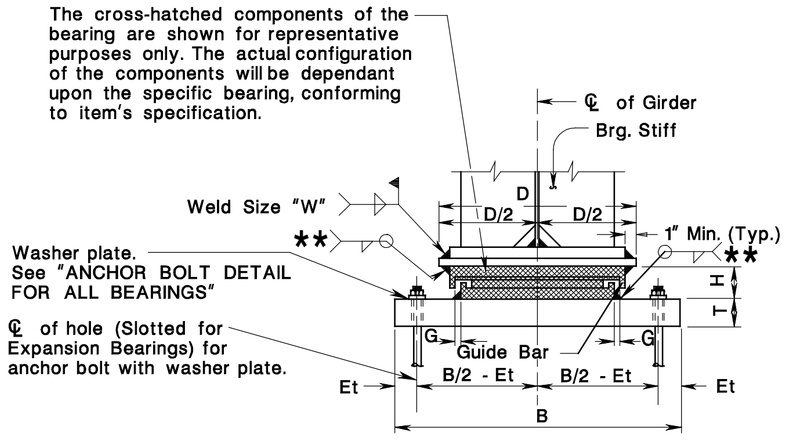
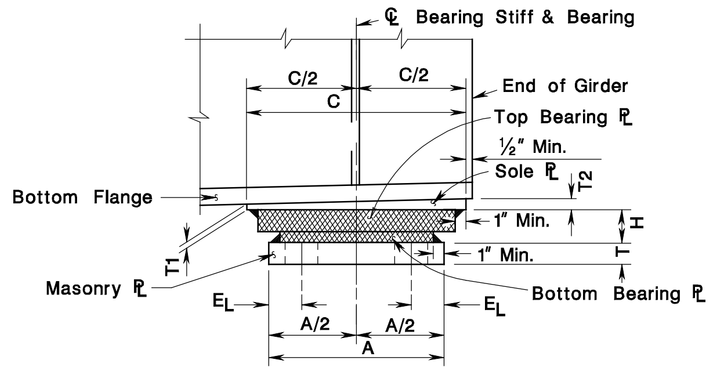
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME

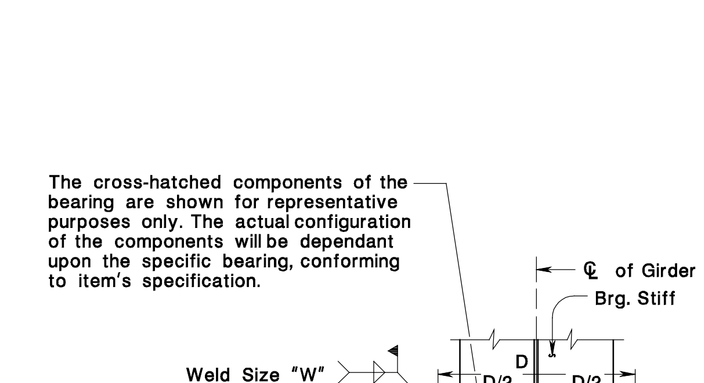


ELEVATION



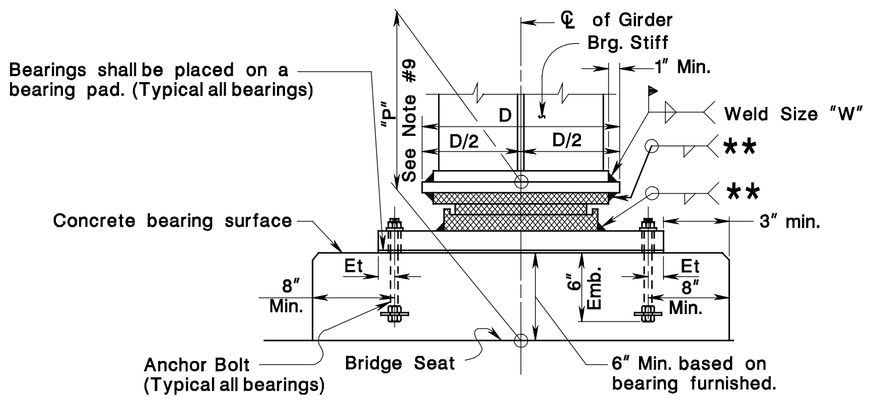
SIDE ELEVATION

EXPANSION BEARING



TYPICAL SLOTTED HOLE DETAIL
MASONRY PLATE

(FOR EXPANSION BEARINGS ONLY)



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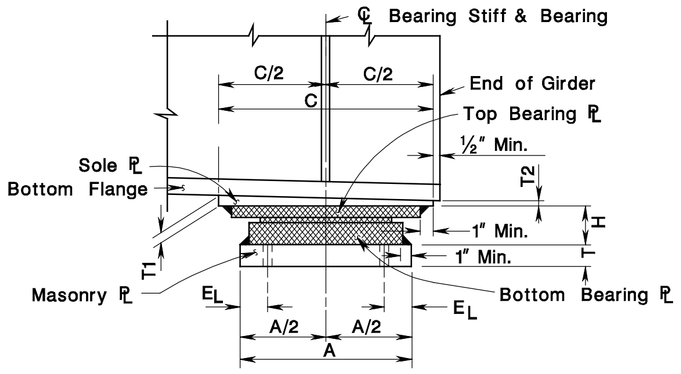
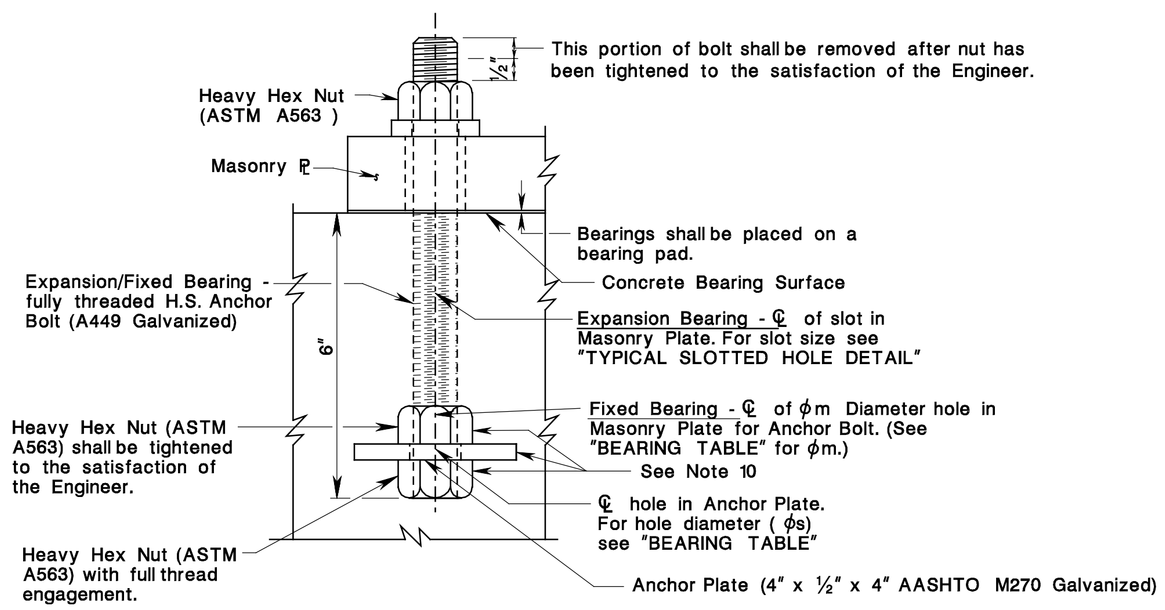


SIDE ELEVATION

FIXED BEARING



ANCHOR BOLT DETAIL FOR ALL BEARINGS

NOTE TO DESIGNER:

THIS SHEET IS NOT TO BE PLACED INTO THE CONTRACT SET OF PLANS AS IS. HOWEVER, INDIVIDUAL DETAILS MAY BE UTILIZED FOR SHOP DRAWING REVIEW.

GENERAL NOTES:

* 1. High Load Pot Bearings shall be designed in conformance with the AASHTO LRFD Bridge Design Specifications, with current interims, as modified by Section 3 of the NJDOT Design Manual for Bridges and Structures, and the NJDOT Standard Specifications for Road and Bridge Construction with current Supplemental Specifications, as modified by the Special Provisions.

2. The furnishing of Pot Bearings shall conform to the provisions of the Standard Specifications.

3. The Designer shall reference the criteria of Subsection 1.24.20 of the Bridges and Structures Design Manual for submission of final plans.

4. Generally the sole plate shall be made 2" wider than the bottom flange. This will provide 1" on each side of the flange for a downward weld attachment to the sole plate. The length of the sole plate shall be 2" longer than the top bearing plate. The minimum thickness of the sole plate shall be ¾". When the slope of the bottom flange exceeds 0.5 percent, a tapered sole plate shall be used.

5. The width of the masonry plate will be dependent on the anchor bolt location. The length of the masonry plate shall be at least 2" greater than the bottom bearing plate. Thickness of the masonry plate shall be determined by the Designer.

6. Top and bottom bearing plates shall be welded to the sole plate and masonry plate respectively. The size of weld (W) shall be determined by the designer. Minimum weld size shall be 5/16".

7. On skewed structures, especially large skews, the designer shall investigate that there is no interference between the bearing components and any of the bracing members (bottom laterals, diaphragms, connection plates, etc.). A detail shall be shown on the plans for each significantly different configuration.

8. Anchor Bolt shall be threaded as shown in "ANCHOR BOLT DETAIL FOR ALL BEARINGS". The nut shall be tightened to the satisfaction of the Engineer and the Anchor Bolt tip shall be removed ½" above the top of the nut. Anchor Bolts, Plates, Washer Plates and Nuts shall conform to the requirements of NJDOT Standard Specification for Road and Bridge Construction.

9. This drawing represents straight simple span bridge structure. For clarity purposes no lateral bracings are shown.

10. If the design indicates that there will be no tension under any loading condition, the plate and nuts are not required.

* The note should be modified to reflect applicable year and updated Specifications.

BEARING TABLE

LOCATION	FIX / EXP.	ITEM NO.	QUANTITY REQUIRED	CAPACITY (KIPS)	ONE WAY* LONGIT. MOVEMENT (IN)	(G) GUIDE CLEARANCE (IN)	MASONRY ℙ								BRG.	ANCHOR BOLTS		WELD SIZE	WASHER ℙ		SOLE PLATE				ϕ_s (IN)
							A (IN)	B (IN)	T (IN)	Am (IN)	Bm (IN)	E_T (IN)	E_L (IN)	ϕ_m (IN)	H (IN)	ϕ (IN)	BOLTS PER BRG.	W (IN)	Awp (IN)	Bwp (IN)	C (IN)	D (IN)	T1 (IN)	T2 (IN)	

* One way longitudinal movement is the maximum movement (Expansion or Contraction) of the Superstructure when bearings are set at 68° F. This includes 1" of tolerance. When the bearings are to be set at temperatures other than 68°, reference AASHTO LRFD Bridge Design Specifications, Articles 3.12.2.1 and 3.12.2.2 for guidance for setting temperatures and bearing movement.

** Manufacturer shall provide the weld size. Minimum size of weld shall be 5/16".

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

BDC04MB-01

BDC04MB-01

STANDARD DRAWING PLATE 2.2-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

POT BEARING

ROUTE : SECTION :

MUNICIPALITY COUNTY

SCALE : NONE

BRIDGE SHEET NO. ____ OF ____

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