

### NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

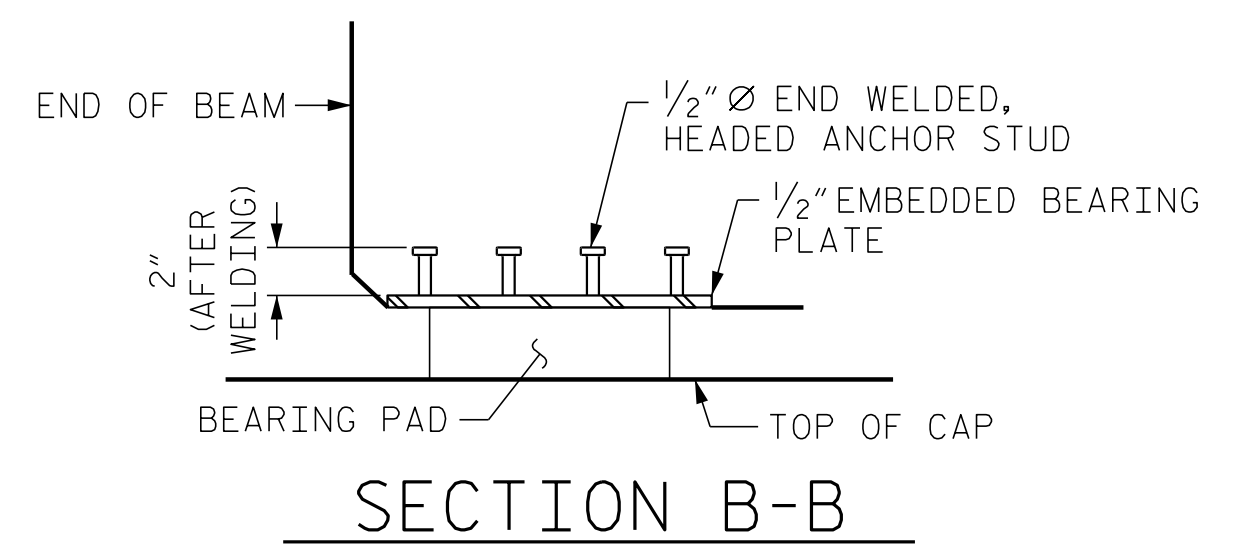
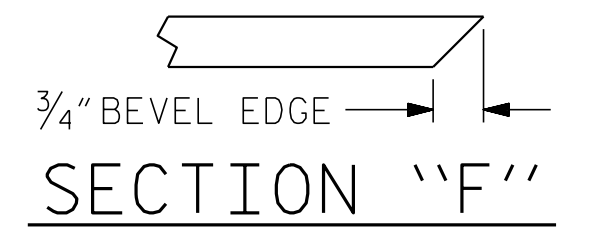
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 5200 PSI. FOR SPANS A AND C AND 7000 PSI FOR SPAN B

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

THE #5 S6 BARS SHALL BE TIED TO THE 3/8" STRAND AFTER TENSIONING.

THE #5 V1 BARS SHALL BE PLACED SO IT IS EQUAL DISTANCE FROM TOP & BOTTOM FLANGE.



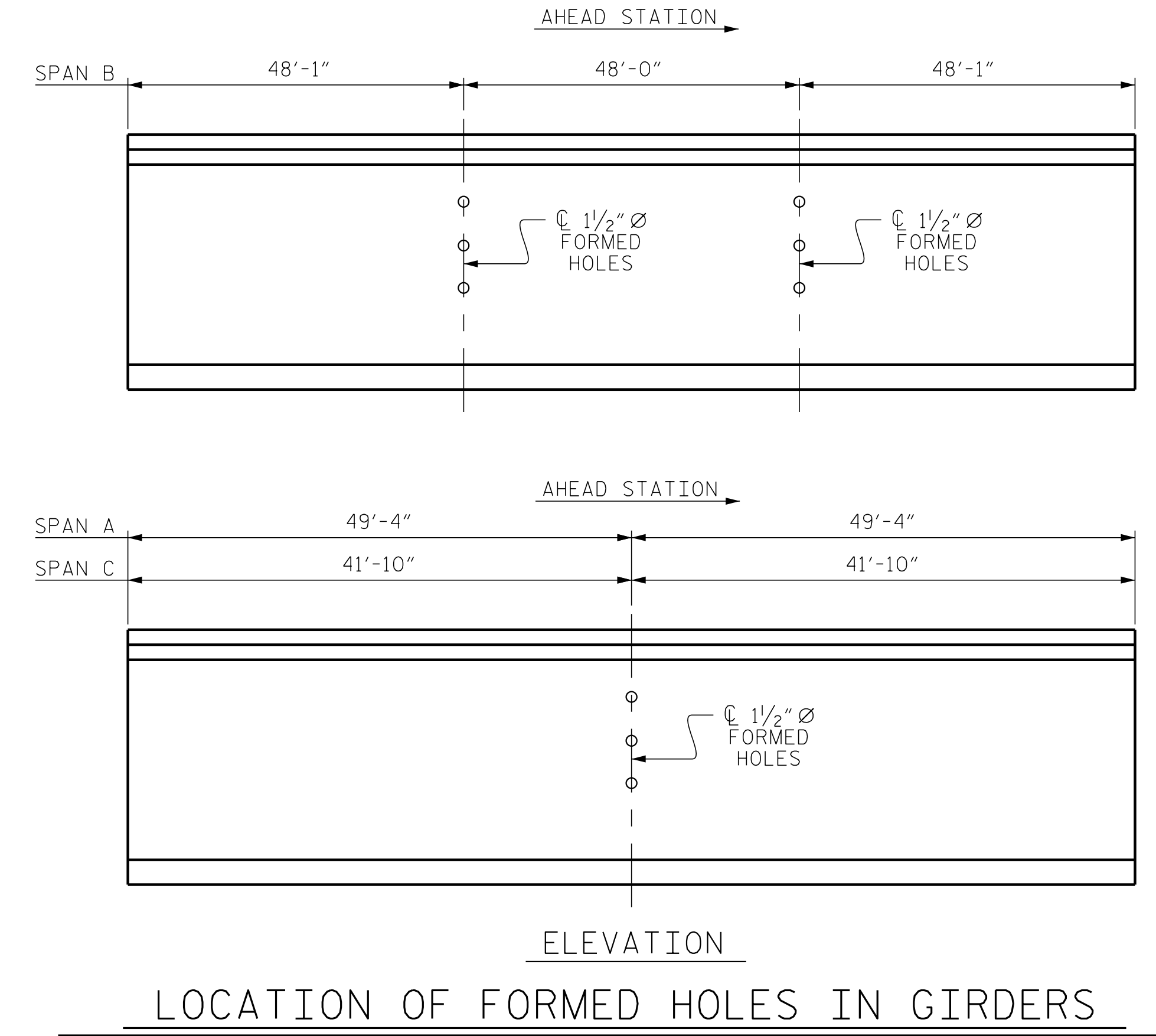
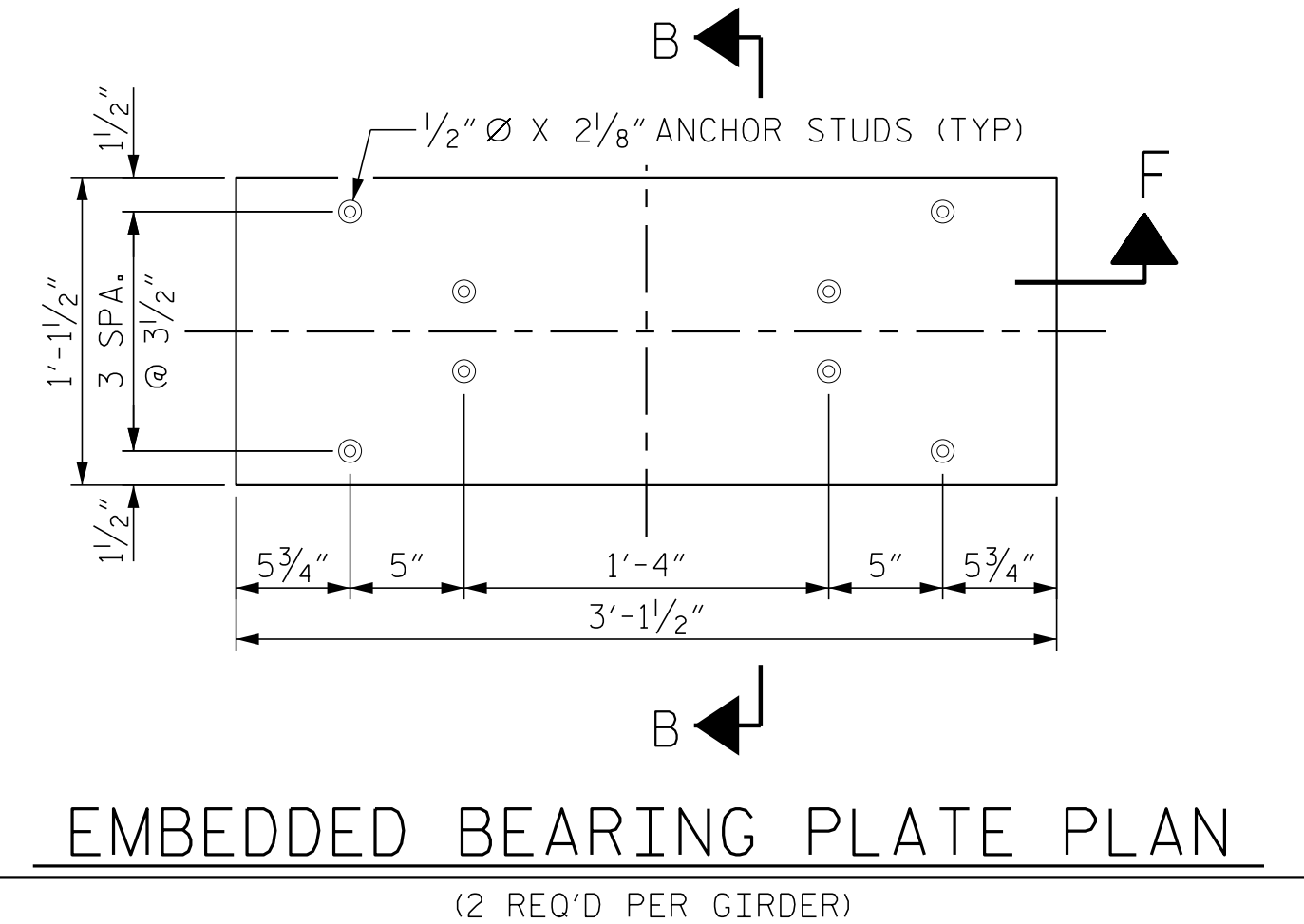
### EMBEDDED PLATE NOTES

EMBEDDED PLATE SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

ALL SURFACES OF EMBEDDED BEARING PLATES SHALL BE SMOOTH AND STRAIGHT.

ALL BEARING PLATES SHALL BE AASHTO M270 GRADE 36 OR 50.



### DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION	SPAN "A"																				
	GIRDERS 1 THRU 4																				
	TWENTIETH POINTS																				
CAMBER ( GIRDER ALONE IN PLACE )	0	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0	0.010	0.019	0.028	0.038	0.045	0.052	0.057	0.061	0.063	0.065	0.063	0.061	0.057	0.052	0.045	0.038	0.028	0.019	0.010	0
FINAL CAMBER	0"	1/16"	1/16"	1/8"	1/8"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	1/8"	1/8"	1/8"	1/8"	1/16"	1/16"	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

0.6" Ø LOW RELAXATION	SPAN "B"																																												
	GIRDERS 1 THRU 4																																												
	FORTIETH POINTS																																												
CAMBER ( GIRDER ALONE IN PLACE )	0	.025	.050	.075	.100	.125	.150	.175	.200	.225	.250	.275	.300	.325	.350	.375	.400	.425	.450	.475	.500	.525	.550	.575	.600	.625	.650	.675	.700	.725	.750	.775	.800	.825	.850	.875	.900	.925	.950	.975	0				
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0	0.020	0.040	0.060	0.080	0.099	0.118	0.137	0.156	0.171	0.186	0.201	0.216	0.225	0.235	0.244	0.254	0.257	0.260	0.263	0.267	0.269	0.270	0.269	0.267	0.263	0.257	0.250	0.241	0.231	0.219	0.206	0.192	0.177	0.159	0.143	0.124	0.105	0.085	0.064	0.043	0.022	0		
FINAL CAMBER	0	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	1/16"	0

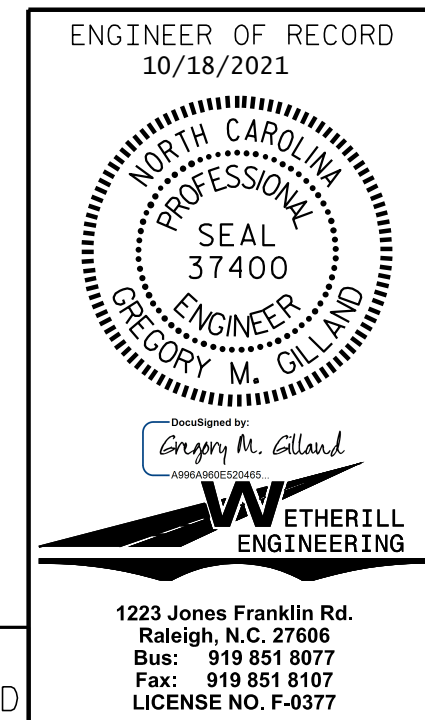
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### DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION	SPAN "C"																					
	GIRDERS 1 THRU 4																					
	TWENTIETH POINTS																					
CAMBER ( GIRDER ALONE IN PLACE )	0	0.008	0.017	0.024	0.032	0.038	0.044	0.047	0.051	0.052	0.054	0.052	0.051	0.047	0.044	0.038	0.032	0.024	0.017	0.008	0	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0	0.005	0.010	0.015	0.019	0.023	0.027	0.029	0.031	0.032	0.033	0.032	0.031	0.029	0.027	0.023	0.019	0.015	0.010	0.005	0	
FINAL CAMBER	0"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	0"

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PROJECT NO. B-5947  
NASH COUNTY  
STATION: 23+90.50 -LREV-



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUPERSTRUCTURE FIB DETAILS & DEAD LOAD DEFLECTIONS					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					S-16
					TOTAL SHEETS 39

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

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10/18/2021 10:55:31 AM

DRAWN BY: D. HODGE DATE: 5/20  
CHECKED BY: J. DILWORTH/GMG DATE: 8/21