

**TITLE XV: LAND USAGE**

**CHAPTER 158: LAND DISTURBANCE AND SLOPE PROTECTION ORDINANCE**

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### Chapter 158: Land Disturbance and Slope Protection Ordinance

#### Sec 158.01 Purpose

It is the purpose of this Ordinance to protect, maintain and enhance the environment of the Town of Black Mountain and the health, safety and public welfare of its citizens by establishing minimum requirements concerning land disturbance and to control the potential adverse effects of increased erosion and sedimentation.

#### Sec 158.02 Applicability

- A. Beginning with and subsequent to its effective date, this Ordinance shall be applicable to all development and redevelopment, including, but not limited to, site plan applications, subdivision applications, and grading projects within the Town of Black Mountain's jurisdiction.
- B. Grading permits shall be required whenever 5,000 square feet or more of land is disturbed. The addition of impervious surface of 5,000 square feet or more or of a cumulative land disturbance of land of 12,000 square feet or more shall also require a Town Stormwater Permit.
- C. 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 storm-water 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.
- D. Any grading or other land disturbing activity within the floodplain shall be reviewed by the floodplain administrator to determine applicability of floodplain regulations and associated permits.

#### Sec 158.03 Cut and Fill Slopes

- A. Property being developed within the Town of Black Mountain shall not exceed the following specifications for cut and fill:
  - 1. Cut slopes shall not exceed a ratio of greater than 1:1 (horizontal distance to vertical distance, or a 45 degree slope angle, or 100% grade); and
  - 2. Fill slopes shall not exceed a ratio of greater than 1.5:1 (horizontal distance to vertical distance, or a 33 degree slope angle, or 66% grade).
- B. Roads exceeding 15% grade and proposed for dedication to the Town as public streets shall include roadway design and engineering with benching or other stabilization techniques as part of the site plan and shall include a Town maintenance easement to the toe of the slope.
- C. All cut and fill slopes shall be hydro-seeded or landscaped within 14 days of achievement of final grade and all temporary roads and slopes shall not be left exposed for more than a 45 day period.
- D. Retaining Walls greater than five (5) feet in height must be designed and sealed by an engineer and approved by the Town's Building Inspector.

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### Sec 158.04 Sedimentation and Erosion Control

- A. Any land disturbance permitted under Buncombe County's Soil Erosion and Sedimentation Control Office must be documented before any grading activity may take place. Buncombe County enforces the State "Sedimentation Pollution Control Act of 1973" for the Town of Black Mountain and regulates certain land disturbing activities for the purpose of controlling accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, water courses and other public and private property by sedimentation.
- B. Land disturbing activity or grading in connection with development or redevelopment on a site that requires a building permit, and that does not fall under the Sedimentation and Pollution Control Act of 1973, such as that under one acre of land, shall comply with the following requirements:
  - 1. A written or graphic concept plan of the proposed soil and sedimentation controls during construction shall be submitted with the grading permit. Concept plan shall include identification of areas of land disturbance within the site and the location of proposed temporary and permanent soil erosion and sedimentation control measures designed to retain sediment on-site.
  - 2. Land disturbing activity shall not take place within twenty-five feet of a stream or otherwise result in a violation of rules adopted by the State Environmental Management Commission to protect riparian buffers along State surface waters. In accordance with State and local stormwater management regulations, no built-upon area shall be within 30' of a stream.
  - 3. Land disturbing activity shall not result in a violation of any local ordinance including but not limited to zoning district requirements and floodplain regulations.
  - 4. Erosion control measures in compliance with the approved plan and building permit shall be in place before construction may begin. Failure to comply will result in a stop work order.
  - 5. Permanent erosion control measures or landscaping shall be in place before final certificate of occupancy is issued or shall be bonded at 125% of the estimated cost for implementation of the landscaping plan.

### Sec 158.05 Designation of Steep Slopes and Hillside Requirements

- A. Steep slope and hillside regulations apply to any subdivision or development that meets the following criteria:
  - 1. A development or redevelopment project or subdivision located on a parcel greater than one (1) acre and in which the average of the natural slope for the entire parcel is 16% or greater, or
  - 2. A development or redevelopment project or subdivision of a parcel less than one (1) acre in which the average natural slope of 25% or greater, or
  - 3. A development or redevelopment project or subdivision, where 50% or more of the subdivision lies at or above elevations of 2,600 feet above mean sea level or greater.
- B. Any portion of the lot, parcel, or tract of land which has been approved by the planning department or planning board as a minor or major subdivision or Special Use Permit 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. Subsequent phases of, or additions to, a minor or major subdivision or Special Use Permit, as well as approved subdivision projects where the site plan has been changed, or approved subdivisions

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where the lot design has changed, shall indicate the proposed contours, limit and area of grading, and percentage of the site to be graded and shall comply with the requirements of these regulations.

- C. Slope calculations shall use the smallest contour interval for which maps are available or at a minimum of 5’ intervals, and shall be determined based on the tract to be subdivided, irrespective of proposed subdivision boundaries if part of a minor or major subdivision. The average slope is calculated using the following formula:

$$S\% = \frac{0.0023 \times I \times L}{A}$$

Where:

- S = Average natural slope of parcel in percent
- I = Contour interval of map in feet, with 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

Property owners may submit an alternate method of slope calculation for consideration based on the peculiarities of the site and prepared by a member of the American Society of Landscape Architects (ASLA), Professional Engineer (P.E.), or be a qualified environmental scientist. These methods may include, but are not limited to, weighted average, slope mapping, or other field-based techniques, etc.

- D. In addition to the application requirements submitted for review, proposed projects which meet the standards of the hillside area definition must include the following information:
  - 1. 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;
  - 2. Areas exceeding 16% slope shall be indicated on all site plans, development plans, preliminary plats, and special use permit plan applications.
  - 3. Soils maps shall be submitted if available from the natural resource conservation service (NRCS) and deposits of known colluvial soils shall be located on the site plan.
  - 4. Consultation with a geotechnical engineer shall be required for road, driveway, or home construction in areas of a tract in excess of 40% natural slope and an investigation for colluvial deposits shall be made. Recommendations of the geotechnical engineer shall be submitted with the application for review by staff or by the Planning Board if part of a major subdivision or Special Use Permit application.
  - 5. Homesites on a 40 percent or greater slope shall include a Global stability analysis with the Building Permit.
  - 6. Homesites on a 25% or greater slope must conform to the following density table in addition to the minimum zoning requirements. Wherever the minimum lot size for the district and the Density Table are in conflict, the regulation of the greatest lot size shall apply:

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DENSITY TABLE FOR STEEP SLOPES		
SLOPE %	UNITS PER ACRE	MINIMUM LOT IN ACRES
25	1.250	0.80
26	1.064	0.94
27	0.926	1.08
28	0.820	1.22
29	0.735	1.36
30	0.667	1.5
31	0.625	1.6
32	0.588	1.7
33	0.556	1.8
34	0.526	1.9
35	0.500	2.0
36	0.476	2.1
37	0.455	2.2
38	0.435	2.3
39	0.417	2.4
40	0.400	2.5
41	0.385	2.6
42	0.370	2.7
43	0.357	2.8
44	0.345	2.9
45	0.333	3.0
46	0.323	3.1
47	0.313	3.2
48	0.303	3.3
49	0.294	3.4
50	0.286	3.5
51	0.278	3.6
52	0.270	3.7
53	0.263	3.8
54	0.256	3.9
55	0.250	4.0
56	0.217	4.6

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SLOPE %	UNITS PER ACRE	MINIMUM LOT IN ACRES
57	0.192	5.2
58	0.172	5.8
59	0.156	6.4
60	0.143	7.0
61	0.132	7.6
62	0.122	8.2
63	0.114	8.8
64	0.106	9.4
65	0.100	10

7. Development and subdivision plans shall be designed to minimize disturbance to the natural landform and demonstrate terrain-adaptive design and construction techniques. Extensive grading shall be avoided and Low Impact Development (“LID”) techniques which meet the Town’s Stormwater requirements are required.
8. On any tract greater than one (1) acre proposed for subdivision or construction, no more than 50% of the tract shall be graded or disturbed.
9. Streets, right-of-ways, pedestrian facilities and setbacks shall be designed to minimize impact on steep slope areas of the particular site without compromising the Town’s ability to provide connectivity, street maintenance, waste management, or fire protection, and must be designed to the approval of the Town’s Fire Marshall and Public Works Director. Street standards may be allowed a staff variance of up to 20% (up to 8 feet variation on right-of-way requirements, and up to 4.8 feet variation on total travel surface requirements), based on topography, traffic and public safety needs. Subdivisions complying with the Conservation Subdivision Plan requirements (Chapter 13) do not have to meet the setback requirements for the Zoning District. However, the location and lay out of streets, lots buildings, and pedestrian facilities should minimize environmental impact.
10. All major subdivisions meeting steep slope and hillside criteria and of 10 acres or more must adhere to the Conservation Subdivision Plan guidelines in Chapter 13.
11. All structures built above 2,600 feet in elevation shall be constructed so as to minimize the structure’s visual impact from the valley with the application of muted colors or the use of natural materials that do not stand out in a wooded setting (such as wood, clabbered or stone siding).
12. Issuance of land disturbing permit. No land disturbing permit shall be issued for a site plan review or a subdivision review which meets the standards set forth in the definition of hillside area until the site plan review and subdivision plat review have been completed.  
(Ord. 0-08-09, passed 4-14-08)