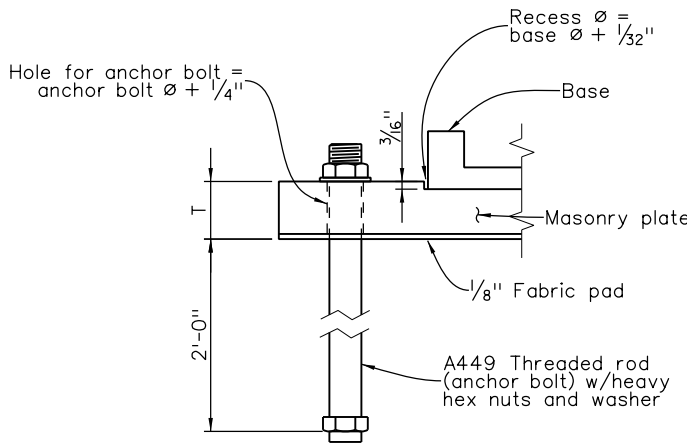


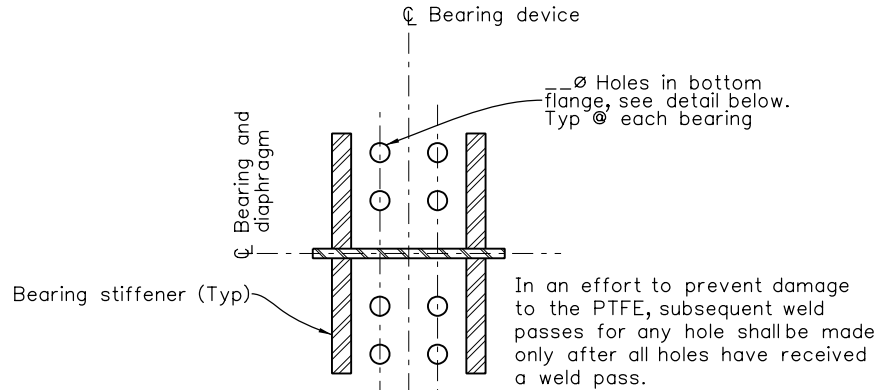
NOTES:

1. All structural steel for the bearing devices, including sole plates, top plates, and masonry plates, shall be AASHTO M270 (ASTM A709) Grade _____ unless otherwise shown. A588 or A572 may be substituted for Grade 36 at no additional cost to the project.
2. Bearing seat elevations at abutments and piers shall be checked and adjusted according to the final dimensions of bearing assemblies adopted.
3. Longitudinal structure movement due to temperature and shrinkage is based on a mid-range temperature of 40°F. If site temperature is not 40°, a longitudinal offset of top elements of the bearing (above sliding surface) shall be made in the field based on the 10° temperature increment in the table. In addition, longitudinal one way structure movement due to prestress shortening and creep shall be accommodated for all temperature ranges with the initial offset in the table away from the fixed bearing.
4. Anchor bolts may be set in wet concrete of bearing seat, or placed within a formed cylindrical void 4" in diameter and then grouted with high strength epoxy grout.
5. The internal surfaces of the pot cavity and the bottom surface of the piston shall be polished after zinc metalizing.

Gd = Guided expansion bearing
Exp = Non-guided (free floating) expansion bearing

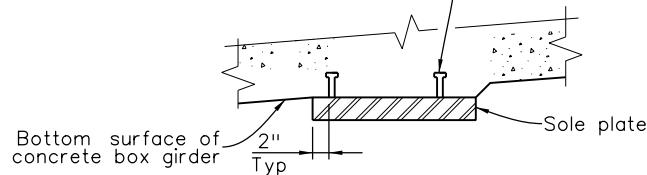


ANCHOR BOLT DETAIL

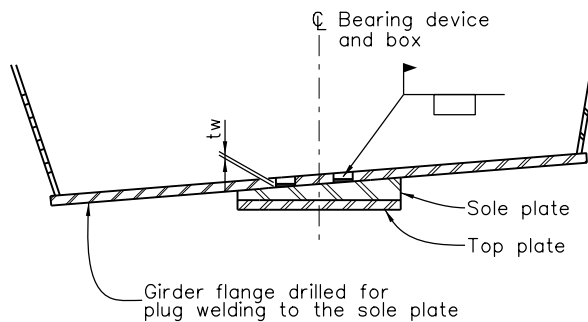


PLAN

$\frac{1}{2}$ " x _____" long (A108 See AWS D1.5-88) shear connector arranged in a symmetrical circular pattern of diameter "Ds". Automatically end welded



SOLE PLATE TO GIRDER CONNECTION (CONCRETE GIRDER)



SECTION TOP PLATE OF GIRDER CONNECTION (STEEL GIRDER)
Bearing stiffener and diaphragm not shown

Designer/Detailer:
Add 2" to the Theoretical value for dimension B in guided and non-guided bearings and add 2" to the theoretical value for dimension A in non-guided bearings to provide a design and construction tolerance.
Designer shall specify grade of steel required

ACCEPTABLE ALTERNATES

D. S. Brown Company
North Baltimore, Ohio

Cosmec, Inc.
Walpole, MA

Con-Serv, Inc.
Georgetown, SC

R. J. Watson, Inc.
Amherst, NY
(Disk Bearing Alternate)

Mageba
New York, NY

Revision Dates	(Preliminary Stage Only)				
3/99	11/99	4/02	9/02	6/04	3/07
					10/13
					3/23

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By						
Checked By						

Location	Quant	Fixed Girder Exp	Vertical Load Per Brg (Kip)		Horiz Load Per Brg (Kip)				Longit Range of Structure Movement (In)	Rotation (Radians)	Top Plate (Sole Plate similar)		Bearing ID	Masonry Plate (In)			Top Connections				A449 Zinc Plated Anchor Bolts No Size	Total Height H	X-Slope Looking Ah Sta	Grade Ah Sta	Guide Angle θ	10° Temp Incr	Initial Offset (In)			
			Service	Strength	Service		Strength				A	B		C	D	T	Field Plug Welds (Steel Str)		Concrete Anchor Studs											
					Trans	Long	Trans	Long									No	ϕ (In)	tw	No								Ds	ϕ (In)	
Abut 1																														

All seals for this set of drawings are applied to the cover page(s)	Print Date: \$DATE\$ File Name: Sheet_B-512-3B.dgn	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 	As Constructed No Revisions: Revised: Void:	BEARING DEVICE (TYPE III) Designer: XXXXXXXX Detailer: XXXXXXXX Sheet Subset: BRIDGE				Project No./Code Project Number Code Sheet Number	
	Unit Information _____ Unit Leader Initials _____			Staff Bridge Branch Initials _____	Structure Numbers: X-XX-XX Subset Sheets: BXX of XXX							