

8/25/2022 2:04:58 PM P:\Rail\Projects\2015\Y-4810K (NCDOT_RailDiv)\Structures\Drawings\Final\Y4810K_SMU_DL.dgn

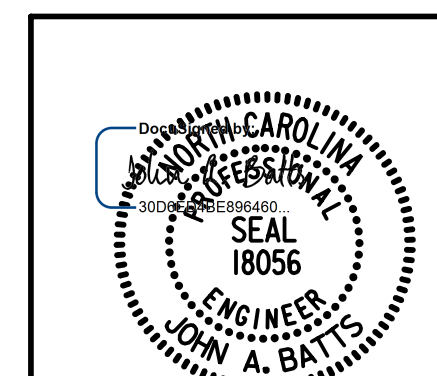
DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPANS A & D																						
0.6" Ø LOW RELAXATION																						
GIRDER G1																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.036	0.071	0.104	0.135	0.162	0.185	0.203	0.216	0.224	0.227	0.224	0.216	0.203	0.185	0.162	0.135	0.104	0.071	0.036	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.017	0.036	0.054	0.071	0.085	0.098	0.107	0.115	0.119	0.121	0.119	0.115	0.107	0.098	0.085	0.071	0.054	0.036	0.017	0
FINAL CAMBER	↑	0	1/4"	7/16"	5/8"	3/4"	15/16"	1 1/16"	1 1/8"	1 3/16"	1 1/4"	1 1/4"	1 1/4"	1 3/16"	1 1/8"	1 1/16"	1 5/16"	3/4"	5/8"	7/16"	1/4"	0
0.6" Ø LOW RELAXATION																						
GIRDERS G2-G4																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.036	0.071	0.104	0.135	0.162	0.185	0.203	0.216	0.224	0.227	0.224	0.216	0.203	0.185	0.162	0.135	0.104	0.071	0.036	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.018	0.039	0.058	0.076	0.092	0.105	0.116	0.124	0.128	0.130	0.128	0.124	0.116	0.105	0.092	0.076	0.058	0.039	0.018	0
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	1 1/16"	7/8"	1 5/16"	1 1/16"	1 1/8"	1 1/8"	1 3/16"	1 1/8"	1 1/8"	1 1/16"	1 5/16"	7/8"	1 1/16"	9/16"	3/8"	3/16"	0
0.6" Ø LOW RELAXATION																						
GIRDER G5																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.036	0.071	0.104	0.135	0.162	0.185	0.203	0.216	0.224	0.227	0.224	0.216	0.203	0.185	0.162	0.135	0.104	0.071	0.036	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.017	0.036	0.054	0.071	0.085	0.098	0.107	0.115	0.119	0.121	0.119	0.115	0.107	0.098	0.085	0.071	0.054	0.036	0.017	0
FINAL CAMBER	↑	0	1/4"	7/16"	5/8"	3/4"	15/16"	1 1/16"	1 1/8"	1 3/16"	1 1/4"	1 1/4"	1 1/4"	1 3/16"	1 1/8"	1 1/16"	1 5/16"	3/4"	5/8"	7/16"	1/4"	0

* INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPANS B & C																						
0.6" Ø LOW RELAXATION																						
GIRDER G1																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.043	0.084	0.124	0.160	0.192	0.218	0.240	0.256	0.265	0.269	0.265	0.256	0.240	0.218	0.192	0.160	0.124	0.084	0.043	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.026	0.055	0.082	0.106	0.128	0.147	0.162	0.173	0.180	0.182	0.180	0.173	0.162	0.147	0.128	0.106	0.082	0.055	0.026	0
FINAL CAMBER	↑	0	3/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1 5/16"	1"	1"	1 1/16"	1"	1"	1 5/16"	7/8"	3/4"	5/8"	1/2"	3/8"	3/16"	0
0.6" Ø LOW RELAXATION																						
GIRDERS G2-G4																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.043	0.084	0.124	0.160	0.192	0.218	0.240	0.256	0.265	0.269	0.265	0.256	0.240	0.218	0.192	0.160	0.124	0.084	0.043	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.028	0.059	0.088	0.115	0.138	0.158	0.174	0.186	0.193	0.196	0.193	0.186	0.174	0.158	0.138	0.115	0.088	0.059	0.028	0
FINAL CAMBER	↑	0	3/16"	5/16"	7/16"	9/16"	5/8"	1 1/16"	1 3/16"	1 3/16"	7/8"	7/8"	7/8"	1 3/16"	1 3/16"	1 1/16"	5/8"	9/16"	7/16"	5/16"	3/16"	0
0.6" Ø LOW RELAXATION																						
GIRDER G5																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.043	0.084	0.124	0.160	0.192	0.218	0.240	0.256	0.265	0.269	0.265	0.256	0.240	0.218	0.192	0.160	0.124	0.084	0.043	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.026	0.055	0.082	0.106	0.128	0.147	0.162	0.173	0.180	0.182	0.180	0.173	0.162	0.147	0.128	0.106	0.082	0.055	0.026	0
FINAL CAMBER	↑	0	3/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1 5/16"	1"	1"	1 1/16"	1"	1"	1 5/16"	7/8"	3/4"	5/8"	1/2"	3/8"	3/16"	0

* INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

PROJECT NO. Y-4810K
CABARRUS COUNTY
STATION: 31+94.08 -L-



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE

DEAD LOAD DEFLECTION
AND GIRDER CAMBER

DRAWN BY: S.D. COOPER DATE: 2-19
CHECKED BY: J. A. BATTS DATE: 2-19
DESIGN ENGINEER OF RECORD: J. A. BATTS DATE: 2-19

LICENSURE NO. C-4434				REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:			S-22	
1			3					TOTAL SHEETS	
2			4					53	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED