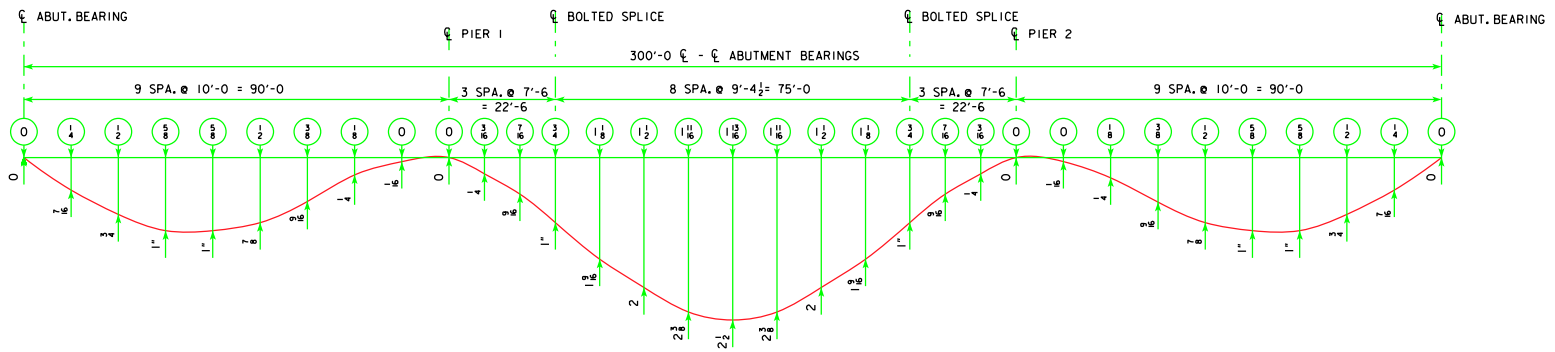

DEAD LOAD DEFLECTION DIAGRAM

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*	542	511	606	567	1189	1117	35	33	121	114
DC2		0.14	0.14	79	78	107	106	148	149	5	5	17	17
DW		0.15	0.15	82	82	112	111	155	156	5	5	17	17
LIVE LOAD +IMPACT HL-93	DISTRIBUTION FACTOR	MOMENT	MOMENT	1272	1420	1370	1669	1083	1269	86	76	154	135
		0.609	0.681										
		REACTION	REACTION	-	-	-	-	-	-	-	-	-	-
		0.772	0.681										
TOTAL				-	-	-	-	2575	2691	131	119	309	283

* 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
300'-0 BRIDGE

RS40-068-10