

| DEAD LOAD DEFLECTIONS (FT.) |          |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |
|-----------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
| Tenth Point Location        | ABUTMENT | 0. 1 0 | 0. 2 0 | 0. 3 0 | 0. 4 0 | 0. 5 0 | 0. 6 0 | 0. 7 0 | 0. 8 0 | 0. 9 0 | PIER  | 0. 1 0 | 0. 2 0 | 0. 3 0 | 0. 4 0 | 0. 5 0 |
| Glrder Self Weight          | 0.000    | 0.029  | 0.054  | 0.072  | 0.081  | 0.080  | 0.070  | 0.053  | 0.033  | 0.014  | 0.000 | -0.005 | -0.004 | 0.000  | 0.004  | 0.005  |
| Concrete Slab               | 0.000    | 0.085  | 0.158  | 0.209  | 0.235  | 0.233  | 0.205  | 0.157  | 0.099  | 0.042  | 0.000 | -0.019 | -0.021 | -0.016 | -0.009 | -0.006 |
| Total After Slab Pour       | 0.000    | 0.114  | 0.212  | 0.281  | 0.316  | 0.313  | 0.275  | 0.210  | 0.132  | 0.056  | 0.000 | -0.024 | -0.025 | -0.016 | -0.005 | -0.001 |
| Additional Dead Load        | 0.000    | 0.028  | 0.052  | 0.070  | 0.079  | 0.079  | 0.069  | 0.053  | 0.034  | 0.014  | 0.000 | -0.004 | -0.003 | 0.001  | 0.004  | 0.006  |
| Total Deflection            | 0.000    | 0.142  | 0.264  | 0.351  | 0.395  | 0.392  | 0.344  | 0.263  | 0.166  | 0.070  | 0.000 | -0.028 | -0.028 | -0.015 | -0.001 | 0.005  |

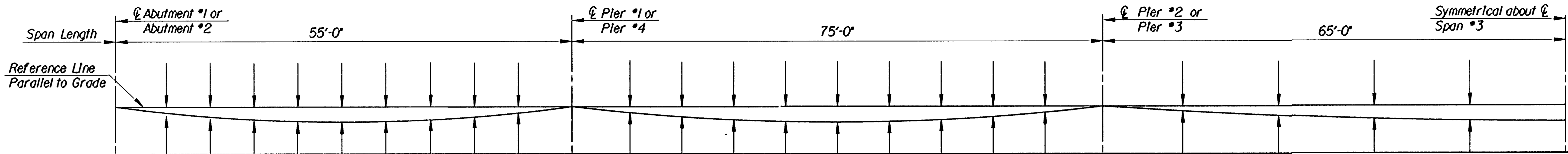
DEAD LOAD DEFLECTIONS

Note:  
Deflections were computed for a continuous concrete deck placement from end to end of bridge. Should the Contractor request to use an Alternate Pouring Sequence, details for the Alternate Sequence must be provided to the Engineer prior to Girder fabrication.

| DEAD LOAD DEFLECTIONS (FT.)<br>AT FIELD SPLICES |       |        |       |
|-------------------------------------------------|-------|--------|-------|
| Field Splice Location                           | NO. 1 | NO. 2  | NO. 3 |
| Glrder Self Weight                              | 0.039 | 0.002  | 0.039 |
| Concrete Slab                                   | 0.117 | -0.013 | 0.117 |
| Total After Slab Pour                           | 0.156 | -0.011 | 0.156 |
| Additional Dead Load                            | 0.040 | 0.002  | 0.040 |
| Total Deflection                                | 0.196 | -0.009 | 0.196 |

Girders shall be fabricated such that after total dead load deflections the girder web will be parallel to the finished slab grade as shown on the Table of Pavement Elevations. After the structural steel is completely erected and false work removed, the camber shall be measured in the field by a profile of each girder. Any deviation in the actual camber and total deflection less girder self weight shall be corrected by varying the depth of the concrete fillets over the girders so that the finished slab elevations shall be constructed to the theoretical grade.

"Glrder Self Weight" refers to the deflection due to the weight of all structural steel.  
"Concrete Slab" refers to the deflection due to the slab pour.  
"Additional Dead Load" refers to the deflection due to the Latex Surface Course, the Curbs and Future Wearing Surface.  
"Total Deflection" refers to the total deflection caused by all dead loads.



| CAMBER (FT.)          |          |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |        |        |        |        |       |        |        |        |        |        |
|-----------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
| Tenth Point Locatlon  | ABUTMENT | 0. 1 0 | 0. 2 0 | 0. 3 0 | 0. 4 0 | 0. 5 0 | 0. 6 0 | 0. 7 0 | 0. 8 0 | 0. 9 0 | PIER  | 0. 1 0 | 0. 2 0 | 0. 3 0 | 0. 4 0 | 0. 5 0 | 0. 6 0 | 0. 7 0 | 0. 8 0 | 0. 9 0 | PIER  | 0. 1 0 | 0. 2 0 | 0. 3 0 | 0. 4 0 | 0. 5 0 |
| Concrete T-Beams      | 0.000    | 0.006  | 0.013  | 0.018  | 0.022  | 0.023  | 0.021  | 0.017  | 0.012  | 0.006  | 0.000 | -0.008 | -0.017 | -0.026 | -0.034 | -0.041 | -0.044 | -0.041 | -0.031 | -0.017 | 0.000 | 0.035  | 0.076  | 0.119  | 0.154  | 0.168  |
| Additional Dead Loads | 0.000    | 0.001  | 0.003  | 0.004  | 0.005  | 0.006  | 0.005  | 0.004  | 0.003  | 0.002  | 0.000 | -0.002 | -0.005 | -0.008 | -0.012 | -0.015 | -0.016 | -0.015 | -0.012 | -0.006 | 0.000 | 0.013  | 0.029  | 0.046  | 0.060  | 0.066  |
| Long Term Deflection  | 0.000    | 0.007  | 0.013  | 0.017  | 0.021  | 0.023  | 0.021  | 0.017  | 0.012  | 0.007  | 0.000 | -0.008 | -0.017 | -0.027 | -0.036 | -0.044 | -0.048 | -0.046 | -0.034 | -0.018 | 0.000 | 0.038  | 0.084  | 0.132  | 0.171  | 0.187  |
| Total Deflection      | 0.000    | 0.014  | 0.029  | 0.039  | 0.048  | 0.052  | 0.047  | 0.038  | 0.027  | 0.015  | 0.000 | -0.018 | -0.039 | -0.061 | -0.082 | -0.100 | -0.108 | -0.102 | -0.077 | -0.041 | 0.000 | 0.086  | 0.189  | 0.297  | 0.385  | 0.421  |

DEAD LOAD CAMBER DIAGRAM

|                                                                                                                                                                                               |           |            |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|------------|
| I                                                                                                                                                                                             |           |            |            |
| No.                                                                                                                                                                                           | Revisions | By         | Date       |
| CITY OF WICHITA, KANSAS<br>MICHAEL E. LINDEBAK, P.E.-CITY ENGINEER<br>DOUGLAS AVENUE BRIDGE<br>OVER ARKANSAS RIVER<br>DEAD LOAD DEFLECTIONS & CAMBER<br>CITY OF WICHITA PROJECT NO. 472-82721 |           |            |            |
| PROFESSIONAL ENGINEERING CONSULTANTS, P.A.<br>ENGINEERS<br>WICHITA, KANSAS                                                                                                                    |           |            |            |
| Designed by                                                                                                                                                                                   | P.D.F.    | Checked by | R.A.S.     |
| Drawn by                                                                                                                                                                                      | W.L.L.    | Date       | Sept. 1997 |
|                                                                                                                                                                                               |           | Job No.    | 95088-4    |