

Example Codes

City of Asheville, North Carolina Development Standards for Hillside Summary

Purpose

“To regulate development in hillside areas in order to preserve the City of Asheville's unique visual character, conserve the public health, safety, and general welfare, and promote environmentally sound design and planning. The mountains and hills constitute a significant natural topographic feature of the community and create a desirable setting, visible to the entire city. To insure the preservation of the hillsides, the regulations of this section are established to recognize that development of land in hilly or mountainous areas involves special considerations and unique situations which result from the slope of the land....”

Hillside area definition.

Any lot, parcel, or tract of land which meets all the following standards; is located within any zoning district and/or transition overlay district in the city and its extraterritorial jurisdiction, where a development is proposed that would require a zoning permit pursuant to these sections, has an average slope of its natural terrain of 15 percent or greater, and has an elevation of 2,220 feet above mean sea level or greater, provided only that portion a lot, parcel or tract which has an elevation of 2,220 feet above mean sea level or greater shall be defined as a “hillside area.”

Exemptions.

Any previously reviewed area under the hillside development standards or an area subdivided or developed prior to code adoption shall not be included within the definition of a hillside area. Lots in existence by the day of adoption of this ordinance (June 19, 2007) may be developed with a single-family home.

Average slope determination.

Contour map required and calculation of natural average slope, the natural average slope is calculated using the following formula: $S = 0.0023 \times I \times L/A$, see the ordinance for the variable definitions.

Grading and density graph.

Development regulated; exceptions. Developments in the hillside area are regulated with regard to the permitted density and extent of grading on the site. Density and grading of residential uses shall be determined by the average slope of a site, in accordance with the grading and density graph. *Grading and density graph.* (See the graph shown in the ordinance).

Hillside area development review process.

The required plans, calculations, etc...are outlined in this section as well as the requirement that no grading permits shall be issued without compliance with the review process.

City of Asheville, North Carolina
Development Standards for Hillsides

Sec. 7-12-4. Hillside area development.

(a) *Purpose.* The purpose of this section is to regulate development in hillside areas in order to preserve the City of Asheville's unique visual character, conserve the public health, safety, and general welfare, and promote environmentally sound design and planning. The mountains and hills constitute a significant natural topographic feature of the community and create a desirable setting, visible to the entire city. In order to insure the preservation of the hillsides, the regulations of this section are established to recognize that development of land in hilly or mountainous areas involves special considerations and unique situations which result from the slope of the land. These special considerations and unique situations include, but are not limited to, increased hazards to development from rock falls, stormwater runoff, and geologic hazards. In addition, steeply sloped land presents design limitations to roadways, cuts and fills, and buildings, and difficulties in providing public services. The following objectives shall serve as general guidelines to fulfill the purpose of this section.

- To protect life and property from all potentially hazardous conditions particular to hillsides such as rock falls, stormwater runoff, and mass movements;
- To preserve and enhance the scenic and environmental resources of the landscape by encouraging the maximum retention of prominent natural topographic features, such as drainage swales, streams, slopes, ridgelines, rock outcroppings, vistas, natural plant formations, and trees;
- To encourage innovative site and architectural design and planning in order that the development adapts to the natural terrain and is harmonious with the character of the area;
- To minimize grading and cut and fill operations consistent with the retention of the natural character of the hillside;
- To minimize stormwater runoff and erosion problems incurred by the development on and off the site;
- To preserve, where possible, natural streams, ponds and associated riparian vegetation;
- To require the retention of trees and other vegetation which stabilizes steep hillsides, retains moisture, prevents erosion, and enhances the natural scenic beauty and to require additional landscaping where it is necessary;
- To encourage the retention of trees and other vegetation throughout the site instead of just in the periphery area of the development and to require that graded areas be reasonably distributed throughout the project site;
- To encourage minimal grading which relates to the natural contour of the land, which will round off sharp angles at the top and bottom of cut and fill slopes in a natural manner thereby avoiding unreasonable "padding" or "staircase" effects;
- To provide land use densities to promote the best possible development of hillside areas in order to retain significant natural features;
- To encourage road design which follows the natural topography wherever possible in order to minimize cutting and grading; and
- To preserve predominant views from and of the hillside areas in order to retain the sense of identity and imagery that the hills and mountains now impart to the City of Asheville.

(b) *Hillside area definition.*

(1) *Hillside area defined.* For the purposes of this section, a hillside area is defined as any lot, parcel, or tract of land which meets all the following standards:

- a. Is located within any zoning district and/or transition overlay district in the city and its extraterritorial jurisdiction;
- b. Where a development is proposed that would require a zoning permit pursuant to section 7-5-2 of this chapter, a Level I, II or III site plan review pursuant to section 7-5-9 of this chapter, or subdivision review pursuant to section 7-5-8 of this chapter, or PUD review subject to section 7-5-8 of this chapter;

- c. Has an average slope of its natural terrain of 15 percent or greater; and
- d. Has an elevation of 2,220 feet above mean seal level or greater, provided only that portion a lot, parcel or tract which has an elevation of 2,220 feet above mean sea level or greater shall be defined as a "hillside area" and any portion below said elevation shall not be defined as a "hillside area."

(2) *Previously approved developments exempt.* Any portion of a lot, parcel, or tract of land the development of which has been previously reviewed under the hillside development standards and approved through a zoning permit, as a Level I, II or III site plan or as a subdivision prior to the adoption of this section or developed prior to the adoption of this section shall not be included within the definition of a hillside area if no further development is proposed within that portion of the lot, parcel, or tract of land. However, subsequent, previously-unapproved phases of a Level I, II or III site plan project or subdivision, as well as approved Level I, II or III site plan projects where the site plan has been changed, or approved zoning permits or subdivisions where the lot design has changed, shall be subject to the requirements of this section. Regardless of the provisions of this section, lawfully-established lots in existence on June 19, 2007, may be developed with a single-family home provided that the grading and plan submittal requirements of subsections (c), (d) and (e) are met, except that subsection (d) shall not apply to such lots where extent of grading has been previously designated and approved on a preliminary plat or approved development plan.

(c) *Average slope determination.*

(1) *Contour map required.* Each application for a development which meets the standards set forth in the hillside area definition shall include a contour map which includes a scale and contour interval on the site plan to determine the average slope of a lot, parcel, or tract of land in its natural state.

(2) *Calculation of natural average slope.* The natural average slope is calculated using the following formula:

$$S = 0.0023 \times I \times L/A$$

Where:

S = Average natural slope of parcel in percent

I = Contour interval of map in feet, with said contour intervals to be five feet or less

L = Total length of the contour lines within the parcel in feet

A = Area of the parcel in acres

0.0023 = Constant which converts square feet into acres

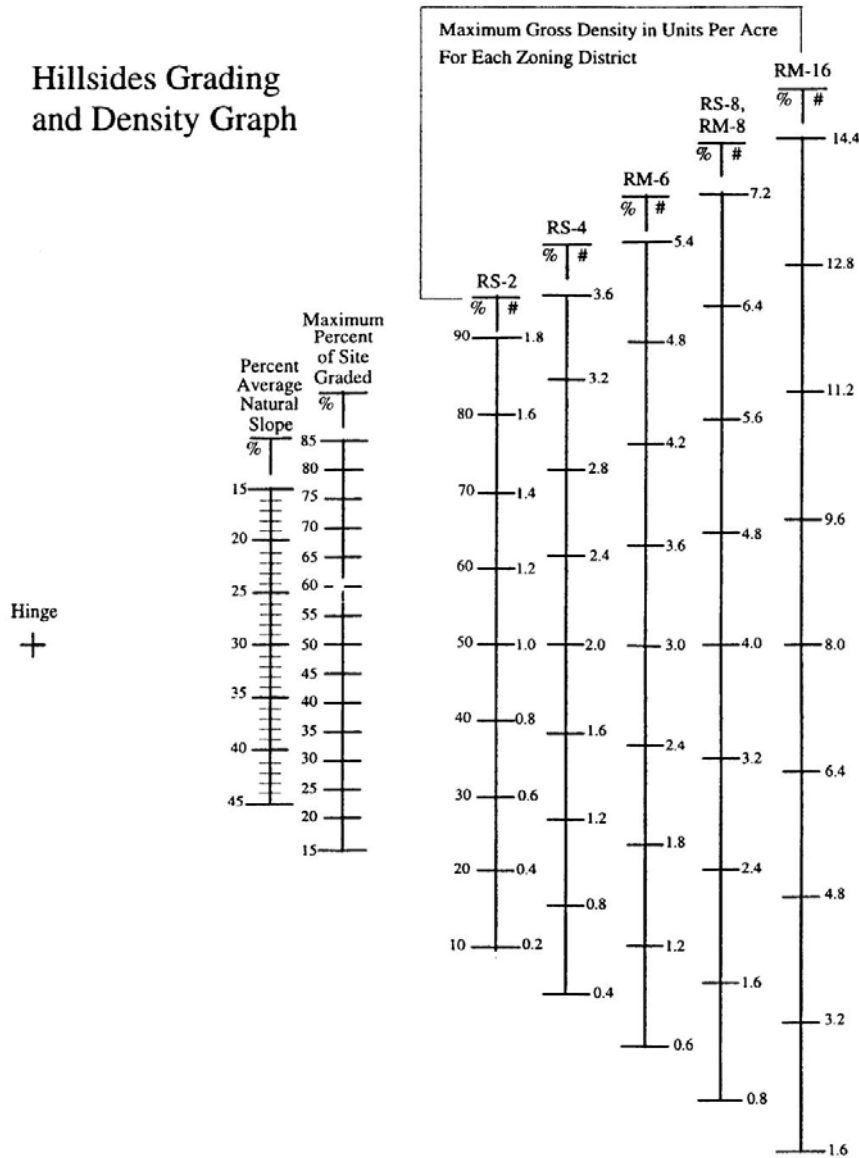
Once "S" or the average natural percent is calculated and rounded off to the nearest whole number, the grading and density graph, as set forth hereinafter, shall be used to determine development requirements.

(d) *Grading and density graph.*

(1) *Development regulated; exceptions.* Developments which meet the standards set forth in the definition of hillside area shall further be regulated with regard to the permitted density and extent of grading on the site. The permitted density and extent of grading for residential uses shall be determined by the average slope of a site to be developed for residential use in accordance with the grading and density graph. For the purposes of this section 7-12-4, grading shall mean any manipulation of the ground forms including, but not limited to, cutting of trees with excavation of stumps or any other earth-disturbing activities; provided, (a) that installation of utilities in an area with a topographical change of not more than five percent where the area disturbed is not wider than 18 inches (including ditch and spill areas); and (b) that creation of stormwater drainage and erosion control ditches except when the ditch is located in an existing natural drainage channel and the only improvement is the lining of the channel with rock, shall not be considered grading.

(2) *Grading and density graph.* The grading and density graph to be used in this section 7-12-4 is shown in Figure 12-2.

Hillsides Grading and Density Graph



(3) *Use of graph.* The following describes the method for using the graph.

- Place a straight edge on the graph so that it aligns the "cross-hairs" of the hinge point and the percent of average natural slope of the parcel.
- Read along the straight edge to the scale labeled "percent site graded." Where the straight edge intersects this scale is the area of the site which can be graded for this average natural slope. This area is expressed as a percentage of the parcel and should be rounded off to the nearest whole number.
- Read along the straight edge to the scale labeled with the zoning district in which the parcel is located. Where the straight edge intersects this scale is the maximum density per acre for the parcel. This density is expressed as a percentage of the number of units usually permitted in the zoning district and should be rounded off to the nearest whole number. When converting the percentage of units per acre for the zoning district to the actual number of units allowed, the maximum number of units should be rounded off to one decimal point.

(4) As the graph and the definition of hillside area indicate, any proposed development whose average natural slope is less than 15 percent is not subject to the regulations for permitted density and extent of grading as set forth herein. Any proposed development which meets the definition

of hillside area and whose average natural slope is above 45 percent is subject to the most restrictive percent labeled on the percent site graded and maximum density scales.

(e) *Hillside area development review process.*

(1) *Information required.* Compliance with this section 7-12-4 shall be evaluated as part of the site plan, or subdivision review process set forth in article V of this chapter. In addition to the application information required for a site plan or subdivision review, those proposed developments which meet the standards of the hillside area definition must include the following information:

- a. A site plan which includes the boundaries and acreage of the parcel, scale and contour interval, existing and proposed contours, limit and area of grading, and percent of site to be graded;
- b. Average natural slope calculations which include the average natural slope in percent, contour intervals of five feet or less, individual and total length of contour lines in feet and area of the parcel in acres;
- c. A grading and density graph which shows the line that connects the hinge point and average natural slope with the percent site graded and maximum density scales, labeled with the appropriate number for each scale where it is intersected by the line to describe the potential development limits with the number of proposed units or lots in the development and the percentage of the site to be graded; and
- d. Other information or descriptions or maps which may be requested by the planning and development director, the technical review committee and/or the Asheville Planning and Zoning Commission to address concerns regarding geologic hazards, soil stability, building-to-site relationships, and similar characteristics.

(2) *Issuance of grading permit.* No grading permit shall be issued for a site plan review or a subdivision which meets the standards set forth in the definition of hillside area until the site plan review and subdivision play review have been completed.

(Ord. No. 2369, § 1, 5-27-97; Ord. No. 2438, § 1, 11-25-97; Ord. No. 3117, § 1, 5-11-04; Ord. No. 3328, § 1(m)-(p), 1-24-06; Ord. No. 3490, § 1 6-19-07)