

SPAN W

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	182	5	1	7'-10"	1487	
S2	120	5	1	7'-2"	897	
GDR. 1	S3	37	5	1	7'-9"	299
GDR. 2	S3	38	5	1	7'-9"	307
GDR. 3	S3	39	5	1	7'-9"	315
GDR. 4	S3	40	5	1	7'-9"	323
GDR. 5	S3	41	5	1	7'-9"	331
GDR. 1	S4	258	3	3	4'-4"	420
GDR. 2	S4	260	3	3	4'-4"	424
GDR. 3	S4	262	3	3	4'-4"	427
GDR. 4	S4	264	3	3	4'-4"	430
GDR. 5	S4	266	3	3	4'-4"	433
S5	46	3	2	3'-3"	56	
S6	24	5	STR	6'-0"	150	
* S7	10	5	STR	4'-0"	42	
GDR. 1	S8	163	4	STR	3'-8"	399
GDR. 2	S8	164	4	STR	3'-8"	402
GDR. 3	S8	165	4	STR	3'-8"	404
GDR. 4	S8	167	4	STR	3'-8"	409
GDR. 5	S8	168	4	STR	3'-8"	411
S9	16	4	STR	8'-0"	86	
S10	16	4	4	6'-8"	71	
S11	8	6	STR	28'-0"	336	
S12	14	5	5	12'-8"	185	

QUANTITIES FOR ONE GIRDER

GIRDER	REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	NO.
GDR. 1	4428	41.4	75
GDR. 2	4443	41.7	75
GDR. 3	4456	42.1	75
GDR. 4	4472	42.4	75
GDR. 5	4485	42.8	75

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	VARIES	743.55'

SPAN X

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	182	5	1	7'-10"	1487	
S2	120	5	1	7'-2"	897	
GDR. 1	S3	38	5	1	7'-9"	307
GDR. 2	S3	39	5	1	7'-9"	315
GDR. 3	S3	39	5	1	7'-9"	315
GDR. 4	S3	40	5	1	7'-9"	323
GDR. 5	S3	40	5	1	7'-9"	323
GDR. 1	S4	260	3	3	4'-4"	424
GDR. 2	S4	262	3	3	4'-4"	427
GDR. 3	S4	262	3	3	4'-4"	427
GDR. 4	S4	264	3	3	4'-4"	430
GDR. 5	S4	264	3	3	4'-4"	430
S5	46	3	2	3'-3"	56	
S6	24	5	STR	6'-0"	150	
* S7	20	5	STR	4'-0"	83	
GDR. 1	S8	164	4	STR	3'-8"	402
GDR. 2	S8	165	4	STR	3'-8"	404
GDR. 3	S8	165	4	STR	3'-8"	404
GDR. 4	S8	166	4	STR	3'-8"	407
GDR. 5	S8	167	4	STR	3'-8"	409
S9	16	4	STR	8'-0"	86	
S10	16	4	4	6'-8"	71	
S11	8	6	STR	28'-0"	336	
S12	14	5	5	12'-8"	185	

QUANTITIES FOR ONE GIRDER

GIRDER	REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	NO.
GDR. 1	4484	41.7	75
GDR. 2	4497	41.9	75
GDR. 3	4497	42.1	75
GDR. 4	4511	42.4	75
GDR. 5	4513	42.6	75

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	VARIES	744.50'

SPAN Y

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	182	5	1	7'-10"	1487
S2	120	5	1	7'-2"	897
S3	34	5	1	7'-9"	275
S4	252	3	3	4'-4"	411
S5	46	3	2	3'-3"	56
S6	24	5	STR	6'-0"	150
* S7	10	5	STR	4'-0"	42
S8	157	4	STR	3'-8"	385
S9	16	4	STR	8'-0"	86
S10	16	4	4	6'-8"	71
S11	8	6	STR	28'-0"	336
S12	14	5	5	12'-8"	185

QUANTITIES FOR ONE GIRDER

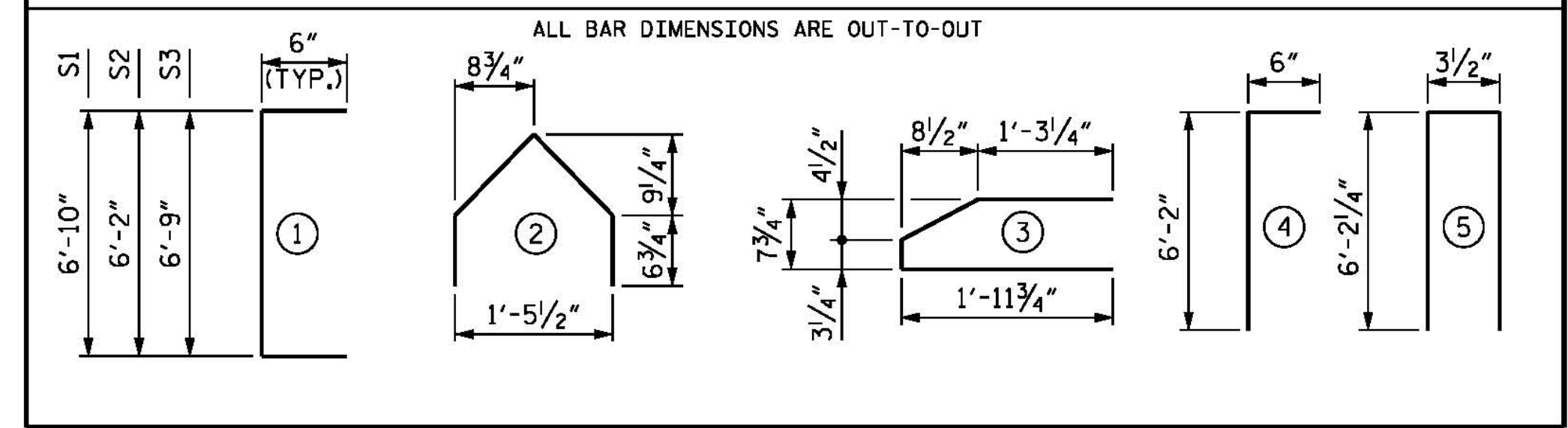
REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
4381	39.8	75

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
5	140.76'	703.80'

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

BAR TYPES

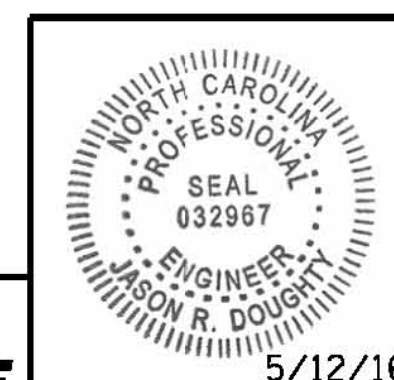


PROJECT NO. B-4929

PENDER COUNTY

STATION: 38+13.81 -L2-

SHEET 6 OF 6 STEEL ALTERNATE



PARSONS BRINCKERHOFF
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
LICENSE NO. F-0165

DocuSigned by:
Jason R. Doughty
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
F.I.B. 78"
PRESTRESSED
CONCRETE GIRDER
(SPAN Q THROUGH Y)

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

TOTAL SHEETS
278

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

5/12/2016 401_083_B4929_SMU_FIB78_10s.dgn

DESIGNED BY: B. LOFLIN DATE: FEB 2016
DRAWN BY: M. HOBBS DATE: FEB 2016
CHECKED BY: J. SHERMAN DATE: FEB 2016
DESIGN ENGINEER OF RECORD: J. DOUGHTY DATE: MAY 2016