

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.

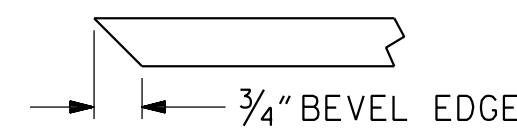
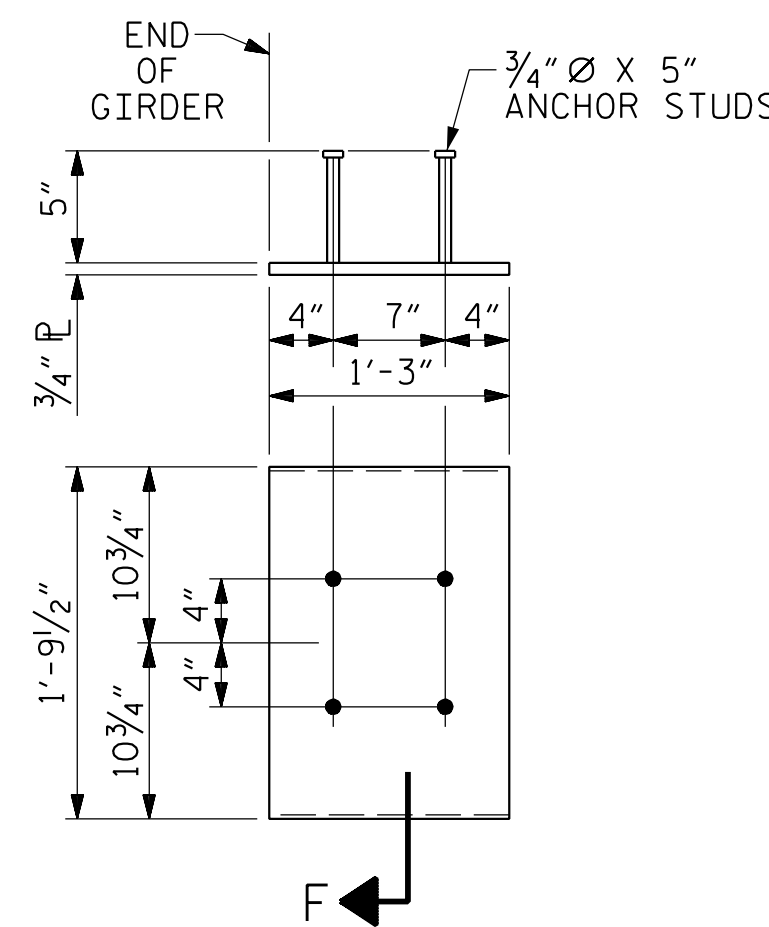
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

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 5000 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 LINK SLAB REGIONS, SHALL BE RAKED TO A DEPTH OF 1/4".



SECTION "F"

(SEE NOTES)

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

(2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR GIRDERS - SPANS A, B & C

0.6" Ø LOW RELAXATION	GIRDERS 1 - 10																				
	TWENTIETH POINTS																				
CAMBER (GIRDER ALONE IN PLACE) ↑	0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	1.0
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.0	0.017	0.034	0.050	0.064	0.077	0.088	0.097	0.103	0.107	0.109	0.107	0.103	0.097	0.088	0.077	0.064	0.050	0.034	0.017	0.0
FINAL CAMBER ↑	0.0	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	11/16"	3/4"	13/16"	13/16"	13/16"	3/4"	11/16"	5/8"	9/16"	1/2"	3/8"	1/4"	1/8"	0.0

\* INCLUDES FUTURE WEARING SURFACE.

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

PROJECT NO. U-5839  
HAYWOOD COUNTY  
 STATION: 31+45.00 -L- POT

SHEET 3 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUPERSTRUCTURE  
 PRESTRESSED CONCRETE GIRDER  
 DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-20
1			3			TOTAL SHEETS
2			4			49

PLANS PREPARED BY:

**NV5**

NV5 ENGINEERS & CONSULTANTS, INC.  
 3300 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27518  
 P: 919.851.1912 www.NV5.com  
 NC License # F-1333

DocuSigned by:

*Robert C. Larson*

EEB2398D9220470...  
 14114  
 ENGINEER  
 ROBERT C. LARSON

5/19/2023

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

5/17/2023 7:03:22 PM R:\Structures\Bridges over Richard Creek\20 U5839\_SMU 03\_43086.dgn

DRAWN BY : W. B. ALLEN DATE : 5/19  
 CHECKED BY : Z. H. BROWN DATE : 7/19  
 DESIGN ENGINEER OF RECORD: R. C. LARSON DATE : 2/23

DocuSigned by:  
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