

**FIXED BEARING DIMENSIONS TABLE**

Brg. Location	Vertical Design Load (kips)	Lateral Design Load (kips)	Bottom Bearing Plate			Top Bearing Plate											Anchor Bolt $\phi$ in.	Anchor Bolt Specification Grade	C Setting Angle (Degrees)	
			Tb in.	Lb in.	Wb in.	Top Plate		Lt in.	Wt in.	M in.	N in.	R in.	S in.	X in.	Th1 in.	Th2 in.				Dia. in.
						T11 in.	T12 in.													
S.N. 082-0322																				
Unit 1, Pier 2	600	115	1 $\frac{3}{4}$	35	33	2 $\frac{1}{2}$	2 $\frac{3}{4}$	25	25	6 $\frac{1}{2}$	6	6	6	3 $\frac{1}{2}$	8 $\frac{1}{4}$	8 $\frac{1}{2}$	21 $\frac{3}{8}$	1	Gr. 55	Girder 1 1°29'22" Girder 2 1°29'5" Girder 3 1°28'54" Girders 4-8 0°
Unit 2, Pier 5	700	194	1 $\frac{3}{4}$	36	36	2 $\frac{1}{8}$	2 $\frac{3}{4}$	26	26	7	6	6	6	4	8 $\frac{5}{8}$	8 $\frac{1}{2}$	23 $\frac{5}{8}$	1 $\frac{1}{4}$	Gr. 55	Girders 1-5 9°18'15"
	700	194	1 $\frac{3}{4}$	36	36	3	2 $\frac{3}{4}$	26	26	7	6	6	6	4	8 $\frac{3}{4}$	8 $\frac{1}{2}$	23 $\frac{5}{8}$	1 $\frac{1}{4}$	Gr. 55	Girders 6-10 13°32'20" Girder 11 15°22'35"
Unit 3, Pier 7	800	102	1 $\frac{3}{4}$	37	37	3 $\frac{1}{4}$	3	27	27	3 $\frac{1}{2}$	10	7	7	3	9 $\frac{1}{4}$	9	25	1	Gr. 36	0°
Unit 3, Pier 8	800	139	1 $\frac{3}{4}$	37	37	3 $\frac{1}{4}$	3	27	27	3 $\frac{1}{2}$	10	7	7	3	9 $\frac{1}{4}$	9	25	1 $\frac{1}{4}$	Gr. 36	0°
Unit 3, Pier 9	800	87	1 $\frac{3}{4}$	37	37	3 $\frac{1}{4}$	3	27	27	3 $\frac{1}{2}$	10	7	7	3	9 $\frac{1}{4}$	9	25	1	Gr. 36	0°
Unit 4, Pier 11	500	115	1 $\frac{1}{2}$	31	31	3	2 $\frac{3}{8}$	20	20	5	5	4	6	3	8 $\frac{1}{8}$	7 $\frac{1}{2}$	19 $\frac{3}{8}$	1	Gr. 55	0°
Unit 4, Pier 12	500	152	1 $\frac{1}{2}$	31	31	3 $\frac{3}{8}$	3 $\frac{3}{8}$	20	20	4	6	4	6	3	8 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{3}{8}$	1 $\frac{1}{4}$	Gr. 36	0°
S.N. 082-0324																				
Pier 3	700	158	1 $\frac{1}{4}$	36	36	4	2 $\frac{3}{4}$	26	26	7	6	6	6	4	9 $\frac{1}{8}$	8 $\frac{5}{8}$	23 $\frac{5}{8}$	1 $\frac{1}{4}$	Gr. 36	0°
Pier 4	700	110	1 $\frac{3}{4}$	36	36	4 $\frac{1}{4}$	2 $\frac{3}{4}$	26	26	7	6	6	6	4	10 $\frac{1}{8}$	8 $\frac{5}{8}$	23 $\frac{5}{8}$	1	Gr. 55	0°

**BILL OF MATERIAL**

Item	Unit	Total
High Load Multi-Rotation Bearings, Fixed 500K	Each	12
High Load Multi-Rotation Bearings, Fixed 700K	Each	21
High Load Multi-Rotation Bearings, Fixed 800K	Each	18
High Load Multi-Rotation Bearings, Fixed 600K	Each	8
Anchor Bolts, 1"	Each	186
Anchor Bolts, 1 $\frac{1}{4}$ "	Each	168

**Notes:**

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

H:\projects\0804650\0802-0322 & 0324 - F:\gov\1900.cad\901.dwg - master - consolidated\structural\082-0322-0324-76C76-5E09-F01-F-2.dwg



USER NAME =  
 PLOT SCALE = 0:2" = 1' IN.  
 PLOT DATE = 8/15/2011

DESIGNED - LLV  
 DRAWN - BRD  
 CHECKED - PJL  
 DATE - 08-12-11

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FIXED POT BEARING ASSEMBLIES - II  
 I-70E OVER I-55, CSX & KCS RAILROADS

SCALE: SHEET S-138 OF S-234 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TO	82-1-B-2	ST. CLAIR	399	265
S.N. 082-0322 & S.N. 082-0324		CONTRACT NO. 76C76		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		