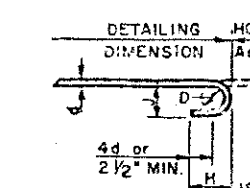


FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	STATE AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	GA.					

HOOK DETAILS

RECOMMENDED 180° HOOKS

GRADE 40 ksi
 $D = 5d$ for #3 through #11
 $D = 10d$ for #14 and #18
 GRADES 50-60-75 ksi
 $D = 6d$ for #3 through #8
 $D = 8d$ for #9, #10, and #11
 $D = 10d$ for #14 and #18

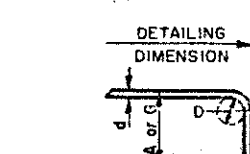


RECOMMENDED 180° END HOOK DIMENSIONS

BAR SIZE	GRADES 50-60-75 ksi				GRADE 40 ksi	
	A or G		J		A or G	J
#3	5	3	5	5	2 3/4	
#4	6	4	6	6	3 1/2	
#5	7	5	7	7	4 1/2	
#6	8	6	8	8	5 1/4	
#7	10	7	9	9	6 1/4	
#8	11	8	10	10	7	
#9	1-3	1 1/4	1-0	1-0	8	
#10	1-5	1-0 3/4	1-1	1-1	9	
#11	1-7	1-2 1/4	1-2	1-2	10	
#14	2-2	1-8 1/2	2-2	2-2	1-8 1/2	
#18	2-11	2-3	2-11	2-11	2-3	
STYLE					2	

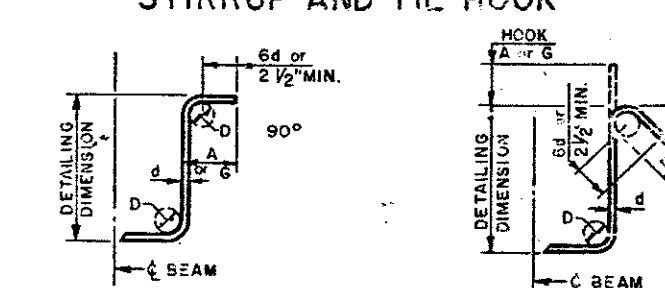
RECOMMENDED 90° END HOOK DIMENSIONS

ALL GRADES
 $D = 6d$ for #3 through #8
 $D = 8d$ for #9, #10, and #11
 $D = 10d$ for #14 and #18



BAR SIZE	HOOK A or G	
	A or G	J
#3	6	5
#4	8	6
#5	10	7
#6	12	8
#7	14	9
#8	16	10
#9	18	11
#10	20	12
#11	22	13
#14	26	16
#18	32	20
HOOK STYLE 3		

STIRRUP AND TIE HOOK



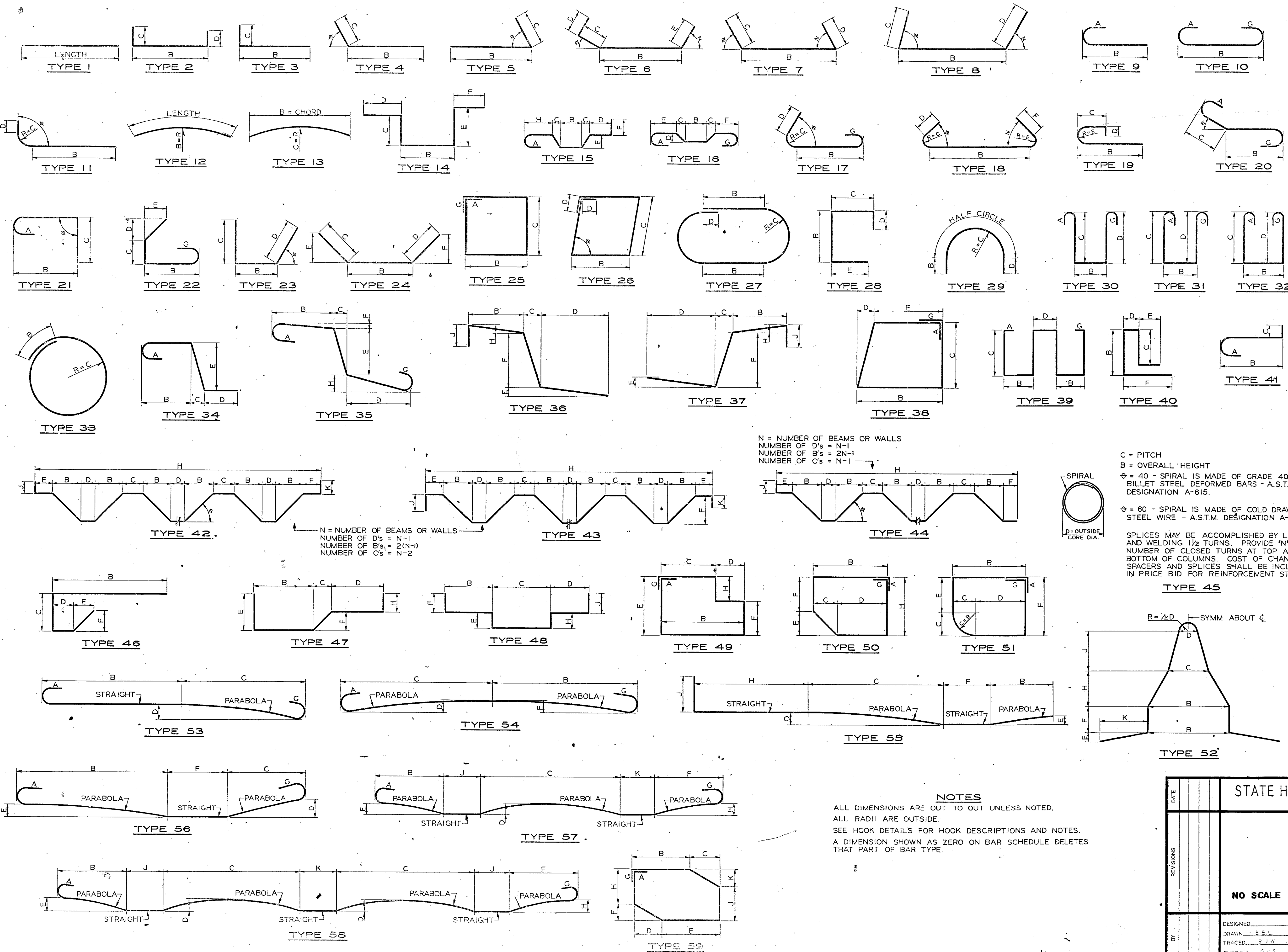
STIRRUPS (TIES SIMILAR)

STIRRUP AND TIE HOOK DIMENSIONS

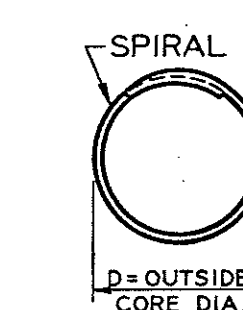
BAR SIZE	D (in.)	90° HOOK		135° HOOK		N Approx.
		HOOK A or G	HOOK H	HOOK A or G	HOOK H	
#3	1 1/2	4	4	4 1/2	2 1/2	
#4	2	4 1/2	4 1/2	5	3	
#5	2 1/2	5	5	5 1/2	3 1/2	
#6	3	5 1/2	5 1/2	6	4	
STYLE		4		5		

STYLE 6 = NO HOOK

HOOK STYLES DETAILED ON THIS SHEET ARE FOR ILLUSTRATION ONLY. ACTUAL HOOK STYLE FOR ANY PARTICULAR BAR WILL BE SHOWN UNDER A OR G HEADING ON BAR SCHEDULE.



N = NUMBER OF BEAMS OR WALLS
 NUMBER OF D's = N-1
 NUMBER OF B's = 2N-1
 NUMBER OF C's = N-1



C = PITCH
 B = OVERALL HEIGHT
 $\phi = 40$ - SPIRAL IS MADE OF GRADE 40 BILLET STEEL DEFORMED BARS - A.S.T.M. DESIGNATION A-615.
 $\phi = 60$ - SPIRAL IS MADE OF COLD DRAWN STEEL WIRE - A.S.T.M. DESIGNATION A-82.
 SPLICES MAY BE ACCOMPLISHED BY LAPPING AND WELDING 1/2 TURNS. PROVIDE 'N' = TOTAL NUMBER OF CLOSED TURNS AT TOP AND BOTTOM OF COLUMNS. COST OF CHANNEL SPACERS AND SPLICES SHALL BE INCLUDED IN PRICE BID FOR REINFORCEMENT STEEL.

NOTES

ALL DIMENSIONS ARE OUT TO OUT UNLESS NOTED.
 ALL RADII ARE OUTSIDE.
 SEE HOOK DETAILS FOR HOOK DESCRIPTIONS AND NOTES.
 A DIMENSION SHOWN AS ZERO ON BAR SCHEDULE DELETES THAT PART OF BAR TYPE.

STATE HIGHWAY DEPARTMENT OF GEORGIA BRIDGE DIVISION

STANDARD BAR BENDING DETAILS

NO SCALE AUGUST 1969

DESIGNED: E.E.L.
 DRAWN: E.E.L.
 TRACED: E.E.L.
 CHECKED: E.E.L.
 SUBMITTED: R.L. Chapman
 APPROVED: STATE HIGHWAY ENGINEER
 NUMBER: 3901