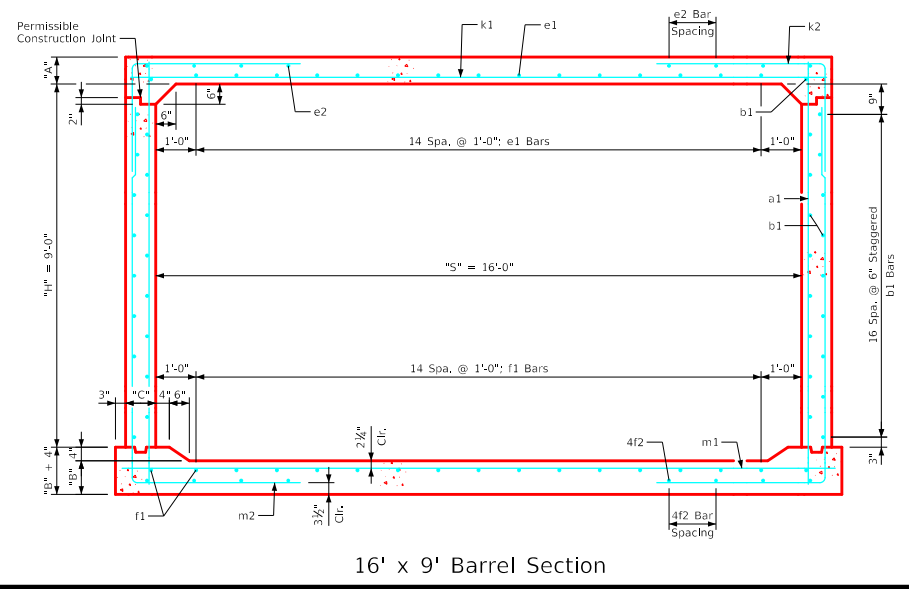
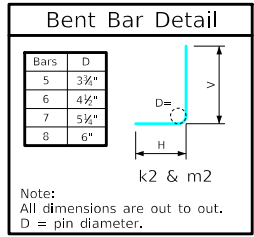


Variable Dimensions and Quantities for 16' x 9' Barrel Sections

| Dimensions | | | | | | | | | | | | Bar List | | | | | | | | | | | | | | | | | | Quantities | | | | | | | | | | | | | | | | | | | |
|------------|----|---|------|------|------|---|------|-----|---------|------|-----|----------|------|-----|-----|------|-----|-----|------|-----|----|------|-----|---|------|-----|--------|------|-----|------------|------------------|--------|------|--------|---------------|-------|---------|---|---|---------|-------|--------|---|---------|-------|-------|-------|-------|--------|
| Fill | S | H | A | B | C | D | a1 | | b1 | | e1 | | e2 | | f1 | | f2 | | k1 | | k2 | | k9 | | m1 | | m2 | | m9 | | Concrete (CY/FT) | | | | Steel (LB/FT) | | | | | | | | | | | | | | |
| 0 | 16 | 9 | 14.5 | 15 | 9 | 6 | Size | Sp. | L | Size | Sp. | No. | Size | Sp. | No. | Size | Sp. | No. | Size | Sp. | L | Size | Sp. | L | Size | Sp. | L | Size | Sp. | L | Size | Sp. | Slab | Floor | Walls | Total | | | | | | | | | | | | | |
| 1 | 16 | 9 | 14 | 15 | 9 | 6 | 4 | 6 | 11'-4" | 4 | 6 | 36 | 5 | 12 | 15 | 4 | 14 | 10 | 4 | 12 | 17 | 4 | 16 | 8 | 8 | 9 | 17'-2" | 5 | 6 | 8'-0" | 5'-0" | 3'-8" | 5 | 17'-2" | 8 | 9 | 17'-8" | 5 | 6 | 14'-6" | 4'-9" | 9'-8" | 5 | 17'-8" | 0.816 | 0.870 | 0.479 | 2.165 | 323.66 |
| 2 | 16 | 9 | 10 | 12.5 | 9 | 9 | 4 | 12 | 10'-9" | 4 | 6 | 36 | 6 | 12 | 15 | 4 | 16 | 8 | 4 | 12 | 17 | 4 | 16 | 8 | 8 | 6 | 17'-2" | 6 | 6 | 8'-3" | 4'-7" | 3'-8" | 6 | 17'-2" | 7 | 6 | 17'-8" | 6 | 6 | 14'-1" | 4'-7" | 9'-6" | 6 | 17'-8" | 0.573 | 0.731 | 0.479 | 1.783 | 387.53 |
| 3-5 | 16 | 9 | 10 | 12.5 | 9 | 9 | 4 | 12 | 10'-9" | 4 | 6 | 36 | 4 | 12 | 15 | 4 | 15 | 8 | 4 | 12 | 17 | 4 | 15 | 8 | 8 | 6 | 17'-2" | 6 | 6 | 8'-1" | 4'-5" | 3'-8" | 6 | 17'-2" | 8 | 6 | 17'-8" | 6 | 6 | 13'-10" | 4'-4" | 9'-6" | 6 | 17'-8" | 0.573 | 0.731 | 0.479 | 1.783 | 394.97 |
| 6-8 | 16 | 9 | 10.5 | 13.5 | 9 | 9 | 4 | 12 | 10'-11" | 4 | 6 | 36 | 4 | 12 | 15 | 4 | 14 | 8 | 4 | 12 | 17 | 4 | 12 | 8 | 8 | 6 | 17'-2" | 7 | 6 | 8'-2" | 4'-1" | 4'-1" | 7 | 17'-2" | 8 | 6 | 17'-8" | 6 | 6 | 13'-4" | 3'-9" | 9'-7" | 6 | 17'-8" | 0.600 | 0.787 | 0.479 | 1.866 | 411.08 |
| 9-10 | 16 | 9 | 12 | 14.5 | 9 | 9 | 4 | 12 | 11'-1" | 4 | 6 | 36 | 4 | 12 | 15 | 4 | 13 | 8 | 4 | 12 | 17 | 4 | 17 | 6 | 9 | 6 | 17'-2" | 6 | 6 | 7'-8" | 3'-10" | 3'-10" | 6 | 17'-2" | 9 | 6 | 17'-8" | 6 | 6 | 13'-1" | 3'-5" | 9'-8" | 6 | 17'-8" | 0.681 | 0.842 | 0.479 | 2.002 | 438.50 |
| 11-13 | 16 | 9 | 13 | 15.5 | 10 | 9 | 4 | 12 | 11'-3" | 4 | 6 | 36 | 4 | 12 | 15 | 4 | 16 | 6 | 4 | 12 | 17 | 4 | 16 | 6 | 9 | 6 | 17'-4" | 8 | 9 | 8'-1" | 3'-5" | 4'-8" | 8 | 17'-4" | 9 | 6 | 17'-10" | 8 | 9 | 13'-2" | 3'-5" | 9'-9" | 8 | 17'-10" | 0.744 | 0.908 | 0.532 | 2.184 | 473.89 |
| 14-16 | 16 | 9 | 14.5 | 17.5 | 10.5 | 6 | 4 | 6 | 11'-7" | 4 | 6 | 36 | 4 | 12 | 15 | 4 | 15 | 6 | 4 | 12 | 17 | 4 | 15 | 6 | 9 | 6 | 17'-5" | 8 | 9 | 8'-1" | 3'-4" | 4'-9" | 8 | 17'-5" | 9 | 6 | 17'-11" | 7 | 9 | 13'-3" | 3'-4" | 9'-11" | 7 | 17'-11" | 0.831 | 1.024 | 0.560 | 2.415 | 467.30 |



- Notes:**
- Dimensions listed on this sheet to be used in conjunction with Sheet RCB G3-20.
 - The k2 and m2 bars horizontal legs may lap in low fill situations.
 - Fill, dimensions "S" and "H" are in feet.
 - Dimensions "A", "B", "C", "D", and "Sp." listed in the bar list are in inches.
 - Dimensions "L", "H", "V" are in feet and inches.

| | | | |
|----------------------|---------------------------------|---|--------------------|
| LATEST REVISION DATE | APPROVED BY BRIDGE ENGINEER | Standard Design Single Reinforced Concrete Box Culverts July, 2020 | |
| | | Culvert Barrel Details 16' x 9' Barrel Sections | RCB 16-9-20 |

ENGLISHLRFDDESIGNEDSINGLECULVERTS.DGN - RCB 16-9-20 - THIS SHEET ISSUED 07-2020.