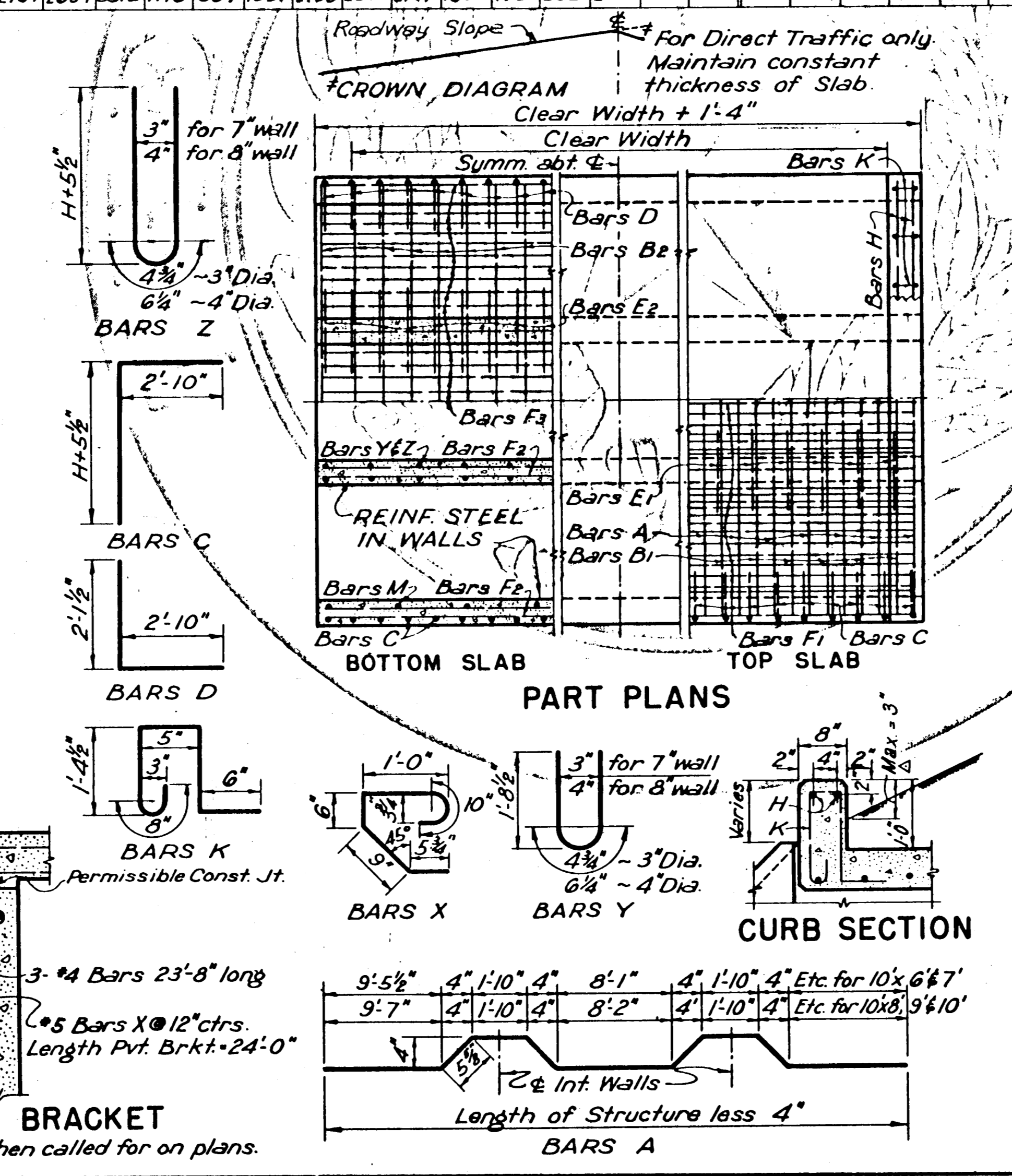


BILLS OF REINFORCING STEEL ~ FOR 44'-0" CLEAR WIDTH ~ BARRELS ONLY

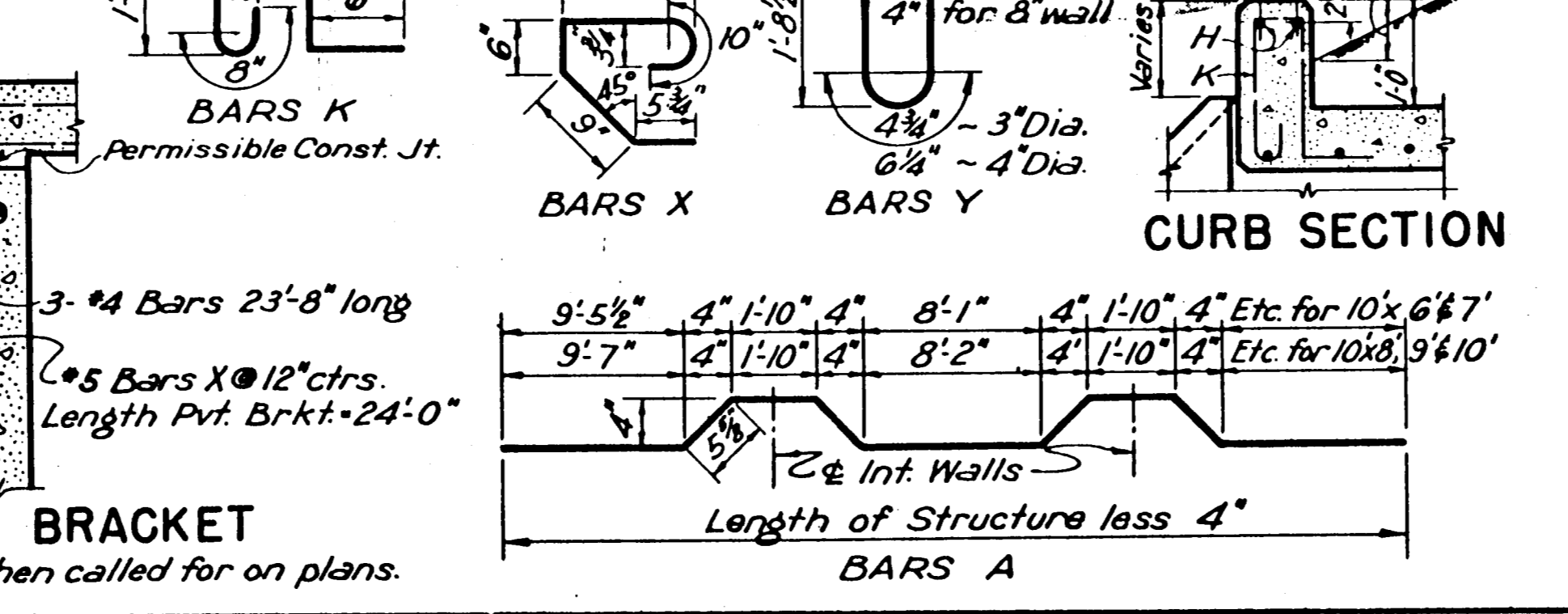
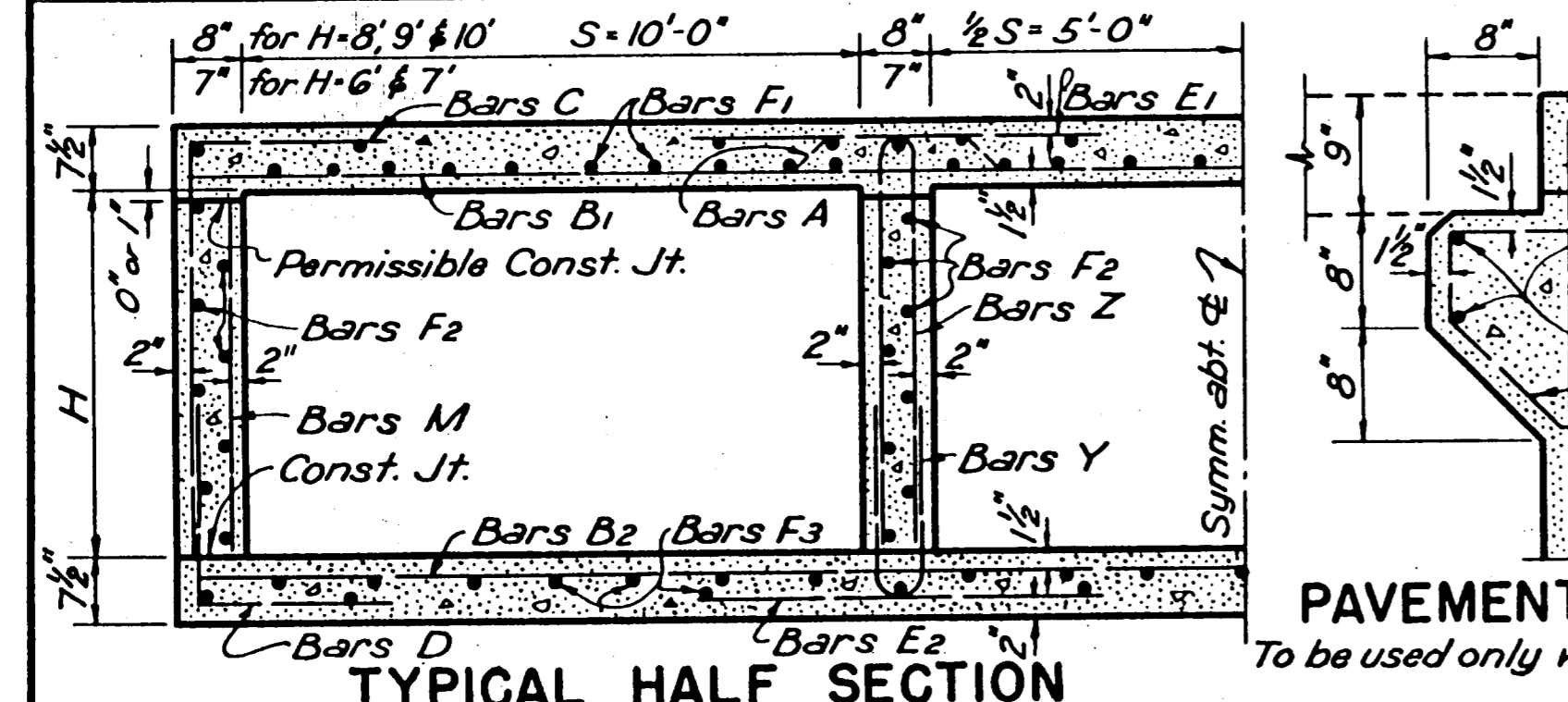
| MARK | 2 SPANS ~ 10'x6' | | | | | | | | | | | | | 2 SPANS ~ 10'x7' | | | | | | | | | | | | | 2 SPANS ~ 10'x8' | | | | | | | | | | | | | 2 SPANS ~ 10'x9' | | | | | | | | | | | | | | | | | | | | | | | |
|---------|------------------|-------|---------|---------|---------|------|------|-------|-------|-------|-------|------|-------|------------------|-------|-------|-------|---------|-------|-------|------|--------|-------|-------|-------|-------|------------------|-------|------|-------|--------|-------|---------|--------|--------|------|--------|-------|-------|------------------|-------|------|-------|------|-------|--------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|------|-------|------|-------|-------|-----|-----|
| | A | B1 | B2 | C | D | E1 | E2 | F1 | F2 | F3 | H | K | M | Y | Z | A | B1 | B2 | C | D | E1 | E2 | F1 | F2 | F3 | H | K | M | Y | Z | A | B1 | B2 | C | D | E1 | E2 | F1 | F2 | F3 | H | K | M | Y | Z | A | B1 | B2 | C | D | E1 | E2 | F1 | F2 | F3 | H | K | M | Y | Z | | | |
| NUMBER | 40 | 39 | 52 | 104 | 104 | 39 | 61 | 29 | 24 | 21 | 4 | 44 | 62 | 46 | 46 | 40 | 39 | 52 | 110 | 110 | 39 | 65 | 29 | 30 | 21 | 4 | 44 | 62 | 46 | 46 | 40 | 39 | 52 | 116 | 116 | 39 | 65 | 29 | 30 | 21 | 4 | 46 | 62 | 46 | 46 | 40 | 39 | 55 | 122 | 122 | 39 | 69 | 29 | 36 | 21 | 4 | 46 | 62 | 46 | 46 | | | |
| SIZE | #5 | #5 | #5 | #5 | #5 | #6 | #6 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #5 | #5 | #5 | #5 | #5 | #6 | #6 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #5 | #5 | #5 | #5 | #5 | #6 | #6 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #5 | #5 | #5 | #5 | #5 | #6 | #6 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | | |
| SPACING | 14" | 14" | 10 1/2" | 10 1/2" | 10 1/2" | 14" | 9" | 18" | 18" | 12" | 12" | 12" | 12" | 12" | 12" | 14" | 14" | 10 1/2" | 10" | 10" | 14" | 8 1/2" | 17" | 17" | 12" | 12" | 12" | 12" | 12" | 12" | 14" | 14" | 10 1/2" | 9 1/2" | 9 1/2" | 14" | 8 1/2" | 19" | 19" | 12" | 12" | 12" | 12" | 12" | 12" | 12" | 14" | 14" | 10" | 9" | 9" | 14" | 8" | 18" | 18" | 12" | 12" | 12" | 12" | 12" | 12" | 12" | 12" |
| LENGTH | 21'8" | 21'5" | 21'5" | 9'3" | 4'11" | 5'8" | 5'8" | 45'0" | 45'0" | 45'0" | 21'5" | 4'2" | 5'11" | 3'7" | 13'1" | 21'8" | 21'5" | 21'5" | 10'3" | 4'11" | 5'8" | 5'8" | 45'0" | 45'0" | 45'0" | 21'5" | 4'2" | 6'11" | 3'7" | 15'1" | 21'11" | 21'8" | 21'8" | 11'3" | 4'11" | 5'8" | 5'8" | 45'0" | 45'0" | 45'0" | 21'8" | 4'2" | 7'11" | 3'7" | 17'1" | 21'11" | 21'8" | 21'8" | 12'3" | 4'11" | 5'8" | 5'8" | 45'0" | 45'0" | 45'0" | 21'8" | 4'2" | 7'11" | 3'7" | 17'1" | 19'1" | | |
| WEIGHT | 904 | 871 | 1162 | 1003 | 534 | 332 | 519 | 873 | 722 | 632 | 57 | 123 | 245 | 110 | 402 | 904 | 871 | 1162 | 1176 | 564 | 332 | 554 | 873 | 903 | 632 | 57 | 123 | 287 | 110 | 463 | 915 | 881 | 1175 | 1361 | 595 | 332 | 554 | 873 | 903 | 632 | 58 | 128 | 328 | 110 | 525 | 915 | 881 | 1243 | 1559 | 626 | 332 | 588 | 873 | 1084 | 632 | 58 | 128 | 369 | 110 | 586 | | | |

| MARK | A | B1 | B2 | C | D | E1 | E2 | F1 | F2 | F3 | H | K | M | Y | Z |
|---------|--------|-------|--------|-------|-------|------|--------|-------|-------|-------|-------|------|-------|------|-------|
| NUMBER | 40 | 39 | 58 | 138 | 138 | 39 | 73 | 29 | 42 | 21 | 4 | 46 | 62 | 46 | 46 |
| SIZE | #5 | #5 | #5 | #5 | #5 | #6 | #6 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 |
| SPACING | 14" | 14" | 9 1/2" | 8" | 8" | 14" | 7 1/2" | 17" | 17" | 12" | 12" | 12" | 12" | 12" | 12" |
| LENGTH | 21'11" | 21'8" | 21'8" | 13'3" | 4'11" | 5'8" | 5'8" | 45'0" | 45'0" | 45'0" | 21'8" | 4'2" | 9'11" | 3'7" | 21'1" |
| WEIGHT | 915 | 881 | 1311 | 1907 | 708 | 332 | 622 | 873 | 1264 | 632 | 58 | 128 | 411 | 110 | 648 |



| CULVERT SIZE | NO. OF SPANS | LENGTH OF STRUCT. | *BARREL QUANTITIES | | QUANTITIES P.L.F. BBL. | |
|--------------|--------------|-------------------|--------------------|-------|------------------------|--------|
| | | | CONC. | STEEL | CONC. | STEEL |
| 10'x6' | 2 | 21'-9" | 64.36 | 8489 | 1.396 | 182.30 |
| | 3 | 32'-4" | 92.94 | 12393 | 2.015 | 265.88 |
| | 4 | 42'-11" | 121.57 | 16295 | 2.635 | 349.46 |
| | 5 | 53'-6" | 150.20 | 20197 | 3.255 | 433.12 |
| | 6 | 64'-1" | 178.79 | 24236 | 3.874 | 519.68 |
| | 10'x7' | 2 | 21'-9" | 67.31 | 9011 | 1.461 |
| 3 | | 32'-4" | 96.89 | 13070 | 2.102 | 280.32 |
| 4 | | 42'-11" | 126.47 | 17128 | 2.743 | 367.24 |
| 5 | | 53'-6" | 156.05 | 21185 | 3.384 | 454.24 |
| 6 | | 64'-1" | 185.63 | 25380 | 4.025 | 544.14 |
| 10'x8' | | 2 | 22'-0" | 74.12 | 9370 | 1.611 |
| | 3 | 32'-8" | 105.97 | 13494 | 2.302 | 289.51 |
| | 4 | 43'-4" | 137.87 | 17627 | 2.994 | 378.01 |
| | 5 | 54'-0" | 169.72 | 21761 | 3.685 | 466.60 |
| | 6 | 64'-8" | 201.62 | 26025 | 4.377 | 558.86 |
| | 10'x9' | 2 | 22'-0" | 77.47 | 9984 | 1.685 |
| 3 | | 32'-8" | 110.46 | 14298 | 2.401 | 306.99 |
| 4 | | 43'-4" | 143.44 | 18619 | 3.117 | 399.65 |
| 5 | | 54'-0" | 176.43 | 22943 | 3.833 | 492.29 |
| 6 | | 64'-8" | 209.41 | 27398 | 4.544 | 587.80 |
| 10'x10' | | 2 | 22'-0" | 80.83 | 10800 | 1.759 |
| | 3 | 32'-8" | 114.95 | 15302 | 2.500 | 328.83 |
| | 4 | 43'-4" | 149.07 | 19812 | 3.241 | 426.29 |
| | 5 | 54'-0" | 183.14 | 24325 | 3.981 | 522.69 |
| | 6 | 64'-8" | 217.26 | 28974 | 4.722 | 622.39 |

GENERAL NOTES:
 Designed for HS20 Loading and maximum fill heights shown.
 The bottom edge of the top slab shall be chamfered 3 inches at the entrance. Reinforcing bars shall be adjusted to provide a minimum of 1 1/4 inches clear cover. Headwall heights will be reduced, if necessary, to provide a maximum of 3 inches projection above the roadway slope. No increase or decrease will be made in plan quantity of concrete or reinforcing steel for this work.
 Construction joints shown at the flow line may be raised a maximum of 6 inches at the Contractor's option. Bars M may be cut off or raised, bars C and D may be reversed (D on top) and bars Y and Z may be reversed (Y on top).



* These quantities do not include paving brackets, toe walls or wings.

| PVT. BRKT. QUANT. | |
|-------------------|-------------|
| 2-PVT. BRACKETS | 24'-0" Long |
| CONC. | STEEL |
| Cu. Yd. | Lb. |
| 1.19 | 272 |

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

MULTIPLE BOX CULVERTS

SIZES - 10'x6', 10'x7', 10'x8', 10'x9' & 10'x10'

DIRECT TRAFFIC TO 2'-0" FILL

RECORD DRAWING MC10-1

Rev. 6-63 Rev. 7-64 Rev. 8-65

| | | | | | | |
|-------|---------|----------------|------------|-------|-------------------------|-----------|
| DATE | DRAWING | DATE | REVISED BY | STATE | FEDERAL AID PROJECT NO. | SHEET NO. |
| CK DM | WH | ORIGINAL | JAN 1958 | TEXAS | | |
| CK DM | MDA | Rev. Jan. 1959 | | | | |
| CK DM | KMI | Rev. Nov. 1964 | | | | |
| CK YR | OCC | Rev. Nov. 1967 | | | | |
| | | Rev. May 1967 | | | | |

PREPARED BY AND FOR THE USE OF THE STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

C-4

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