

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.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW.

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 4000 PSI FOR SPANS A AND C, AND 7400 PSI FOR SPAN B.

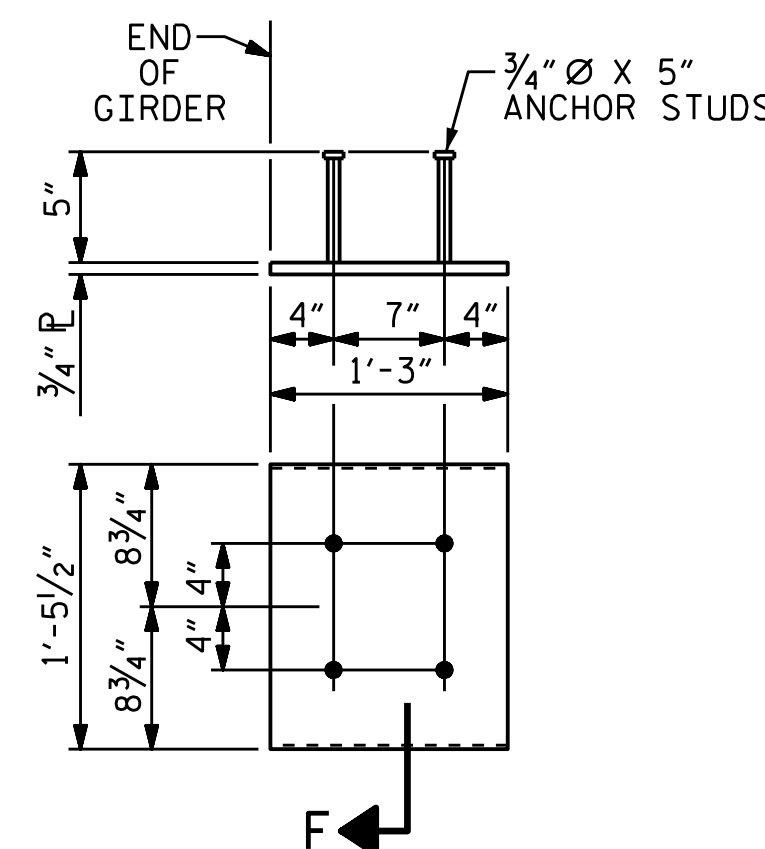
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

PRESTRESSED CONCRETE GIRDERS SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

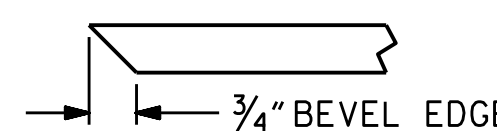
PRESTRESSED CONCRETE GIRDERS ARE DESIGNED FOR 0 PSI TENSION IN THE PRECOMPRESSED TENSILE ZONE UNDER ALL LOADING CONDITIONS.

| DEAD LOAD DEFLECTION TABLE FOR GIRDERS | | | | | | | | | | | | |
|--|---|---------------|-------|-------|-------|-------|--------|-------|-------|-------|-------|---|
| SPANS A & C | | | | | | | | | | | | |
| 0.6" Ø LOW RELAXATION | | GIRDERS 1 & 5 | | | | | | | | | | |
| TENTH POINTS | | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0 | 0.010 | 0.019 | 0.026 | 0.031 | 0.033 | 0.031 | 0.026 | 0.019 | 0.010 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0 | 0.004 | 0.008 | 0.010 | 0.012 | 0.013 | 0.012 | 0.010 | 0.008 | 0.004 | 0 |
| FINAL CAMBER | ↑ | 0 | 1/16" | 1/8" | 3/16" | 1/4" | 1/4" | 1/4" | 3/16" | 1/8" | 1/16" | 0 |
| SPANS A & C | | | | | | | | | | | | |
| 0.6" Ø LOW RELAXATION | | GIRDERS 2 - 4 | | | | | | | | | | |
| TENTH POINTS | | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0 | 0.010 | 0.019 | 0.026 | 0.031 | 0.033 | 0.031 | 0.026 | 0.019 | 0.010 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0 | 0.004 | 0.007 | 0.010 | 0.012 | 0.012 | 0.012 | 0.010 | 0.007 | 0.004 | 0 |
| FINAL CAMBER | ↑ | 0 | 1/16" | 1/8" | 3/16" | 1/4" | 1/4" | 1/4" | 3/16" | 1/8" | 1/16" | 0 |
| SPAN B | | | | | | | | | | | | |
| 0.6" Ø LOW RELAXATION | | GIRDERS 1 & 5 | | | | | | | | | | |
| TENTH POINTS | | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0 | 0.049 | 0.093 | 0.128 | 0.149 | 0.157 | 0.149 | 0.128 | 0.093 | 0.049 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0 | 0.026 | 0.048 | 0.066 | 0.078 | 0.081 | 0.078 | 0.066 | 0.048 | 0.026 | 0 |
| FINAL CAMBER | ↑ | 0 | 5/16" | 9/16" | 3/4" | 7/8" | 7/8" | 7/8" | 3/4" | 9/16" | 5/16" | 0 |
| SPAN B | | | | | | | | | | | | |
| 0.6" Ø LOW RELAXATION | | GIRDERS 2 - 4 | | | | | | | | | | |
| TENTH POINTS | | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0 | 0.049 | 0.093 | 0.128 | 0.149 | 0.157 | 0.149 | 0.128 | 0.093 | 0.049 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0 | 0.025 | 0.048 | 0.065 | 0.076 | 0.080 | 0.076 | 0.065 | 0.048 | 0.025 | 0 |
| FINAL CAMBER | ↑ | 0 | 5/16" | 9/16" | 3/4" | 7/8" | 15/16" | 7/8" | 3/4" | 9/16" | 5/16" | 0 |

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



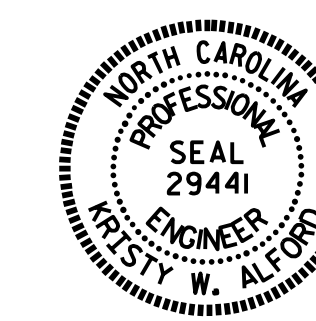
EMBEDDED PLATE "B-1" DETAILS
FOR AASHTO TYPE II GIRDER
(2 REQ'D PER GIRDER)



SECTION "F"
(SEE NOTES)

PROJECT NO. R-5021
BRUNSWICK COUNTY
STATION: 369+42.00 -L-

SHEET 3 OF 4



DocuSigned by:
1/23/2019

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS
(EBL)

| | |
|--------------------------|--------------------|
| ASSEMBLED BY : WFP / QTN | DATE : 8/14/18 |
| CHECKED BY : M. K. BEARD | DATE : 11/18 |
| DRAWN BY : ELR 11/91 | REV. 1/15 MAA/TMC |
| CHECKED BY : GRP 11/91 | REV. 2/15 MAA/TMC |
| | REV. 12/17 MAA/THC |

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

| REVISIONS | | | | | | SHEET NO. | |
|-----------|-----|-------|-----|-----|-------|-----------------|--|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S2-16 | |
| 1 | | | 3 | | | TOTAL SHEETS 38 | |
| 2 | | | 4 | | | | |