

EMBEDDED PLATE "B-1" DETAILS FOR 72" MODIFIED BULB TEES (2 REQUIRED PER GIRDER)

## **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 6,800 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  $\frac{1}{4}$ ".

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

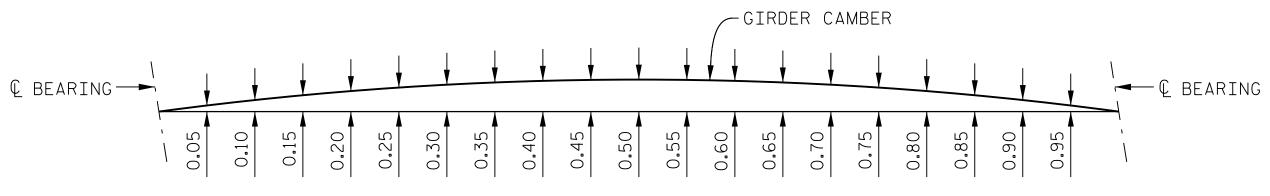
THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4,500 LBS.

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.

## CAMBER AND DEAD LOAD DEFLECTIONS SPAN A AND SPAN B GIRDERS 1 THRU 4 0.50 0.55 0.247 0.304 0.297 0.095 0.048 CAMBER (GIRDER ALONE IN PLACE) 0.048 0.095 0.181 0.214 0.268 0.289 0.268 0.214 0.000 0.297 0.247 DEFLECTION DUE TO SUPERIMPOSED D.L. \* 0.000 0.028 0.057 0.111 0.132 0.153 0.167 0.180 0.185 0.185 0.167 0.153 0.132 0.111 0.084 0.057 0.028 0.000 FINAL CAMBER

\* INCLUDES FUTURE WEARING SURFACE

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



GIRDER CAMBER AND DEFLECTIONS

SEAL 19299 E NGINEES **PARSONS** 

PLANS PREPARED BY

NC LICENSE No. F-0246

SHEET 3 OF 3 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROJECT NO. \_\_

STATION:

GUILFORD

U-2524BC

27 + 40.75 - L -

COUNTY

STANDARD

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD

3/6/2015

**DETAILS** 

SHEET No. **REVISIONS** S01-13

ASSEMBLED BY: K.E.LOFTON DATE: 12-14 T.M. HARRIS DATE: 1-15 CHECKED BY : MAA/GM DRAWN BY : ELR REV. I/I5 MAA/TM( CHECKED BY : GRP 11/91 MAA/TMG

K. E. LOFTON DATE : 12–14 T. M. HARRIS CHECKED BY \_ DATE : <u>1–15</u> DESIGN ENGINEER : \_\_\_\_T. M. HARRIS \_\_\_\_ DATE : \_\_\_2-15

STD. No. PCG9 STR. #1