

3/21/2023 8:16:12 AM P:\Raleigh\Projects\2019\Division 9 (Davenport)\B-5783\Structures\Drawings\NEW\Final\280168_SB\B-5783_SMU_DL_280168.dgn

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN A																						
GIRDERS G1-G5																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
DEFLECTION DUE TO WEIGHT OF STEEL	↓	0	.000	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	0	
* DEFLECTION DUE TO WEIGHT OF SLAB	↓	0	.001	.002	.003	.004	.005	.005	.006	.006	.006	.006	.006	.006	.005	.005	.004	.003	.002	.001	0	
DEFLECTION DUE TO WEIGHT OF RAIL	↓	0	.000	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	0	
TOTAL DEAD LOAD DEFLECTION	↓	0	.001	.002	.005	.006	.007	.007	.008	.008	.008	.008	.008	.008	.007	.007	.006	.005	.002	.001	0	
VERTICAL CURVE ORDINATE	↑	0	.002	.005	.007	.008	.010	.011	.012	.012	.013	.013	.013	.012	.012	.011	.010	.008	.007	.005	.002	0
SUPERELEVATION ORDINATE	↑	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0	
REQUIRED CAMBER	↑	0	1/16"	1/16"	1/8"	3/16"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	3/16"	1/8"	1/16"	1/16"	0

* INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN B																						
GIRDERS G1-G5 (0 THRU .500)																						
FORTIETH POINTS	0	.025	.050	.075	.100	.125	.150	.175	.200	.225	.250	.275	.300	.325	.350	.375	.400	.425	.450	.475	.500	
DEFLECTION DUE TO WEIGHT OF STEEL	↓	0	.010	.021	.031	.041	.050	.059	.068	.077	.085	.092	.099	.105	.111	.115	.120	.123	.126	.128	.129	.129
* DEFLECTION DUE TO WEIGHT OF SLAB	↓	0	.019	.046	.074	.100	.126	.152	.176	.198	.220	.240	.258	.275	.290	.303	.314	.324	.331	.336	.339	.340
DEFLECTION DUE TO WEIGHT OF RAIL	↓	0	.007	.014	.022	.029	.035	.042	.048	.054	.060	.065	.070	.074	.078	.081	.084	.087	.088	.090	.091	.091
TOTAL DEAD LOAD DEFLECTION	↓	0	.036	.081	.127	.170	.211	.253	.292	.329	.365	.397	.427	.454	.479	.499	.518	.534	.545	.554	.559	.560
VERTICAL CURVE ORDINATE	↑	0	.012	.024	.035	.046	.056	.065	.074	.082	.089	.096	.102	.107	.112	.116	.120	.123	.125	.126	.127	.128
SUPERELEVATION ORDINATE	↑	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
REQUIRED CAMBER	↑	0	9/16"	1 1/4"	1 15/16"	2 5/8"	3 1/4"	3 13/16"	4 7/16"	4 15/16"	5 1/2"	5 15/16"	6 3/8"	6 3/4"	7 1/8"	7 7/16"	7 11/16"	7 15/16"	8 1/16"	8 3/16"	8 1/4"	8 5/16"

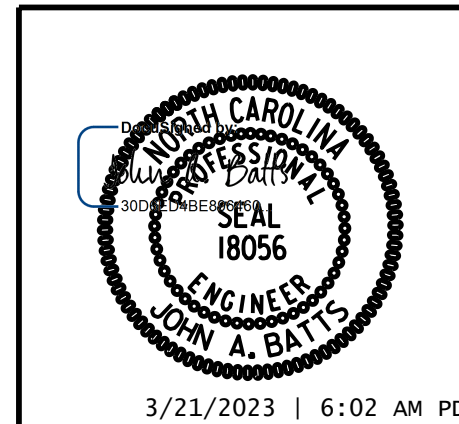
DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN B																						
GIRDERS G1-G5 (.500 THRU 1.000)																						
FORTIETH POINTS	.500	.525	.550	.575	.600	.625	.650	.675	.700	.725	.750	.775	.800	.825	.850	.875	.900	.925	.950	.975	1.00	
DEFLECTION DUE TO WEIGHT OF STEEL	↓	.129	.129	.128	.126	.123	.120	.115	.111	.105	.099	.092	.085	.077	.068	.059	.050	.041	.031	.021	.010	0
* DEFLECTION DUE TO WEIGHT OF SLAB	↓	.340	.339	.336	.331	.324	.314	.303	.290	.275	.258	.240	.220	.198	.176	.152	.126	.100	.074	.046	.019	0
DEFLECTION DUE TO WEIGHT OF RAIL	↓	.091	.091	.090	.088	.087	.084	.081	.078	.074	.070	.065	.060	.054	.048	.042	.035	.029	.022	.014	.007	0
TOTAL DEAD LOAD DEFLECTION	↓	.560	.559	.554	.545	.534	.518	.499	.479	.454	.427	.397	.365	.329	.292	.253	.211	.170	.127	.081	.036	0
VERTICAL CURVE ORDINATE	↑	.128	.127	.126	.125	.123	.120	.116	.112	.107	.102	.096	.089	.082	.074	.065	.056	.046	.035	.024	.012	0
SUPERELEVATION ORDINATE	↑	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
REQUIRED CAMBER	↑	8 5/16"	8 3/4"	8 3/16"	8 3/16"	7 15/16"	7 11/16"	7 7/16"	7 3/8"	6 3/4"	6 3/8"	5 15/16"	5 1/2"	4 15/16"	4 7/16"	3 3/16"	2 11/16"	2 5/8"	1 15/16"	1 1/4"	9/16"	0

* INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
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DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN C																						
GIRDERS G1-G5																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
DEFLECTION DUE TO WEIGHT OF STEEL	↓	0	.000	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	0	
* DEFLECTION DUE TO WEIGHT OF SLAB	↓	0	.001	.002	.003	.004	.005	.005	.006	.006	.006	.006	.006	.006	.006	.005	.005	.004	.003	.002	.001	0
DEFLECTION DUE TO WEIGHT OF RAIL	↓	0	.000	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	0	
TOTAL DEAD LOAD DEFLECTION	↓	0	.001	.002	.005	.006	.007	.007	.008	.008	.008	.008	.008	.008	.007	.007	.006	.005	.002	.001	0	
VERTICAL CURVE ORDINATE	↑	0	.002	.005	.007	.008	.010	.011	.012	.012	.013	.013	.013	.012	.012	.011	.010	.008	.007	.005	.002	0
SUPERELEVATION ORDINATE	↑	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0	
REQUIRED CAMBER	↑	0	1/16"	1/16"	1/8"	3/16"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	3/16"	1/8"	1/16"	1/16"	0

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PROJECT NO. B-5783
DAVIDSON COUNTY
STATION: 21+53.61 -SBL-



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE

DEAD LOAD DEFLECTION AND GIRDER CAMBER

DRAWN BY : T. BANKOVICH DATE : 12-22
CHECKED BY : J.A. BATTS DATE : 12-22
DESIGN ENGINEER OF RECORD: J.A. BATTS DATE : 12-22

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
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