

GIRDER DIMENSIONS

GIRDER	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"	"M"	CONCRETE (CY)
AG1	90'-9 $\frac{1}{8}$ "	45'-4 $\frac{3}{16}$ "	1'-6 $\frac{1}{16}$ "	39'-10 $\frac{9}{16}$ "	50'-10 $\frac{9}{16}$ "	--	--	--	--	--	--	--	--	18.0
AG2	90'-7 $\frac{1}{2}$ "	45'-3 $\frac{3}{4}$ "	1'-5 $\frac{1}{4}$ "	--	--	39'-9 $\frac{3}{4}$ "	11'-3 $\frac{3}{4}$ "	39'-6"	--	--	--	--	--	18.0
AG3	90'-5 $\frac{7}{8}$ "	45'-2 $\frac{15}{16}$ "	1'-4 $\frac{1}{16}$ "	--	--	39'-8 $\frac{15}{16}$ "	11'-3 $\frac{3}{8}$ "	39'-5 $\frac{9}{16}$ "	--	--	--	--	--	17.9
AG4	90'-4 $\frac{1}{4}$ "	45'-2 $\frac{1}{8}$ "	1'-3 $\frac{3}{8}$ "	50'-11 $\frac{1}{8}$ "	39'-5 $\frac{1}{8}$ "	--	--	--	--	--	--	--	--	17.9
BG1	119'-11 $\frac{1}{4}$ "	59'-11 $\frac{5}{8}$ "	1'-1 $\frac{1}{8}$ "	--	--	34'-4 $\frac{1}{8}$ "	39'-8 $\frac{1}{2}$ "	45'-10 $\frac{3}{8}$ "	--	--	--	--	--	23.8
BG2	119'-9"	59'-10 $\frac{1}{2}$ "	1'-0"	--	--	--	--	--	34'-3"	11'-7 $\frac{1}{4}$ "	28'-1 $\frac{1}{4}$ "	11'-7 $\frac{1}{4}$ "	34'-2 $\frac{1}{4}$ "	23.7
BG3	119'-6 $\frac{5}{8}$ "	59'-9 $\frac{5}{16}$ "	10 $\frac{3}{16}$ "	--	--	--	--	--	34'-1 $\frac{3}{4}$ "	11'-6 $\frac{7}{8}$ "	28'-1 $\frac{5}{8}$ "	11'-6 $\frac{7}{8}$ "	34'-1 $\frac{1}{2}$ "	23.7
BG4	119'-4 $\frac{3}{8}$ "	59'-8 $\frac{1}{16}$ "	9 $\frac{11}{16}$ "	--	--	45'-7 $\frac{1}{8}$ "	39'-8 $\frac{1}{2}$ "	34'-0 $\frac{3}{4}$ "	--	--	--	--	--	23.6
CG1	63'-0 $\frac{7}{8}$ "	31'-6 $\frac{1}{16}$ "	7 $\frac{15}{16}$ "	25'-6 $\frac{1}{16}$ "	37'-6 $\frac{1}{16}$ "	--	--	--	--	--	--	--	--	12.5
CG2	62'-11 $\frac{3}{8}$ "	31'-5 $\frac{13}{16}$ "	7 $\frac{3}{16}$ "	--	--	25'-5 $\frac{13}{16}$ "	11'-10 $\frac{3}{16}$ "	25'-7 $\frac{1}{2}$ "	--	--	--	--	--	12.5
CG3	62'-10 $\frac{3}{8}$ "	31'-5 $\frac{3}{16}$ "	6 $\frac{11}{16}$ "	--	--	25'-5 $\frac{3}{16}$ "	11'-9 $\frac{15}{16}$ "	25'-7 $\frac{1}{4}$ "	--	--	--	--	--	12.5
CG4	62'-9 $\frac{1}{8}$ "	31'-4 $\frac{9}{16}$ "	6 $\frac{1}{16}$ "	37'-2 $\frac{1}{8}$ "	25'-7"	--	--	--	--	--	--	--	--	12.4

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW.

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

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.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

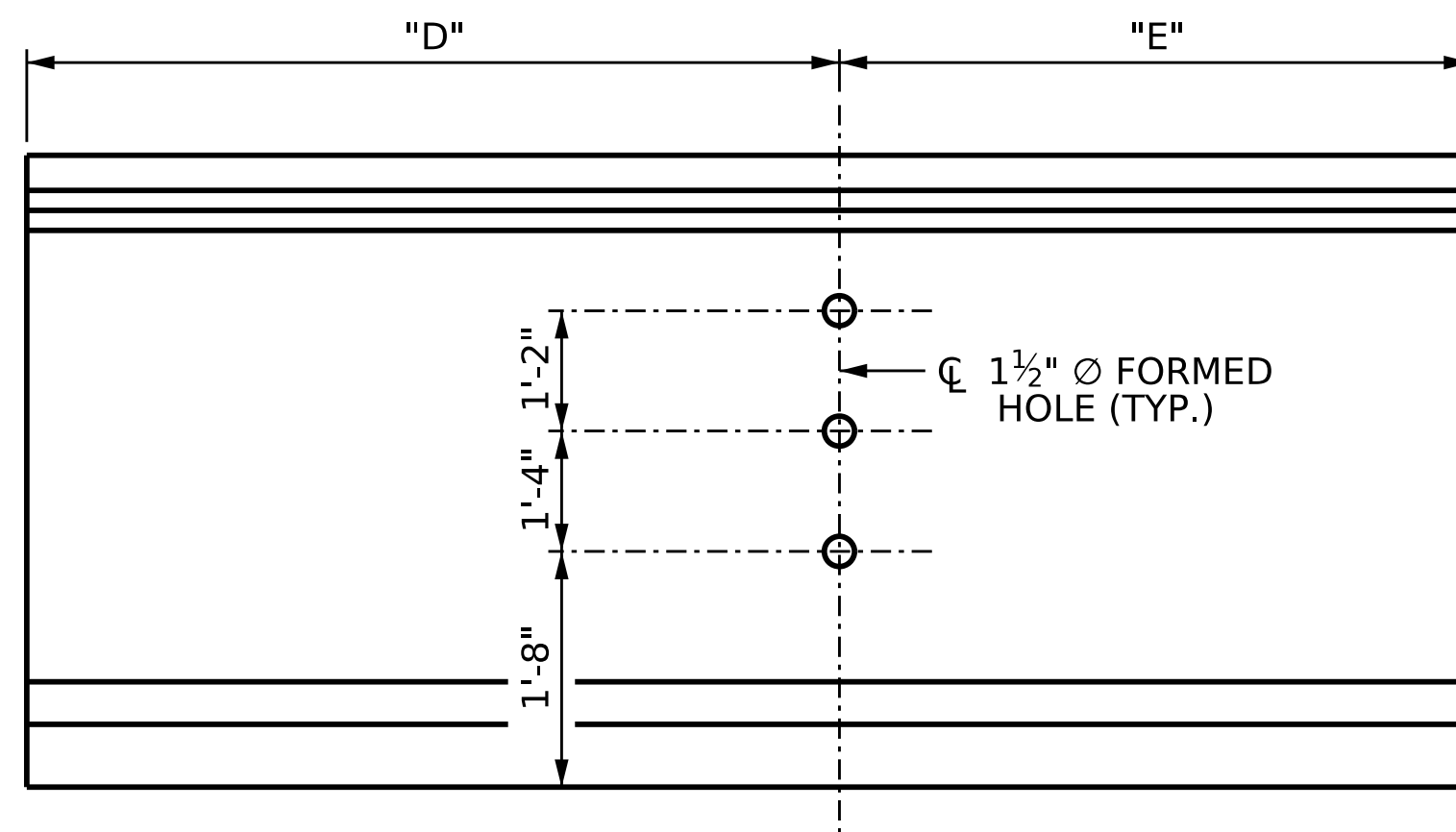
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 5200 PSI (SPAN A), 6800 PSI (SPAN B), AND 4800 PSI (SPAN C).

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

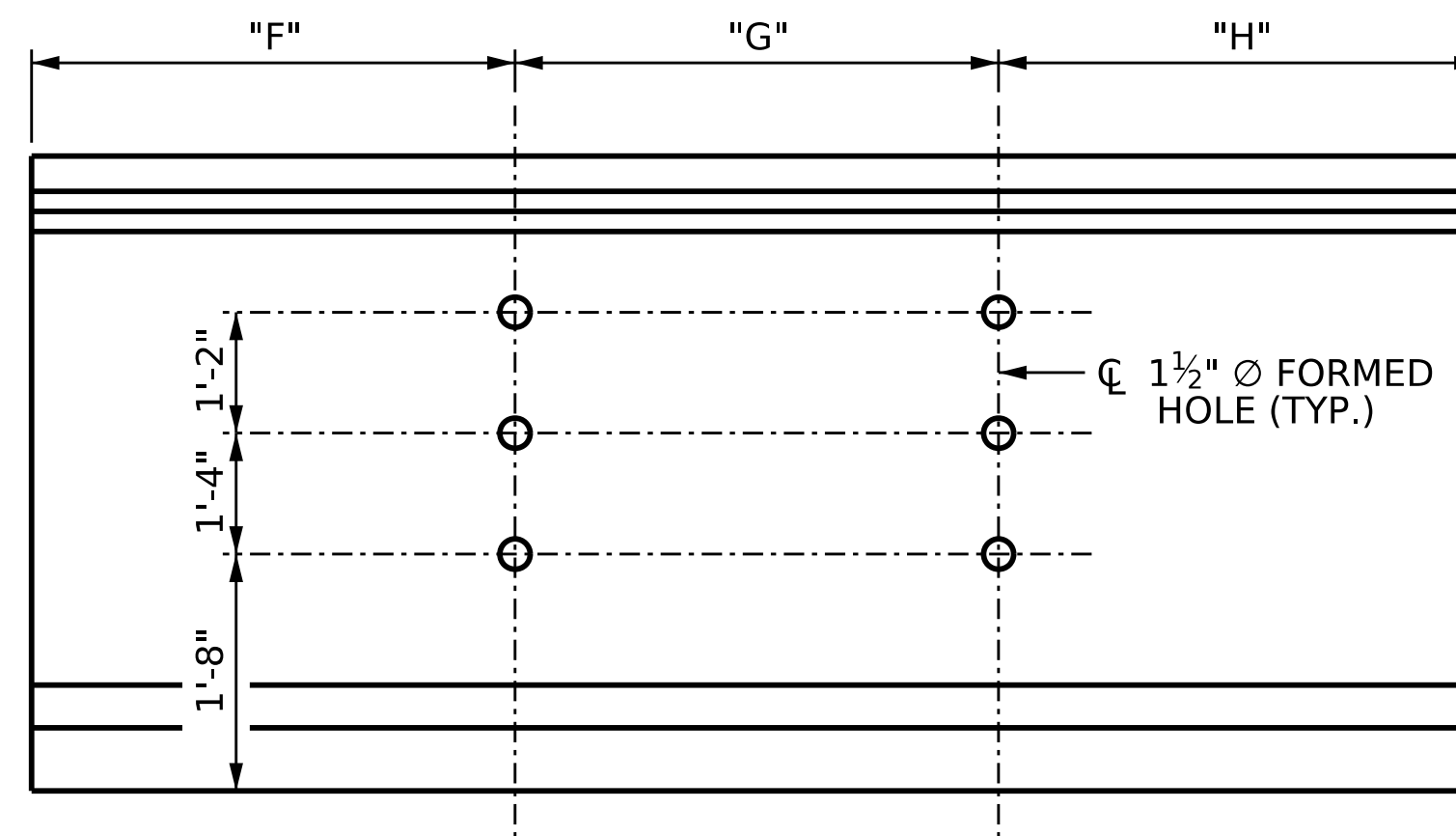
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF $\frac{1}{4}$ " EXCEPT AS NOTED IN THE LINK SLAB REGION.

A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE.

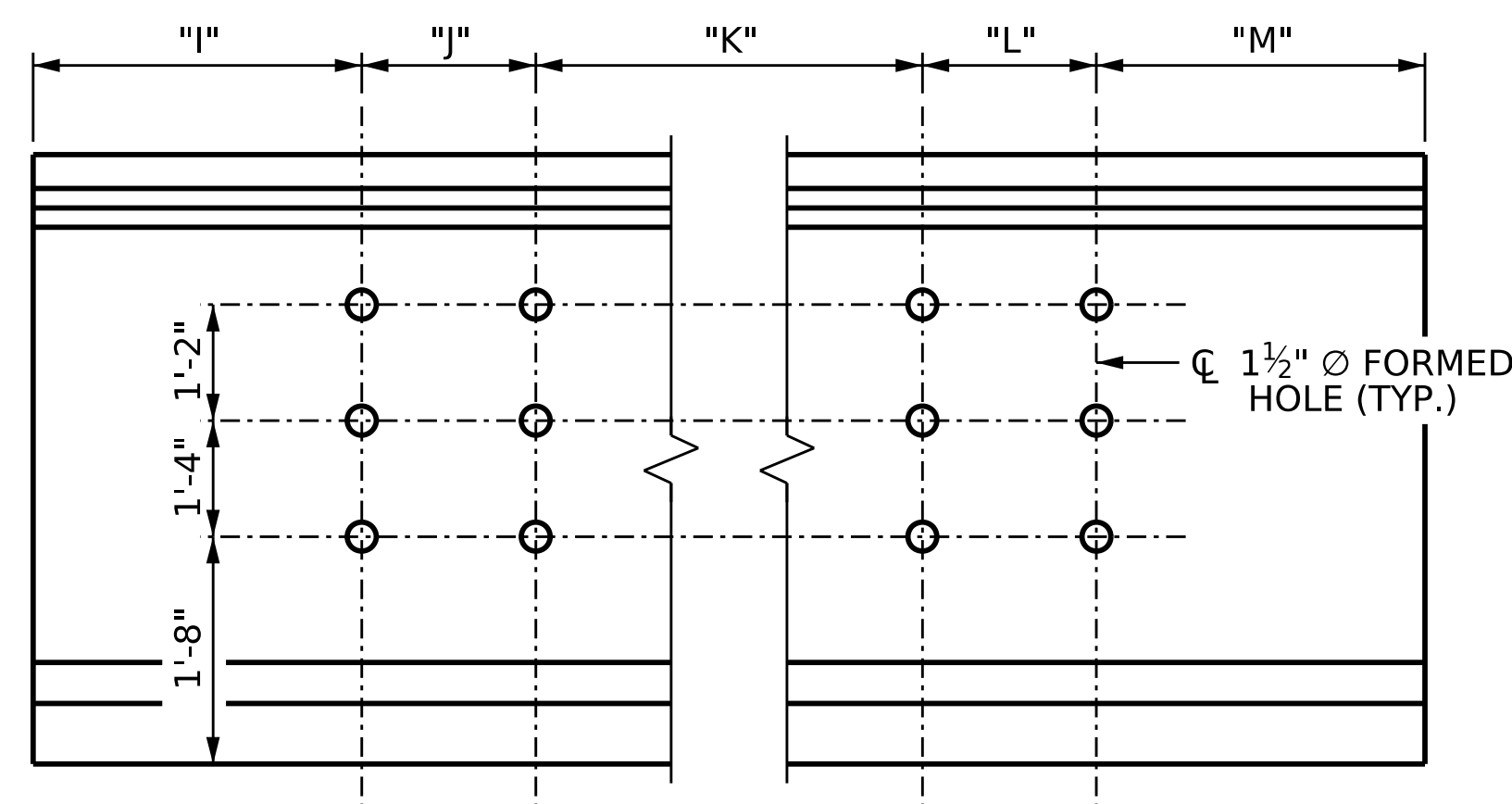
THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.



GIRDERS AG1, AG4, CG1 & CG4



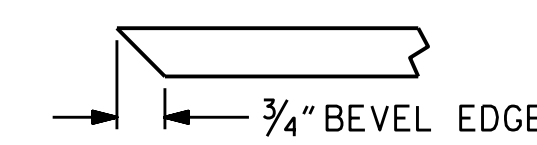
GIRDERS AG2, AG3, BG1, BG4, CG2 & CG3



GIRDERS BG2 & BG3

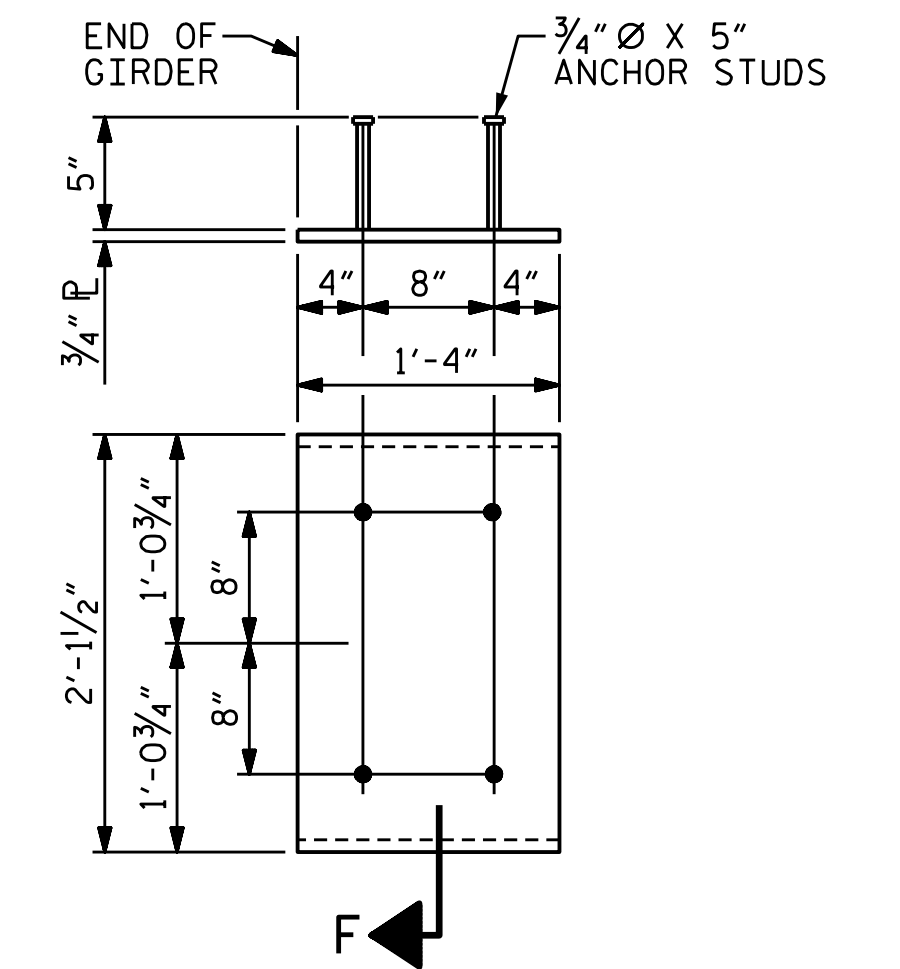
LOCATION OF 1 1/2" Ø FORMED HOLE

STATION AHEAD →



SECTION "F"

(SEE NOTES)



EMBEDDED PLATE "B-1" DETAILS

(2 REQ'D PER GIRDER)

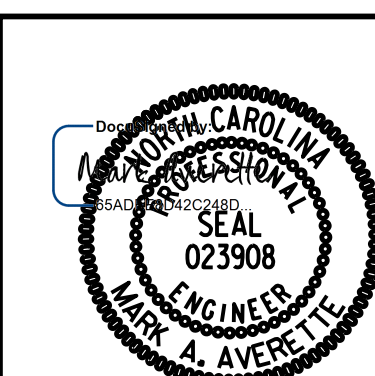
PROJECT NO. I-2513AA/AB
BUNCOMBE COUNTY
 STATION: 20+16.70 -Y5RPA-

SHEET 4 OF 4



5640 Dillard Drive, Suite 200
 Cary, NC 27518

LICENSURE NO. C-4434



12/21/2023 | 11:09 AM

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**63" PRESTRESSED
 CONCRETE MODIFIED
 BULB TEE DETAILS**

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO.
5-20
TOTAL SHEETS
49

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

12/21/2023 1:48:31 PM c:\pwworking\cecom_ds21_na_2020\d0252774\I2513AA_SMU_G4_100902.dgn

DRAWN BY : S.D. COOPER DATE : 12-23
 CHECKED BY : M.A. AVERETTE DATE : 12-23
 DESIGN ENGINEER OF RECORD: M.A. AVERETTE DATE : 12-23