

TABLES OF DIMENSIONS & REINFORCEMENT - 75° SKEW - (ONE WALL). Includes tables for dimensions and reinforcement for various pipe sizes and opening types.

TABLES OF DIMENSIONS & REINFORCEMENT - 60° SKEW - (ONE WALL). Includes tables for dimensions and reinforcement for various pipe sizes and opening types.

TABLES OF DIMENSIONS & REINFORCEMENT - 45° SKEW - (ONE WALL). Includes tables for dimensions and reinforcement for various pipe sizes and opening types.

* PIPE SIZE: DIMENSIONS SHOWN ARE INSIDE DIMENSIONS - SEE PIPE DETAIL SHEET.

ESTIMATED QUANTITIES (ONE WALL). Table showing estimated quantities for concrete and reinforcement steel based on pipe size and skew angle.

*INCLUDES CUT-OFF WALL. NOTE: CUT-OFF WALL PER FT. SAME FOR ALL SKEWS & PIPE SIZES - EQUALS 0.03 CU. YDS. CONC. & 1 LB. REINFORCING STEEL.

TABLE OF DIMENSION "X". Table defining dimension X for various pipe sizes and skew angles.

GENERAL NOTES

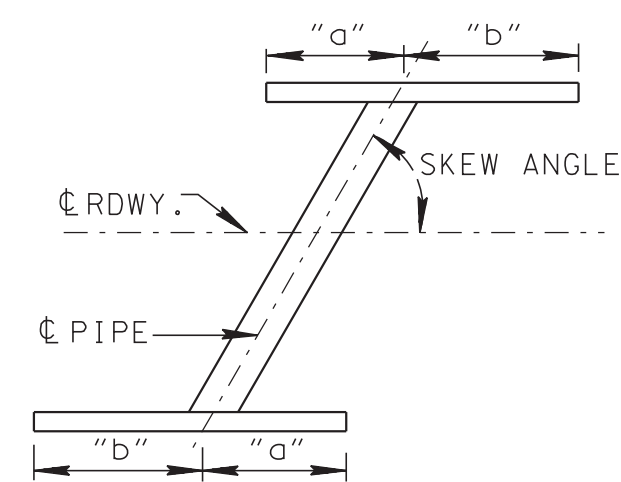
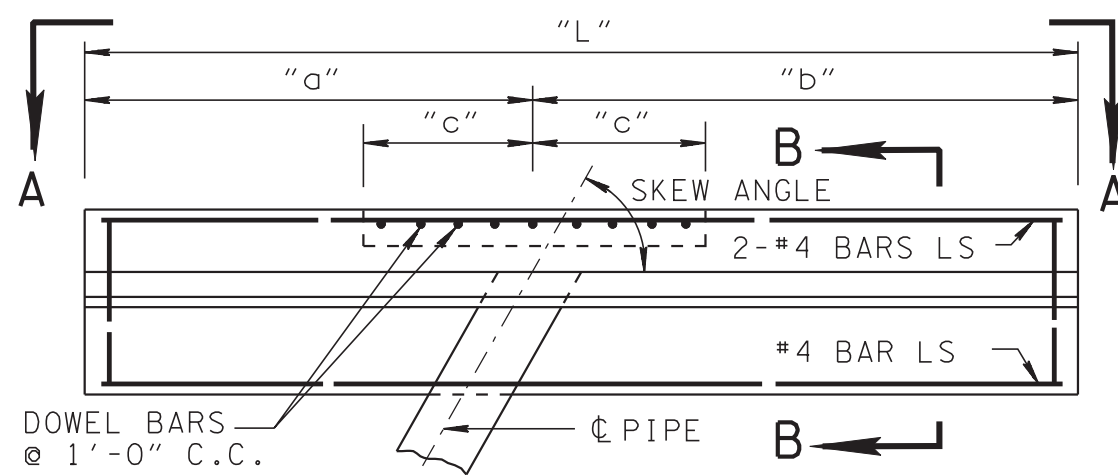
- (A) FORMULA FOR WALL LENGTH "L" FOR INTERMEDIATE SKEW ANGLES BETWEEN 75° & 60°: (1) WALL LENGTH PORTION "a" REMAINS SAME AS SHOWN FOR 75° SKEW FOR RESPECTIVE PIPE SIZES. (2) WALL LENGTH PORTION "b" EQUALS WALL LENGTH "a" (AS SHOWN FOR 75° SKEW FOR RESPECTIVE PIPE SIZES) DIVIDED BY SINE OF REQUIRED SKEW ANGLE, OR, "L"="a"+"a"/SINE OF REQUIRED SKEW ANGLE. (B) FOR INTERMEDIATE SKEW ANGLES LESS THAN 60°: (1) WALL PORTION "a"="a" AS SHOWN IN (A) ABOVE PLUS "X" AS SHOWN IN TABLE, (2) WALL PORTION "b" SAME AS SHOWN IN (A) ABOVE, (3) OR, "L"="a"+"X"+"a"/SINE OF REQUIRED SKEW ANGLE. (C) FOR WALL LENGTH FOR SKEWS 75°-85°, USE WALL LENGTHS AS SHOWN FOR 75° FOR RESPECTIVE PIPE SIZES. (D) FOR CUT-OFF WALL LENGTHS FOR SKEWS LESS THAN 75°, DIVIDE TWICE THE LENGTH OF "C" (SHOWN FOR 75° SKEW FOR RESPECTIVE PIPE SIZES) BY THE SINE OF THE REQUIRED SKEW ANGLE.

SHEET TO BE USED FOR 75°, 60° & 45° SKEWS

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

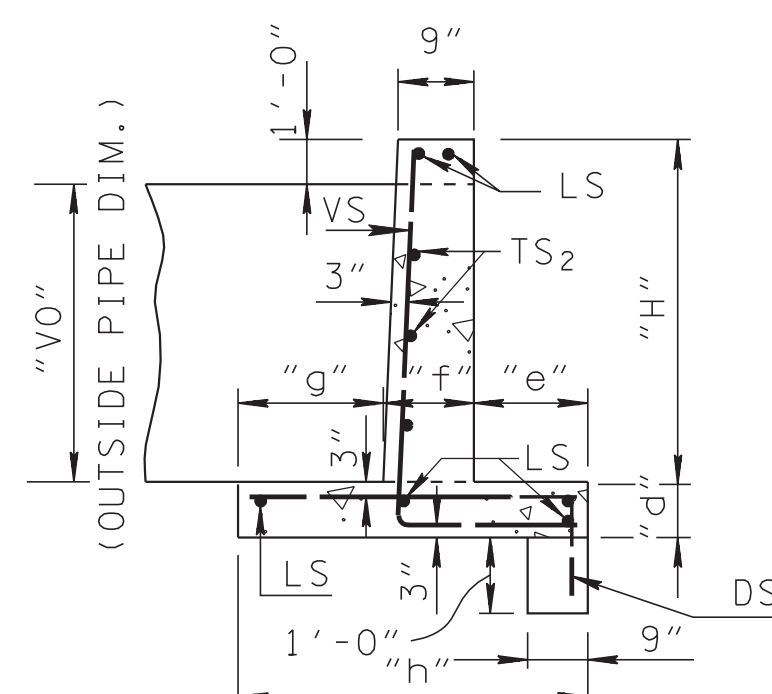
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD STRAIGHT ENDWALLS FLATBASE CONCRETE PIPES



SKETCH OF PIPE LAYOUT

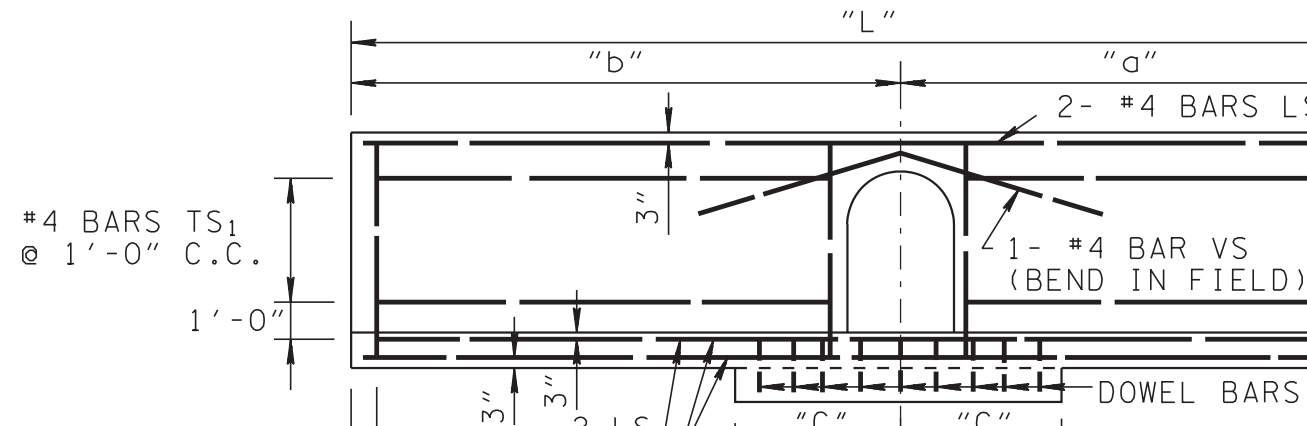
LEFT SKEW. NOTE: RIGHT SKEW SAME BUT OPPOSITE HAND.



SECTION B-B

PLAN-LEFT SKEW

SHOWING REINFORCING IN FOOTING



ELEVATION A-A

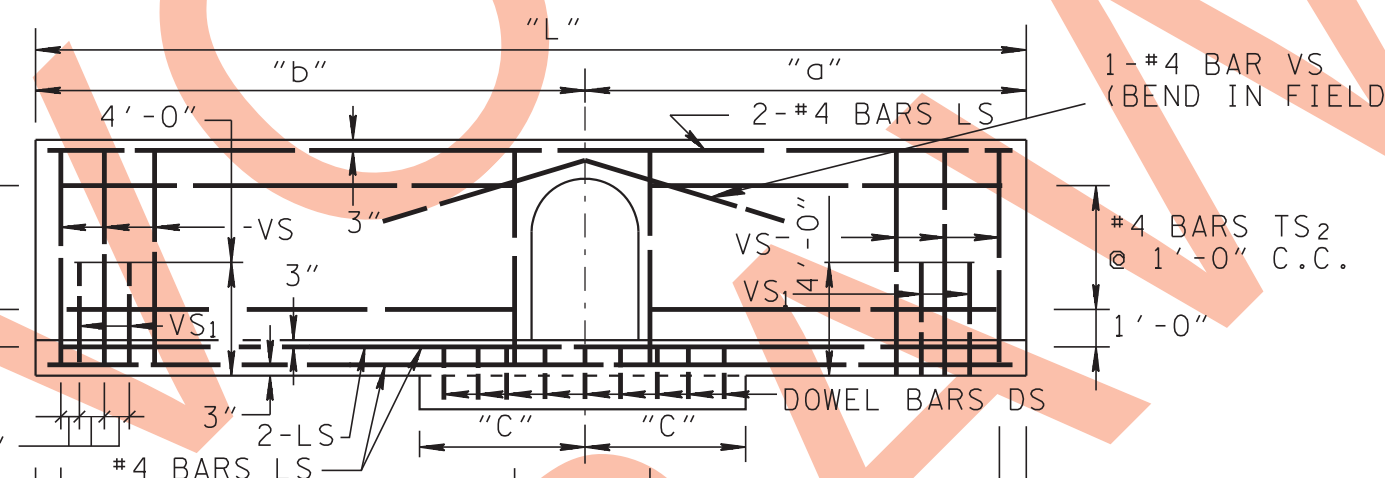
68" x 68" PIPE, CATTLE PASS, & 80" x 80" PIPE. NOTE: FOR CATTLE PASS OMIT CUT-OFF WALL.

Table showing reinforcement details for Elevation A-A for various skew angles and pipe sizes.

ELEVATION A-A

97" x 97" PIPE

Table showing reinforcement details for Elevation A-A for various skew angles and pipe sizes.



ELEVATION A-A

91" x 91" PIPE

Table showing reinforcement details for Elevation A-A for various skew angles and pipe sizes.

ELEVATION A-A

46" x 46" PIPE & 57" x 57" PIPE

Table showing reinforcement details for Elevation A-A for various skew angles and pipe sizes.