

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.

TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 36 STRUCTURAL STEEL.

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.

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 5100 PSI.

FOR GIRDERS WITH 0.6 Ø DEBONDED STRANDS OPTION THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 6000 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", SHALL BE RAKED TO A DEPTH OF 1/4".

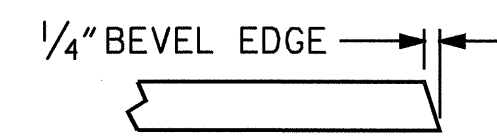
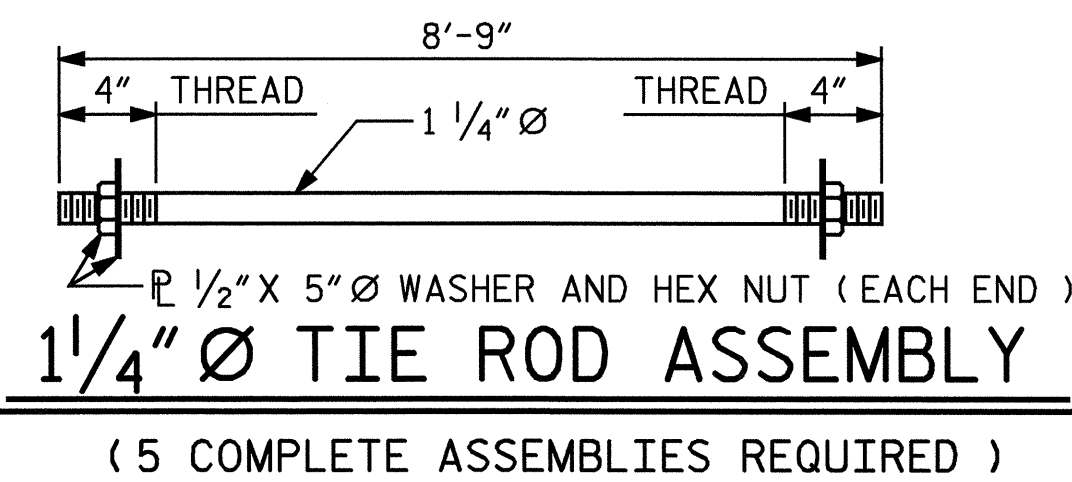
WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 6" OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 1/2" OF THE THEORETICAL LOCATION SHOWN.

A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" AND 72" MODIFIED BULB TEES ONLY.

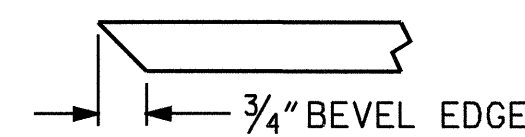
FOR VERTICAL CRACKS IN PRESTRESSED CONCRETE GIRDERS PRIOR TO DETENSIONING, SEE SPECIAL PROVISIONS.

THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

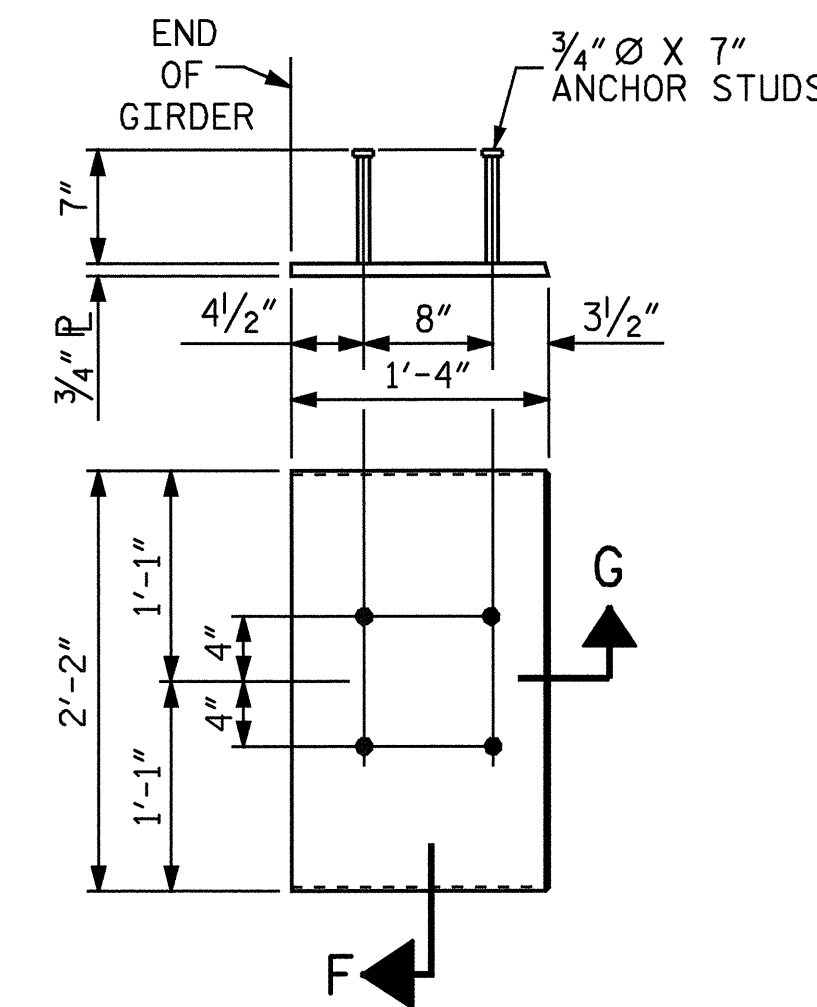


SECTION "G"



SECTION "F"

(SEE NOTES)



EMBEDDED PLATE "B-1" DETAILS

(2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR GIRDERS												
1/2" Ø LOW RELAXATION	SPAN A											
	GIRDERS #1 THRU #6											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.110	0.208	0.285	0.334	0.351	0.334	0.285	0.208	0.110	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.046	0.088	0.120	0.140	0.147	0.140	0.120	0.088	0.046	0
FINAL CAMBER	↑	0	3/4"	1 1/16"	2"	2 5/16"	2 7/16"	2 5/16"	2"	1 7/16"	3/4"	0

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

DEAD LOAD DEFLECTION TABLE FOR GIRDERS												
0.6" Ø LOW RELAXATION	SPAN A											
	GIRDERS #1 THRU #6											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.096	0.181	0.248	0.291	0.305	0.291	0.248	0.181	0.096	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.045	0.085	0.116	0.136	0.143	0.136	0.116	0.085	0.045	0
FINAL CAMBER	↑	0	5/8"	1 3/16"	1 9/16"	1 7/8"	2"	1 7/8"	1 9/16"	1 3/16"	5/8"	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-3300
ASHE COUNTY
 STATION: 17+36.00-L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**STANDARD
 PRESTRESSED CONCRETE GIRDER
 DETAILS
 AND DEFLECTION TABLES**

ASSEMBLED BY : L.L. MURPHY	DATE : 10-04
CHECKED BY : V.X. NGUYEN	DATE : 12-04
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

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 23