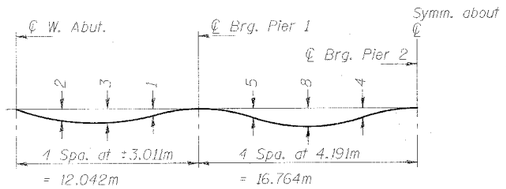
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| F.A.P. Rt. 305 | 28 R-HB-F | McHenry | 13 | 8 |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT- | | |

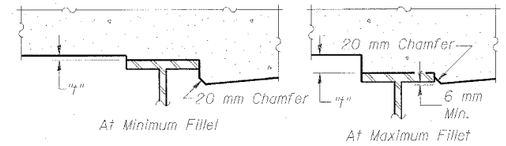
CONTRACT NUMBER: 62856




## DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.
All dimensions are in millimeters (mm) except as noted.




To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

## FILLET HEIGHTS

Beam 1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 29+971.220 | -5.267 | 290.603 | 290.603 |
| CL W. Abut. | 29+971.602 | -5.267 | 290.607 | 290.607 |
| A | 29+974.602 | 5.267 | 290.636 | 290.638 |
| B | 29+977.602 | -5.267 | 290.661 | 290.664 |
| C | 29+980.602 | -5.267 | 290.683 | 290.684 |
| CL Brg. Pier 1 | 29+983.644 | 5.267 | 290.702 | 290.702 |
| D | 29+986.644 | -5.267 | 290.717 | 290.720 |
| E | 29+989.644 | -5.267 | 290.728 | 290.735 |
| F | 29+992.644 | -5.267 | 290.736 | 290.743 |
| G | 29+995.644 | -5.267 | 290.740 | 290.745 |
| H | 29+998.644 | -5.267 | 290.741 | 290.741 |
| CL Brg. Pier 2 | 30+000.408 | -5.267 | 290.739 | 290.739 |
| I | 30+003.408 | -5.267 | 290.735 | 290.737 |
| J | 30+006.408 | -5.267 | 290.726 | 290.733 |
| K | 30+009.408 | -5.267 | 290.714 | 290.722 |
| L | 30+012.408 | -5.267 | 290.699 | 290.705 |
| M | 30+015.408 | -5.267 | 290.680 | 290.681 |
| CL Brg. Pier 3 | 30+017.172 | -5.267 | 290.667 | 290.667 |
| N | 30+020.172 | -5.267 | 290.642 | 290.643 |
| O | 30+023.172 | 5.267 | 290.614 | 290.617 |
| P | 30+026.172 | -5.267 | 290.583 | 290.585 |
| CL E. Abut. | 30+029.214 | -5.267 | 290.547 | 290.547 |
| Bk. E. Abut. | 30+029.596 | -5.267 | 290.542 | 290.542 |

Beam 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|---|---|---|---|---|
| Bk. W. Abut. | 29+971.049 | -3.507 | 290.588 | 290.588 |
| CL W. Abut. | 29+971.431 | -3.507 | 290.592 | 290.592 |
| A | 29+974.431 | -3.507 | 290.621 | 290.623 |
| B | 29+977.431 | -3.507 | 290.647 | 290.650 |
| C | 29+980.431 | -3.507 | 290.669 | 290.670 |
| CL Brg. Pier 1 | 29+983.473 | -3.507 | 290.688 | 290.688 |
| D | 29+986.473 | -3.507 | 290.703 | 290.706 |
| E | 29+989.473 | -3.507 | 290.714 | 290.721 |
| F | 29+992.473 | -3.507 | 290.722 | 290.730 |
| G | 29+995.473 | -3.507 | 290.727 | 290.731 |
| H | 29+998.473 | -3.507 | 290.728 | 290.728 |
| CL Brg. Pier 2 | 30+000.237 | -3.507 | 290.726 | 290.726 |
| I | 30+003.237 | -3.507 | 290.722 | 290.724 |
| J | 30+006.237 | -3.507 | 290.714 | 290.720 |
| K | 30+009.237 | -3.507 | 290.702 | 290.710 |
| L | 30+012.237 | -3.507 | 290.687 | 290.692 |
| M | 30+015.237 | -3.507 | 290.668 | 290.669 |
| CL Brg. Pier 3 | 30+017.001 | -3.507 | 290.655 | 290.655 |
| N | 30+020.001 | -3.507 | 290.631 | 290.632 |
| O | 30+023.001 | -3.507 | 290.603 | 290.606 |
| P | 30+026.001 | -3.507 | 290.572 | 290.574 |
| CL E. Abut. | 30+029.043 | -3.507 | 290.536 | 290.536 |
| Bk. E. Abut. | 30+029.425 | -3.507 | 290.531 | 290.531 |

**FOR INFORMATION ONLY**
**NOT PART OF THIS CONTRACT**

TOP OF SLAB ELEVATIONS - 1

| Date | Designed MR | SOUTH ST. OVER US 14<br>FAP ROUTE NO. 305<br>SECTION 28 R-HB-F<br>STATION 29+999.897<br>COUNTY McHENRY<br>STRUCTURE NO. 056-3015 | Sheet No. 8 of 13 |
|---|---|---|---|
| Revisions | Drawn R.VEJAR | | |
| | Checked KSM | | |
| | Approved KSM | | |

HARRY O. HEPTER-ASSOCIATES, INC.
DESIGN AND CONSULTING ENGINEERS
150 North Wabash Ave.
Chicago, Illinois 60601
312/346-8181

File Name:

Job No. 1962

09/10/2004 11:20:41 AM

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