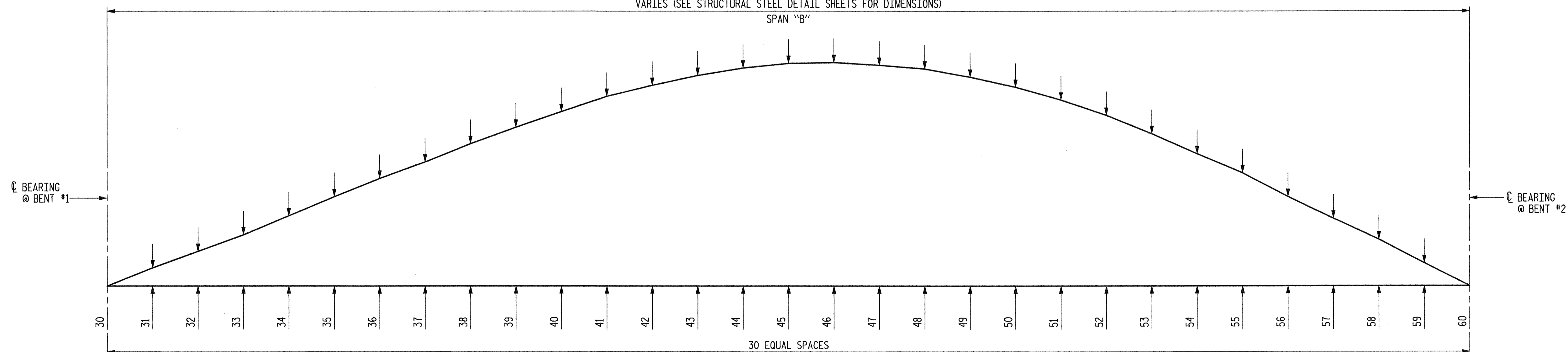


DEAD LOAD DEFLECTION AND CAMBER

GIRDER	THIRTIETH POINTS	SPAN "B"																														
		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1	DEFLECTION DUE TO WT. OF STEEL	0	.000	-.001	-.002	-.001	-.001	.000	.001	.003	.004	.006	.008	.010	.011	.012	.013	.014	.014	.014	.013	.012	.011	.010	.008	.006	.005	.003	.002	.001	.000	0
	DEFLECTION DUE TO WT. OF SLAB	0	-.004	-.005	-.006	-.005	-.003	.000	.003	.009	.014	.020	.026	.031	.035	.039	.042	.043	.044	.043	.041	.038	.034	.030	.024	.019	.015	.009	.006	.003	.001	0
	DEFLECTION DUE TO WT. OF RAIL	0	.000	.000	.000	.000	.000	.001	.001	.002	.002	.003	.004	.005	.005	.006	.006	.006	.006	.006	.006	.005	.005	.004	.003	.003	.002	.001	.001	.001	.000	0
	TOTAL DEAD LOAD DEFLECTION	0	-.004	-.006	-.008	-.006	-.004	.001	.005	.014	.020	.029	.038	.046	.051	.057	.061	.063	.064	.063	.060	.055	.050	.044	.035	.028	.022	.013	.009	.005	.001	0
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
	VERTICAL CURVE ORDINATE	0	.024	.046	.066	.085	.103	.118	.132	.144	.155	.164	.171	.177	.181	.184	.185	.184	.181	.177	.171	.164	.155	.144	.132	.118	.103	.085	.066	.046	.024	0
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
REQUIRED CAMBER	0	20	40	58	79	99	119	137	158	175	193	209	223	232	241	246	247	245	240	231	219	205	188	167	146	125	98	75	51	25	0	
2	DEFLECTION DUE TO WT. OF STEEL	0	.000	-.001	-.002	-.002	-.001	.000	.001	.002	.003	.005	.006	.007	.008	.009	.010	.010	.010	.009	.008	.007	.006	.005	.004	.003	.002	.001	.000	.000	0	
	DEFLECTION DUE TO WT. OF SLAB	0	-.005	-.005	-.006	-.005	-.003	.000	.003	.007	.011	.015	.020	.023	.026	.029	.031	.031	.031	.030	.029	.026	.023	.020	.016	.012	.009	.005	.002	.001	.000	0
	DEFLECTION DUE TO WT. OF RAIL	0	.000	.000	-.001	.000	.000	.001	.001	.001	.002	.002	.003	.003	.004	.004	.005	.005	.005	.004	.004	.003	.003	.003	.002	.002	.001	.001	.001	.000	.000	0
	TOTAL DEAD LOAD DEFLECTION	0	-.005	-.006	-.009	-.007	-.004	.001	.005	.010	.016	.022	.029	.033	.038	.042	.046	.046	.046	.044	.042	.037	.033	.029	.023	.018	.013	.008	.004	.001	.000	0
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
	VERTICAL CURVE ORDINATE	0	.021	.041	.059	.076	.091	.105	.118	.129	.138	.146	.153	.158	.161	.164	.164	.164	.161	.158	.153	.146	.138	.129	.118	.105	.091	.076	.059	.041	.021	0
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
REQUIRED CAMBER	0	16	35	50	69	87	106	123	139	154	168	182	191	199	206	210	210	207	202	195	183	171	158	141	123	104	84	63	42	21	0	
3	DEFLECTION DUE TO WT. OF STEEL	0	.000	-.001	-.002	-.002	-.001	-.001	.000	.001	.002	.002	.003	.004	.005	.005	.006	.006	.006	.006	.005	.005	.004	.003	.003	.002	.001	.000	.000	.000	.000	0
	DEFLECTION DUE TO WT. OF SLAB	0	-.004	-.005	-.006	-.006	-.004	-.002	.000	.003	.006	.009	.012	.014	.016	.018	.019	.019	.019	.018	.017	.015	.012	.010	.007	.005	.003	.001	.000	-.001	.000	0
	DEFLECTION DUE TO WT. OF RAIL	0	.000	-.001	-.001	-.001	.000	.000	.001	.001	.001	.002	.002	.002	.003	.003	.003	.003	.003	.003	.002	.002	.002	.002	.001	.001	.001	.000	.000	.000	.000	0
	TOTAL DEAD LOAD DEFLECTION	0	-.004	-.007	-.009	-.009	-.005	-.003	.001	.005	.009	.013	.017	.020	.023	.026	.028	.028	.028	.027	.024	.022	.018	.015	.011	.008	.005	.001	.000	-.001	.000	0
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
	VERTICAL CURVE ORDINATE	0	.019	.036	.052	.067	.081	.093	.104	.114	.122	.129	.135	.140	.143	.145	.145	.145	.143	.140	.135	.129	.122	.114	.104	.093	.081	.067	.052	.036	.019	0
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
REQUIRED CAMBER	0	15	29	43	58	76	90	105	119	131	142	152	160	166	171	173	173	171	167	159	151	140	129	115	101	86	68	52	35	19	0	
4	DEFLECTION DUE TO WT. OF STEEL	0	.000	-.002	-.002	-.003	-.003	-.003	-.002	-.001	-.001	.000	.000	.000	.001	.001	.002	.002	.002	.002	.002	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	0
	DEFLECTION DUE TO WT. OF SLAB	0	-.004	-.005	-.007	-.008	-.008	-.007	-.006	-.004	-.002	.000	.002	.003	.005	.006	.007	.007	.007	.006	.006	.004	.003	.002	.000	-.001	-.001	-.002	-.002	-.002	-.001	0
	DEFLECTION DUE TO WT. OF RAIL	0	.000	-.001	-.001	-.001	-.001	.000	.000	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	0
	TOTAL DEAD LOAD DEFLECTION	0	-.004	-.008	-.010	-.012	-.012	-.011	-.008	-.005	-.003	.001	.003	.004	.007	.008	.010	.010	.010	.009	.009	.006	.005	.004	.000	-.001	-.001	-.002	-.002	-.002	-.001	0
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
	VERTICAL CURVE ORDINATE	0	.016	.032	.046	.059	.071	.082	.091	.100	.107	.113	.118	.122	.125	.127	.127	.127	.125	.122	.118	.113	.107	.100	.091	.082	.071	.059	.046	.032	.016	0
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0
REQUIRED CAMBER	0	12	24	36	47	59	71	83	95	104	114	121	126	132	135	137	137	135	131	127	119	112	104	91	81	70	57	44	30	15	0	

VARIES (SEE STRUCTURAL STEEL DETAIL SHEETS FOR DIMENSIONS)



SCHMATIC OF CAMBER ORDINATES - SPAN "B"

FOR CAMBER VALUES AT THIRTIETH POINTS, SEE TABLES.

SLOPE FOR ZERO CAMBER LINE VARIES.

NOTES:

VALUES GIVEN IN TABLE ARE AT THIRTIETH POINTS BETWEEN Q BEARINGS.

DEFLECTION AND ORDINATE VALUES ARE GIVEN IN METERS (DECIMAL FORM).

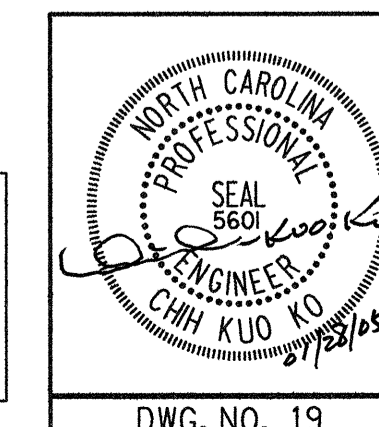
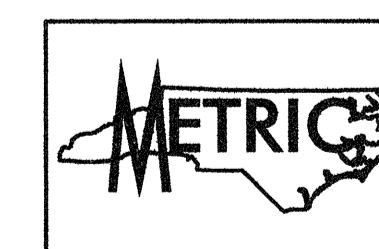
REQUIRED CAMBER VALUES GIVEN IN MILLIMETERS.

PROJECT NO. R-2552AA  
 WAKE-JOHNSTON COUNTY  
 STATION: 27+51.601 -I1Y1-

SHEET 2 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUPERSTRUCTURE  
 CAMBER AND DEAD LOAD DEFLECTIONS



Plans prepared by:  
**KO & ASSOCIATES, P.C.**  
 Consulting Engineers  
 101 SCHAUH DR. SUITE #202  
 RALEIGH, N.C. 27606  
 For Division of Highways

REVISIONS						SHEET NO. 5-55
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 42-9
2			4			

DWG. NO. 19