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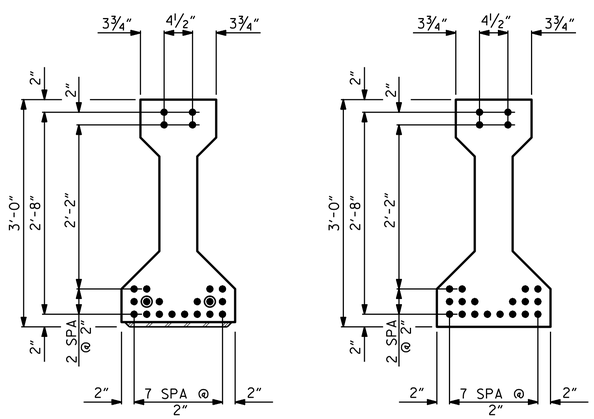
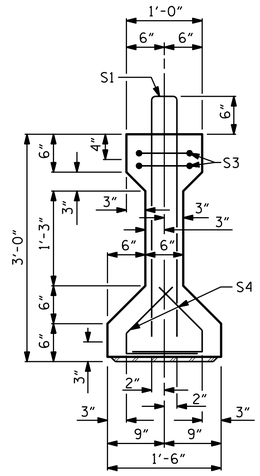


AT END OF GIRDER

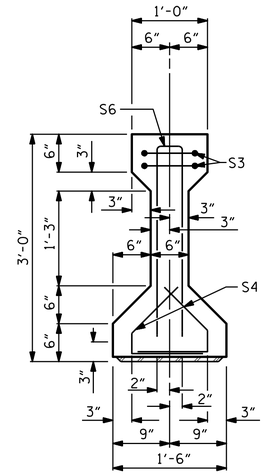
AT ℄ OF GIRDER

0.6"Ø LOW RELAXATION STRAND LAYOUT

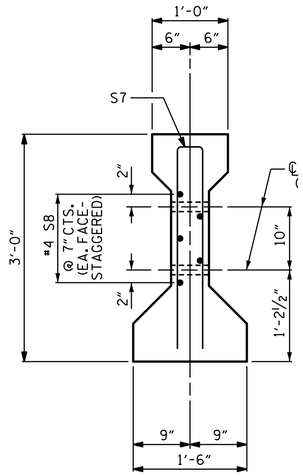
◉ STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER



SECTION A-A

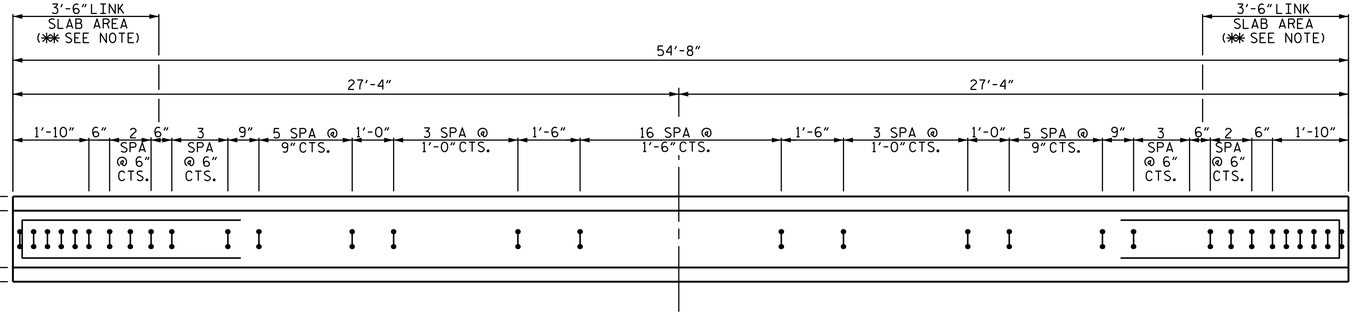


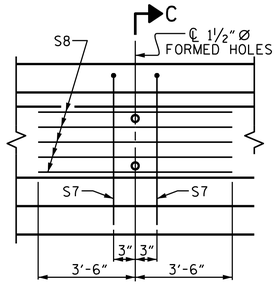
SECTION B-B



SECTION C-C

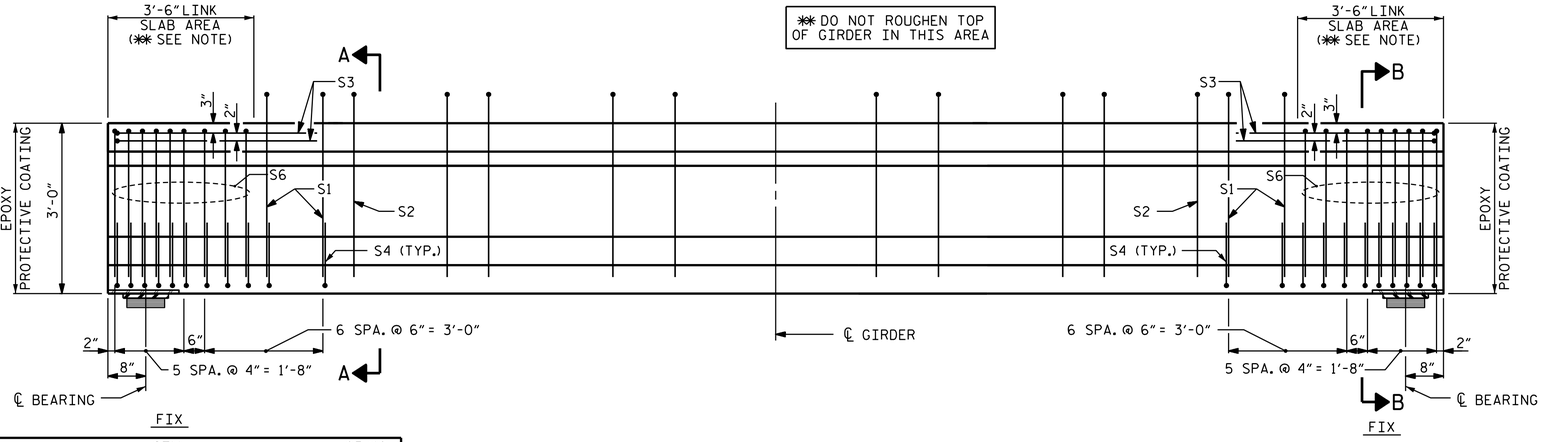
(S2 BARS NOT SHOWN)





PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL.



0.6" Ø L. R. GRADE 270 STRANDS

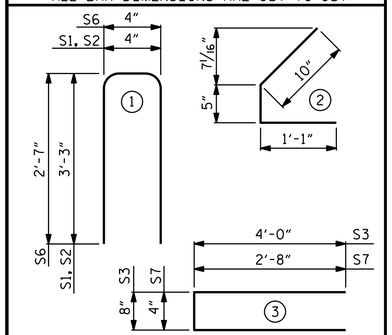
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	8	#5	1	6'-10"	57
S2	37	#4	1	6'-10"	169
S3	4	#4	3	8'-8"	23
S4	52	#4	2	2'-4"	81
S6	18	#5	1	5'-6"	103
S7	2	#5	3	5'-8"	12
S8	5	#4	STR	7'-0"	23

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL LB.	7500 PSI CONCRETE C.Y.	0.6"Ø L.R. STRANDS No.
GIRDERS 1-5	468	5.2	22

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	54'-8"	273'-4"

DRAWN BY :	STM	DATE :	05/19
CHECKED BY :	MGC	DATE :	11/19
DESIGN ENGINEER OF RECORD:	TBE	DATE :	03/20

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

10/5/2020
X:\NCDOT\B-4414\Structures\Final Plans\Final DGNs\401_025_B-4414_SMU_G2_060043.dgn
Users\masinople

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL C. CHEEK, JR.
DocuSigned by: Marshall C. Cheek, Jr. 5FBCC2F3A4DC413...
2/8/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH STREET
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

PROJECT NO. B-4414

BEAUFORT COUNTY

STATION: 24+78.90 -L-

SHEET 2 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE II PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD SPAN B

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-12
1			3			TOTAL SHEETS
2			4			33

STD. NO. PCG4 (Sht. 2)