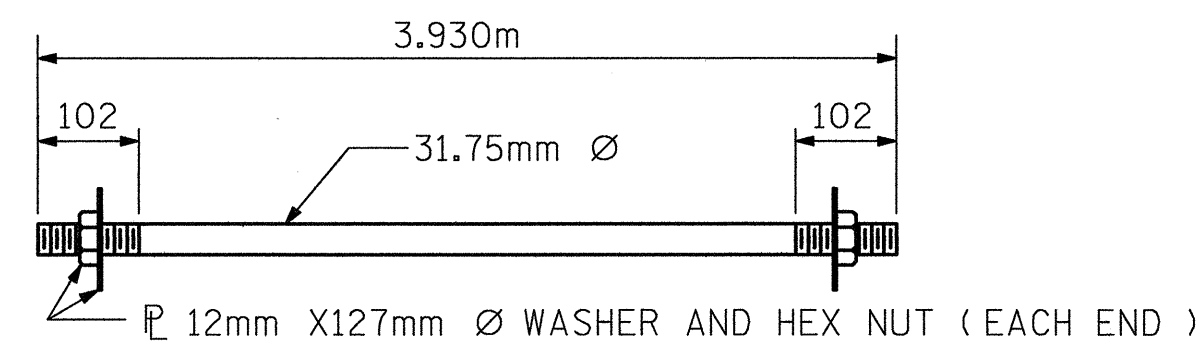


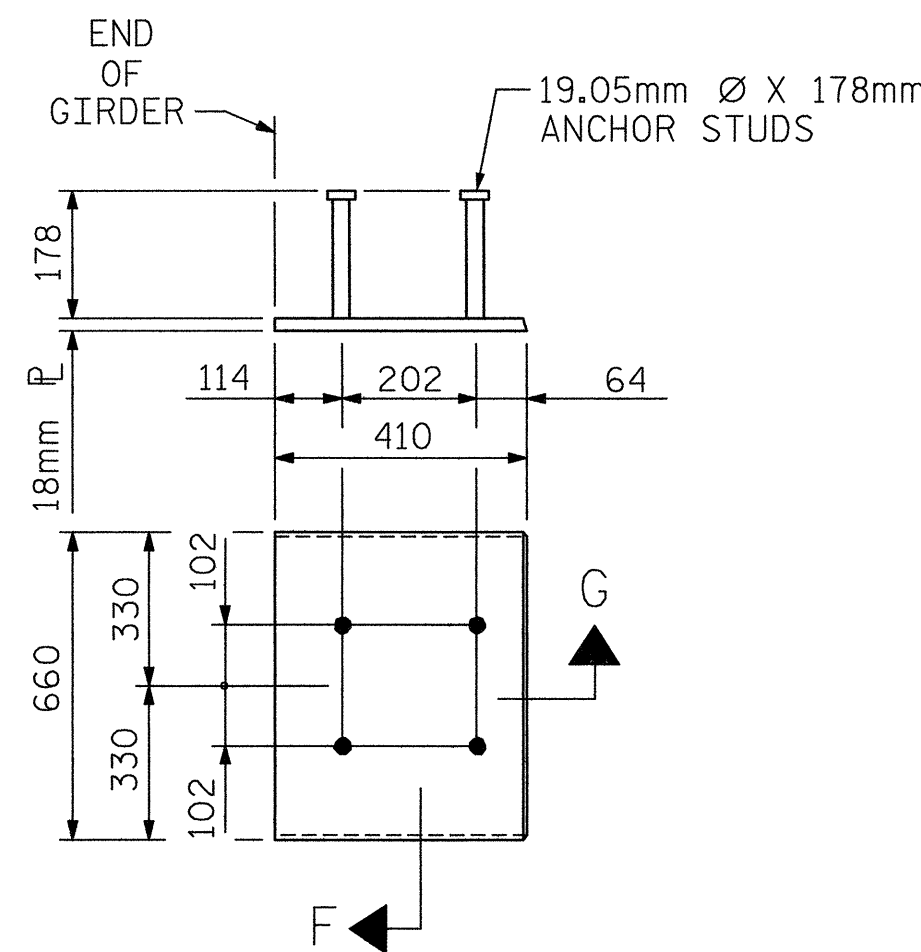
DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)



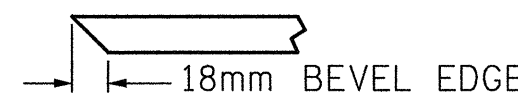
31.75mm Ø TIE ROD ASSEMBLY

(9 COMPLETE ASSEMBLIES REQUIRED)



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

(2 REQ'D PER GIRDER)



SECTION "F"

(SEE NOTES)



SECTION "G"

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 SPAN A & SPAN C AND NOT LESS THAN 48.3 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 STANDS 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.

THE UPLIFT FORCE DUE TO DRAPED STRANDS IS 103.9 kN.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

DEAD LOAD DEFLECTION TABLE FOR GIRDERS - SPAN A

TENTH POINTS	GIRDERS 1 & 4											GIRDERS 2 & 3										
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0
CAMBER (GIRDER ALONE IN PLACE)	0.000	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.000	0.000	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0.000	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.001	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.001	0.000
FINAL CAMBER	0	1	2	2	3	3	3	2	2	1	0	0	1	1	2	2	2	2	2	1	1	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS - SPAN B

TENTH POINTS	GIRDERS 1 & 4											GIRDERS 2 & 3										
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0
CAMBER (GIRDER ALONE IN PLACE)	0.000	0.025	0.048	0.065	0.076	0.080	0.076	0.065	0.048	0.025	0.000	0.000	0.025	0.048	0.065	0.076	0.080	0.076	0.065	0.048	0.025	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0.000	0.014	0.027	0.037	0.043	0.046	0.043	0.037	0.027	0.014	0.000	0.000	0.018	0.033	0.046	0.053	0.056	0.053	0.046	0.033	0.018	0.000
FINAL CAMBER	0	11	21	28	33	34	33	28	21	11	0	0	7	15	19	23	24	23	19	15	7	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS - SPAN C

TENTH POINTS	GIRDERS 1 & 4											GIRDERS 2 & 3										
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0
CAMBER (GIRDER ALONE IN PLACE)	0.000	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.000	0.000	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L.	0.000	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.000	0.000	0.001	0.002	0.003	0.004	0.004	0.004	0.003	0.002	0.001	0.000
FINAL CAMBER	0	1	1	1	2	2	2	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0

* INCLUDES FUTURE WEARING SURFACE IN SUPERIMPOSED DEAD LOAD

NOTE:

ALL DIMENSIONS ARE SHOWN IN METERS EXCEPT FINAL CAMBER IS SHOWN IN MILLIMETERS.

VALUES ARE SHOWN AT TENTH POINTS BETWEEN BEARINGS.

ASSEMBLED BY : JDF	DATE : 05/01/02
CHECKED BY : MSB	DATE : 05/01/02
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

PROJECT NO. R-2552B
JOHNSTON COUNTY
 STATION: 97+59.319-L-LT POC



SHEET 4 OF 4

		STATE OF NORTH CAROLINA		SHEET NO. 5-93
		DEPARTMENT OF TRANSPORTATION		
		RALEIGH		TOTAL SHEETS 431
		STANDARD		
CONSOER TOWNSEND ENVIRONMENTAL ENGINEERS, INC. 13325 SOUTH POINT BOULEVARD, SUITE 400 CHARLOTTE, NORTH CAROLINA 28273-5820 (704) 583-0902		PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS		REVISIONS NO. BY: DATE: NO. BY: DATE: 1 2
		SHEET NO. 5-93 TOTAL SHEETS 431		