RETAINER BAR

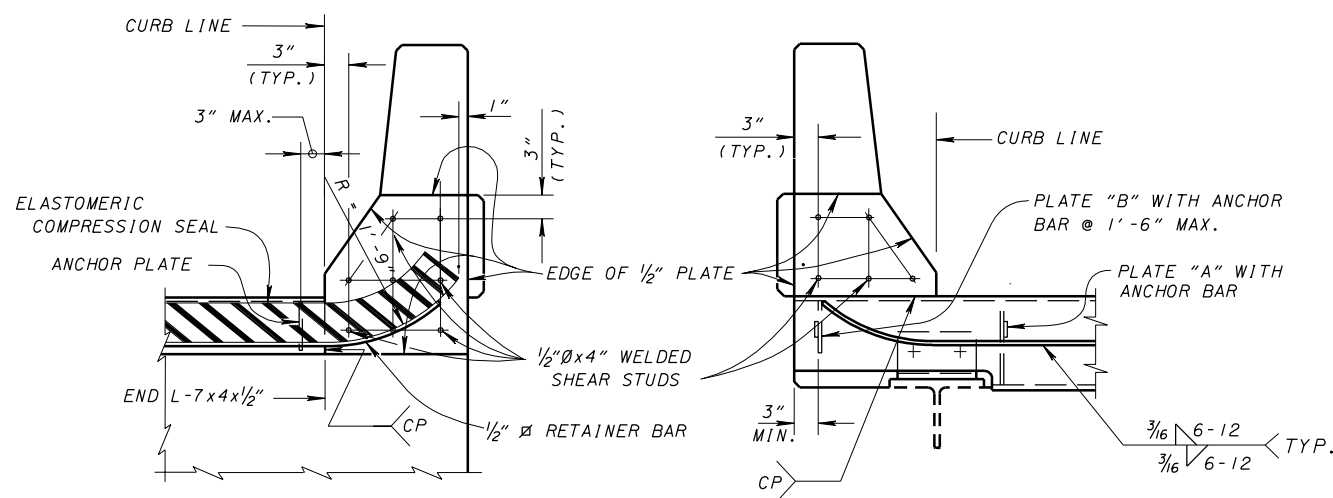


**SECTION D-D**



**DETAIL E**

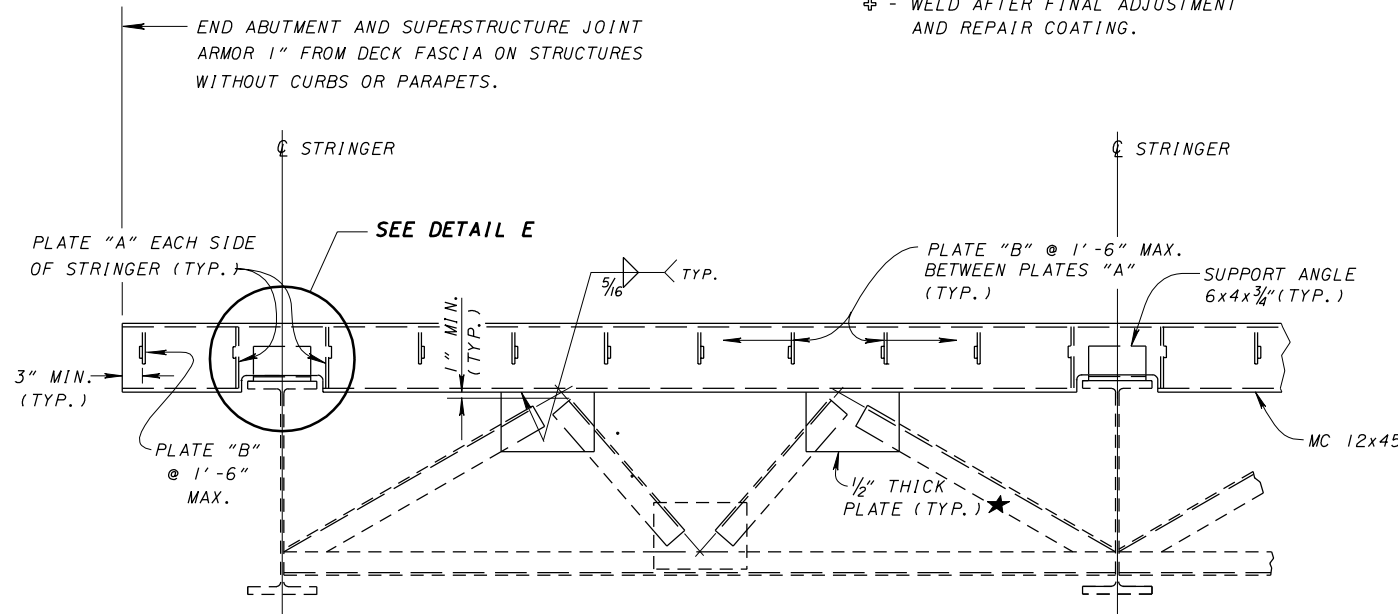
⊕ - WELD AFTER FINAL ADJUSTMENT AND REPAIR COATING.



**SECTION A-A**

**SECTION B-B**

NOTE: SEAL NOT SHOWN



**PART TRANSVERSE SECTION**

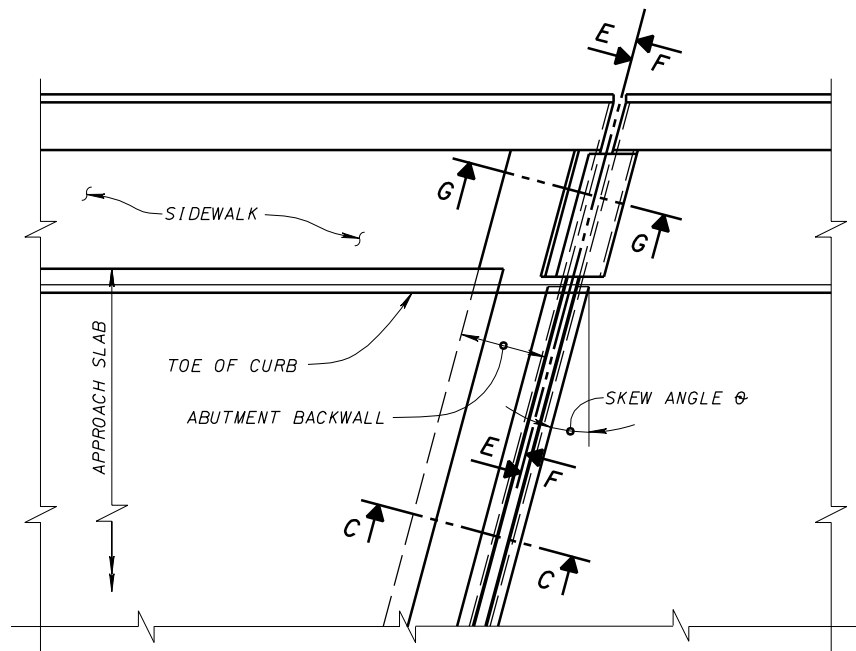
SEE STANDARD BRIDGE DRAWING GSD-1-96 FOR DETAILS OF END CROSSFRAMES AND GUSSET PLATES. SEE SECTION G-G ON SHEET 2/3 FOR PLATE B DETAILS.

★ INCLUDED WITH EXPANSION JOINT FOR COATING & PAYMENT.

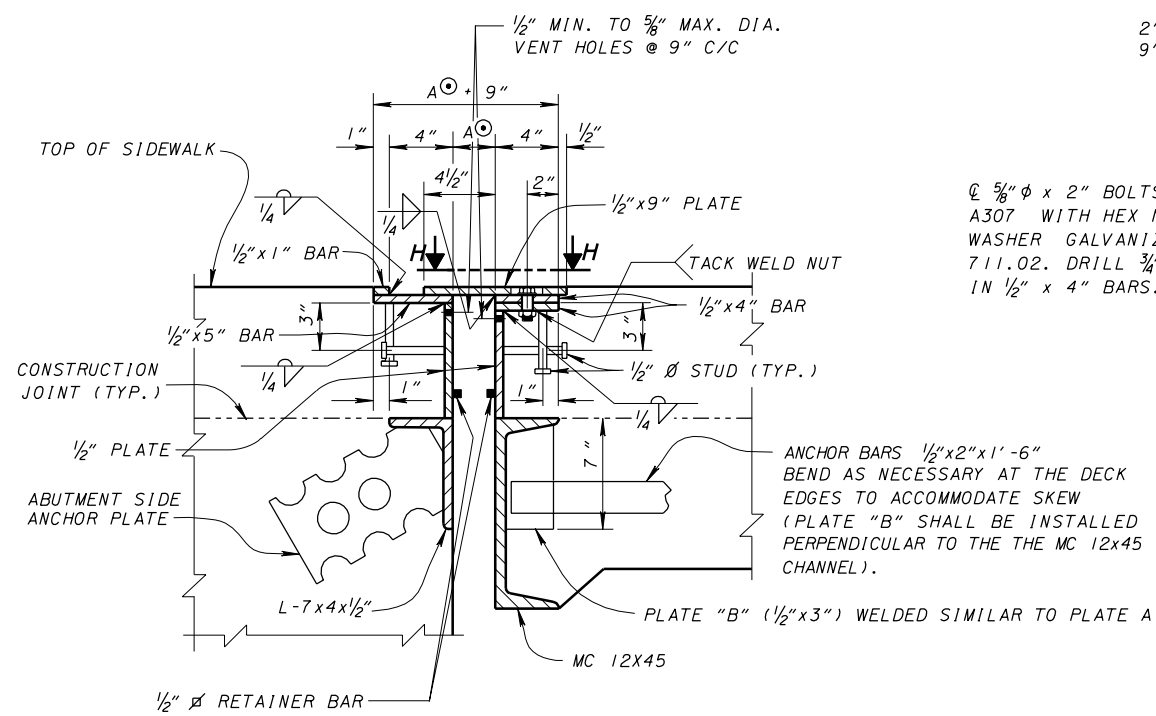
**LEGEND:**  
R = RADIUS

SEE SHEET 3/3 FOR GENERAL NOTES AND CONSTRUCTION PROCEDURES.

DESIGN AGENCY	OFFICE OF	STRUCTURAL ENGINEERING
STATE OF OHIO, DEPARTMENT OF TRANSPORTATION	9-1-81	DATE
ENGINEER OF BRIDGES	Robert B. Fisher	
REVIEWED	WTL/MPB	EXJ-2-81
CHECKED	JS/RLD	
DESIGNED	MPB/AJM	
REVISIONS	04-2-84	
	02-14-97	
	04-20-01	
	07-19-02	
STANDARD	COMPRESSION SEAL EXPANSION JOINTS AT ABUTMENTS FOR STEEL STRINGER STRUCTURES	
		1/3

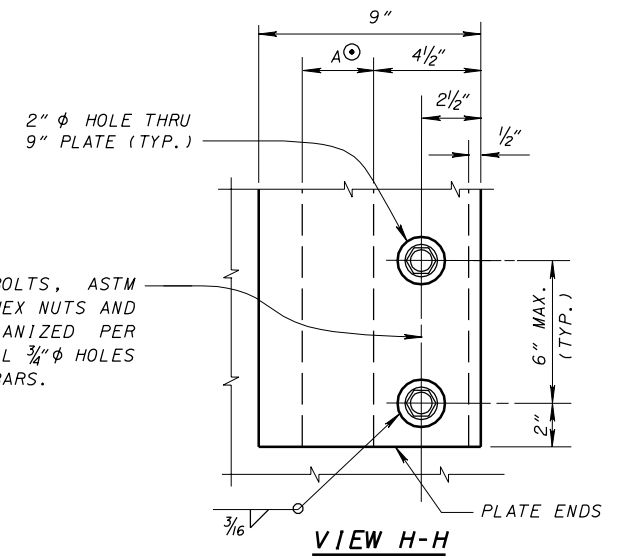


**PART PLAN AT ABUTMENT**  
FOR BRIDGES WITH SIDEWALK PARAPET RAILING

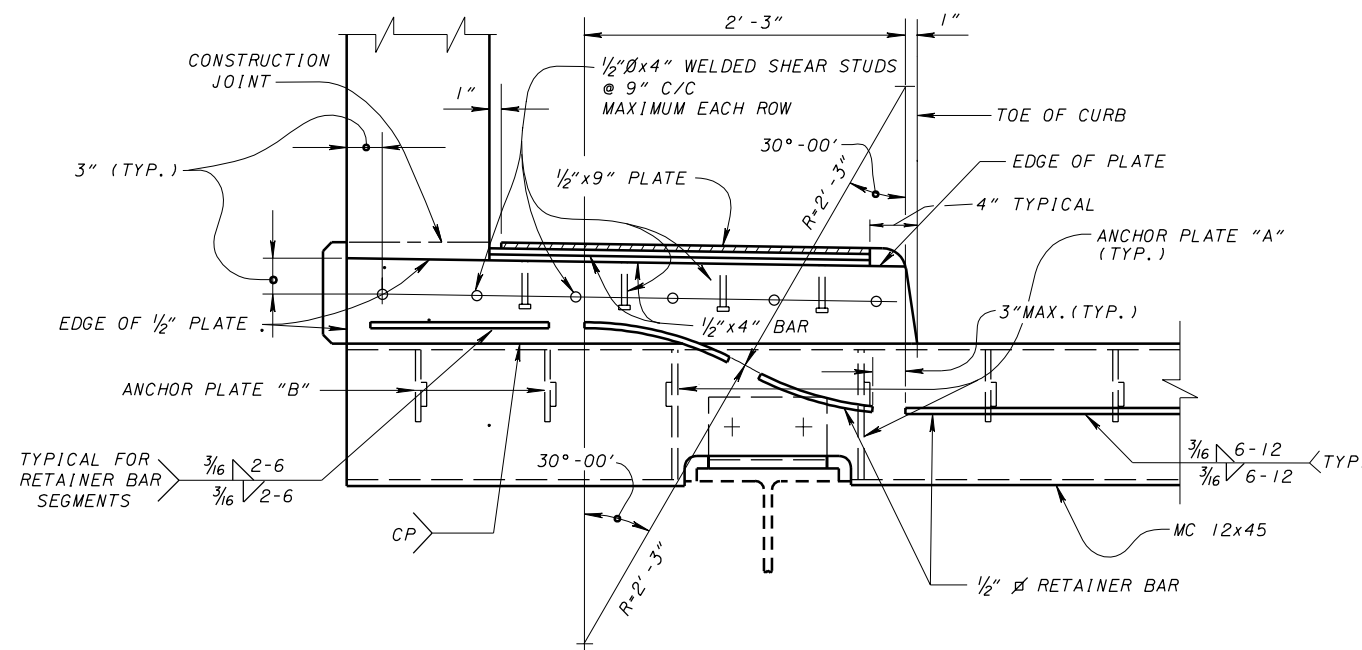


**SECTION G-G**

NOTE: FOR DIMENSIONS A<sup>⊙</sup>, D<sub>A</sub>, ADDITIONAL NOTES AND DETAILS SEE SHEETS 1/3 AND 3/3.



**VIEW H-H**

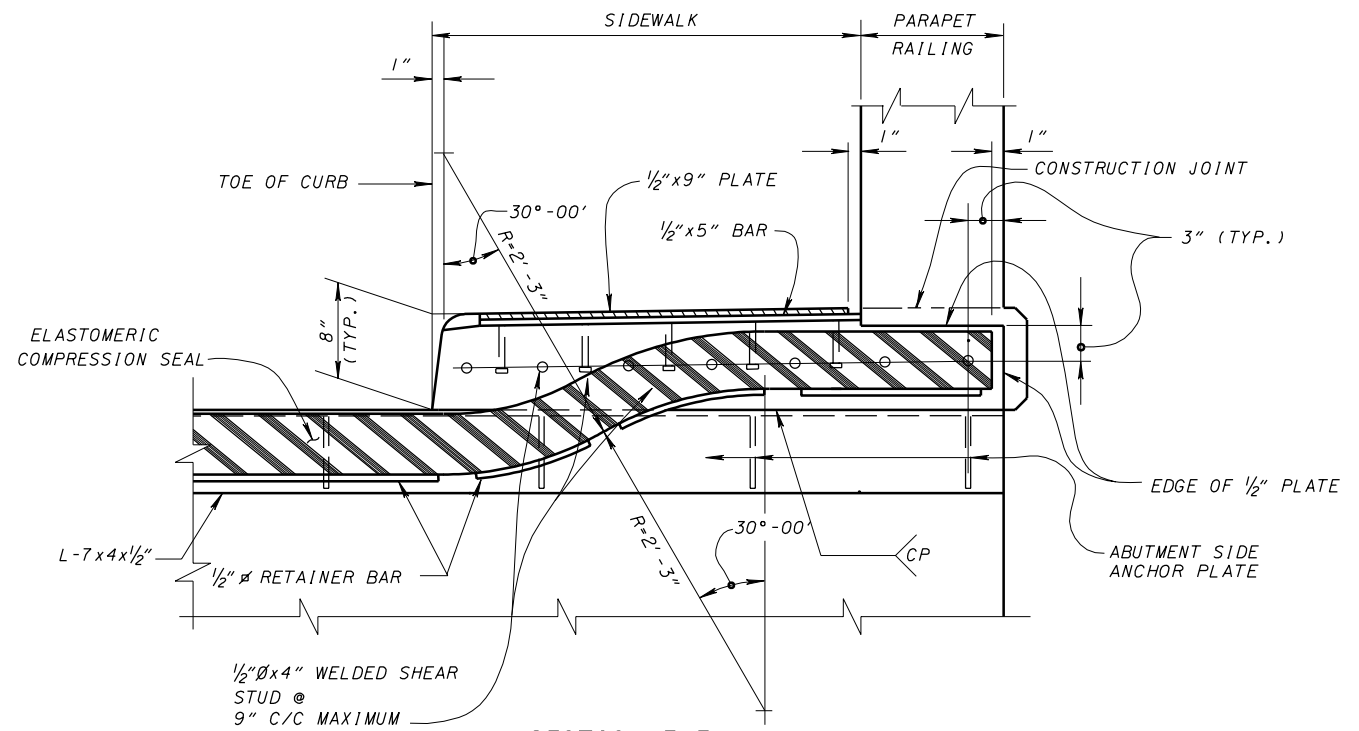


**SECTION E-E**  
SEAL NOT SHOWN

SEE SECTION F-F FOR OTHER DETAILS NOT SHOWN

**LEGEND:**  
R = RADIUS

FOR ADDITIONAL DETAILS, SEE DETAIL E ON SHEET 1/3.



**SECTION F-F**

SEE SECTION E-E FOR OTHER DETAILS NOT SHOWN

FOR SECTION C-C SEE SHEET 1/3.

SEE SHEET 3/3 FOR GENERAL NOTES AND FOR CONSTRUCTION PROCEDURES.

**GENERAL NOTES:**

**COMPRESSION SEAL:** FURNISH MATERIAL CONFORMING TO 705.11. THE SEAL CONFIGURATION SHOULD BE SIMILAR TO THE DETAILS SHOWN HEREIN. ACCEPTED MANUFACTURES ARE: D.S.BROWN (MODEL CV4000), WATSON-BOWMAN-ACME (MODEL WJ400) OR AN APPROVED EQUIVALENT. INSTALL THE SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE.

**JOINTS IN COMPRESSION SEALS:** FURNISH SEALS IN ONE CONTINUOUS PIECE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

**ARMOR STEEL:** ALL CHANNEL SHAPES, ANGLE SHAPES AND ALL CROSS FRAME CONNECTION GUSSET PLATES, SHALL BE ASTM A709, GRADE 50 OR 50W. ALL OTHER STEEL PARTS INCLUDING RETAINERS, SHALL BE ASTM A709, GRADE 36, 50 OR 50W.

**JOINTS IN ARMOR STEEL:** SHOP OR FIELD JOINTS IN THE ARMOR SHALL BE COMPLETE PENETRATION WELDS GROUND FLUSH WHERE IN CONTACT WITH THE SEAL AND THE RETAINER.

**ARMOR COATING:** COAT ALL STEEL PARTS OF THE JOINT ASSEMBLY ACCORDING TO 516.

DO NOT FIELD PAINT METALIZED SURFACES EXCEPT AS NOTED. CLEAN AND PAINT THE AREAS ON THE 1/2" GUSSET PLATES DAMAGED DURING CROSSFRAME INSTALLATION IN CONFORMANCE WITH THE STRUCTURE'S PAINT SYSTEM. PROTECT THE METALIZED COATING WHEN BLASTING OR COATING ADJACENT STEEL MEMBERS. OVERSPRAY NEED NOT BE REMOVED.

**TEMPORARY SUPPORTS:** THE FABRICATOR SHALL DESIGN AND INSTALL TEMPORARY SUPPORTS TO RESIST SHIPPING, ERECTION AND CONSTRUCTION FORCES WITHOUT DAMAGE TO THE STEEL ARMOR OR COATING. THESE SUPPORTS SHALL BE ADJUSTABLE IN THE FIELD TO ACCOUNT FOR VARIABLE TEMPERATURE SETTINGS. INSTALL THE SUPPORTS AFTER THE FABRICATION AND COATING IS COMPLETE.

**CONSTRUCTION PROCEDURE:**

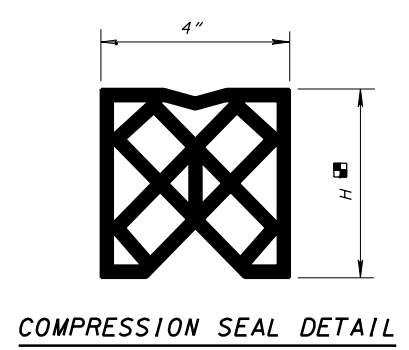
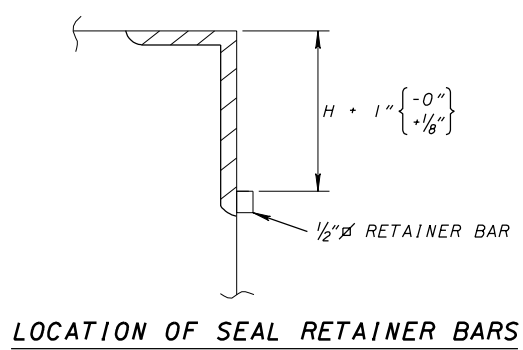
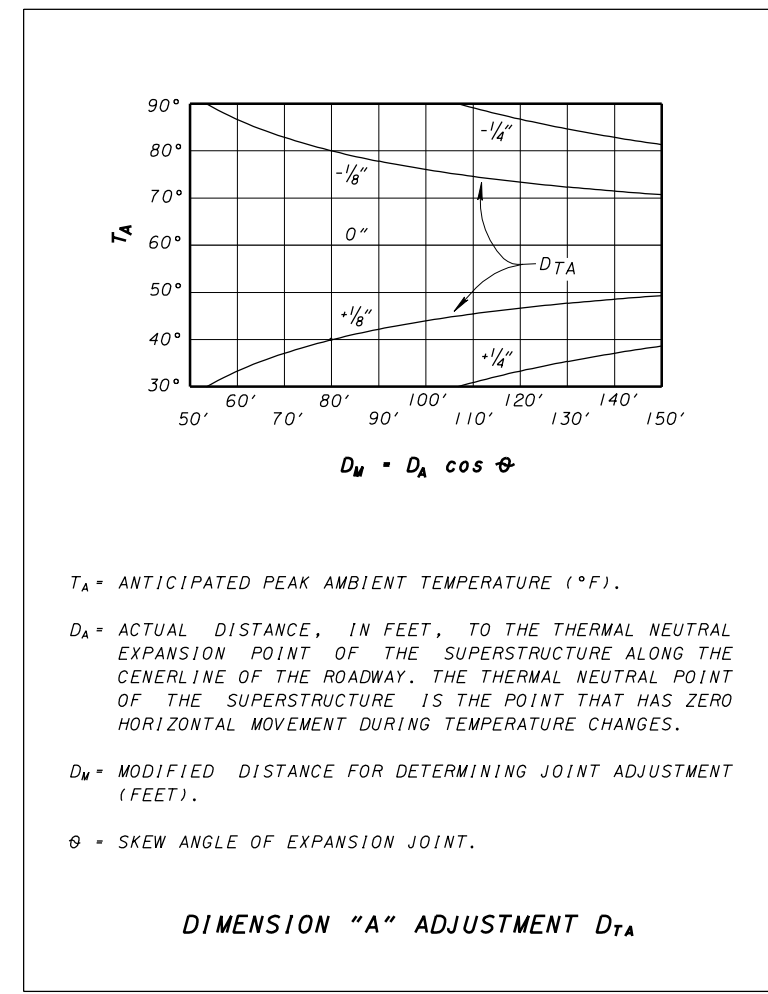
1. PLACE SUPERSTRUCTURE CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT PRIOR TO PLACING ABUTMENT BACKWALL CONCRETE.
2. NOT MORE THAN FOUR HOURS PRIOR TO THE DAY'S PEAK AMBIENT TEMPERATURE, SET ABUTMENT EXPANSION JOINT WIDTH TO DIMENSION "A" WHICH SHALL BE DETERMINED AS FOLLOWS:  
  
 $A = 2\frac{1}{4}'' \pm D_{TA}$ , WHERE:  
 A = JOINT WIDTH (INCHES) MEASURED NORMAL TO JOINT  
 D<sub>TA</sub> = ADJUSTMENT (INCHES) FOR A PEAK AMBIENT TEMPERATURE OTHER THAN 60°F (SEE CHART).
3. PLACE BACKWALL CONCRETE DURING STABLE OR RISING AMBIENT TEMPERATURES AND CONCLUDE PLACEMENT AT OR IMMEDIATELY BEFORE THE DAY'S PEAK AMBIENT TEMPERATURE.
4. LOOSEN ANY TEMPORARY END DAM BOLTS AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONCRETE PLACEMENT.

**NOTES TO DESIGNER:**

**DESIGN LIMITS:** THIS DESIGN IS INTENDED FOR STRUCTURES WITH SKEW ANGLES NOT GREATER THAN 15°, ROADWAY GRADES OF 2% OR LESS AND D<sub>M</sub> (SEE CHART ON THIS SHEET) NOT LARGER THAN 150 FEET.

**BEAM ENDS** FOR STRUCTURES SHALL BE MADE VERTICAL. DESIGNERS SHALL SUPPLY DETAILS FOR STRUCTURES WITH ROADWAY GRADES GREATER THAN 2%.

**COMPRESSION SEALS** AT FIXED BEARINGS SHALL BE AS SHOWN WHERE DIMENSION "A" = 2 1/4" AT ANY AMBIENT TEMPERATURE.



SEE THE MANUFACTURER'S CATALOGUE FOR THE SEAL ACTUALLY CHOSEN FOR USE.