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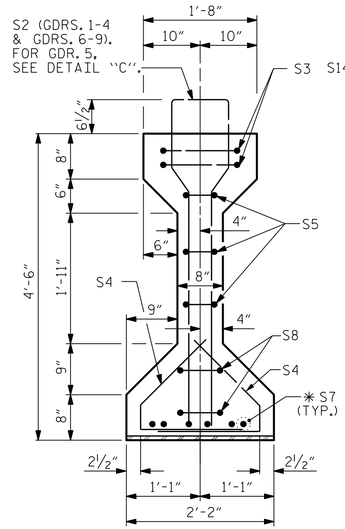
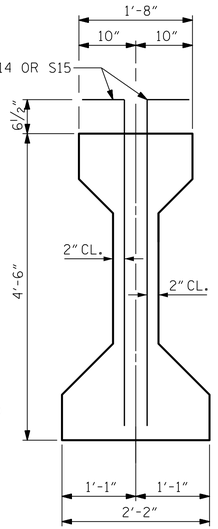
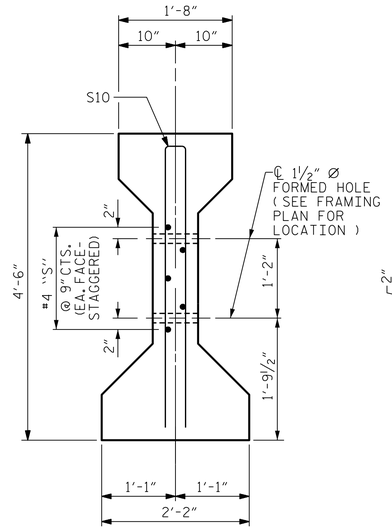


SECTION B-B



DETAIL "C"

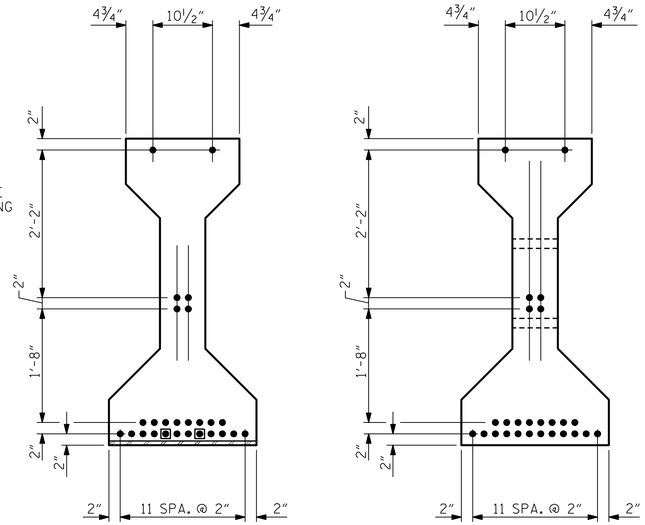
(GIRDER 5 ONLY)



SECTION C-C

(S1 BARS NOT SHOWN)

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



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

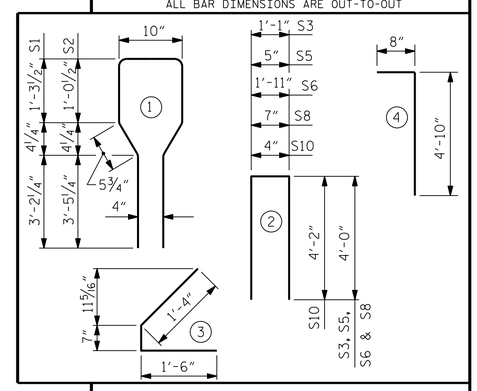
REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
GDRS. 1 & 2	S1	87	#4	1	10'-9"	625
GDRS. 3 & 4	S1	88	#4	1	10'-9"	632
GDRS. 6-9	S1	89	#4	1	10'-9"	639
GDRS. 1-4 & 6-9	S2	16	#6	1	10'-9"	258
	S3	4	#4	2	9'-1"	24
	S4	140	#4	3	3'-5"	320
	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"	2
	S10	2	#5	2	8'-8"	18
	S11	5	#4	STR	7'-0"	23
GDR. 5	S14	176	#4	4	5'-6"	647
GDR. 5	S15	32	#6	4	5'-6"	264

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

BAR TYPES

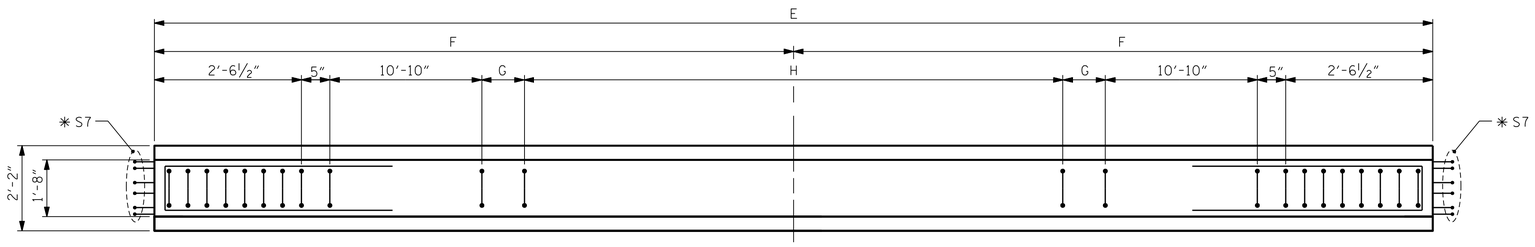
ALL BAR DIMENSIONS ARE OUT-TO-OUT



NOTE: FOR DIMENSIONS E, F, G, H AND TOTAL BILL OF MATERIAL QUANTITIES, SEE SHEET 3 OF 5.

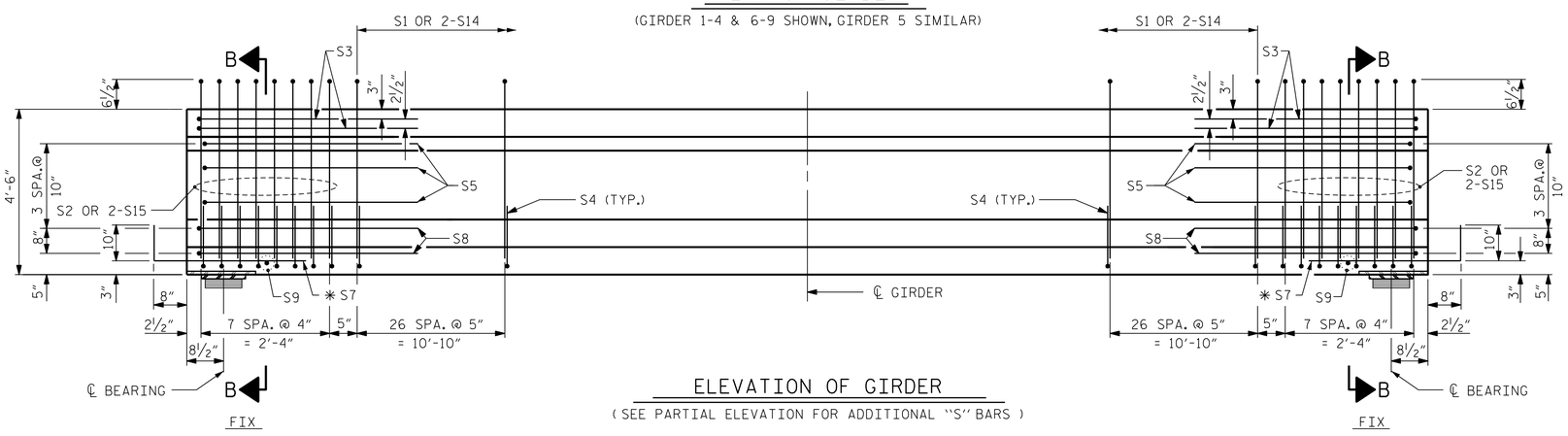
DEBONDING LEGEND

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



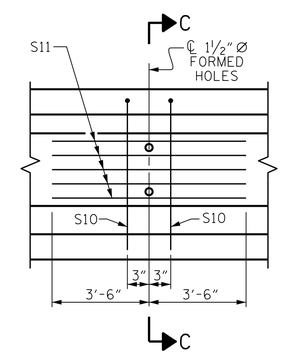
PLAN OF GIRDER

(GIRDER 1-4 & 6-9 SHOWN, GIRDER 5 SIMILAR)



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL	7500 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
SEE BILL OF MATERIALS CHART, SHEET 3 OF 5.			

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
SEE BILL OF MATERIALS CHART, SHEET 3 OF 5.		

PROJECT NO. B-4565

LENOIR COUNTY

STATION: 29+57.00 -L-

SHEET 2 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD

SPAN B

NORTH CAROLINA PROFESSIONAL SEAL 040343 ENGINEER GREGORY R. COLS

11/13/2014

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-84
1			3				TOTAL SHEETS
2			4				118

STD. NO. PCG6

ASSEMBLED BY:	B.E. ATKINSON	DATE:	07/14
CHECKED BY :	G.R. COLS	DATE:	07/14
DESIGN ENGINEER OF RECORD:	G.R. COLS	DATE:	10/14
DRAWN BY : ELR 8/91	REV. 10/17/00R	RWW/LES	
CHECKED BY : VAP 8/91	REV. 5/1/06RR	TLA/GM	
	REV. 10/1/11	MAA/GM	

11:13/2014
1:14:44 PM
User: blanning
Filename: P:\NC Bridges\MI4001.01 - B-4565 Lenoir\Site 2\Structures\A02.120_S02_B4565_SMU_PCG02.dgn