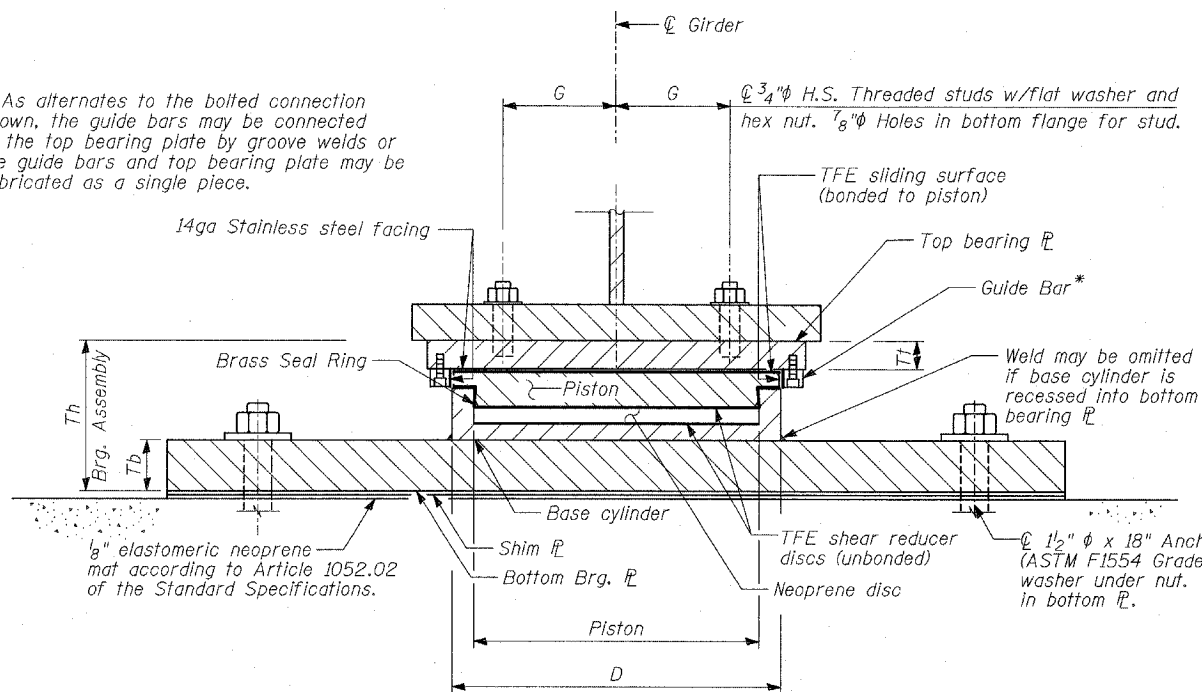


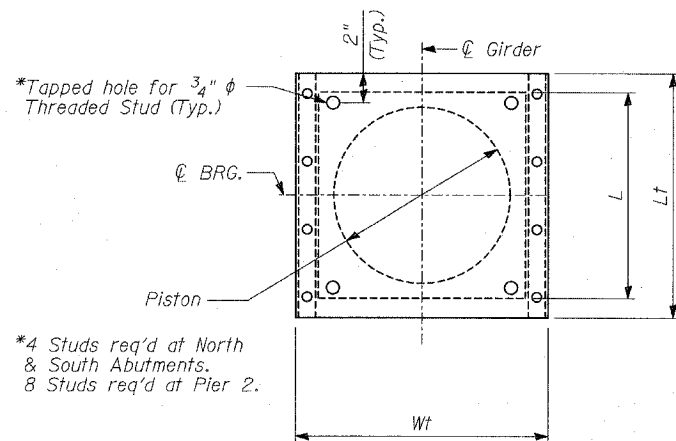
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. - S-35 S-66 SHEETS
346	*	LAKE	23	23	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		
		125X-HB-1F	CONTRACT # 60E33		

* 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.

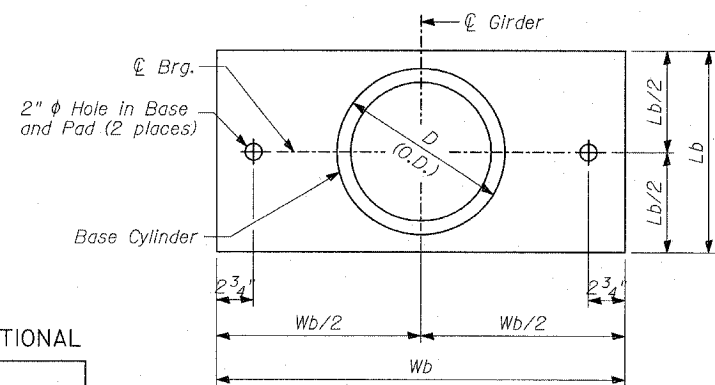


GUIDED EXPANSION POT BEARING



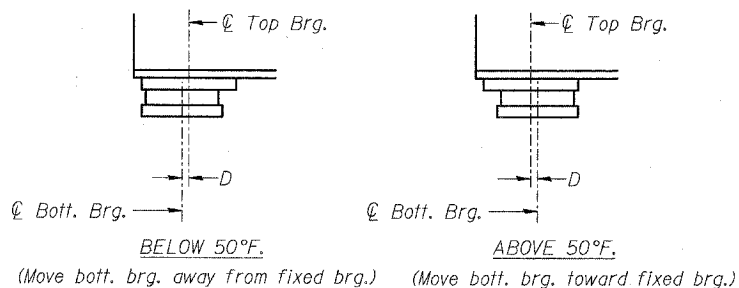
TOP BEARING PLATE - PISTON PLAN

(N. & S. Abutments)



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

(N. & S. Abutments)



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.

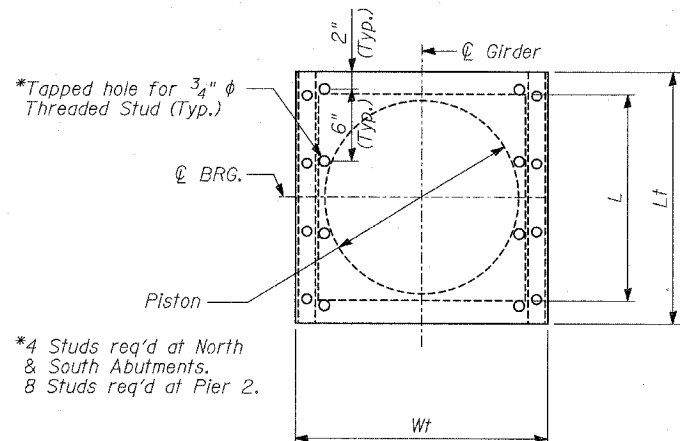
"NOT IN CONTRACT"

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, 1/8" Elastomeric Neoprene, shim plates and threaded studs with washer shall be included with "Furnishing HLMR Bearings, Guided Expansion", of the load rating specified.
- Anchor bolts not included in this Contract.
- 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.

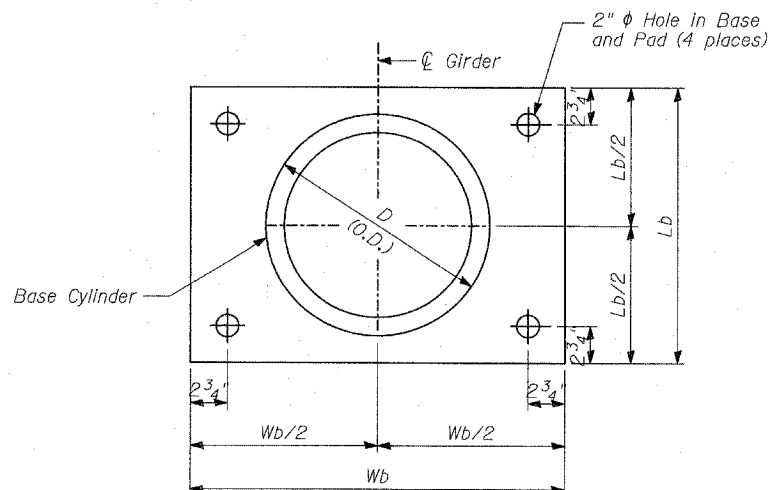
FLOATING BEARING, GUIDED EXPANSION TABLE

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



TOP BEARING PLATE - PISTON PLAN

(Pier 2)



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

(Pier 2)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing HLMR Bearings, Guided Expansion, 250 kips	Each	20
Furnishing HLMR Bearings, Guided Expansion, 850 kips	Each	10

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