

**Notes:**

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. 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.

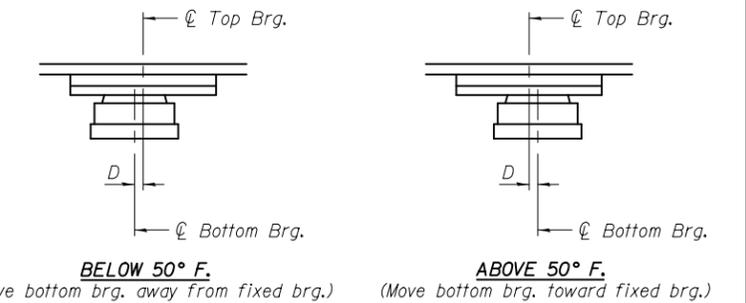
For anchor bolt locations, see sheet 62 & 63 of 79.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270, Grade 50.

Provide 5/8" x 1'-6" x 3'-0 1/4" fill plate at girder 9.

Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Bearing dimensions and details shown are for a pot type HLMR bearing. Disc type HLMR bearing dimensions and details will vary.



**SETTING ANCHOR BOLTS AT EXP. BRG.**

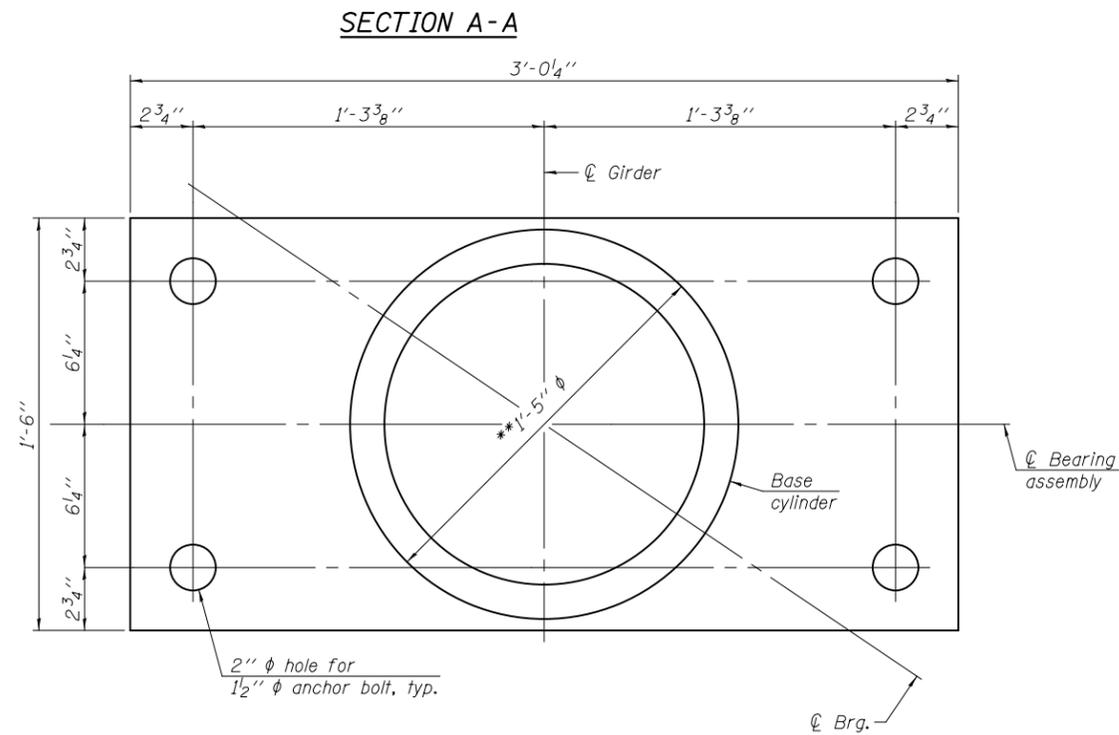
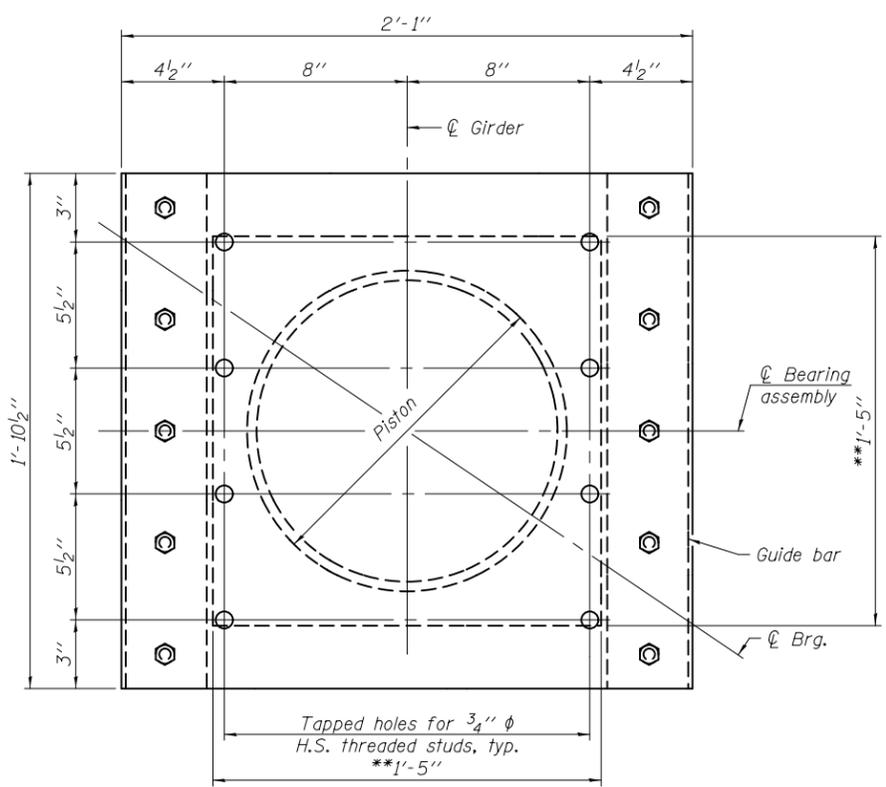
D = 5/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

**DESIGN DATA**

Bearing Manufacturer Design Criteria	Pier 4
Vertical Design Load (kips)	523
Horizontal Design Load (kips), H <sub>u</sub>	105
Design Rotation (rad), θ <sub>u</sub>	0.0074
Total Required Movement (in.)	3 3/8

**BILL OF MATERIAL**

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 550k	Each	12
Anchor Bolts, 1 1/2"	Each	48



DESIGNED - DAVID H. RICHTER  
 CHECKED - JUSTIN T. BELUE  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - J.T.B. / D.H.R.

EXAMINED - *Jaime F. Joffe*  
 ACTING ENGINEER OF BRIDGE DESIGN

PASSED - *Carl Perry*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 4, 2013  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PIER 4 BEARING DETAILS  
 STRUCTURE NO. 046 - 0135 (NB) & 046 - 0136 (SB)

SHEET NO. 43 OF 79 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(140)BR&BR-1	KANKAKEE	183	83

CONTRACT NO. 66750  
 ILLINOIS FED. AID PROJECT