

**DEAD LOAD DEFLECTION TABLE FOR GIRDERS**

GIRDERS 1 & 4																																									
FOURTIETH POINTS	0	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	0
DEFLECTION DUE TO WEIGHT OF GIRDER ↓	0	0.012	0.024	0.036	0.047	0.058	0.069	0.079	0.088	0.097	0.105	0.112	0.119	0.125	0.131	0.135	0.139	0.142	0.144	0.145	0.146	0.145	0.144	0.142	0.139	0.135	0.131	0.125	0.119	0.112	0.105	0.097	0.088	0.079	0.069	0.058	0.047	0.036	0.024	0.012	0
DEFLECTION DUE TO WEIGHT OF SLAB * ↓	0	0.031	0.062	0.100	0.137	0.172	0.206	0.237	0.268	0.295	0.322	0.345	0.368	0.387	0.405	0.419	0.432	0.440	0.448	0.451	0.454	0.451	0.448	0.440	0.432	0.419	0.405	0.387	0.368	0.345	0.322	0.295	0.268	0.237	0.206	0.172	0.137	0.100	0.062	0.031	0
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL ↓	0	0.005	0.011	0.016	0.021	0.026	0.031	0.035	0.039	0.043	0.047	0.050	0.053	0.056	0.058	0.060	0.062	0.063	0.064	0.065	0.065	0.065	0.064	0.063	0.062	0.060	0.058	0.056	0.053	0.050	0.047	0.043	0.039	0.035	0.031	0.026	0.021	0.016	0.011	0.005	0
TOTAL DEAD LOAD DEFLECTION ↓	0	0.048	0.097	0.152	0.205	0.256	0.306	0.351	0.395	0.435	0.474	0.507	0.540	0.568	0.594	0.614	0.633	0.645	0.656	0.661	0.665	0.661	0.656	0.645	0.633	0.614	0.594	0.568	0.540	0.507	0.474	0.435	0.395	0.351	0.306	0.256	0.205	0.152	0.097	0.048	0
REQUIRED CAMBER ↑	0	9/16"	1 3/16"	1 13/16"	2 1/16"	3 1/16"	3 11/16"	4 3/16"	4 3/4"	5 1/4"	5 11/16"	6 1/16"	6 1/2"	6 13/16"	7 1/8"	7 3/8"	7 5/8"	7 3/4"	7 7/8"	7 15/16"	8"	7 15/16"	7 7/8"	7 3/4"	7 5/8"	7 3/8"	7 1/8"	6 13/16"	6 1/2"	6 1/16"	5 11/16"	5 1/4"	4 3/4"	4 3/16"	3 11/16"	3 1/16"	2 7/16"	1 13/16"	1 3/16"	9/16"	0

**DEAD LOAD DEFLECTION TABLE FOR GIRDERS**

GIRDERS 2 & 3																																									
FOURTIETH POINTS	0	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	0
DEFLECTION DUE TO WEIGHT OF GIRDER ↓	0	0.012	0.024	0.036	0.047	0.058	0.069	0.079	0.088	0.097	0.105	0.112	0.119	0.125	0.131	0.135	0.139	0.142	0.144	0.145	0.146	0.145	0.144	0.142	0.139	0.135	0.131	0.125	0.119	0.112	0.105	0.097	0.088	0.079	0.069	0.058	0.047	0.036	0.024	0.012	0
DEFLECTION DUE TO WEIGHT OF SLAB * ↓	0	0.032	0.063	0.101	0.138	0.174	0.209	0.240	0.271	0.299	0.326	0.350	0.373	0.392	0.410	0.424	0.437	0.445	0.453	0.456	0.459	0.456	0.453	0.445	0.437	0.424	0.410	0.392	0.373	0.350	0.326	0.299	0.271	0.240	0.209	0.174	0.138	0.101	0.063	0.032	0
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL ↓	0	0.005	0.011	0.016	0.021	0.025	0.030	0.034	0.038	0.042	0.046	0.049	0.052	0.054	0.057	0.059	0.060	0.062	0.063	0.063	0.063	0.063	0.062	0.060	0.059	0.057	0.054	0.052	0.049	0.046	0.042	0.038	0.034	0.030	0.025	0.021	0.016	0.011	0.005	0	
TOTAL DEAD LOAD DEFLECTION ↓	0	0.049	0.098	0.153	0.206	0.257	0.308	0.353	0.397	0.438	0.477	0.511	0.544	0.571	0.598	0.618	0.636	0.649	0.660	0.664	0.668	0.664	0.660	0.649	0.636	0.618	0.598	0.571	0.544	0.511	0.477	0.438	0.397	0.353	0.308	0.257	0.206	0.153	0.098	0.049	0
REQUIRED CAMBER ↑	0	9/16"	1 3/16"	1 13/16"	2 1/2"	3 1/16"	3 11/16"	4 1/4"	4 3/4"	5 1/4"	5 3/4"	6 1/8"	6 1/2"	6 7/8"	7 3/16"	7 1/16"	7 15/16"	8"	7 15/16"	7 15/16"	7 13/16"	7 5/8"	7 1/16"	7 3/16"	6 7/8"	6 1/2"	6 1/8"	5 3/4"	5 1/4"	4 3/4"	4 1/4"	3 11/16"	3 1/16"	2 1/2"	1 13/16"	1 3/16"	9/16"	0			

\* INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.  
 ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "REQUIRED CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).  
 DEFLECTIONS ARE TAKEN AT FOURTIETH POINTS BETWEEN BEARINGS.

PROJECT NO. B-5772  
ROWAN COUNTY  
 STATION: 20+91.04 -EL-



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUPERSTRUCTURE  
 DEAD LOAD DEFLECTIONS

DRAWN BY : M. G. SHAIKH DATE : 02/2021  
 CHECKED BY : A. SORSENGINH DATE : 05/2021  
 DESIGN ENGINEER OF RECORD: A. SORSENGINH DATE : 05/2021

NO.	REVISIONS			NO.	REVISIONS			SHEET NO.
	BY:	DATE:			BY:	DATE:		
1				3				S-13
2				4				TOTAL SHEETS 25