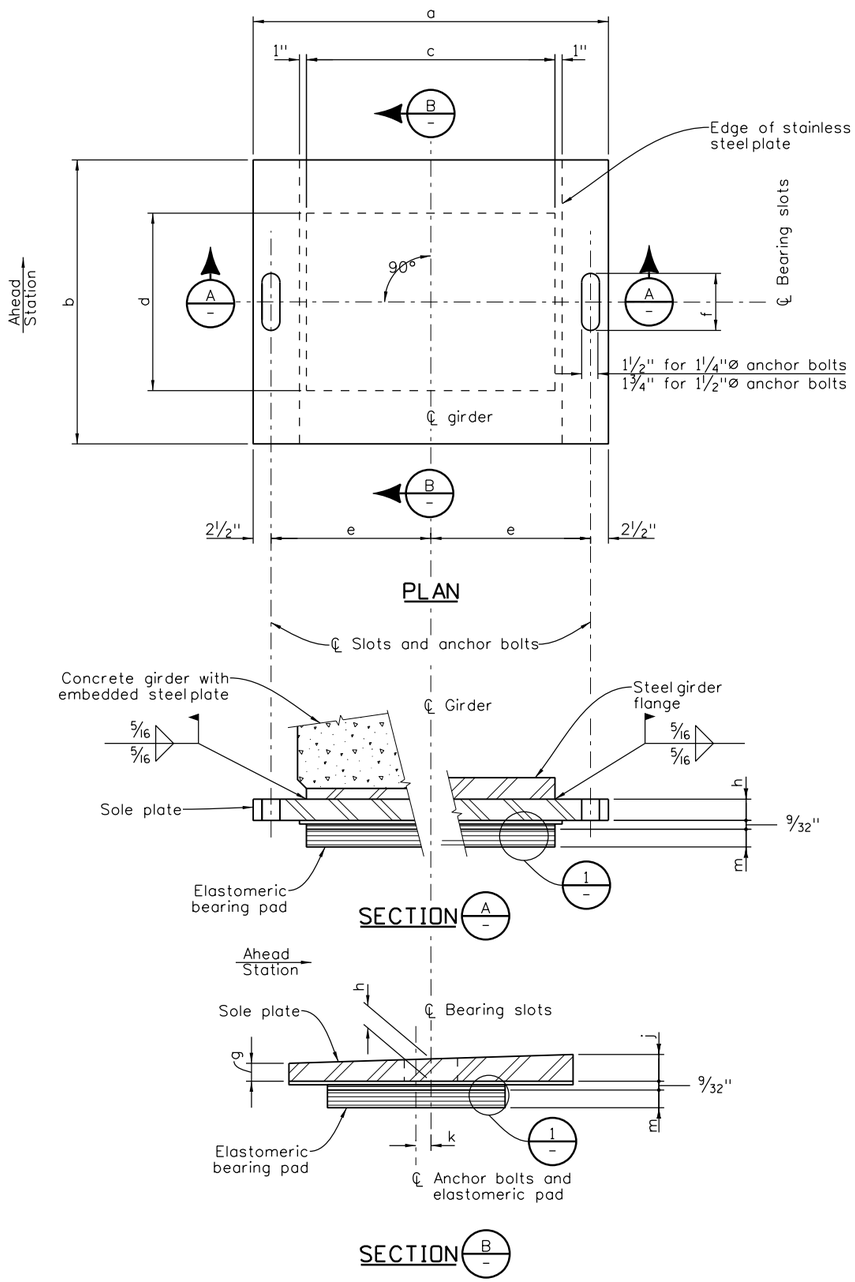
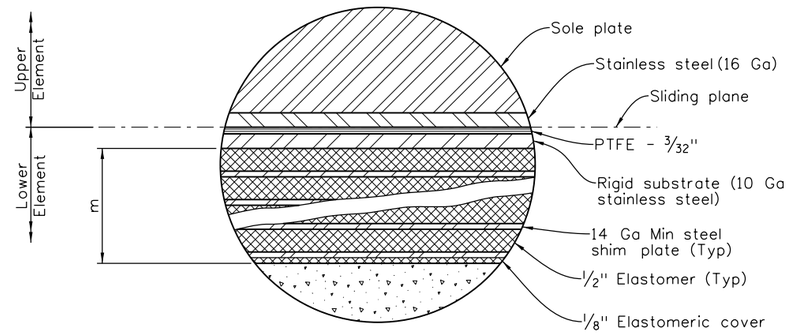
Revision Dates						
3/99	11/99	4/02	6/04	3/07	10/13	3/23	9/24



Designer:
As shown in Detail "1", the thickness of the elastomeric cover may be as small as 1/8" (default thickness) or as large as 3/8". The maximum Shore A hardness allowed in a laminated bearing is 50 Durometer for Method A, and 60 Durometer for Method B.

Add 2" to the theoretical value for dimension b to provide a design and construction tolerance.



DETAIL 1

Use for m > 1/2". When m ≤ 1/2", a plain elastomeric pad shall be used.

NOTES:

1. The centerlines of the upper and lower elements of the expansion bearings shall be aligned as shown in Section B at a mid-point temperature of 40°. The upper element only, shall be adjusted, in relation to the fixed bearing, for each 10° temperature change. Adjust away from the fixed bearing one 10° temperature increment for each 10° change above 40° and toward the fixed bearing for each 10° change below 40°.
2. Provide 1/4" clearance between jam nut and sole plate under all temperature conditions prior to jamming.
3. Sole plates, stainless steel plates, anchor bolts, PTFE, and elastomeric pads shall be included in the bid price for Item No. 512, Bearing Device (Type II).
4. Stainless steel in contact with PTFE shall be polished to a brightness finish of less than 10 micro-inches root mean square.
5. Seal weld stainless steel to the sole plate.
6. PTFE and substrate shall be vulcanized to the elastomeric pad.
7. Grade 3 elastomer shall be used.
8. Higher grade elastomer may be substituted for grade 3 at no additional cost to the project.
9. Design shear modulus G = _____ psi at 73°F.
10. Hardness = _____ Duro (Shore A).
11. AASHTO design method _____ has been used.

Location	No Req'd	Maximum Design Load Kip	Dimensions (Inches) a	b	c	d	e	f	g	h	j	☆ k	m	10° Temp Increment

☆ Note: Dimension k compensates for creep and shrinkage in concrete bridges. Negative values indicate that the ℄ bearing slots shall be set backstation from the ℄ anchor bolts and elastomeric pad.

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-512-2.dgn
Horiz. Scale: None 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 DEVICE (TYPE II)

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

$PLOT_INFO$