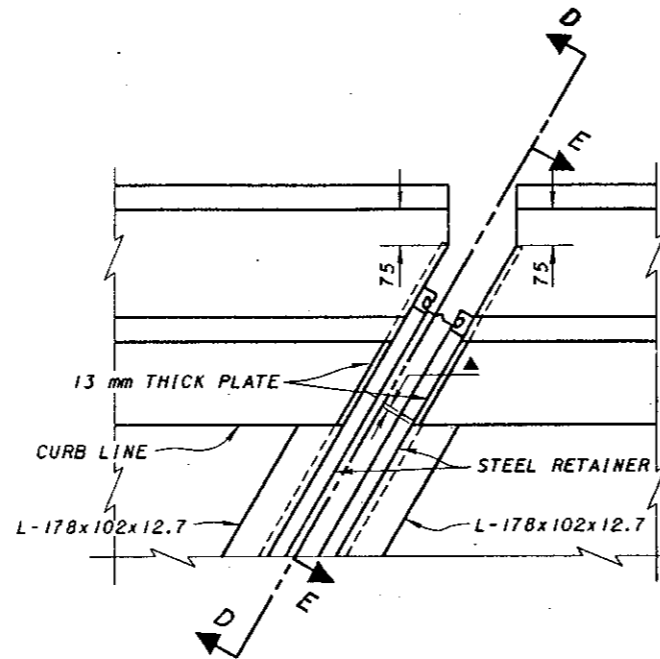
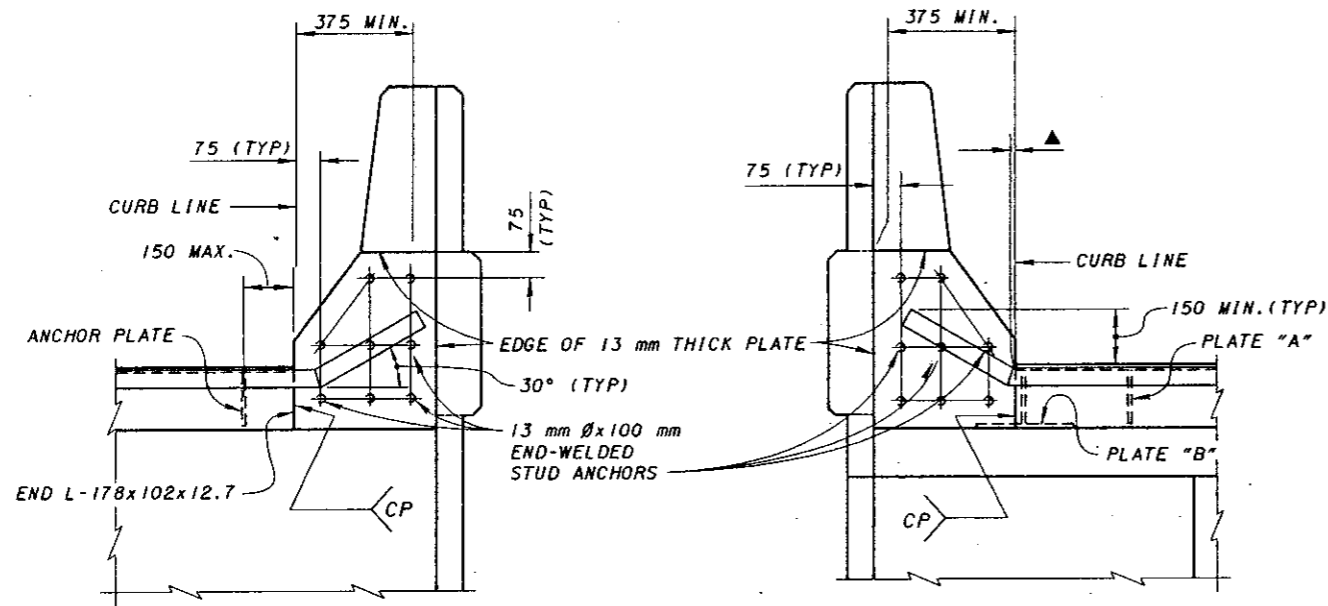


**PLAN AT ABUTMENT**  
FOR SKEWED BRIDGES (OVER 15°)  
WITH DEFLECTOR PARAPET RAILING



**DETAIL B**



**SECTION D-D**

**SECTION E-E**

▲ - 0 MIN. TO 13 mm MAX. AT BREAKPOINT IN RETAINER FOR SQUARE BRIDGES. ON SKEWED BRIDGES THIS DIMENSION WILL ONLY APPLY TO THE SIDE OF JOINT ASSEMBLY WHICH IS NEAREST TO THE CURB LINE (SEE DETAIL "B" ABOVE).

**DESIGN NOTES:**

**JOINTS IN END DAM ARMOR:** TRANSVERSE JOINTS IN ARMOR SHALL HAVE COMPLETE PENETRATION BUTT WELDS. BUTT WELDS IN CONTACT WITH THE STEEL RETAINERS SHALL BE GROUND FLUSH.

THE MINIMUM LENGTH OF RETAINER SHALL BE 1800 mm BETWEEN JOINTS UNLESS OTHERWISE SHOWN.

**JOINTS IN RETAINERS** SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS IN CONTACT WITH THE SEAL GLAND AND/OR JOINT ARMOR SHALL BE GROUND SMOOTH.

PROJECT PLANS SHALL LIST DIMENSION "A" FOR TEMPERATURES BETWEEN 0°C AND 35°C IN 5 DEGREE INCREMENTS.

**JOINT SEAL GLANDS AT FIXED BEARINGS** SHALL BE THE SAME SIZE AS THE EXPANSION BEARINGS WITH A DIMENSION "A" OF 50 mm AT ANY AMBIENT TEMPERATURE.

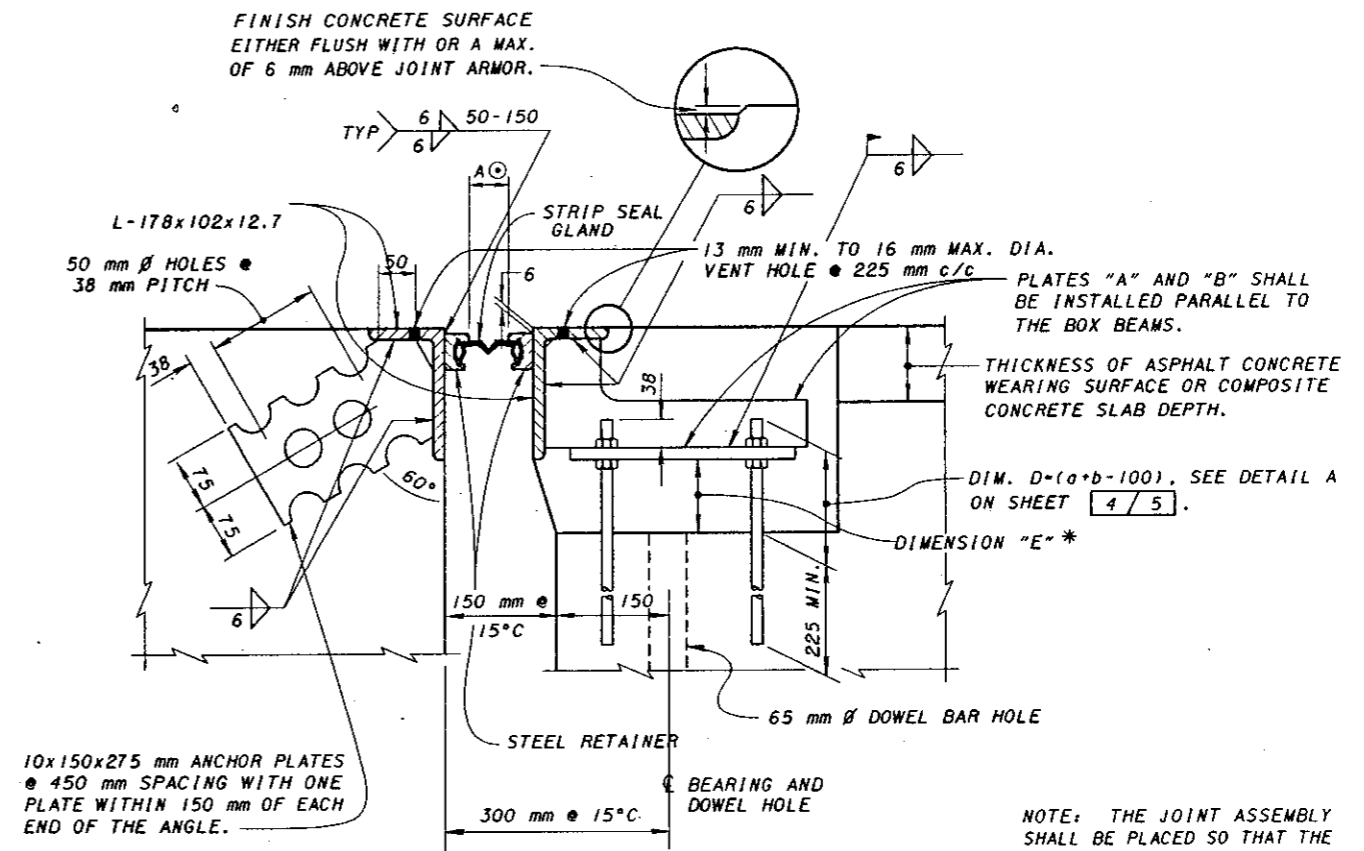
**CONCRETE UNDER JOINT ARMOR** SHALL BE HAND PLACED AND VIBRATED TO ACHIEVE SOLID FILLING.

**PRESTRESSED CONCRETE BOX BEAMS** SHALL BE MODIFIED AS FOLLOWS FOR STRIP SEAL INSTALLATION:

1. STIRRUP REINFORCING STEEL IN NOTCHED AREAS AT ENDS OF COMPOSITE BEAMS SHALL NOT PROJECT ABOVE THE TOP OF CONCRETE.
2. ENDS OF FASCIA BEAMS SHALL BE NOTCHED FULL WIDTH OF THE BEAMS.
3. HOLES FOR DOWEL BARS SHALL BE 65 mm IN DIAMETER.
4. BEAM ENDS FOR STRUCTURES ON GRADES OVER 2% SHALL BE MADE VERTICAL.

**ABUTMENT DETAILS:** THIS DESIGN IS INTENDED FOR STRUCTURES WITH A FREE STANDING ABUTMENT SIMILAR TO THE ABUTMENT DETAIL SHOWN ON SHEET 4/5.

DOWEL BAR HOLES IN THE ABUTMENT SEATS SHALL BE 32 mm MINIMUM IN DIAMETER.



**SECTION X-X**

⊙ - DIMENSION "A" SHALL BE DETERMINED FROM TABLE "B", TABLE "C" OR TABLE "D" ON SHEET 5/5.

\* - IF DIMENSION "E" IS LESS THAN 75 mm A BED OF NON-SHRINKING GROUT SHALL BE PLACED AND COMPACTED UNDER EACH PLATE B AFTER FINAL VERTICAL ADJUSTMENT.

NOTE: THE JOINT ASSEMBLY SHALL BE PLACED SO THAT THE 178x102x12.7 ANGLES REMAIN PARALLEL TO EACH OTHER AND PERPENDICULAR TO THE ROADWAY GRADIENT.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION  
 BUREAU OF BRIDGES  
 STRUCTURAL DESIGN  
 REVIEWED: LMY  
 CHECKED: JS  
 DESIGNED: AJM  
 DRAWN: AJM  
 REVISIONS:  
 STANDARD  
 STRIP SEAL EXPANSION JOINTS  
 CONCRETE BOX BEAM STRUCTURES  
 2 / 5

ENGINEER OF BRIDGES  
 3-20-95  
 DATE