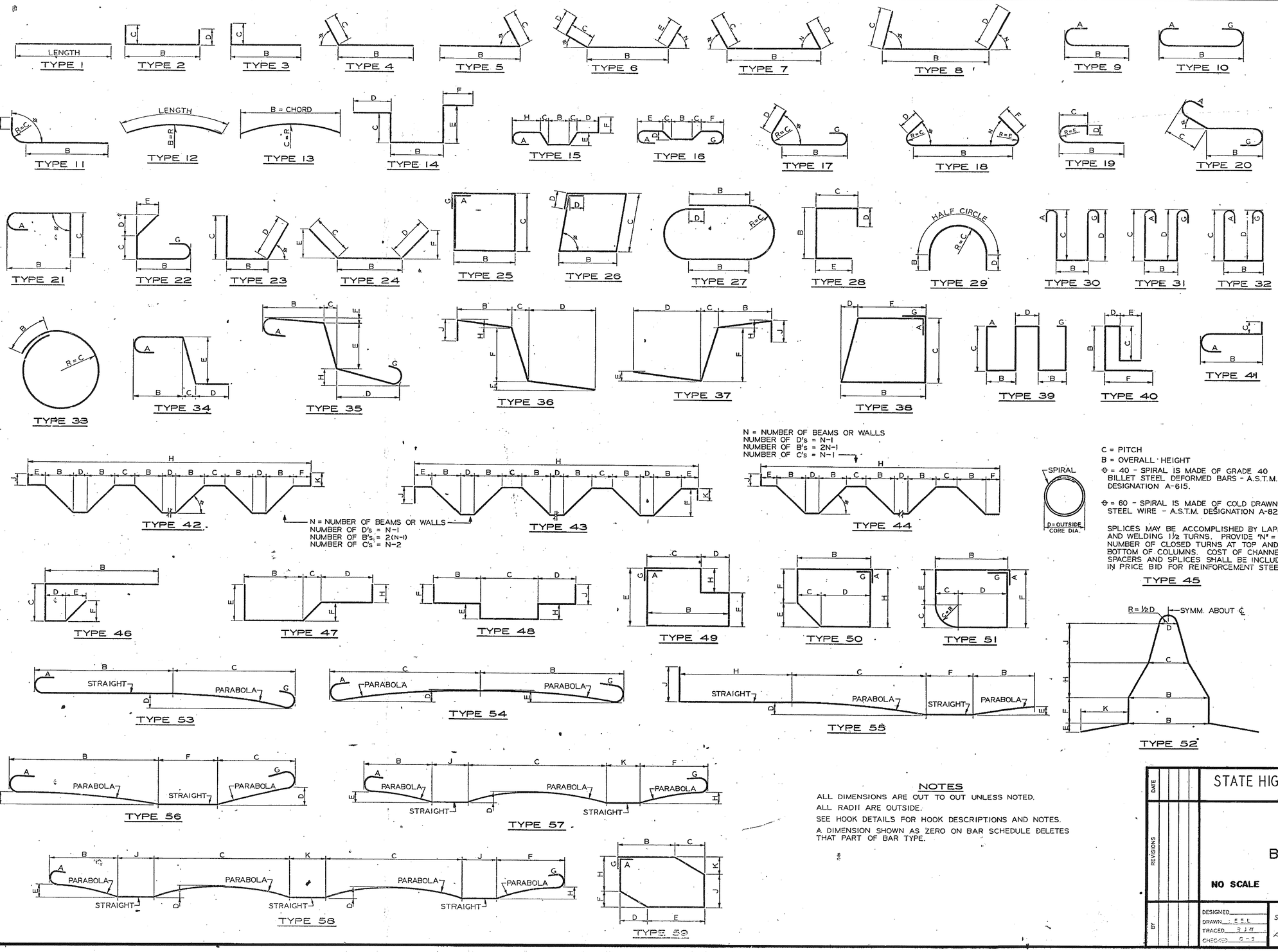
| FED ROAD DIV. NO. | STATE | FED AID PROJ. NO. | STATE AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|---|
| 3 | GA. | NHS-M | 002-00 | (13) | 22 | 24 |

CONTRACT 2




C = PITCH

B = OVERALL HEIGHT

θ = 40 - SPIRAL IS MADE OF GRADE 40 BILLET STEEL DEFORMED BARS - A.S.T.M. DESIGNATION A-615.

θ = 60 - SPIRAL IS MADE OF COLD DRAWN STEEL WIRE - A.S.T.M. DESIGNATION A-82.

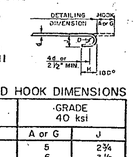
SPLICES MAY BE ACCOMPLISHED BY LAPPING AND WELDING 1½ TURNS. PROVIDE 'N' = TOTAL NUMBER OF CLOSED TURNS AT TOP AND BOTTOM OF COLUMNS. COST OF CHANNEL SPACERS AND SPLICES SHALL BE INCLUDED IN PRICE BID FOR REINFORCEMENT STEEL.

## 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

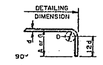



### RECOMMENDED 180° END HOOK DIMENSIONS

| BAR SIZE | GRADES 50-60-75 ksi | | GRADE 40 ksi | |
|---|---|---|---|---|
| | A or G | J | A or G | J |
| #3 | 5 | 3 | 5 | 2¾ |
| #4 | 6 | 4 | 6 | 3½ |
| #5 | 7 | 5 | 7 | 4½ |
| #6 | 8 | 6 | 8 | 5¼ |
| #7 | 10 | 7 | 9 | 6¼ |
| #8 | 11 | 8 | 10 | 7 |
| #9 | 1-3 | 11¼ | 1-0 | 8 |
| #10 | 1-5 | 1-0¾ | 1-1 | 9 |
| #11 | 1-7 | 1-2¾ | 1-2 | 10 |
| #14 | 2-2 | 1-8½ | 2-2 | 1-8½ |
| #18 | 2-11 | 2-3 | 2-11 | 2-3 |
| STYLE | 1 | | 2 | |

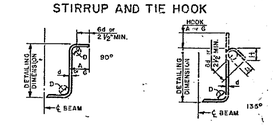
### RECOMMENDED 90° END HOOK DIMENSIONS

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 |
|---|---|
| #3 | 6 |
| #4 | 8 |
| #5 | 10 |
| #6 | 1-0 |
| #7 | 1-2 |
| #8 | 1-4 |
| #9 | 1-7 |
| #10 | 1-10 |
| #11 | 2-0 |
| #14 | 2-7 |
| #18 | 3-5 |
| HOOK STYLE 3 | |

### STIRRUP AND TIE HOOK




STIRRUPS
(TIES SIMILAR)

**STIRRUP AND TIE HOOK DIMENSIONS**
GRADES 40-50-60 ksi

| BAR SIZE | D (in.) | 90° HOOK | 135° HOOK | |
|---|---|---|---|---|
| | | HOOK A or G | HOOK A or G | H Approx. |
| #3 | 1½ | 4 | 4 | 2½ |
| #4 | 2 | 4½ | 4½ | 3 |
| #5 | 2½ | 6 | 5½ | 3¾ |
| #6 | 3 | 6½ | 6½ | 4½ |
| 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.

### 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**

DATE | REVISIONS | BY

DESIGNED
DRAWN E.S.L.
TRACED B.J.W.
CHECKED D.-S.

SUBMITTED R. L. Chapman Jr. BRIDGE ENGINEER
APPROVED STATE HIGHWAY ENGINEER

NUMBER **3901**