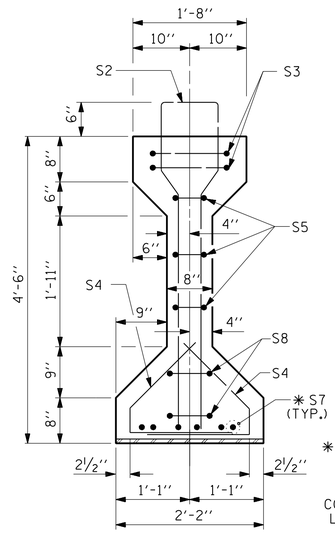
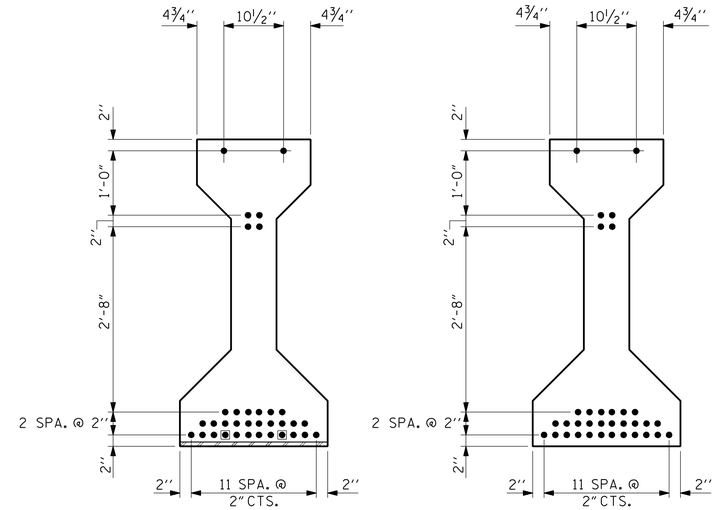


✱ FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET 6 OF 7

SECTION B-B



AT END OF GIRDER

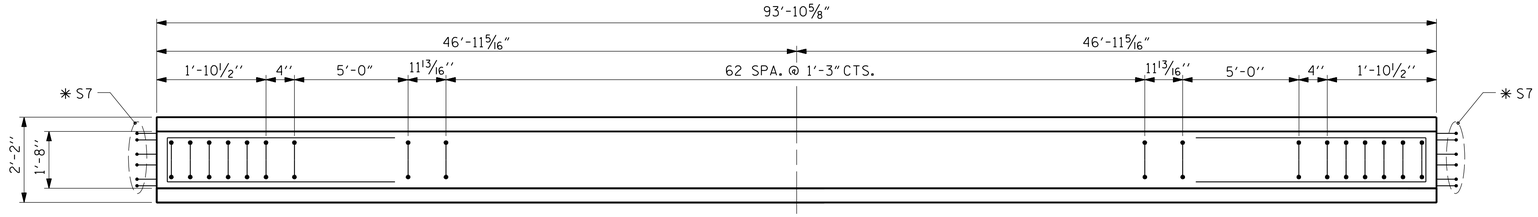
AT ℄ OF GIRDER

0.6" Ø LOW RELAXATION STRAND LAYOUT

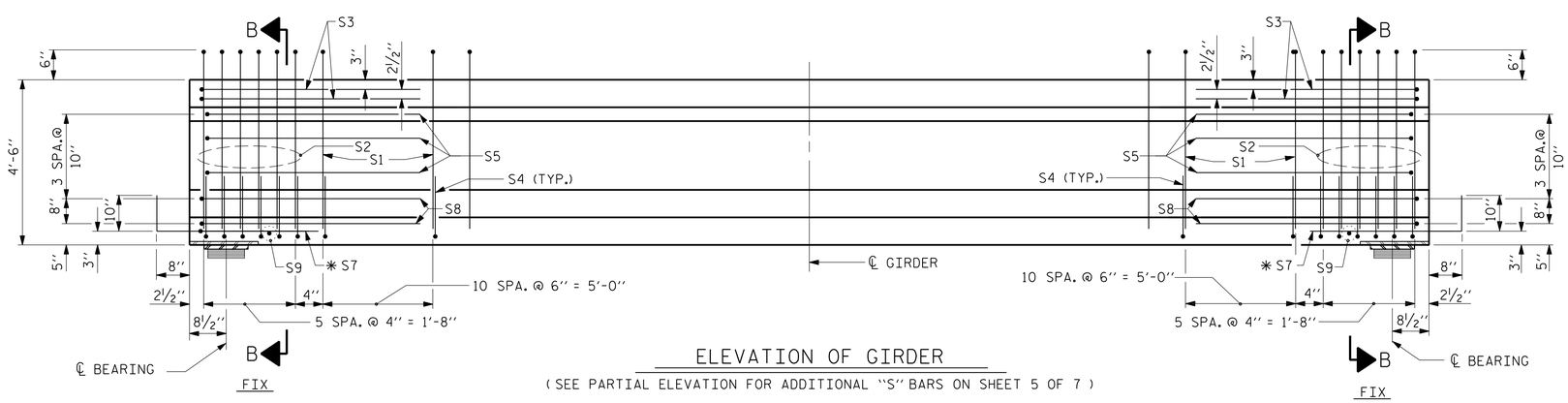
(34 STRANDS REQUIRED)

DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ◉ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER



PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS ON SHEET 5 OF 7)

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

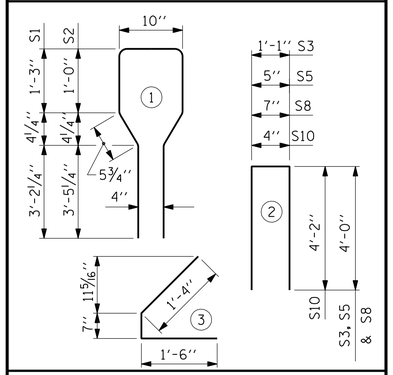
REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
	S1	85	#4	1	10'-8"	606
	S2	12	#6	1	10'-8"	192
	S3	4	#4	2	9'-1"	24
	S4	68	#4	3	3'-5"	155
	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.	S14	5	#4	STR	14'-7"	49

✱ 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 LB.	7500 PSI CONCRETE C.Y.	0.6" Ø L.R. STRANDS No.
EXTERIOR GIRDER	1122	19.1	34
INTERIOR GIRDER	1166	19.1	34

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	93'-10⅝"	469'-5⅛"

PROJECT NO. U-2579B

FORSYTH COUNTY

STATION: 17+10.00 -Y4RPA-

SHEET 3 OF 7

PLANS PREPARED BY:

MULKEY ENGINEERS & CONSULTANTS
PO Box 33127
Raleigh, N.C. 27636
(919) 851-1912
(919) 851-1918 (FAX)
WWW.MULKEYINC.COM
NC LICENSE NO. C-1021

THIS STANDARD DRAWING REVIEWED & ADOPTED FOR USE AT THE REFERENCED LOCATION BY THE UNDERSIGNED:

NORTH CAROLINA PROFESSIONAL SEAL 034352 ENGINEER TERRY R. PETERSON

DocuSigned by: Terry R. Peterson 5/19/2014
6DC4171647CD40F...

DWG. NO. RPA-18

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPAN C

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-235
1			3			TOTAL SHEETS
2			4			707

STR #7

STD. NO. PCG6 (Sht. 1)

ASSEMBLED BY : W. B. ALLEN	DATE : 9/13		
CHECKED BY : T. R. PETERSON	DATE : 10/13		
DRAWN BY : ELR 8/91	REV. 10/17/00R	RWW/LES	
CHECKED BY : GRP 8/91	REV. 5/1/06R	TLA/GM	
	REV. 10/1/11	MAA/GM	

5/19/2014 8:09:19 AM R:\Structures\U-2579B Ramp A\U-2579B_RPA_SD_03.0.dgn