TERRACE DIMENSION CHART

BACK SLOPE 2 TO 1 ---------- FRONT SLOPE 8 TO 1

FIELD SLOPE (PERCENT)

		1		2		3		4		5		6		7		8		9		10	
DEPTH	XUP	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN
.1	.8	.1	.2	.1	.2	.1	.3	.1	.3	.1	.3	.1	.3	.2	.4	.2	.4	.2	.4	.2	.5
.2	1.6	.2	.4	.2	.5	.2	.5	.3	.6	.3	.6	.3	.7	.3	.7	.3	.8	.3	.8	.4	.9
.3	2.4	.3	.7	.3	.7	.4	.8	.4	.9	.4	.9	.4	1.0	.5	1.1	.5	1.2	.5	1.3	.5	1.4
.4	3.2	.4	.9	.5	1.0	.5	1.1	.5	1.1	.6	1.2	.6	1.3	.6	1.5	.7	1.6	.7	1.7	.7	1.8
.5	4.0	.5	1.1	.6	1.2	.6	1.3	.7	1.4	.7	1.6	.7	1.7	.8	1.8	.8	2.0	.9	2.1	.9	2.3
.6	4.8	.6	1.3	.7	1.4	.7	1.6	.8	1.7	.8	1.9	.9	2.0	.9	2.2	1.0	2.3	1.0	2.5	1.1	2.7
.7	5.6	.8	1.5	.8	1.7	.9	1.8	.9	2.0	1.0	2.2	1.0	2.4	1.1	2.5	1.1	2.7	1.2	2.9	1.3	3.2
.8	6.4	.9	1.8	.9	1.9	1.0	2.1	1.1	2.3	1.1	2.5	1.2	2.7	1.2	2.9	1.3	3.1	1.4	3.4	1.4	3.6
.9	7.2	1.0	2.0	1.0	2.2	1.1	2.4	1.2	2.6	1.3	2.8	1.3	3.0	1.4	3.3	1.5	3.5	1.5	3.8	1.6	4.1
1.0	8.0	1.1	2.2	1.2	2.4	1.2	2.6	1.3	2.9	1.4	3.1	1.5	3.4	1.6	3.6	1.6	3.9	1.7	4.2	1.8	4.5
1.1	8.8	1.2	2.4	1.3	2.7	1.4	2.9	1.5	3.2	1.5	3.4	1.6	3.7	1.7	4.0	1.8	4.3	1.9	4.6	2.0	5.0
1.2	9.6	1.3	2.6	1.4	2.9	1.5	3.2	1.6	3.4	1.7	3.7	1.8	4.0	1.9	4.4	2.0	4.7	2.1	5.0	2.2	5.4
1.3	10.4	1.4	2.9	1.5	3.1	1.6	3.4	1.7	3.7	1.8	4.0	1.9	4.4	2.0	4.7	2.1	5.1	2.2	5.5	2.3	5.8
1.4	11.2	1.5	3.1	1.6	3.4	1.7	3.7	1.8	4.0	2.0	4.4	2.1	4.7	2.2	5.1	2.3	5.5	2.4	5.9	2.5	6.3
1.5	12.0	1.6	3.3	1.7	3.6	1.9	4.0	2.0	4.3	2.1	4.7	2.2	5.0	2.3	5.4	2.5	5.9	2.6	6.3	2.7	6.8
1.6	12.8	1.7	3.5	1.9	3.9	2.0	4.2	2.1	4.6	2.2	5.0	2.4	5.4	2.5	5.8	2.6	6.2	2.8	6.7	2.9	7.2
1.7	13.6	1.8	3.7	2.0	4.1	2.1	4.5	2.2	4.9	2.4	5.3	2.5	5.7	2.7	6.2	2.8	6.6	2.9	7.1	3.1	7.7
1.8	14.4	1.9	4.0	2.1	4.3	2.2	4.7	2.4	5.2	2.5	5.6	2.7	6.1	2.8	6.5	3.0	7.0	3.1	7.6	3.2	8.1
1.9	15.2	2.1	4.2	2.2	4.6	2.4	5.0	2.5	5.5	2.7	5.9	2.8	6.4	3.0	6.9	3.1	7.4	3.3	8.0	3.4	8.6
2.0	16.0	2.2	4.4	2.3	4.8	2.5	5.3	2.6	5.7	2.8	6.2	3.0	6.7	3.1	7.3	3.3	7.8	3.4	8.4	3.6	9.0
2.1	16.8	2.3	4.6	2.4	5.1	2.6	5.5	2.8	6.0	2.9	6.5	3.1	7.1	3.3	7.6	3.4	8.2	3.6	8.8	3.8	9.5
2.2	17.6	2.4	4.8	2.6	5.3	2.7	5.8	2.9	6.3	3.1	6.8	3.3	7.4	3.4	8.0	3.6	8.6	3.8	9.2	4.0	9.9
2.3	18.4	2.5	5.1	2.7	5.6	2.9	6.1	3.0	6.6	3.2	7.2	3.4	7.7	3.6	8.3	3.8	9.0	4.0	9.6	4.1	10.3
2.4	19.2	2.6	5.3	2.8	5.8	3.0	6.3	3.2	6.9	3.4	7.5	3.6	8.1	3.7	8.7	3.9	9.4	4.1	10.1	4.3	10.8
2.5	20.0	2.7	5.5	2.9	6.0	3.1	6.6	3.3	7.2	3.5	7.8	3.7	8.4	3.9	9.1	4.1	9.8	4.3	10.5	4.5	11.3
2.6	20.8	2.8	5.7	3.0	6.3	3.2	6.9	3.4	7.5	3.6	8.1	3.8	8.7	4.1	9.4	4.3	10.2	4.5	10.9	4.7	11.7
2.7	21.6	2.9	6.0	3.1	6.5	3.3	7.1	3.6	7.7	3.8	8.4	4.0	9.1	4.2	9.8	4.4	10.5	4.6	11.3	4.9	12.2
2.8	22.4	3.0	6.2	3.2	6.8	3.5	7.4	3.7	8.0	3.9	8.7	4.1	9.4	4.4	10.2	4.6	10.9	4.8	11.7	5.0	12.6
2.9	23.2	3.1	6.4	3.4	7.0	3.6	7.7	3.8	8.3	4.1	9.0	4.3	9.8	4.5	10.5	4.8	11.3	5.0	12.2	5.2	13.1
3.0	24.0	3.2	6.6	3.5	7.2	3.7	7.9	4.0	8.6	4.2	9.3	4.4	10.1	4.7	10.9	4.9	11.7	5.2	12.6	5.4	13.5
3.1	24.8	3.3	6.8	3.6	7.5	3.8	8.2	4.1	8.9	4.3	9.6	4.6	10.4	4.8	11.2	5.1	12.1	5.3	13.0	5.6	13.9
3.2	25.6	3.5	7.1	3.7	7.7	4.0	8.4	4.2	9.2	4.5	10.0	4.7	10.8	5.0	11.6	5.2	12.5	5.5	13.4	5.8	14.4
3.3	26.4	3.6	7.3	3.8	8.0	4.1	8.7	4.4	9.5	4.6	10.3	4.9	11.1	5.1	12.0	5.4	12.9	5.7	13.8	5.9	14.9
3.4	27.2	3.7	7.5	3.9	8.2	4.2	9.0	4.5	9.8	4.8	10.6	5.0	11.4	5.3	12.3	5.6	13.3	5.8	14.3	6.1	15.3
3.5	28.0	3.8	7.7	4.1	8.5	4.3	9.2	4.6	10.0	4.9	10.9	5.2	11.8	5.5	12.7	5.7	13.7	6.0	14.7	6.3	15.8
3.6	28.8	3.9	7.9	4.2	8.7	4.5	9.5	4.8	10.3	5.0	11.2	5.3	12.1	5.6	13.1	5.9	14.1	6.2	15.1	6.5	16.2
3.7	29.6	4.0	8.2	4.3	8.9	4.6	9.8	4.9	10.6	5.2	11.5	5.5	12.4	5.8	13.4	6.1	14.4	6.4	15.5	6.7	16.7
3.8	30.4	4.1	8.4	4.4	9.2	4.7	10.0	5.0	10.9	5.3	11.8	5.6	12.8	5.9	13.8	6.2	14.8	6.5	15.9	6.8	17.1
3.9	31.2	4.2	8.6	4.5	9.4	4.8	10.3	5.1	11.2	5.5	12.1	5.8	13.1	6.1	14.1	6.4	15.2	6.7	16.4	7.0	17.6
4.0	32.0	4.3	8.8	4.6	9.7	5.0	10.6	5.3	11.5	5.6	12.4	5.9	13.5	6.2	14.5	6.6	15.6	6.9	16.8	7.2	18.0
4.1	32.8	4.4	9.0	4.8	9.9	5.1	10.8	5.4	11.8	5.7	12.8	6.1	13.8	6.4	14.9	6.7	16.0	7.1	17.2	7.4	18.4
4.2	33.6	4.5	9.3	4.9	10.1	5.2	11.1	5.5	12.1	5.9	13.1	6.2	14.1	6.6	15.2	6.9	16.4	7.2	17.6	7.6	18.9
4.3	34.4	4.6	9.5	5.0	10.4	5.3	11.3	5.7	12.3	6.0	13.4	6.4	14.5	6.7	15.6	7.1	16.8	7.4	18.0	7.7	19.4
4.4	35.2	4.8	9.7	5.1	10.6	5.5	11.6	5.8	12.6	6.2	13.7	6.5	14.8	6.9	16.0	7.2	17.2	7.6	18.5	7.9	19.8
4.5	36.0	4.9	9.9	5.2	10.9	5.6	11.9	5.9	12.9	6.3	14.0	6.7	15.1	7.0	16.3	7.4	17.6	7.7	18.9	8.1	20.3

Notes:

1. This chart can be used to determine approximate terrace dimensions with the given various depths, front slopes, back slopes and field slopes. Depth (d) applies to fill terraces only. XUP is horizontal distance from front toe of the fill to top of ridge, XDN is horizontal distance from top of ridge to the back toe and HT is height of fill at the top of ridge.

TERRACE DIMENSION CHART

BACK SLOPE 4 TO 1 ---------- FRONT SLOPE 8 TO 1

		FIELD SLOPE (PERCENT) 1		2		3		4		5		6		7		8		9		10	
DEPTH	XUP	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN
.1	.8	.1	.4	.1	.5	.1	.6	.1	.6	.1	.7	.1	.8	.2	.9	.2	1.0	.2	1.1	.2	1.2
.2	1.6	.2	.9	.2	1.0	.2	1.1	.3	1.3	.3	1.4	.3	1.6	.3	1.7	.3	1.9	.3	2.2	.4	2.4
.3	2.4	.3	1.3	.3	1.5	.4	1.7	.4	1.9	.4	2.1	.4	2.3	.5	2.6	.5	2.9	.5	3.2	.5	3.6
.4	3.2	.4	1.8	.5	2.0	.5	2.3	.5	2.5	.6	2.8	.6	3.1	.6	3.5	.7	3.9	.7	4.3	.7	4.8
.5	4.0	.5	2.2	.6	2.5	.6	2.8	.7	3.1	.7	3.5	.7	3.9	.8	4.3	.8	4.8	.9	5.4	.9	6.0
.6	4.8	.6	2.7	.7	3.0	.7	3.4	.8	3.8	.8	4.2	.9	4.7	.9	5.2	1.0	5.8	1.0	6.5	1.1	7.2
.7	5.6	.8	3.1	.8	3.5	.9	3.9	.9	4.4	1.0	4.9	1.0	5.5	1.1	6.1	1.1	6.8	1.2	7.5	1.3	8.4
.8	6.4	.9	3.6	.9	4.0	1.0	4.5	1.1	5.0	1.1	5.6	1.2	6.2	1.2	6.9	1.3	7.7	1.4	8.6	1.4	9.6
.9	7.2	1.0	4.0	1.0	4.5	1.1	5.1	1.2	5.7	1.3	6.3	1.3	7.0	1.4	7.8	1.5	8.7	1.5	9.7	1.6	10.8
1.0	8.0	1.1	4.5	1.2	5.0	1.2	5.6	1.3	6.3	1.4	7.0	1.5	7.8	1.6	8.7	1.6	9.6	1.7	10.8	1.8	12.0
1.1	8.8	1.2	4.9	1.3	5.5	1.4	6.2	1.5	6.9	1.5	7.7	1.6	8.6	1.7	9.5	1.8	10.6	1.9	11.8	2.0	13.2
1.2	9.6	1.3	5.4	1.4	6.1	1.5	6.8	1.6	7.5	1.7	8.4	1.8	9.3	1.9	10.4	2.0	11.6	2.1	12.9	2.2	14.4
1.3	10.4	1.4	5.8	1.5	6.6	1.6	7.3	1.7	8.2	1.8	9.1	1.9	10.1	2.0	11.3	2.1	12.5	2.2	14.0	2.3	15.6
1.4	11.2	1.5	6.3	1.6	7.1	1.7	7.9	1.8	8.8	2.0	9.8	2.1	10.9	2.2	12.1	2.3	13.5	2.4	15.1	2.5	16.8
1.5	12.0	1.6	6.7	1.7	7.6	1.9	8.5	2.0	9.4	2.1	10.5	2.2	11.7	2.3	13.0	2.5	14.5	2.6	16.1	2.7	18.0
1.6	12.8	1.7	7.2	1.9	8.1	2.0	9.0	2.1	10.1	2.2	11.2	2.4	12.5	2.5	13.9	2.6	15.4	2.8	17.2	2.9	19.2
1.7	13.6	1.8	7.6	2.0	8.6	2.1	9.6	2.2	10.7	2.4	11.9	2.5	13.2	2.7	14.7	2.8	16.4	2.9	18.3	3.1	20.4
1.8	14.4	1.9	8.1	2.1	9.1	2.2	10.1	2.4	11.3	2.5	12.6	2.7	14.0	2.8	15.6	3.0	17.4	3.1	19.4	3.2	21.6
1.9	15.2	2.1	8.5	2.2	9.6	2.4	10.7	2.5	11.9	2.7	13.3	2.8	14.8	3.0	16.5	3.1	18.3	3.3	20.4	3.4	22.8
2.0	16.0	2.2	9.0	2.3	10.1	2.5	11.3	2.6	12.6	2.8	14.0	3.0	15.6	3.1	17.3	3.3	19.3	3.4	21.5	3.6	24.0
2.1	16.8	2.3	9.4	2.4	10.6	2.6	11.8	2.8	13.2	2.9	14.7	3.1	16.4	3.3	18.2	3.4	20.3	3.6	22.6	3.8	25.2
2.2	17.6	2.4	9.9	2.6	11.1	2.7	12.4	2.9	13.8	3.1	15.4	3.3	17.1	3.4	19.1	3.6	21.2	3.8	23.7	4.0	26.4
2.3	18.4	2.5	10.3	2.7	11.6	2.9	13.0	3.0	14.5	3.2	16.1	3.4	17.9	3.6	19.9	3.8	22.2	4.0	24.7	4.1	27.6
2.4	19.2	2.6	10.8	2.8	12.1	3.0	13.5	3.2	15.1	3.4	16.8	3.6	18.7	3.7	20.8	3.9	23.2	4.1	25.8	4.3	28.8
2.5	20.0	2.7	11.2	2.9	12.6	3.1	14.1	3.3	15.7	3.5	17.5	3.7	19.5	3.9	21.7	4.1	24.1	4.3	26.9	4.5	30.0
2.6	20.8	2.8	11.7	3.0	13.1	3.2	14.7	3.4	16.3	3.6	18.2	3.8	20.3	4.1	22.5	4.3	25.1	4.5	28.0	4.7	31.2
2.7	21.6	2.9	12.1	3.1	13.6	3.3	15.2	3.6	17.0	3.8	18.9	4.0	21.0	4.2	23.4	4.4	26.0	4.6	29.0	4.9	32.4
2.8	22.4	3.0	12.6	3.2	14.1	3.5	15.8	3.7	17.6	3.9	19.6	4.1	21.8	4.4	24.3	4.6	27.0	4.8	30.1	5.0	33.6
2.9	23.2	3.1	13.0	3.4	14.6	3.6	16.3	3.8	18.2	4.1	20.3	4.3	22.6	4.5	25.1	4.8	28.0	5.0	31.2	5.2	34.8
3.0	24.0	3.2	13.5	3.5	15.1	3.7	16.9	4.0	18.9	4.2	21.0	4.4	23.4	4.7	26.0	4.9	28.9	5.2	32.3	5.4	36.0
3.1	24.8	3.3	13.9	3.6	15.6	3.8	17.5	4.1	19.5	4.3	21.7	4.6	24.1	4.8	26.9	5.1	29.9	5.3	33.3	5.6	37.2
3.2	25.6	3.5	14.4	3.7	16.1	4.0	18.0	4.2	20.1	4.5	22.4	4.7	24.9	5.0	27.7	5.2	30.9	5.5	34.4	5.8	38.4
3.3	26.4	3.6	14.8	3.8	16.6	4.1	18.6	4.4	20.7	4.6	23.1	4.9	25.7	5.1	28.6	5.4	31.8	5.7	35.5	5.9	39.6
3.4	27.2	3.7	15.3	3.9	17.1	4.2	19.2	4.5	21.4	4.8	23.8	5.0	26.5	5.3	29.5	5.6	32.8	5.8	36.6	6.1	40.8
3.5	28.0	3.8	15.7	4.1	17.6	4.3	19.7	4.6	22.0	4.9	24.5	5.2	27.3	5.5	30.3	5.7	33.8	6.0	37.6	6.3	42.0
3.6	28.8	3.9	16.2	4.2	18.2	4.5	20.3	4.8	22.6	5.0	25.2	5.3	28.0	5.6	31.2	5.9	34.7	6.2	38.7	6.5	43.2
3.7	29.6	4.0	16.6	4.3	18.7	4.6	20.9	4.9	23.3	5.2	25.9	5.5	28.8	5.8	32.1	6.1	35.7	6.4	39.8	6.7	44.4
3.8	30.4	4.1	17.1	4.4	19.2	4.7	21.4	5.0	23.9	5.3	26.6	5.6	29.6	5.9	32.9	6.2	36.7	6.5	40.9	6.9	45.6
3.9	31.2	4.2	17.5	4.5	19.7	4.8	22.0	5.1	24.5	5.5	27.3	5.8	30.4	6.1	33.8	6.4	37.6	6.7	41.9	7.0	46.8
4.0	32.0	4.3	18.0	4.6	20.2	5.0	22.5	5.3	25.1	5.6	28.0	5.9	31.2	6.2	34.7	6.6	38.6	6.9	43.0	7.2	48.0
4.1	32.8	4.4	18.4	4.8	20.7	5.1	23.1	5.4	25.8	5.7	28.7	6.1	31.9	6.4	35.5	6.7	39.6	7.1	44.1	7.4	49.2
4.2	33.6	4.5	18.9	4.9	21.2	5.2	23.7	5.5	26.4	5.9	29.4	6.2	32.7	6.6	36.4	6.9	40.5	7.2	45.2	7.6	50.4
4.3	34.4	4.6	19.3	5.0	21.7	5.3	24.2	5.7	27.0	6.0	30.1	6.4	33.5	6.7	37.3	7.1	41.5	7.4	46.2	7.7	51.6
4.4	35.2	4.8	19.8	5.1	22.2	5.5	24.8	5.8	27.7	6.2	30.8	6.5	34.3	6.9	38.1	7.2	42.4	7.6	47.3	7.9	52.8
4.5	36.0	4.9	20.2	5.2	22.7	5.6	25.4	5.9	28.3	6.3	31.5	6.7	35.1	7.0	39.0	7.4	43.4	7.7	48.4	8.1	54.0

2. This chart assumes a V-shaped ridge and channel. Depth should be increased, when needed, to meet ridge and channel width requirements.

TERRACE DIMENSION CHART

BACK SLOPE 8 TO 1 ---------- FRONT SLOPE 8 TO 1

FIELD SLOPE (PERCENT)

DEPTH	XUP	1 HT	1 XDN	2 HT	2 XDN	3 HT	3 XDN	4 HT	4 XDN	5 HT	5 XDN	6 HT	6 XDN	7 HT	7 XDN	8 HT	8 XDN	9 HT	9 XDN	10 HT	10 XDN
.1	.8	.1	.9	.1	1.1	.1	1.3	.1	1.6	.1	1.9	.1	2.3	.2	2.8	.2	3.6	.2	4.9	.2	7.2
.2	1.6	.2	1.9	.2	2.2	.2	2.6	.3	3.1	.3	3.7	.3	4.6	.3	5.7	.3	7.3	.3	9.8	.4	14.4
.3	2.4	.3	2.8	.3	3.3	.4	3.9	.4	4.7	.4	5.6	.4	6.8	.5	8.5	.5	10.9	.5	14.7	.5	21.6
.4	3.2	.4	3.8	.5	4.4	.5	5.2	.5	6.2	.6	7.5	.6	9.1	.6	11.3	.7	14.6	.7	19.7	.7	28.8
.5	4.0	.5	4.7	.6	5.5	.6	6.5	.7	7.8	.7	9.3	.7	11.4	.8	14.2	.8	18.2	.9	24.6	.9	36.0
.6	4.8	.6	5.6	.7	6.6	.7	7.8	.8	9.3	.8	11.2	.9	13.7	.9	17.0	1.0	21.9	1.0	29.5	1.1	43.2
.7	5.6	.8	6.6	.8	7.7	.9	9.1	.9	10.9	1.0	13.1	1.0	15.9	1.1	19.9	1.1	25.5	1.2	34.4	1.3	50.4
.8	6.4	.9	7.5	.9	8.8	1.0	10.4	1.1	12.4	1.1	14.9	1.2	18.2	1.2	22.7	1.3	29.2	1.4	39.3	1.4	57.6
.9	7.2	1.0	8.5	1.0	9.9	1.1	11.7	1.2	14.0	1.3	16.8	1.3	20.5	1.4	25.5	1.5	32.8	1.5	44.2	1.6	64.8
1.0	8.0	1.1	9.4	1.2	11.0	1.2	13.1	1.3	15.5	1.4	18.7	1.5	22.8	1.6	28.4	1.6	36.4	1.7	49.1	1.8	72.0
1.1	8.8	1.2	10.3	1.3	12.2	1.4	14.4	1.5	17.1	1.5	20.5	1.6	25.0	1.7	31.2	1.8	40.1	1.9	54.1	2.0	79.2
1.2	9.6	1.3	11.3	1.4	13.3	1.5	15.7	1.6	18.6	1.7	22.4	1.8	27.3	1.9	34.0	2.0	43.7	2.1	59.0	2.2	86.4
1.3	10.4	1.4	12.2	1.5	14.4	1.6	17.0	1.7	20.2	1.8	24.3	1.9	29.6	2.0	36.9	2.1	47.4	2.2	63.9	2.3	93.6
1.4	11.2	1.5	13.1	1.6	15.5	1.7	18.3	1.8	21.7	2.0	26.1	2.1	31.9	2.2	39.7	2.3	51.0	2.4	68.8	2.5	100.8
1.5	12.0	1.6	14.1	1.7	16.6	1.9	19.6	2.0	23.3	2.1	28.0	2.2	34.2	2.3	42.5	2.5	54.7	2.6	73.7	2.7	108.0
1.6	12.8	1.7	15.0	1.9	17.7	2.0	20.9	2.1	24.8	2.2	29.9	2.4	36.4	2.5	45.4	2.6	58.3	2.8	78.6	2.9	115.2
1.7	13.6	1.8	16.0	2.0	18.8	2.1	22.2	2.2	26.4	2.4	31.7	2.5	38.7	2.7	48.2	2.8	62.0	2.9	83.5	3.1	122.4
1.8	14.4	1.9	16.9	2.1	19.9	2.2	23.5	2.4	28.0	2.5	33.6	2.7	41.0	2.8	51.1	3.0	65.6	3.1	88.5	3.2	129.6
1.9	15.2	2.1	17.8	2.2	21.0	2.4	24.8	2.5	29.5	2.7	35.5	2.8	43.3	3.0	53.9	3.1	69.2	3.3	93.4	3.4	136.8
2.0	16.0	2.2	18.8	2.3	22.1	2.5	26.1	2.6	31.1	2.8	37.3	3.0	45.5	3.1	56.7	3.3	72.9	3.4	98.3	3.6	144.0
2.1	16.8	2.3	19.7	2.4	23.2	2.6	27.4	2.8	32.6	2.9	39.2	3.1	47.8	3.3	59.6	3.4	76.5	3.6	103.2	3.8	151.2
2.2	17.6	2.4	20.7	2.6	24.3	2.7	28.7	2.9	34.2	3.1	41.1	3.3	50.1	3.4	62.4	3.6	80.2	3.8	108.1	4.0	158.4
2.3	18.4	2.5	21.6	2.7	25.4	2.9	30.0	3.0	35.7	3.2	42.9	3.4	52.4	3.6	65.2	3.8	83.8	4.0	113.0	4.1	165.6
2.4	19.2	2.6	22.5	2.8	26.5	3.0	31.3	3.2	37.3	3.4	44.8	3.6	54.6	3.7	68.1	3.9	87.5	4.1	117.9	4.3	172.8
2.5	20.0	2.7	23.5	2.9	27.6	3.1	32.6	3.3	38.8	3.5	46.7	3.7	56.9	3.9	70.9	4.1	91.1	4.3	122.9	4.5	180.0
2.6	20.8	2.8	24.4	3.0	28.7	3.2	33.9	3.4	40.4	3.6	48.5	3.8	59.2	4.1	73.7	4.3	94.8	4.5	127.8	4.7	187.2
2.7	21.6	2.9	25.4	3.1	29.8	3.3	35.2	3.6	41.9	3.8	50.4	4.0	61.5	4.2	76.6	4.4	98.4	4.6	132.7	4.9	194.4
2.8	22.4	3.0	26.3	3.2	30.9	3.5	36.5	3.7	43.5	3.9	52.3	4.1	63.8	4.4	79.4	4.6	102.0	4.8	137.6	5.0	201.6
2.9	23.2	3.1	27.2	3.4	32.0	3.6	37.9	3.8	45.0	4.1	54.1	4.3	66.0	4.5	82.3	4.8	105.7	5.0	142.5	5.2	208.8
3.0	24.0	3.2	28.2	3.5	33.1	3.7	39.2	4.0	46.6	4.2	56.0	4.4	68.3	4.7	85.1	4.9	109.3	5.2	147.4	5.4	216.0
3.1	24.8	3.3	29.1	3.6	34.2	3.8	40.5	4.1	48.1	4.3	57.9	4.6	70.6	4.8	87.9	5.1	113.0	5.3	152.3	5.6	223.2
3.2	25.6	3.5	30.1	3.7	35.4	4.0	41.8	4.2	49.7	4.5	59.7	4.7	72.9	5.0	90.8	5.2	116.6	5.5	157.3	5.8	230.4
3.3	26.4	3.6	31.0	3.8	36.5	4.1	43.1	4.4	51.2	4.6	61.6	4.9	75.1	5.1	93.6	5.4	120.3	5.7	162.2	5.9	237.6
3.4	27.2	3.7	31.9	3.9	37.6	4.2	44.4	4.5	52.8	4.8	63.5	5.0	77.4	5.3	96.4	5.6	123.9	5.8	167.1	6.1	244.8
3.5	28.0	3.8	32.9	4.1	38.7	4.3	45.7	4.6	54.4	4.9	65.3	5.2	79.7	5.5	99.3	5.7	127.6	6.0	172.0	6.3	252.0
3.6	28.8	3.9	33.8	4.2	39.8	4.5	47.0	4.8	55.9	5.0	67.2	5.3	82.0	5.6	102.1	5.9	131.2	6.2	176.9	6.5	259.2
3.7	29.6	4.0	34.7	4.3	40.9	4.6	48.3	4.9	57.5	5.2	69.1	5.5	84.2	5.8	104.9	6.1	134.8	6.4	181.8	6.7	266.4
3.8	30.4	4.1	35.7	4.4	42.0	4.7	49.6	5.0	59.0	5.3	70.9	5.6	86.5	5.9	107.8	6.2	138.5	6.5	186.7	6.8	273.6
3.9	31.2	4.2	36.6	4.5	43.1	4.8	50.9	5.1	60.6	5.5	72.8	5.8	88.8	6.1	110.6	6.4	142.1	6.7	191.7	7.0	280.8
4.0	32.0	4.3	37.6	4.6	44.2	5.0	52.2	5.3	62.1	5.6	74.7	5.9	91.1	6.2	113.5	6.6	145.8	6.9	196.6	7.2	288.0
4.1	32.8	4.4	38.5	4.8	45.3	5.1	53.5	5.4	63.7	5.7	76.5	6.1	93.4	6.4	116.3	6.7	149.4	7.1	201.5	7.4	295.2
4.2	33.6	4.5	39.4	4.9	46.4	5.2	54.8	5.5	65.2	5.9	78.4	6.2	95.6	6.6	119.1	6.9	153.1	7.2	206.4	7.6	302.4
4.3	34.4	4.6	40.4	5.0	47.5	5.3	56.1	5.7	66.8	6.0	80.3	6.4	97.9	6.7	122.0	7.1	156.7	7.4	211.3	7.7	309.6
4.4	35.2	4.8	41.3	5.1	48.6	5.5	57.4	5.6	68.3	6.2	82.1	6.5	100.2	6.9	124.8	7.2	160.4	7.6	216.2	7.9	316.8
4.5	36.0	4.9	42.3	5.2	49.7	5.6	58.7	5.9	69.9	6.3	84.0	6.7	102.5	7.0	127.6	7.4	164.0	7.7	221.1	8.1	324.0

3. Terrace dimensions can also be found by the formulas:

$$XUP = dF$$

$$HT = d + dFs$$

$$XDN = \frac{d + dFs}{(1/B) - s}$$

when d = depth at front toe of fill (ft)
F = Front slope (ft/ft)
B = Back slope (ft/ft)
S = field slope (ft/ft)

**********TERRACE DIMENSION CHART**********

********** BACK SLOPE 6 TO 1 ---------- FRONT SLOPE 8 TO 1 **********

		FIELD SLOPE (PERCENT) 1		2		3		4		5		6		7		8		9		10	
DEPTH	XUP	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN	HT	XDN
.1	.8	.1	.7	.1	.8	.1	.9	.1	1.0	.1	1.2	.1	1.4	.2	1.6	.2	1.9	.2	2.2	.2	2.7
.2	1.6	.2	1.4	.2	1.6	.2	1.8	.3	2.1	.3	2.4	.3	2.8	.3	3.2	.3	3.8	.3	4.5	.4	5.4
.3	2.4	.3	2.1	.3	2.4	.4	2.7	.4	3.1	.4	3.6	.4	4.2	.5	4.8	.5	5.7	.5	6.7	.5	8.1
.4	3.2	.4	2.8	.5	3.2	.5	3.6	.5	4.2	.6	4.8	.6	5.6	.6	6.5	.7	7.6	.7	9.0	.7	10.8
.5	4.0	.5	3.4	.6	4.0	.6	4.5	.7	5.2	.7	6.0	.7	6.9	.8	8.1	.8	9.5	.9	11.2	.9	13.5
.6	4.8	.6	4.1	.7	4.7	.7	5.4	.8	6.3	.8	7.2	.9	8.3	.9	9.7	1.0	11.4	1.0	13.5	1.1	16.2
.7	5.6	.8	4.8	.8	5.5	.5	6.4	.9	7.3	1.0	8.4	1.0	9.7	1.1	11.3	1.1	13.2	1.2	15.7	1.3	18.9
.8	6.4	.9	5.5	.9	6.3	1.0	7.3	1.1	8.3	1.1	9.6	1.2	11.1	1.2	12.9	1.3	15.1	1.4	17.9	1.4	21.6
.9	7.2	1.0	6.2	1.0	7.1	1.1	8.2	1.2	9.4	1.3	10.8	1.3	12.5	1.4	14.5	1.5	17.0	1.5	20.2	1.6	24.3
1.0	8.0	1.1	6.9	1.2	7.9	1.2	9.1	1.3	10.4	1.4	12.0	1.5	13.9	1.6	16.1	1.6	18.9	1.7	22.4	1.8	27.0
1.1	8.8	1.2	7.6	1.3	8.7	1.4	10.0	1.5	11.5	1.5	13.2	1.6	15.3	1.7	17.8	1.8	20.8	1.9	24.7	2.0	29.7
1.2	9.6	1.3	8.3	1.4	9.5	1.5	10.9	1.6	12.5	1.7	14.4	1.8	16.6	1.9	19.4	2.0	22.7	2.1	26.9	2.2	32.4
1.3	10.4	1.4	9.0	1.5	10.3	1.6	11.8	1.7	13.5	1.8	15.6	1.9	18.0	2.0	21.0	2.1	24.6	2.2	29.2	2.3	35.1
1.4	11.2	1.5	9.7	1.6	11.1	1.7	12.7	1.8	14.6	2.0	16.8	2.1	19.4	2.2	22.6	2.3	26.5	2.4	31.4	2.5	37.8
1.5	12.0	1.6	10.3	1.7	11.9	1.9	13.6	2.0	15.6	2.1	18.0	2.2	20.8	2.3	24.2	2.5	28.4	2.6	33.7	2.7	40.5
1.6	12.8	1.7	11.0	1.9	12.7	2.0	14.5	2.1	16.7	2.2	19.2	2.4	22.2	2.5	25.8	2.6	30.3	2.8	35.9	2.9	43.2
1.7	13.6	1.8	11.7	2.0	13.4	2.1	15.4	2.2	17.7	2.4	20.4	2.5	23.6	2.7	27.4	2.8	32.2	2.9	38.1	3.1	45.9
1.8	14.4	1.9	12.4	2.1	14.2	2.2	16.3	2.4	18.8	2.5	21.6	2.7	25.0	2.8	29.0	3.0	34.1	3.1	40.4	3.2	48.6
1.9	15.2	2.1	13.1	2.2	15.0	2.4	17.2	2.5	19.8	2.7	22.8	2.8	26.4	3.0	30.7	3.1	36.0	3.3	42.6	3.4	51.3
2.0	16.0	2.2	13.8	2.3	15.8	2.5	18.1	2.6	20.8	2.8	24.0	3.0	27.7	3.1	32.3	3.3	37.8	3.4	44.9	3.6	54.0
2.1	16.8	2.3	14.5	2.4	16.6	2.6	19.1	2.8	21.9	2.9	25.2	3.1	29.1	3.3	33.9	3.4	39.7	3.6	47.1	3.8	56.7
2.2	17.6	2.4	15.2	2.6	17.4	2.7	20.0	2.9	22.9	3.1	26.4	3.3	30.5	3.4	35.5	3.6	41.6	3.8	49.4	4.0	59.4
2.3	18.4	2.5	15.9	2.7	18.2	2.9	20.9	3.0	24.0	3.2	27.6	3.4	31.9	3.6	37.1	3.8	43.5	4.0	51.6	4.1	62.1
2.4	19.2	2.6	16.5	2.8	19.0	3.0	21.8	3.2	25.0	3.4	28.8	3.6	33.3	3.7	38.7	3.9	45.4	4.1	53.8	4.3	64.8
2.5	20.0	2.7	17.2	2.9	19.8	3.1	22.7	3.3	26.1	3.5	30.0	3.7	34.7	3.9	40.3	4.1	47.3	4.3	56.1	4.5	67.4
2.6	20.8	2.8	17.9	3.0	20.6	3.2	23.6	3.4	27.1	3.6	31.2	3.8	36.1	4.1	42.0	4.3	49.2	4.5	58.3	4.7	70.2
2.7	21.6	2.9	18.6	3.1	21.4	3.3	24.5	3.6	28.1	3.8	32.4	4.0	37.5	4.2	43.6	4.4	51.1	4.6	60.6	4.9	72.9
2.8	22.4	3.0	19.3	3.2	22.1	3.5	25.4	3.7	29.2	3.9	33.6	4.1	38.8	4.4	45.2	4.6	53.0	4.8	62.8	5.0	75.6
2.9	23.2	3.1	20.0	3.4	22.9	3.6	26.3	3.8	30.2	4.1	34.8	4.3	40.2	4.5	46.8	4.8	54.9	5.0	65.1	5.2	78.3
3.0	24.0	3.2	20.7	3.5	23.7	3.7	27.2	4.0	31.3	4.2	36.0	4.4	41.6	4.7	48.4	4.9	56.8	5.2	67.3	5.4	81.0
3.1	24.8	3.3	21.4	3.6	24.5	3.8	28.1	4.1	32.3	4.3	37.2	4.6	43.0	4.8	50.0	5.1	58.7	5.3	69.5	5.6	83.7
3.2	25.6	3.5	22.1	3.7	25.3	4.0	29.0	4.2	33.3	4.5	38.4	4.7	44.4	5.0	51.6	5.2	60.6	5.5	71.8	5.8	86.4
3.3	26.4	3.6	22.7	3.8	26.1	4.1	29.9	4.4	34.4	4.6	39.6	4.9	45.8	5.1	53.3	5.4	62.4	5.7	74.0	5.9	89.1
3.4	27.2	3.7	23.4	3.9	26.9	4.2	30.8	4.5	35.4	4.8	40.8	5.0	47.2	5.3	54.9	5.6	64.3	5.8	76.3	6.1	91.8
3.5	28.0	3.8	24.1	4.1	27.7	4.3	31.8	4.6	36.5	4.9	42.0	5.2	48.6	5.5	56.5	5.7	66.2	6.0	78.5	6.3	94.5
3.6	28.8	3.9	24.8	4.2	28.5	4.5	32.7	4.8	37.5	5.0	43.2	5.3	50.0	5.6	58.1	5.9	68.1	6.2	80.8	6.5	97.2
3.7	29.6	4.0	25.5	4.3	29.3	4.6	33.6	4.9	38.6	5.2	44.4	5.5	51.3	5.8	59.7	6.1	70.0	6.4	83.0	6.7	99.9
3.8	30.4	4.1	26.2	4.4	30.1	4.7	34.5	5.0	39.6	5.3	45.6	5.6	52.7	5.9	61.3	6.2	71.9	6.5	85.3	6.8	102.6
3.9	31.2	4.2	26.9	4.5	30.9	4.8	35.4	5.1	40.6	5.5	46.8	5.8	54.1	6.1	62.9	6.4	73.8	6.7	87.5	7.0	105.3
4.0	32.0	4.3	27.6	4.6	31.6	5.0	36.3	5.3	41.7	5.6	48.0	5.9	55.5	6.2	64.6	6.6	75.7	6.9	89.7	7.2	108.0
4.1	32.8	4.4	28.3	4.8	32.4	5.1	37.2	5.4	42.7	5.7	49.2	6.1	56.9	6.4	66.2	6.7	77.6	7.1	92.0	7.4	110.7
4.2	33.6	4.5	29.0	4.9	33.2	5.2	38.1	5.5	43.8	5.9	50.4	6.2	58.3	6.6	67.8	6.9	79.5	7.2	94.2	7.6	113.4
4.3	34.4	4.6	29.6	5.0	34.0	5.3	39.0	5.7	44.8	6.0	51.6	6.4	59.7	6.7	69.4	7.1	81.4	7.4	96.5	7.7	116.1
4.4	35.2	4.8	30.3	5.1	34.8	5.5	39.9	5.8	45.9	6.2	52.8	6.5	61.0	6.9	71.0	7.2	83.3	7.6	98.7	7.9	118.8
4.5	36.0	4.9	31.0	5.2	35.6	5.6	40.8	5.9	46.9	6.3	54.0	6.7	62.4	7.0	72.6	7.4	85.2	7.7	101.0	8.1	121.5

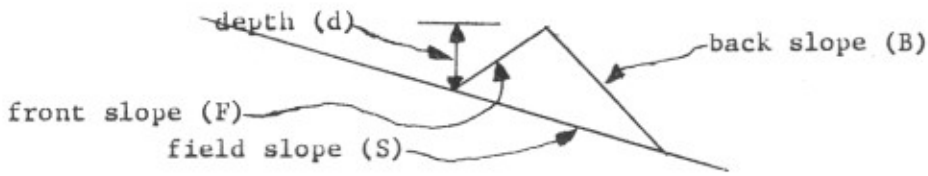
TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 2 TO 1 ---------- FRONT SLOPE 8 TO 1

DEPTH	FIELD SLOPE (PERCENT) 1	2	3	4	5	6	7	8	9	10
.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.2	.01	.01	.01	.01	.01	.01	.01	.01	.02	.02
.3	.02	.02	.02	.02	.03	.03	.03	.03	.03	.04
.4	.03	.04	.04	.04	.05	.05	.05	.06	.06	.07
.5	.05	.06	.06	.07	.07	.08	.08	.09	.10	.10
.6	.07	.08	.09	.10	.10	.11	.12	.13	.14	.15
.7	.10	.11	.12	.13	.14	.15	.16	.18	.19	.20
.8	.13	.14	.16	.17	.18	.20	.21	.23	.25	.27
.9	.17	.18	.20	.22	.23	.25	.27	.29	.31	.34
1.0	.20	.22	.24	.27	.29	.31	.34	.36	.39	.42
1.1	.25	.27	.30	.32	.35	.38	.41	.44	.47	.50
1.2	.29	.32	.35	.38	.41	.45	.48	.52	.56	.60
1.3	.34	.38	.41	.45	.49	.53	.57	.61	.66	.70
1.4	.40	.44	.48	.52	.56	.61	.66	.71	.76	.82
1.5	.46	.50	.55	.60	.65	.70	.76	.81	.87	.94
1.6	.52	.57	.63	.68	.74	.80	.86	.93	.99	1.07
1.7	.59	.65	.71	.77	.83	.90	.97	1.04	1.12	1.20
1.8	.66	.72	.79	.86	.93	1.01	1.09	1.17	1.26	1.35
1.9	.74	.81	.88	.96	1.04	1.12	1.21	1.31	1.40	1.50
2.0	.82	.90	.98	1.06	1.15	1.25	1.34	1.45	1.55	1.67
2.1	.90	.99	1.08	1.17	1.27	1.37	1.48	1.59	1.71	1.84
2.2	.99	1.08	1.18	1.29	1.39	1.51	1.63	1.75	1.88	2.02
2.3	1.08	1.18	1.29	1.41	1.52	1.65	1.78	1.91	2.05	2.20
2.4	1.18	1.29	1.41	1.53	1.66	1.79	1.93	2.08	2.24	2.40
2.5	1.28	1.40	1.53	1.66	1.80	1.95	2.10	2.26	2.43	2.60
2.6	1.38	1.51	1.65	1.80	1.95	2.11	2.27	2.44	2.63	2.82
2.7	1.49	1.63	1.78	1.94	2.10	2.27	2.45	2.64	2.83	3.04
2.8	1.60	1.75	1.92	2.08	2.26	2.44	2.63	2.83	3.05	3.27
2.9	1.72	1.88	2.05	2.23	2.42	2.62	2.83	3.04	3.27	3.50
3.0	1.84	2.01	2.20	2.39	2.59	2.80	3.02	3.25	3.50	3.75
3.1	1.96	2.15	2.35	2.55	2.77	2.99	3.23	3.47	3.73	4.00
3.2	2.09	2.29	2.50	2.72	2.95	3.19	3.44	3.70	3.98	4.27
3.3	2.22	2.44	2.66	2.89	3.14	3.39	3.66	3.94	4.23	4.54
3.4	2.36	2.59	2.82	3.07	3.33	3.60	3.88	4.18	4.49	4.82
3.5	2.50	2.74	2.99	3.25	3.53	3.82	4.11	4.43	4.76	5.10
3.6	2.64	2.90	3.17	3.44	3.73	4.04	4.35	4.69	5.03	5.40
3.7	2.79	3.06	3.34	3.64	3.94	4.26	4.60	4.95	5.32	5.70
3.8	2.95	3.23	3.53	3.84	4.16	4.50	4.85	5.22	5.61	6.02
3.9	3.10	3.40	3.72	4.04	4.38	4.74	5.11	5.50	5.91	6.34
4.0	3.27	3.58	3.91	4.25	4.61	4.98	5.37	5.78	6.21	6.67
4.1	3.43	3.76	4.11	4.47	4.84	5.24	5.65	6.08	6.53	7.00
4.2	3.60	3.95	4.31	4.69	5.08	5.49	5.93	6.38	6.85	7.35
4.3	3.77	4.14	4.52	4.91	5.33	5.76	6.21	6.69	7.18	7.70
4.4	3.95	4.33	4.73	5.14	5.58	6.03	6.50	7.00	7.52	8.07
4.5	4.13	4.53	4.95	5.38	5.83	6.31	6.80	7.32	7.87	8.44

Notes:

1. This chart can be used to estimate fill yardage for terraces of various depths, front slopes, back slopes and field slopes. Depth (d) applies to fill terraces only.



TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 4 TO 1 ——— FRONT SLOPE 8 TO 1

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01
.2	.01	.01	.01	.01	.02	.02	.02	.02	.02	.03
.3	.02	.03	.03	.03	.03	.04	.04	.05	.05	.06
.4	.04	.04	.05	.06	.06	.07	.08	.09	.10	.11
.5	.06	.07	.08	.09	.10	.11	.12	.13	.15	.17
.6	.09	.10	.11	.13	.14	.16	.17	.19	.21	.24
.7	.12	.14	.15	.17	.19	.21	.24	.26	.29	.33
.8	.16	.18	.20	.22	.25	.28	.31	.34	.38	.43
.9	.20	.23	.25	.28	.31	.35	.39	.43	.48	.54
1.0	.25	.28	.31	.35	.39	.43	.48	.54	.60	.67
1.1	.30	.34	.38	.42	.47	.52	.58	.65	.72	.81
1.2	.36	.40	.45	.50	.56	.62	.69	.77	.86	.96
1.3	.42	.47	.53	.59	.66	.73	.81	.91	1.01	1.13
1.4	.49	.55	.61	.68	.76	.85	.94	1.05	1.17	1.31
1.5	.56	.63	.70	.79	.87	.97	1.08	1.21	1.34	1.50
1.6	.64	.72	.80	.89	1.00	1.11	1.23	1.37	1.53	1.71
1.7	.72	.81	.90	1.01	1.12	1.25	1.39	1.55	1.73	1.93
1.8	.81	.91	1.01	1.13	1.26	1.40	1.56	1.74	1.93	2.16
1.9	.90	1.01	1.13	1.26	1.40	1.56	1.74	1.93	2.16	2.41
2.0	1.00	1.12	1.25	1.40	1.56	1.73	1.93	2.14	2.39	2.67
2.1	1.10	1.24	1.38	1.54	1.71	1.91	2.12	2.36	2.63	2.94
2.2	1.21	1.36	1.52	1.69	1.88	2.09	2.33	2.59	2.89	3.23
2.3	1.32	1.48	1.66	1.85	2.06	2.29	2.55	2.84	3.16	3.53
2.4	1.44	1.61	1.80	2.01	2.24	2.49	2.77	3.09	3.44	3.84
2.5	1.56	1.75	1.96	2.18	2.43	2.70	3.01	3.35	3.73	4.17
2.6	1.69	1.89	2.12	2.36	2.63	2.93	3.25	3.62	4.04	4.51
2.7	1.82	2.04	2.28	2.55	2.83	3.15	3.51	3.91	4.35	4.86
2.8	1.96	2.20	2.45	2.74	3.05	3.39	3.77	4.20	4.68	5.23
2.9	2.10	2.36	2.63	2.94	3.27	3.64	4.05	4.51	5.02	5.61
3.0	2.25	2.52	2.82	3.14	3.50	3.89	4.33	4.82	5.37	6.00
3.1	2.40	2.69	3.01	3.36	3.74	4.16	4.63	5.15	5.74	6.41
3.2	2.56	2.87	3.21	3.58	3.98	4.43	4.93	5.49	6.12	6.83
3.3	2.72	3.05	3.41	3.80	4.23	4.71	5.24	5.84	6.50	7.26
3.4	2.89	3.24	3.62	4.04	4.50	5.00	5.57	6.20	6.90	7.71
3.5	3.06	3.43	3.84	4.28	4.76	5.30	5.90	6.57	7.32	8.17
3.6	3.24	3.63	4.06	4.53	5.04	5.61	6.24	6.95	7.74	8.64
3.7	3.42	3.84	4.29	4.78	5.32	5.92	6.59	7.34	8.18	9.13
3.8	3.61	4.05	4.52	5.04	5.62	6.25	6.95	7.74	8.62	9.63
3.9	3.80	4.26	4.76	5.31	5.91	6.58	7.32	8.15	9.08	10.14
4.0	4.00	4.48	5.01	5.59	6.22	6.92	7.70	8.58	9.56	10.67
4.1	4.20	4.71	5.26	5.87	6.54	7.27	8.09	9.01	10.04	11.21
4.2	4.41	4.94	5.52	6.16	6.86	7.63	8.49	9.45	10.53	11.76
4.3	4.62	5.18	5.79	6.46	7.19	8.00	8.90	9.91	11.04	12.33
4.4	4.84	5.42	6.06	6.76	7.53	8.38	9.32	10.38	11.56	12.91
4.5	5.06	5.67	6.34	7.07	7.87	8.76	9.75	10.85	12.09	13.50

2. This chart assumes V-shaped ridge top and channel. Depth should be increased, when needed, to meet ridge and channel width requirements.

TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 6 TO 1 ---------- FRONT SLOPE 8 TO 1

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01
.2	.01	.01	.02	.02	.02	.02	.03	.03	.04	.05
.3	.03	.03	.04	.04	.05	.05	.06	.07	.09	.10
.4	.05	.05	.06	.07	.08	.10	.11	.13	.16	.19
.5	.07	.09	.10	.11	.13	.15	.17	.20	.24	.29
.6	.11	.12	.14	.16	.19	.22	.25	.29	.35	.42
.7	.15	.17	.19	.22	.25	.29	.34	.40	.47	.57
.8	.19	.22	.25	.29	.33	.38	.45	.52	.62	.75
.9	.24	.28	.32	.36	.42	.49	.56	.66	.79	.94
1.0	.30	.34	.39	.45	.52	.60	.70	.82	.97	1.17
1.1	.36	.41	.47	.54	.63	.73	.84	.99	1.17	1.41
1.2	.43	.49	.56	.65	.75	.86	1.00	1.18	1.40	1.68
1.3	.50	.58	.66	.76	.88	1.01	1.18	1.38	1.64	1.97
1.4	.58	.67	.77	.88	1.02	1.18	1.37	1.60	1.90	2.29
1.5	.67	.77	.88	1.01	1.17	1.35	1.57	1.84	2.18	2.62
1.6	.76	.87	1.00	1.15	1.33	1.53	1.79	2.09	2.48	2.99
1.7	.86	.99	1.13	1.30	1.50	1.73	2.02	2.36	2.80	3.37
1.8	.97	1.11	1.27	1.46	1.68	1.94	2.26	2.65	3.14	3.78
1.9	1.08	1.23	1.42	1.63	1.87	2.16	2.52	2.95	3.50	4.21
2.0	1.19	1.37	1.57	1.80	2.07	2.40	2.79	3.27	3.88	4.67
2.1	1.31	1.51	1.73	1.99	2.29	2.64	3.08	3.61	4.27	5.14
2.2	1.44	1.65	1.90	2.18	2.51	2.90	3.37	3.96	4.69	5.65
2.3	1.58	1.81	2.07	2.38	2.74	3.17	3.69	4.33	5.13	6.17
2.4	1.72	1.97	2.26	2.59	2.99	3.45	4.02	4.71	5.58	6.72
2.5	1.86	2.14	2.45	2.81	3.24	3.75	4.36	5.11	6.06	7.29
2.6	2.01	2.31	2.65	3.04	3.51	4.05	4.71	5.53	6.55	7.89
2.7	2.17	2.49	2.86	3.28	3.78	4.37	5.08	5.96	7.07	8.50
2.8	2.34	2.68	3.07	3.53	4.07	4.70	5.47	6.41	7.60	9.15
2.9	2.51	2.87	3.30	3.79	4.36	5.04	5.86	6.88	8.15	9.81
3.0	2.68	3.08	3.53	4.05	4.67	5.40	6.28	7.36	8.72	10.50
3.1	2.86	3.28	3.77	4.33	4.98	5.76	6.70	7.86	9.32	11.21
3.2	3.05	3.50	4.01	4.61	5.31	6.14	7.14	8.37	9.93	11.95
3.3	3.24	3.72	4.27	4.90	5.65	6.53	7.59	8.90	10.56	12.70
3.4	3.44	3.95	4.53	5.21	5.99	6.93	8.06	9.45	11.21	13.49
3.5	3.65	4.19	4.80	5.52	6.35	7.34	8.54	10.02	11.87	14.29
3.6	3.86	4.43	5.08	5.84	6.72	7.77	9.04	10.60	12.56	15.12
3.7	4.08	4.68	5.37	6.16	7.10	8.21	9.55	11.19	13.27	15.97
3.8	4.30	4.93	5.66	6.50	7.49	8.66	10.07	11.81	14.00	16.85
3.9	4.53	5.20	5.96	6.85	7.89	9.12	10.61	12.44	14.74	17.74
4.0	4.77	5.47	6.27	7.20	8.30	9.59	11.16	13.08	15.51	18.67
4.1	5.01	5.74	6.59	7.57	8.72	10.08	11.72	13.74	16.30	19.61
4.2	5.25	6.03	6.92	7.94	9.15	10.58	12.30	14.42	17.10	20.58
4.3	5.51	6.32	7.25	8.33	9.59	11.09	12.89	15.12	17.92	21.57
4.4	5.77	6.62	7.59	8.72	10.04	11.61	13.50	15.83	18.77	22.59
4.5	6.03	6.92	7.94	9.12	10.50	12.14	14.12	16.56	19.63	23.62

Fill yardage can also be calculated by the formula:

$$yd^3/ft = \frac{d^2Fs + d^2}{54}\left[F + \frac{(Fs + 1)}{(1/B) - s}\right]$$

Example:

depth 2.5', 8:1 front slope,
2:1 back slope and 4% field slope

$$yd^3/ft = \frac{(2.5)^2\ (8)\ (0.04) + (2.5)^2}{54}\left[8 + \frac{8(0.04) + 1}{(1/2) - 0.04}\right]$$

or

$$1.66\ yd^3/ft$$

Exhibit IN-8-10
(sheet 3 of 4)

TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 8 TO 1 ---------- FRONT SLOPE 8 TO 1

FIELD SLOPE (PERCENT)

DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.00	.00	.00	.01	.01	.01	.01	.01	.02	.03
.2	.01	.02	.02	.02	.03	.03	.04	.05	.07	.11
.3	.03	.04	.04	.05	.06	.08	.09	.12	.16	.24
.4	.06	.07	.08	.09	.11	.13	.17	.22	.29	.43
.5	.09	.10	.12	.14	.17	.21	.26	.34	.46	.67
.6	.13	.15	.17	.21	.25	.30	.38	.49	.66	.96
.7	.17	.20	.24	.28	.34	.41	.51	.66	.89	1.31
.8	.22	.26	.31	.37	.44	.54	.67	.86	1.16	1.71
.9	.28	.33	.39	.47	.56	.68	.85	1.09	1.47	2.16
1.0	.35	.41	.48	.58	.69	.84	1.05	1.35	1.82	2.67
1.1	.42	.50	.58	.70	.84	1.02	1.27	1.63	2.20	3.23
1.2	.50	.59	.70	.83	1.00	1.21	1.51	1.94	2.62	3.84
1.3	.59	.69	.82	.97	1.17	1.43	1.78	2.28	3.08	4.51
1.4	.68	.80	.95	1.13	1.36	1.65	2.06	2.65	3.57	5.23
1.5	.78	.92	1.09	1.29	1.56	1.90	2.36	3.04	4.10	6.00
1.6	.89	1.05	1.24	1.47	1.77	2.16	2.69	3.46	4.66	6.83
1.7	1.01	1.18	1.40	1.66	2.00	2.44	3.04	3.90	5.26	7.71
1.8	1.13	1.33	1.57	1.86	2.24	2.73	3.40	4.37	5.90	8.64
1.9	1.26	1.48	1.75	2.08	2.50	3.04	3.79	4.87	6.57	9.63
2.0	1.39	1.64	1.93	2.30	2.77	3.37	4.20	5.40	7.28	10.67
2.1	1.53	1.80	2.13	2.54	3.05	3.72	4.63	5.95	8.03	11.76
2.2	1.68	1.98	2.34	2.78	3.35	4.08	5.08	6.53	8.81	12.91
2.3	1.84	2.16	2.56	3.04	3.66	4.46	5.56	7.14	9.63	14.11
2.4	2.00	2.36	2.78	3.31	3.98	4.86	6.05	7.77	10.48	15.36
2.5	2.17	2.56	3.02	3.59	4.32	5.27	6.57	8.44	11.38	16.67
2.6	2.35	2.77	3.27	3.89	4.67	5.70	7.10	9.12	12.30	18.03
2.7	2.54	2.98	3.52	4.19	5.04	6.15	7.66	9.84	13.27	19.44
2.8	2.73	3.21	3.79	4.51	5.42	6.61	8.24	10.58	14.27	20.91
2.9	2.93	3.44	4.07	4.84	5.81	7.09	8.83	11.35	15.31	22.43
3.0	3.13	3.68	4.35	5.18	6.22	7.59	9.45	12.15	16.38	24.00
3.1	3.34	3.93	4.65	5.53	6.64	8.10	10.10	12.97	17.49	25.63
3.2	3.56	4.19	4.95	5.89	7.08	8.64	10.76	13.82	18.64	27.31
3.3	3.79	4.46	5.26	6.26	7.53	9.18	11.44	14.70	19.82	29.04
3.4	4.02	4.73	5.59	6.65	7.99	9.75	12.14	15.60	21.04	30.83
3.5	4.26	5.01	5.92	7.05	8.47	10.33	12.87	16.53	22.30	32.67
3.6	4.51	5.30	6.27	7.45	8.96	10.93	13.61	17.49	23.59	34.56
3.7	4.76	5.60	6.62	7.87	9.46	11.54	14.38	18.48	24.92	36.51
3.8	5.02	5.91	6.98	8.31	9.98	12.18	15.17	19.49	26.28	38.51
3.9	5.29	6.22	7.35	8.75	10.52	12.83	15.98	20.53	27.68	40.56
4.0	5.57	6.55	7.73	9.20	11.06	13.49	16.81	21.60	29.12	42.67
4.1	5.85	6.88	8.13	9.67	11.62	14.18	17.66	22.69	30.60	44.83
4.2	6.14	7.22	8.53	10.15	12.20	14.88	18.53	23.81	32.11	47.04
4.3	6.43	7.57	8.94	10.63	12.78	15.59	19.42	24.96	33.65	49.31
4.4	6.73	7.92	9.36	11.13	13.38	16.33	20.34	26.13	35.24	51.63
4.5	7.04	8.29	9.79	11.65	14.00	17.08	21.27	27.33	36.86	54.00

Example Terrace Yardage Calculation

Back slope = 6:1
Front slope = 8:1
Field slope = 3%

Sta.	Depth (ft)	yd^3/ft	Average yd^3/ft	Dist	Volume (xd^3)
0+50	0.0	0.00	-	-	-
1+00	0.5	0.10	0.05	50	2.50
1+50	1.7	1.13	0.615	50	30.75
2+00	2.2	1.90	1.515	50	75.75
2+50	1.8	1.27	1.585	50	79.25
3+00	0.9	0.32	0.795	50	39.75
3+40	0.0	0.00	0.16	40	6.40
				Total	234.4 xd^3

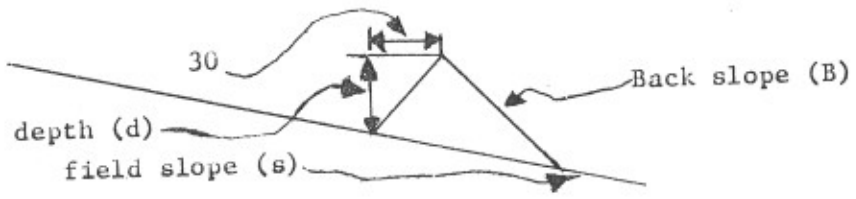
********** TERRACE YARDAGE CHART -- CUBIC YARDS/FT. **********

********** BACK SLOPE 2 TO 1 ---------- TOP OF RIDGE TO CHANNEL BOTTOM, 30 FT. **********

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.23	.41	.59	.79	.99	1.21	1.43	1.66	1.91	2.17
.2	.29	.47	.66	.86	1.06	1.28	1.51	1.74	1.99	2.25
.3	.35	.53	.72	.92	1.13	1.35	1.58	1.82	2.07	2.34
.4	.41	.59	.79	.99	1.20	1.43	1.66	1.90	2.16	2.42
.5	.47	.66	.85	1.06	1.28	1.50	1.74	1.98	2.24	2.51
.6	.53	.72	.92	1.13	1.35	1.58	1.81	2.06	2.33	2.60
.7	.59	.79	.99	1.20	1.42	1.65	1.89	2.15	2.41	2.69
.8	.66	.85	1.06	1.27	1.50	1.73	1.97	2.23	2.50	2.78
.9	.72	.92	1.13	1.34	1.57	1.81	2.05	2.31	2.59	2.87
1.0	.79	.99	1.20	1.42	1.65	1.89	2.14	2.40	2.67	2.96
1.1	.85	1.06	1.27	1.49	1.72	1.97	2.22	2.48	2.76	3.06
1.2	.92	1.12	1.34	1.57	1.80	2.05	2.30	2.57	2.85	3.15
1.3	.99	1.19	1.41	1.64	1.88	2.13	2.39	2.66	2.94	3.24
1.4	1.05	1.27	1.49	1.72	1.96	2.21	2.47	2.75	3.04	3.34
1.5	1.12	1.34	1.56	1.79	2.04	2.29	2.56	2.84	3.13	3.44
1.6	1.19	1.41	1.64	1.87	2.12	2.38	2.65	2.93	3.22	3.54
1.7	1.26	1.48	1.71	1.95	2.20	2.46	2.73	3.02	3.32	3.63
1.8	1.33	1.56	1.79	2.03	2.28	2.55	2.82	3.11	3.41	3.73
1.9	1.41	1.63	1.86	2.11	2.36	2.63	2.91	3.20	3.51	3.83
2.0	1.48	1.71	1.94	2.19	2.45	2.72	3.00	3.30	3.61	3.94
2.1	1.55	1.78	2.02	2.27	2.53	2.81	3.09	3.39	3.71	4.04
2.2	1.63	1.86	2.10	2.35	2.62	2.90	3.19	3.49	3.81	4.14
2.3	1.70	1.94	2.18	2.44	2.71	2.99	3.28	3.59	3.91	4.24
2.4	1.78	2.01	2.26	2.52	2.79	3.08	3.37	3.68	4.01	4.35
2.5	1.85	2.09	2.34	2.61	2.88	3.17	3.47	3.78	4.11	4.46
2.6	1.93	2.17	2.43	2.69	2.97	3.26	3.56	3.88	4.21	4.56
2.7	2.01	2.25	2.51	2.78	3.06	3.35	3.66	3.98	4.32	4.67
2.8	2.09	2.33	2.59	2.87	3.15	3.45	3.76	4.08	4.42	4.78
2.9	2.16	2.42	2.68	2.95	3.24	3.54	3.85	4.18	4.53	4.89
3.0	2.24	2.50	2.77	3.04	3.33	3.64	3.95	4.29	4.63	5.00
3.1	2.33	2.58	2.85	3.13	3.43	3.73	4.05	4.39	4.74	5.11
3.2	2.41	2.67	2.94	3.22	3.52	3.83	4.15	4.49	4.85	5.22
3.3	2.49	2.75	3.03	3.32	3.61	3.93	4.26	4.60	4.96	5.34
3.4	2.57	2.84	3.12	3.41	3.71	4.03	4.36	4.71	5.07	5.45
3.5	2.66	2.93	3.21	3.50	3.81	4.13	4.46	4.81	5.18	5.57
3.6	2.74	3.01	3.30	3.59	3.90	4.23	4.57	4.92	5.29	5.68
3.7	2.83	3.10	3.39	3.69	4.00	4.33	4.67	5.03	5.41	5.80
3.8	2.91	3.19	3.48	3.78	4.10	4.43	4.78	5.14	5.52	5.92
3.9	3.00	3.28	3.57	3.88	4.20	4.53	4.88	5.25	5.63	6.04
4.0	3.09	3.37	3.67	3.98	4.30	4.64	4.99	5.36	5.75	6.16
4.1	3.18	3.46	3.76	4.08	4.40	4.74	5.10	5.47	5.87	6.28
4.2	3.27	3.56	3.86	4.17	4.50	4.85	5.21	5.59	5.98	6.40
4.3	3.36	3.65	3.95	4.27	4.61	4.95	5.32	5.70	6.10	6.52
4.4	3.45	3.74	4.05	4.37	4.71	5.06	5.43	5.82	6.22	6.65
4.5	3.54	3.84	4.15	4.47	4.81	5.17	5.54	5.93	6.34	6.77

Notes:

1. This chart can be used to estimate fill yardage for terraces of various depths, back slopes and field slopes when the horizontal distance from the front toe of fill to ridge is a constant 30 ft. Depth (d) applies to fill terraces only.



TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 4 TO 1 ---------- TOP OF RIDGE TO CHANNEL BOTTOM, 30 FT.

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.23	.43	.64	.87	1.13	1.41	1.72	2.07	2.46	2.91
.2	.30	.50	.71	.95	1.21	1.50	1.82	2.18	2.58	3.04
.3	.36	.57	.79	1.03	1.30	1.60	1.93	2.29	2.71	3.18
.4	.43	.64	.86	1.11	1.39	1.69	2.03	2.41	2.83	3.32
.5	.49	.71	.94	1.20	1.48	1.79	2.14	2.53	2.96	3.46
.6	.56	.78	1.02	1.29	1.57	1.89	2.25	2.65	3.09	3.60
.7	.63	.86	1.10	1.37	1.67	2.00	2.36	2.77	3.23	3.75
.8	.70	.94	1.19	1.46	1.77	2.10	2.48	2.89	3.36	3.89
.9	.78	1.01	1.27	1.56	1.87	2.21	2.59	3.02	3.50	4.04
1.0	.85	1.09	1.36	1.65	1.97	2.32	2.71	3.15	3.64	4.20
1.1	.93	1.18	1.45	1.74	2.07	2.43	2.83	3.28	3.78	4.35
1.2	1.01	1.26	1.54	1.84	2.17	2.54	2.95	3.41	3.93	4.51
1.3	1.09	1.35	1.63	1.94	2.28	2.66	3.08	3.55	4.07	4.67
1.4	1.17	1.43	1.72	2.04	2.39	2.78	3.20	3.68	4.22	4.83
1.5	1.25	1.52	1.82	2.14	2.50	2.89	3.33	3.82	4.37	5.00
1.6	1.33	1.61	1.91	2.25	2.61	3.02	3.46	3.97	4.53	5.17
1.7	1.42	1.70	2.01	2.35	2.73	3.14	3.60	4.11	4.69	5.34
1.8	1.51	1.80	2.11	2.46	2.84	3.26	3.73	4.25	4.84	5.51
1.9	1.60	1.89	2.22	2.57	2.96	3.39	3.87	4.40	5.00	5.69
2.0	1.69	1.99	2.32	2.68	3.08	3.52	4.01	4.55	5.17	5.86
2.1	1.78	2.09	2.42	2.79	3.20	3.65	4.15	4.71	5.33	6.04
2.2	1.87	2.19	2.53	2.91	3.32	3.78	4.29	4.86	5.50	6.23
2.3	1.97	2.29	2.64	3.02	3.45	3.92	4.44	5.02	5.67	6.41
2.4	2.06	2.39	2.75	3.14	3.57	4.05	4.58	5.18	5.84	6.60
2.5	2.16	2.50	2.86	3.26	3.70	4.19	4.73	5.34	6.02	6.79
2.6	2.26	2.60	2.98	3.38	3.83	4.33	4.88	5.50	6.20	6.98
2.7	2.36	2.71	3.09	3.51	3.97	4.47	5.04	5.67	6.37	7.18
2.8	2.46	2.82	3.21	3.63	4.10	4.62	5.19	5.83	6.56	7.38
2.9	2.57	2.93	3.33	3.76	4.24	4.76	5.35	6.00	6.74	7.58
3.0	2.67	3.04	3.45	3.89	4.37	4.91	5.51	6.18	6.93	7.78
3.1	2.78	3.16	3.57	4.02	4.51	5.06	5.67	6.35	7.12	7.98
3.2	2.89	3.27	3.69	4.15	4.66	5.21	5.83	6.53	7.31	8.19
3.3	3.00	3.39	3.82	4.29	4.80	5.37	6.00	6.71	7.50	8.40
3.4	3.11	3.51	3.95	4.42	4.95	5.52	6.17	6.89	7.70	8.61
3.5	3.23	3.63	4.07	4.56	5.09	5.68	6.34	7.07	7.89	8.83
3.6	3.34	3.75	4.20	4.70	5.24	5.84	6.51	7.25	8.09	9.04
3.7	3.46	3.88	4.34	4.84	5.39	6.00	6.68	7.44	8.30	9.26
3.8	3.57	4.00	4.47	4.98	5.55	6.17	6.86	7.63	8.50	9.49
3.9	3.69	4.13	4.61	5.13	5.70	6.33	7.04	7.82	8.71	9.71
4.0	3.82	4.26	4.74	5.27	5.86	6.50	7.22	8.02	8.92	9.94
4.1	3.94	4.39	4.88	5.42	6.01	6.67	7.40	8.21	9.13	10.17
4.2	4.06	4.52	5.02	5.57	6.17	6.84	7.58	8.41	9.34	10.40
4.3	4.19	4.66	5.16	5.72	6.34	7.02	7.77	8.61	9.56	10.63
4.4	4.32	4.79	5.31	5.88	6.50	7.19	7.96	8.81	9.78	10.87
4.5	4.44	4.93	5.45	6.03	6.67	7.37	8.15	9.02	10.00	11.11

. This chart assumes a V-shaped ridge and channel. Depth should be increased, when necessary, to meet ridge and channel width requirements.

********** TERRACE YARDAGE CHART -- CUBIC YARDS/FT. **********

********** BACK SLOPE .6 TO 1 ---------- TOP OF RIDGE TO CHANNEL BOTTOM, 30 FT. **********

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.24	.45	.69	.97	1.30	1.68	2.15	2.72	3.45	4.39
.2	.31	.53	.78	1.06	1.40	1.81	2.29	2.89	3.64	4.62
.3	.38	.60	.86	1.16	1.51	1.93	2.44	3.06	3.84	4.86
.4	.45	.68	.95	1.26	1.63	2.06	2.59	3.23	4.04	5.10
.5	.52	.76	1.04	1.37	1.75	2.20	2.74	3.41	4.25	5.35
.6	.60	.85	1.14	1.47	1.87	2.33	2.90	3.59	4.46	5.60
.7	.67	.94	1.24	1.58	1.99	2.47	3.06	3.78	4.68	5.86
.8	.75	1.03	1.34	1.70	2.12	2.62	3.22	3.97	4.90	6.12
.9	.84	1.12	1.44	1.81	2.25	2.77	3.39	4.16	5.13	6.39
1.0	.92	1.21	1.54	1.93	2.38	2.92	3.56	4.36	5.36	6.67
1.1	1.01	1.31	1.65	2.05	2.52	3.07	3.74	4.56	5.60	6.95
1.2	1.10	1.41	1.76	2.18	2.66	3.23	3.92	4.77	5.84	7.23
1.3	1.19	1.51	1.88	2.30	2.80	3.39	4.10	4.98	6.09	7.52
1.4	1.29	1.62	1.99	2.43	2.95	3.56	4.29	5.20	6.34	7.82
1.5	1.38	1.72	2.11	2.57	3.10	3.72	4.48	5.42	6.59	8.12
1.6	1.48	1.83	2.24	2.70	3.25	3.90	4.68	5.64	6.85	8.43
1.7	1.58	1.95	2.36	2.84	3.40	4.07	4.88	5.87	7.12	8.75
1.8	1.69	2.06	2.49	2.98	3.56	4.25	5.08	6.10	7.39	9.07
1.9	1.79	2.18	2.62	3.13	3.72	4.43	5.29	6.34	7.67	9.39
2.0	1.90	2.30	2.75	3.27	3.89	4.62	5.50	6.58	7.95	9.72
2.1	2.01	2.42	2.89	3.43	4.06	4.81	5.71	6.83	8.23	10.06
2.2	2.13	2.55	3.02	3.58	4.23	5.00	5.93	7.08	8.52	10.40
2.3	2.24	2.67	3.17	3.74	4.40	5.20	6.15	7.33	8.82	10.75
2.4	2.36	2.80	3.31	3.89	4.58	5.40	6.38	7.59	9.12	11.10
2.5	2.48	2.94	3.46	4.06	4.76	5.60	6.61	7.85	9.42	11.46
2.6	2.61	3.07	3.60	4.22	4.95	5.81	6.84	8.12	9.73	11.82
2.7	2.73	3.21	3.76	4.39	5.13	6.02	7.08	8.39	10.04	12.19
2.8	2.86	3.35	3.91	4.56	5.32	6.23	7.32	8.67	10.36	12.57
2.9	2.99	3.49	4.07	4.74	5.52	6.45	7.57	8.95	10.69	12.95
3.0	3.12	3.64	4.23	4.91	5.71	6.67	7.82	9.23	11.01	13.33
3.1	3.26	3.78	4.39	5.09	5.91	6.89	8.07	9.52	11.35	13.72
3.2	3.39	3.93	4.56	5.27	6.12	7.12	8.33	9.81	11.69	14.12
3.3	3.53	4.09	4.72	5.46	6.32	7.35	8.59	10.11	12.03	14.52
3.4	3.67	4.24	4.89	5.65	6.53	7.58	8.85	10.41	12.38	14.93
3.5	3.82	4.40	5.07	5.84	6.75	7.82	9.12	10.72	12.73	15.35
3.6	3.96	4.56	5.24	6.03	6.96	8.06	9.39	11.03	13.09	15.77
3.7	4.11	4.72	5.42	6.23	7.18	8.31	9.67	11.34	13.45	16.19
3.8	4.26	4.89	5.60	6.43	7.40	8.56	9.95	11.66	13.82	16.62
3.9	4.42	5.06	5.79	6.64	7.63	8.81	10.23	11.98	14.19	17.06
4.0	4.57	5.23	5.98	6.84	7.86	9.06	10.52	12.31	14.56	17.50
4.1	4.73	5.40	6.17	7.05	8.09	9.32	10.81	12.64	14.95	17.95
4.2	4.89	5.58	6.36	7.26	8.32	9.58	11.10	12.97	15.33	18.40
4.3	5.06	5.75	6.55	7.48	8.56	9.85	11.40	13.31	15.72	18.86
4.4	5.22	5.93	6.75	7.70	8.80	10.12	11.70	13.66	16.12	19.32
4.5	5.39	6.12	6.95	7.92	9.05	10.39	12.01	14.01	16.52	19.79

3. Fill yardage can also be calculated by the formula:

$$yd^3/ft = \left[\frac{d + 30(s)}{54}\right] \left[30 + \frac{d + 30(s)}{(1/B) - S}\right]$$

Example:

depth 3.0', 4:1 back slope
and 40% field slope

$$\left[yd^3/ft = \frac{3.0 + 30(0.04)}{54}\right] \left[30 + \frac{3.0 + 30(0.04)}{(1/4) - 0.04}\right]$$

or

$3.89\ yd^3/ft.$

Exhibit IN-8-11
(sheet 3 of 4)

TERRACE YARDAGE CHART -- CUBIC YARDS/FT.

BACK SLOPE 8 TO 1 ---------- TOP OF RIDGE TO CHANNEL BOTTOM, 30 FT.

	FIELD SLOPE (PERCENT)									
DEPTH	1	2	3	4	5	6	7	8	9	10
.1	.25	.48	.75	1.09	1.52	2.08	2.85	3.96	5.70	8.84
.2	.32	.56	.85	1.20	1.66	2.25	3.06	4.23	6.06	9.36
.3	.39	.64	.95	1.32	1.80	2.42	3.27	4.50	6.43	9.90
.4	.47	.73	1.05	1.45	1.95	2.60	3.49	4.78	6.81	10.45
.5	.55	.82	1.16	1.57	2.10	2.78	3.72	5.07	7.20	11.02
.6	.63	.92	1.27	1.71	2.26	2.97	3.95	5.37	7.59	11.60
.7	.72	1.02	1.39	1.84	2.42	3.17	4.20	5.68	8.00	12.20
.8	.81	1.12	1.51	1.98	2.58	3.37	4.44	5.99	8.43	12.81
.9	.90	1.23	1.63	2.13	2.76	3.58	4.70	6.31	8.86	13.43
1.0	.99	1.34	1.76	2.28	2.93	3.79	4.96	6.65	9.30	14.07
1.1	1.09	1.45	1.89	2.43	3.11	4.01	5.23	6.99	9.75	14.73
1.2	1.20	1.57	2.03	2.59	3.30	4.23	5.50	7.33	10.21	15.40
1.3	1.30	1.69	2.17	2.75	3.49	4.46	5.78	7.69	10.69	16.08
1.4	1.41	1.82	2.31	2.92	3.69	4.69	6.07	8.05	11.17	16.78
1.5	1.52	1.94	2.46	3.09	3.89	4.94	6.36	8.43	11.67	17.50
1.6	1.64	2.08	2.61	3.26	4.09	5.18	6.66	8.81	12.17	18.23
1.7	1.76	2.21	2.76	3.44	4.31	5.43	6.97	9.20	12.69	18.97
1.8	1.88	2.35	2.92	3.63	4.52	5.69	7.29	9.59	13.21	19.73
1.9	2.00	2.49	3.08	3.82	4.74	5.96	7.61	10.00	13.75	20.51
2.0	2.13	2.64	3.25	4.01	4.97	6.22	7.94	10.41	14.30	21.30
2.1	2.26	2.79	3.42	4.21	5.20	6.50	8.27	10.83	14.86	22.10
2.2	2.40	2.94	3.60	4.41	5.44	6.78	8.61	11.26	15.43	22.92
2.3	2.53	3.09	3.77	4.61	5.68	7.07	8.96	11.70	16.00	23.75
2.4	2.67	3.25	3.96	4.82	5.92	7.36	9.32	12.15	16.59	24.60
2.5	2.82	3.42	4.14	5.04	6.17	7.66	9.68	12.60	17.20	25.46
2.6	2.97	3.58	4.33	5.26	6.43	7.96	10.05	13.07	17.81	26.34
2.7	3.12	3.75	4.53	5.48	6.69	8.27	10.42	13.54	18.43	27.23
2.8	3.27	3.93	4.72	5.71	6.95	8.58	10.81	14.02	19.06	28.14
2.9	3.43	4.10	4.93	5.94	7.22	8.90	11.19	14.50	19.70	29.06
3.0	3.59	4.29	5.13	6.18	7.50	9.23	11.59	15.00	20.36	30.00
3.1	3.75	4.47	5.34	6.42	7.78	9.56	11.99	15.50	21.02	30.95
3.2	3.92	4.66	5.55	6.66	8.07	9.90	12.40	16.02	21.70	31.92
3.3	4.09	4.85	5.77	6.91	8.36	10.24	12.82	16.54	22.38	32.90
3.4	4.26	5.04	5.99	7.17	8.65	10.59	13.24	17.07	23.08	33.90
3.5	4.44	5.24	6.22	7.42	8.95	10.95	13.67	17.60	23.78	34.91
3.6	4.62	5.44	6.45	7.69	9.26	11.31	14.11	18.15	24.50	35.93
3.7	4.80	5.65	6.68	7.95	9.57	11.67	14.55	18.70	25.23	36.97
3.8	4.98	5.86	6.92	8.22	9.88	12.05	15.00	19.26	25.96	38.03
3.9	5.17	6.07	7.16	8.50	10.20	12.42	15.45	19.83	26.71	39.10
4.0	5.37	6.29	7.40	8.78	10.52	12.81	15.92	20.41	27.47	40.18
4.1	5.56	6.51	7.65	9.06	10.85	13.19	16.39	21.00	28.24	41.28
4.2	5.76	6.73	7.90	9.35	11.19	13.59	16.86	21.59	29.02	42.40
4.3	5.96	6.96	8.16	9.65	11.53	13.99	17.35	22.19	29.81	43.53
4.4	6.17	7.19	8.42	9.94	11.87	14.40	17.84	22.81	30.62	44.67
4.5	6.38	7.42	8.68	10.24	12.22	14.81	18.33	23.43	31.43	45.83

4. For horizontal distances differing from 30 feet, substitute that distance in place of 30 in the Note 3 equation.

5. Example Terrace Yardage Calculation
   Front slope length = 30'
   back slope = 2%
   Land slope = 3%

sta.	Depth (ft)	yd^3/ft	Average $yd^3/ft.$	Dist	Volume yd^3
0+50	0.0	0	-	-	-
1+00	0.5	0.85	0.425	50	21.25
1+50	1.7	1.71	1.28	50	64.00
2+00	2.2	2.10	1.90	50	95.25
2+50	1.8	1.79	1.945	50	97.25
3+00	0.9	1.13	1.46	50	73.00
3+40	0.0	0	0.565	40	22.60

Total 373.35 yd^3