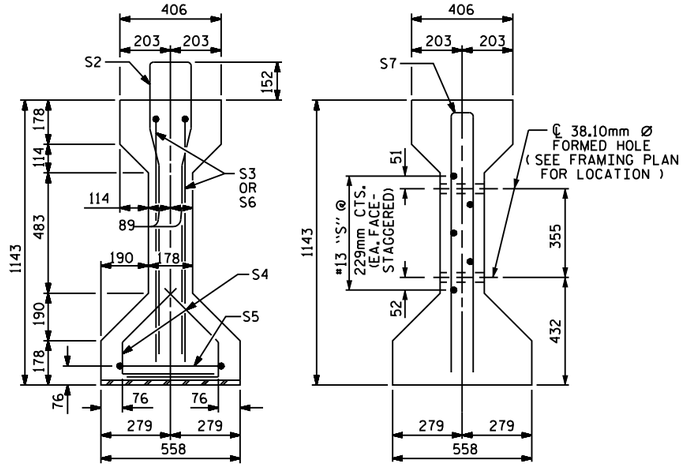
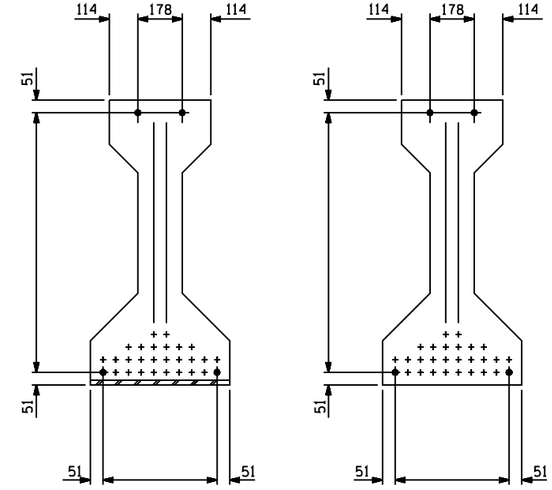


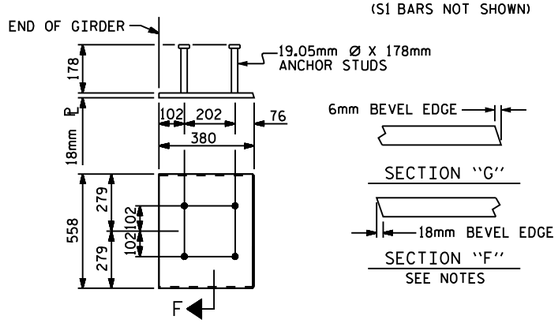
SECTION A-A

SECTION C-C

(S1 BARS NOT SHOWN)



15.24mm Ø LOW RELAXATION STRAND LAYOUT



EMBEDDED PLATE "B-1" DETAILS

TWO EMBEDDED PLATES "B-1" ARE REQUIRED FOR EACH GIRDER.

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203M EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 420.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS.

BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

ALL PRESTRESSED STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

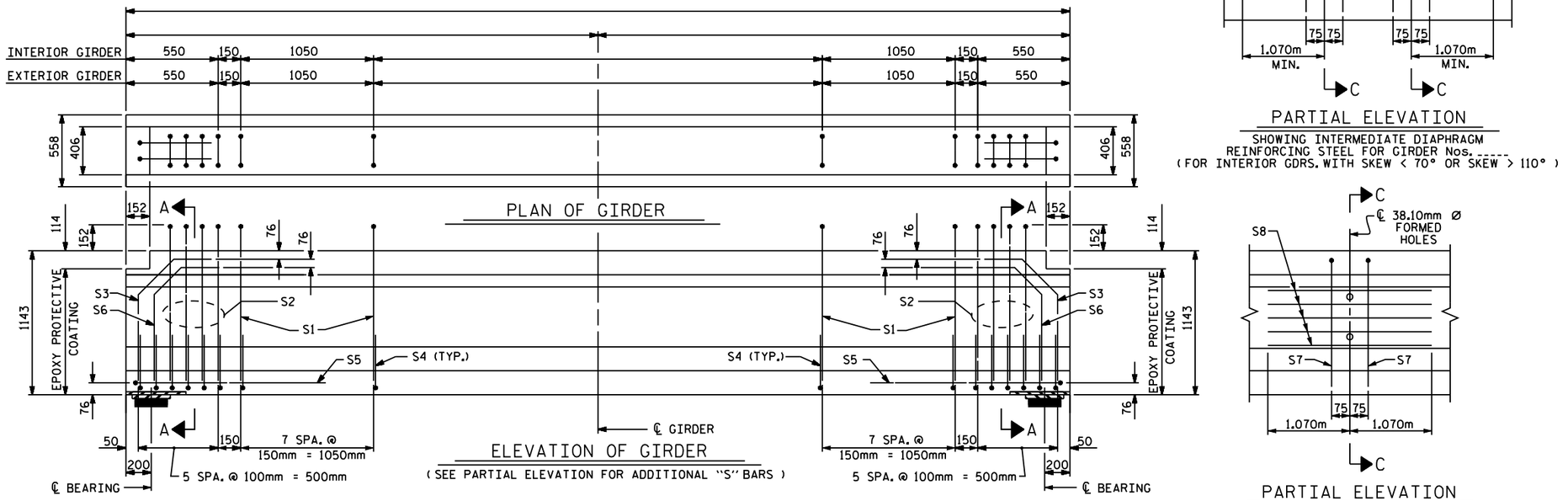
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN ____ MPa.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER SHALL BE RAKED TO A DEPTH OF 6mm EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 150mm OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 13mm OF THE THEORETICAL LOCATION SHOWN.

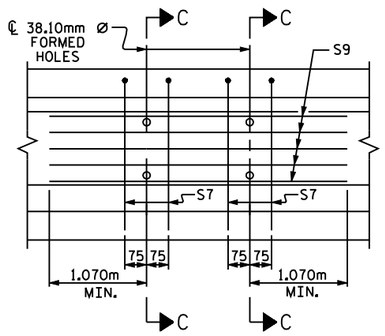
FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.



PLAN OF GIRDER

ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. _____ (FOR INTERIOR GDRS. WITH SKEW < 70° OR SKEW > 110°)

PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. _____ (FOR ALL EXTERIOR GIRDERS AND INTERIOR GIRDERS WITH 70° ≤ SKEW ≤ 110°)

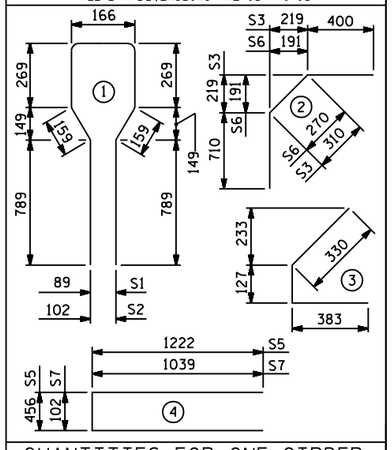
15.24mm Ø L. R. GRADE 270 STRANDS		
AREA (mm^2)	ULTIMATE STRENGTH (kN PER STRAND)	APPLIED PRESTRESS (kN PER STRAND)
140.00	260.7	195.5

REINFORCING STEEL FOR ONE GDR.

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
EXTERIOR GDR.	S1		#13	1	2600	
INTERIOR GDR.	S1		#13	1	2600	
	S2	8	#19	1	2600	46
	S3	4	#19	2	1420	13
	S4	56	#13	3	840	47
	S5	2	#13	4	2900	6
	S6	4	#19	2	1380	12
EXTERIOR GDR.	S7		#16	4	2180	
INTERIOR GDR.	S7		#16	4	2180	
EXTERIOR GDR.	S8		#13	STR	2140	
INTERIOR GDR.	S		#13	STR		

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL	____ MPa CONCRETE	15.24mm Ø L.R. STRANDS
	kg	m^3	No.
EXTERIOR GDR.			
INTERIOR GDR.			

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH

PROJECT NO. _____

_____ COUNTY

STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE III
PRESTRESSED CONCRETE GIRDER

ASSEMBLED BY :	DATE :
CHECKED BY :	DATE :
DRAWN BY : JMB 10/87	REV. 7/17/98 RWW/LES
CHECKED BY : GRP 10/87	REV. 8/16/99RR RWW/LES
	REV. 5/1/06R TLA/GM

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

STD. NO. PCG2SM