

NOTE :
ORDINATE DUE TO SUPERELEVATION
IS ZERO FOR EACH GIRDER.

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN A																						
GIRDER #3																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	0	
DEFLECTION DUE TO WEIGHT OF GIRDER	↓	0.000	0.004	0.008	0.012	0.016	0.018	0.021	0.023	0.024	0.024	0.023	0.022	0.020	0.017	0.015	0.012	0.009	0.005	0.003	0.000	
DEFLECTION DUE TO WEIGHT OF SLAB *	↓	0.000	0.015	0.031	0.044	0.057	0.067	0.076	0.082	0.086	0.088	0.087	0.084	0.079	0.072	0.063	0.053	0.042	0.031	0.020	0.009	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	↓	0.000	0.005	0.009	0.013	0.017	0.020	0.023	0.025	0.026	0.026	0.025	0.024	0.022	0.020	0.017	0.013	0.010	0.006	0.003	0.000	
TOTAL DEAD LOAD DEFLECTION	↓	0.000	0.024	0.048	0.069	0.090	0.105	0.120	0.130	0.136	0.138	0.137	0.132	0.125	0.114	0.100	0.085	0.067	0.050	0.031	0.015	0.000
VERTICAL CURVE ORDINATE	↑	0.000	0.075	0.143	0.202	0.254	0.297	0.333	0.360	0.380	0.392	0.396	0.392	0.380	0.360	0.333	0.297	0.254	0.202	0.143	0.075	0.000
REQUIRED CAMBER	↑	0	1 3/16"	2 5/16"	3 1/4"	4 1/8"	4 3/16"	5 1/16"	5 7/8"	6 3/16"	6 3/8"	6 3/8"	6 5/16"	6 1/16"	5 11/16"	5 3/16"	4 9/16"	3 7/8"	3"	2 1/16"	1 1/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN B																						
GIRDER #3																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	0	
DEFLECTION DUE TO WEIGHT OF GIRDER	↓	0.000	-0.001	-0.002	-0.003	-0.004	-0.004	-0.005	-0.005	-0.005	-0.006	-0.006	-0.005	-0.005	-0.005	-0.004	-0.004	-0.003	-0.002	-0.001	0.000	
DEFLECTION DUE TO WEIGHT OF SLAB *	↓	0.000	-0.004	-0.008	-0.012	-0.014	-0.016	-0.018	-0.020	-0.020	-0.021	-0.021	-0.021	-0.020	-0.019	-0.018	-0.016	-0.014	-0.011	-0.008	-0.004	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	↓	0.000	-0.001	-0.003	-0.004	-0.004	-0.005	-0.005	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.005	-0.005	-0.004	-0.003	-0.002	-0.001	0.000	
TOTAL DEAD LOAD DEFLECTION	↓	0.000	-0.006	-0.013	-0.019	-0.022	-0.025	-0.028	-0.031	-0.031	-0.033	-0.033	-0.032	-0.031	-0.030	-0.028	-0.025	-0.022	-0.017	-0.012	-0.006	0.000
VERTICAL CURVE ORDINATE	↑	0.000	0.030	0.057	0.080	0.100	0.118	0.132	0.143	0.151	0.155	0.157	0.155	0.151	0.143	0.132	0.118	0.100	0.080	0.057	0.030	0.000
REQUIRED CAMBER	↑	0	5/16"	1/2"	3/4"	15/16"	1 1/8"	1 1/4"	1 3/8"	1 7/16"	1 7/16"	1 1/2"	1 1/2"	1 1/16"	1 3/8"	1 1/4"	1 1/8"	15/16"	3/4"	9/16"	5/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN C																						
GIRDER #3																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	0	
DEFLECTION DUE TO WEIGHT OF GIRDER	↓	0.000	0.002	0.005	0.008	0.011	0.013	0.016	0.018	0.020	0.021	0.022	0.022	0.022	0.021	0.019	0.017	0.014	0.011	0.008	0.004	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	↓	0.000	0.008	0.018	0.028	0.039	0.049	0.059	0.067	0.073	0.078	0.080	0.081	0.080	0.076	0.070	0.062	0.052	0.041	0.029	0.015	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	↓	0.000	0.003	0.006	0.009	0.012	0.015	0.018	0.020	0.022	0.023	0.024	0.024	0.024	0.022	0.021	0.018	0.015	0.012	0.009	0.004	0.000
TOTAL DEAD LOAD DEFLECTION	↓	0.000	0.013	0.029	0.045	0.062	0.077	0.093	0.105	0.115	0.122	0.126	0.127	0.126	0.119	0.110	0.097	0.081	0.064	0.046	0.023	0.000
VERTICAL CURVE ORDINATE	↑	0.000	0.072	0.137	0.194	0.243	0.285	0.320	0.346	0.365	0.377	0.380	0.377	0.365	0.346	0.320	0.285	0.243	0.194	0.137	0.072	0.000
REQUIRED CAMBER	↑	0	1"	2"	2 7/8"	3 11/16"	4 3/8"	4 15/16"	5 7/16"	5 3/4"	6"	6 1/16"	6 1/16"	5 7/8"	5 9/16"	5 3/16"	4 9/16"	3 7/8"	3 3/8"	2 3/16"	1 1/8"	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).

PROJECT NO. B-5121/B-5317

WAKE COUNTY

STATION: 20+19.94 -FLYOVER-

SHEET 3 OF 6



DocuSigned by:
Westy W. Alford
4/13/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
DEAD LOAD
DEFLECTIONS

DRAWN BY : J.P. ADAMS DATE : 1/2016
CHECKED BY : I.L. AVERETTE DATE : 2/2016
DESIGN ENGINEER OF RECORD: R.L. CHESSON DATE : 2/2016

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-69
1			3			TOTAL SHEETS 110
2			4			