

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.

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.

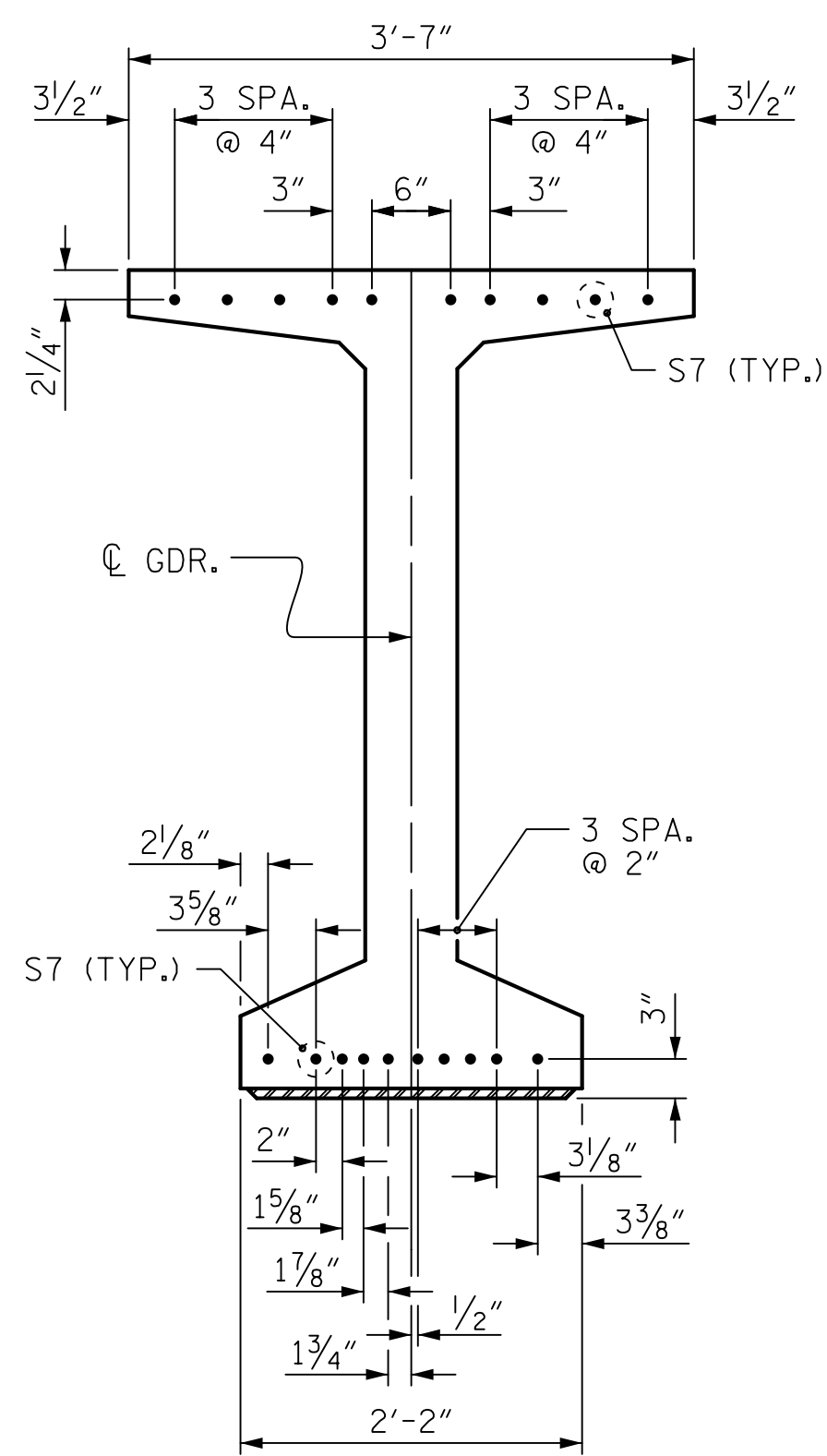
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 6400 PSI. DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

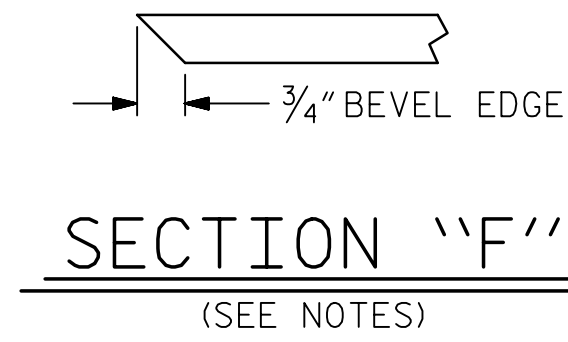
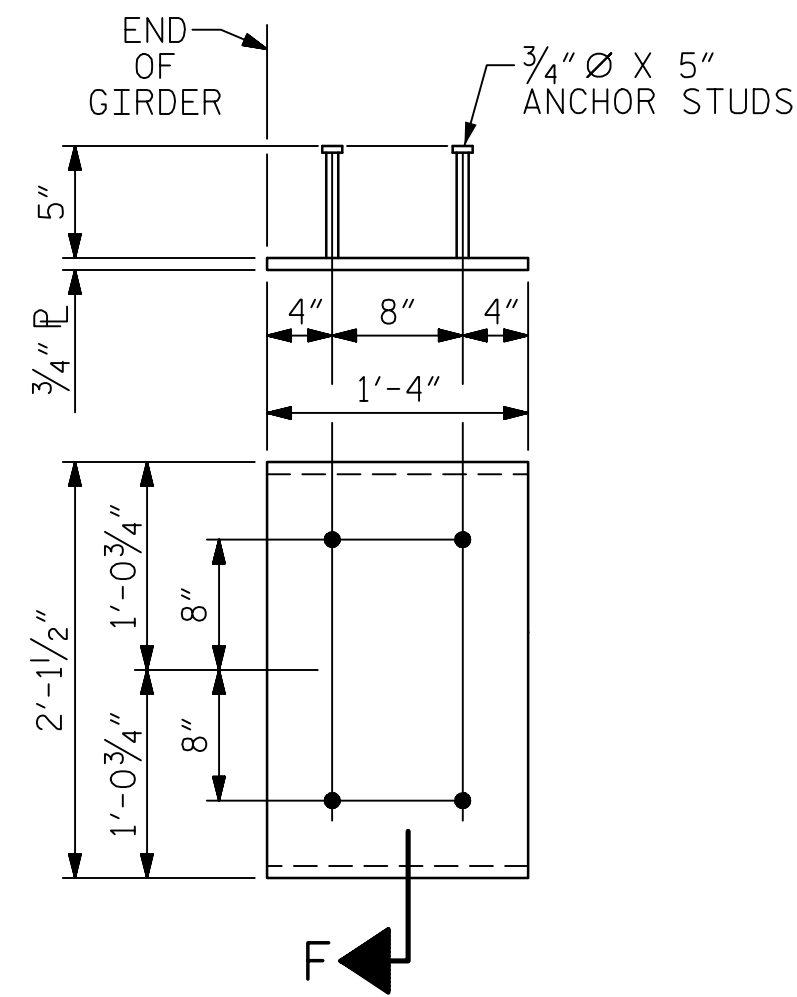
A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" MODIFIED BULB TEES.

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.

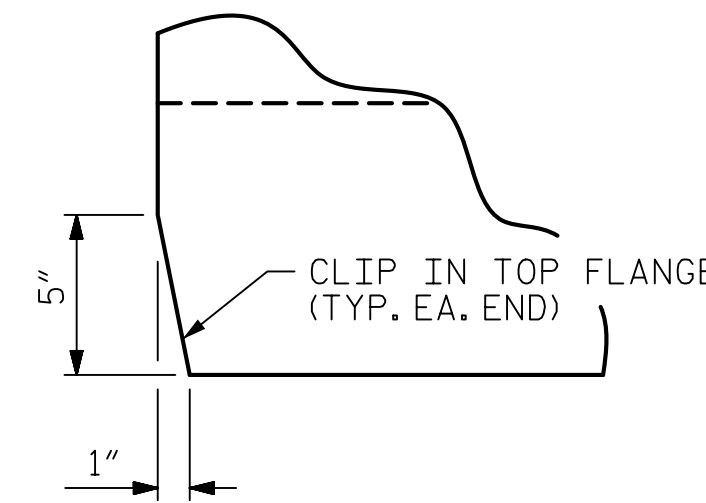
FOR EMBEDDED CLIPS FOR PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.



DETAIL "C"



EMBEDDED PLATE "B-1" DETAILS FOR 63" MODIFIED BULB TEES (2 REQ'D PER GIRDER)



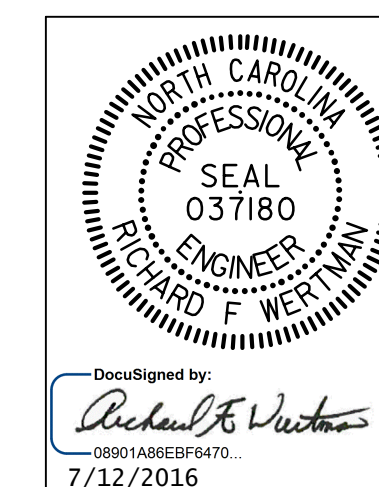
DETAIL "D"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
0.6" Ø LOW RELAXATION	SPAN A																					
	GIRDERS 1 & 5																					
	TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	0
CAMBER ( GIRDER ALONE IN PLACE )	↑	0	0.046	0.091	0.134	0.173	0.207	0.237	0.260	0.277	0.287	0.291	0.287	0.277	0.260	0.237	0.207	0.173	0.134	0.091	0.046	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.028	0.056	0.084	0.109	0.132	0.151	0.166	0.177	0.184	0.186	0.184	0.177	0.166	0.151	0.132	0.109	0.084	0.056	0.028	0
FINAL CAMBER	↑	0	3/16"	7/16"	5/8"	3/4"	7/8"	1 1/16"	1 1/8"	1 3/16"	1 1/4"	1 1/4"	1 1/4"	1 3/16"	1 1/8"	1 1/16"	7/8"	3/4"	5/8"	7/16"	3/16"	0
0.6" Ø LOW RELAXATION	SPAN A																					
	GIRDERS 2, 3 & 4																					
	TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	0
CAMBER ( GIRDER ALONE IN PLACE )	↑	0	0.046	0.091	0.134	0.173	0.207	0.237	0.260	0.277	0.287	0.291	0.287	0.277	0.260	0.237	0.207	0.173	0.134	0.091	0.046	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.029	0.060	0.090	0.118	0.143	0.164	0.180	0.192	0.199	0.202	0.199	0.192	0.180	0.164	0.143	0.118	0.090	0.060	0.029	0
FINAL CAMBER	↑	0	3/16"	3/8"	1/2"	1 1/16"	3/4"	7/8"	1 5/16"	1"	1 1/16"	1 1/16"	1 1/16"	1"	1 5/16"	7/8"	3/4"	1 1/16"	1/2"	3/8"	3/16"	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-4447  
BURKE COUNTY  
STATION: 25+85.40 -L-  
15+67.23 -Y-

SHEET 2 OF 2



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
STANDARD  
PRESTRESSED CONCRETE GIRDER  
DETAILS  
EASTBOUND LANE

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S02-11
2			4			TOTAL SHEETS 28

ASSEMBLED BY : T.J. KIRSCHBAUM	DATE : 10/9/15
CHECKED BY : R.F. WERTMAN	DATE : 3/24/16
DRAWN BY : ELR 11/91	REV. 10/1/11 MAA/GM
CHECKED BY : GRP 11/91	REV. 1/15 MAA/TMG
	REV. 2/15 MAA/TMG

PLANS PREPARED BY:  
**Gannett Fleming**  
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Raleigh, NC 27607-3073  
(919) 420-7660  
INC Lic. No. F-0270

THESE PLANS HAVE BEEN PROPERLY EXAMINED BY THE UNDERSIGNED. I HAVE DETERMINED THAT THEY COMPLY WITH EXISTING NORTH CAROLINA CODES, AND HAVE BEEN PROPERLY ADAPTED FOR USE IN THIS AREA.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STR. NO. 2

STD. NO. PCG9