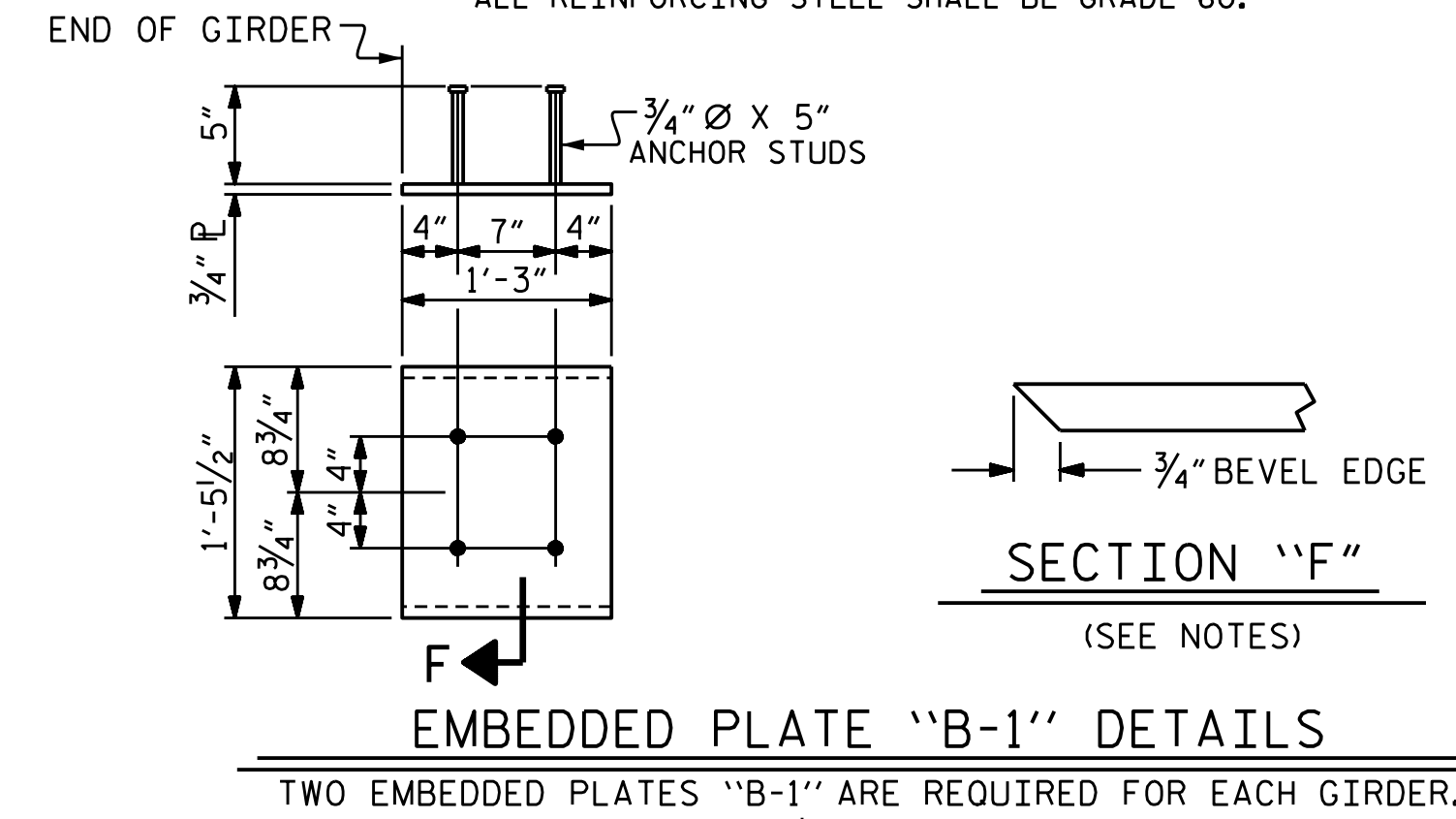


12-0.6" Ø LOW RELAXATION STRAND LAYOUT
• FULLY BONDED STRANDS



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.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES AS SHOWN.

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.

ALL PRESTRESSED 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.

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 SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.

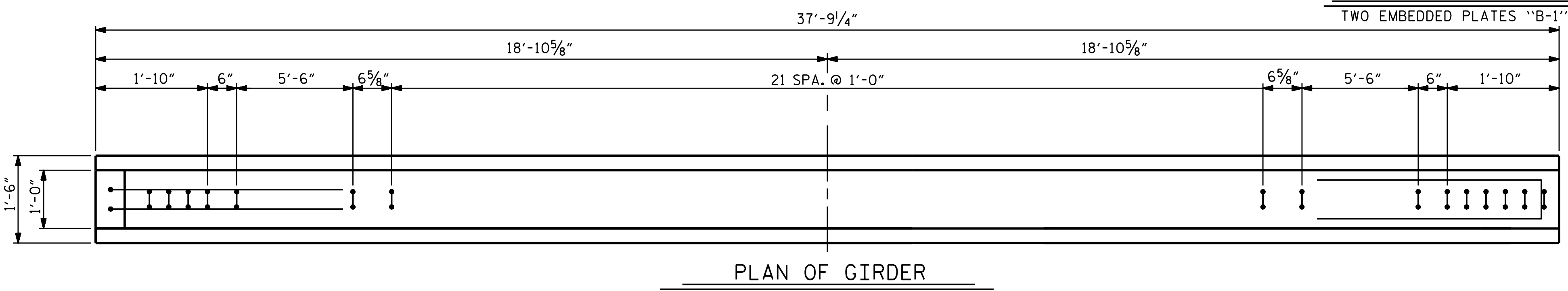
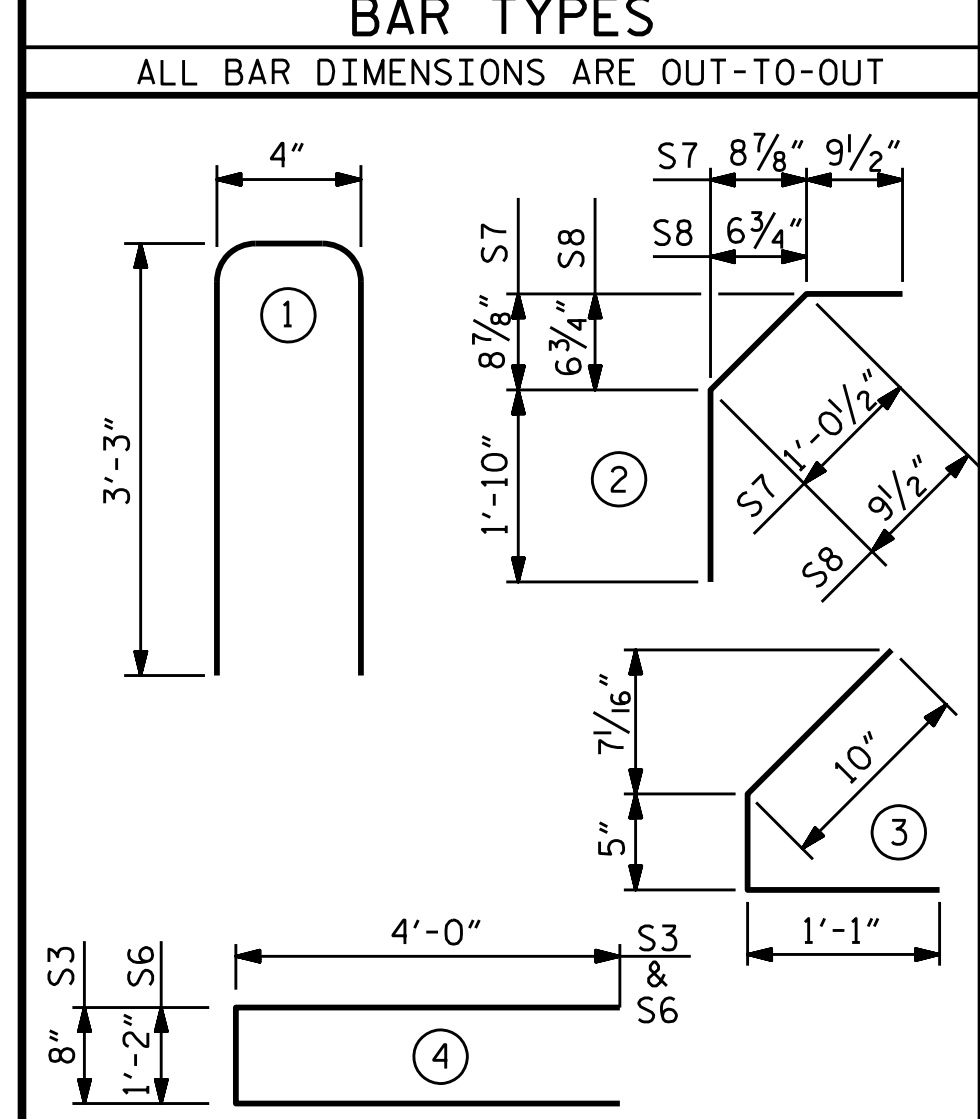
ALL REINFORCING STEEL SHALL BE GRADE 60.

0.6" Ø L. R. GRADE 270 STRANDS

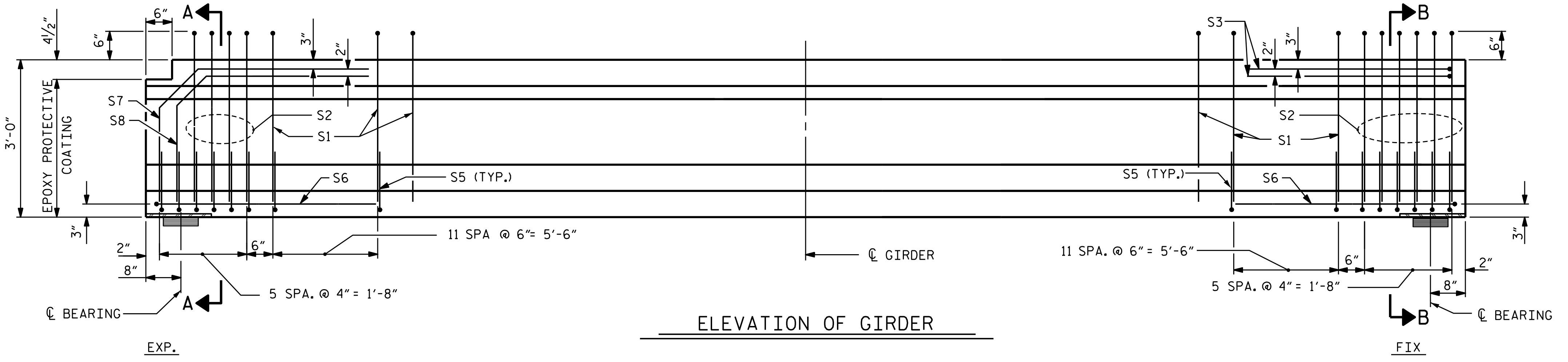
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	46	#4	1	6'-10"	210
S2	10	#5	1	6'-10"	71
S3	2	#4	4	8'-8"	12
S5	72	#4	3	2'-4"	112
S6	2	#4	4	9'-2"	12
S7	2	#5	2	3'-8"	8
S8	2	#5	2	3'-5"	7



PLAN OF GIRDER



ELEVATION OF GIRDER

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL LB.	5000 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
D1, D2	432	3.58	12

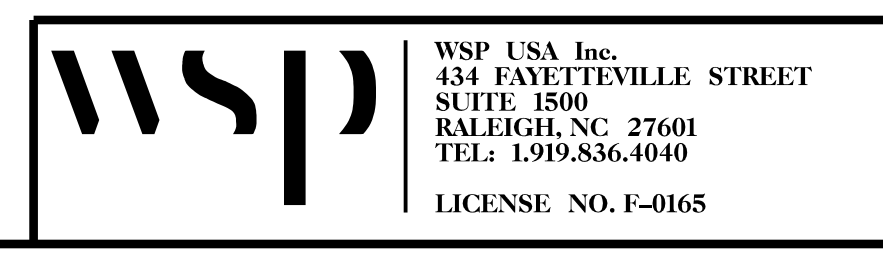
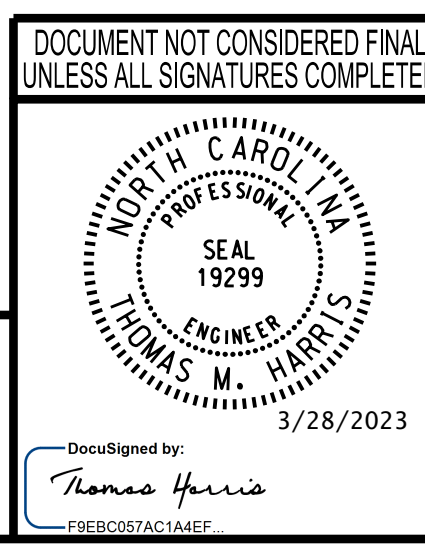
GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
2	37.8	75.5

PROJECT NO. U-4424
EDGEcombe COUNTY
 STATION: 66+24.84 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD
 AASHTO TYPE II
 PRESTRESSED CONCRETE GIRDER
 SPAN D



REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. **S-17**
 TOTAL SHEETS **37**

3/28/2023
 J:\188771-06_NCDOT_NC_111U-4424\Structures\Dr-off-fig\DGNS\401_035_U4424_SML_C3_017.dgn

DRAWN BY: JMB 12/87	REV. 1/15	MAA/TMG
CHECKED BY: ARB 12/87	REV. 2/15	MAA/TMG
	REV. 12/17	MAA/THC
DESIGNED BY: J. WHEATLEY	DATE: MAR 2023	
DRAWN BY: J. WHEATLEY	DATE: MAR 2023	
CHECKED BY: T. KIRSCHBAUM	DATE: MAR 2023	
DESIGN ENGINEER OF RECORD: T. HARRIS	DATE: MAR 2023	