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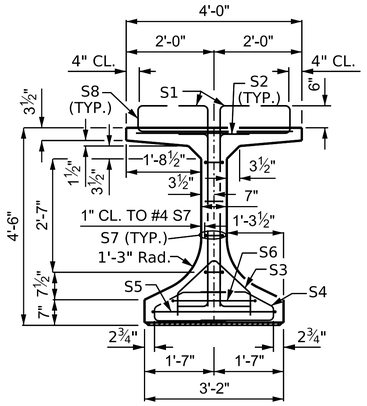
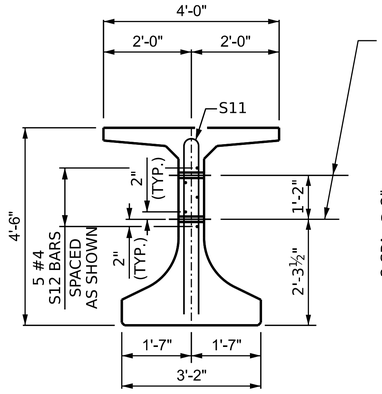
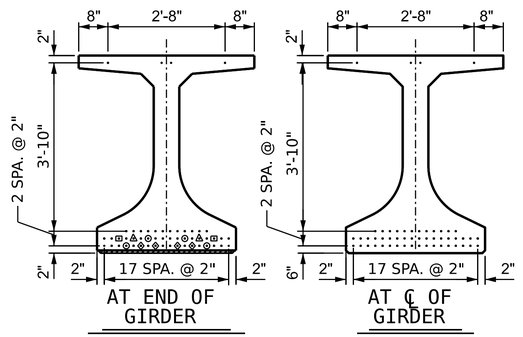


SECTION A-A



SECTION B-B

(S8, S9 AND S10 BARS NOT SHOWN)

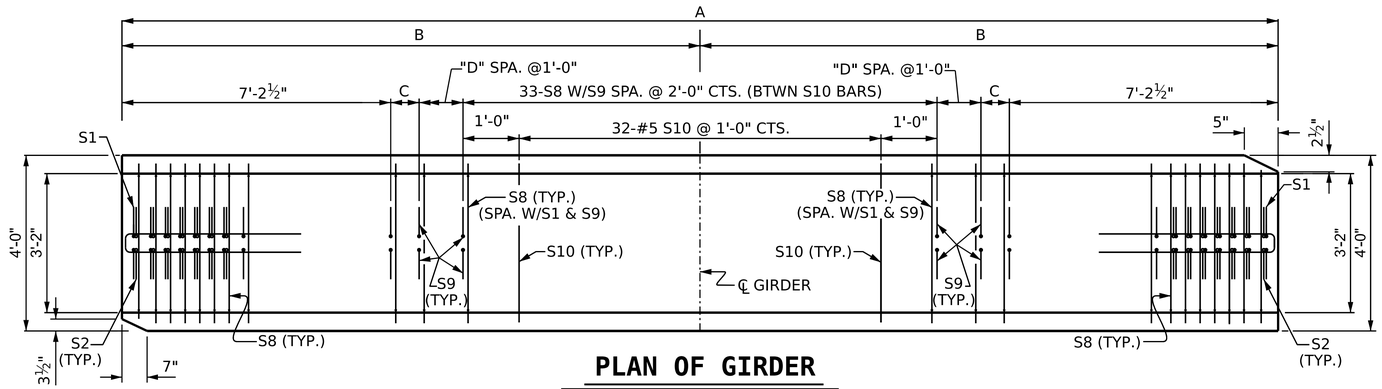


0.6" ∅ LOW RELAXATION STRAND LAYOUT

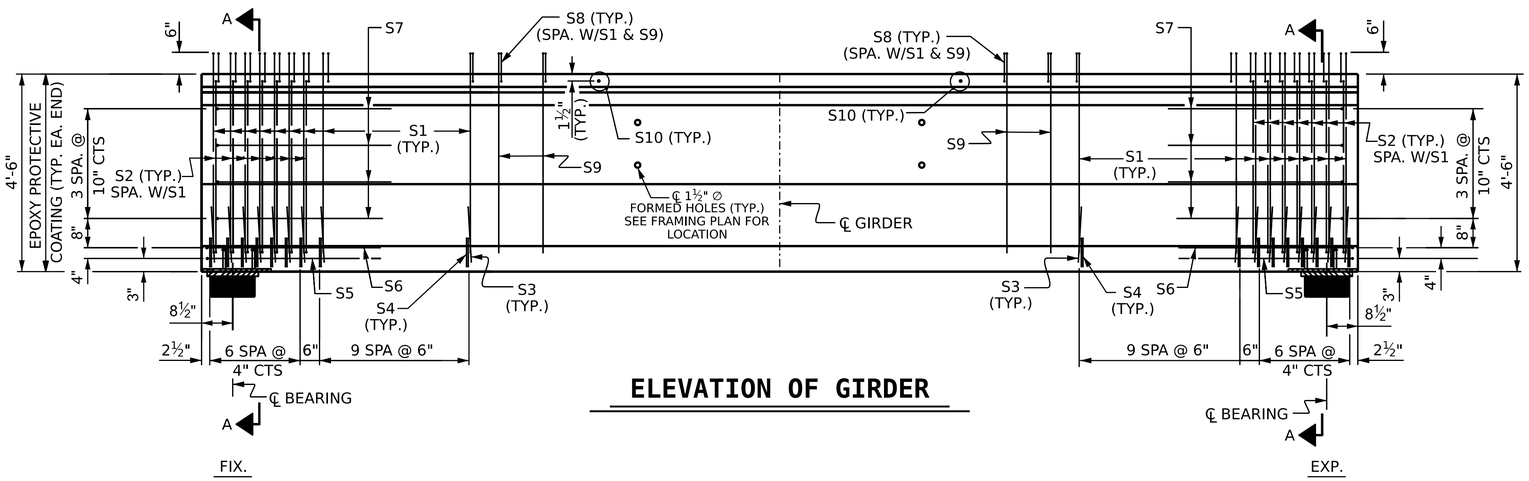
DEBONDING LEGEND

- FULLY BONDED STRANDS
- STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 6'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 24'-0" FROM END OF GIRDER

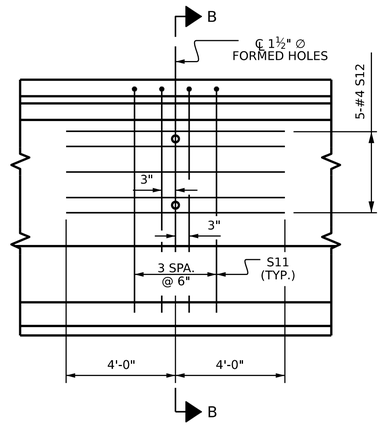
NOTE:
CUT S8 BARS TO PROVIDE ADEQUATE CLEAR COVER



PLAN OF GIRDER



ELEVATION OF GIRDER



PARTIAL ELEVATION

SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. A4 & A5

	A	B	C	D
GIRDER 4	120'-7¼"	60'-3⅝"	1'-1⅛"	20
GIRDER 5	122'-11¾"	61'-5⅞"	1'-3½"	21

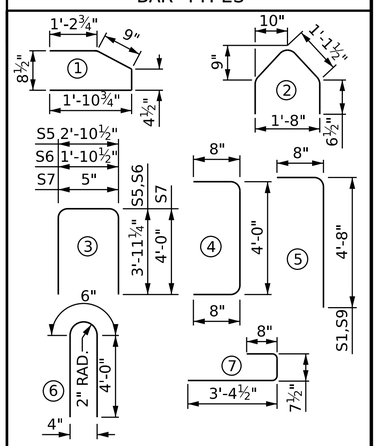
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

0.6"⌀ 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 GDR					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	68	#5	5	5'-4"	378
S2	28	#5	4	5'-4"	156
S3	34	#3	2	3'-4"	43
S4	68	#3	1	4'-3"	109
S5	2	#5	3	10'-9"	23
S6	2	#5	3	9'-9"	21
S7	8	#4	3	8'-5"	45
S8	214	#5	7	4'-8"	1042
S8	218	#5	7	4'-8"	1062
S9	146	#5	5	5'-4"	813
S9	150	#5	5	5'-4"	835
S10	32	#5	STR	3'-8"	123
S11	16	#5	6	8'-6"	142
S12	20	#4	STR	8'-0"	107

GIRDER 4
GIRDER 5
GIRDER 4
GIRDER 5

BAR TYPES



ALL BAR DIMENSIONS ARE OUT-TO-OUT

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL	8500 PSI CONCRETE	0.6" ∅ L.R. STRANDS
	LB.	C.Y.	No.
GIRDER 5	3044	29.5	52
GIRDER 4	3002	28.9	52

GIRDERS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH
2	SEE TABLE	243'-7"

PROJECT NO. B-3186 / B-5898
HAYWOOD COUNTY
STATION: 32+21.34 -L_LT-

SHEET 2 OF 4

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

NORTH CAROLINA PROFESSIONAL SEAL 041343 ENGINEER GREGORY R. COLS
DocuSigned by: 180CFCC2...
10/18/2023

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

54" FLORIDA I BEAM (FIB)

PRESTRESSED CONCRETE GIRDER

GIRDER A4 AND A5

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-17
1			3			TOTAL SHEETS
2			4			43

DRAWN BY : S.NATARAJAN DATE : 02/2023
CHECKED BY : J.C.MORRISON DATE : 02/2023
DESIGN ENGINEER OF RECORD: G.R. COLS DATE : 02/2023

8/18/2023
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