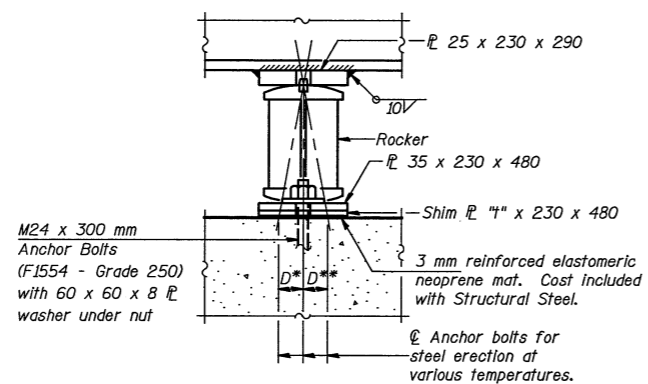
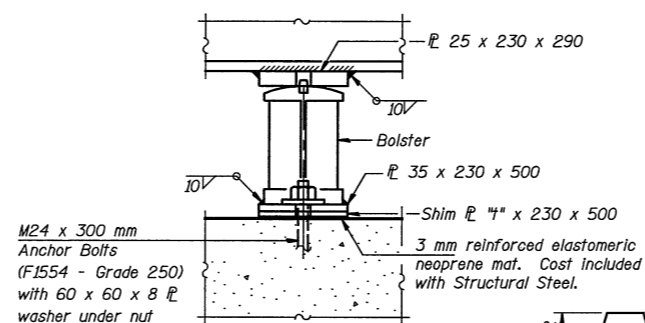


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
55	*	McLEAN	310/192

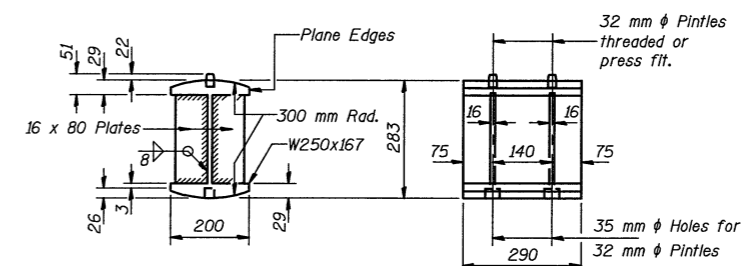
FED. ROAD DIST. NO. 7 ILLINOIS IAP  
 \*(57-4)R, HBY, HBR, (57-4VB)DM  
 Contract No. 70757



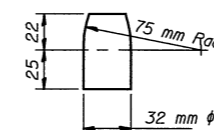
**PIERS 1, 3, 4 & 6  
ELEVATION**



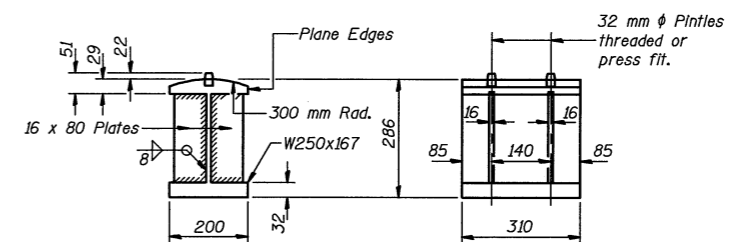
**PIERS 2 & 5  
ELEVATION**



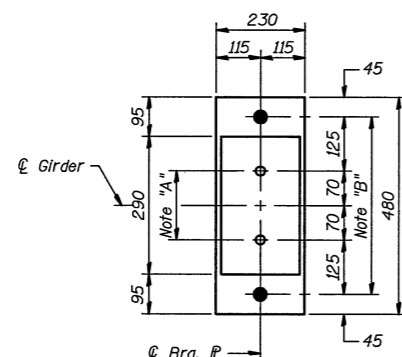
**ROCKER**



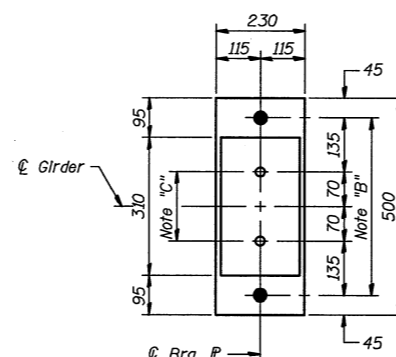
**PINTLE**



**BOLSTER**



**PLAN  
AT PIERS 1, 3, 4 & 6**



**PLAN  
AT PIERS 2 & 5**

Note "A"  
 35 mm  $\phi$  Holes-25 mm deep in top  $\bar{\bar{r}}$  for 32 mm  $\phi$  pintles. Thread or press fit pintles in bottom  $\bar{\bar{r}}$ .

Note "B"  
 40 mm  $\phi$  Holes for M24 Anchor Bolts - 8 x 60 x 60  $\bar{\bar{r}}$  washer under nut.

Note "C"  
 35 mm  $\phi$  Holes-25 mm deep in top  $\bar{\bar{r}}$  for 32 mm  $\phi$  pintles.

**BEARING ASSEMBLY DETAILS**

**BILL OF MATERIAL**

Item	Unit	Total
Anchor Bolts, M24	Each	24

**NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS**

- a.) D\* (Side of brg. away from fixed brg.)  
 $D^* = 1 \text{ mm per each } 10 \text{ m of expansion for every } 8 \text{ }^\circ\text{C fall below the normal temp. of } 10 \text{ }^\circ\text{C.}$
- D\*\* (Side of brg. toward fixed brg.)  
 $D^{**} = 1 \text{ mm per each } 10 \text{ m of expansion for every } 8 \text{ }^\circ\text{C rise above the normal temp. of } 10 \text{ }^\circ\text{C.}$
- b.) After girders have been erected and dimensions D\* & D\*\* determined, holes shall be drilled and anchor bolts shall be installed.  
 All fixed anchor bolts may be built into the masonry.

Notes:  
 All dimensions are in millimeters (mm) except as noted. Bearing details shown are to be used at new beam locations only. Two 3 mm adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. The quantity of Steel required for the pier bearing assemblies, bolsters and rockers is included in Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height dimensions. 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 250 ( $F_y=248\text{MPa}$ ). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
SHEET TITLE <b>BEARING DETAILS AT PIERS</b>	
PROJECT F.A.I. 55 OVER BUSINESS U.S. 51 SECTION 57-4HBR-4 STATION 37+474.206 McLEAN COUNTY STRUCTURE NO. 057-0024 (N.B.) & STRUCTURE NO. 057-0025 (S.B.)	PROJECT NO. 08049-5 SCALE DATE 07/15/2009 DRAWN BY TFG/CFC CHECKED BY CME/MCB DRAWING NO.
<b>COOMBE-BLOXDORF P.C.</b> Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	
16	OF 24 SHTS