



$A_1 = 200' \times 500' = 100,000 \text{ Sq. Ft.} = 2.3 \text{ AC}$
 $A_2 = 480' \times 600' = 288,000 \text{ Sq. Ft.} = 6.6 \text{ AC}$
 $A_3 = 400' \times 680' = 272,000 \text{ Sq. Ft.} = 6.3 \text{ AC}$
 $A_4 = 7.0 \text{ AC}$

$I_{50} = 50 \text{ yr Isohyet Rainfall} = 6.5 \text{ in}$
 [L.A. County Manual Appendix B, Figure 1-H1.18]
 $C_u = \text{Undeveloped Runoff Ratio} = 0.80$

$A_1 = \text{Tributary Area to Single Family Lot} = 2.3 \text{ AC}$

$Q_{50} = C_u \cdot I_{50} \cdot A_1 = 0.80 \times 6.5 \times 2.3 = 12.0 \text{ cfs}$

Bulking Factor = 1.66
 $Q_{BULK} = 1.66 \times Q_{50} = 1.66 \times 12 = 19.9 \text{ cfs}$
 DP Zone 4 = 72,000 cyd/sq. mile
 $DP = 72,000 \text{ cyd/sq. mile} \times 1/640 \times 2.3 \text{ AC}$
DP = DEBRIS PRODUCTION = 258.8 cu. Yd.

KHATRI INTERNATIONAL INC.

**HYDROLOGY ANALYSIS
SEDIMENTATION CALCULATIONS**

SCALE 1" = 100 ft

Laurel Canyon Hydrology Single Lot