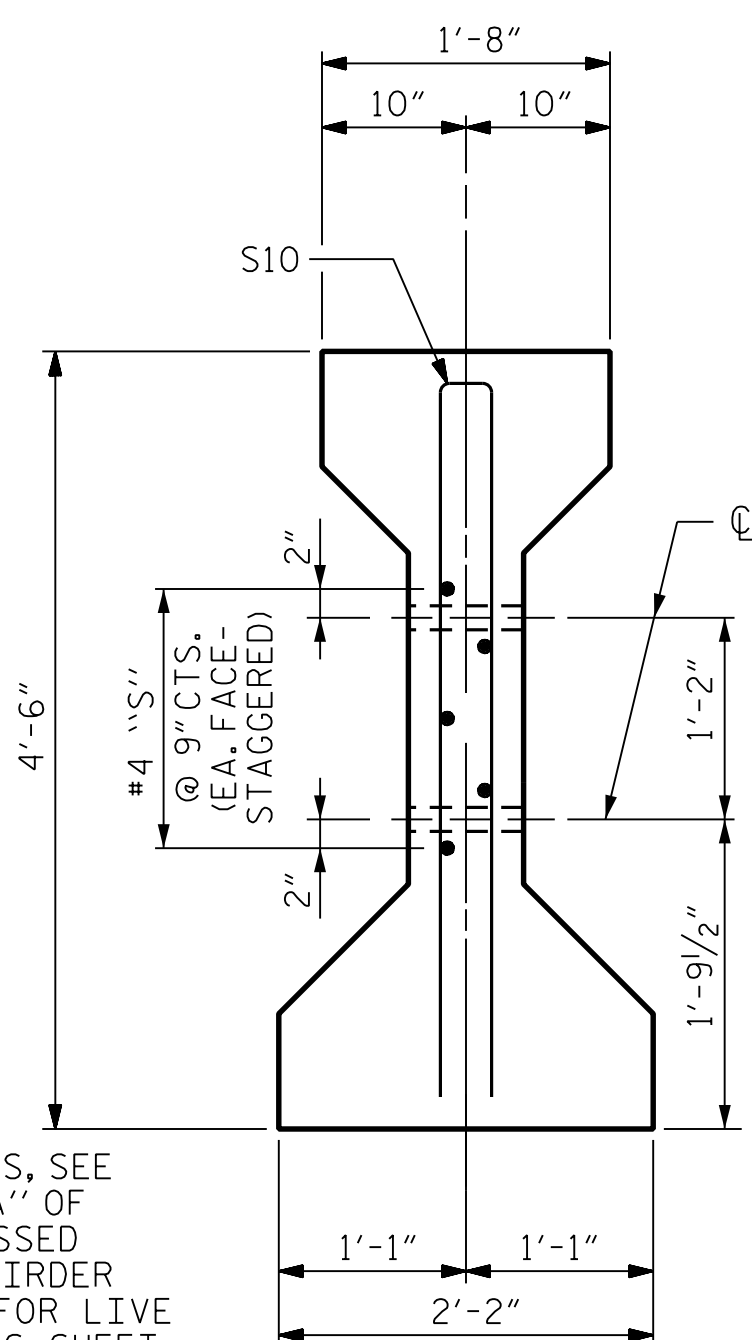
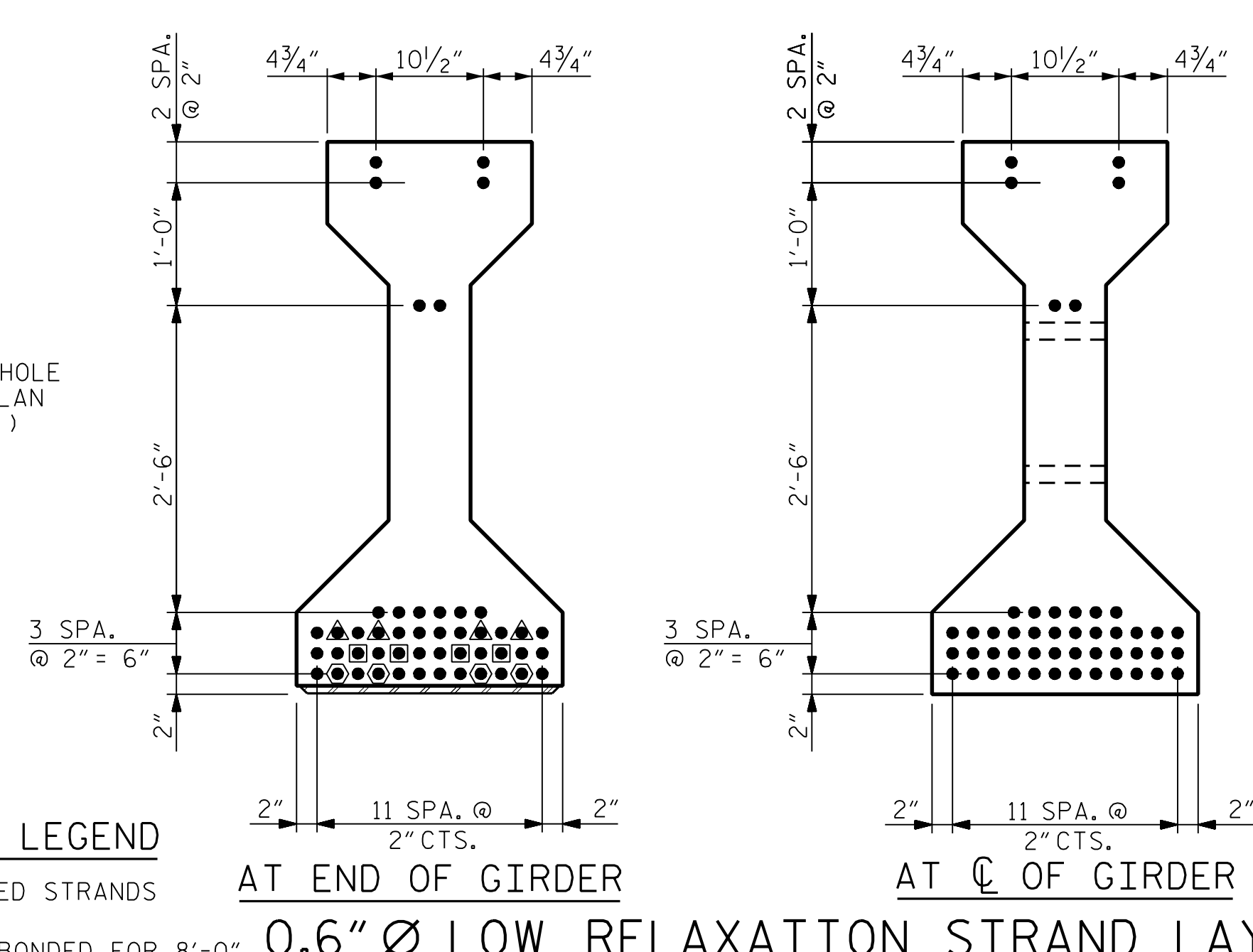


SECTION A-A

SECTION B-B



SECTION C-C
(S1 BARS NOT SHOWN)

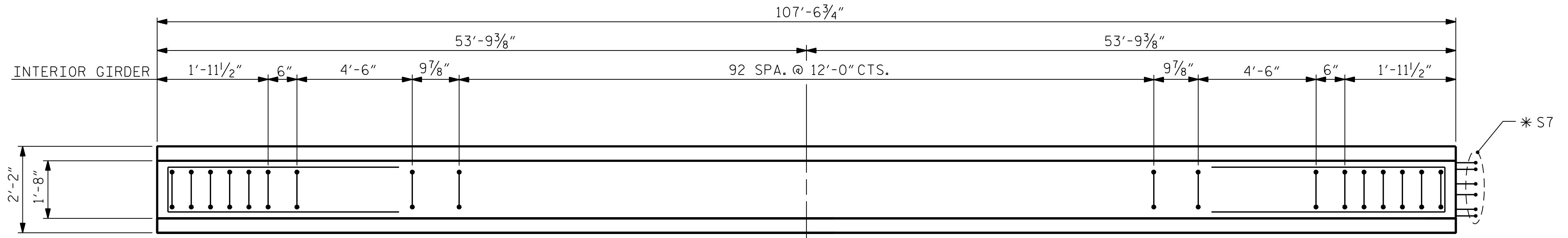


0.6" Ø LOW RELAXATION STRAND LAYOUT

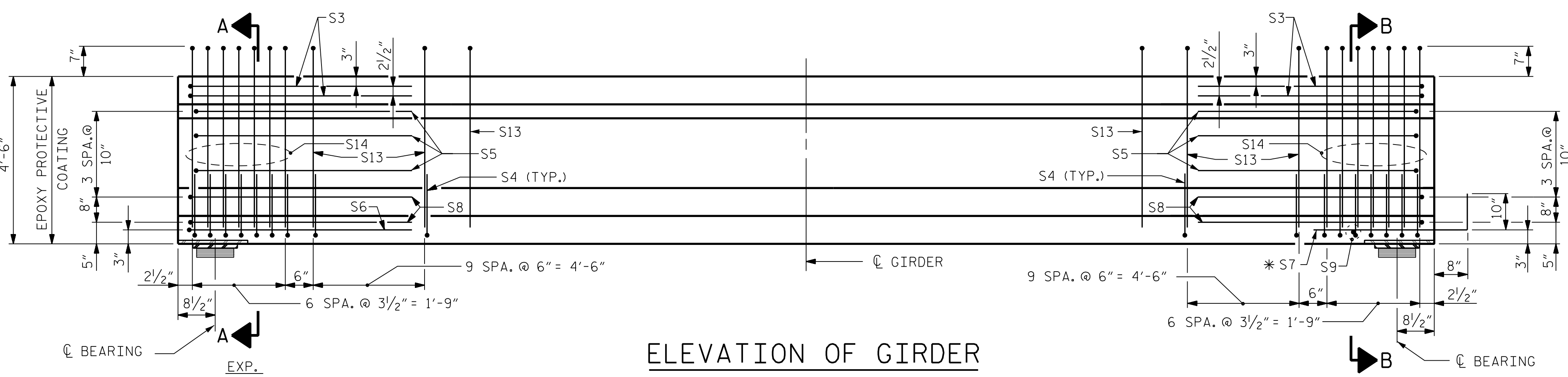
DEBONDING LEGEND

- FULLY BONDED STRANDS
- ▲ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 30'-0" FROM END OF GIRDER

* FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET

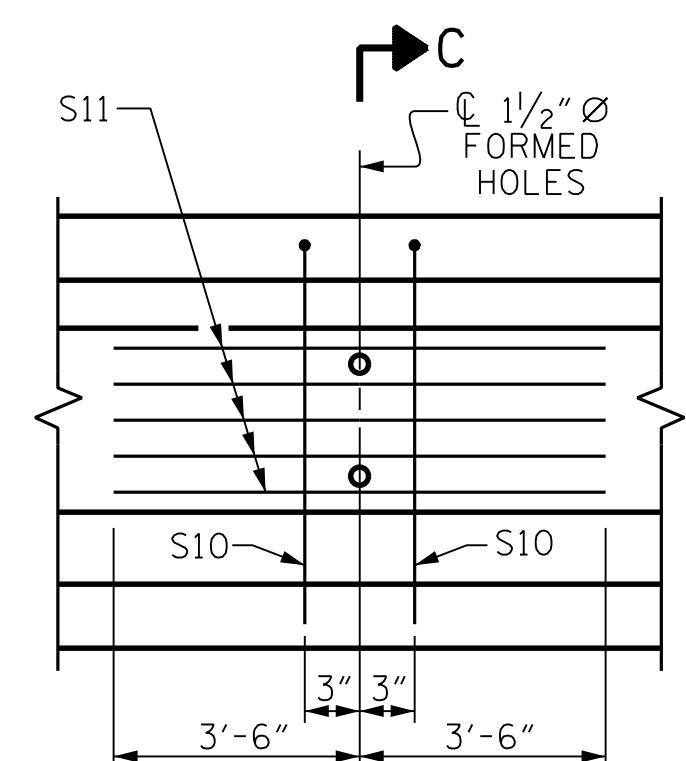


PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)
(SPAN A SHOWN, SPAN B SIMILAR BY ROTATION)



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDERS 6 & 7

0.6" Ø L. R. GRADE 270 STRANDS

| AREA (SQUARE INCHES) | ULTIMATE STRENGTH (LBS. PER STRAND) | APPLIED PRESTRESS (LBS. PER STRAND) |
|-------------------------|--|--|
| 0.217 | 58,600 | 43,950 |

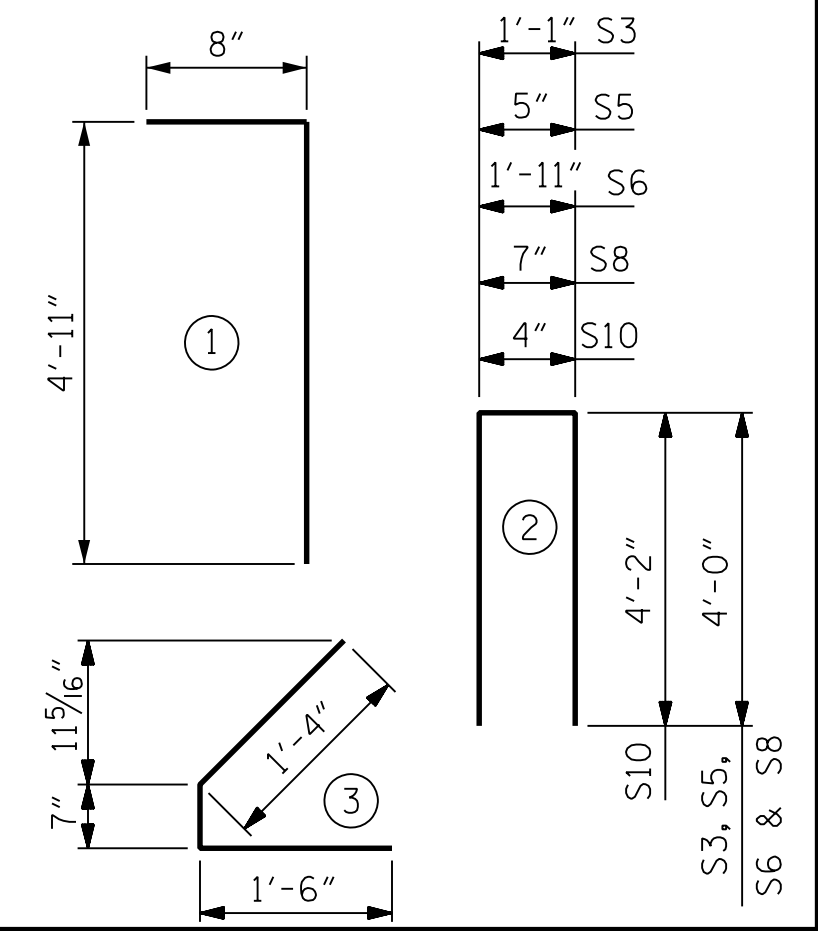
REINFORCING STEEL FOR ONE GIRDER

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|-----|--------|------|------|--------|--------|
| S3 | 4 | #4 | 2 | 9'-1" | 24 |
| S4 | 68 | #4 | 3 | 3'-5" | 155 |
| S5 | 6 | #4 | 2 | 8'-5" | 34 |
| S6 | 1 | #4 | 2 | 9'-11" | 7 |
| *S7 | 6 | #5 | STR. | 3'-8" | 23 |
| S8 | 4 | #4 | 2 | 8'-7" | 23 |
| S9 | 1 | #3 | STR. | 1'-10" | 1 |
| S10 | 4 | #5 | 2 | 8'-8" | 36 |
| S11 | 10 | #4 | STR. | 7'-0" | 47 |
| S13 | 226 | #4 | 1 | 5'-7" | 843 |
| S14 | 28 | #6 | 1 | 5'-7" | 235 |

* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

| | REINFORCING STEEL | 7,500 PSI CONCRETE | 0.6" Ø L. R. STRANDS |
|---------------|-------------------|--------------------|----------------------|
| | LB. | C.Y. | No. |
| GIRDERS 6 & 7 | 1,428 | 21.8 | 48 |

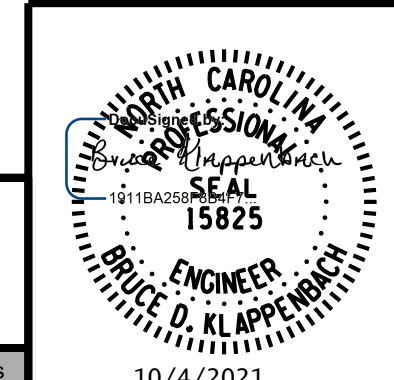
GIRDERS REQUIRED

| NUMBER | LENGTH | TOTAL LENGTH |
|--------|-------------|--------------|
| 4 | 107'-6 3/4" | 430'-3" |

PROJECT NO. I-5972
JOHNSTON COUNTY
 STATION: 36+93.50 -Y1-

SHEET 2 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
 AASHTO TYPE IV
 PRESTRESSED CONCRETE GIRDER
 CONTINUOUS FOR LIVE LOAD
 GIRDERS 6 & 7



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 Engineers | Construction Managers | Planners | Scientists
 www.rkk.com

10/4/2021
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-16 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 54 |

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DRAWN BY: B. A. HAAG DATE: JUN 2021
 CHECKED BY: B. D. KLAPPENBACH DATE: JUN 2021
 DESIGN ENGINEER OF RECORD: B. D. KLAPPENBACH DATE: JUN 2021