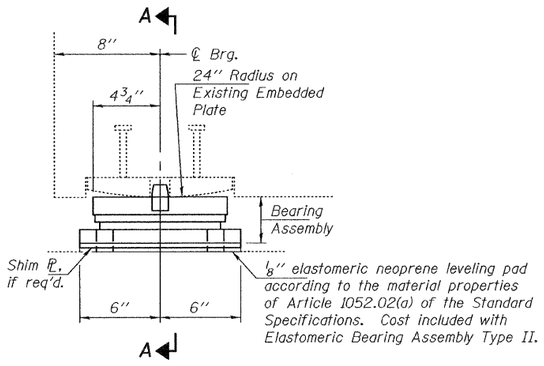
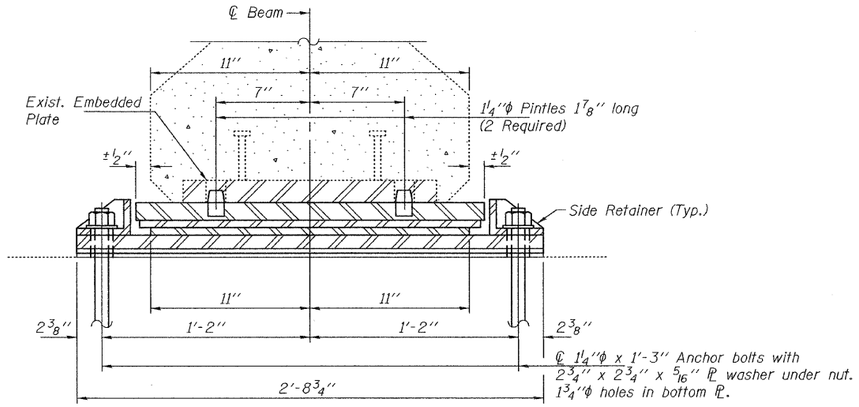
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



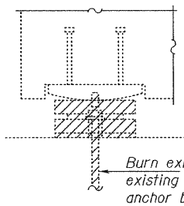
ELEVATION AT BEARING



SECTION A-A

BEAM REACTIONS

$R_{\text{℄}}$	(k)	47
$R_{S\text{℄}}$	(k)	13
$R_{\text{℄}_L}$	(k)	40
R_{IMP}	(k)	11
$R_{(TOTAL)}$	(k)	111



Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolts smooth & seal with epoxy. Cost included with Jack and Remove Existing Bearings.

EXISTING BEARING REMOVAL DETAILS

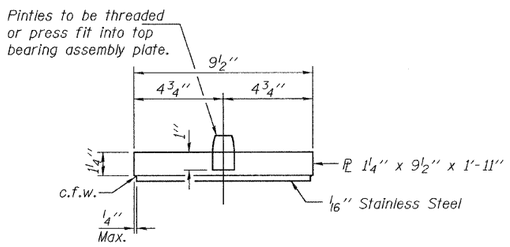
Note: Hatched area indicates removal of existing bearings.

JACK AND REMOVE EXISTING BEARING PROCEDURE

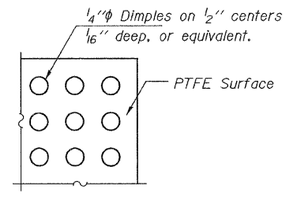
1. The Contractor shall submit for approval by the Engineer, plans for jacking prior to commencing any work at the bearings.
2. The maximum differential lift between beams at any one substructure unit shall be limited to 1/8 inch. If simultaneous jacking of all beams at a sub-structure unit is utilized, then the maximum total lift shall be limited to 1/4 inch.
3. Traffic shall be removed from the structure during the jacking operation including lifting or lowering the beams. Traffic shall not be allowed on the structure after lifting until the beams are shored in place.
4. The maximum reaction per bearing is 60 kips for dead load and 51 kips for live load. The minimum jack capacity is 120 kips.

EXPANSION BEARING

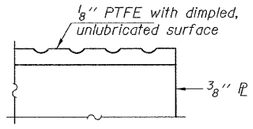
Span 13, Pier 13, Beam 5



TOP BEARING ASSEMBLY

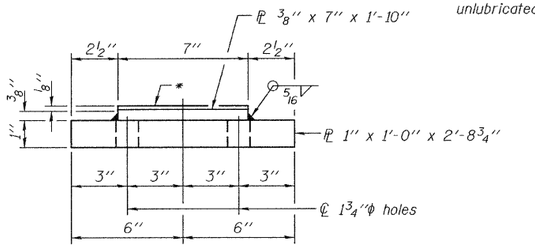


PLAN-TFE SURFACE

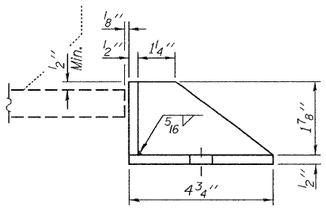


SECTION THRU TFE

* 1/8'' PTFE dimpled, unlubricated

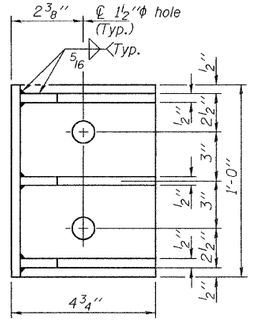


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

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



Notes:

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 60 Tons.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

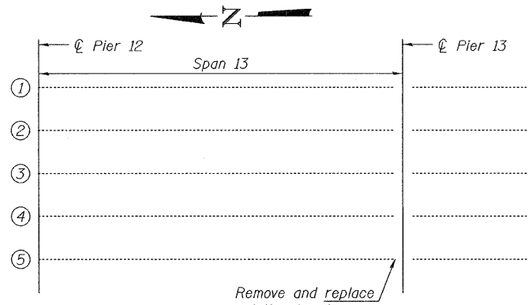
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

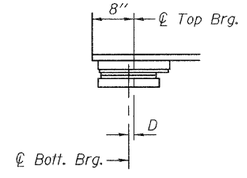
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

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.

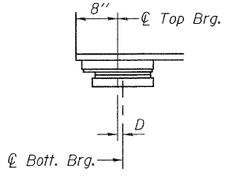
Bonding of 1/8'' PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



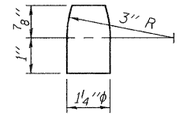
REPAIR LOCATION PLAN



BELOW 50° F.
(Move bott. brg. away from fixed brg.)



ABOVE 50° F.
(Move bott. brg. toward fixed brg.)



PINTLE

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	1
Jack and Remove Existing Bearings	Each	1
Anchor Bolts 1''ϕ	Each	4

BEARING REPLACEMENT DETAILS
SN 002-0002 (SB)

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.

DESIGNED	
CHECKED	
DRAWN	baliva
CHECKED	

APRIL 29, 2010

EXAMINED

ENGINEER OF STRUCTURAL SERVICES

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	57	D9 BSMART 2010-1	ALEXANDER	25	20A
			CONTRACT NO. 78173		
		ILLINOIS FED. AID PROJECT			

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