DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION	SPAN A AND SPAN B																				
	GIRDERS 1 AND 11 (EXTERIOR)																				
TWENTIETH POINTS	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1.0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.00	0.021	0.042	0.062	0.080	0.096	0.110	0.121	0.128	0.133	0.135	0.133	0.128	0.121	0.110	0.096	0.080	0.062	0.042	0.021	0.00
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.00	0.013	0.026	0.038	0.050	0.060	0.068	0.075	0.080	0.083	0.084	0.083	0.080	0.075	0.068	0.060	0.050	0.038	0.026	0.013	0.00
FINAL CAMBER ↑	0	1/8"	3/16"	5/16"	3/8"	7/16"	1/2"	9/16"	9/16"	5/8"	5/8"	5/8"	9/16"	9/16"	1/2"	7/16"	3/8"	5/16"	3/16"	1/8"	0
	GIRDERS 2 - 10 (INTERIOR)																				
TWENTIETH POINTS	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1.0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.00	0.021	0.042	0.062	0.080	0.096	0.110	0.121	0.128	0.133	0.135	0.133	0.128	0.121	0.110	0.096	0.080	0.062	0.042	0.021	0.00
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.00	0.016	0.031	0.046	0.059	0.071	0.081	0.089	0.095	0.098	0.100	0.098	0.095	0.089	0.081	0.071	0.059	0.046	0.031	0.016	0.00
FINAL CAMBER ↑	0	1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	3/8"	3/8"	7/16"	7/16"	7/16"	3/8"	3/8"	3/8"	5/16"	1/4"	3/16"	1/8"	1/16"	0

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

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 ELEVATION VIEW.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

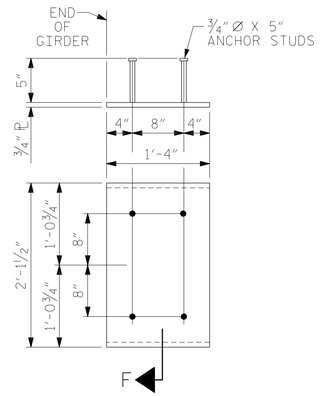
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4,500 PSI.

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

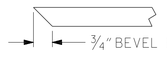
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", AND INDICATED ON THE GIRDER SHEET, SHALL BE RAKED TO A DEPTH OF 1/4".

ALL PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH GIRDER ENDS.



EMBEDDED PLATE "B-1" DETAILS
FOR AASHTO TYPE IV GIRDER

(2 REQ'D PER GIRDER)



SECTION "F"

(SEE NOTES)

PROJECT NO. U-2579AB

FORSYTH COUNTY

STATION: 30+67.66 -Y4-

SHEET 2 OF 2

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 18442 RICHARD LEON BOLLINGER JR.
10/14/2021

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

PRESTRESSED CONCRETE GIRDER DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-12
1			3			TOTAL SHEETS
2			4			37

DRAWN BY : MRA DATE : 08/2019
CHECKED BY : JMR DATE : 09/2019
DESIGN ENGINEER OF RECORD: JMR DATE : 10/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

10/14/2021
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