

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	.	**	97	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
*(101BY)BR428-BR1				
** WARREN COUNTIES				

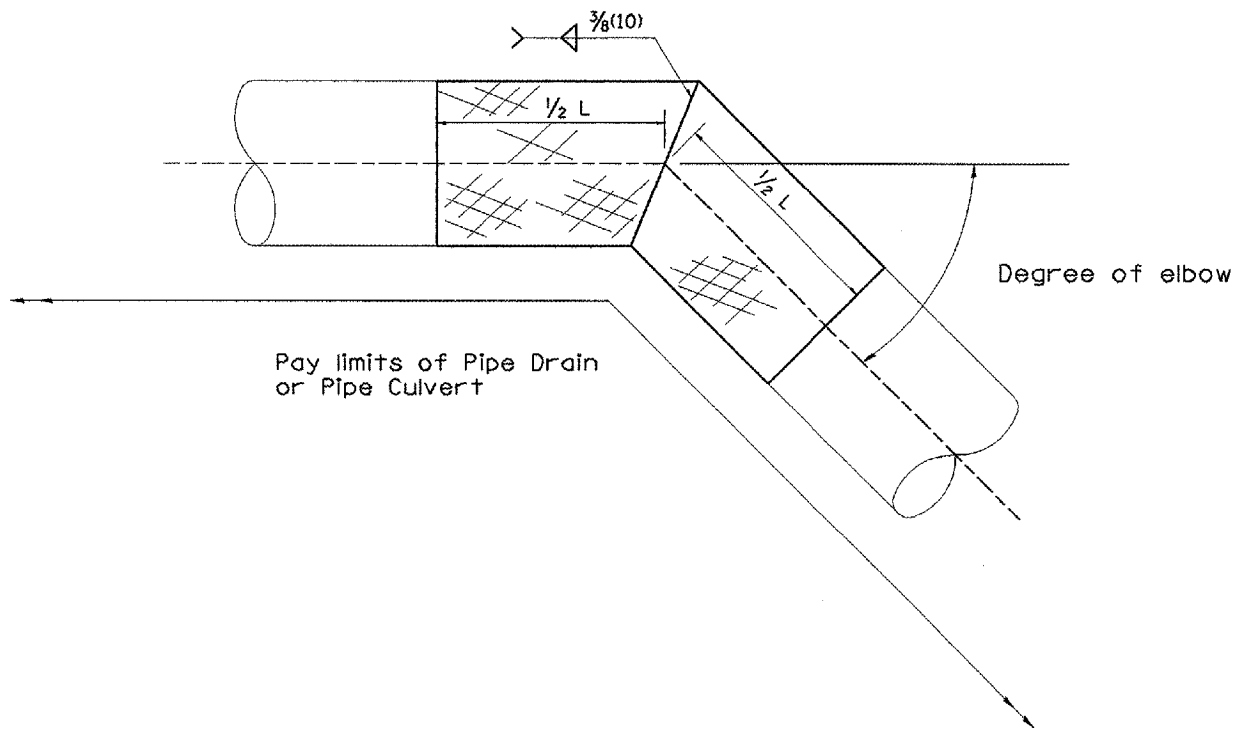
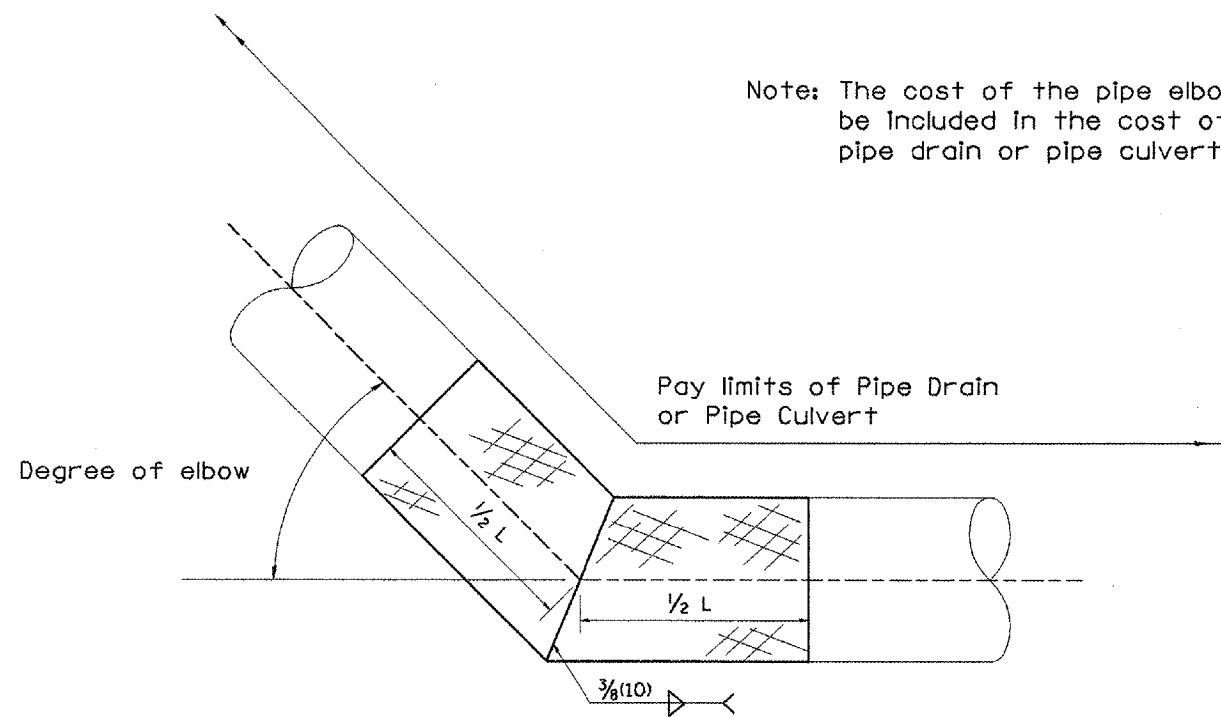


TABLE A ELBOW DESIGN CONTROLS		
PIPE DIAMETER	L = Minimum length of pipe required for fabrication	
	DEGREE OF ELBOW ≤ 45°	DEGREE OF ELBOW ≥ 46°
12(300)	24(600)	4'(1.22M)
15(375)	24(600)	4'(1.22M)
18(450)	24(600)	4'(1.22M)
21(525)	24(600)	4'(1.22M)
24(600)	4'(1.22M)	4'(1.22M)
30(750)	4'(1.22M)	6'(1.83M)
36(900)	4'(1.22M)	6'(1.83M)

TABLE B ELBOW DESIGN CONTROLS	
EARTH SLOPE (V:H)	DEGREE OF ELBOW *
1:6	9°
1:4	14°
1:3	18°
1:2	26°
1:1 1/2	33°

\* Approximate - based upon 0.5% inlet and outlet flowlines.



Note: The cost of the pipe elbow shall be included in the cost of the pipe drain or pipe culvert.

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DATE	REVISIONS	BY

**PIPE ELBOW  
DETAIL**

CADD STD. NO. 601301-D4  
SCALE: NOT DRAWN TO SCALE  
DRAWN BY CADD  
CHECKED BY