

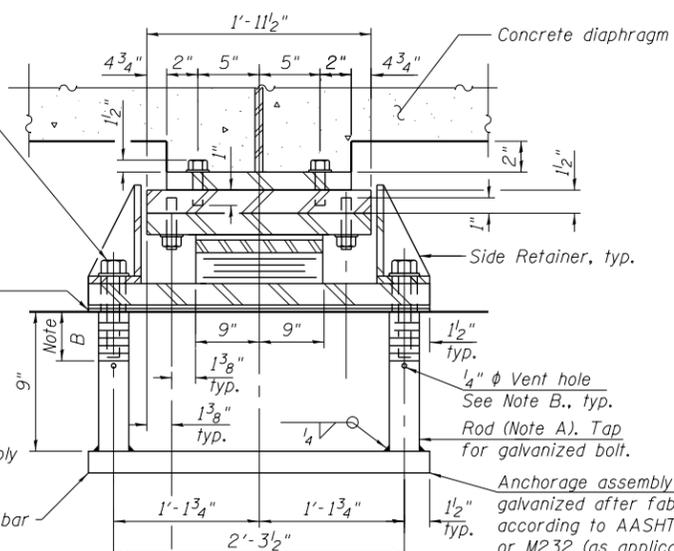
**ELEVATION AT ABUT.**  
(Looking West)

3/4"  $\phi$  ASTM A325 bolt.  
hot dip galvanized  
per AASHTO M332.  
Coat bolts with  
anti-seize compound.  
2" x 2" x 5/16" PL  
washer under nut.  
1/4"  $\phi$  Hole in bott PL

Fill PL for crown, shim  
PL and 1/8" elastomeric  
neoprene leveling pad  
according to the  
material properties of  
Article 1052.02 of the  
Standard Specifications.  
Cost of pad included with  
Elastomeric Bearing Assembly  
Type II

2-3/4"  $\phi$  H.S. Bolts w/lock washers (Typ. ea. side)  
(Coat bolts with anti-seize compound)  
Tapped holes in top PL; 7/8"  $\phi$  holes in bearing PL

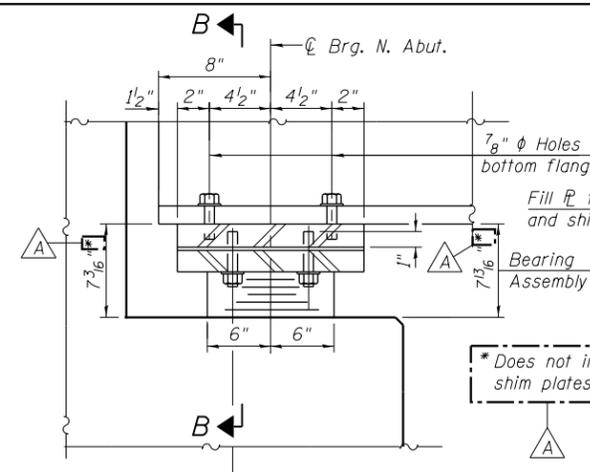
**TYPE II ELASTOMERIC EXP. BRG.**  
(at South Abutment)



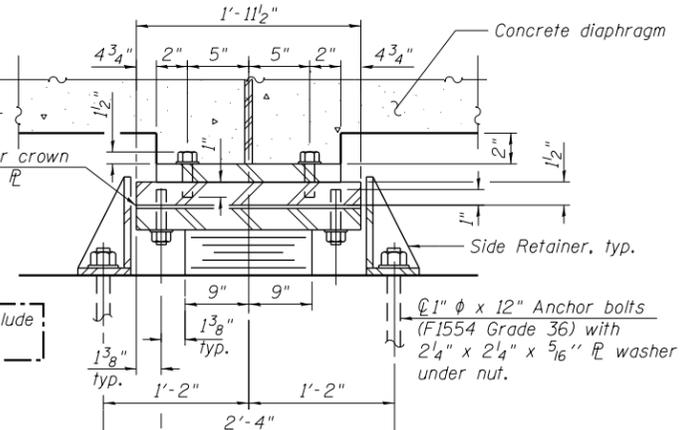
**SECTION A-A**

Note A:  
AASHTO M270 G50 or G50W or similar material.  
Rod dia. = 1/2"  $\phi$

Note B:  
Bolt engagement 1/4" min., 1 5/8" max., allowing up to 3/8"  
adjustment shims. Tap full threads in rod 1 3/4" deep.  
Provide 1/4"  $\phi$  galvanizing vent hole below full thread.

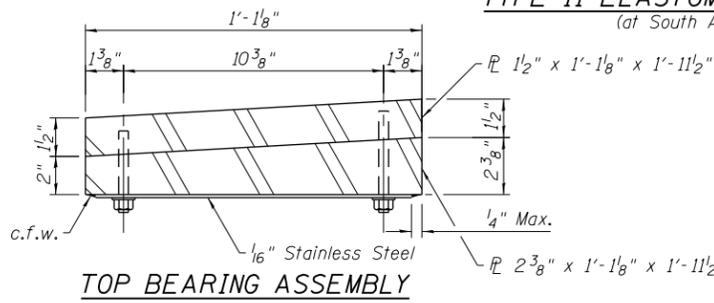


**ELEVATION AT ABUT.**  
(Looking East)

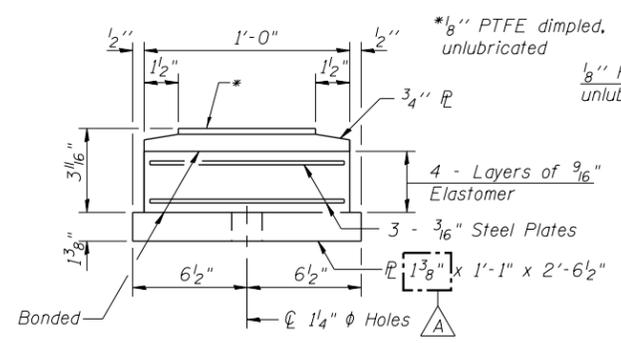


**SECTION B-B**

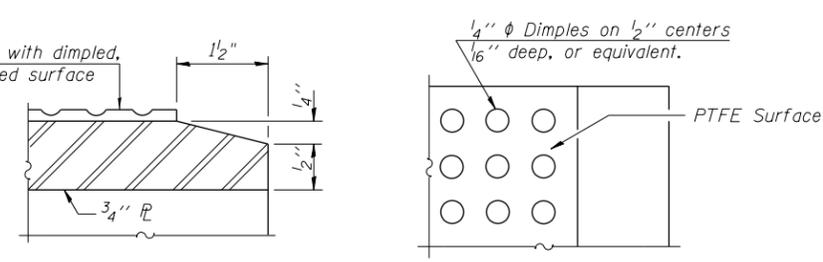
**TYPE I ELASTOMERIC EXP. BRG.**  
(at North Abutment)



**TOP BEARING ASSEMBLY**

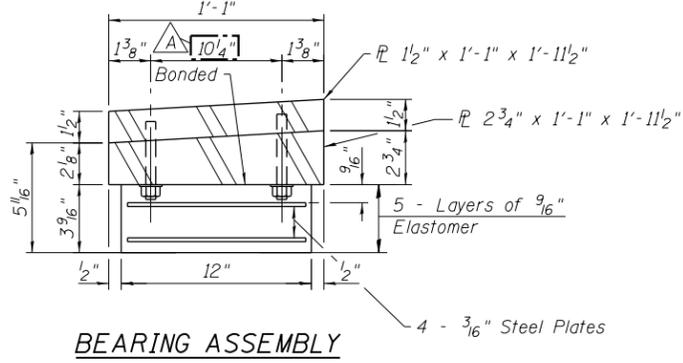


**BOTTOM BEARING ASSEMBLY**



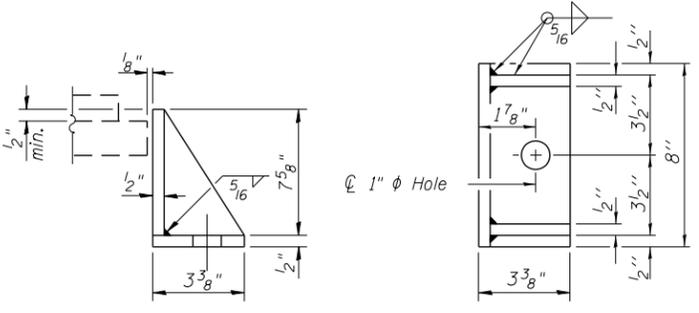
**SECTION THRU PTFE**

**PLAN-PTFE SURFACE**

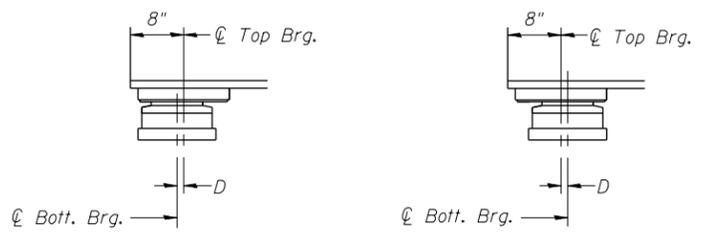


**BEARING ASSEMBLY**

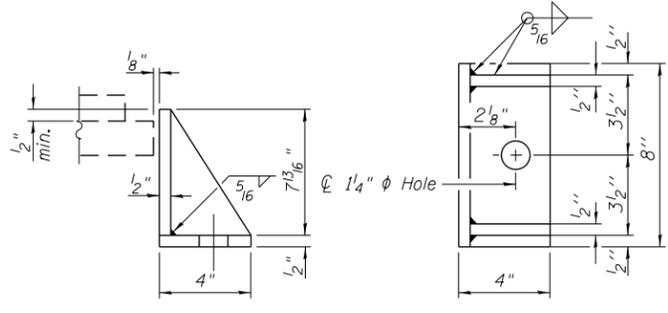
Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Anchor bolts for side retainers for Type I bearings may be cast in place or installed in holes drilled before or after members are in place.  
Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I or Elastomeric Bearing Assembly, Type II.  
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.  
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.  
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.  
All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts and washers shall be galvanized according to ASTM M111 or M232 as applicable.



**SIDE RETAINER**  
Equivalent rolled angle with stiffeners  
will be allowed in lieu of welded plates.



**SETTING ANCHOR BOLTS AT EXP. BRG.**  
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



**SIDE RETAINER**  
Equivalent rolled angle with stiffeners  
will be allowed in lieu of welded plates.

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	9
Elastomeric Bearing Assembly, Type II	Each	9
Anchor Bolts, 1" $\phi$	Each	18

10:32:31 AM 0161708-60W29-5036-Bearing\_AbutDetails.dgn



USER NAME = BAWIort	DESIGNED = JRM	REVISED = 12/18/2013 JRM/WJC
PLOT SCALE = 0x2.0000 '1' / in.	CHECKED = WJC	REVISED
PLOT DATE = 12/19/2013	DRAWN = MTS	REVISED
	CHECKED = WJC	REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT BEARING DETAILS**  
**STRUCTURE NO. 016-1708**

SHEET NO. 36 OF 55 SHEETS

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2090	2013-011R	COOK	356	168
CONTRACT NO.			60W29	
ILLINOIS FED. AID PROJECT				