SAN MARCOS
DISCOVER LIFE'S POSSIBILITIES

SLOPE/DENSITY BREAKDOWN
APPENDIX A ZONING ORDINANCE

ARTICLE V. R-1 (20) – ESTATE ZONE

Section 175. Area.

Every lot and building site in the R-1 (20) Zone shall have a minimum area based upon the following slope categories:

0 - 15% slope - 20,000 sq. ft.
15 - 25% slope - ¾ of an acre
25% or greater - 1 acre

ARTICLE VI. A-1 – AGRICULTURAL ZONE

Section 185. Area

Every lot and building site in the A-1 Zone shall have a minimum area based upon the following slope categories:

0 - 15% slope - 1 acre
15 - 25% slope - 2 acres
25 - 35% slope - 4 acres
35% or greater - 8 acres

ARTICLE VII. A-2 – AGRICULTURAL ZONE

Section 195. Area

Every lot and building site in the A-2 Zone shall have a minimum area based upon the following slope categories:

0 - 15% slope - 1 acre
15 - 25% slope - 2 acres
25 - 35% slope - 4 acres
35% or greater - 8 acres

ARTICLE VIII. A-3 – AGRICULTURAL ZONE

Section 205. Area

Every lot and building site in the A-3 Zone shall have a minimum area based upon the following slope categories:

0 - 15% slope - 4 acre
15 - 25% slope - 4 acres
25 - 35% slope - 8 acres
35% or greater - 20 acres

ARTICLE X. R-1 – RESIDENCE ZONE

Section 225. Area

Every lot or building site in the R-1 Zone shall have a minimum area based upon the following slope categories:

0 - 10% slope - 10,000 sq. ft.
10 - 15% slope - 15,000 sq. ft.
15 - 25% slope - 20,000 sq. ft.
25% or greater - 1 acre

ARTICLE XI. R-1-7.5 – RESIDENT ZONE

Section 235. Area

Every lot or building site in the R-1-7.5 Zone shall have a minimum area based upon the following slope categories:

0 - 10% slope - 7,500 sq. ft.
10 - 15% slope - 15,000 sq. ft.
15 - 25% slope - 20,000 sq. ft.
25% or greater - 1 acre

ARTICLE XIII. R-2 – RESIDENCE ZONE

Section 255. Area

Every lot or building site in the R-2 Zone shall have a minimum area based upon the following slope categories:

0 - 10% slope - 3,500 sq. ft.
10 - 15% slope - 7,500 sq. ft.
15 - 25% slope - 10,000 sq. ft.
25 - 35% slope - 20,000 sq. ft.
35% or greater - 1 acre

IMPLEMENTATION FOR SLOPE DENSITY PROCESS

A. Definitions:

1. **Average Slope:** The sum of the slopes at every point within a given piece of land divided by its area as computed from either a San Diego County Engineer 200 ft/inch topographic map prepared by a registered Civil Engineer or a Licensed Land Surveyor.

2. **Average Slope Formula:** The average slope shall be computed by the formula:

$$S = \frac{I \times L}{A} \times 100$$

Where S = average natural slope in percent

I = contour interval in feet at no greater than 5' intervals

L = total accumulated length of all contours of interval "I" in feet

A = the area being considered in square feet

3. **Maximum Density:** The maximum number of lots permitted is determined by dividing the gross area of the parcel by the minimum lot size as designated in the appropriate plan land use element.

4. **Rounding Procedure:**

a. Rounding procedure for slope/density analysis purposes is as follows:

(1) 1.8 may be considered as a maximum of 2 whole lots

(2) 2.7 may be considered as a maximum of 3 whole lots

(3) 3.6 may be considered as a maximum of 4 whole lots

(4) above 4 whole lots, rounding for the fractional number may be rounded to the next higher whole number when the fraction is 0.51 or greater.

b. Rounding procedure for percent of slope is as follows:

(1) Rounding for the fractional number may be rounded to the next higher whole number when the fraction is 0.51 or greater.

B. Slope/Density Analysis Alternative Procedures:

1. Alternative "A" (for projects where slopes are relatively uniform).

a. Compute the average slope for the entire project area using the formula:

$$S = \frac{I \times L}{A} \times 100$$

b. Determine the minimum lot size for this average slope from the San Marcos Zoning Ordinance.

c. Determine the maximum density for the project by dividing the project area by the minimum lot size

2. Alternative "B" (for projects where slopes are varying steep and flat terrains).

a. Divide the project into 500 foot grids starting at the most northwesterly corner of the property and preceding in an easterly direction.

b. Compute the average slope of all area in each 500 foot grid using the formula:

$$S = \frac{I \times L}{A} = 100.$$

c. Total separately each slope category defined in the grids for the entire project area.

d. Determine the minimum lot sizes for each average slope category from the San Marcos Zoning Ordinance.

e. Determine the maximum number of lots for each average slope category by dividing the project area within each average slope category by the minimum lot size for the particular category.

f. Determine the maximum density for the project by adding the total lots for each slope category. (Note: Rounding procedures shall only be used during this final step).

3. Alternative "C" (This alternative may be used on minor subdivisions only – four lots or less – incremental slope/density analysis by lot):

a. Compute the average slope within each lot using the formula:

$$S = \frac{I \times L}{A} \times 100$$

b. Determine the slope category and minimum lot size for each lot from the San Marcos Zoning Ordinance.

c. Determine that the size of each lot contains the minimum lot requirements for its average slope calculation.

It should be noted that the slope analysis procedure will result in the maximum number of lots theoretically obtainable and the minimum lot sizes of each lot. This procedure does not take into account location of streets and other design factors which must be considered in the subdivision process.