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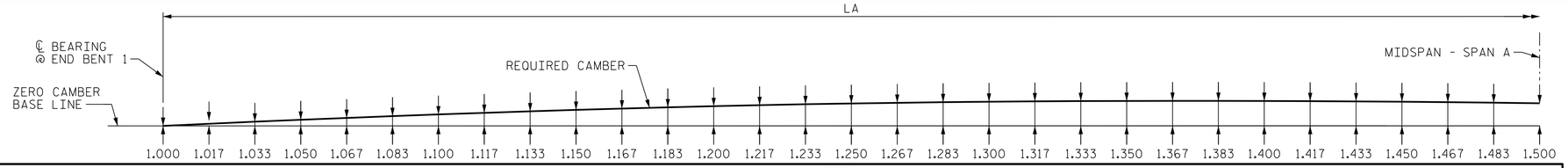


NOTES

SLOPE FOR THE ZERO CAMBER BASE LINE VARIES.

VALUES GIVEN ARE AT SIXTIETH POINTS BETWEEN CENTERLINE OF BEARINGS.

DEFLECTIONS AND ORDINATES ARE IN FEET (DECIMAL FORM).

REQUIRED CAMBER VALUES ARE IN INCHES (FRACTION FORM).

DOWNWARD DEFLECTION IS INDICATED WITH A "-" SIGN.

GIRDER	LA
1	147.394′
2	142.707′
3	138.129′
4	133.654′

SPAN A

GIRDER 1

60TH POINTS	1.000	1.017	1.033	1.050	1.067	1.083	1.100	1.117	1.133	1.150	1.167	1.183	1.200	1.217	1.233	1.250	1.267	1.283	1.300	1.317	1.333	1.350	1.367	1.383	1.400	1.417	1.433	1.450	1.467	1.483	1.500
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.000	-0.001	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001	-0.001	0.000	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	0.012	0.013	0.014	0.016	0.017
DEFLECTION DUE TO WEIGHT OF SLAB ✳	0.000	-0.005	-0.009	-0.013	-0.017	-0.021	-0.025	-0.028	-0.031	-0.034	-0.037	-0.039	-0.041	-0.042	-0.043	-0.043	-0.043	-0.043	-0.042	-0.041	-0.039	-0.037	-0.035	-0.033	-0.030	-0.027	-0.023	-0.020	-0.016	-0.012	-0.008
DEFLECTION DUE TO WT. OF BARRIER RAIL	0.000	-0.001	-0.001	-0.002	-0.003	-0.004	-0.004	-0.005	-0.005	-0.006	-0.006	-0.007	-0.007	-0.007	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-0.007	-0.006	-0.006	-0.006	-0.005	-0.005	-0.004
TOTAL DEAD LOAD DEFLECTION	0.000	-0.006	-0.011	-0.017	-0.022	-0.027	-0.031	-0.035	-0.039	-0.042	-0.045	-0.047	-0.049	-0.050	-0.050	-0.051	-0.050	-0.049	-0.047	-0.045	-0.043	-0.039	-0.036	-0.032	-0.027	-0.023	-0.017	-0.012	-0.007	-0.001	0.005
VERTICAL CURVE ORDINATE	0.000	0.015	0.030	0.044	0.057	0.071	0.083	0.095	0.107	0.118	0.128	0.138	0.148	0.157	0.165	0.173	0.180	0.188	0.194	0.200	0.205	0.210	0.215	0.218	0.222	0.224	0.227	0.229	0.230	0.231	0.231
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING ✳✳	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0″	1/4″	1/2″	3/4″	15/16″	1 3/16″	1 3/8″	1 9/16″	1 3/4″	1 15/16″	2 1/16″	2 1/4″	2 3/8″	2 1/2″	2 9/16″	2 11/16″	2 3/4″	2 13/16″	2 7/8″	2 15/16″	3″	3″	3″	3″	3″	2 15/16″	2 15/16″	2 7/8″	2 13/16″	2 13/16″	2 11/16″

SPAN A

GIRDER 2

60TH POINTS	1.000	1.017	1.033	1.050	1.067	1.083	1.100	1.117	1.133	1.150	1.167	1.183	1.200	1.217	1.233	1.250	1.267	1.283	1.300	1.317	1.333	1.350	1.367	1.383	1.400	1.417	1.433	1.450	1.467	1.483	1.500
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.005	0.006	0.006	0.007	0.008	0.009	0.010	0.011	0.012	0.013	0.014
DEFLECTION DUE TO WEIGHT OF SLAB ✳	0.000	-0.004	-0.007	-0.011	-0.014	-0.017	-0.020	-0.023	-0.026	-0.028	-0.030	-0.032	-0.033	-0.035	-0.036	-0.037	-0.037	-0.037	-0.037	-0.036	-0.035	-0.034	-0.032	-0.031	-0.029	-0.027	-0.024	-0.022	-0.019	-0.016	-0.013
DEFLECTION DUE TO WT. OF BARRIER RAIL	0.000	0.000	-0.001	-0.001	-0.001	-0.002	-0.002	-0.002	-0.003	-0.003	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.003	-0.002	-0.002	-0.002	-0.001
TOTAL DEAD LOAD DEFLECTION	0.000	-0.004	-0.008	-0.012	-0.016	-0.019	-0.023	-0.026	-0.029	-0.031	-0.033	-0.035	-0.037	-0.038	-0.038	-0.039	-0.039	-0.038	-0.038	-0.036	-0.034	-0.032	-0.030	-0.027	-0.024	-0.021	-0.017	-0.013	-0.009	-0.005	-0.001
VERTICAL CURVE ORDINATE	0.000	0.014	0.028	0.041	0.053	0.066	0.077	0.088	0.099	0.109	0.119	0.129	0.137	0.146	0.154	0.161	0.168	0.174	0.180	0.186	0.191	0.195	0.200	0.203	0.206	0.209	0.211	0.213	0.214	0.214	0.215
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING ✳✳	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0″	3/16″	7/16″	5/8″	13/16″	1″	1 3/16″	1 3/8″	1 9/16″	1 11/16″	1 13/16″	1 15/16″	2 1/16″	2 3/16″	2 5/16″	2 3/8″	2 1/2″	2 9/16″	2 5/8″	2 11/16″	2 11/16″	2 3/4″	2 3/4″	2 3/4″	2 3/4″	2 3/4″	2 3/4″	2 11/16″	2 11/16″	2 5/8″	2 9/16″

SPAN A

GIRDER 3

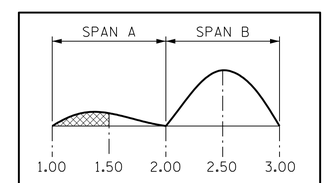
60TH POINTS	1.000	1.017	1.033	1.050	1.067	1.083	1.100	1.117	1.133	1.150	1.167	1.183	1.200	1.217	1.233	1.250	1.267	1.283	1.300	1.317	1.333	1.350	1.367	1.383	1.400	1.417	1.433	1.450	1.467	1.483	1.500
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.006	0.007	0.007	0.008	0.009	0.010	0.011	0.011	0.012	0.013	0.014
DEFLECTION DUE TO WEIGHT OF SLAB ✳	0.000	-0.004	-0.007	-0.010	-0.014	-0.017	-0.020	-0.022	-0.025	-0.027	-0.029	-0.031	-0.033	-0.034	-0.035	-0.036	-0.036	-0.036	-0.036	-0.035	-0.035	-0.034	-0.032	-0.031	-0.029	-0.027	-0.024	-0.022	-0.019	-0.017	-0.014
DEFLECTION DUE TO WT. OF BARRIER RAIL	0.000	0.000	-0.001	-0.001	-0.002	-0.002	-0.002	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.003	-0.002	-0.002	-0.002
TOTAL DEAD LOAD DEFLECTION	0.000	-0.004	-0.008	-0.012	-0.015	-0.019	-0.022	-0.025	-0.028	-0.030	-0.033	-0.034	-0.036	-0.037	-0.037	-0.038	-0.038	-0.037	-0.036	-0.035	-0.033	-0.032	-0.029	-0.026	-0.024	-0.020	-0.017	-0.013	-0.009	-0.005	-0.001
VERTICAL CURVE ORDINATE	0.000	0.013	0.026	0.038	0.050	0.061	0.072	0.083	0.092	0.102	0.111	0.120	0.128	0.136	0.143	0.150	0.157	0.163	0.168	0.173	0.178	0.182	0.186	0.189	0.192	0.195	0.197	0.198	0.199	0.200	0.200
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING ✳✳	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0″	3/16″	7/16″	5/8″	13/16″	15/16″	1 1/8″	1 5/16″	1 7/16″	1 9/16″	1 3/4″	1 7/8″	1 15/16″	2 1/16″	2 3/16″	2 1/4″	2 5/16″	2 3/8″	2 7/16″	2 1/2″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 1/2″	2 7/16″	2 7/16″

SPAN A

GIRDER 4

60TH POINTS	1.000	1.017	1.033	1.050	1.067	1.083	1.100	1.117	1.133	1.150	1.167	1.183	1.200	1.217	1.233	1.250	1.267	1.283	1.300	1.317	1.333	1.350	1.367	1.383	1.400	1.417	1.433	1.450	1.467	1.483	1.500
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.004	0.005	0.006	0.007	0.007	0.008	0.009	0.010	0.011	0.012	0.013	0.014	0.015
DEFLECTION DUE TO WEIGHT OF SLAB ✳	0.000	-0.004	-0.008	-0.012	-0.015	-0.019	-0.022	-0.025	-0.028	-0.031	-0.033	-0.035	-0.037	-0.039	-0.040	-0.041	-0.042	-0.042	-0.042	-0.042	-0.041	-0.040	-0.038	-0.036	-0.034	-0.032	-0.030	-0.027	-0.024	-0.021	-0.018
DEFLECTION DUE TO WT. OF BARRIER RAIL	0.000	-0.001	-0.002	-0.003	-0.004	-0.005	-0.006	-0.006	-0.007	-0.008	-0.008	-0.009	-0.009	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.009	-0.009	-0.009	-0.008	-0.008	-0.007	-0.007	-0.006
TOTAL DEAD LOAD DEFLECTION	0.000	-0.005	-0.010	-0.015	-0.019	-0.024	-0.028	-0.031	-0.035	-0.038	-0.041	-0.044	-0.045	-0.047	-0.048	-0.049	-0.049	-0.049	-0.048	-0.047	-0.045	-0.043	-0.041	-0.037	-0.034	-0.031	-0.027	-0.023	-0.018	-0.013	-0.009
VERTICAL CURVE ORDINATE	0.000	0.012	0.024	0.035	0.046	0.057	0.067	0.077	0.086	0.095	0.104	0.112	0.120	0.127	0.133	0.140	0.146	0.152	0.157	0.161	0.166	0.170	0.174	0.177	0.179	0.182	0.183	0.185	0.186	0.187	0.187
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING ✳✳	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0″	3/16″	7/16″	5/8″	13/16″	15/16″	1 1/8″	1 5/16″	1 7/16″	1 5/8″	1 3/4″	1 7/8″	2″	2 1/16″	2 3/16″	2 1/4″	2 5/16″	2 3/8″	2 7/16″	2 1/2″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 9/16″	2 1/2″	2 1/2″	2 7/16″	2 3/8″	2 3/8″

✳ = INCLUDES SLAB, BUILDUPS, AND STAY-IN-PLACE FORMS.
✳✳ = HEAT CURVING IS ALLOWED. CAMBER DISSIPATION DUE TO HEAT CURVING IS ZERO FOR ALL GIRDERS.



KEY

PROJECT NO. B-3186/B-5898

HAYWOOD COUNTY

STATION: 27+54.43 -Y1RT-

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE DEAD LOAD DEFLECTION AND CAMBER ORDINATES SPAN A

NORTH CAROLINA PROFESSIONAL SEAL 040791 ENGINEER W. BRIAN WATSON

W. Brian Watson 1/24/2022

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			S02-23
1	--	--	3	--	--			TOTAL SHEETS
2	--	--	4	--	--			48

DES BY: B. WATSON	DATE: 06/21	DWG BY: B. PETERSON	DATE: 06/21
DES CHK: S. NIFONG	DATE: 06/21	CHK BY: B. WATSON	DATE: 06/21

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.pltt PENTABLE: NCDOT STRUCTURES DEFAULT PEN.tbl
USER: PPETERSO DATE: 1/24/2022 TIME: 1:30:25 PM
FILE: ...\402_110_B3186-B5898_SMU_DL_023_430168.dgn