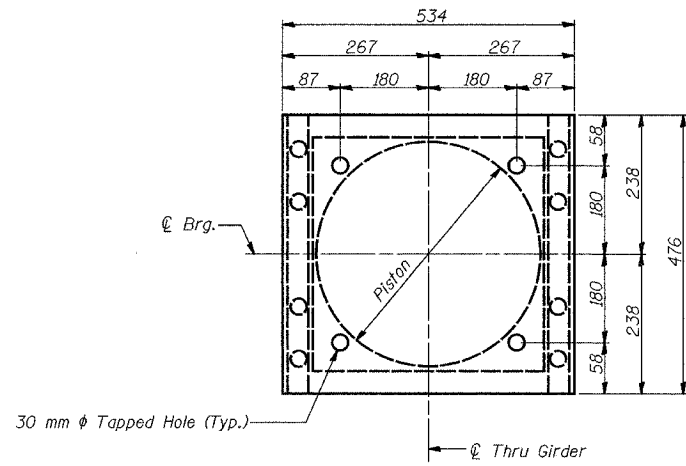


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

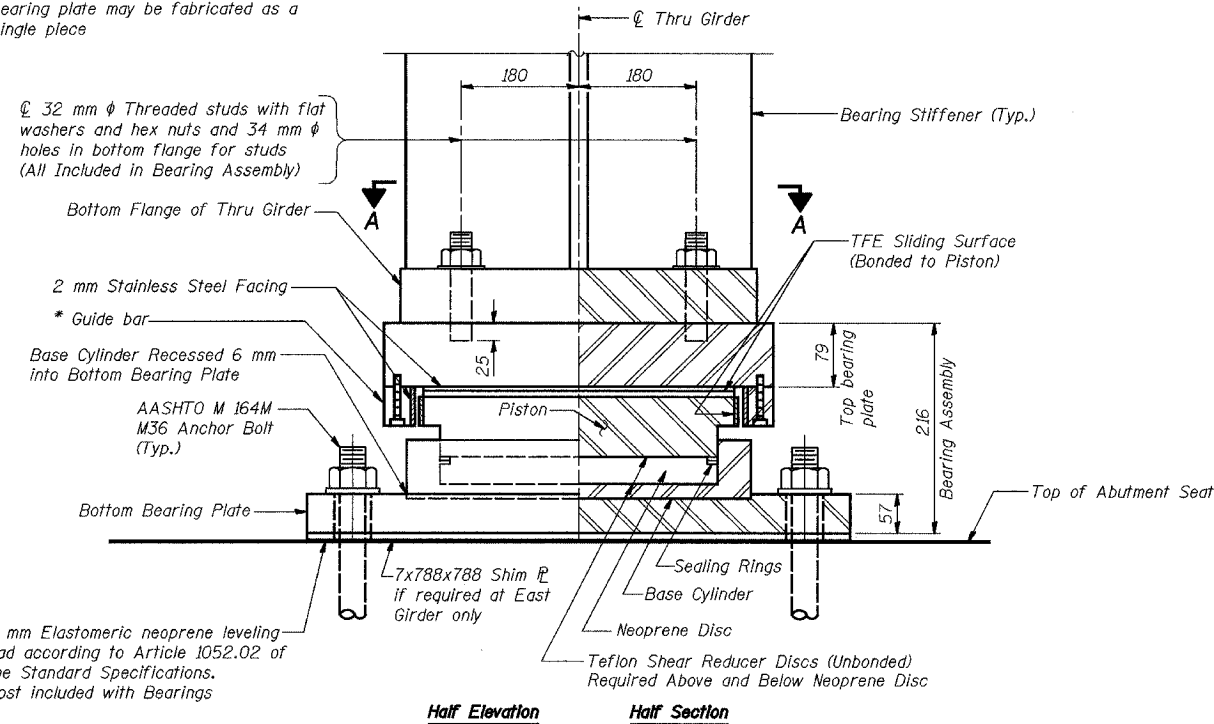
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 337	19R-1	LAKE	800	597
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 15  
37 SHEETS



**TOP BEARING PLATE & PISTON PLAN**

\* 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

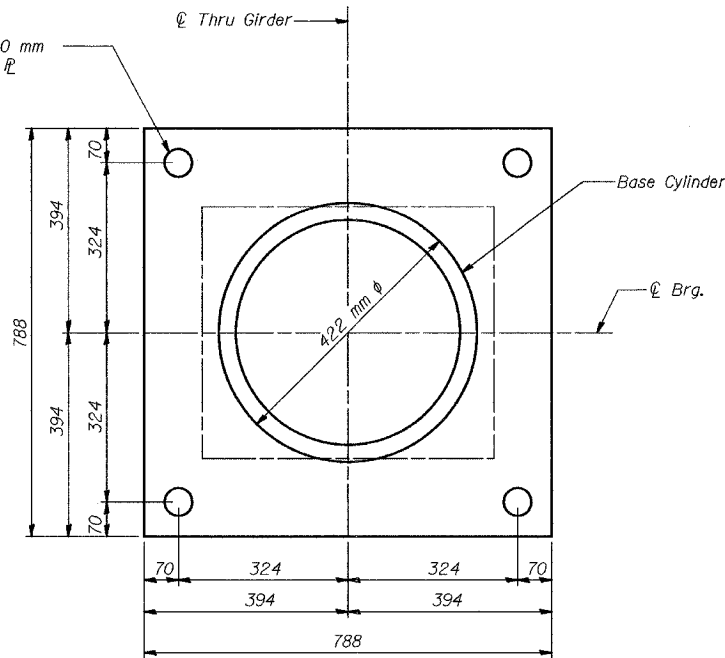


**EXPANSION FLOATING BEARING**  
(2 Required at North Abutment)

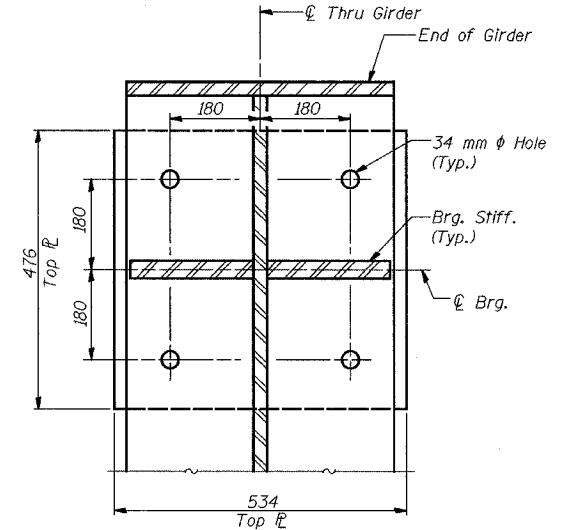
Total - Total axial DL+LL w/o impact+W+BF...	2,525 kN
D - Outside pot diameter	422 mm
Tb - Thickness of bottom plate	57 mm
Tt - Thickness of top plate	79 mm
Th - Total height of bearing assembly	216 mm
Movement = 60 mm Total (±30 mm set at 10°C)	

Rotation = .01 Radians (DL and LL)

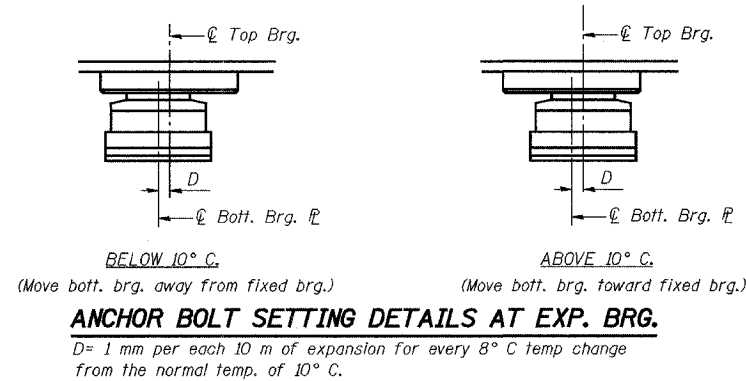
48 mm  $\phi$  Holes for M36x450 mm Anchor bolts with 75x75x8  $\square$  washer under nut.



**BOTTOM BEARING PLATE & BASE CYLINDER PLAN**



**SECTION A-A**



**ANCHOR BOLT SETTING DETAILS AT EXP. BRG.**  
D = 1 mm per each 10 m of expansion for every 8°C temp change from the normal temp. of 10°C.

**BILL OF MATERIAL**

Item	Unit	Total
Floating Bearings, Guided Expansion, 2,600kN	Each	2

**THROUGH GIRDER FLOATING BEARINGS-GUIDED EXPANSION**

Date	Designed EV	<b>ELGIN, JOLIET &amp; EASTERN RY. CO. BRIDGE OVER ILLINOIS ROUTE 22 F.A.P. ROUTE 337 SECTION (19R-1) LAKE COUNTY STATION 32+61.151 STRUCTURE NO. 049-0188</b>	Sheet No. <b>15</b> of 37
Revisions	Drawn EV		
	Checked NPP		
	Approved NPP		
	Prepared By: URS		

NOTE:  
1. All steel for Floating Bearing shall conform to the requirements of AASHTO M 270M, Grade 345, unless noted otherwise.