



SPIRAL COLUMN REINFORCING STEEL QUANTITIES FOR 3'-0" X 20' COLUMN

SPIRAL HEIGHT = 20'-0" + 3" EXTENSION INTO CAP = 20'-3"
 SPIRAL TURNS = $20.25' \times 12" \div 3" = 81$ TURNS
 TOTAL TURNS = 81 TURNS + 2 (1 1/2) TURNS = 84 TURNS
 SPIRAL LENGTH = $\frac{84 \times \sqrt{[(36" - 4\frac{1}{2}"\pi)]^2 + (3")^2}}{12"} = 693'-1"$
 SPIRAL WEIGHT = (693.08 X 0.668 LBS./FT.) X 2 COLS. = 926 LBS.

EXAMPLE - BILL OF MATERIAL

FIGURE 10 - 9