



ARCH-BOX SERIES COORDINATES FOR HYDRAULIC MODELING (FT.)

NOTE: THE ECO-SPAN® ARCH-BOX SHAPE MATCHES THE HEC-RAS CULVERT DATA EDITOR'S "CONSPAN" SHAPE AND HY-8'S "ARCH BOX" SHAPE.

12' Span (AB12)

Rise \ X	0.00	0.01	0.52	1.80	3.88	6.00	8.12	10.20	11.48	11.99	12.00
4'	0.00	1.00	2.55	3.40	3.85	4.00	3.85	3.40	2.55	1.00	0.00
5'	0.00	2.00	3.55	4.40	4.85	5.00	4.85	4.40	3.55	2.00	0.00
6'	0.00	3.00	4.55	5.40	5.85	6.00	5.85	5.40	4.55	3.00	0.00
7'	0.00	4.00	5.55	6.40	6.85	7.00	6.85	6.40	5.55	4.00	0.00
8'	0.00	5.00	6.55	7.40	7.85	8.00	7.85	7.40	6.55	5.00	0.00
9'	0.00	6.00	7.55	8.40	8.85	9.00	8.85	8.40	7.55	6.00	0.00
10'	0.00	7.00	8.55	9.40	9.85	10.00	9.85	9.40	8.55	7.00	0.00

14' Span (AB14)

Rise \ X	0.00	0.01	0.50	1.80	6.00	7.00	8.00	12.20	13.50	13.99	14.00
4'	0.00	1.00	2.50	3.40	4.00	4.00	4.00	3.40	2.50	1.00	0.00
5'	0.00	2.00	3.50	4.40	5.00	5.00	5.00	4.40	3.50	2.00	0.00
6'	0.00	3.00	4.50	5.40	6.00	6.00	6.00	5.40	4.50	3.00	0.00
7'	0.00	4.00	5.50	6.40	7.00	7.00	7.00	6.40	5.50	4.00	0.00
8'	0.00	5.00	6.50	7.40	8.00	8.00	8.00	7.40	6.50	5.00	0.00
9'	0.00	6.00	7.50	8.40	9.00	9.00	9.00	8.40	7.50	6.00	0.00
10'	0.00	7.00	8.50	9.40	10.00	10.00	10.00	9.40	8.50	7.00	0.00

16' Span (AB16)

Rise \ X	0.00	0.01	0.48	1.77	4.86	8.00	11.14	14.23	15.52	15.99	16.00
4'	0.00	0.47	2.10	3.21	3.80	4.00	3.80	3.21	2.10	0.47	0.00
5'	0.00	1.47	3.10	4.21	4.80	5.00	4.80	4.21	3.10	1.47	0.00
6'	0.00	2.47	4.10	5.21	5.80	6.00	5.80	5.21	4.10	2.47	0.00
7'	0.00	3.47	5.10	6.21	6.80	7.00	6.80	6.21	5.10	3.47	0.00
8'	0.00	4.47	6.10	7.21	7.80	8.00	7.80	7.21	6.10	4.47	0.00
9'	0.00	5.47	7.10	8.21	8.80	9.00	8.80	8.21	7.10	5.47	0.00
10'	0.00	6.47	8.10	9.21	9.80	10.00	9.80	9.21	8.10	6.47	0.00

20' Span (AB20)

Rise \ X	0.00	0.01	0.48	1.77	5.83	10.00	14.17	18.23	19.52	19.99	20.00
5'	0.00	0.87	2.50	3.61	4.65	5.00	4.65	3.61	2.50	0.87	0.00
6'	0.00	1.87	3.50	4.61	5.65	6.00	5.65	4.61	3.50	1.87	0.00
7'	0.00	2.87	4.50	5.61	6.65	7.00	6.65	5.61	4.50	2.87	0.00
8'	0.00	3.87	5.50	6.61	7.65	8.00	7.65	6.61	5.50	3.87	0.00
9'	0.00	4.87	6.50	7.61	8.65	9.00	8.65	7.61	6.50	4.87	0.00
10'	0.00	5.87	7.50	8.61	9.65	10.00	9.65	8.61	7.50	5.87	0.00
11'	0.00	6.87	8.50	9.61	10.65	11.00	10.65	9.61	8.50	6.87	0.00

24' Span (AB24)

Rise \ X	0.00	0.01	0.48	1.77	6.77	12.00	17.23	22.23	23.52	23.99	24.00
5'	0.00	0.07	1.70	2.81	4.45	5.00	4.45	2.81	1.70	0.07	0.00
6'	0.00	1.07	2.70	3.81	5.45	6.00	5.45	3.81	2.70	1.07	0.00
7'	0.00	2.07	3.70	4.81	6.45	7.00	6.45	4.81	3.70	2.07	0.00
8'	0.00	3.07	4.70	5.81	7.45	8.00	7.45	5.81	4.70	3.07	0.00
9'	0.00	4.07	5.70	6.81	8.45	9.00	8.45	6.81	5.70	4.07	0.00
10'	0.00	5.07	6.70	7.81	9.45	10.00	9.45	7.81	6.70	5.07	0.00
11'	0.00	6.07	7.70	8.81	10.45	11.00	10.45	8.81	7.70	6.07	0.00

28' Span (AB28)

Rise \ X	0.00	0.01	1.17	5.24	9.59	14.00	18.41	22.76	26.83	27.99	28.00
6'	0.00	0.25	3.07	5.03	5.76	6.00	5.76	5.03	3.07	0.25	0.00
7'	0.00	1.25	4.07	6.03	6.76	7.00	6.76	6.03	4.07	1.25	0.00
8'	0.00	2.25	5.07	7.03	7.76	8.00	7.76	7.03	5.07	2.25	0.00
9'	0.00	3.25	6.07	8.03	8.76	9.00	8.76	8.03	6.07	3.25	0.00
10'	0.00	4.25	7.07	9.03	9.76	10.00	9.76	9.03	7.07	4.25	0.00
11'	0.00	5.25	8.07	10.03	10.76	11.00	10.76	10.03	8.07	5.25	0.00
12'	0.00	6.25	9.07	11.03	11.75	12.00	11.76	11.03	9.07	6.25	0.00

32' Span (AB32)

Rise \ X	0.00	0.01	1.17	5.13	10.51	16.00	21.49	26.87	30.83	31.99	32.00
7'	0.00	0.49	3.31	5.49	6.62	7.00	6.62	5.49	3.31	0.49	0.00
8'	0.00	1.49	4.31	6.49	7.62	8.00	7.62	6.49	4.31	1.49	0.00
9'	0.00	2.49	5.31	7.49	8.62	9.00	8.62	7.49	5.31	2.49	0.00
10'	0.00	3.49	6.31	8.49	9.62	10.00	9.62	8.49	6.31	3.49	0.00
11'	0.00	4.49	7.31	9.49	10.62	11.00	10.62	9.49	7.31	4.49	0.00
12'	0.00	5.49	8.31	10.49	11.62	12.00	11.62	10.49	8.31	5.49	0.00
13'	0.00	6.49	9.31	11.49	12.62	13.00	12.62	11.49	9.31	6.49	0.00

36' Span (AB36)

Rise \ X	0.00	0.01	1.17	5.00	11.41	18.00	24.59	31.00	34.83	35.99	36.00
8'	0.00	0.61	3.43	5.83	7.45	8.00	7.45	5.83	3.43	0.61	0.00
9'	0.00	1.61	4.43	6.83	8.45	9.00	8.45	6.83	4.43	1.61	0.00
10'	0.00	2.61	5.43	7.83	9.45	10.00	9.45	7.83	5.43	2.61	0.00
11'	0.00	3.61	6.43	8.83	10.45	11.00	10.45	8.83	6.43	3.61	0.00
12'	0.00	4.61	7.43	9.83	11.45	12.00	11.45	9.83	7.43	4.61	0.00
13'	0.00	5.61	8.43	10.83	12.45	13.00	12.45	10.83	8.43	5.61	0.00
14'	0.00	6.61	9.43	11.83	12.45	14.00	13.45	11.83	9.43	6.61	0.00

42' Span (AB42)

Rise \ X	0.00	0.01	0.67	5.00	12.83	21.00	29.17	37.00	41.33	41.99	42.00
10'	0.00	0.81	3.02	6.66	9.16	10.00	9.16	6.66	3.02	0.81	0.00
11'	0.00	1.81	4.02	7.66	10.16	11.00	10.16	7.66	4.02	1.81	0.00
12'	0.00	2.81	5.02	8.66	11.16	12.00	11.16	8.66	5.02	2.81	0.00
13'	0.00	3.81	6.02	9.66	12.16	13.00	12.16	9.66	6.02	3.81	0.00
14'	0.00	4.81	7.02	10.66	13.16	14.00	13.16	10.66	7.02	4.81	0.00
15'	0.00	5.81	8.02	11.66	14.16	15.00	14.16	11.66	8.02	5.81	0.00
16'	0.00	6.81	9.02	12.66	15.16	16.00	15.16	12.66	9.02	6.81	0.00

48' Span (AB48)

Rise \ X	0.00	0.01	0.67	1.89	5.00	14.23	24.00	33.77	43.00	46.11	47.33	47.99	48.00
9'	0.00	0.27	2.45	3.86	5.52	8.13	9.00	8.13	5.52	3.86	2.45	0.27	0.00
10'	0.00	1.27	3.45	4.86	6.52	9.12	10.00	9.12	6.52	4.86	3.45	1.27	0.00
11'	0.00	2.27	4.45	5.86	7.52	10.12	11.00	10.12	7.52	5.86	4.45	2.27	0.00
12'	0.00	3.27	5.45	6.86	8.52	11.12	12.00	11.12	8.52	6.86	5.45	3.27	0.00
13'	0.00	4.27	6.45	7.86	9.52	12.12	13.00	12.12	9.52	7.86	6.45	4.27	0.00
14'	0.00	5.27	7.45	8.86	10.52	13.12	14.00	13.12	10.52	8.86	7.45	5.27	0.00
15'	0.00	6.27	8.45	9.86	11.52	14.12	15.00	14.12	11.52	9.86	8.45	6.27	0.00

54' Span (AB54)

Rise \ X	0.00	0.01	0.82	3.08	4.76	6.52	16.65	27.00	37.35	47.48	49.24	50.92	53.18	53.99	54.00
9'	0.00	0.00	2.28	4.48	5.30	5.94	8.23	9.00	8.23	5.94	5.30	4.48	2.28	0.00	0.00
10'	0.00	0.58	3.28	5.48	6.30	6.94	9.23	10.00	9.23	6.94	6.30	5.48	3.28	0.58	0.00
11'	0.00	1.58	4.28	6.48	7.30	7.94	10.23	11.00	10.23	7.94	7.30	6.48	4.28	1.58	0.00
12'	0.00	2.58	5.28	7.48	8.30	8.94	11.23	12.00	11.23	8.94	8.30	7.48	5.28	2.58	0.00
13'	0.00	3.58	6.28	8.48	9.30	9.94	12.23	13.00	12.23	9.94	9.30	8.48	6.28	3.58	0.00
14'	0.00	4.58	7.28	9.48	10.30	10.94	13.23	14.00	13.23	10.94	10.30	9.48	7.28	4.58	0.00
15'	0.00	5.58	8.28	10.48	11.30	11.94	14.23	15.00	14.23	11.94	11.30	10.48	8.28	5.58	0.00

60' Span (AB60)

Rise \ X	0.00	0.01	0.83	3.08	6.24	9.53	19.65	30.00	40.35	50.47	53.76	56.92	59.17	59.99	60.00
9'	0.00	0.00	1.00	3.21	4.74	5.94	8.23	9.00	8.23	5.94	4.74	3.21	1.00	0.00	0.00
10'	0.00	0.00	2.00	4.21	5.74	6.94	9.23	10.00	9.23	6.94	5.74	4.21	2.00	0.00	0.00
11'	0.00	0.31	3.00	5.21	6.74	7.94	10.23	11.00	10.23	7.94	6.74	5.21	3.00	0.31	0.00
12'	0.00	1.31	4.00	6.21	7.74	8.94	11.23	12.00	11.23	8.94	7.74	6.21	4.00	1.31	0.00
13'	0.00	2.31	5.00	7.21	8.74	9.94	12.23	13.00	12.23	9.94	8.74	7.21	5.00	2.31	0.00
14'	0.00	3.31	6.00	8.21	9.74	10.94	13.23	14.00	13.23	10.94	9.74	8.21	6.00	3.31	0.00
15'	0.00	4.31	7.00	9.21	10.74	11.94	14.23	15.00	14.23	11.94	10.74	9.21	7.00	4.31	0.00