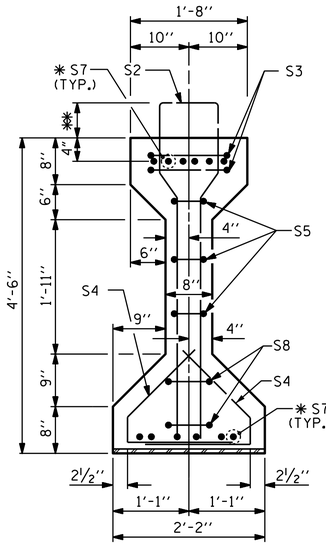
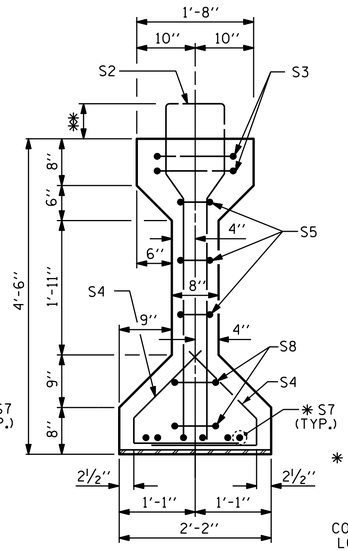
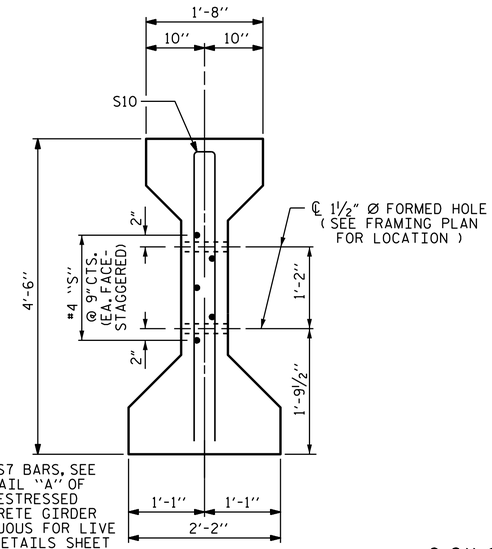


SECTION A-A



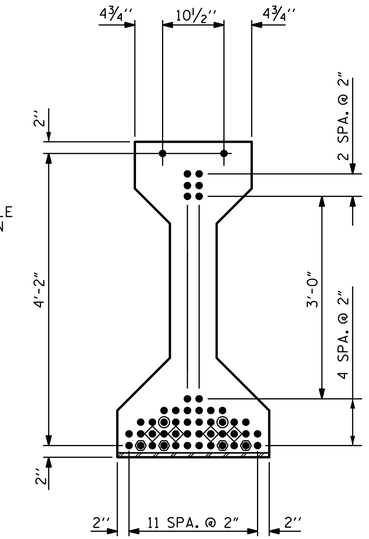
SECTION B-B



✱ 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

- ● FULLY BONDED STRANDS
- ◉ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
- ◈ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
- ◉ STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER

DEBONDING LEGEND

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	106	#4	1	11'-0"	779
S2	12	#6	1	11'-0"	198
S3	4	#4	2	9'-1"	24
S4	84	#4	3	3'-5"	192
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	2	#5	2	8'-8"	18
S11	5	#4	STR	7'-0"	23
✱S13	1	#3	STR	1'-4"	1
S14	60	#4	1	10'-10"	434

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

QUANTITIES FOR ONE GIRDER

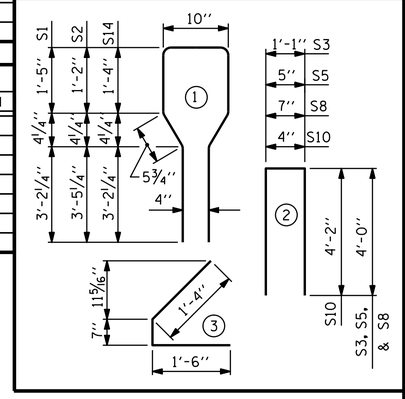
	REINFORCING STEEL LB.	9000 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
SPAN A	1796	18.1	50
SPAN B	1726	18.1	50
SPAN E	1726	18.1	50
SPAN H	1726	18.1	50
SPAN K	1726	18.1	50
SPAN N	1726	18.1	50
SPAN O	1796	18.1	50

GIRDERS REQUIRED

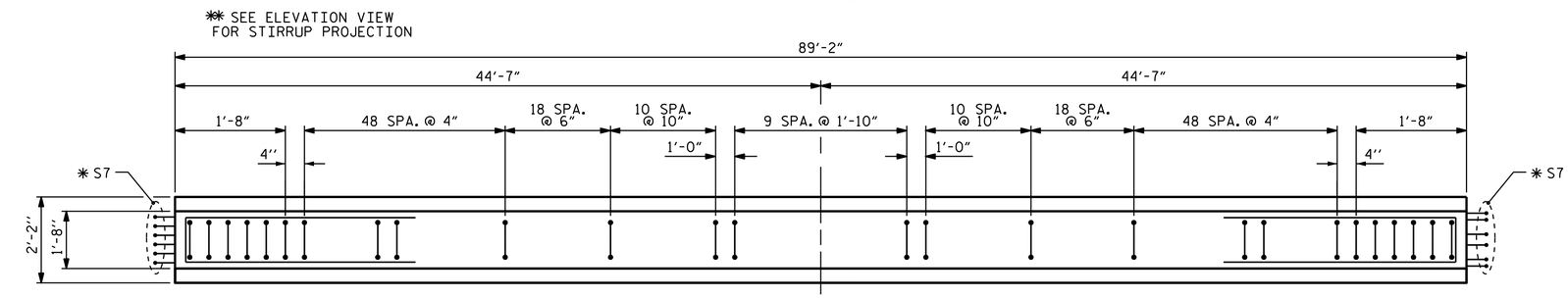
	No.	LENGTH	TOTAL LENGTH
SPAN A	4	89'-2"	356'-8"
SPAN B	4	89'-2"	356'-8"
SPAN E	4	89'-2"	356'-8"
SPAN H	4	89'-2"	356'-8"
SPAN K	4	89'-2"	356'-8"
SPAN N	4	89'-2"	356'-8"
SPAN O	4	89'-2"	356'-8"

BAR TYPES

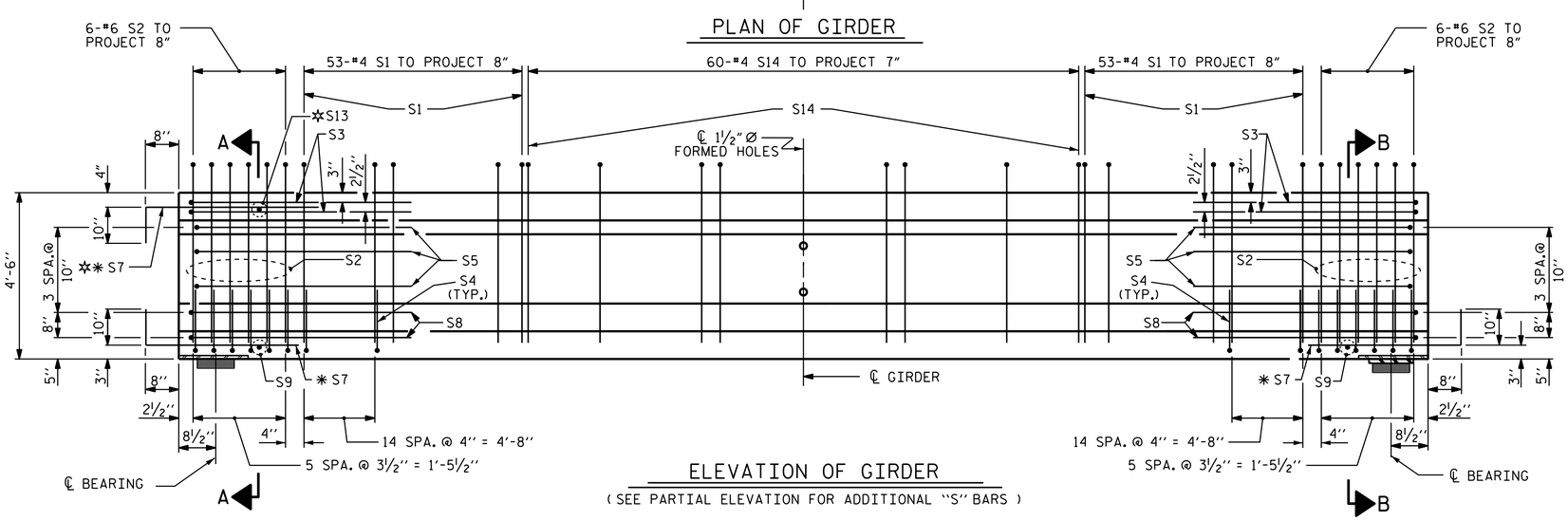
ALL BAR DIMENSIONS ARE OUT-TO-OUT



✱ NOTE: S7 AND S13 BARS SHOWN IN THE TOP OF INTEGRAL END BENT END OF GIRDER ARE FOR SPAN A AND SPAN O ONLY.



PLAN OF GIRDER

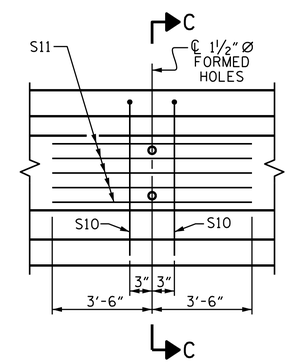


INTEGRAL END BENT & FIX

ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

FIX



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR ALL GIRDER.

PROJECT NO. B-4722B

CARTERET COUNTY

STATION: 47+75.00 -L-

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD

NORTH CAROLINA PROFESSIONAL SEAL 22005 ENGINEER A. KEITH PASCHAL

DocuSigned by: A. Keith Paschal F8B8AD6DB2F048F... 1/16/2015

REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

SHEET NO. S-17

TOTAL SHEETS 45

ASSEMBLED BY : D. G. ELY		DATE : 1/24/14
CHECKED BY : B. N. BARODAWALA		DATE : 3/31/14
DESIGN ENGINEER OF RECORD: M. M. AHMED		DATE : 10/14/14
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

16-JAN-2015 15:10
R:\structures\FinalPlans\B4722B_sd_PCG.dgn
kpaschal

STD. NO. PCG6 (Sht. 2)