

**GENERAL NOTES:**

Design lengths below assume a csg structure type carrying an HS 20-44 loading with an 8" deck and 4" of asphalt.

Girder working stress reactions relating to span lengths may be different for different structure types. Girder working stress reactions should be verified.

Where three sizes or dimensions are shown, the callout with no asterisks may be used for structures with span lengths up to 50 feet (girder working stress reaction = 107 kips).

Sizes or dimensions shown with one asterisk (\*) may be used for structures with span lengths up to 80 feet (girder working stress reaction = 154 kips.)

Sizes or dimensions shown with two asterisks (\*\*) may be used for structures with span lengths up to 95 feet (girder working stress reaction = 175 kips.)

Where only one size or dimension is given, the callout is good for all designs up to 95 feet.

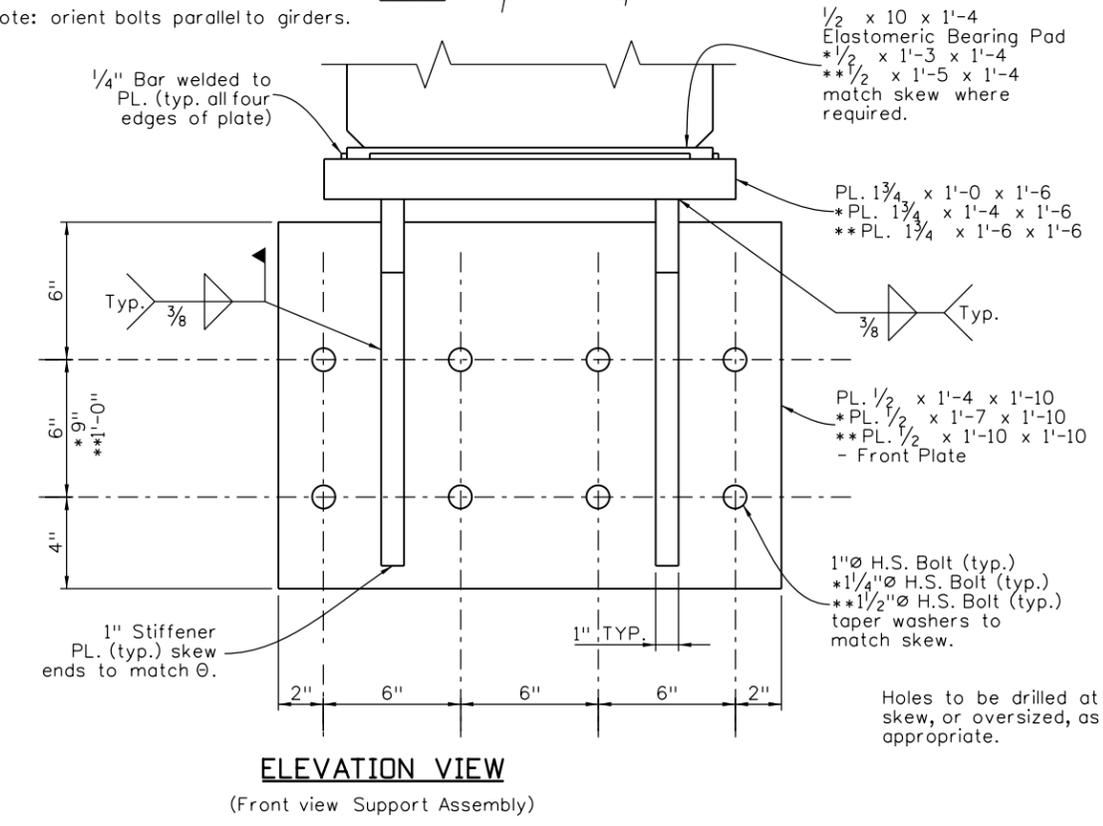
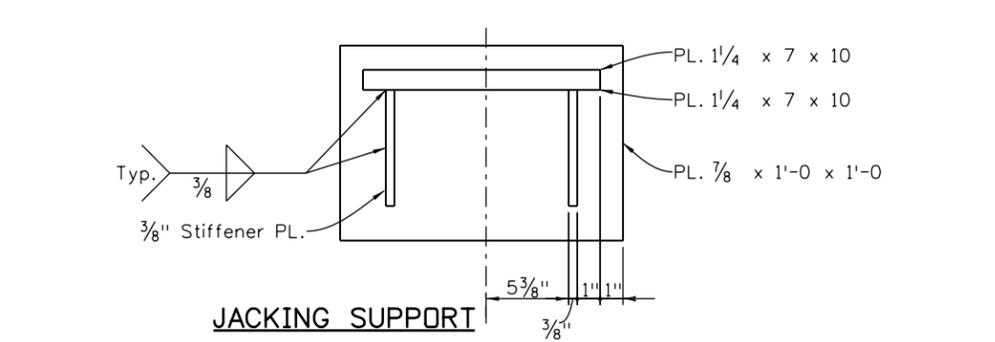
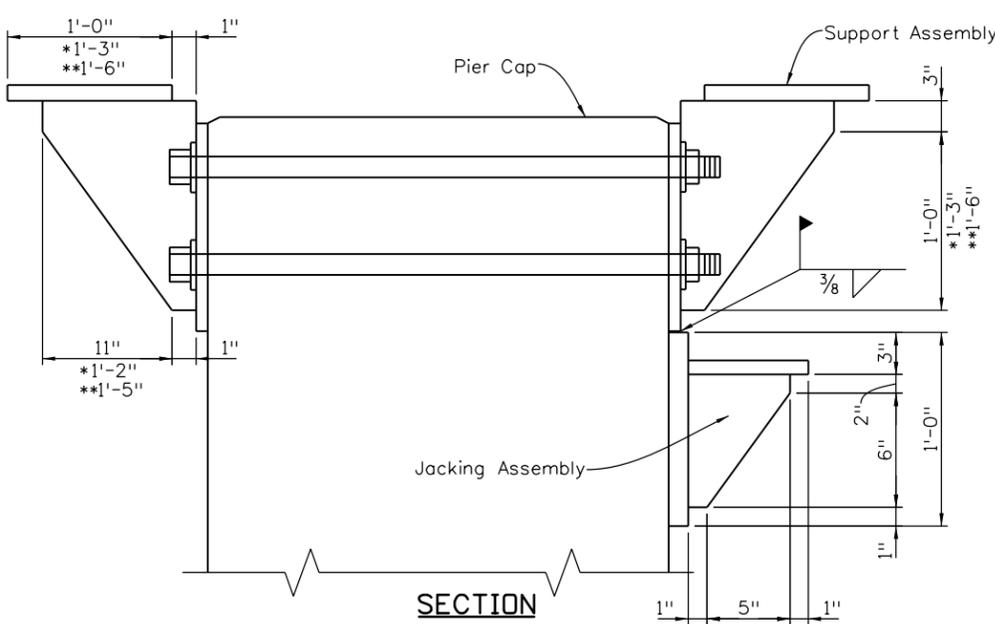
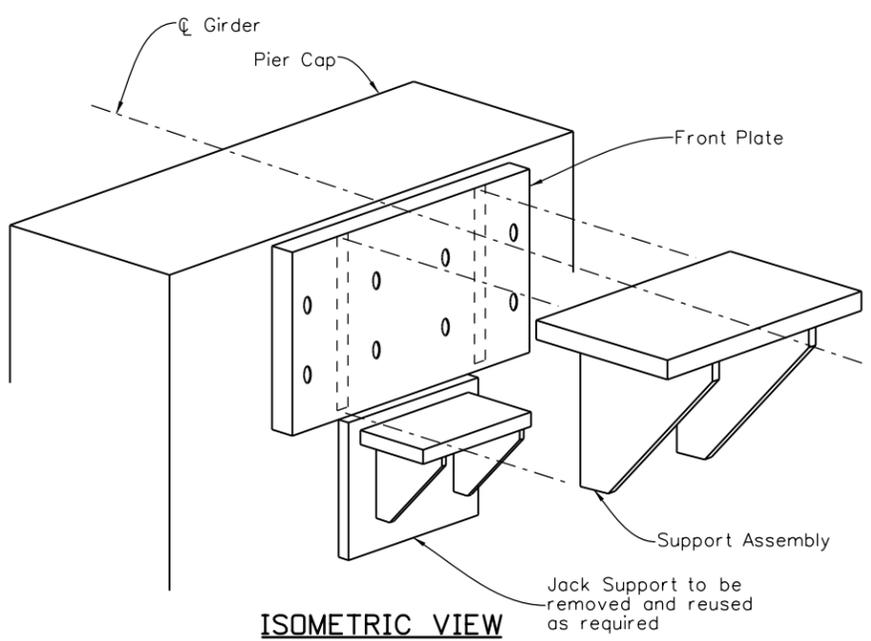
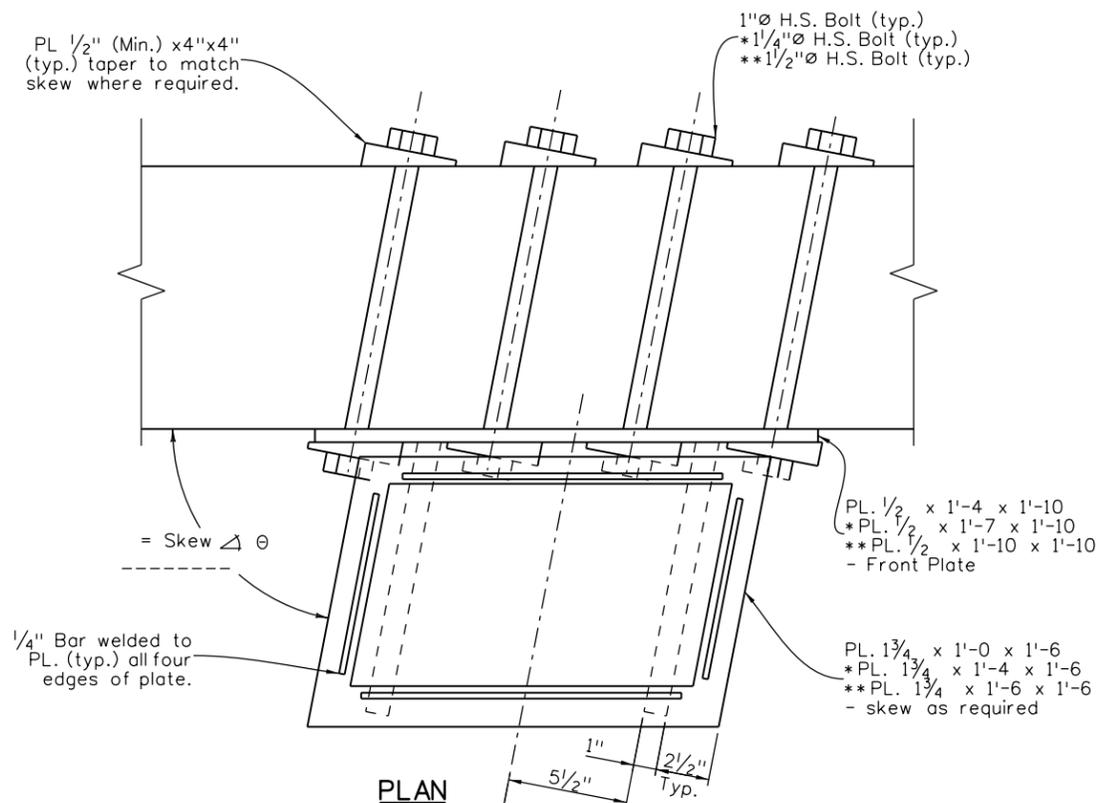
Note: where repair is required on both sides of a pier cap along a single girder line, place bearing assembly on both sides as shown in the section.

All bolts shall be A449 high strength bolts.

The contractor shall verify all dimensions prior to ordering materials

**SUGGESTED CONSTRUCTION PROCEDURE**

1. Remove loose concrete and clean reinforcing steel.
2. Bolt the form in place and restore the pier cap to its original section using an approved grout (Duracal, etc.)
3. Allow curing time as recommended by the Manufacturer before removing the form.
4. Locate and mark centerline of the girder on the pier cap.
5. Mark location of bolt holes on pier cap, see elevation view and section.
6. Drill holes in pier cap and place bolts.
7. Cut holes in plywood form to match bolt holes in pier cap.
8. Using the form for a pattern, cut the bolt holes in the front plate.
9. Attach plates and tighten bolts. (100 lb-ft. Torque).
10. Raise the support assembly until the elastomeric pad is compressed  $\frac{1}{16}$ " (200 psix pad area = jacking force).
11. Field weld the support assembly to the front plate.
12. Paint all steel as directed by the Engineer.



Revision Dates (Preliminary Stage Only)		DATE	BY
8/95	3/99	11/99	3/07
9/02	4/02	10/13	

Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
XXX	MM/YY	XXX	MM/YY	XXX	MM/YY
Checked By					

Print Date: \$DATE\$	<b>Sheet Revisions</b>			Colorado Department of Transportation 4201 East Arkansas Avenue Room 107 Denver, CO 80222 Phone: 303-757-9309 FAX: 303-757-9197	As Constructed No Revisions: Revised: Void:	<b>BEARING REPAIR DETAILS</b> 107-175 KIPS SKEWED			Project No./Code
File Name: Sheet_B-509-2D.dgn	Date:	Comments	Init.			Project Number			
Horiz. Scale: NTS Vert. Scale: As Noted	0000			Staff Bridge Branch Initials	Sheet Number	Designer: XXXXXXXX	Structure Numbers: X-XX-XX	Code	
Staff Bridge Branch - Unit 022X Unit Leader Initials						Detailer: XXXXXXXX	Subset Sheets: BXX of XXX	Sheet Number	