

CULVERT SIZE (FEET) SPAN X RISE	2 : 1 Slope 30° Skew				2 : 1 Slope 45° Skew			
	EC-3 Type B	Depth (T) (18")	Depth (T) (24")	Depth (T) (36")	EC-3 Type B	Depth (T) (18")	Depth (T) (24")	Depth (T) (36")
		Class A1	Class I	Class II		Class A1	Class I	Class II
	Sq. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Sq. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.
3 x 3	6.45	3.23	4.30	6.45	7.41	3.71	4.94	7.41
3 x 4	7.83	3.92	5.22	7.83	9.42	4.71	6.28	9.42
4 x 3	8.94	4.47	5.96	8.94	10.16	5.08	6.77	10.16
4 x 4	10.74	5.37	7.16	10.74	12.36	6.18	8.24	12.36
4 x 5	12.54	6.27	8.36	12.54	14.57	7.28	9.71	14.57
4 x 6	14.34	7.17	9.56	14.34	16.76	8.38	11.17	16.76
5 x 3	12.09	6.05	8.06	12.09	13.56	6.78	9.04	13.56
5 x 4	14.28	7.14	9.52	14.28	16.23	8.12	10.82	16.23
5 x 5	16.46	8.23	10.97	16.46	18.92	9.46	12.61	18.92
5 x 6	18.65	9.32	12.43	18.65	21.59	10.79	14.39	21.59
5 x 7	20.82	10.41	13.88	20.82	24.24	12.12	16.16	24.24
6 x 4	18.27	9.14	12.18	18.27	20.57	10.28	13.71	20.57
6 x 5	20.99	10.49	13.99	20.99	23.87	11.93	15.91	23.87
6 x 6	23.75	11.87	15.83	23.75	27.21	13.61	18.14	27.21
6 x 7	26.73	13.37	17.82	26.73	30.74	15.37	20.49	30.74
6 x 8	28.53	14.27	19.02	28.53	33.14	16.57	22.09	33.14
7 x 4	22.68	11.34	15.12	22.68	25.34	12.67	16.89	25.34
7 x 6	28.76	14.38	19.17	28.76	32.75	16.37	21.83	32.75
7 x 8	35.30	17.65	23.53	35.30	40.61	20.30	27.07	40.61
7 x 10	41.79	20.90	27.86	41.79	48.44	24.22	32.29	48.44
8 x 4	27.57	13.79	18.38	27.57	30.57	15.29	20.38	30.57
8 x 6	34.25	17.12	22.83	34.25	38.23	19.12	25.82	38.23
8 x 8	40.91	20.45	27.27	40.91	46.91	23.45	31.27	46.91
8 x 10	47.58	23.79	31.72	47.58	55.23	27.62	36.82	55.23
9 x 4	32.90	16.45	21.93	32.90	36.23	18.11	24.15	36.23
9 x 6	40.34	20.17	26.89	40.34	45.33	22.67	30.22	45.33
9 x 8	48.00	24.00	32.00	48.00	54.69	27.35	36.46	54.69
9 x 10	56.18	28.09	37.45	56.18	64.55	32.27	43.03	64.55
9 x 12	64.22	32.11	42.81	64.22	74.24	37.12	49.49	74.24
10 x 4	38.64	19.32	25.76	38.64	42.33	21.17	28.22	42.33
10 x 6	46.85	23.42	31.23	46.85	52.40	26.20	34.93	52.40
10 x 8	55.07	27.53	36.71	55.07	62.45	31.22	41.63	62.45
10 x 10	63.27	31.64	42.18	63.27	72.51	36.26	48.34	72.51
10 x 12	71.49	35.75	47.66	71.49	82.56	41.28	55.04	82.56
12 x 6	61.25	30.62	40.83	61.25	67.83	33.92	45.22	67.83
12 x 8	71.01	35.51	47.34	71.01	79.77	39.89	53.18	79.77
12 x 10	80.76	40.38	53.84	80.76	91.71	45.86	61.14	91.71
12 x 12	90.51	45.26	60.34	90.51	103.65	51.83	69.10	103.65

**TABLE D-21 CULVERT OUTLET PROTECTION FOR MULTIPLE BOX CULVERT
(INCREMENTS FOR EACH ADDITIONAL BARREL)**

Quantities To Be Used Only For Computations Of Dry Rip Rap For Outlet Protection.*

* Rev. 7/10