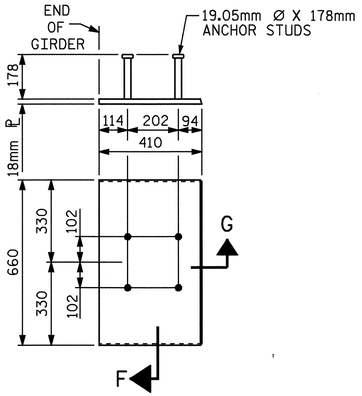
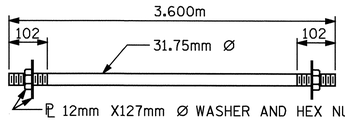


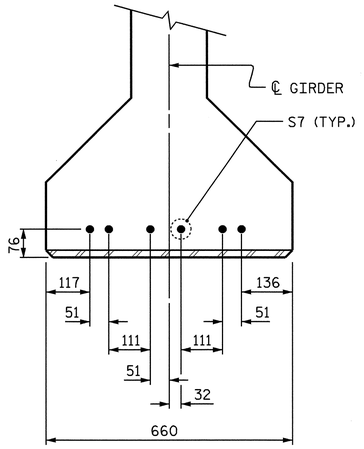
EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE IV GIRDER

(2 REQ'D PER GIRDER)



31.75mm Ø TIE ROD ASSEMBLY

(9 COMPLETE ASSEMBLIES REQUIRED)



DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203M EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 250 STRUCTURAL STEEL.

ALL REINFORCING STEEL SHALL BE GRADE 420.

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 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.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 50mm BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

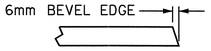
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 27.6 MPa. FOR SPANS A AND C, AND 35.0 MPa. FOR SPAN B.

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

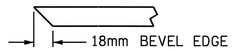
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 100mm, SHALL BE RAKED TO A DEPTH OF 6mm.

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 150mm OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 13mm OF THE THEORETICAL LOCATION SHOWN.

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



SECTION "G"



SECTION "F"

(SEE NOTES)

DEAD LOAD DEFLECTION TABLE FOR SPAN A & C

12.70mm LOW RELAXATION	GIRDER 1 & 4											GIRDER 2 & 3										
TENTH POINTS	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	0.005	0.009	0.013	0.015	0.015	0.015	0.013	0.009	0.005	0.0	0.0	0.005	0.009	0.013	0.015	0.015	0.015	0.013	0.009	0.005	0.0
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.0	0.002	0.004	0.006	0.007	0.007	0.007	0.006	0.004	0.002	0.0	0.0	0.002	0.005	0.007	0.008	0.009	0.008	0.007	0.005	0.002	0.0
FINAL CAMBER ↑	0.0	3	5	7	8	8	8	7	5	3	0.0	0.0	3	4	6	7	6	7	6	4	3	0.0

DEAD LOAD DEFLECTION TABLE FOR SPAN B

12.70mm LOW RELAXATION	GIRDER 1 & 4											GIRDER 2 & 3										
TENTH POINTS	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	0.029	0.054	0.074	0.087	0.091	0.087	0.074	0.054	0.029	0.0	0.0	0.029	0.054	0.074	0.087	0.091	0.087	0.074	0.054	0.029	0.0
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.0	0.010	0.020	0.027	0.032	0.034	0.032	0.027	0.020	0.010	0.0	0.0	0.012	0.023	0.032	0.038	0.040	0.038	0.032	0.023	0.012	0.0
FINAL CAMBER ↑	0.0	19	34	47	55	57	55	47	34	19	0.0	0.0	17	31	42	49	51	49	42	31	17	0.0

✳ INCLUDES FUTURE WEARING SURFACE.

ALL VALUES ARE SHOWN IN METERS, EXCEPT "FINAL CAMBER" WHICH IS SHOWN IN MILLIMETERS.

PROJECT NO. R-2610B

CHATHAM COUNTY

STATION: 22+83.400-L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

AASHTO TYPE IV PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS AND DEFLECTION TABLES

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-12
1			3			TOTAL SHEETS
2			4			60

NORTH CAROLINA PROFESSIONAL SEAL 10730 ENGINEER D. ANDRE DAVENPORT

ASSEMBLED BY :	H. T. BARBOUR	DATE :	3-12-04
CHECKED BY :	D. A. DAVENPORT	DATE :	5-04
DRAWN BY : ELR 11/91	REV. 8/16/99		MAB/LES
CHECKED BY : GRP 11/91	REV. 10/17/00		RWW/LES
	REV. 7/10/01		LES/RDR

02-JUL-2004 12:01
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adavenport

STR. #1

STD. NO. PCG11SM