

BEARING PLAN

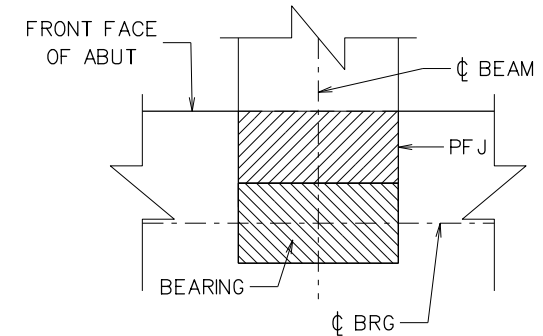


TYPICAL SECTION

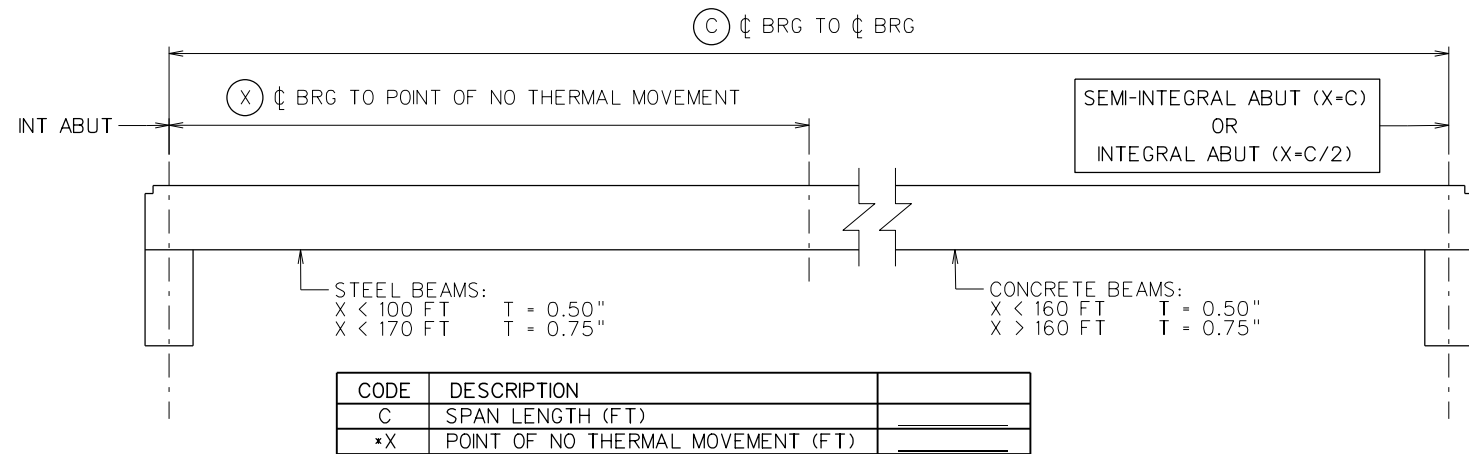
PLAIN BEARING PAD CONTROL DIMENSIONS				
CODE	DESCRIPTION	EQUATION	ABUT 1	ABUT 2
	NO. OF PADS			
	DUROMETER			
L	PAD LENGTH (IN)			
W	PAD WIDTH (IN)			
T	THICKNESS (IN)			
A	PAD PLAN AREA (SQ. IN.)	$W \times L$		
P	PAD PLAN PERIMETER (IN)	$2W + 2L$		
S	SHAPE FACTOR	$\frac{A}{P \times T}$		
	DUROMETER 50 ALLOWABLE COMPRESSIVE STRESS (PSI)	$13.7S^2 < 800$		
	DUROMETER 60 ALLOWABLE COMPRESSIVE STRESS (PSI)	$18.7S^2 < 800$		
	ACTUAL COMPRESSIVE STRESS (PSI)			

NOTES:

- BRIDGE SEATS ON WHICH BEARING PADS WILL BE MOUNTED SHALL BE FINISHED TO A TRULY LEVEL PLANE AT THE EXACT REQUIRED ELEVATION. IF FULL CONTACT IS NOT ACHIEVED, FIELD ADJUSTMENTS OR MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE FULL CONTACT SUBJECT TO THE APPROVAL OF THE ENGINEER.
- WELDING WHILE THE BEARING PAD IS IN CONTACT WITH METAL IS DISCOURAGED.
- PLAIN ELASTOMERIC BEARING SHALL BE DUROMETER 50 OR 60 CORRESPONDING TO A SHEAR MODULUS OF 113 OR 165 PSI RESPECTIVELY.
- DUROMETER 50 BEARINGS ARE RECOMMENDED FOR BRIDGES WITH MODERATE LONGITUDINAL SLOPE, SKEW OR CURVATURE.
- PLAIN BEARINGS SHALL ONLY BE USED FOR TEMPORARY SUPPORT AT INTEGRAL ABUTMENTS OR PIERS. PLAIN BEARINGS ARE FORBIDDEN AS THE PERMANENT METHOD FOR ACCOMMODATING THERMAL MOVEMENTS.
- PRIOR TO SHIPMENT, BEARINGS SHALL BE WRAPPED WITH A WATERPROOFING COVERING. THE BEARINGS SHALL NOT BE UNWRAPPED UNTIL BEARINGS ARE READY TO BE SET INTO THEIR FINAL POSITION.
- THE CONTRACTOR SHALL FINISH ALL CLOSURE POURS AT INTEGRAL SUBSTRUCTURE UNITS PRIOR TO WINTER SHUTDOWN AFTER THE BEAMS AND BEARINGS HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL VERIFY THE POSITIONING OF BEAMS AND CONDITION OF THE TEMPORARY BEARING AFTER EXTREME LOW OR HIGH TEMPERATURE EVENTS. REPLACE DAMAGED BEARINGS AT THE DISCRETION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR RESETTING BEAMS AND BEARING REPLACEMENT IF NEEDED.
- THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS TO AVOID SPILLS OF GREASE, DIRT AND OTHER FOREIGN MATERIAL ON BEARINGS DURING INSTALLATION. ALL FOREIGN MATERIAL SHALL BE REMOVED BY AN APPROVED METHOD BEFORE FINAL INSTALLATION. A DEGREASING AGENT APPROVED BY THE ENGINEER SHALL BE REQUIRED FOR ALL SPILLS.
- A PREFORMED JOINT (PFJ) SHALL BE USED IN FRONT OF THE TEMPORARY BEARINGS AS NEEDED TO FILL ALL VOIDS. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID ENCASING WATER WITHIN THE ABUTMENT.



BEARING LAYOUT



*THE POINT OF NO THERMAL MOVEMENT SHALL BE COMPUTED USING BEST ENGINEERING PRACTICE FOR MULTI SPAN BRIDGES.

BRIDGE ELEVATION SCHEMATIC

PRINT DATE
5-FEB-2022 13:59

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NOT TO SCALE

				WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS				DESIGNED _____ DATE _____ CHECKED _____ DATE _____							
								DRAWN _____ DATE _____ REVIEWED _____ DATE _____							
NO.	REVISION	DATE	BY									STANDARD BRIDGE PLANS PLAIN ELASTOMERIC BEARING DETAILS SHEET NUMBER 18.00B1			