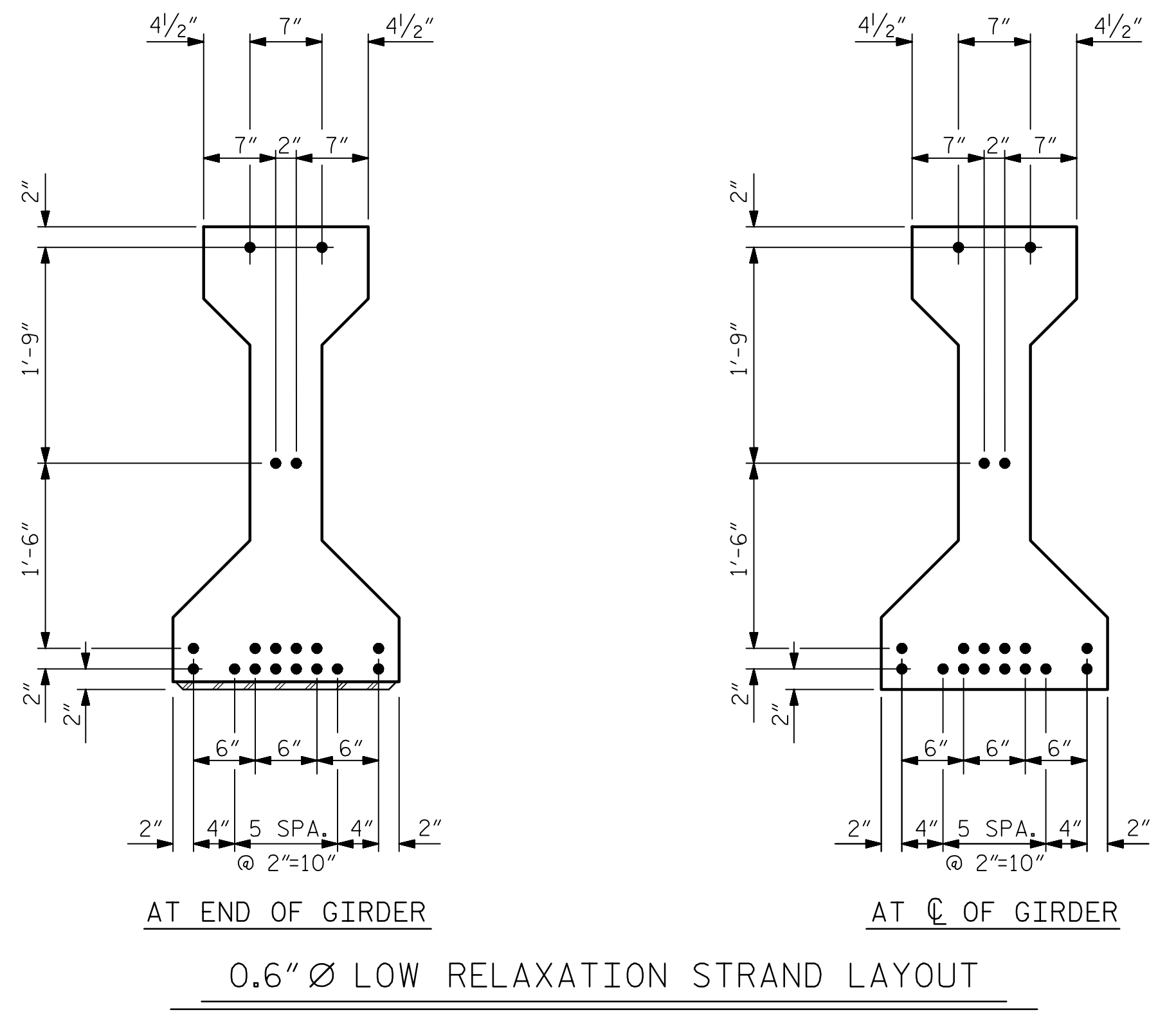
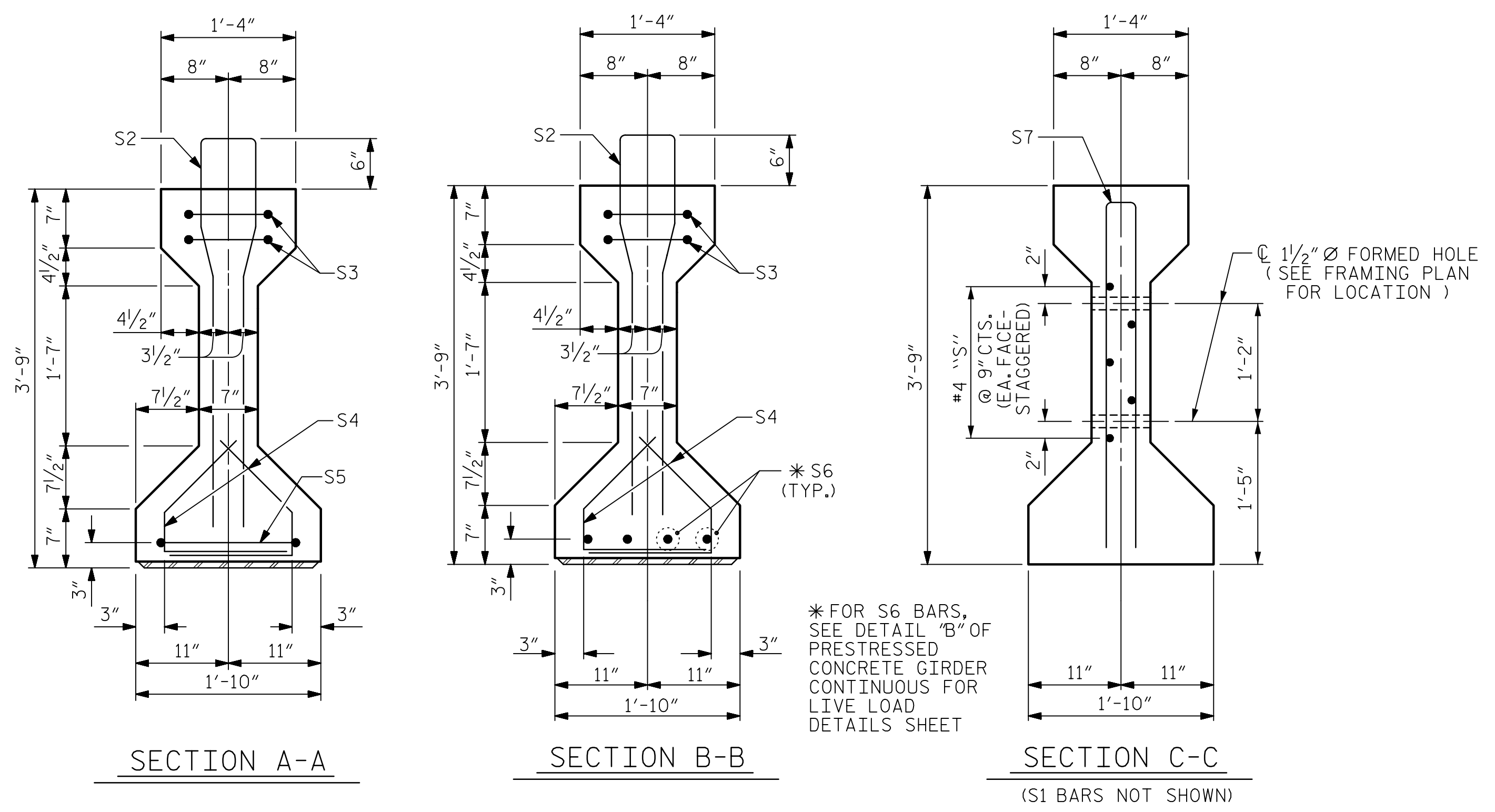


DATE: 2/9/2023
TIME: 12:37:28 PM

USER: catter, pw\jmorrisson-pw.bentley.com AECOM_DS21.NA.2020\Documents\60609754-U-5748 Ligon Mill\900-CAD GIS\910-CAD\70-NCDOT-TIP\Structures\04 Drawings\401_041_U-5748_SMU.G3.S1-20_91021



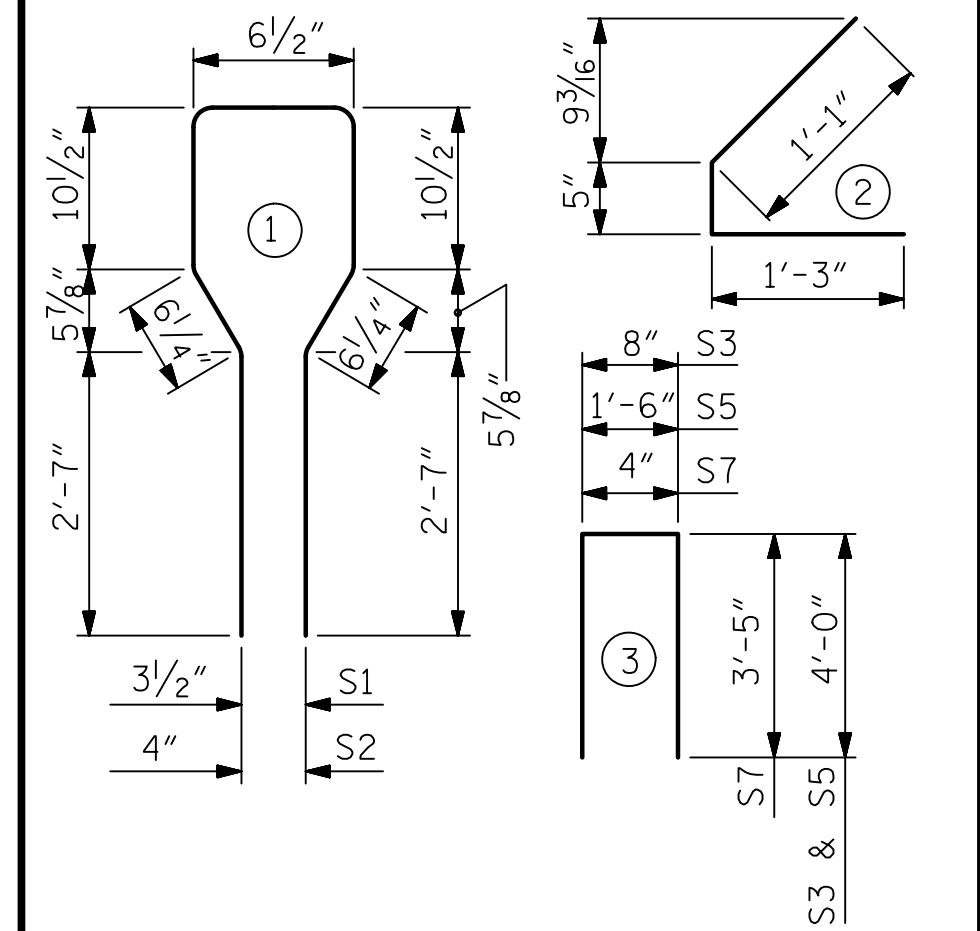
| 0.6" Ø L. R. GRADE 270 STRANDS | | |
|--------------------------------|--|--|
| AREA (SQUARE INCHES) | ULTIMATE STRENGTH (LBS. PER STRAND) | APPLIED PRESTRESS (LBS. PER STRAND) |
| 0.217 | 58,600 | 43,950 |

| REINFORCING STEEL FOR ONE GIRDER | | | | | |
|----------------------------------|--------|------|------|--------|--------|
| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
| S1 | 60 | #4 | 1 | 8'-6" | 341 |
| S2 | 14 | #6 | 1 | 8'-6" | 179 |
| S3 | 4 | #4 | 3 | 8'-8" | 23 |
| S4 | 60 | #4 | 2 | 2'-9" | 110 |
| S5 | 1 | #4 | 3 | 9'-6" | 6 |
| * S6 | 4 | #5 | STR | 3'-8" | 15 |
| S7 | 2 | #5 | 3 | 7'-2" | 15 |
| S8 | 5 | #4 | STR | 7'-0" | 23 |

* NOTE: S6 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

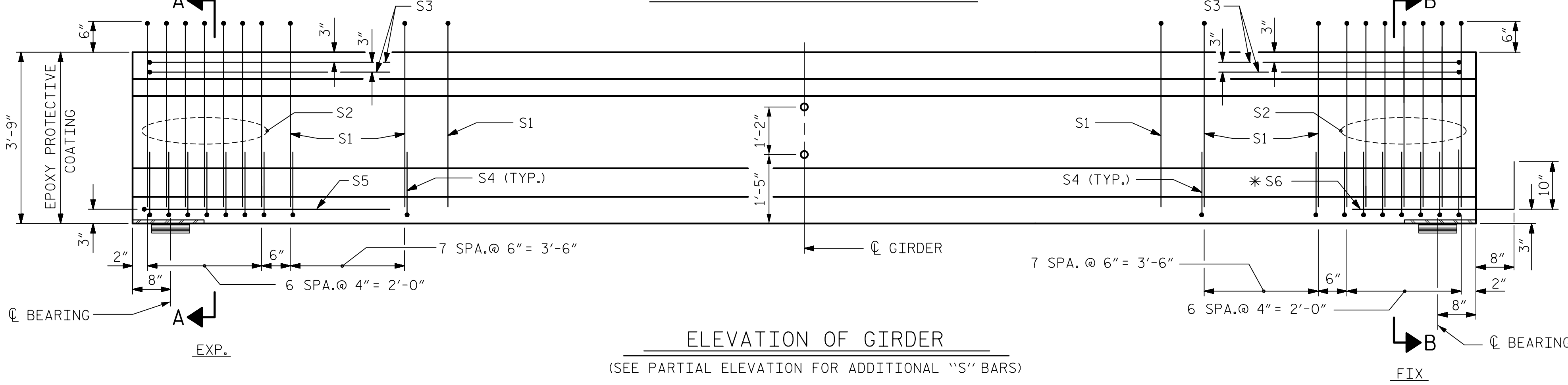
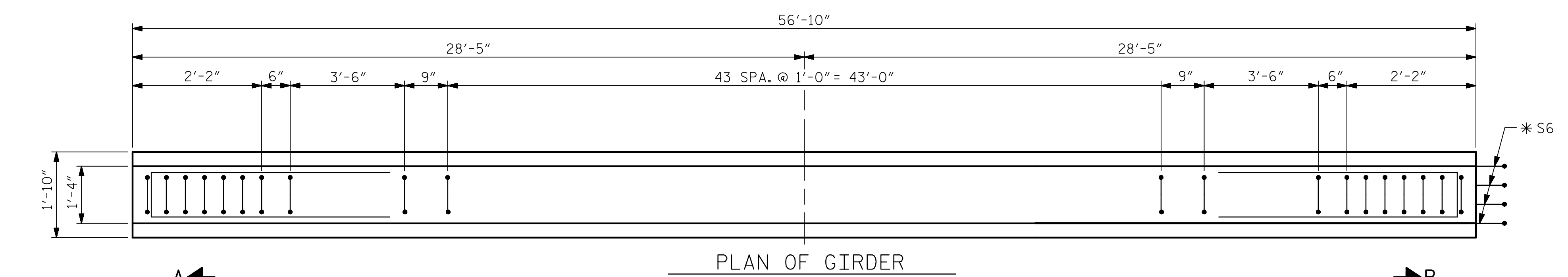
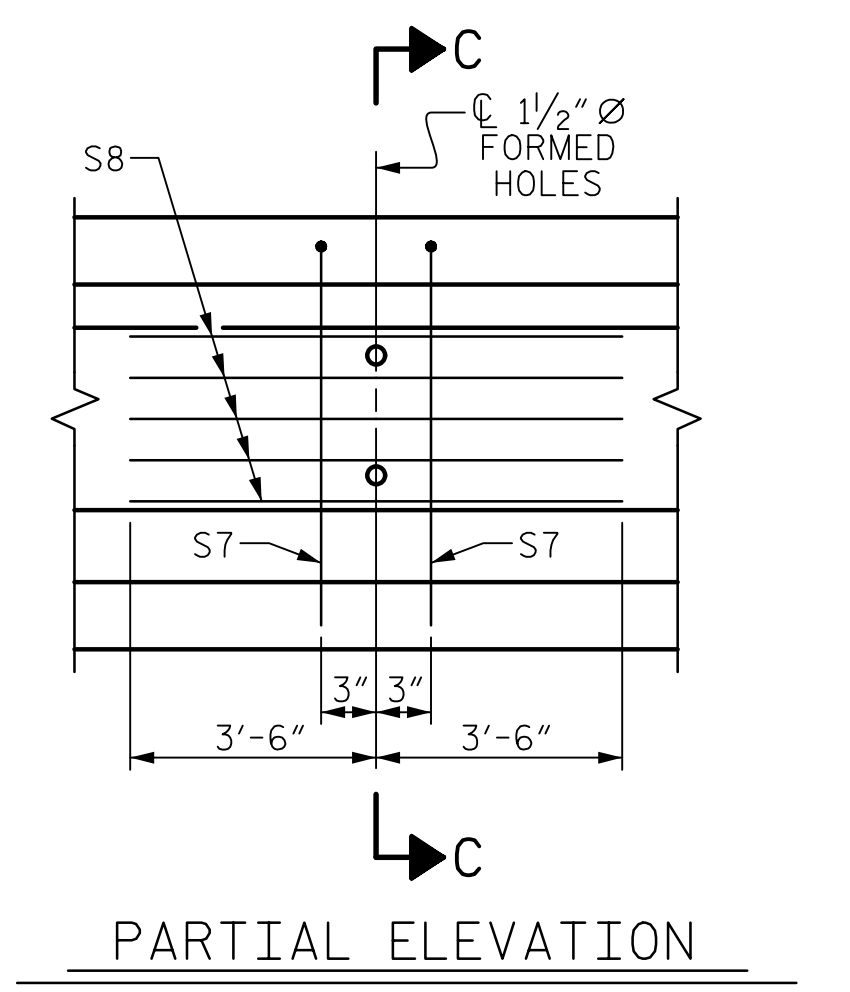
BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



| QUANTITIES FOR ONE GIRDER | | | |
|---------------------------|--------------------------|----------------------------|-----------------------------|
| | REINFORCING STEEL LB. | 6,000 PSI CONCRETE C.Y. | 0.6" Ø L. R. STRANDS No. |
| GIRDER 1, 2 & 3 | 712 | 8.2 | 18 |

| GIRDERS REQUIRED | | |
|------------------|---------|--------------|
| NUMBER | LENGTH | TOTAL LENGTH |
| 3 | 56'-10" | 170'-6" |



PROJECT NO. U-5748
 WAKE COUNTY
 STATION: 24+88.00 -L-

SHEET 3 OF 5

AECOM
AECOM TECHNICAL SERVICES OF NC, INC.
 5438 WADE PARK BOULEVARD, SUITE 200
 RALEIGH, NC 27607
 (919) 854-6200 www.aecom.com
 AECOM License No. F-0342

JOHN C. MORRISON
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 030474

2/10/2023

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD
 AASHTO TYPE III
 PRESTRESSED CONCRETE GIRDER
 CONTINUOUS FOR LIVE LOAD
 SPAN C

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S1-20 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 119 |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| | |
|----------------------------|---------------------|
| ASSEMBLED BY : M. CATER | DATE : 10/2020 |
| CHECKED BY : J.C. MORRISON | DATE : 05/2021 |
| DRAWN BY : ELR 8/91 | REV. 10/1/11 MAA/GM |
| CHECKED BY : GRP 8/91 | REV. 1/15 MAA/TMG |
| | REV. 12/17 MAA/THC |