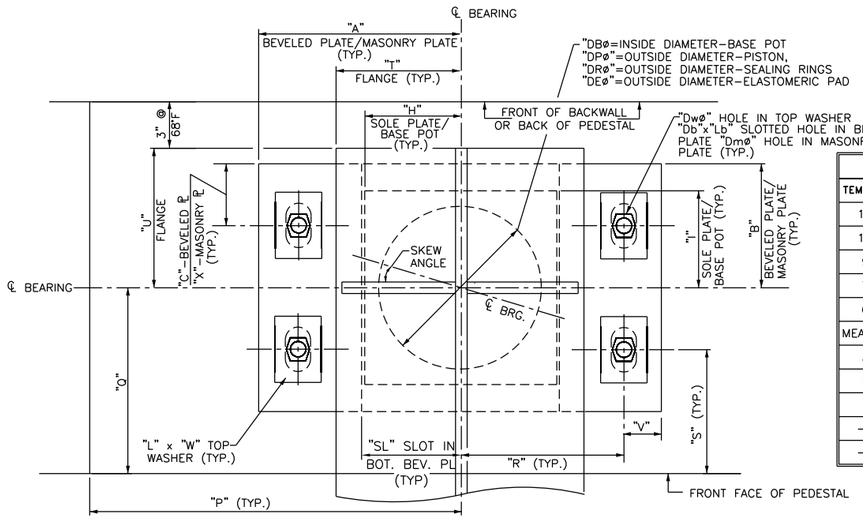
XXX
XXX



BEARING PLAN

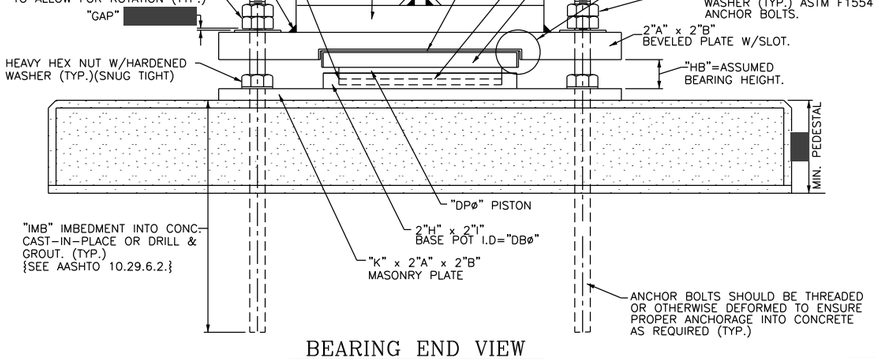
EXPANSION BEARING SETTING TABLE					
TEMP. (F°)	Δ TO MEAN	TEMP. CORR.(IN.)	"A"	ELONG. CORR.(IN.)	"B"
120°	75°				
105°	60°				
90°	45°				
75°	30°				
60°	15°				
MEAN 45°	–	–			
30°	15°				
15°	30°				
0°	45°				
−15°	60°				
−30°	75°				

– "A" = DISTANCE FROM FRONT EDGE OF PAD TO FRONT EDGE OF SOLE PLATE WITH BEAM AND DIAPHRAGM LOADS ON BEAM.

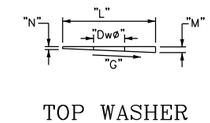
– "B" = DISTANCE FROM FRONT EDGE OF PAD TO FRONT EDGE OF SOLE PLATE WITH ALL DEAD LOADS AND SUPERIMPOSED DEAD LOADS ON BEAM.

– ELONGATION IS DUE TO DEFLECTION.

– DEFLECTION IS DUE TO D.L. & S.D.L. EXCLUDING BEAM & DIAPHRAGM LOADS.

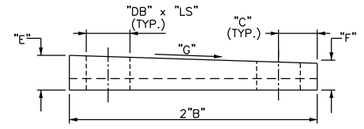


BEARING END VIEW

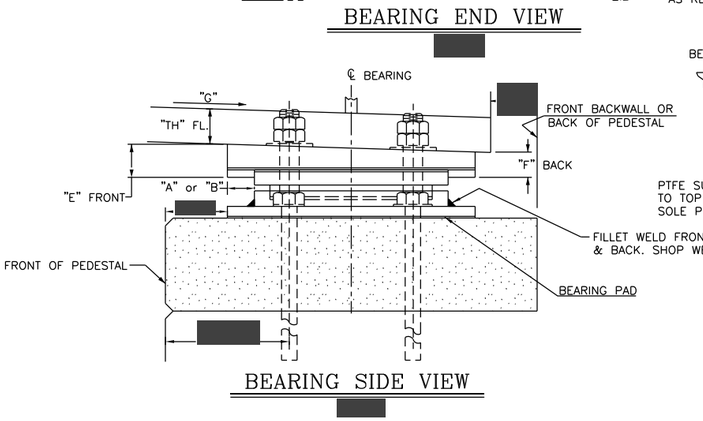


TOP WASHER BEVEL DETAIL

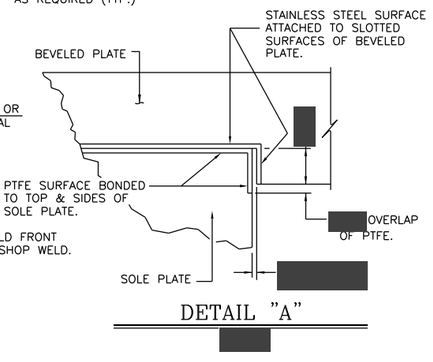
{ DESIGNER SHALL INDICATE REQUIRED SIZE OF ALL WELDS. }



BEVEL PLATE DETAIL



BEARING SIDE VIEW



DETAIL "A"

ASSUMED BEARING HEIGHT	SKEW ANGLE
HB	
#	#

MULTI-ROTATIONAL BEARING DEVICE NOTES:

EXPANSION BEARING INSTALLATION AND ALIGNMENT: THE BEVELED PLATE SHALL BE SET ACCORDING TO THE TABLE AT LEFT. THE POT BEARING COMPONENTS AND MASONRY PLATE SHALL NOT BE OFFSET FROM THE CENTERLINE OF BEARING STIFFENER BY MORE THAN ONE-HALF THE THICKNESS OF THE FLANGE AT THAT LOCATION, OR THE THICKNESS OF THE BEARING STIFFENER, WHICHEVER IS THE LESSER DISTANCE LONGITUDINALLY FROM THE CENTERLINE OF THE BEARING STIFFENER.

THE {CONTRACTOR, FABRICATOR OR THRUWAY AUTHORITY, WHICHEVER IS APPLICABLE} SHALL SUPPLY MULTI-ROTATIONAL BRIDGE BEARINGS CONFORMING TO THE REQUIREMENTS OF THE BEARING ITEM SHOWN AND SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE BEARING DEVICES SUPPLIED SHALL BE CAPABLE OF TRANSMITTING THE LOADS AND MOVEMENTS SHOWN ON THESE PLANS.
2. THE HEIGHT OF THE BEARING BETWEEN THE BEVELED PLATE AND THE MASONRY PLATE REPRESENTS THE ASSUMED TOTAL HEIGHT OF THE BEARING MECHANISM USED BY THE DESIGNER TO ESTABLISH CONCRETE DIMENSIONS. THE CONTRACTOR SHALL RECOMPUTE ALL TOP OF PEDESTAL ELEVATIONS TO ACCURATELY REFLECT THE HEIGHT OF BEARINGS SUPPLIED.
3. THE MASONRY PLATES SHOWN HAVE BEEN DESIGNED TO SUIT TYPICAL BEARINGS FOR THE DESIGN LOADS AND MOVEMENTS SHOWN. THE ALLOWABLE CONCRETE BEARING STRESS SHALL BE [redacted]

   WHERE [redacted]

   THE MAXIMUM CONCRETE BEARING STRESS SHALL NOT EXCEED [redacted] IF THE PLAN AREA OF ANY MASONRY PLATE IS REVISED (INCREASED), IT SHALL FIT WITHIN THE PLAN DIMENSIONS SHOWN FOR THE PEDESTAL. THE MINIMUM CONCRETE EDGE DISTANCE SHALL BE [redacted] AND THE MINIMUM LATERAL ANCHOR BOLT COVER SHALL BE [redacted]
4. THE BEARING DEVICE, MASONRY PLATE, BEARING PAD, SOLE PLATE, BEVELED PLATE, ANCHOR BOLTS, NUTS, WASHERS AND WASHER PLATES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 565.15(21-25)-"TYPE MR EXPANSION BEARING".
5. ALL BEARING CONNECTIONS SHALL BE CAPABLE OF RESISTING A LATERAL FORCE EQUAL TO 19F THE VERTICAL DESIGN DEAD LOAD AND SUPERIMPOSED DEAD LOAD HORIZONTALLY IN ANY DIRECTION.
6. THE STEEL FOR THE BEARINGS SHALL BE ASTM [redacted] UNLESS OTHERWISE NOTED.
7. ALL STEEL FABRICATION SHALL CONFORM TO THE PROVISIONS OF THE LATEST EDITION OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL (SCM) UNLESS OTHERWISE NOTED.
8. ANY ADJUSTMENTS IN ELEVATION NECESSARY TO ACCOMMODATE THE ACTUAL BEARING THAT IS SUPPLIED SHALL BE MADE BY CHANGING THE TOP OF THE PEDESTAL ELEVATIONS. THE MINIMUM PEDESTAL HEIGHT ALLOWED WILL BE [redacted]. NO CHANGE IN THE BRIDGE SEAT ELEVATION WILL BE ALLOWED WITHOUT WRITTEN APPROVAL OF THE D.S.D. IN LIEU OF CHANGING PEDESTAL ELEVATIONS THE CONTRACTOR MAY ELECT ONE OF THE FOLLOWING AT NO ADDITIONAL COST TO THE THRUWAY AUTHORITY:
   A. USE A SHIM PLATE UNDER THE MASONRY PLATE. THE SIZE AND MATERIAL OF THE SHIM PLATE SHALL BE THE SAME AS THE MASONRY PLATE. ONLY ONE SHIM PLATE SHALL BE PERMITTED AND THE MINIMUM THICKNESS SHALL BE [redacted]
   B. INCREASE THE THICKNESS OF THE MASONRY PLATE.
9. ANCHOR BOLTS, WASHERS, WASHER PLATES AND NUTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SPECIFICATION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS". THEIR COST (INCLUDING GALVANIZING) SHALL BE INCLUDED IN THE UNIT PRICE FOR THE BEARING ITEM.
10. THE MASONRY PLATE AND BEVELED PLATE SHALL BE SHOP METALIZED OR GALVANIZED (MANUFACTURE'S PREFERENCE). THE COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.
11. THE BASE POT AND SOLE PLATE SHALL BE SHOP METALIZED OR GALVANIZED (MANUFACTURE'S PREFERENCE). THE COST TO BE INCLUDED IN THE PRICE BID FOR THE BEARING ITEM.
12. SHOP DRAWINGS SHALL BE SUBMITTED TO THE THRUWAY AUTHORITY FOR APPROVAL AND SHALL INCLUDE ALL WELDING AND BONDING PROCEDURES.
13. THE MINIMUM VERTICAL DESIGN LOAD [redacted]
14. THE MINIMUM HORIZONTAL DESIGN LOAD [redacted]
15. THE BEARING PAD SHALL HAVE THE SAME HORIZONTAL DIMENSIONS AS THE MASONRY PLATE AND A THICKNESS OF [redacted] THE BEARING PAD MATERIAL SHALL CONFORM TO N.Y.S. STANDARD SPEC. 728-01 OR 728-02.

{NOTE: "{ }" INDICATES NOTES TO DESIGNER. DO NOT INCLUDE IN CONTRACT DRAWING.}

PE STAMP & SIGNATURE ARE REQUIRED ON THIS SHEET.

HOLE SIZE IN BEVELED PLATE DEPENDENT ON: AMOUNT OF TRANSLATION IN EXPANSION BEARINGS

BEVELED PLATE										SOLE PLATE			PISTON
SL	A	B	C	V	E	F	DbxLb**	C	R	H	I	J	DPø
#	#	#	#	#	#	#	#	#	#	#	#	#	#

SEALING RING	ELASTOMERIC PAD	BASE POT			MASONRY PLATE						
DRø	DEø	H	I	DBø	A	B	X	V	R	K	Dmø
#	#	#	#	#	#	#	#	#	#	#	#

TOP WASHERS					ANCHOR BOLTS				PEDESTAL				BOTTOM FLANGE		
Dwø	L	W	M	N	IMB	O	GAP	DAø	P	Q	R	S	T	U	TH FL
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#

DISC TYPE M.R. BEARINGS SHALL NOT BE SUBSTITUTED FOR THE POT TYPE M.R. BEARINGS SHOWN ON THESE PLANS.

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
TITLE OF PROJECT LINE 1
TITLE OF PROJECT LINE 2

LOCATION OF PROJECT
LOCATION OF PROJECT LINE 1
LOCATION OF PROJECT LINE 2

TITLE OF DRAWING
MULTI-ROTATIONAL POT-TYPE EXPANSION BEARING DETAILS

CONTRACT NUMBER: TA
DATE: 3/10
DRAWING NUMBER: *

DRAFTED BY: TA
DESIGNED BY: TA
CHECKED BY: TA
IN CHARGE OF: TA