

## LEVEL TERRACE DESIGN

Job Name \_\_\_\_\_ Job Class \_\_\_\_\_

Location \_\_\_\_\_  
(SWCD) (near)

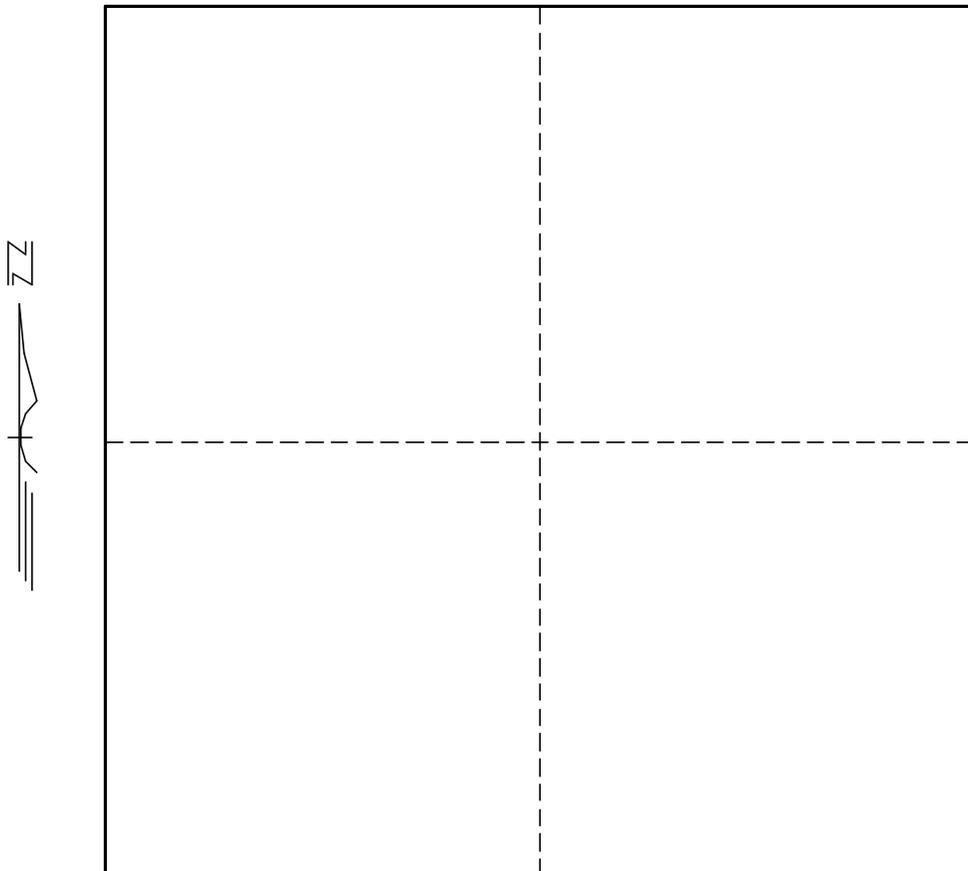
By \_\_\_\_\_ Date \_\_\_\_\_

Checked by \_\_\_\_\_ Date \_\_\_\_\_

### Level Terrace Design Procedures

1. Make trial terrace system layout keeping in mind terrace standard limitations.
2. Check trial layout with USLE to see that the predicted soil loss,  $A$ , is less than the allowable soil loss,  $T$ .
3. Adjust the trial layout and/or management practices as necessary.
4. Determine the runoff volume for each terrace in the system.
5. Determine the required cross sectional area for each terrace in the system.
6. Select the configuration for each terrace in the system.

### Terrace System Layout



**Check Trial Layout With USLE**

Soil Series \_\_\_\_\_ Allowable Soil Loss - T = \_\_\_\_\_ tons/acre/year

Soil Erodibility Factor - K = \_\_\_\_\_

Cropping Sequence \_\_\_\_\_

Management Practices \_\_\_\_\_

Cropping Management Factor - C = \_\_\_\_\_

Erosion Control Practice \_\_\_\_\_

Erosion Control Practice Factor - P = \_\_\_\_\_ Rainfall Factor - R = \_\_\_\_\_

	Ter. No. _____					
Field Slope %	_____	_____	_____	_____	_____	_____
Slope Length (feet)	_____	_____	_____	_____	_____	_____
LS Factor	_____	_____	_____	_____	_____	_____
Predicted Soil Loss - A	_____	_____	_____	_____	_____	_____

Where  $A = R K L S C P$

**Continue if A is less than T - If not, adjust layout and/or management practices as necessary.**

**Determine Runoff Volume For Each Terrace**

	Ter. No. _____					
Watershed Area (acres)	_____	_____	_____	_____	_____	_____
Runoff (inches)	_____	_____	_____	_____	_____	_____
Runoff Volume (cu.ft.)	_____	_____	_____	_____	_____	_____

Where Runoff Volume =  $\frac{(Watershed Area)(Runoff)}{12}$

**Determine Required Cross Sectional Area Required For Each Terrace**

	Ter. No. _____					
Terrace Length (feet)	_____	_____	_____	_____	_____	_____
Required Cross Sectional Area (sq.ft.)	_____	_____	_____	_____	_____	_____

Where Required Cross Sectional Area =  $\frac{Runoff Volume}{Terrace Length}$

**Select The Terrace Configuration For Each Terrace In The System**

Terrace No. \_\_\_\_\_ Terrace No. \_\_\_\_\_