

**NOTES**

FOR DISC BEARINGS, SEE SPECIAL PROVISIONS.

ALL BEARING PLATES SHALL BE AASHTO M270 GRADE 50W OR GRADE 50.

AT ALL POINTS OF SUPPORT, NUTS FOR ANCHOR BOLTS SHALL BE FINGER-TIGHTENED PLUS AN ADDITIONAL 1/4 TURN. THE THREAD OF THE NUT AND BOLT SHALL THEN BE BURRED WITH A SHARP POINTED TOOL.

WHEN WELDING THE SOLE PLATE TO THE GIRDER, USE TEMPERATURE INDICATING WAX PENS, OR OTHER SUITABLE MEANS, TO ENSURE THAT THE TEMPERATURE OF THE BEARING DOES NOT EXCEED 250°F. TEMPERATURES ABOVE THIS MAY DAMAGE THE TFE OR URETHANE DISC.

AFTER BEARING ASSEMBLY IS IN PLACE AND ANCHOR BOLTS HAVE BEEN FINALLY POSITIONED, THEY SHALL BE GROUTED IN PLACE AS SHOWN.

THE CLOSURE PLATE, GROUT PIPE, AND STANDARD PIPE FOR THIS ASSEMBLY NEED NOT BE GALVANIZED.

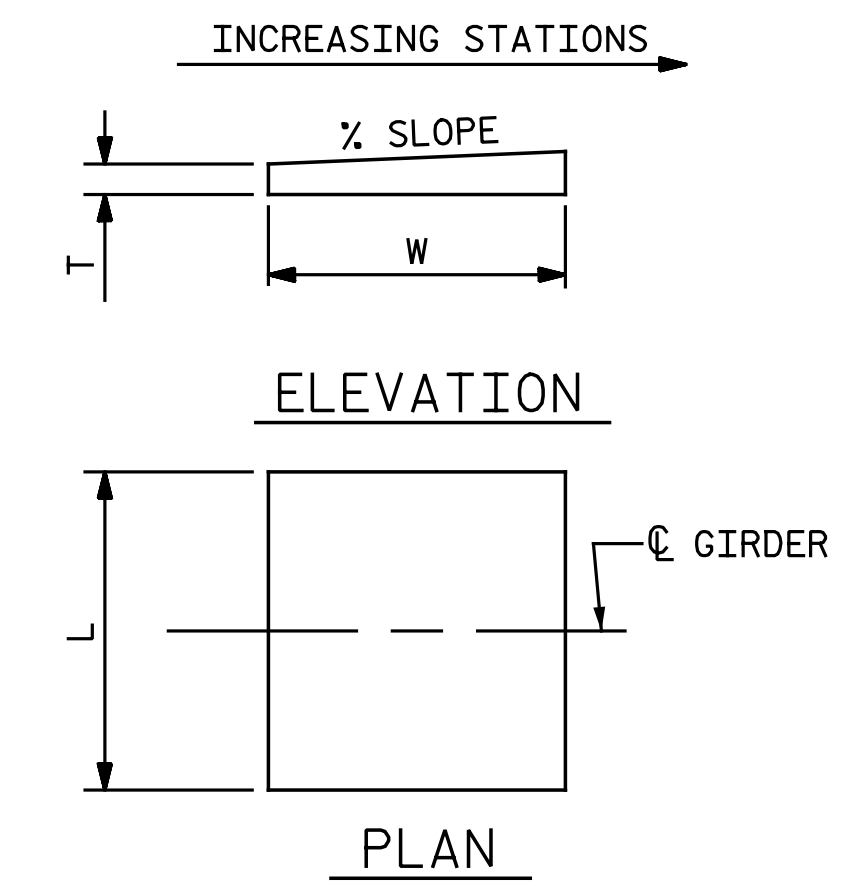
SOLE PLATES SHOULD BE WELDED TO GIRDER FLANGES AND ANCHOR BOLTS SHOULD BE GROUTED BEFORE FALSEWORK IS PLACED.

ALL SURFACES OF BEARING PLATES SHALL BE SMOOTH AND STRAIGHT.

FOR ATTACHMENT OF THE STAINLESS STEEL SHEETS TO THE STEEL SOLE PLATE AND GUIDE BARS, AS WELL AS THE TOP AND SIDE PTFE SHEETS TO THE STEEL UPPER BEARING PLATE, SEE SPECIAL PROVISIONS.

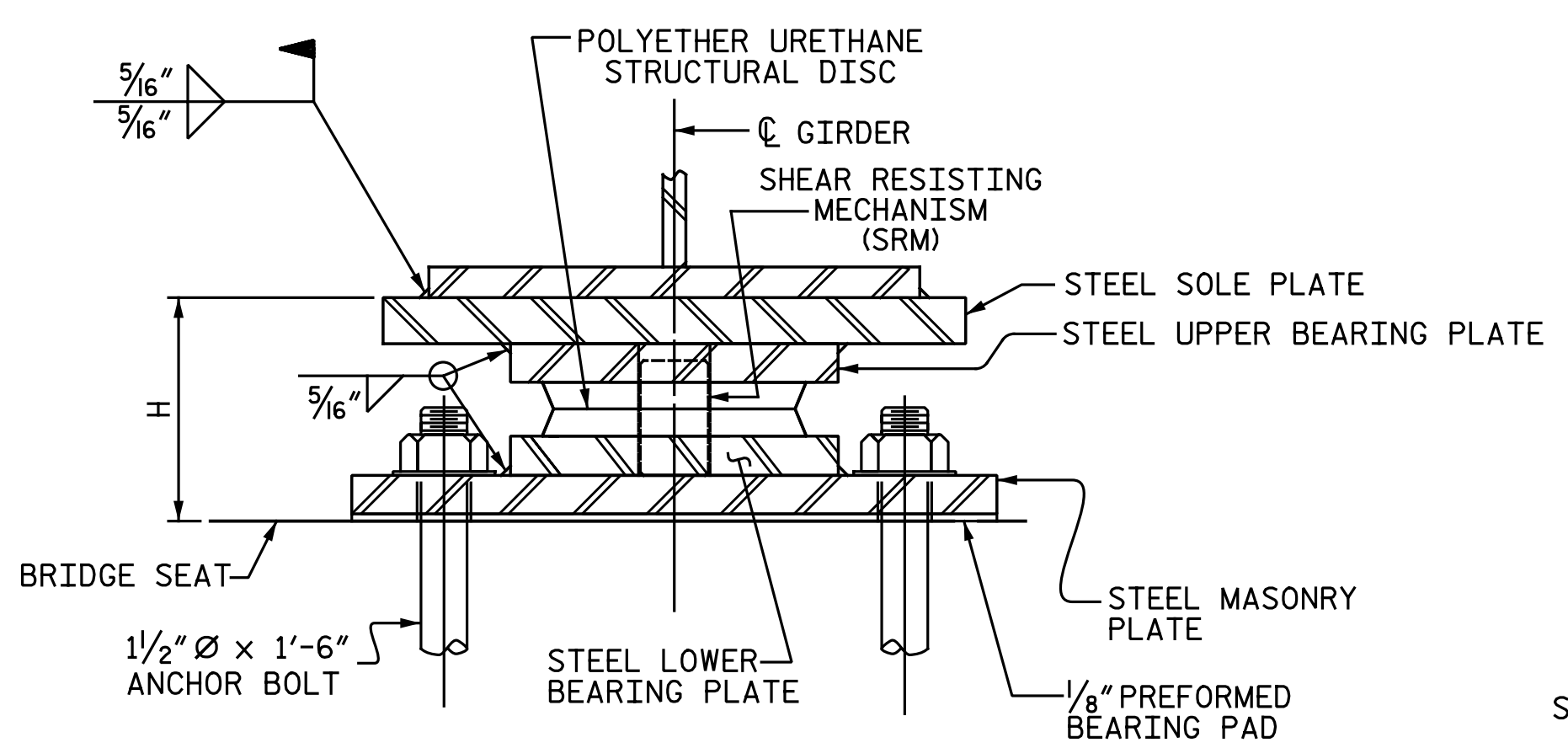
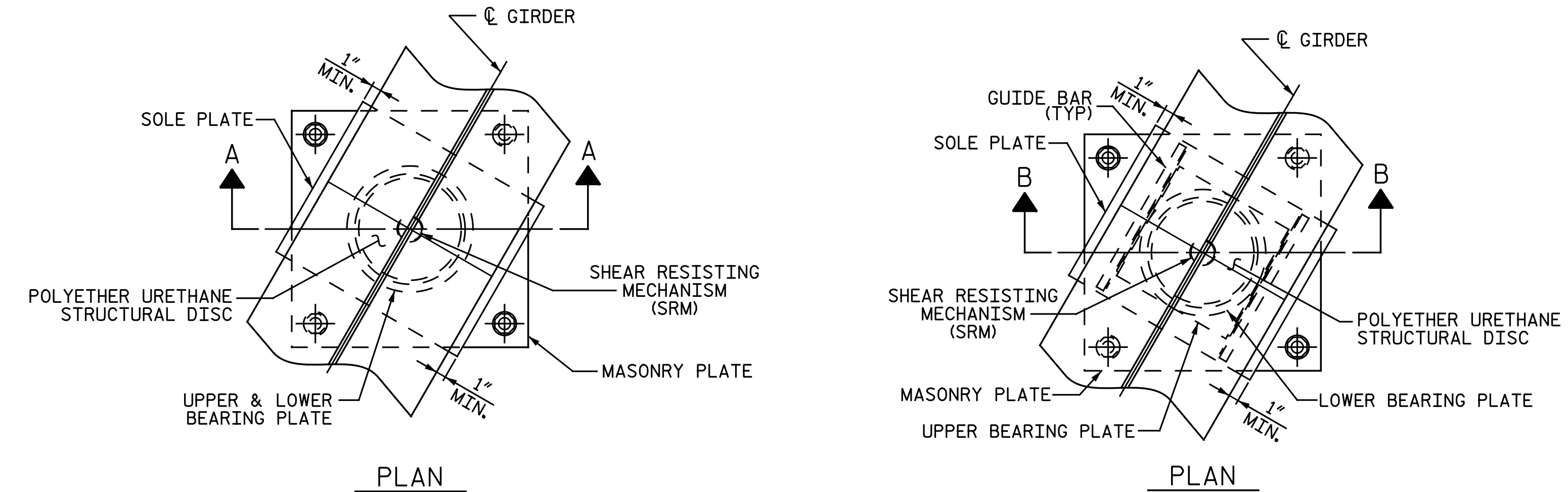
FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

THE MINIMUM ROTATIONAL CAPACITY FOR ALL BEARINGS SHALL BE 0.02 RADIAN.

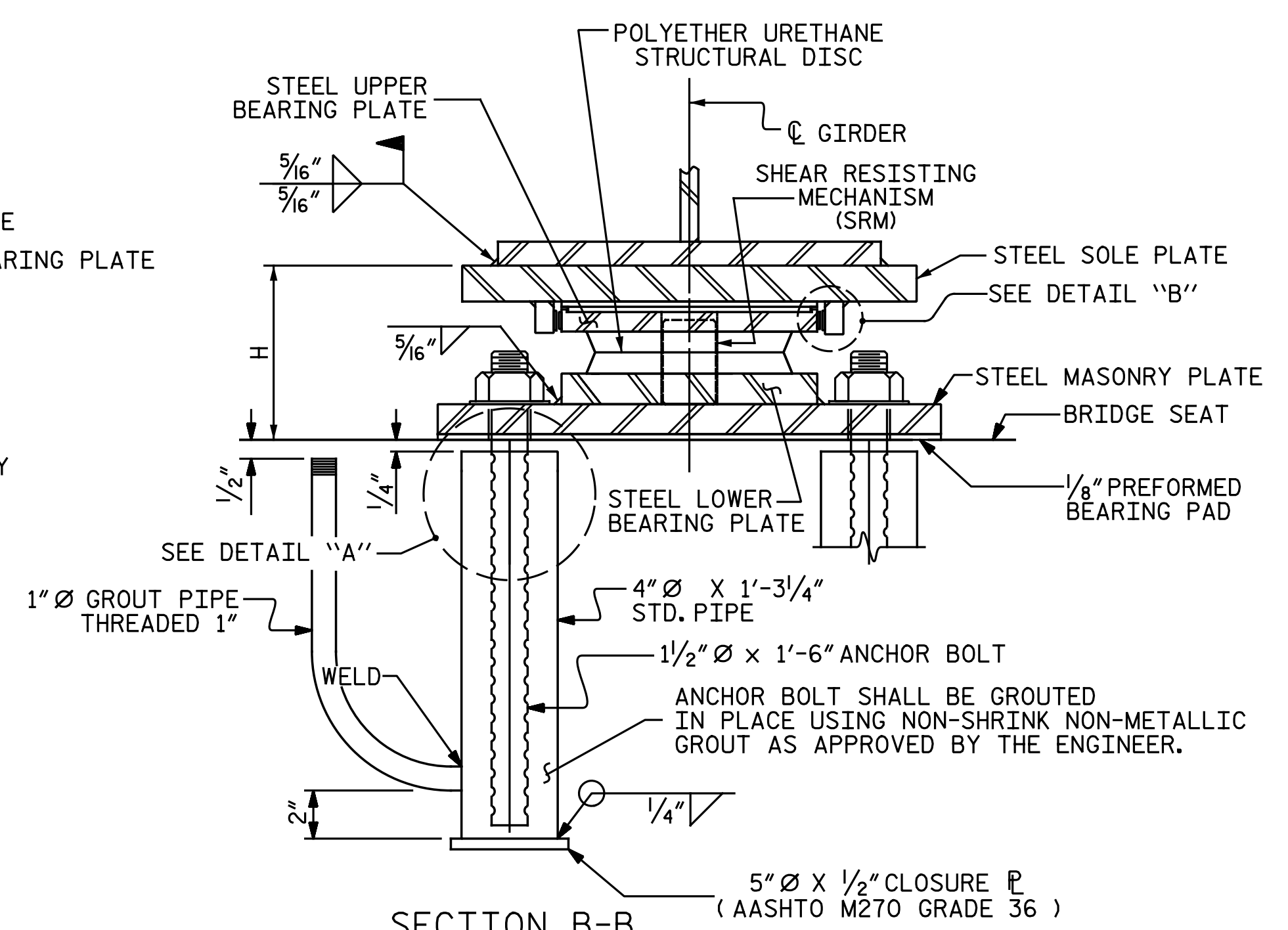


NOTE:  
DIMENSIONS "W" AND "T" SHALL BE DETERMINED BY THE BEARING MANUFACTURER.

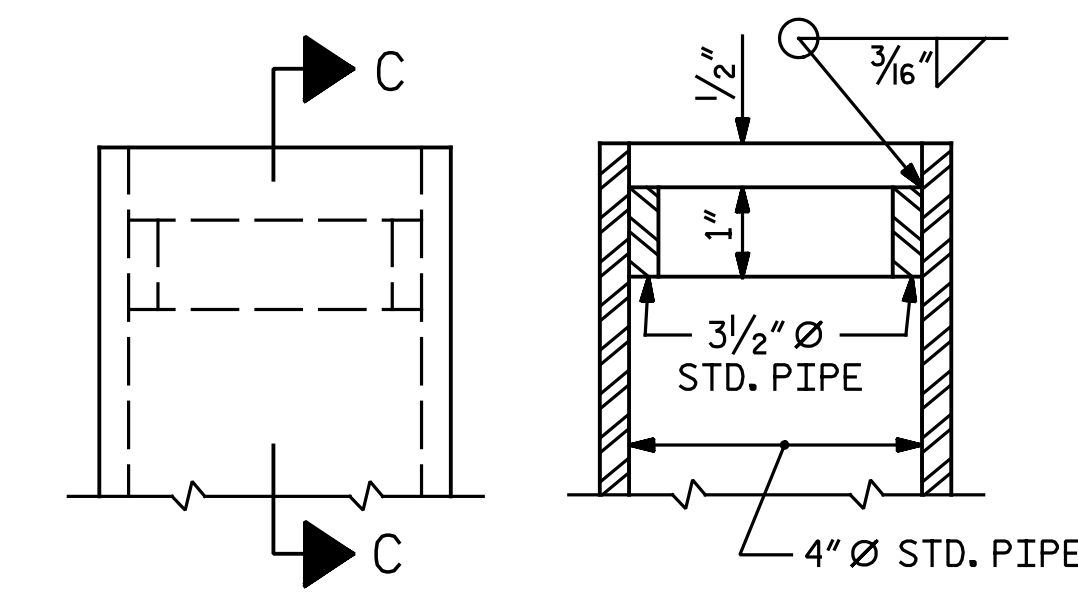
**SOLE PLATE DETAILS**



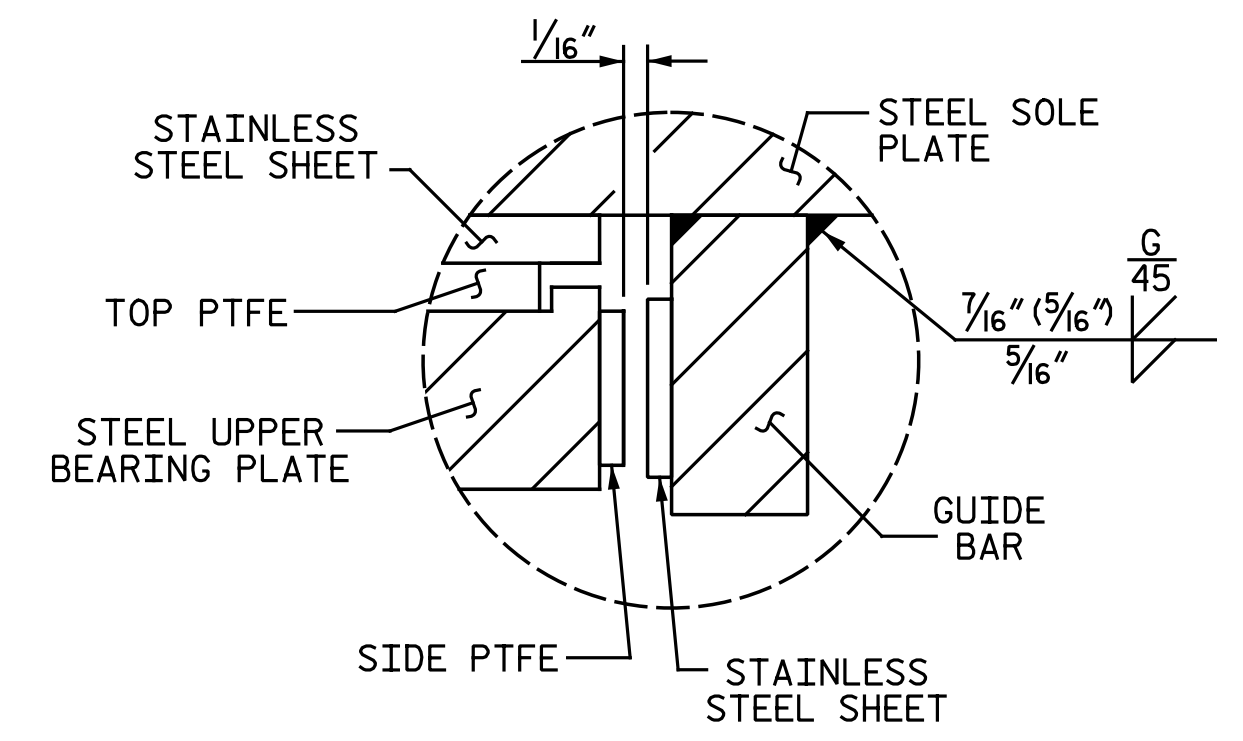
**SECTION A-A**  
DB1, FIXED



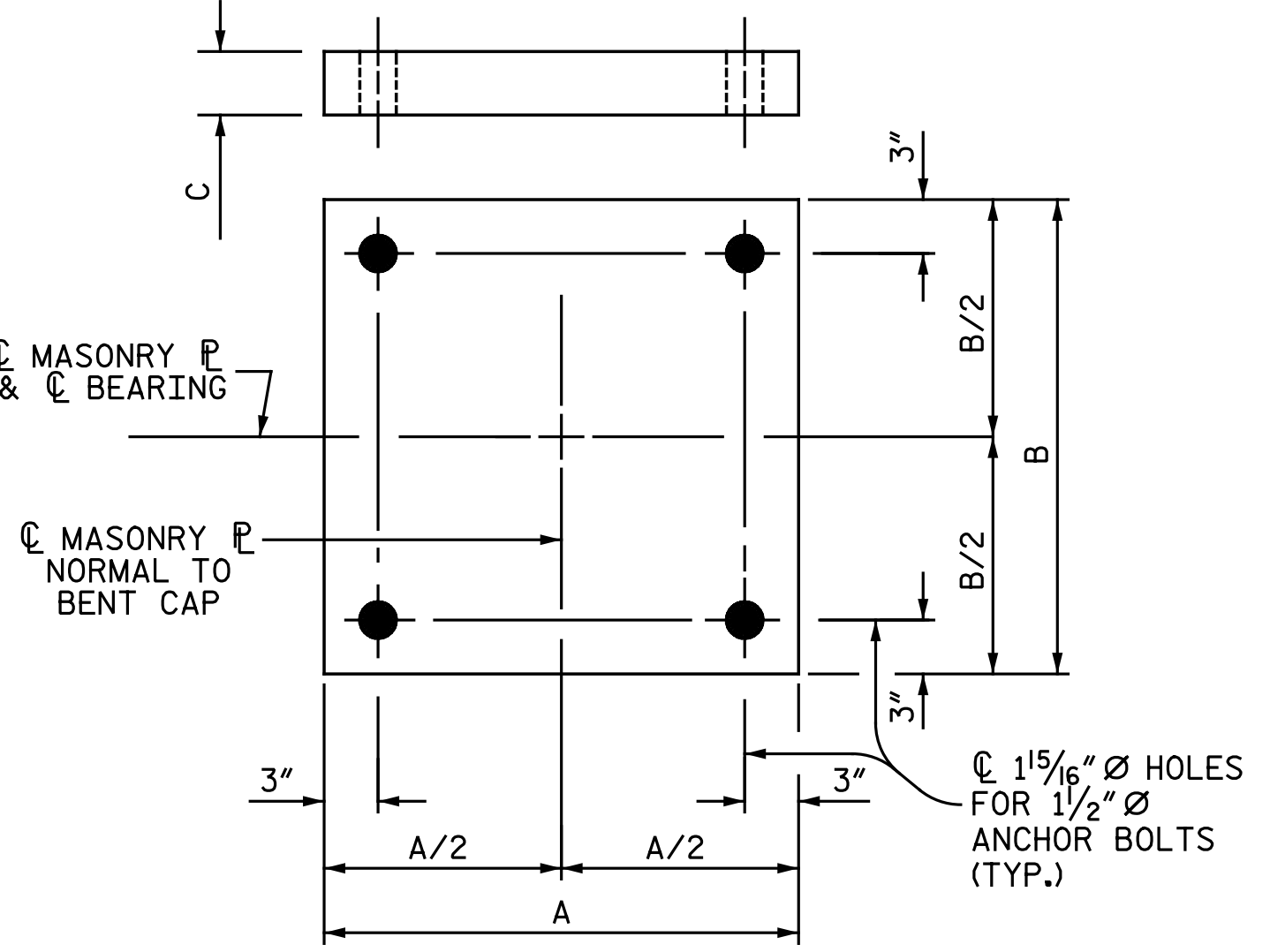
**SECTION B-B**  
DB2, EXP.



**DETAIL "A"**



**DETAIL "B"**

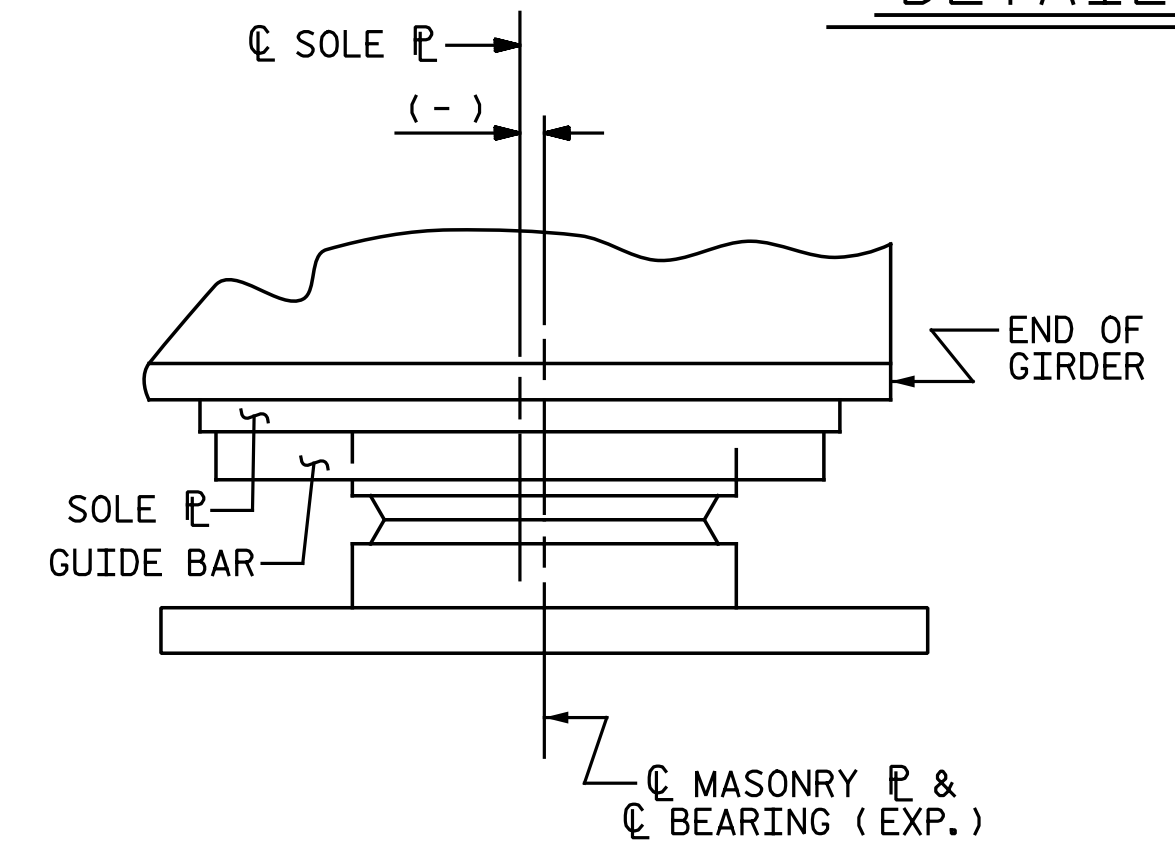


**MASONRY PLATE DETAILS**

PLATE SETTING DATA (EXPANSION DISC BEARINGS)				
LOCATION	TEMPERATURE AT TIME OF SETTING			*
	45° F	60° F	90° F	
END BENT 1	-5/16"	0"	3/16"	-1 5/8"

\* CORRECTION FOR END ROTATION DUE TO WEIGHT OF SLAB AND COMPOSITE DEAD LOAD.

**TEMPERATURE SETTING DETAIL**



DESIGNATIONS	BEARINGS	MASONRY PLATE	LOCATION	NUMBER OF BEARINGS	DIMENSIONS				LOADS AND MOVEMENT						
					BEARING H (IN.)	MASONRY PLATE			SOLE PLATE		UNFACTORED VERTICAL LOAD (KIPS)			FACTORED HORIZONTAL LOAD (KIPS)	ONE-WAY MOVEMENT (IN.)
						A (IN.)	B (IN.)	C (IN.)	TOP SLOPE (%)	L (IN.)	DC	DW	LIVE LL+IM		
DB1 (FIXED)	M1	END BENT 2	6	5 1/2	22 1/2	22 1/2	3/4	0	26	294	38	170	104	0	
DB2 (EXP.)	M2	END BENT 1	6	6 1/2	28 1/2	28 1/2	3/4	0	26	294	38	170	104	3/2	

PROJECT NO. U-2524D  
GUILFORD COUNTY  
STATION: 495+22.00 -LREV-

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**STANDARD**

**DISC BEARING DETAILS**

**RIGHT LANES**

**Michael Baker International**

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7/18/2016

REVISIONS						SHEET NO. S4-14
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 35
2			4			

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ASSEMBLED BY : M. D. MAYHEW DATE : 11-30-15  
 CHECKED BY : B. J. BELL DATE : 3-20-16  
 DRAWN BY : TMG 08/13 REV.  
 CHECKED BY : EXP 10/13 REV.