SUPERSTRUCTURE

MARK	LOCATION	BAR SIZE	COAT	NO. OF BARS	BAR TYPE	BEND TYPE	BARS/ SET	LENGTH a	LENGTH b	LENGTH c	LENGTH d	LENGTH e	ANGLE θ	ANGLE Φ	TOTAL LENGTH

SUPERSTRUCTURE BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#4		0.668	
#5		1.043	
#6		1.502	
#7		2.044	
	TOTAL WEIGHT		

EPOXY COATED BAR WEIGHT

BAR SIZE	LINEAR FEET	POUNDS PER FOOT	TOTAL WEIGHT
#4		0.668	
#5		1.043	
#6		1.502	
#7		2.044	
	TOTAL WEIGHT		

GFRP BAR LENGTH

BAR SIZE	LINEAR FEET PER BAR	NUMBER OF BARS	TOTAL LENGTH
#4			

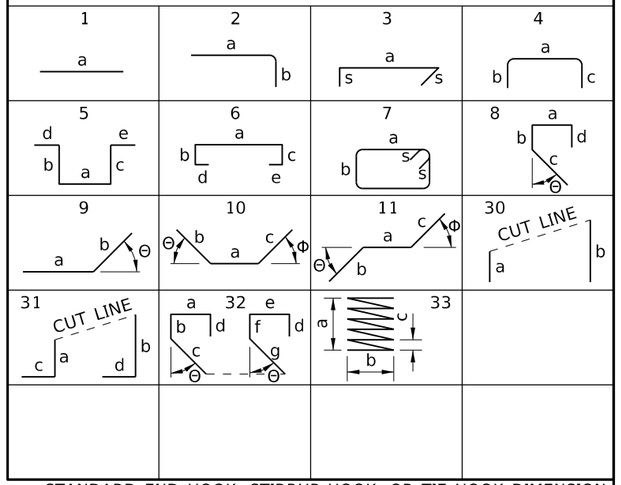
REINFORCEMENT NOTES

1. PROVIDE BEND DETAILS IN ACCORDANCE WITH THE LATEST ACI STANDARD PRACTICE AND AASHTO SPECIFICATIONS.
2. DIMENSIONS SHOWN IN THE "BAR BEND DIAGRAMS" ARE OUT TO OUT OF BEND POINTS, HOOKS, OR BAR ENDS, UNLESS NOTED OTHERWISE. PIN DIAMETER "D" IS THE SAME FOR BENDS AND HOOK ON A BAR.
3. NO DEDUCTIONS FOR CURVATURE AT BENDS ARE MADE EXCEPT FOR THE ADJUSTMENTS INCLUDED IN THE ABOVE "ADD LENGTH" DIMENSIONS.
4. * INDICATES STIRRUP OR TIE BAR.
5. PROVIDE BARS THAT CONFORM TO AASHTO M31, GRADE 60.
6. A. PROVIDE EPOXY COATED BARS DESIGNATED "E" IN THE "COAT" COLUMN.
   B. PROVIDE GLASS FIBER REINFORCED POLYMER COATED BARS DESIGNATED "G" IN THE "COAT" COLUMN.
   C. PROVIDE BAR TYPE S OR W DESIGNATED IN THE "BAR TYPE" COLUMN.
7. BAR WEIGHTS ONLY INCLUDE REINFORCING STEEL PAID FOR UNDER THE PAY ITEMS 503-005A, 503-010A, 503-015A & 503-020A. OTHER REINFORCING STEEL NOT LISTED IS INCIDENTAL TO OTHER PAY ITEMS.

DESIGNER NOTES

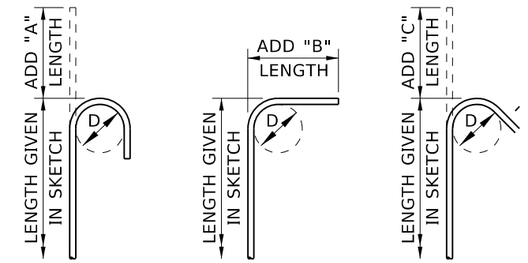
PROVIDE BAR TYPE S OR W IN ACCORDANCE WITH BRIDGE DESIGN MANUAL ARTICLE 5.4.3.

BAR BEND DIAGRAMS



s = STANDARD END HOOK, STIRRUP HOOK, OR TIE HOOK DIMENSION

BEND DETAILS



"L" = LENGTH GIVEN IN SKETCH

STANDARD END HOOK DIMENSIONS

BAR SIZE	ALL GRADES D	A	B
#3	2¼"	5"	6"
#4	3"	6"	8"
#5	3¾"	7"	10"
#6	4½"	8"	1'-0"
#7	5¼"	10"	1'-2"
#8	6"	11"	1'-4"
#9	9½"	1'-3"	1'-7"
#10	10¾"	1'-5"	1'-10"
#11	1'-0"	1'-7"	2'-0"
#14	1'-6¼"	2'-3"	2'-7"
#18	2'-0"	3'-0"	3'-5"

STIRRUP AND TIE HOOK DIMENSIONS

ALL GRADES D	B	C
1½"	4"	4"
2"	4½"	4½"
2½"	6"	5½"
4½"	1'-0"	8"
5¼"	1'-2"	9"
6"	1'-4"	10½"

REVISIONS NO.	DATE	BY	DESCRIPTION
△			
△			
△			
△			
△			

DESIGNED
DESIGN CHECKED
DETAILED
DWG. CHECKED
CORRECTIONS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME
Standards/Bridge Standard Drawings/ B05.18.DGN

DRAWING DATE: DEC 2024

IDAHO TRANSPORTATION DEPARTMENT
YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

APPROVED BY: BRIDGE ENGINEER MICHAEL T. JOHNSON DATE: _____

ENGLISH

PROJECT NO.

METAL REINFORCEMENT - SHEET 2

BRIDGE LRFD DESIGN MANUAL B5.1B

BRIDGE PLANS

BRIDGE KEY NO.

COUNTY | KEY NO.

BRIDGE DWG. NO. | SHEET OF