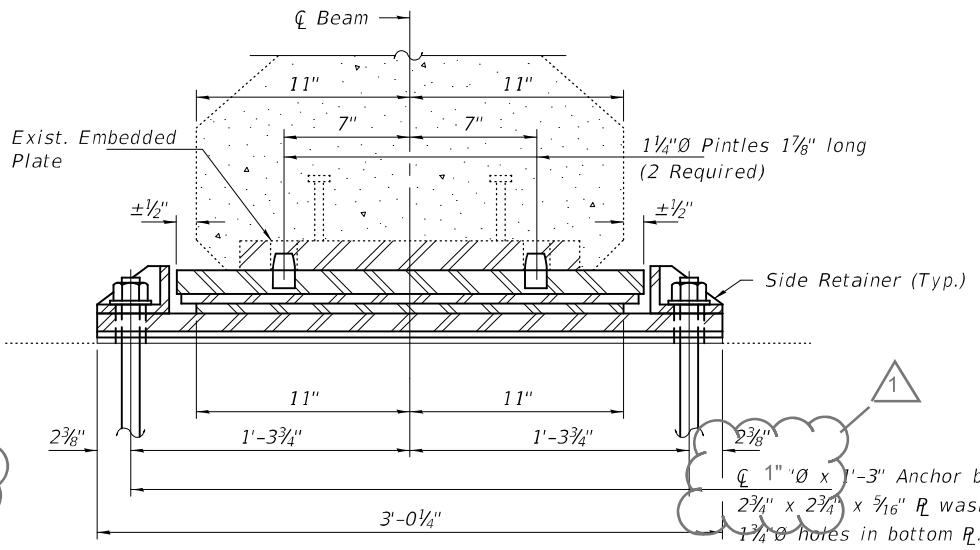


ELEVATION AT BEARING

EXPANSION BEARING
(North Abutment)



SECTION A-A

BEAM REACTIONS

R ₀	(k)	47
R ₅₀	(k)	13
R _L	(k)	40
R _{IMP}	(k)	11
R _{TOTAL}	(k)	111

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 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts 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 Furnishing and Erecting Structural Steel.

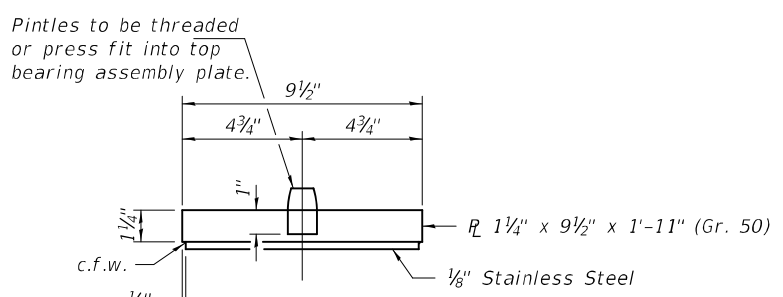
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Cost of PTFE, stainless steel sheet, pintles and all labor necessary to assemble the bearing is included in the cost of Furnishing and Erecting Structural Steel.

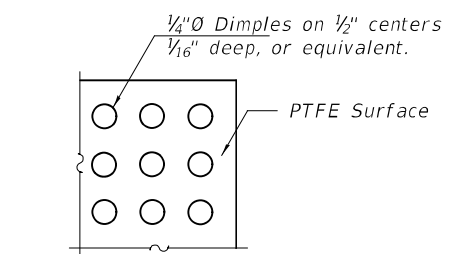


JACK AND REMOVE EXISTING BEARING PROCEDURE

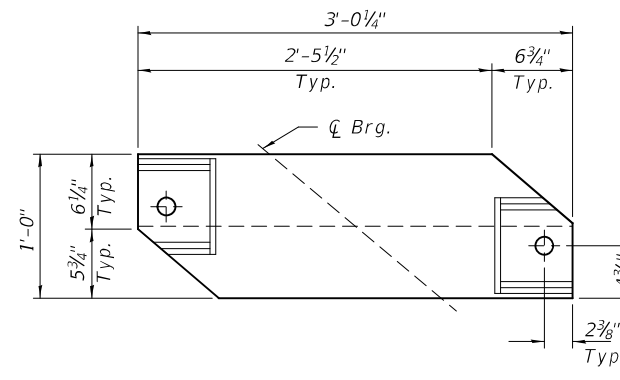
1. The Contractor shall submit for approval by the Engineer, plans for jacking prior to commencing any work at the bearings.
2. The maximum differential lift between beams at any one substructure unit shall be limited to 1/8 inch. If simultaneous jacking of all beams at a substructure unit is utilized, 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.



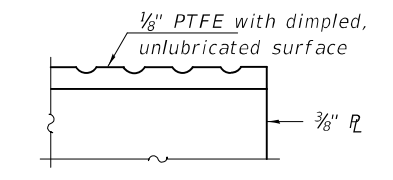
TOP BEARING ASSEMBLY



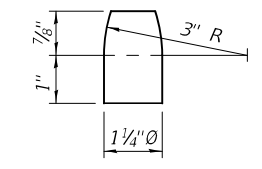
PLAN-PTFE SURFACE



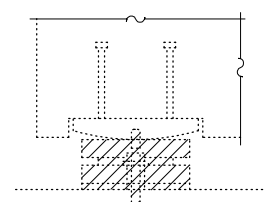
BOTTOM PLATE DETAILS



SECTION THRU TFE



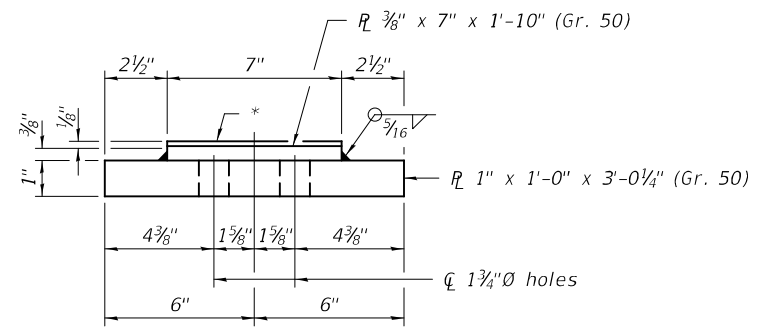
PINTLE



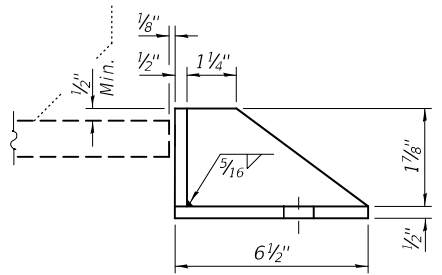
Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolts smooth & seal with epoxy. Cost included with Jack and Remove Existing Bearings.

EXISTING BEARING REMOVAL DETAILS

Note: Hatched area indicates removal of existing bearings.

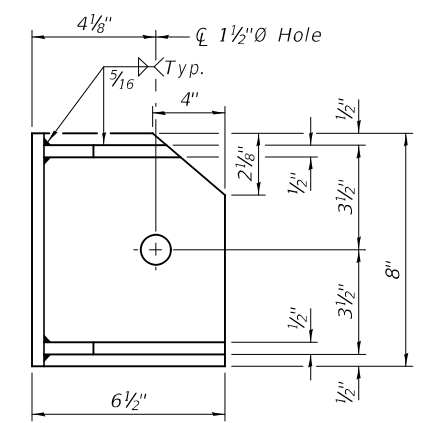


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

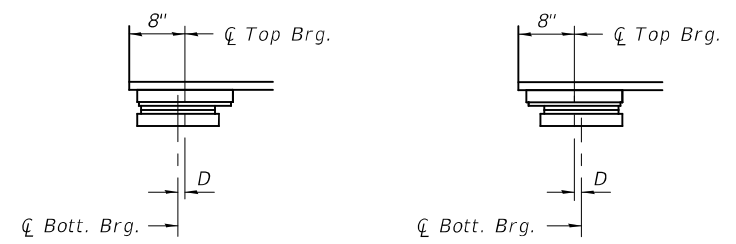
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



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

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.



BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Structural Steel	Each	1120
Jack and Remove Existing Bearings	Each	5
Anchor Bolts, 1"	Each	10

1 REV. 6-5-2020