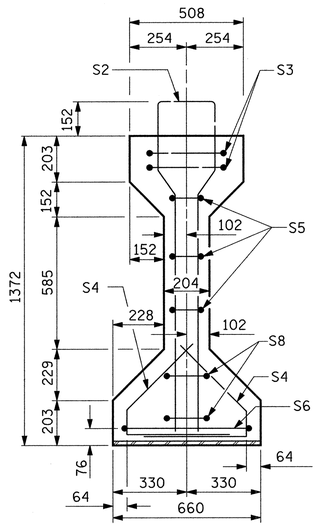
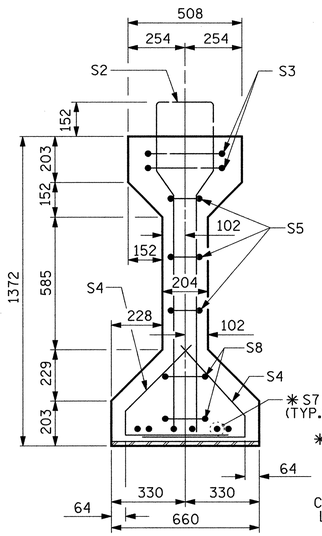
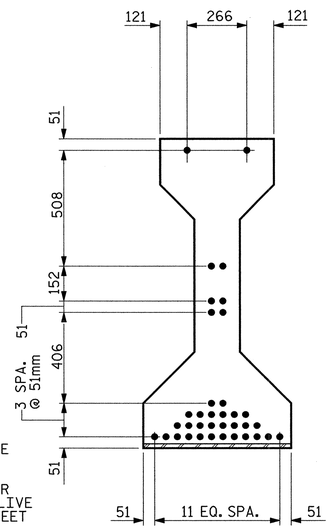


SECTION A-A

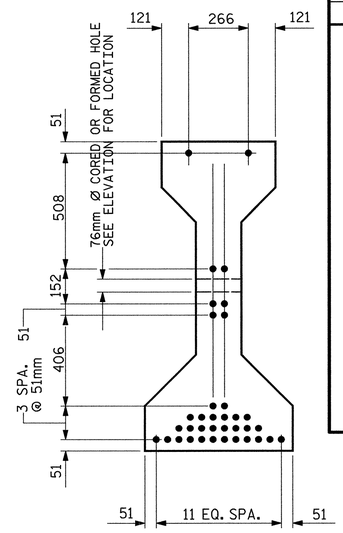


✱FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET

SECTION B-B



AT END OF GIRDER

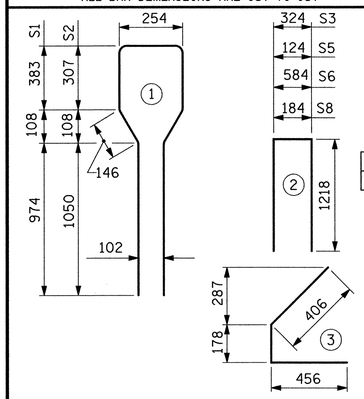


AT ℄ OF GIRDER

12.70mm Ø LOW RELAXATION STRAND LAYOUT

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



12.70mm Ø L. R. GRADE 270 STRANDS

AREA (mm^2)	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
SPAN A	S1	68	#13	1	3260	220
SPAN B	S1	69	#13	1	3260	224
	S2	11	#19	1	3260	80
	S3	4	#13	2	2760	11
	S4	64	#13	3	1040	66
	S5	6	#13	2	2560	15
	S6	1	#13	2	3020	3
	✱S7	6	#16	STR	1120	10
	S8	4	#13	2	2620	10
	S9	1	#10	STR	560	1
	S10	2	#19	STR	1480	7

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

QUANTITIES FOR ONE GIRDER

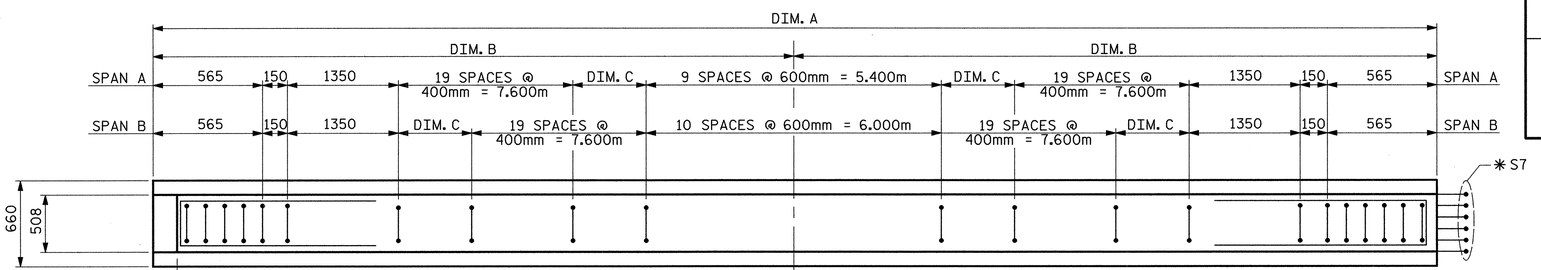
		REINFORCING STEEL kg	45.0 MPa CONCRETE m^3	12.70mm Ø L.R. STRANDS No.
GIRDER 1	SPAN A	423	13.0	36
GIRDER 2	SPAN A	423	13.0	36
GIRDER 3	SPAN A	423	13.0	36
GIRDER 4	SPAN A	423	13.1	36
GIRDER 5	SPAN A	423	13.1	36
GIRDER 1	SPAN B	427	13.1	36
GIRDER 2	SPAN B	427	13.1	36
GIRDER 3	SPAN B	427	13.2	36
GIRDER 4	SPAN B	427	13.2	36
GIRDER 5	SPAN B	427	13.2	36

DIMENSION TABLE

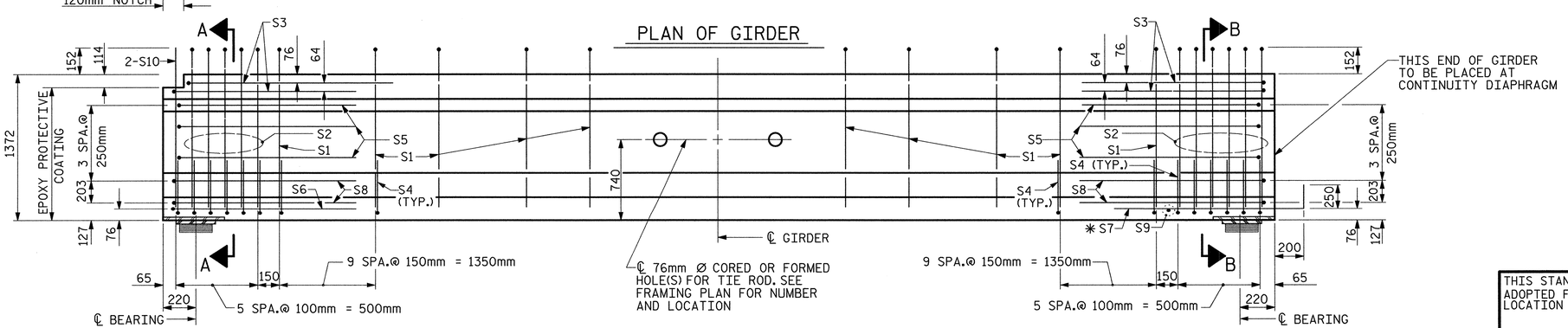
SPAN	GIRDER	DIM. A	DIM. B	DIM. C
A	1	25.588m	12.794m	429
	2	25.608m	12.804m	439
	3	25.628m	12.814m	449
	4	25.648m	12.824m	459
	5	25.668m	12.834m	469
B	1	25.810m	12.905m	240
	2	25.830m	12.915m	250
	3	25.850m	12.925m	260
	4	25.870m	12.935m	270
	5	25.890m	12.945m	280

GIRDERS REQUIRED

	SPAN	NUMBER	LENGTH	TOTAL LENGTH
GIRDER 1	A	1	25.588m	25.588m
GIRDER 2	A	1	25.608m	25.608m
GIRDER 3	A	1	25.628m	25.628m
GIRDER 4	A	1	25.648m	25.648m
GIRDER 5	A	1	25.668m	25.668m
GIRDER 1	B	1	25.810m	25.810m
GIRDER 2	B	1	25.830m	25.830m
GIRDER 3	B	1	25.850m	25.850m
GIRDER 4	B	1	25.870m	25.870m
GIRDER 5	B	1	25.890m	25.890m
TOTAL LENGTH FOR SPANS A & B				257.390m



PLAN OF GIRDER



ELEVATION OF GIRDER

PLANS PREPARED BY:

MULKEY
ENGINEERS & CONSULTANTS
PO Box 33127
RALEIGH, N.C. 27636
(919) 851-1912
(919) 851-1918 (FAX)
WWW.MULKEYINC.COM

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

NORTH CAROLINA PROFESSIONAL SEAL 14116 ENGINEER ROBERT C. LARSON

2/25/05

REFERENCE NO. BR-14

PROJECT NO. R-2552C

JOHNSTON COUNTY

STATION: 110+37.000 -L2RT- POC

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD AASHTO TYPE IV PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD SPAN A & B (RIGHT LANE) STD. NO. PCG6SM

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-239
1			3			TOTAL SHEETS
2			4			431

ASSEMBLED BY : W. B. ALLEN	DATE : 10/04		
CHECKED BY : R. C. LARSON	DATE : 1/05		
DRAWN BY : ELR 8/91	REV. 5/16/97	EEM/RGW	
CHECKED BY : GRP 8/91	REV. 7/17/98	RWW/LES	
	REV. 10/17/00	RWW/LES	

02/21/2005 01:34:41 PM G:\projects\2004\23.0WR-2552\Structures\Sht. 1\Right Lane\R2552C_SD_01.dgn