



DEAD LOAD DEFLECTION DIAGRAM

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

2. DEFLECTIONS ARE IN INCHES.

| | | MOMENT - foot-kips | | MOMENT AND REACTION TABLE | | | | | | | | 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 | INTERIOR | EXTERIOR | | |
| DC1 | 0.74* | 0.72* | 129 | 120 | 167 | 155 | 279 | 259 | 16 | 15 | 55 | 51 | | | | | |
| DC2 | 0.14 | 0.14 | 24 | 24 | 35 | 35 | 38 | 38 | 3 | 3 | 9 | 9 | | | | | |
| DW | 0.15 | 0.15 | 25 | 25 | 37 | 36 | 39 | 39 | 3 | 3 | 9 | 9 | | | | | |
| LIVE LOAD + IMPACT HL-93 | DISTRIBUTION FACTOR | MOMENT | MOMENT | | | | | | | | | | | | | | |
| | | 0.635 | 0.681 | 538 | 577 | 606 | 699 | 339 | 380 | - | - | - | - | | | | |
| | | REACTION | REACTION | | | | | | | | | | | | | | |
| | | 0.772 | 0.681 | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

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

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| LATEST REVISION DATE | APPROVED BY BRIDGE ENGINEER | STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES OCTOBER, 2014 | |
| | | BEAM DEFLECTIONS 160'-0 BRIDGE | RS40-061-14 |
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