

(b) *Critical slopes.*

- (1) *Purpose and intent.* The provisions of this subsection (hereinafter, "critical slopes provisions") are intended to protect ~~natural~~ topographical features that have a slope in excess of the grade established in the following ordinance for the following reasons and whose disturbance could cause one or more of the following negative impacts:

- ~~a. Construction on critical slopes can result in the e~~rosion affecting of those slopes, and impact the structural integrity of those ~~slopes~~features.
- b. Stormwater and erosion-related impacts on adjacent properties.
- ~~c. Construction on critical slopes can result in erosion that impacts adjacent properties which may contain environmentally sensitive areas such as streams and wetlands.~~Stormwater and erosion-related impacts to environmentally sensitive areas such as streams and wetlands.
- ~~d. Critical slopes are integral to the natural beauty of the City of Charlottesville, and construction on critical slopes impacts the visual quality of the community.~~Increased stormwater velocity due to loss of vegetation.
- ~~e. Critical slopes play a role in decelerating stormwater as it passes through the natural vegetation present on those slopes.~~Decreased groundwater recharge due to changes in site hydrology.
- f. Loss of significant, natural, or topographic features that contribute to the natural beauty and visual quality of the community.
- g. Other environmental disturbance that affects the overall quality of life for the community (E.g. loss of tree canopy, forested areas, wildlife habitat.)

These provisions are intended to direct building locations to terrain more suitable to development and to discourage development on critical slopes for the reasons listed above, and to supplement other regulations and policies regarding encroachment of development into stream buffers and floodplains, and protection of public water supplies, open space, natural areas, tree canopy, and wildlife habitat.

- (2) *Definition of critical slope.* A critical slope is any slope whose grade is more than 25% and which meets the following conditions:
- a. Its run is greater than 20 feet; AND its total area is greater than 2,000 square feet; OR
 - b. It is within 200 feet of a stream as identified in the City's Comprehensive Plan; OR
 - c. It contains significant and unique natural or topographic features.
- Disturbance of critical slopes could create negative environmental impacts and should be avoided if at all possible.

- ~~(2)~~(3) *Building site required.* Every lot shall contain at least one (1) building site. For purposes of this section, the term building site refers to a contiguous area of land in slopes of less than twenty-five (25) percent, as determined by reference to either topographic quadrangle maps of the U.S. Geological Survey (contour

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interval twenty (20) feet), or a source determined by the city engineer to be of superior accuracy, exclusive of such areas as may be located in the flood hazard overlay district or under water.

~~(3)~~(4) Building site area and dimensions. Each building site in a residential development shall have adequate area for all dwelling unit(s) ~~together with an area equivalent to the sum of the applicable~~ outside of all required yard areas for the applicable zoning district and all parking areas. Within all other developments subject to the requirement of a site plan, each building site shall have adequate area for all buildings and structures, parking and loading areas, storage yards and other improvements, and all earth disturbing activity related to the improvements.

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~~(4)~~(5) Location of structures and improvements. The following shall apply to the location of any building or structure for which a permit is required under the Uniform Statewide Building Code and to any improvement shown on a site plan pursuant to Article VII of this chapter:

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- a. No building, structure or improvement shall be located on any lot or parcel within any area other than a building site.
- b. No building, structure or improvement, nor any earth disturbing activity to establish such structure or improvement shall be located on ~~slopes of twenty five (25) percent or greater~~ a critical slope, except as may be permitted by a waiver.

~~(5)~~(6) Modification or waiver.

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- a. Any person may request the planning commission to modify or waive the requirements of these critical slopes provisions. Any such request shall be presented in writing and shall address how the proposed modification or waiver will satisfy the purpose and intent of these provisions.

The planning commission may grant a modification or waiver, upon making ~~one (1) or more of the following~~ a findings: ~~that a strict application of requirements would not forward the purposes and intent of these critical slopes provisions; that the alternatives proposed by the developer would satisfy the purposes and intent of these critical slopes provisions to at least an equivalent degree; that, due to unusual size, topography, shape, location or other unusual physical conditions of a property one (1) or more of these critical slopes provisions would effectively prohibit or unreasonably restrict the use of such property or would result in significant degradation of the site, or adjacent properties; or that granting the proposed modification or that a~~ waiver would serve a public purpose of greater import than would be served by a strict application of the requirements of these critical slopes provisions.

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Any waiver should be based exclusively on a public purpose specifically identified in the Comprehensive Plan.

A waiver shall only be granted if the alternatives proposed by the developer are more likely to satisfy the purposes and intent of these critical slope provisions than leaving the slope undisturbed.

No modification or waiver granted by the commission shall be detrimental to the public health, safety or welfare, detrimental to the orderly development of the area or adjacent properties, or contrary to sound engineering practices. In granting a modification or waiver, the planning commission may impose such conditions as it deems necessary to protect the public health, safety or welfare and to insure that a development will be consistent with the purpose and intent of these critical slopes provisions.

In considering waiver requests, the Planning Commission may and should consider the potential negative impacts of new slopes and/or retaining walls created by the disturbance and regarding of existing slopes.

In general, the Planning Commission shall impose conditions to achieve a net improvement in environmental quality after disturbance.

b. City staff can require that any application for development that does not contain a building site as defined under Section 2 of this ordinance submit a request for a modification or waiver to be reviewed by the planning commission if the proposed development, in the opinion of staff, violates the purpose and intent of the critical slope provisions.

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b-c. In considering a requested modification or waiver the planning commission shall consider the recommendation of the director of neighborhood development services of their designee. The director, in formulating his recommendation, shall consult with the city engineer, the city's environmental manager, and other appropriate officials. The director shall provide the commission with an evaluation of the proposed modification or waiver that considers the potential for soil erosion, sedimentation and water pollution in accordance with current provisions of the Commonwealth of Virginia Erosion and Sediment Control Handbook and the Virginia State Water Control Board best management practices, and, where applicable, the provisions of Chapter 10 of the City Code. The director may also consider other negative impacts of disturbance as defined in these critical slope provisions.

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e-d. A modification or waiver granted or denied by the commission in conjunction with an application for a special use permit shall be subject to review by the city council. The denial of a modification or waiver, or the approval of a modification or waiver with conditions objectionable to the developer, considered in conjunction with an application for approval of a site plan or subdivision plat may be appealed as set forth within Article VII of this chapter or within Chapter 29 of the City Code, as may be applicable. All other decisions of the commission with respect to a requested modification or waiver may be appealed to the city council.

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| ~~(6)~~(7) Exemptions. A lot, structure or improvement may be exempt from the requirements of these critical slopes provisions, as follows:

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- a. Any structure which was lawfully in existence prior to the effective date of these critical slopes provisions, and which is nonconforming solely on the basis of the requirements of these provisions, may be expanded, enlarged, extended, modified and/or reconstructed as though such structure were a conforming structure. For the purposes of this section, the term "lawfully in existence" shall also apply to any structure for which a site plan was approved or a building permit was issued prior to the effective date of these provisions, provided such plan or permit has not expired.
- b. Any lot or parcel of record which was lawfully a lot of record on the effective date of this chapter shall be exempt from the requirements of these critical slopes provisions for the establishment of the first single-family dwelling unit on such lot or parcel; however, subparagraph (4)b., above, shall apply to such lot or parcel if it contains adequate land area in slopes of less than twenty-five (25) percent for the location of such structure.
- c. AeeessDriveways, public utility lines and appurtenances, stormwater management facilities and any other public facilities necessary to allow the use of the parcel shall not be required to be located within a building site and shall not be subject to the building site area and dimension requirements set forth above within these critical slopes provisions, provided that the applicant demonstrates that no reasonable alternative location or alignment exists. The city engineer shall require that protective and restorative measures be installed and maintained as deemed necessary to insure that the development will be consistent with the purpose and intent of these critical slopes provisions.

(9-15-03(3); 11-21-05; 1-17-06(7))

Critical Slope Implementation Guidelines

Purpose of Guidelines

The purpose of these Guidelines is to assist applicants, staff, Planning Commission, and City Council in the appropriate implementation of the Critical Slopes Provisions. Applicants should use these Guidelines as a reference when preparing waiver requests. Staff should use these guidelines as a reference when counseling applicants about the merits of a waiver request, and when reporting to the Commission on specific waiver requests. The Commission and Council should use these Guidelines in the evaluation of waiver requests.

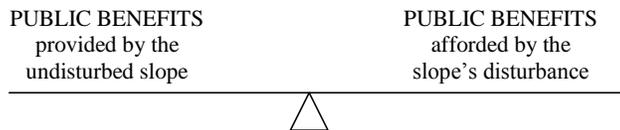
Factors Contributing to the Significance of a Critical Slope

The following factors may be used to determine the relative significance of a critical slope:

- a) Proximity to a recognized stream or waterway.
- b) Steepness of grade.
- c) Area
- d) Run
- e) Presence of Significant Natural or topographic features.
- ~~f) Presence of significant large and/or specimen trees.~~
- ~~g) Other factors of significance as determined by Staff or the Commission.~~

Waiver Requirements

The Planning Commission may grant a modification or waiver, upon making a finding that a waiver would serve a public purpose of greater import than would be served by a strict application of the requirements of these critical slopes provisions. This means that the Planning Commission must weigh, on the one hand, the public benefits provided by the undisturbed slope against, on the other hand, the public benefits afforded by disturbance of the slope. This is best illustrated by a diagram:



A waiver may only be granted if the public benefits of allowing disturbance outweigh the public benefits of the undisturbed slope. The public benefits of undisturbed critical slopes may include, but are not limited to:

- a) Erosion control that maintains the stability of the slope.
- b) Stormwater and erosion control that protects the quality of adjacent areas.
- c) Stormwater and erosion control that protects environmentally sensitive areas.
- d) Groundwater recharge.
- e) Reduced stormwater velocity
- f) Significant landscape features.
- g) Tree canopy (whose benefits include offset of urban heat island effect)
- ~~h) Habitat for key species~~

- ~~i) Large specimen trees (whose size and species contribute to the unique character of the City)~~

The public benefits afforded by disturbance of critical slopes might include, but are not limited to:

- a) Achievement of Comprehensive Plan goals and objectives.
- b) Stabilization of otherwise unstable slopes.
- c) Realization of desired land uses on sites uniquely suited to these land uses.

Waiver Conditions

Any waiver of critical slope protections shall include appropriate conditions to achieve a net improvement in environmental quality after disturbance. Waiver conditions should address specific potential negative impacts, including but not limited to those described in the Purpose and Intent. Typical conditions could include (actual values in bold may vary depending upon specific application):

- a) Detailed site engineering plan to achieve increased overall slope stability on the site.
- b) Detailed site engineering plan to achieve a 10% increase in onsite stormwater retention.
- c) Posting of a bond to cover any environmental costs resulting from inadequate protections.
- d) Bond must be maintained for five (5) years following construction.
- e) Detailed site engineering plan to achieve a 10% decrease in stormwater surface flow velocity.
- f) Detailed site engineering plan to achieve a 10% increase in groundwater recharge.
- g) Limitation of the period of construction disturbance to a specific number of consecutive days.
- h) Requirement that reseeded occur in less days than otherwise required by Code.
- i) Protection of significant landscape features.
- j) Tree canopy replacement at a rate of 120% after 10 years.
- k) Tree diversity replacement based on recommendations of the City staff.
- l) Habitat redevelopment plan approved by City staff.

Conditions applied by the Commission should clearly specify the impacts that are mitigated by the conditions. Typically, these impacts are a result of the loss of some of the identified benefits of the undisturbed slope.

Tracking of information

In order to monitor the effectiveness of these provisions, the City requires all applicants to provide the following information about disturbance of any slope whose average grade exceeds 25%:

- a) Total area and average grade of predevelopment slopes whose average grade exceeds 25%.

- b) Total area and average grade of post-development slopes whose average grade will exceed 25%.
- c) Total area of disturbance of slopes whose average grade exceeds 25%.
- d) Total number of trees removed whose diameter exceeds 12”.
- e) Total number and caliper of new trees indicated on the landscape plan.
- f) Total are of lost tree canopy.
- g) Total area of projected tree canopy replacement (after 10 years).

Overview of Process

