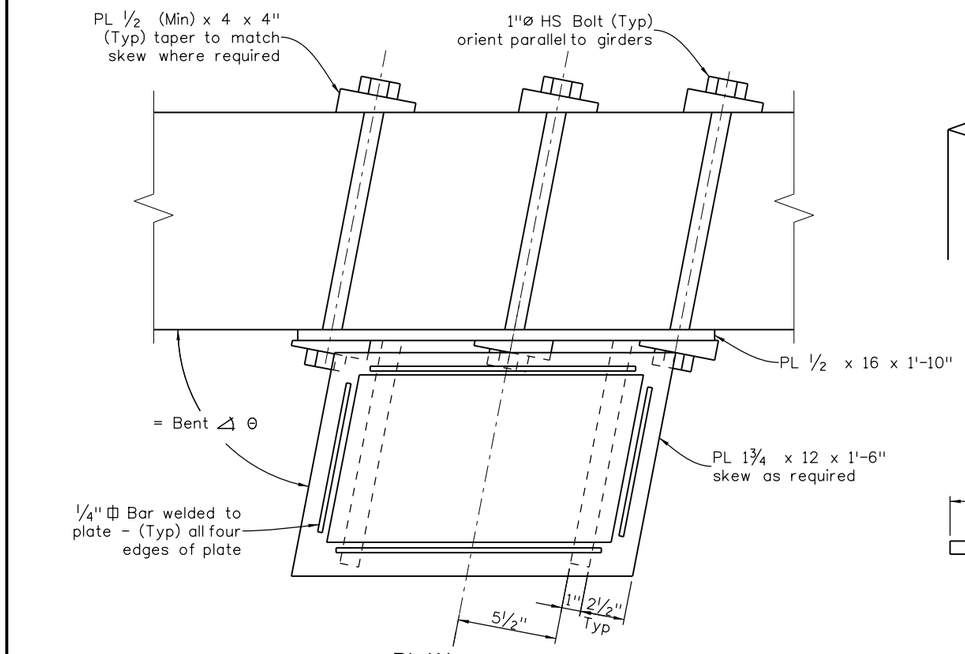
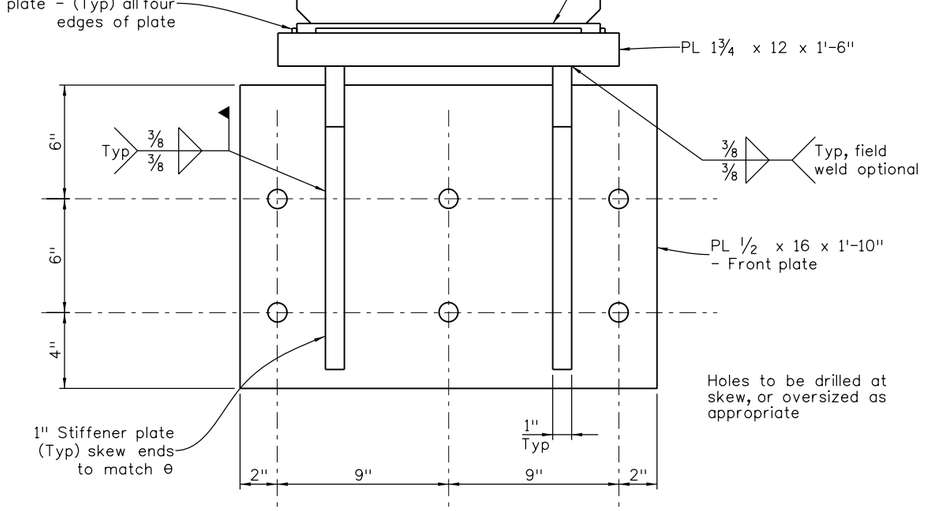
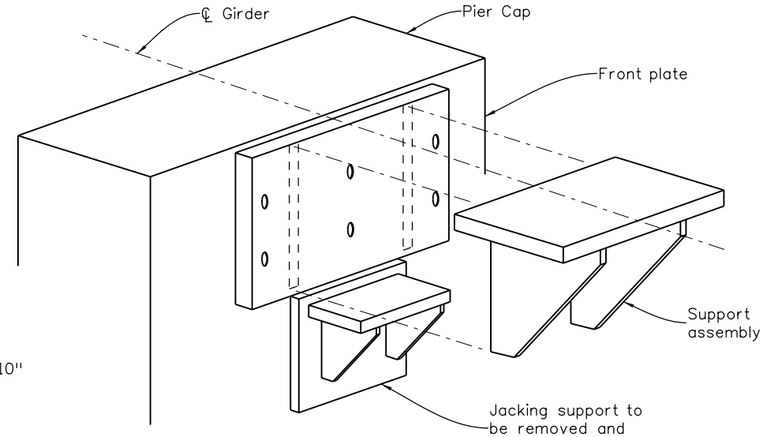


PLAN

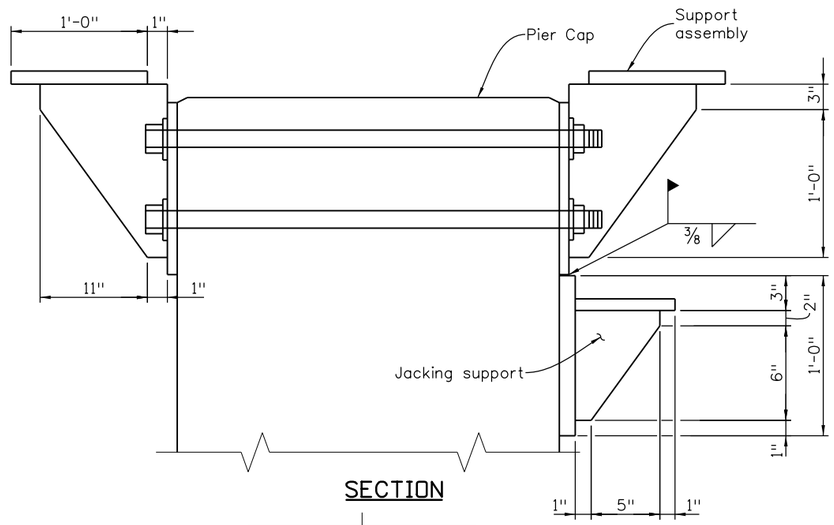
Note: orient bolts parallel to girders



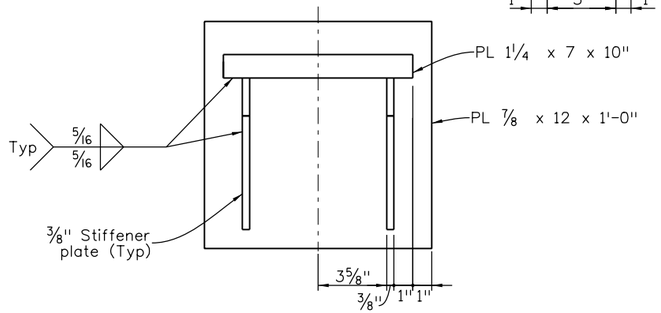
ELEVATION VIEW
(Front view Support Assembly)



ISOMETRIC VIEW



SECTION



JACKING SUPPORT

NOTES:

1. Design lengths below assume a CSG structure type carrying an HS 20-44 loading with an 8" deck and 4" of asphalt.
2. Girder working stress reactions relating to span lengths may be different for different structure types. Girder working stress reactions should be verified.
3. This design may be used for structures with span lengths up to 32 feet (girder working stress reaction = 82 Kip).
4. 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.
5. All bolts shall be A449 high strength bolts.
6. The Contractor shall verify all dimensions prior to ordering materials.
7. Installation and all items shown shall be paid for under Item 512-00120 Bearing Repair Corbel.
8. All welding shall be performed per AWS D1.1 with low hydrogen electrodes.

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 the 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 1/16" (200 psi x pad area = Jacking Force).
11. Field weld the support assembly to the front plate.
12. Paint all steel as directed by the Engineer.

Note to Detailer: Adjust location of Front plate to avoid existing reinforcing (if known) and check weld lengths for sufficient capacity.

Revision Dates (Preliminary Stage Only)						
8/95	3/99	11/99	4/02	9/02	3/07	10/13	3/23

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By						
Checked By						

All seals for this set of drawings are applied to the cover page(s)

Print Date: $DATE$
File Name: Sheet_B-509-2E.dgn
Horiz. Scale: Not to Scale Vert. Scale: As Noted
Unit Information Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
2829 West Howard Place, 3rd Floor
Denver, CO 80204
Phone: 303-512-4079
FAX: 303-757-9197
Staff Bridge Branch Initials

As Constructed
No Revisions:
Revised:
Void:

BEARING REPAIR DETAILS
82 KIP SKEWED

Designer:	XXXXXXXX	Structure Numbers	X-XX-XX
Detailer:	XXXXXXXX		X-XX-XX
Sheet Subset:	BRIDGE	Subset Sheets:	BXX of XXX

Project No./Code
Project Number
Code
Sheet Number

$PLOT_INFO$