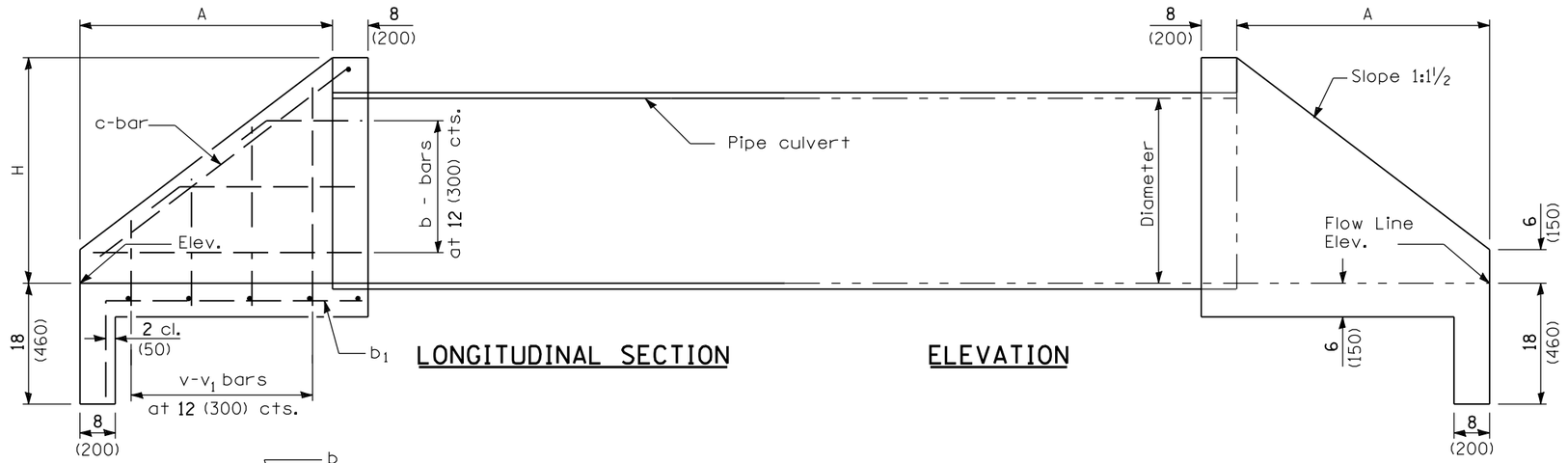
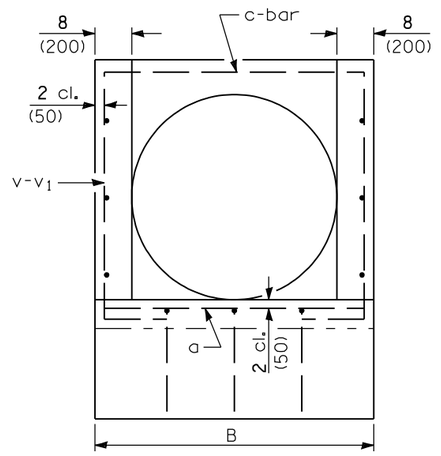
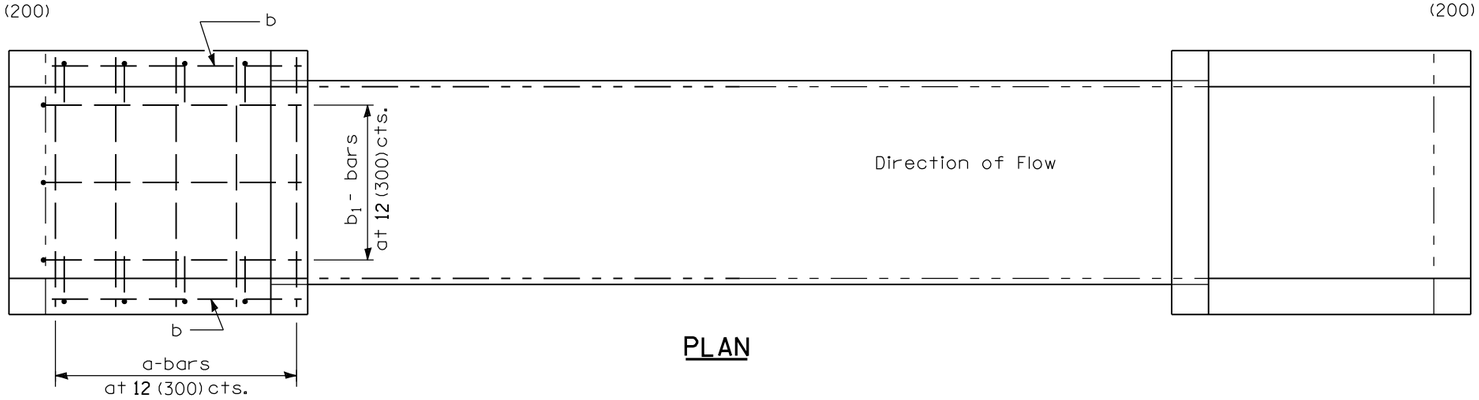


LONGITUDINAL SECTION

ELEVATION



END ELEVATION



PLAN

Pipe Dia. (nom.)	A	B	H	Reinforcing Steel No. 4 (No. 13) bars						Concrete 2 End Secs. cu. yds. (m^3)	Reinf. Bars 2 End Secs. lbs. (kg)
				a	b	b_1	c	v	v_1		
12 (300)	18 (460)	28 (710)	18 (460)	4 @ 24 4 @ (610)	4 @ 21 4 @ (540)	4 @ 31 4 @ (790)	2 @ 5′-9″ 2 @ (1.75 m)	4 @ 30 4 @ (760)	4 @ 21 4 @ (530)	0.59 (0.45)	40 (18.1)
15 (375)	24 (570)	31 (780)	21 (535)	4 @ 27 4 @ (690)	4 @ 27 4 @ (690)	4 @ 39 4 @ (990)	2 @ 7′-0″ 2 @ (2.13 m)	4 @ 33 4 @ (840)	4 @ 24 4 @ (610)	0.77 (0.59)	40 (18.1)
18 (450)	27 (685)	34 (860)	24 (610)	6 @ 30 6 @ (760)	8 @ 30 8 @ (760)	4 @ 3′-6″ 4 @ (1.07 m)	2 @ 8′-0″ 2 @ (2.44 m)	4 @ 36 4 @ (910)	4 @ 27 4 @ (690)	0.92 (0.70)	60 (27.2)
24 (600)	36 (915)	3′-4″ (1.01 m)	30 (760)	6 @ 36 6 @ (910)	8 @ 39 8 @ (990)	6 @ 4′-3″ 6 @ (1.2 m)	2 @ 10′-6″ 2 @ (3.2 m)	8 @ 3′-6″ 8 @ (1.07 m)	4 @ 30 4 @ (760)	1.32 (1.01)	90 (40.8)
30 (750)	3′-9″ (1.14 m)	3′-10″ (1.16 m)	36 (915)	8 @ 3′-6″ 8 @ (1.07 m)	12 @ 4′-0″ 12 @ (1.22 m)	6 @ 5′-0″ 6 @ (1.52 m)	2 @ 12′-6″ 2 @ (3.81 m)	8 @ 4′-0″ 8 @ (1.22 m)	4 @ 36 4 @ (910)	1.79 (1.37)	120 (54.4)
36 (900)	4′-6″ (1.37 m)	4′-4″ (1.32 m)	3′-6″ (1.07 m)	10 @ 4′-0″ 10 @ (1.22 m)	12 @ 4′-9″ 12 @ (1.45 m)	6 @ 5′-9″ 6 @ (1.75 m)	2 @ 15′-0″ 2 @ (4.57 m)	8 @ 4′-6″ 8 @ (1.37 m)	8 @ 3′-6″ 8 @ (1.07 m)	2.33 (1.85)	150 (68.0)
48 (1200)	6′-0″ (1.83 m)	5′-4″ (1.62 m)	4′-6″ (1.37 m)	12 @ 5′-0″ 12 @ (1.52 m)	16 @ 6′-3″ 16 @ (1.9 m)	8 @ 7′-3″ 8 @ (2.21 m)	2 @ 19′-3″ 2 @ (5.87 m)	12 @ 5′-0″ 12 @ (1.52 m)	8 @ 3′-6″ 8 @ (1.07 m)	3.60 (2.80)	230 (104.3)

DESIGN DATA

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

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

Illinois Department of Transportation

APPROVED January 1, 2009
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-09	Switched units to
	English (metric).
1-1-07	Soft converted metric
	reinforcement bars.

REINFORCED CONCRETE END SECTIONS WITH PARALLEL WINGWALLS FOR PIPE CULVERTS 12″ (300 mm) THRU 48″ (1200 mm) DIA. AT RIGHT ANGLES WITH ROADWAY

STANDARD 542001-02