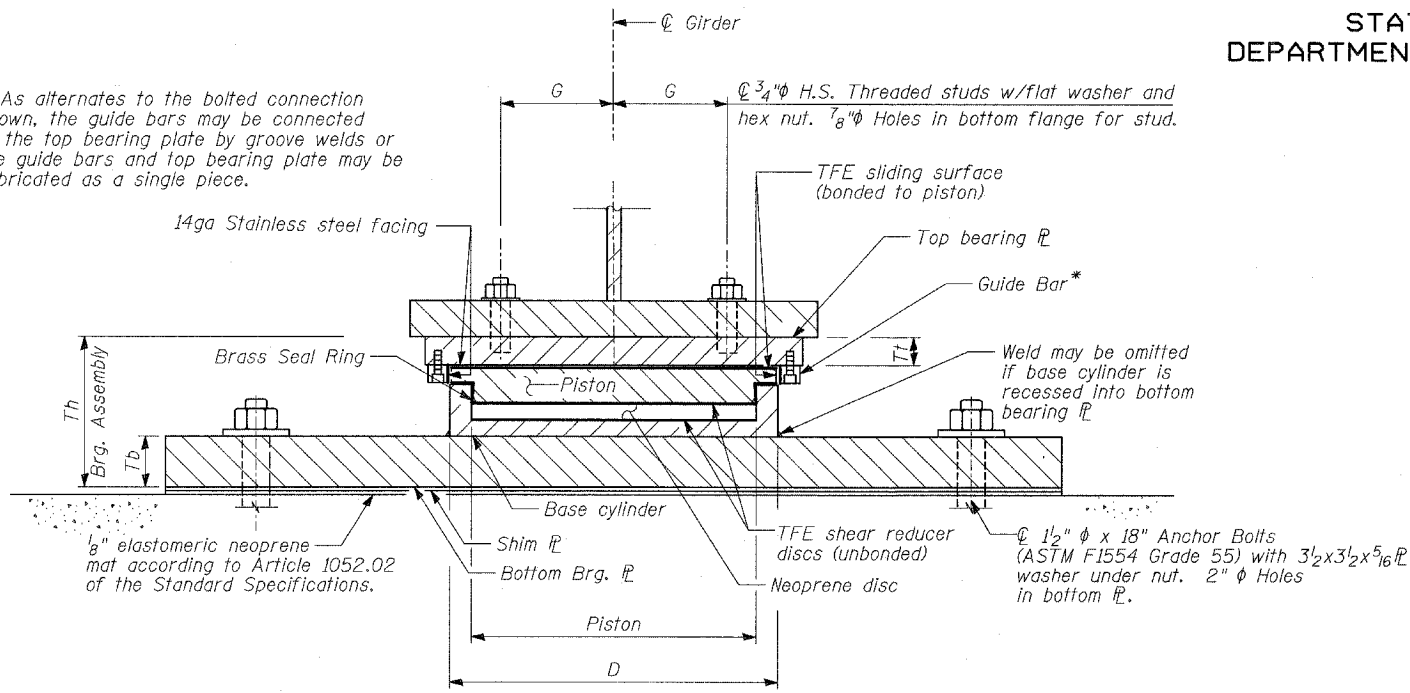


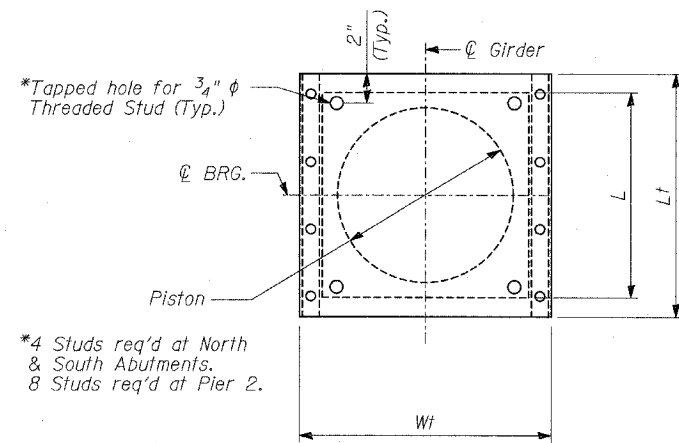
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. - S-35
346	*	LAKE	469	204	S-66 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			
125X-HB-(1&2) R-1		CONTRACT # 60826			

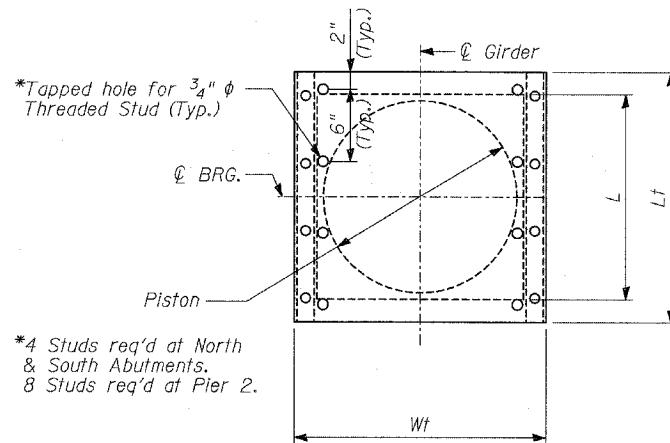
* As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.



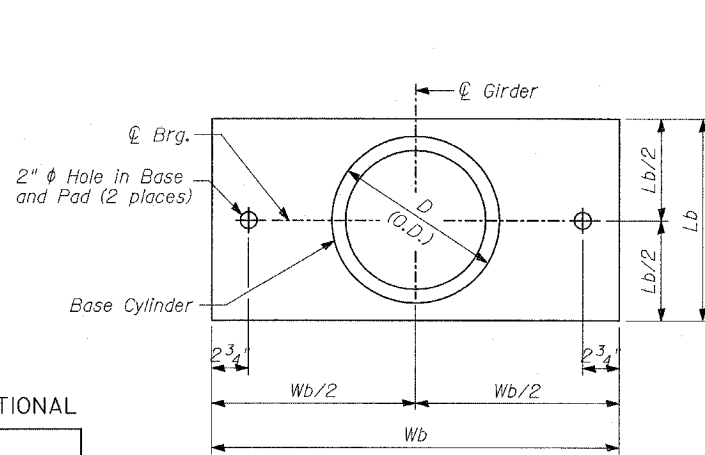
GUIDED EXPANSION POT BEARING



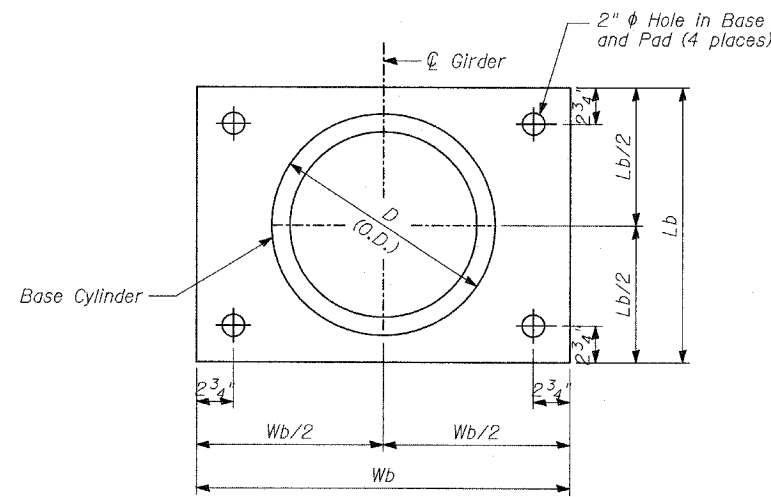
TOP BEARING PLATE - PISTON PLAN
(N. & S. Abutments)



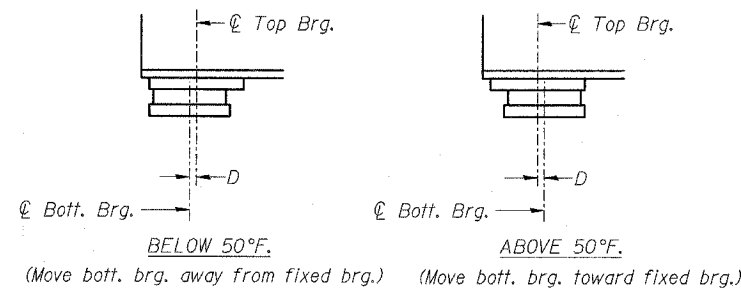
TOP BEARING PLATE - PISTON PLAN
(Pier 2)



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN
(N. & S. Abutments)



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN
(Pier 2)



SETTING ANCHOR BOLTS AT EXP. BRG.

$D = \frac{1}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

NOTES:

- All structural steel for the top and bottom bearing plates shall conform to AASHTO M 270 Grade 50.
- Cost of top and bottom bearing plates, $\frac{1}{8}$ " Elastomeric Neoprene, shim plates and threaded studs with washer shall be included with "Floating Bearings, Guided Expansion".
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternative material) of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts may be cast-in-place or installed in holes drilled after members are in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- See Sheet No. S-36 for anchor bolt installation.
- Two $\frac{1}{8}$ " adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

FLOATING BEARING, GUIDED EXPANSION TABLE

LOCATION	NO. REQ'D	VERT. LOAD CAPACITY	DESIGN VERT. LOAD	TOT. REQ'D MOVEMENT (in)	TOP PLATE (in)				BOTTOM PLATE (in)			BRG. ASSEMBLY (in)		
					Wt	Lt	Tt	G	Wb	Lb	Tb	D	L	Th
NORTH ABUTMENT	10	250K	197K	2.50	17.0	16.5	1.75	6.0	27.0	16.0	1.75	11.875	12.0	8.625
PIER 2	10	850K	820K	3.75	28.5	28.5	3.25	11.0	38.5	26.0	2.50	21.875	22.0	13.75
SOUTH ABUTMENT	10	250K	197K	6.25	17.0	20.5	1.50	6.0	27.0	16.0	1.75	11.875	12.0	8.375

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Erecting HLMR Bearings, Guided Expansion, 250 kips	Each	20
Erecting HLMR Bearings, Guided Expansion, 850 kips	Each	10
Anchor Bolts, $\frac{1}{2}$ "	Each	80

HIGH LOAD MULTI-ROTATION BEARINGS

FAP 346 (U.S. ROUTE 41 - SKOKIE HIGHWAY) OVER ILLINOIS ROUTE 132 SECTION 125X-HB-(1&2)R-1 LAKE COUNTY S.N. 049-0209

TYLIN INTERNATIONAL

DESIGNED	- SP
CHECKED	- AD
DRAWN	- MAF
CHECKED	- AD