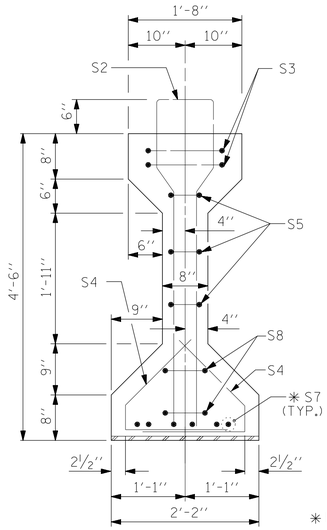
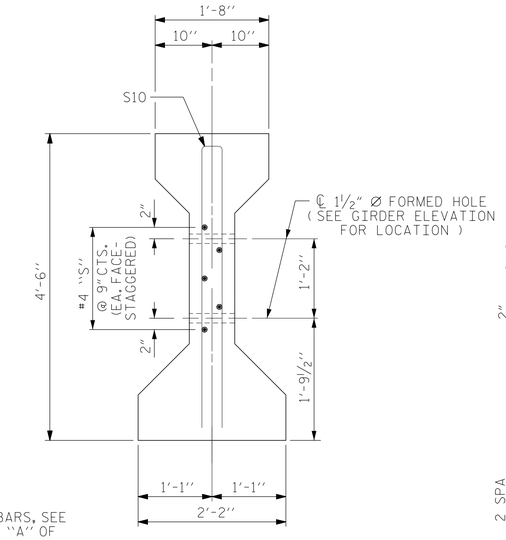


SECTION B-B

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

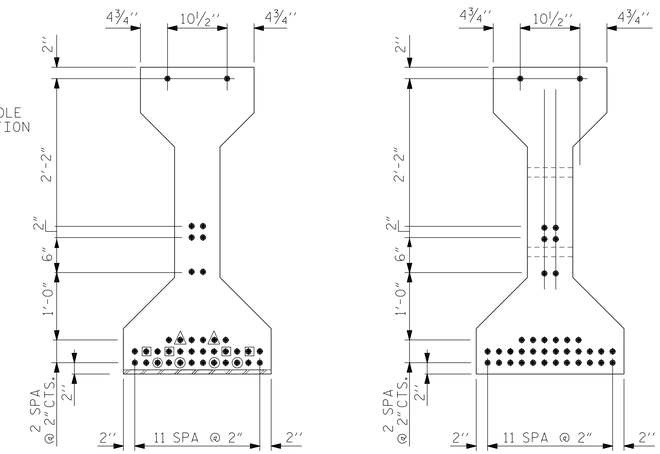


SECTION C-C

(S1 BARS NOT SHOWN)

DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ○ STRANDS DEBONDED FOR 12'-0" FROM GIRDER END
- □ STRANDS DEBONDED FOR 8'-0" FROM GIRDER END
- △ STRANDS DEBONDED FOR 2'-0" FROM GIRDER END



AT END OF GIRDER

AT ℄ OF GIRDER

0.6" Ø LOW RELAXATION STRAND LAYOUT

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

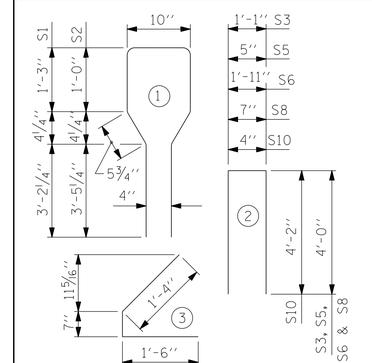
REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
B1	S1	88	#5	1	10'-8"	979
B2,B3	S1	86	#5	1	10'-8"	957
B4	S1	84	#5	1	10'-8"	935
	S2	12	#6	1	10'-8"	192
	S3	4	#4	2	9'-1"	24
B1	S4	92	#4	3	3'-5"	210
B2,B3	S4	88	#4	3	3'-5"	201
B4	S4	84	#4	3	3'-5"	192
	S5	6	#4	2	8'-5"	34
	* S7	12	#5	STR	3'-8"	46
	S8	4	#4	2	8'-7"	23
	S9	2	#3	STR	1'-10"	1
EXTERIOR GDR.	S10	2	#5	2	8'-8"	18
INTERIOR GDR.	S10	4	#5	2	8'-8"	36
EXTERIOR GDR.	S11	5	#4	STR	7'-0"	23
INTERIOR GDR.	S11	10	#4	STR	7'-0"	47

* 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

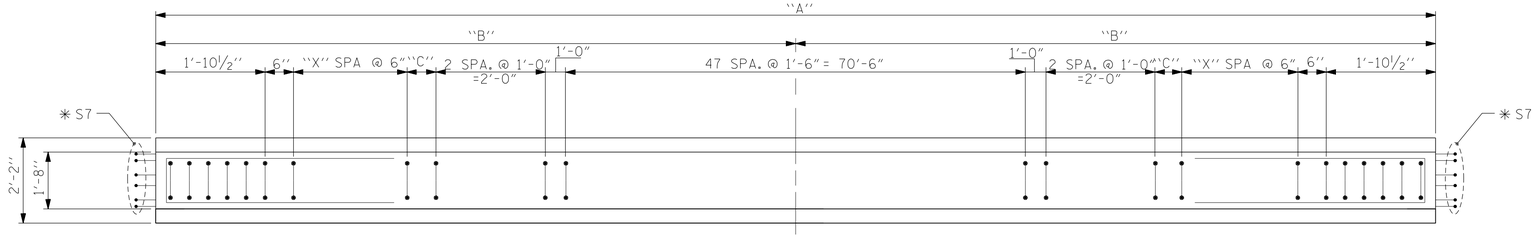
	REINFORCING STEEL	8000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
B1	1550	20.1	38
B2	1561	19.9	38
B3	1561	19.8	38
B4	1488	19.6	38

GIRDERS REQUIRED

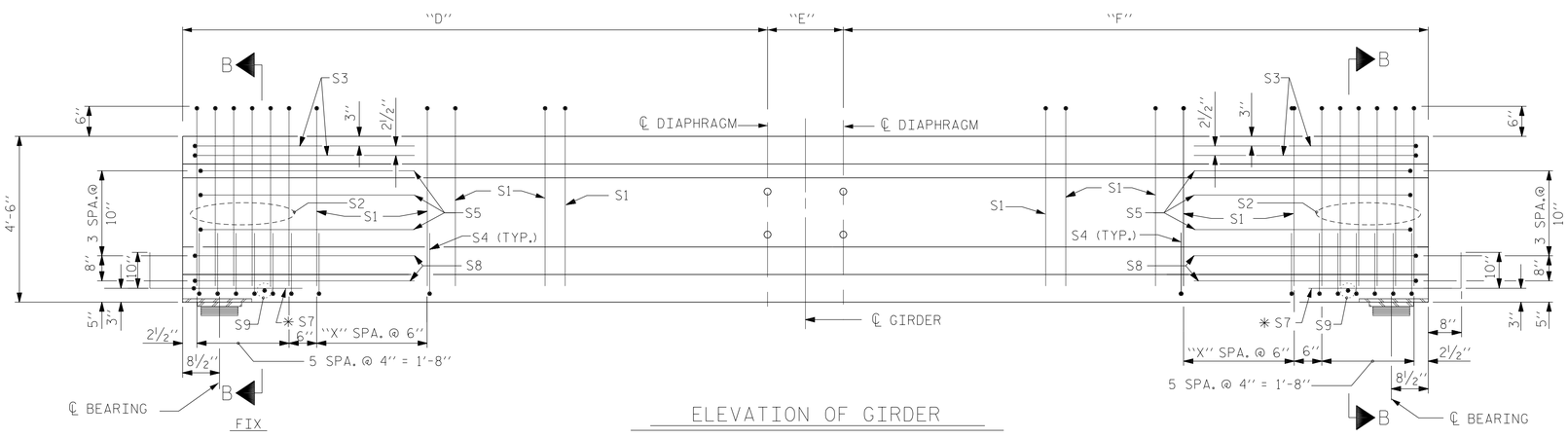
NUMBER	LENGTH	TOTAL LENGTH
1	98'-11¾"	98'-11¾"
1	98'-1⅞"	98'-1⅞"
1	97-4½"	97-4½"
1	96'-7½"	96'-7½"
SPAN B TOTAL		391'-1⅝"

DIMENSIONS

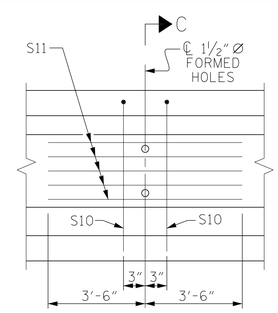
BEAM	B1	B2	B3	B4
"A"	98'-11¾"	98'-1⅞"	97-4½"	96'-7½"
"B"	49'-5⅞"	49'-0 15⁄16"	48'-8¼"	48'-3¾"
"C"	10⅜"	11 7⁄16"	6¾"	8¼"
"D"	56'-2 5⁄16"	42'-4½"	42'-0 15⁄16"	41'-9½"
"E"	0	13'-3 13⁄16"	13'-1 9⁄16"	0
"F"	42'-9 7⁄16"	42'-5 9⁄16"	42'-2"	54'-10"
"X"	16	15	15	14



PLAN OF GIRDER



ELEVATION OF GIRDER



PARTIAL ELEVATION

PROJECT NO. I-0914BA

VANCE COUNTY

STATION: 21+34.80-Y5SBL-POC

SHEET 2 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
SPAN "B"

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DocuSigned by: David Ruggles 11/14/2014
C462768DF412422...

DWG. 15 OF 40

STEWART
Firm License No. C-1051
421 Fayetteville St,
Suite 400
Raleigh, NC 27601
T 919.380.8750
www.stewartinc.com

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-100
1			3				TOTAL SHEETS
2			4				177

DRAWN BY:	H.ASSFOURA	DATE :	07/14
CHECKED BY:	P.JACOB	DATE :	08/14
DESIGN ENGINEER OF RECORD:	D.RUGGLES	DATE :	08/14

11/14/2014 I-914BA SITE 3
...\403_015_I0914BA_SMU_PCCO2.dgn
USER:jloftus