

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.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN GIRDER ELEVATION VIEWS.

EMBEDDED PLATE "B-1" 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.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE 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 7500 PSI FOR SPAN A AND NOT LESS THAN 5600 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" AND LINK SLAB AREA, SHALL BE RAKED TO A MINIMUM DEPTH OF 1/4".

NO WELDING OF THE FORMS OR FALSEWORK TO THE TOP OF THE GIRDER WILL BE PERMITTED IN THE LINK SLAB AREA.

DEAD LOAD DEFLECTION TABLE

SPAN "A"

0.6" Ø LOW RELAXATION	GIRDERS 1 & 4																				
	TWENTIETH POINTS	0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95
CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.030	0.060	0.087	0.113	0.135	0.155	0.170	0.181	0.188	0.190	0.188	0.181	0.170	0.155	0.135	0.113	0.087	0.060	0.030	0
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.024	0.048	0.071	0.091	0.109	0.125	0.137	0.146	0.152	0.153	0.152	0.146	0.137	0.125	0.109	0.091	0.071	0.048	0.024	0
FINAL CAMBER ↑	0	1/16"	1/8"	3/16"	1/4"	3/16"	3/8"	3/8"	7/16"	7/16"	7/16"	7/16"	7/16"	3/8"	3/8"	5/16"	1/4"	3/16"	1/8"	1/16"	0

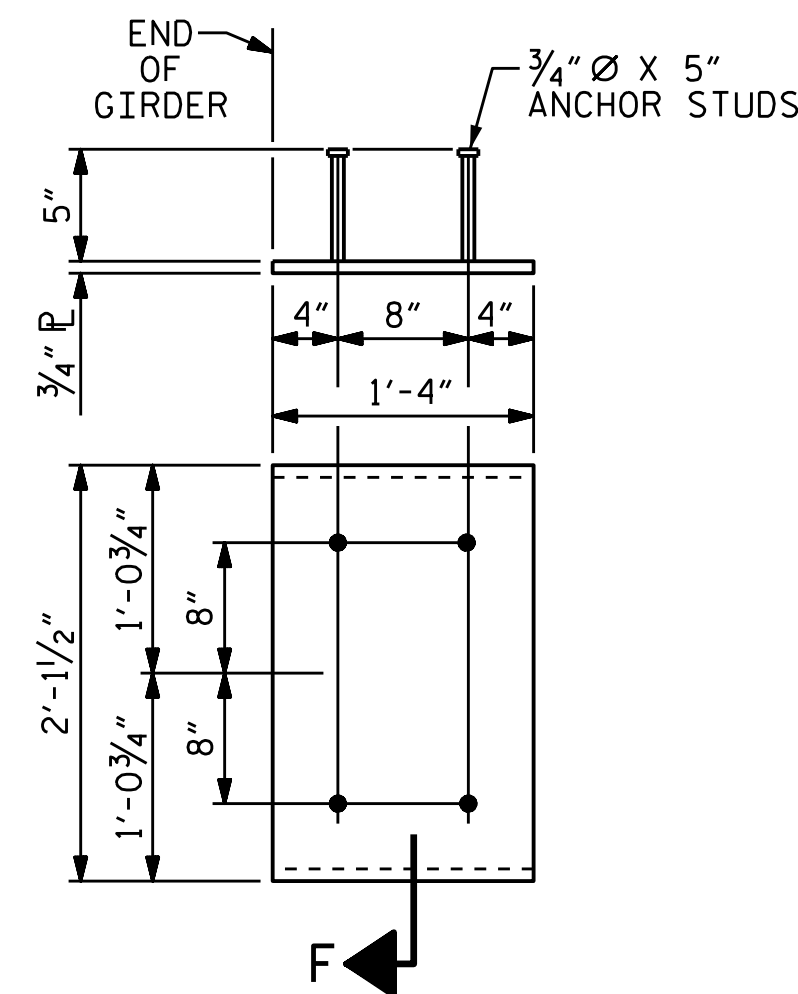
0.6" Ø LOW RELAXATION	GIRDERS 2 & 3																					
	TWENTIETH POINTS	0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.030	0.059	0.087	0.112	0.135	0.154	0.169	0.180	0.187	0.189	0.187	0.180	0.169	0.154	0.135	0.112	0.087	0.059	0.030	0	
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.027	0.054	0.079	0.102	0.123	0.140	0.154	0.164	0.170	0.172	0.170	0.164	0.154	0.140	0.123	0.102	0.079	0.054	0.027	0	
FINAL CAMBER ↑	0	1/16"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	1/16"	0

SPAN "B"

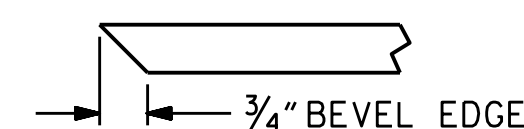
0.6" Ø LOW RELAXATION	GIRDERS 1 & 4																				
	TWENTIETH POINTS	0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95
CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.010	0.019	0.027	0.035	0.043	0.049	0.053	0.057	0.059	0.060	0.059	0.057	0.053	0.049	0.043	0.035	0.027	0.019	0.010	0
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.006	0.012	0.017	0.022	0.027	0.031	0.034	0.036	0.037	0.038	0.037	0.036	0.034	0.031	0.027	0.022	0.017	0.012	0.006	0
FINAL CAMBER ↑	0	1/16"	1/16"	1/8"	3/16"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	3/16"	1/8"	1/16"	1/16"	0

0.6" Ø LOW RELAXATION	GIRDERS 2 & 3																					
	TWENTIETH POINTS	0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.009	0.019	0.027	0.035	0.042	0.048	0.053	0.057	0.059	0.059	0.059	0.057	0.053	0.048	0.042	0.035	0.027	0.019	0.009	0	
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.007	0.013	0.020	0.025	0.030	0.035	0.038	0.041	0.042	0.043	0.042	0.041	0.038	0.035	0.030	0.025	0.020	0.013	0.007	0	
FINAL CAMBER ↑	0	1/16"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	1/16"	0

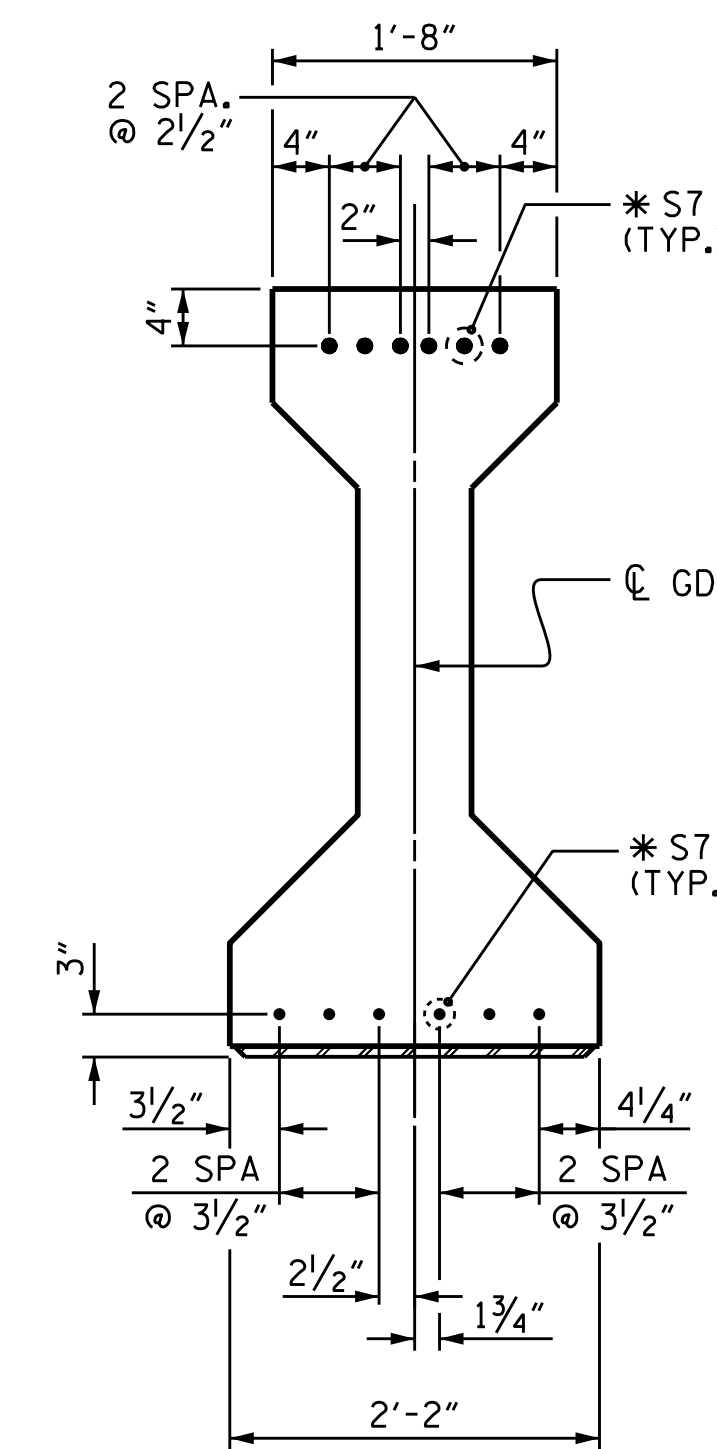
* INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT
"FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).



EMBEDDED PLATE "B1" DETAILS
FOR AASHTO TYPE IV GIRDERS
(2 REQ'D PER GIRDER)



SECTION "F"
(SEE NOTES)



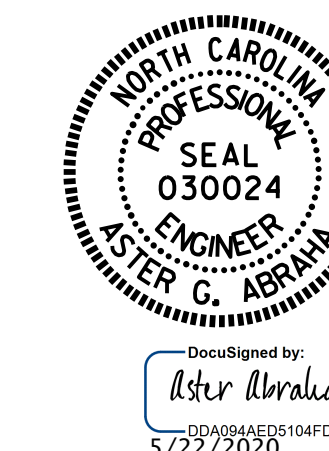
AT INTEGRAL END BENT END

DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)

ASSEMBLED BY : S. WANCE/A.Y. GODFREY DATE : 05/2020
CHECKED BY : S. WANCE DATE :
DESIGN ENGINEER OF RECORD : M. M. AHMED DATE : 09/2019
DRAWN BY : ELR 8/91
CHECKED BY : GRP 8/91

REV. 10/1/11 MAA/GM
REV. 1/15 MAA/TMG
REV. 12/17 MAA/THC



PROJECT NO. B-4931
EDGEcombe COUNTY
STATION: 16+99.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS AND DEFLECTIONS

NO.	REVISIONS						SHEET NO.
	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.	
1			3			S-12	
2			4			TOTAL SHEETS 30	

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

STD. NO. PCG9