

DIMENSIONS AND ESTIMATE OF QUANTITIES

~ NOTES ~

| INLET SIZE NO. | X | Y | PIPE MAX. DIA. | ① H | CONCRETE | | REINF. STEEL LBS. |
|----------------|-------|-------|----------------|--------|----------|-----|-------------------|
| | | | | | CU. YDS. | ② Q | |
| 1 | | | 12" | 2'-2" | 0.99 | | |
| 2 | 2'-0" | 2'-0" | 15" | 2'-5" | 1.06 | | 28 |
| 3 | | | 18" | 2'-9" | 1.13 | | |
| 4 | | | 21" | 3'-0" | 1.35 | | 32 |
| 5 | 2'-6" | 2'-6" | 24" | 3'-3" | 1.44 | 0.3 | 37 |
| 6 | | | 24" | 3'-3" | 1.60 | | 32 |
| 7 | | | 24" | 3'-3" | 1.68 | | |
| 8 | | | 27" | 3'-6" | 1.86 | | 42 |
| 9 | 3'-0" | 2'-6" | 27" | 3'-6" | 2.04 | 0.4 | 48 |
| 10 | | | 30" | 3'-10" | 1.93 | 0.3 | 41 |
| 11 | | | 30" | 3'-10" | 2.13 | | 47 |
| 12 | | | 30" | 3'-10" | 2.34 | 0.4 | 54 |
| 13 | | | 30" | 3'-10" | 2.54 | | 60 |
| 14 | 3'-6" | 3'-6" | 33" | 4'-1" | 2.02 | 0.3 | 41 |
| 15 | | | 33" | 4'-1" | 2.24 | | 47 |
| 16 | | | 33" | 4'-1" | 2.45 | | 54 |
| 17 | | | 33" | 4'-1" | 2.66 | | 60 |
| 18 | | | 36" | 4'-4" | 2.30 | 0.4 | 45 |
| 19 | | | 36" | 4'-4" | 2.53 | | 52 |
| 20 | 4'-0" | 2'-6" | 36" | 4'-4" | 2.76 | | 59 |
| 21 | | | 36" | 4'-4" | 2.99 | | 66 |
| 22 | | | 36" | 4'-4" | 3.22 | 0.5 | 73 |
| 23 | | | 42" | 4'-11" | 2.70 | | 50 |
| 24 | | | 42" | 4'-11" | 2.95 | 0.4 | 57 |
| 25 | 4'-6" | 3'-0" | 42" | 4'-11" | 3.21 | | 65 |
| 26 | | | 42" | 4'-11" | 3.47 | | 73 |
| 27 | | | 42" | 4'-11" | 3.73 | 0.5 | 80 |
| 28 | | | 42" | 4'-11" | 3.98 | | 88 |
| 29 | | | 48" | 5'-5" | 3.12 | 0.4 | 54 |
| 30 | | | 48" | 5'-5" | 3.41 | | 62 |
| 31 | | | 48" | 5'-5" | 3.69 | | 71 |
| 32 | 5'-0" | 3'-0" | 48" | 5'-5" | 3.97 | 0.5 | 79 |
| 33 | | | 48" | 5'-5" | 4.26 | | 88 |
| 34 | | | 48" | 5'-5" | 4.54 | | 96 |
| 35 | | | 54" | 6'-0" | 4.83 | 0.6 | 104 |
| 36 | 5'-6" | 2'-0" | 54" | 6'-0" | 3.58 | 0.4 | 58 |
| 37 | | | 54" | 6'-0" | 3.89 | | 67 |
| 38 | | | 54" | 6'-0" | 4.20 | 0.5 | 76 |
| 39 | | | 54" | 6'-0" | 4.51 | | 86 |
| 40 | 5'-6" | 3'-6" | 54" | 6'-0" | 4.82 | | 95 |
| 41 | | | 54" | 6'-0" | 5.13 | | 104 |
| 42 | | | 54" | 6'-0" | 5.44 | 0.6 | 113 |
| 43 | | | 54" | 6'-0" | 5.75 | | 122 |
| 44 | | | 60" | 6'-6" | 4.06 | | 63 |
| 45 | 6'-0" | 2'-0" | 60" | 6'-6" | 4.39 | 0.5 | 72 |
| 46 | | | 60" | 6'-6" | 4.73 | | 82 |
| 47 | | | 60" | 6'-6" | 5.07 | | 92 |
| 48 | | | 60" | 6'-6" | 5.07 | | 92 |

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| | | | | | CU. YDS. | ② Q | |
| 49 | | 4'-0" | | | 5.40 | | 102 |
| 50 | | 4'-6" | | | 5.74 | | 111 |
| 51 | 6'-0" | 5'-0" | 60" | 6'-6" | 6.08 | 0.6 | 121 |
| 52 | | 5'-6" | | | 6.42 | | 131 |
| 53 | | 6'-0" | | | 6.75 | 0.7 | 140 |
| 54 | | 2'-0" | | | 4.81 | 0.5 | 71 |
| 55 | | 2'-6" | | | 5.19 | | 83 |
| 56 | | 3'-0" | | | 5.57 | | 94 |
| 57 | | 3'-6" | | | 5.94 | 0.6 | 105 |
| 58 | 7'-0" | 4'-0" | 66" | 7'-1" | 6.32 | | 116 |
| 59 | | 4'-6" | | | 6.70 | | 127 |
| 60 | | 5'-0" | | | 7.07 | | 138 |
| 61 | | 5'-6" | | | 7.45 | 0.7 | 149 |
| 62 | | 6'-0" | | | 7.83 | | 160 |
| 63 | | 7'-0" | | | 8.58 | 0.8 | 182 |
| 64 | | 2'-0" | | | 5.37 | 0.5 | 76 |
| 65 | | 2'-6" | | | 5.77 | | 88 |
| 66 | | 3'-0" | | | 6.17 | 0.6 | 99 |
| 67 | | 3'-6" | | | 6.57 | | 111 |
| 68 | | 4'-0" | | | 6.98 | | 123 |
| 69 | 7'-6" | 4'-6" | 72" | 7'-7" | 7.38 | | 134 |
| 70 | | 5'-0" | | | 7.78 | 0.7 | 146 |
| 71 | | 5'-6" | | | 8.19 | | 158 |
| 72 | | 6'-0" | | | 8.59 | | 169 |
| 73 | | 7'-0" | | | 9.39 | 0.8 | 193 |
| 74 | | 7'-6" | | | 9.80 | | 204 |

- ① BASED ON "H" AS EQUAL TO D+++'-0".
- ② "Q" = CU. YDS. OF CONCRETE PER FOOT INCREASE OR DECREASE WHEN "H" VARIES FROM D+++'-0".
3. NO DEDUCTIONS HAVE BEEN MADE FOR PIPE, SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT.
4. THE DIMENSIONS AND QUANTITIES HAVE BEEN CALCULATED FOR ROUND CONCRETE PIPE. WHEN NON-CIRCULAR PIPE IS USED THE BOX SIZE SHALL BE DETERMINED BY THE CONTROLLING DIMENSIONS OF THE PIPE.

REFERENCE CHART

| DIA. OF PIPE | JUNCTION BOX | | CONCRETE TO DEDUCT FOR EACH PIPE CU. YDS. |
|--------------|-------------------------|-------------------------|---|
| | PIPE ON "X" SIDE OF BOX | PIPE ON "Y" SIDE OF BOX | |
| 0 | | | --- |
| 12" | 2'-0" | 2'-0" | |
| 15"-18" | | | 0.1 |
| 21"-24" | 2'-6" | 2'-6" | |
| 27" | 3'-0" | 3'-0" | 0.2 |
| 30"-33" | 3'-6" | 3'-6" | |
| 36" | 4'-0" | 4'-0" | 0.3 |
| 42" | 4'-6" | 4'-6" | 0.4 |
| 48" | 5'-0" | 5'-0" | 0.5 |
| 54" | 5'-6" | 5'-6" | 0.6 |
| 60" | 6'-0" | 6'-0" | 0.7 |
| 66" | 7'-0" | 7'-0" | 0.8 |
| 72" | 7'-6" | 7'-6" | 1.0 |

USE WITH CUR. STD. DWG.
RDX-001

| | |
|---|---------------------|
| KENTUCKY | |
| DEPARTMENT OF HIGHWAYS | |
| JUNCTION BOX | |
| (DIMENSIONS & QUANTITIES) | |
| STANDARD DRAWING NO. RDX-002-04 | |
| SUBMITTED <i>William S. Gullett</i> | DATE 12-01-15 |
| <small>DIRECTOR, DIVISION OF DESIGN</small> | <small>DATE</small> |
| APPROVED <i>[Signature]</i> | DATE 12-01-15 |
| <small>STATE HIGHWAY ENGINEER</small> | <small>DATE</small> |