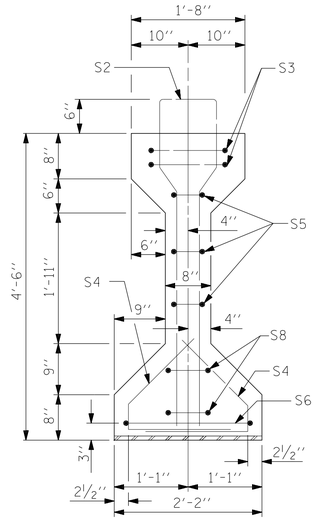
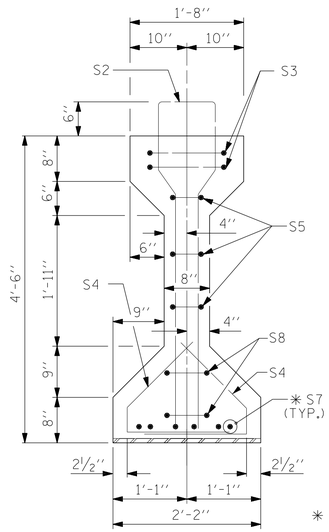
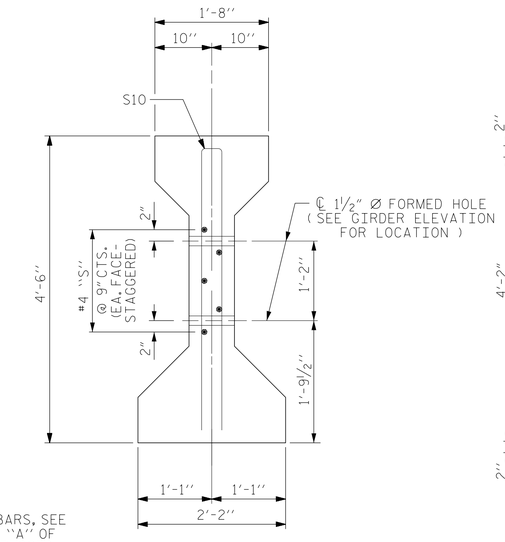


SECTION A-A



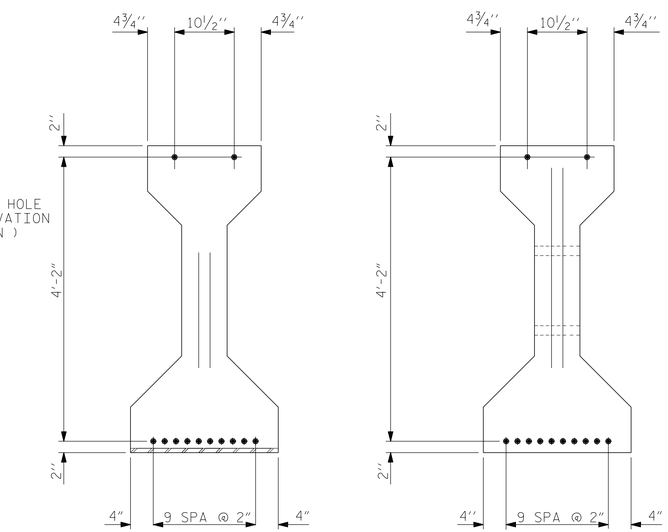
SECTION B-B

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



SECTION C-C

(S1 BARS NOT SHOWN)



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

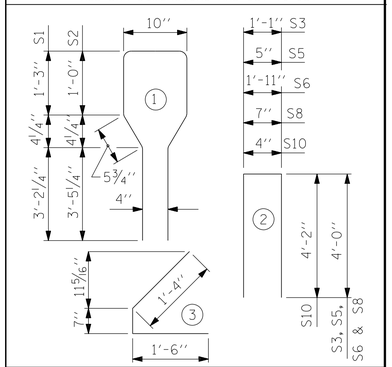
REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
A1, A2	S1	53	#4	1	10'-8"	378
A3, A4	S1	51	#4	1	10'-8"	363
	S2	12	#6	1	10'-8"	192
	S3	4	#4	2	9'-1"	24
A1, A2	S4	80	#4	3	3'-5"	183
A3, A4	S4	76	#4	3	3'-5"	173
	S5	6	#4	2	8'-5"	34
	S6	1	#4	2	9'-11"	7
	✱ S7	6	#5	STR	3'-8"	23
	S8	4	#4	2	8'-7"	23
	S9	1	#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

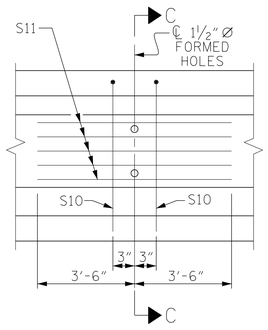
✱ NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

BAR TYPES

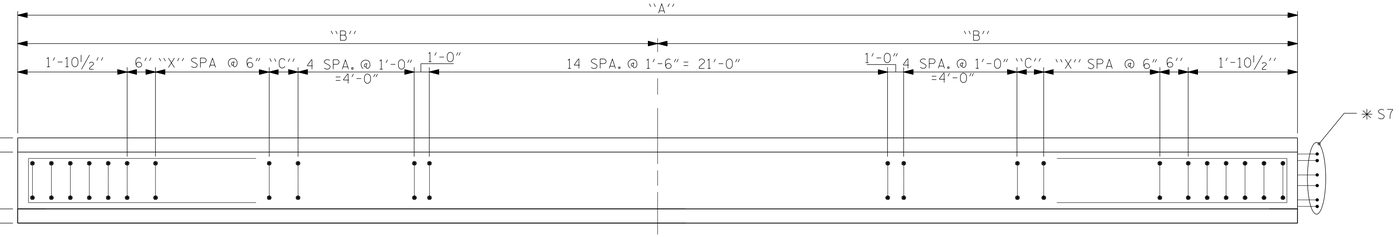
ALL BAR DIMENSIONS ARE OUT-TO-OUT



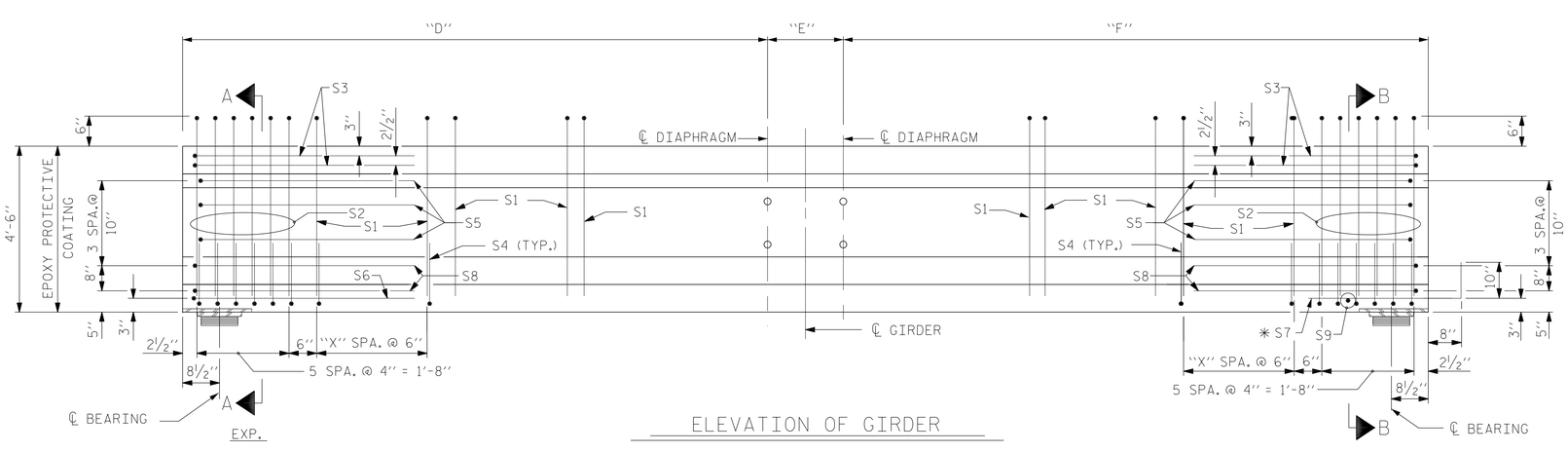
DIMENSIONS				
BEAM	A1	A2	A3	A4
"A"	50'-6¾"	50'-1"	49-7⅜"	49'-2⅛"
"B"	25'-3⅜"	25'-0½"	24'-9 11/16"	24'-7 1/16"
"C"	10⅞"	8"	11 3/16"	8 9/16"
"D"	32'-6 9/16"	17'-9 5/16"	17'-11¼"	17'-9⅞"
"E"	0	14'-8 7/16"	14'-2⅜"	0
"F"	18'-0 3/16"	17'-7¼"	17'-5¾"	31'-4¼"
"X"	13	13	12	12



PARTIAL ELEVATION



PLAN OF GIRDER



ELEVATION OF GIRDER

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL	5500 PSI CONCRETE	0.6" Ø L. R. STRANDS
	LB.	C.Y.	No.
A1	906	10.3	12
A2	948	10.2	12
A3	923	10.1	12
A4	881	10.0	12

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
1	50'-6¾"	50'-6¾"
1	50'-1"	50'-1"
1	49-7⅜"	49'-7⅜"
1	49'-2⅛"	49'-2⅛"
SPAN A TOTAL		199'-5¼"

PROJECT NO. I-0914BA

VANCE COUNTY

STATION: 21+34.80-Y5SBL-POC

SHEET 1 OF 5

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

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

DWG. 14 OF 40

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
SPAN "A"

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-99
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

I-914BA SITE 3
11/14/2014
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USER:jloftus