

12.70mm Ø L.R. GRADE 270 STRANDS					
AREA (mm <sup>2</sup> )	ULTIMATE STRENGTH (kN PER STRAND)	APPLIED PRESTRESS (kN PER STRAND)			
98.71	183.7	137.8			
REINFORCING STEEL FOR ONE GIRDER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	220	#13	1	2100	459
S2	24	#16	1	2100	78
S3	14	#13	2	2560	36
S4	84	#13	3	920	77
S5	1	#16	2	3000	5
S6	244	#16	1	1140	432
*S7	10	#16	STR	1120	17
S8	2	#16	2	2740	9
S9	7	#16	STR	980	11
S10	1	#10	STR	560	1

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

QUANTITIES FOR ONE GIRDER				
	REINFORCING STEEL	55.0 MPa CONCRETE		12.70mm Ø L.R. STRANDS
		kg	m <sup>3</sup>	
GIRDER 1	SPAN C	1125	20.8	58
GIRDER 2	SPAN C	1125	20.8	58
GIRDER 3	SPAN C	1125	20.8	58
GIRDER 4	SPAN C	1125	20.9	58
GIRDER 5	SPAN C	1125	20.9	58
GIRDER 1	SPAN D	1125	20.7	58
GIRDER 2	SPAN D	1125	20.7	58
GIRDER 3	SPAN D	1125	20.8	58
GIRDER 4	SPAN D	1125	20.8	58
GIRDER 5	SPAN D	1125	20.8	58

GIRDERS REQUIRED				
SPAN	NUMBER	LENGTH	TOTAL LENGTH	
GIRDER 1	C	1	38.756m	38.756m
GIRDER 2	C	1	38.786m	38.786m
GIRDER 3	C	1	38.816m	38.816m
GIRDER 4	C	1	38.846m	38.846m
GIRDER 5	C	1	38.876m	38.876m
GIRDER 1	D	1	38.582m	38.582m
GIRDER 2	D	1	38.612m	38.612m
GIRDER 3	D	1	38.644m	38.644m
GIRDER 4	D	1	38.674m	38.674m
GIRDER 5	D	1	38.704m	38.704m
TOTAL LENGTH FOR SPANS C & D			387.296m	

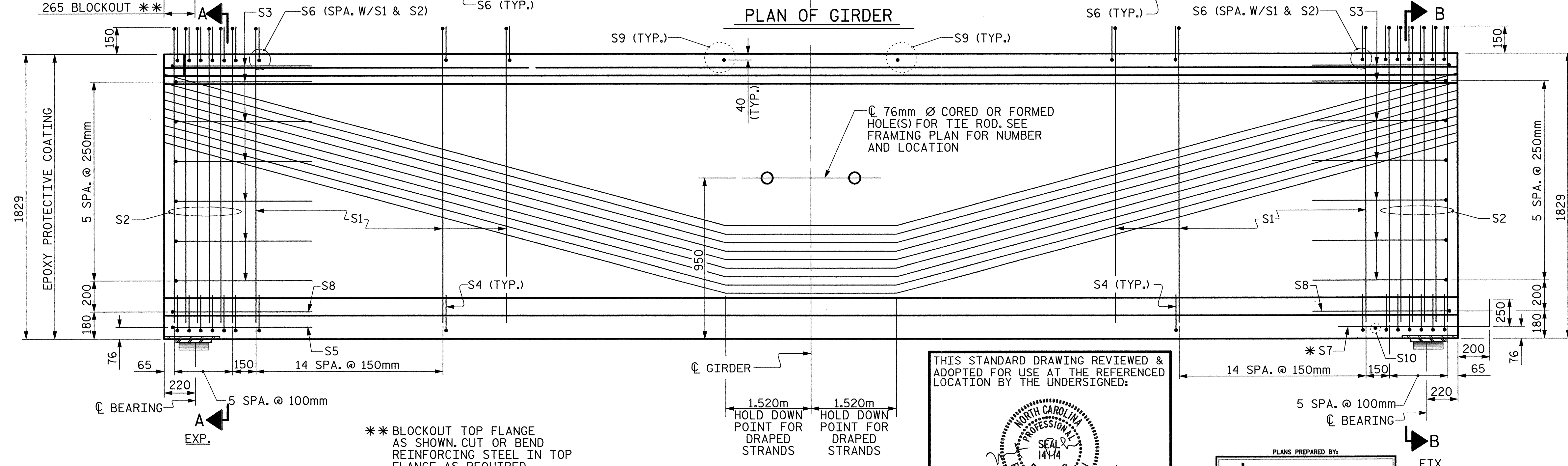
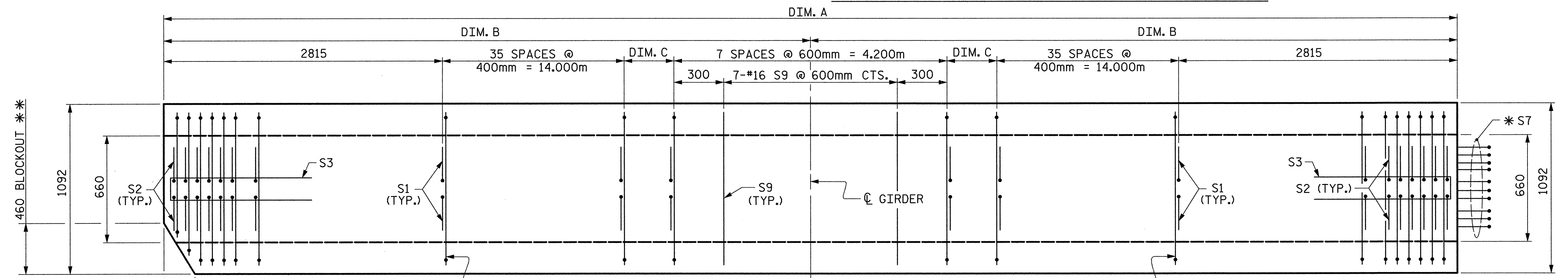
DIMENSION TABLE				
SPAN	GIRDER	DIM. A	DIM. B	DIM. C
C	1	38.756m	19.378m	463
	2	38.786m	19.393m	478
	3	38.816m	19.408m	493
	4	38.846m	19.423m	508
	5	38.876m	19.438m	523
D	1	38.582m	19.291m	376
	2	38.612m	19.306m	391
	3	38.644m	19.322m	407
	4	38.674m	19.337m	422
	5	38.704m	19.352m	437

PROJECT NO. R-2552C  
 JOHNSTON COUNTY  
 STATION: 110+37.000 -L2RT- POC  
 SHEET 2 OF 4

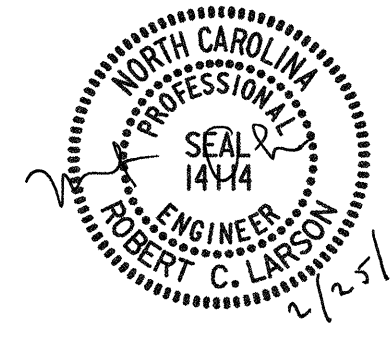
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 1829mm PRESTRESSED CONCRETE  
 MODIFIED BULB TEE  
 CONTINUOUS FOR LIVE LOAD  
 SPAN C & D (RIGHT LANE)  
 STD. NO. PCG10SM

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	TOTAL SHEETS
1			3	431
2			4	

12.70mm Ø LOW RELAXATION STRAND LAYOUT



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



02/21/2005 07:56:03 AM G:\projects\2004\2552C\DIR-2552C\Structures\Site\Right Lane\2552C\_S2.dwg

ASSEMBLED BY: W. B. ALLEN	DATE: 10/04
CHECKED BY: R. C. LARSON	DATE: 1/05
DRAWN BY: EEM 2/6/97	REV. 7/17/98 RWW/LES
CHECKED BY: VAP 2/6/97	REV. 8/16/99 RWW/LES
	REV. 10/17/00 RWW/LES

\*\* BLOCKOUT TOP FLANGE AS SHOWN, CUT OR BEND REINFORCING STEEL IN TOP FLANGE AS REQUIRED.

ELEVATION OF GIRDER

REFERENCE NO. BR-15