

## BEARING NOTES

1. Bearings shall conform to applicable Subsections of sections 531 & 731.
2. Bearings shall be paid for under the item 531.10 "BEARING DEVICE ASSEMBLY (FABRIC)".
3. Fabrication drawings conforming to Subsection 531.03 shall be submitted to include welding and bonding procedures.
4. The concrete surface under the bearing device shall be level.
5. "A" distance is the final setting for the bearing pad after the concrete slab, curb, pavement and bridge rail are placed. The final "A" distance, as shown in the table, must be attained within  $\frac{1}{16}$  of an inch.
6. Design criteria:
  - A. Base plate to concrete design pressure = 1000 P.S.I. maximum
  - B. Minimum allowable design rotation = 0.015 radians
  - C. Horizontal capacity shall be a minimum of 10% of the vertical load
7. All steel in bearing devices (except stainless) shall be AASHTO M-270, Grade 36.
8. All Anchor rods shall be  $\frac{1}{2}$ " diameter, set 15" minimum into the concrete. The rods shall meet the requirements of ASTM F-1554. Nuts shall meet the requirements of ASTM A194. Rods and nuts shall be galvanized.
9. Anchor bolts shall have a minimum of 15" embedment into the concrete and shall conform to Subsection 714.08.
10. All bearing devices shall be galvanized or metalized as per Subsection 531.04(b) and 506.15 of the General Special Provisions. Areas of galvanizing or metalizing damaged by field welding or handling shall be painted with a zinc rich paint in accordance with Supplemental Specification 513. Payment for recoating damaged areas will be considered incidental to Contract Item #531.10.
11. All the anchor bolts, nuts and washers shall be galvanized. All washers shall be  $\frac{3}{8}$ " plate (minimum). Payment for anchor bolts, nuts and washers shall be included in the unit bid price for item #531.10, "BEARING DEVICE ASSEMBLY (FABRIC)".
12. See reference sheet 34 of 43 for Beam ID. Coding of "Beam ID" is as follows: "Number" is the span number, starting from the Waterbury end of the bridge. "Letter" is the beam, starting with "Beam A" at left fascia, to the last beam at the right fascia.

	D.L.	L.L. + I	TOTAL
SPAN 1	47.7	81.9	130
SPAN 2	79.6	83.2	163
SPAN 3	47.7	81.9	130

TEMP	TABLE 1 "A" DIST	TABLE 2 "A" DIST
-30°F	2 $\frac{3}{8}$	2 $\frac{3}{16}$
-15°F	2 $\frac{5}{16}$	2 $\frac{3}{16}$
0°F	2 $\frac{1}{4}$	2 $\frac{5}{16}$
15°F	2 $\frac{3}{16}$	2 $\frac{1}{4}$
30°F	2 $\frac{1}{16}$	2 $\frac{1}{8}$
45°F	2	2
60°F	1 $\frac{5}{16}$	1 $\frac{7}{8}$
75°F	1 $\frac{3}{16}$	1 $\frac{3}{4}$
90°F	1 $\frac{3}{4}$	1 $\frac{11}{16}$

BEARINGS																								
BEARING LOCATION				PAD							STAINLESS		SOLE PLATE						NEW HEIGHT		TEMPERATURE TABLE		EXISTING HEIGHT	CHANGE IN BRIDGE SEAT ELEV. HEIGHT (ft.)
BRIDGE	PIER NO.	SPAN NO.	BRG. MARK	FIX - EXP	BEAM ID	BEAM TYPE	FIG. WIDTH	WIDTH	LENGTH *	THICKNESS	WIDTH	LENGTH *	WIDTH	LENGTH *	THICKNESS	HOLE	SLOTTED HOLE	WIDTH	LENGTH	WIDTH	LENGTH	TEMPERATURE TABLE	EXISTING HEIGHT	CHANGE IN BRIDGE SEAT ELEV. HEIGHT (ft.)
SB	1	1	R1	EXP	1A - 1E	36X160	12"	12"	11"	2"	13"	14 $\frac{1}{4}$ "	21"	14 $\frac{3}{4}$ "	1"	---	1 $\frac{7}{8}$ " X 3 $\frac{3}{8}$ "	3"	3"	6 $\frac{7}{8}$ "	1	2 $\frac{1}{2}$ "	-0.04	
SB	1	2	R2	FIXED	2A - 2E	36X300	16 $\frac{5}{8}$ "	16"	10"	2 $\frac{1}{2}$ "	N/A	N/A	25 $\frac{1}{2}$ "	14"	1"	1 $\frac{7}{8}$ " DIA.	---	3 $\frac{1}{2}$ "	3"	3"		4"	+0.04	
SB	2	2	R3	EXP	2A - 2E	36X300	16 $\frac{5}{8}$ "	16"	10"	2 $\frac{1}{2}$ "	17"	13 $\frac{1}{2}$ "	25 $\frac{1}{2}$ "	14"	1"	---	1 $\frac{7}{8}$ " X 4 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	3"	8"	2	4"	+0.04	
SB	2	3	R4	FIXED	3A - 3E	36X150	12"	12"	11"	2"	N/A	N/A	21"	14"	1" **	1 $\frac{7}{8}$ " DIA.	---	3 $\frac{1}{8}$ "	3"	3"		2 $\frac{1}{2}$ "	-0.05	
NB	3	1	R5	EXP	1A - 1G	36X150	12"	12"	11"	2"	13"	14 $\frac{1}{4}$ "	21"	14 $\frac{3}{4}$ "	1"	---	1 $\frac{7}{8}$ " X 3 $\frac{3}{8}$ "	3"	3"	6 $\frac{7}{8}$ "	1	2 $\frac{1}{2}$ "	-0.05	
NB	3	2	R6	FIXED	2A - 2G	36X300	16 $\frac{5}{8}$ "	16"	10"	2 $\frac{1}{2}$ "	N/A	N/A	25 $\frac{1}{2}$ "	14"	1"	1 $\frac{7}{8}$ " DIA.	---	3 $\frac{1}{2}$ "	3"	3"		4"	+0.04	
NB	4	2	R7	EXP	2A - 2G	36X300	16 $\frac{5}{8}$ "	16"	10"	2 $\frac{1}{2}$ "	17"	13 $\frac{1}{2}$ "	25 $\frac{1}{2}$ "	14"	1"	---	1 $\frac{7}{8}$ " X 4 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	3"	8"	2	4"	+0.04	
NB	4	3	R8	FIXED	3A - 3G	36X160	12"	12"	11"	2"	N/A	N/A	21"	14"	1" **	1 $\frac{7}{8}$ " DIA.	---	3 $\frac{1}{8}$ "	3"	3"		2 $\frac{1}{2}$ "	-0.05	

\* ALONG CENTERLINE OF BEAM

\*\* BEVEL 1" TO 1 $\frac{1}{4}$ "

### BEARINGS SHEET 2 OF 2

PROJECT NAME: RICHMOND  
PROJECT NUMBER: IM 089-2(38)

FILE NAME: 05a236\str\sa236brg.dgn	PLOT DATE: 02-MAY-2006
PROJECT LEADER: SHERWARD FARNSWORTH	DRAWN BY: R. PELLETT
DESIGNED BY: G. SPILAK	CHECKED BY: S. FARNSWORTH
sa236brg2.i	SHEET 12 OF 43