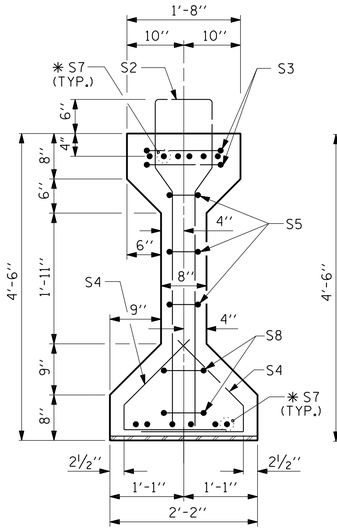
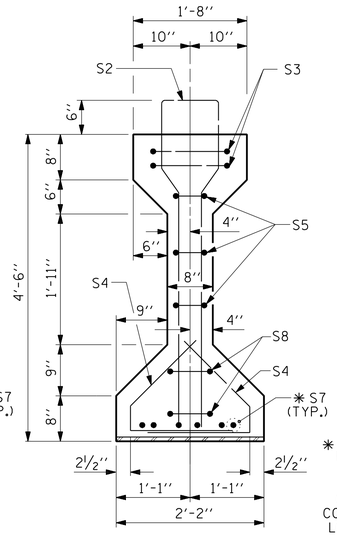
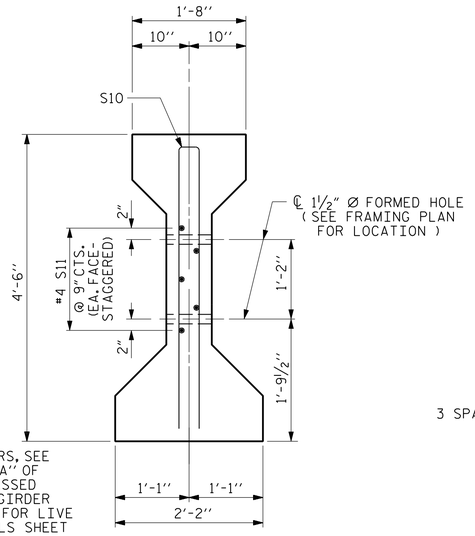


SECTION A-A



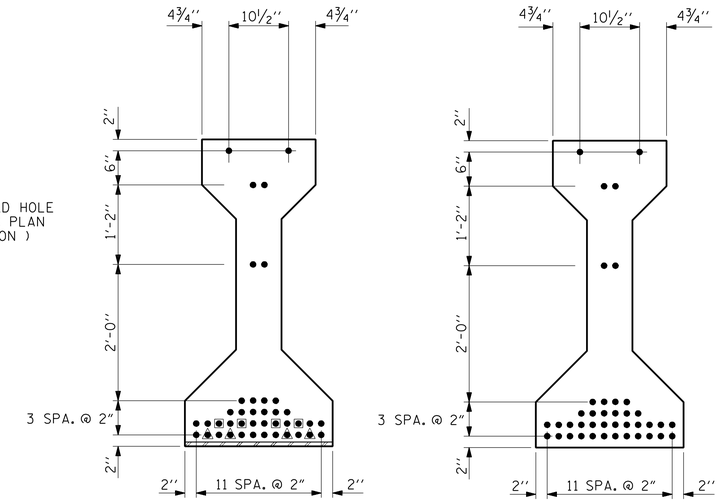
SECTION B-B

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



SECTION C-C

(S1 BARS NOT SHOWN)



0.6" Ø LOW RELAXATION STRAND LAYOUT

(40 STRANDS REQUIRED)

DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ◉ STRANDS DEBONDED FOR 6'-0" FROM END OF GIRDER
- ◉ STRANDS DEBONDED FOR 20'-0" FROM END OF GIRDER

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

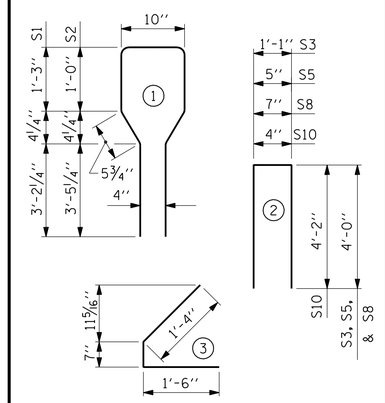
REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	84	#4	1	10'-8"	599
S2	12	#6	1	10'-8"	192
S3	4	#4	2	9'-1"	24
S4	72	#4	3	3'-5"	164
S5	6	#4	2	8'-5"	34
✱ S7	18	#5	STR	3'-8"	69
S8	4	#4	2	8'-7"	23
S9	2	#3	STR	1'-10"	1
S10	4	#5	2	8'-8"	36
S11	10	#4	STR	7'-0"	47
S12	1	#3	STR	1'-4"	1

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

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT

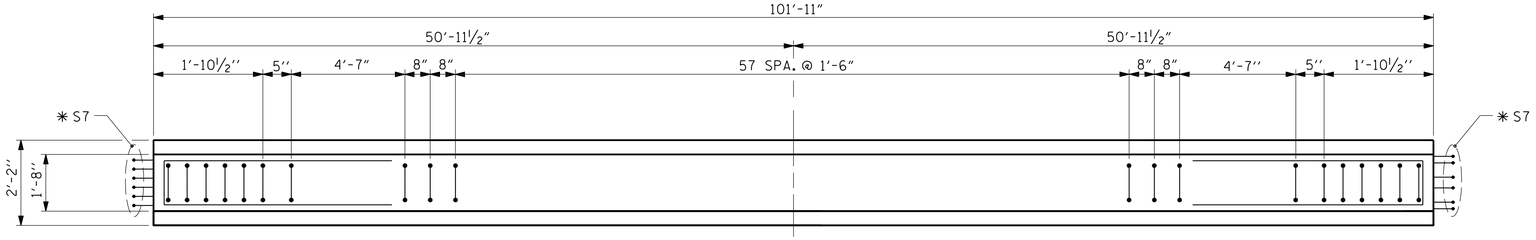


QUANTITIES FOR ONE GIRDER

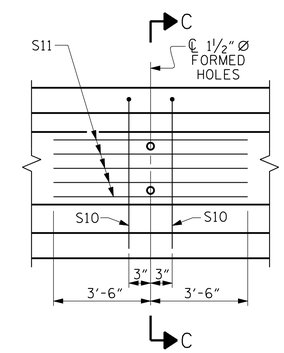
REINFORCING STEEL	8500 PSI CONCRETE	0.6" Ø L.R. STRANDS
LB.	C.Y.	No.
1190	20.7	40

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	101'-11"	509.58'

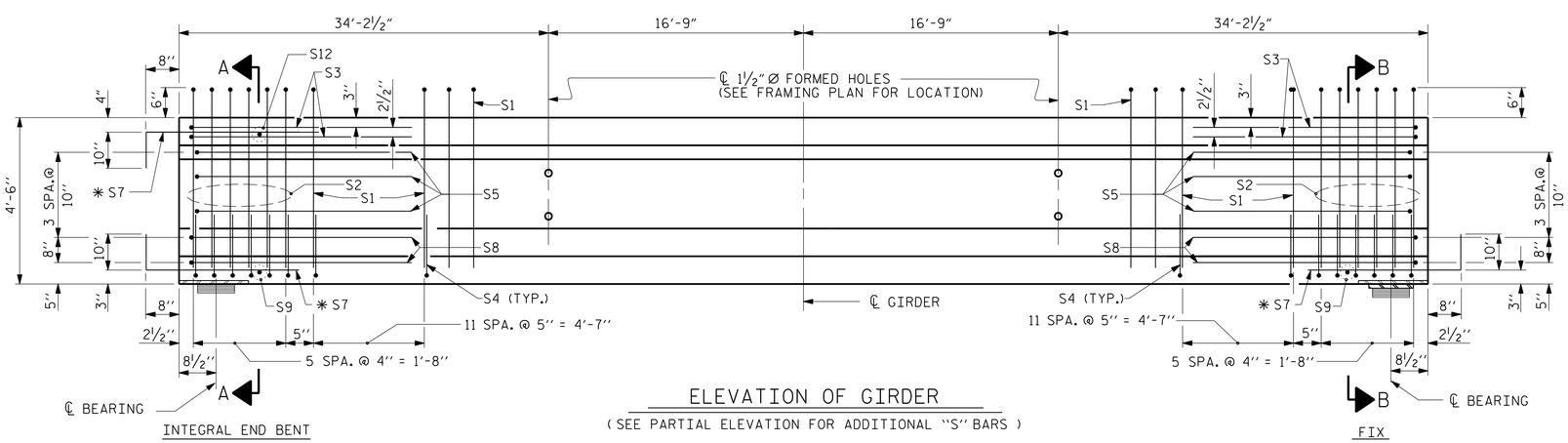


PLAN OF GIRDER



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

PROJECT NO. U-2579B

FORSYTH COUNTY

STATION: 26+60.00 -Y4RPBD-

SHEET 1 OF 5

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-1051

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 5/27/2014
6DC4171647CD40F...

DWG. NO. RPBD-14

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-411
1			3			TOTAL SHEETS
2			4			707

STR #11

STD. NO. PCG6 (Sht. 2)

ASSEMBLED BY : W. B. ALLEN	DATE : 3/14		
CHECKED BY : T. R. PETERSON	DATE : 4/14		
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	

5/27/2014 10:53:39 AM R:\Structures\U-2579B Ramp BD\U-2579B_RPBD_SD_01.dgn