

DEAD LOAD DEFLECTION & CAMBER TABLE FOR GIRDER 4

THIRTIETH POINTS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DEFLECTION DUE TO WEIGHT OF STEEL & SLAB *	0.000	0.062	0.123	0.181	0.237	0.291	0.341	0.389	0.431	0.468	0.501	0.528	0.550	0.564	0.573	0.574	0.570	0.558	0.540	0.516	0.486	0.451	0.411	0.368	0.321	0.271	0.218	0.165	0.111	0.056	0.000
DEFLECTION DUE TO WEIGHT OF RAIL	0.000	0.004	0.008	0.012	0.016	0.019	0.022	0.025	0.028	0.030	0.032	0.033	0.034	0.035	0.036	0.036	0.035	0.035	0.034	0.032	0.030	0.028	0.026	0.023	0.020	0.017	0.014	0.011	0.007	0.004	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.067	0.131	0.193	0.253	0.310	0.364	0.414	0.458	0.498	0.533	0.562	0.584	0.600	0.608	0.610	0.605	0.593	0.573	0.548	0.516	0.479	0.437	0.391	0.341	0.288	0.232	0.175	0.118	0.059	0.000
VERTICAL CURVE ORDINATE	0.000	0.214	0.434	0.659	0.888	1.106	1.309	1.495	1.663	1.813	1.944	2.056	2.146	2.216	2.264	2.290	2.293	2.274	2.232	2.167	2.079	1.968	1.835	1.679	1.501	1.301	1.081	0.840	0.579	0.299	0.000
SUPERELEVATION ORDINATE	0.000	-0.074	-0.143	-0.208	-0.268	-0.323	-0.373	-0.418	-0.458	-0.494	-0.525	-0.551	-0.572	-0.588	-0.600	-0.606	-0.608	-0.605	-0.597	-0.584	-0.566	-0.544	-0.516	-0.484	-0.447	-0.405	-0.359	-0.307	-0.251	-0.190	-0.124
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING	0.219	0.219	0.219	0.219	0.219	0.219	0.208	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.306	0.208	0.208	0.219	0.219	0.219	0.219	0.219
REQUIRED CAMBER	2 5/8"	5/8"	7 1/16"	10 3/8"	13 1/8"	15 3/4"	18 1/8"	21 3/16"	23 5/8"	25 1/2"	27 1/8"	28 1/2"	29 9/16"	30 3/8"	30 5/16"	31 3/16"	31 3/16"	30 3/16"	30 3/16"	29 1/4"	28"	26 1/2"	24 3/4"	22 1/16"	19 1/4"	16 1/16"	14 1/16"	11 1/8"	8"	4 5/8"	0"

DEAD LOAD DEFLECTION & CAMBER TABLE FOR GIRDER 5

THIRTIETH POINTS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DEFLECTION DUE TO WEIGHT OF STEEL & SLAB *	0.000	0.050	0.099	0.145	0.189	0.231	0.270	0.306	0.339	0.368	0.393	0.413	0.429	0.440	0.445	0.446	0.442	0.433	0.420	0.401	0.379	0.352	0.322	0.288	0.251	0.213	0.172	0.130	0.088	0.044	0.000
DEFLECTION DUE TO WEIGHT OF RAIL	0.000	0.004	0.007	0.010	0.013	0.016	0.019	0.021	0.023	0.025	0.027	0.028	0.029	0.030	0.031	0.031	0.030	0.030	0.029	0.028	0.026	0.024	0.022	0.020	0.018	0.015	0.012	0.009	0.006	0.003	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.054	0.106	0.155	0.203	0.247	0.289	0.328	0.362	0.393	0.420	0.441	0.458	0.470	0.476	0.477	0.473	0.463	0.449	0.429	0.405	0.376	0.344	0.308	0.269	0.228	0.185	0.140	0.094	0.048	0.000
VERTICAL CURVE ORDINATE	0.000	0.231	0.469	0.714	0.964	1.207	1.432	1.640	1.828	1.995	2.142	2.267	2.368	2.446	2.500	2.529	2.533	2.512	2.465	2.392	2.294	2.171	2.022	1.849	1.652	1.431	1.188	0.922	0.635	0.327	0.000
SUPERELEVATION ORDINATE	0.000	-0.074	-0.144	-0.209	-0.269	-0.324	-0.375	-0.421	-0.462	-0.499	-0.531	-0.557	-0.580	-0.597	-0.610	-0.617	-0.620	-0.619	-0.612	-0.601	-0.584	-0.564	-0.538	-0.507	-0.472	-0.432	-0.387	-0.338	-0.284	-0.225	-0.161
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING	0.224	0.224	0.224	0.224	0.224	0.224	0.213	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.313	0.213	0.224	0.224	0.224	0.224	0.224	0.224
REQUIRED CAMBER	2 1/16"	5/4"	7 7/8"	10 5/8"	13 7/16"	16 1/4"	18 1/16"	22 5/16"	24 1/2"	26 7/16"	28 3/8"	29 9/16"	30 1/16"	31 9/16"	32 1/8"	32 7/16"	32 3/8"	32 1/16"	31 3/8"	30 3/8"	29 1/8"	27 9/16"	25 1/16"	23 3/16"	21 1/8"	17 1/4"	14 1/2"	11 3/8"	8 1/16"	4 1/2"	0"

DEAD LOAD DEFLECTION & CAMBER TABLE FOR GIRDER 6

THIRTIETH POINTS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DEFLECTION DUE TO WEIGHT OF STEEL & SLAB *	0.000	0.038	0.074	0.108	0.140	0.171	0.200	0.226	0.251	0.272	0.291	0.306	0.318	0.327	0.332	0.333	0.331	0.325	0.316	0.303	0.286	0.267	0.245	0.221	0.194	0.165	0.135	0.103	0.069	0.035	0.000
DEFLECTION DUE TO WEIGHT OF RAIL	0.000	0.003	0.006	0.009	0.012	0.015	0.017	0.019	0.021	0.023	0.025	0.026	0.027	0.028	0.028	0.028	0.028	0.028	0.027	0.026	0.025	0.023	0.021	0.020	0.017	0.015	0.012	0.009	0.006	0.003	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.041	0.080	0.117	0.152	0.186	0.217	0.246	0.272	0.295	0.315	0.332	0.345	0.355	0.360	0.361	0.359	0.353	0.342	0.329	0.311	0.291	0.267	0.240	0.212	0.180	0.147	0.112	0.076	0.038	0.000
VERTICAL CURVE ORDINATE	0.000	0.251	0.510	0.776	1.050	1.321	1.573	1.805	2.017	2.205	2.370	2.510	2.625	2.712	2.773	2.806	2.810	2.786	2.733	2.651	2.541	2.402	2.236	2.043	1.823	1.578	1.308	1.014	0.697	0.359	0.000
SUPERELEVATION ORDINATE	0.000	-0.075	-0.144	-0.210	-0.270	-0.326	-0.378	-0.425	-0.467	-0.504	-0.537	-0.565	-0.588	-0.606	-0.620	-0.629	-0.633	-0.633	-0.628	-0.618	-0.604	-0.584	-0.560	-0.532	-0.498	-0.460	-0.417	-0.370	-0.318	-0.261	-0.200
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING	0.229	0.229	0.229	0.229	0.229	0.229	0.217	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.217	0.217	0.229	0.229	0.229	0.229	0.229
REQUIRED CAMBER	0"	5 3/8"	8 1/16"	10 5/16"	13 5/16"	16 7/8"	19 9/16"	23 3/8"	25 1/16"	27 13/16"	29 5/8"	31 3/16"	32 7/16"	33 3/8"	34"	34 5/16"	34 1/4"	33 7/8"	33 3/16"	32 3/16"	30 13/16"	29 1/8"	27 1/8"	24 7/8"	21 1/16"	18 3/16"	15 3/16"	11 3/16"	8 3/16"	4 3/8"	0"

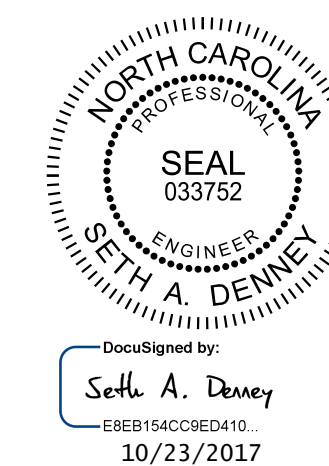
\* INCLUDES ALL STRUCTURAL STEEL COMPONENTS, SLAB (SAND-LIGHTWEIGHT), BUILD-UP (SAND-LIGHTWEIGHT), & STAY-IN-PLACE METAL FORMS.

NOTES:

THIRTIETH POINTS SHOWN ARE MEASURED ALONG C GIRDER AND ARE GIVEN BETWEEN C BEARINGS.

ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "REQUIRED CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

PROJECT NO. U-5806  
CABARRUS COUNTY  
 STATION: 15+75.56 -Y1-  
27+06.95 -L-  
 SHEET 2 OF 2



Designed by:  
 Seth A. Denney  
 EREB154CCRED410  
 10/23/2017

Designed by:  
 Andrew L. Phillips  
 2EB69ABAD4DD0D3  
 10/23/2017

**Kimley»Horn**  
 421 Fayetteville Street, Suite 600  
 Raleigh, NC 27601-1772  
 Phone (919) 677-2000  
 NC LICENSE # F-0102

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUPERSTRUCTURE  
 DEAD LOAD  
 DEFLECTIONS AND  
 CAMBER

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-24
1			3			TOTAL SHEETS
2			4			50

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

10/23/2017 K:\B01\_Structures\Bridges\NC\011036388 - U-5806 - Final Design\Cad\Drawn\024\_U-5806.DWG

DRAWN BY: D. D. LOWERY DATE: 10/17  
 CHECKED BY: A. L. PHILLIPS DATE: 10/17  
 DESIGN ENGINEER OF RECORD: S. A. DENNEY DATE: 10/17