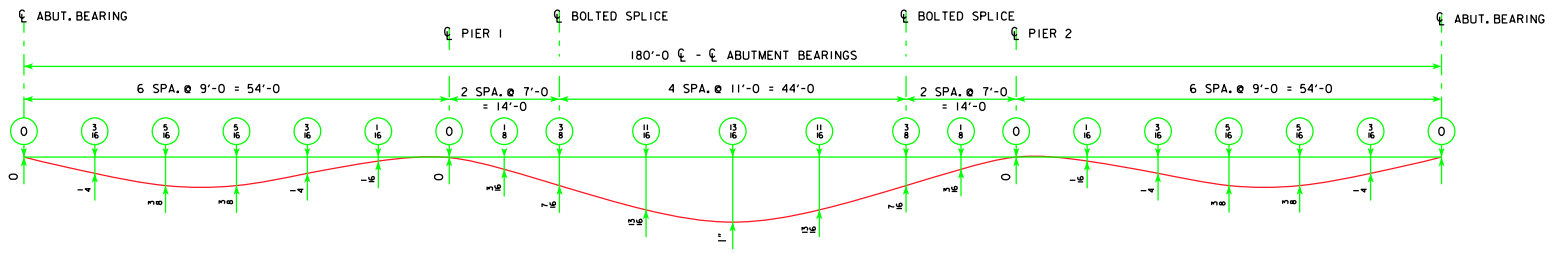

DEAD LOAD DEFLECTION DIAGRAM

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
DC1		0.74*	0.72*	166	155	202	187	370	344	18	17	63	59
DC2		0.14	0.14	30	30	42	42	50	50	3	3	10	10
DW		0.15	0.15	31	31	44	44	52	52	3	3	10	10
LIVE LOAD +IMPACT HL-93	DISTRIBUTION FACTOR	MOMENT	MOMENT	639	690	691	812	429	485	72	64	106	94
		0.630	0.681										
		REACTION	REACTION	-	-	-	-	-	-	-	-	-	-
		0.772	0.681										
TOTAL				-	-	-	-	901	931	96	87	189	173

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

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

JUNE, 2010

BEAM DEFLECTIONS
180'-0 BRIDGE

RS40-062-10