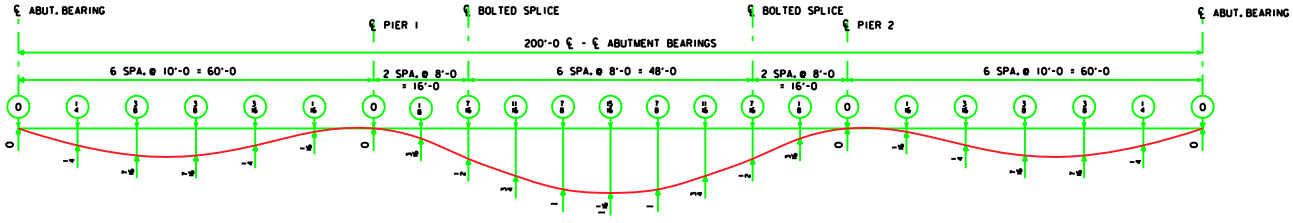

DEAD LOAD DEFLECTION DIAGRAM

NOTES:
1. ENCIRCLED NUMBERS INDICATE ANTICIPATED DEFLECTION DUE TO CONCRETE ONLY.

2. DEFLECTIONS ARE IN INCHES.

MOMENT AND REACTION TABLE

MOMENT - foot-kips | REACTION - kips

LOAD NAME			LOAD - k/ft		POSITIVE MOMENT				NEGATIVE MOMENT		REACTION			
					0.4 PT. END SPAN		0.5 PT. CENTER SPAN		PIER	PIER	ABUTMENT	ABUTMENT	PIER	PIER
			INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR
D.L. NO. 1			0.74*	0.72*	202	198	250	244	446	436	19	19	69	67
D.L. NO. 2			0.29	0.29	74	72	104	98	128	134	7	7	22	22
LIVE LOAD +IMPACT HS20-44	DISTRIBUTION FACTOR	TRUCK	MOMENT	MOMENT	597	557	670	618	-	-	58	48	-	-
			1.35	1.27										
		LANE	REACTION	REACTION	-	-	-	-	389	381	-	-	65	61
			1.65	1.05										
TOTAL			-	-	-	-	-	-	963	951	84	74	156	150

* LOAD VALUES DO NOT INCLUDE GIRDER WEIGHT.
MOMENT AND REACTION VALUES DO INCLUDE GIRDER WEIGHT.
MOMENTS AND REACTIONS SHOWN ARE UNFACTORED.

REVISION - 03-07 - ADDED DISTRIBUTION FACTOR TERM TO TABLE.

03-07
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

FEBRUARY, 2004

BEAM DEFLECTIONS
200'-0 BRIDGE

RS40-48-04