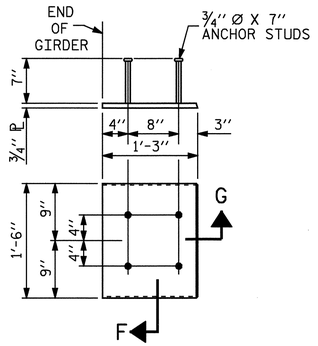
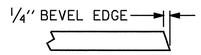
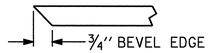


EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE II GIRDER

(2 REQ'D PER GIRDER)



SECTION "G"



SECTION "F"

(SEE NOTES)

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. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

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 4000 PSI FOR SPANS A, B, D-L, N AND 6500 PSI FOR SPANS C & M.

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 THE LINK SLAB AREA, SHALL BE RAKED TO A DEPTH OF ¼".

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 6" OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN ½" OF THE THEORETICAL LOCATION SHOWN.

FOR VERTICAL CRACKS IN PRESTRESSED CONCRETE GIRDERS PRIOR TO DETENSIONING, SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

DEAD LOAD DEFLECTION TABLE FOR SPANS A,B,D,E,F,G,H,I,J,K,L AND N

0.6"Ø LOW RELAXATION	GIRDER 1											GIRDER 2 & 3 & 4											GIRDER 5										
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE) ▲	0.0	0.021	0.040	0.055	0.065	0.068	0.065	0.055	0.040	0.021	0.0	0.0	0.021	0.040	0.055	0.065	0.068	0.065	0.055	0.040	0.021	0.0	0.0	0.021	0.040	0.055	0.065	0.068	0.065	0.055	0.040	0.021	0.0
✳DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0.0	0.011	0.020	0.028	0.032	0.034	0.032	0.028	0.020	0.011	0.0	0.0	0.012	0.022	0.030	0.035	0.037	0.035	0.030	0.022	0.012	0.0	0.0	0.011	0.020	0.028	0.032	0.034	0.032	0.028	0.020	0.011	0.0
FINAL CAMBER ▲	0.0	1/8"	1/4"	5/16"	3/8"	7/16"	3/8"	5/16"	1/4"	1/8"	0.0	0.0	1/8"	3/16"	5/16"	3/8"	3/8"	3/8"	5/16"	3/16"	1/8"	0.0	0.0	1/8"	1/4"	5/16"	3/8"	7/16"	3/8"	5/16"	1/4"	1/8"	0.0

DEAD LOAD DEFLECTION TABLE FOR SPAN C & M

0.6"Ø LOW RELAXATION	GIRDER 1											GIRDER 2 & 3 & 4											GIRDER 5										
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE) ▲	0.0	0.070	0.133	0.182	0.213	0.224	0.213	0.182	0.133	0.070	0.0	0.0	0.070	0.133	0.182	0.213	0.224	0.213	0.182	0.133	0.070	0.0	0.0	0.070	0.133	0.182	0.213	0.224	0.213	0.182	0.133	0.070	0.0
✳DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0.0	0.026	0.049	0.067	0.079	0.083	0.079	0.067	0.049	0.026	0.0	0.0	0.028	0.054	0.073	0.086	0.090	0.086	0.073	0.054	0.028	0.0	0.0	0.026	0.049	0.067	0.079	0.083	0.079	0.067	0.049	0.026	0.0
FINAL CAMBER ▲	0.0	1/2"	1"	1 3/8"	1 5/8"	1 11/16"	1 5/8"	1 3/8"	1"	1/2"	0.0	0.0	1/2"	15/16"	1 5/16"	1 1/2"	1 5/8"	1 1/2"	1 5/16"	15/16"	1/2"	0.0	0.0	1/2"	1"	1 3/8"	1 5/8"	1 11/16"	1 5/8"	1 3/8"	1"	1/2"	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. B-4009

ANSON COUNTY

STATION: 38+66.50-L-

SHEET 5 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 10730 ENGINEER D. ANDRE DAVENPORT, JR.
12-1-05

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-23
1			3			TOTAL SHEETS
2			4			64

ASSEMBLED BY :	H. T. BARBOUR	DATE :	1-5-05
CHECKED BY :	A. COLE	DATE :	2-05
DRAWN BY : ELR 11/91	REV. 8/16/99		MAB/LES
CHECKED BY : GRP 11/91	REV. 10/17/00		RWW/LES
	REV. 7/10/01R		LES/RDR

01-DEC-2005 10:02
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tbarbour

STD.No.PCG11