

**AT ABUTMENT**

**AT PIER**

**EXISTING BEARING REMOVAL DETAIL**

(36 Required)  
(6 at each Abutment & 12 at each Pier)

Indicates Removal of Existing bearing and steel extension.  
Cost included with "Jack and Remove Existing Bearings".

**PROCEDURE TO JACK AND REMOVE EXISTING BEARINGS**

(Minimum Jack Capacity Required 60 tons)

- Jack and Remove Existing Bearings shall be conducted according to the General Bridge Special Provision "Jack and Remove Existing Bearings". See Interior Beam Reaction Table for loads.
- Jacking and removing existing bearings shall be done after partial deck concrete removal and before new deck concrete is poured.
- Three beams may be lifted simultaneously, as outlined in the stage construction layout.
- The existing rockers, elastomeric bearings and steel extensions shall be removed.
- Formwork and bearing seat construction shall occur.
- The new elastomeric bearings shall be placed. The new fixed bearings top and bottom plates shall be assembled prior to sliding into place under the beams.
- After all bearings have been replaced the jacks shall be lowered.
- The new holes for the side retainers shall be drilled at the locations specified where required.

**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.

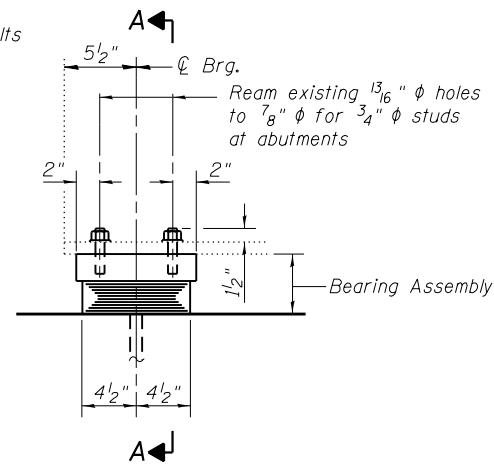
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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

See Sheet 18 of 28 for Anchor Bolt location Details at South Abutment.  
See Sheet 21 of 28 for Anchor Bolt location Details at North Abutment.  
See Sheet 24 of 28 for Anchor Bolt location Details at Pier 1.  
See Sheet 27 of 28 for Anchor Bolt location Details at Pier 2.

Side retainers, anchor bolts, nuts, washers and bearing plates may be galvanized according to AASHTO M111 or M232 (as applicable).

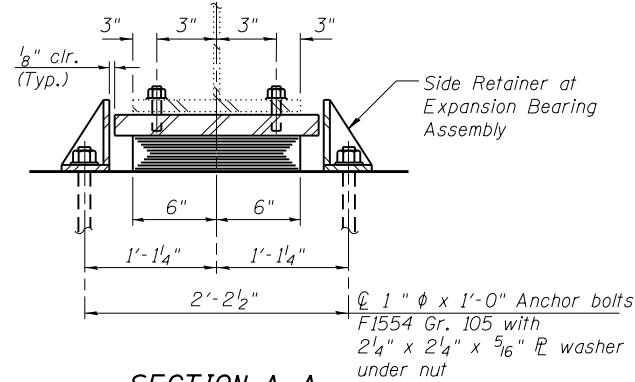
Anchor bolts at fixed bearings may be either cast in place or installed in drilled holes after the supported member is in place.



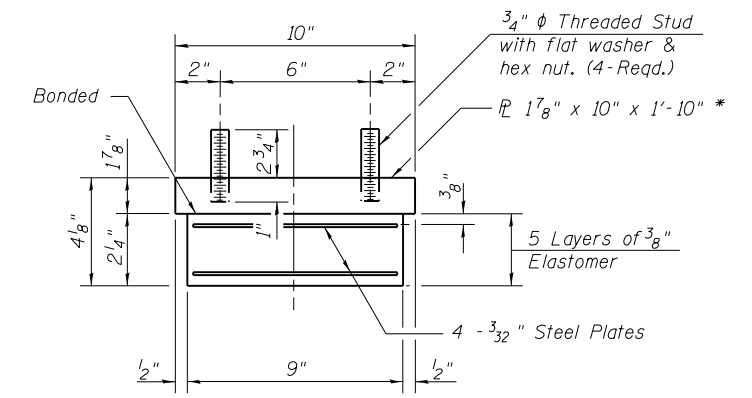
**ELEVATION**

**TYPE I ELASTOMERIC EXPANSION BEARING**

(18 Required)  
(6 at each Abutment & 6 at Pier 2)

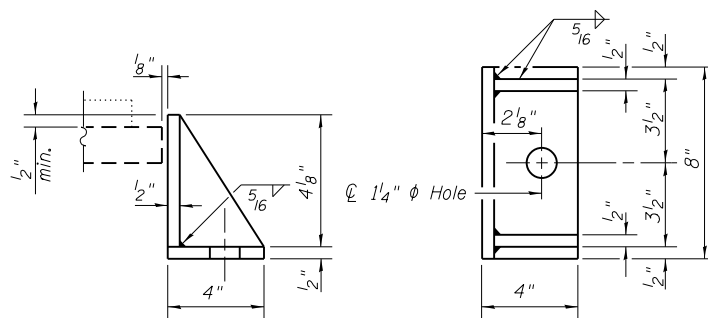


**SECTION A-A**



**BEARING ASSEMBLY**

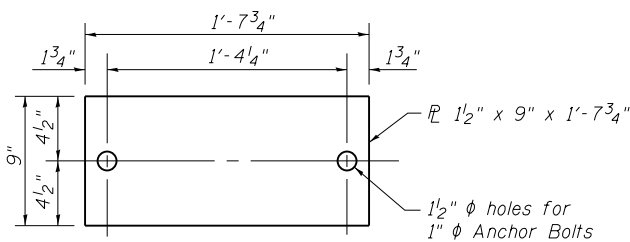
\* Bearing P to be clipped.  
See Sheets 18 and 21 of 28 for clip dimensions and layout.



**SIDE RETAINER**

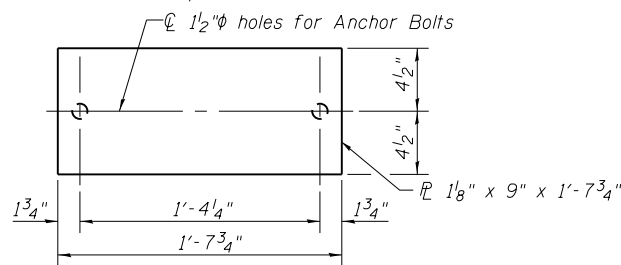
(36 Total)  
(12 at each Abutment and 12 at Pier 2)

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

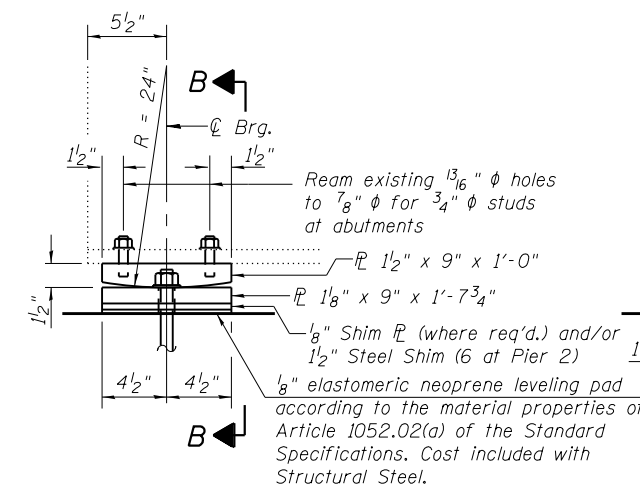


**STEEL SHIM**

(6 Required at Pier 2)



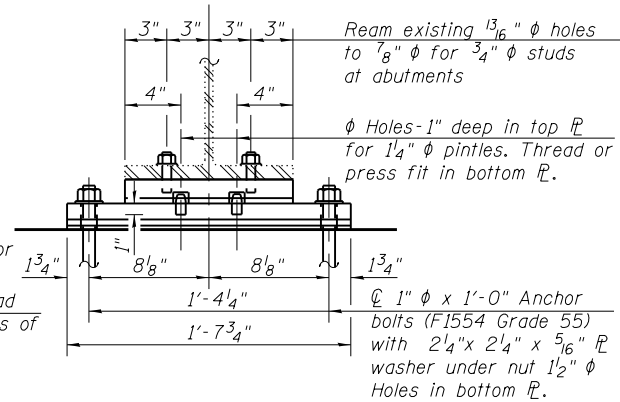
**PLAN - BOTTOM PLATE FIXED BEARING**



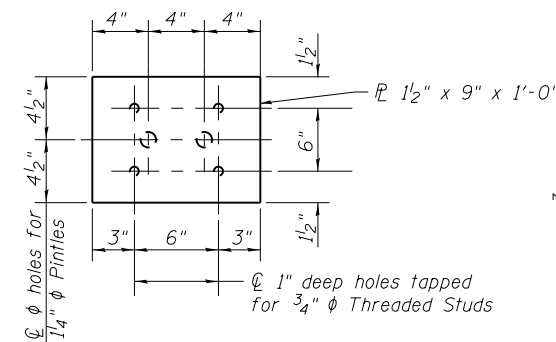
**ELEVATION AT PIER**

**FIXED BEARING**

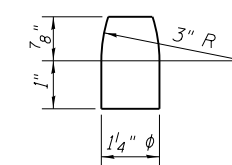
(18 Required)  
(12 at Pier 1 & 6 at Pier 2)



**SECTION B-B**



**PLAN - TOP PLATE FIXED BEARING**



**PINTLE**

INTERIOR BEAM REACTION TABLE					
	Span 1	Span 2	Span 3		
R <sub>l</sub>	(k)	29.9	31.9	27.6	
R <sub>r</sub>	(k)	37.7	38.0	37.1	
Imp.	(k)	9.4	9.5	10.0	
R <sub>Total</sub>	(k)	77.0	79.4	74.7	

Reactions are for the Beam Ends.

**BILL OF MATERIAL**

Item	Unit	Total
Jack & Remove Existing Bearings	Each	18
Elastomeric Bearing Assembly Type I	Each	18
Anchor Bolts, 1"	Each	72
Furnishing & Erecting Structural Steel	Pound	2460