VERTICAL CURVES

DESCRIPTION
Comes with 1'-0" straight track both ends unless otherwise specified
8' RADIUS x 12° SINGLE VERTICAL CURVE
8' RADIUS x 15° SINGLE VERTICAL CURVE
8' RADIUS x 20° SINGLE VERTICAL CURVE
8' RADIUS x 30° SINGLE VERTICAL CURVE
8' RADIUS x 45° SINGLE VERTICAL CURVE
10' RADIUS x 12° SINGLE VERTICAL CURVE
10' RADIUS x 15° SINGLE VERTICAL CURVE
10' RADIUS x 20° SINGLE VERTICAL CURVE
10' RADIUS x 30° SINGLE VERTICAL CURVE
10' RADIUS x 45° SINGLE VERTICAL CURVE
12' RADIUS x 12° SINGLE VERTICAL CURVE
12' RADIUS x 15° SINGLE VERTICAL CURVE
12' RADIUS x 20° SINGLE VERTICAL CURVE
12' RADIUS x 30° SINGLE VERTICAL CURVE
12' RADIUS x 45° SINGLE VERTICAL CURVE
15' RADIUS x 12° SINGLE VERTICAL CURVE
15' RADIUS x 15° SINGLE VERTICAL CURVE
15' RADIUS x 20° SINGLE VERTICAL CURVE
15' RADIUS x 30° SINGLE VERTICAL CURVE
15' RADIUS x 45° SINGLE VERTICAL CURVE
20' RADIUS x 12° SINGLE VERTICAL CURVE
20' RADIUS x 15° SINGLE VERTICAL CURVE
20' RADIUS x 20° SINGLE VERTICAL CURVE
20' RADIUS x 30° SINGLE VERTICAL CURVE
20' RADIUS x 45° SINGLE VERTICAL CURVE

COMPOUND VERTICAL CURVE-12'-0" R W/1'-0" STRAIGHT @ B.E.

Table 1

DROP	DEGREES	TAN/TAN	ARC @ 12'-0 R	CHORD @ 12'-0 R	CHORD @ 11'-10 R	TOTAL ARC @ 12'-0 R	DIFFERENCE	TRUE LENGTH @ 12'-0 R	BEVEL	MK
D	A	L*	A1*	C1*	C2*	TA*	D1*	TL*	B*	
3	8.28°	3'-5 1/2"	1'-8 13/16"	1'-8 13/16"	1'-8 1/2"	3'-5 5/8"	1/8"	5'-5 5/8"	1 3/4"	
3 1/8										
3 1/4										
3 3/8										
3 1/2										
3 5/8										
3 3/4										
3 7/8										
4	9.56°	3'-11 13/16"	2'-0"	2'-0"	1'-11 11/16"	4'-0"	3/16"	6'-0"	2"	
4 1/8										
4 1/4										
4 3/8										
4 1/2										
4 5/8										
4 3/4										
4 7/8										
5	10.69°	4'-5 7/16"	2'-2 7/8"	2'-2 13/16"	2'-2 7/16"	4'-5 3/4"	5/16"	6'-5 3/4"	2 1/4"	
5 1/8										
5 1/4										
5 3/8										
5 1/2										
5 5/8										
5 3/4										
5 7/8										
6	11.71°	4'-10 7/16"	2'-5 7/16"	2'-5 3/8"	2'-5"	4'-10 7/8"	7/16"	6'-10 7/8"	2 1/2"	
6 1/8										
6 1/4										
6 3/8										
6 1/2										
6 5/8										
6 3/4										
6 7/8										
7	12.66°	5'-3 1/8"	2'-7 13/16"	2'-7 3/4"	2'-7 5/16"	5'-3 5/8"	1/2"	7'-3 5/8"	2 11/16"	
7 1/8										
7 1/4										
7 3/8										
7 1/2										
7 5/8										
7 3/4										
7 7/8										
8	13.54°	5'-7 7/16"	2'-10"	2'-9 15/16"	2'-9 1/2"	5'-8"	9/16"	7'-8"	2 7/8"	
8 1/8										
8 1/4										
8 3/8										
8 1/2										
8 5/8										
8 3/4										
8 7/8										
9	14.36°	5'-11 7/16"	3'-0 1/16"	3'-0"	2'-11 1/2"	6'-0 1/8"	11/16"	8'-0 1/8"	3 1/16"	
9 1/8										
9 1/4										
9 3/8										
9 1/2										
9 5/8										
9 3/4										
9 7/8										
10	15.14°	6'-3 1/4"	3'-2 1/16"	3'-1 15/16"	3'-1 7/16"	6'-4 1/8"	7/8"	8'-4 1/8"	3 1/4"	
10 1/8										
10 1/4										
10 3/8										
10 1/2										
10 5/8										
10 3/4										
10 7/8										
11	15.89°	6'-6 7/8"	3'-3 15/16"	3'-3 13/16"	3'-3 1/4"	6'-7 7/8"	1"	8'-7 7/8"	3 7/16"	
11 1/8										
11 1/4										
11 3/8										
11 1/2										
11 5/8										
11 3/4										
11 7/8										
1'-0	16.6°	6'-10 1/4"	3'-5 3/4"	3'-5 9/16"	3'-5"	6'-11 1/2"	1 1/4"	8'-11 1/2"	3 9/16"	
1'-0 1/8										
1'-0 1/4										
1'-0 3/8										
1'-0 1/2										
1'-0 5/8										
1'-0 3/4										
1'-0 7/8										

Table 2

DROP	DEGREES	TAN/TAN	ARC @ 12'-0 R	CHORD @ 12'-0 R	CHORD @ 11'-10 R	TOTAL ARC @ 12'-0 R	DIFFERENCE	TRUE LENGTH @ 12'-0 R	BEVEL	MK
D	A	L*	A1*	C1*	C2*	TA*	D1*	TL*	B*	
1'-1	17.28°	7'-1 9/16"	3'-7 7/16"	3'-7 1/4"	3'-6 11/16"	7'-2 7/8"	1 5/16"	9'-2 7/8"	3 3/4"	
1'-1 1/8										
1'-1 1/4										
1'-1 3/8										
1'-1 1/2										
1'-1 5/8										
1'-1 3/4										
1'-1 7/8										
1'-2	17.94°	7'-4 11/16"	3'-9 1/16"	3'-8 7/8"	3'-8 1/4"	7'-6 1/8"	1 7/16"	9'-6 1/8"	3 7/8"	
1'-2 1/8										
1'-2 1/4										
1'-2 3/8										
1'-2 1/2										
1'-2 5/8										
1'-2 3/4										
1'-2 7/8										
1'-3	18.57°	7'-8 11/16"	3'-10 11/16"	3'-10 1/2"	3'-9 13/16"	7'-9 3/8"	11/16"	9'-9 3/8"	4 1/6"	
1'-3 1/8										
1'-3 1/4										
1'-3 3/8										
1'-3 1/2										
1'-3 5/8										
1'-3 3/4										
1'-3 7/8										
1'-4	19.19°	7'-10 11/16"	4'-0 1/4"	4'-0"	3'-11 5/16"	8'-0 1/2"	1 13/16"	10'-0 1/2"	4 3/16"	
1'-4 1/8										
1'-4 1/4										
1'-4 3/8										
1'-4 1/2										
1'-4 5/8										
1'-4 3/4										
1'-4 7/8										
1'-5	19.78°	8'-1 1/2"	4'-1 11/16"	4'-1 1/2"	4'-0 3/4"	8'-3 3/8"	1 7/8"	10'-3 3/8"	4 5/16"	
1'-5 1/8										
1'-5 1/4										
1'-5 3/8										
1'-5 1/2										
1'-5 5/8										
1'-5 3/4										
1'-5 7/8										
1'-6	20.36°	8'-4 3/16"	4'-3 3/16"	4'-2 7/8"	4'-2 3/16"	8'-6 3/8"	2 3/16"	10'-6 3/8"	4 7/16"	
1'-6 1/8										
1'-6 1/4										
1'-6 3/8										
1'-6 1/2										
1'-6 5/8										
1'-6 3/4										
1'-6 7/8										
1'-7	20.93°	8'-6 7/8"	4'-4 5/8"	4'-4 5/16"	4'-3 9/16"	8'-9 1/4"	2 5/8"	10'-9 1/4"	4 9/16"	
1'-7 1/8										
1'-7 1/4										
1'-7 3/8										
1'-7 1/2										
1'-7 5/8										
1'-7 3/4										
1'-7 7/8										
1'-8	21.48°	8'-9 7/16"	4'-6"	4'-5 11/16"	4'-4 15/16"	9'-0"	2 9/16"	11'-0"	4 3/4"	
1'-8 1/8										
1'-8 1/4										
1'-8 3/8										
1'-8 1/2										
1'-8 5/8										
1'-8 3/4										
1'-8 7/8										
1'-9	22.02°	9'-0"	4'-7 5/16"	4'-7"	4'-6 1/4"	9'-2 5/8"	2 5/8"	11'-2 5/8"	4 7/8"	
1'-9 1/8										
1'-9 1/4										
1'-9 3/8										
1'-9 1/2										
1'-9 5/8										
1'-9 3/4										
1'-9 7/8										
1'-10	22.54°	9'-2 3/8"	4'-8 5/8"	4'-8 5/16"	4'-7 1/2"	9'-5 1/4"	2 7/8"	11'-5 1/4"	5"	
1'-10 1/8										
1'-10 1/4										
1'-10 3/8										
1'-10 1/2										
1'-10 5/8										
1'-10 3/4										
1'-10 7/8										

Table 3

DROP	DEGREES	TAN/TAN	ARC @ 12'-0 R	CHORD @ 12'-0 R	CHORD @ 11'-10 R	TOTAL ARC @ 12'-0 R	DIFFERENCE	TRUE LENGTH @ 12'-0 R	BEVEL	MK
D	A	L*	A1*	C1*	C2*	TA*	D1*	TL*	B*	
1'-11	23.05°	9'-4 3/4"	4'-9 15/16"	4'-9 9/16"	4'-8 3/4"	9'-7 7/8"	3 1/8"	11'-7 7/8"	5 1/8"	
1'-11 1/8										
1'-11 1/4										
1'-11 3/8										
1'-11 1/2										
1'-11 5/8										
1'-11 3/4										
1'-11 7/8										
2'-0	23.56°	9'-7 1/8"	4'-11 3/16"	4'-10 13/16"	4'-10"	9'-10 3/8"	3 1/4"	11'-10 3/8"	5 1/4"	
2'-0 1/8										
2'-0 1/4										
2'-0 3/8										
2'-0 1/2										
2'-0 5/8										
2'-0 7/8										
2'-1	24.05°	9'-9 3/8"	5'-0 7/16"	5'-0"	4'-11 11/16"	10'-0 7/8"	3 1/2"	12'-0 7/8"	5 3/8"	
2'-1 1/8										
2'-1 1/4										
2'-1 3/8										
2'-1 5/8										
2'-1 3/4										
2'-1 7/8										
2'-2	24.53°	9'-11 9/16"	5'-1 5/8"	5'-1 3/16"	5'-0 5/16"	10'-3 1/4"	3 11/16"	12'-3 1/4"	5 1/2"	
2'-2 1/8										
2'-2 1/4										
2'-2 3/8										
2'-2 1/2										
2'-2 5/8										
2'-2 3/4										
2'-2 7/8										
2'-3	25.00°	10'-1 11/16"	5'-2 13/16"	5'-2 5/16"	5'-1 1/2"	10'-5 5/8"	3 15/16"	12'-5 5/8"	5 5/8"	
2'-3 1/8										
2'-3 1/4										
2'-3 3/8										
2'-3 1/2										
2'-3 5/8										
2'-3 3/4										
2'-3 7/8										
2'-4	25.47°	10'-3 7/8"	5'-4"	5'-3 1/2"	5'-2 5/8"	10'-8"	4 1/8"	12'-8"	5 3/4"	
2'-4 1/8										
2'-4 1/4										
2'-4 3/8										
2'-4 1/2										
2'-4 5/8										
2'-4 7/8										
2'-5	25.93°	10'-5 15/16"	5'-5 3/16"	5'-4 5/8"	5'-3 3/4"	10'-10 3/8"	4 7/16"	12'-10 3/8"	5 13/16"	
2'-5 1/8										
2'-5 1/4										
2'-5 3/8										
2'-5 1/2										
2'-5 5/8										
2'-5 3/4										
2'-5 7/8										
2'-6	26.38°	10'-7 15/16"	5'-6 5/16"	5'-5 3/4"	5'-4 13/16"	11'-0 5/8"	4 11/16"	13'-0 5/8"	5 15/16"	
2'-6 1/8										
2'-6 1/4										
2'-6 3/8										
2'-6 1/2										
2'-6 5/8										
2'-6 3/4										
2'-6 7/8										
2'-7	26.83°	10'-10"	5'-7 7/16"	5'-6 13/16"	5'-5 7/8"	11'-2 7/8"	4 7/8"	13'-2 7/8"	6 1/16"	
2'-7 1/8										
2'-7 1/4										
2'-7 3/8										
2'-7 1/2										
2'-7 5/8										
2'-7 3/4										
2'-7 7/8										
2'-8	27.27°	10'-11 15/16"	5'-8 9/16"	5'-7 7/8"	5'-6 15/16"	11'-5 1/8"	5 3/16"	13'-5 1/8"	6 3/16"	
2'-8 1/8										
2'-8 3/16										
3'-2 9/16	30.00°	12'-0"	6'-3 3/8"	6'-2 9/16"	6'-1 1/2"	12'-6 3/4"	6 3/4"	14'-6 3/4"	6 15/16"	