# UNIFIED DEVELOPMENT ORDINANCE

# CHAPTER 2. DISTRICTS AND GENERAL PROVISIONS

## 2.6. Density and dimensional requirements.

### 2.6.2. Building height and massing.

**A. *Purpose*:**

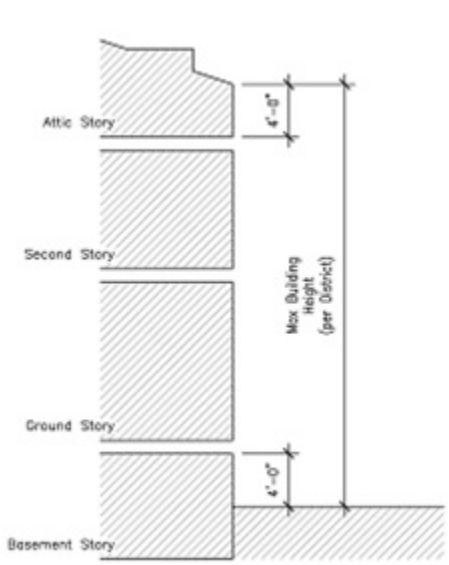
1. The purpose of this section is to regulate building height and massing in a manner that ensures compatibility with surrounding development, limits excessive vertical bulk, encourages variation in building form, and better accommodates development on sloping sites.

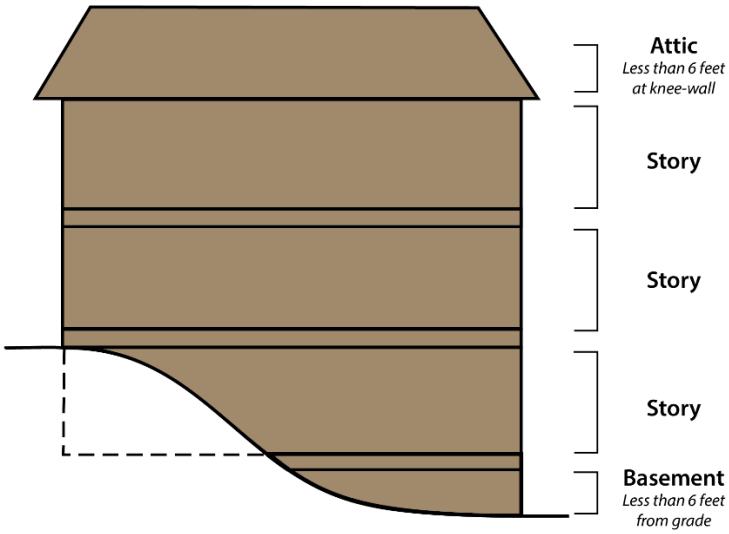
**B. *Story Height:***

1. A building story shall not exceed 14 feet in height from finished floor to finished floor.
2. Basements that emerge less than ~~4~~ 6 feet from grade or attics not exceeding ~~4~~ 6 feet at the knee-wall shall not constitute a story.

~~2.~~

~~FIGURE 2.6.2-A: BUILDING HEIGHT MEASUREMENT~~FIGURE 2.6.2-A: NUMBER OF STORIES




**C. *Buildings of One or Two Stories:***

1. Buildings containing one or two stories shall be regulated by number of stories and the maximum story height.

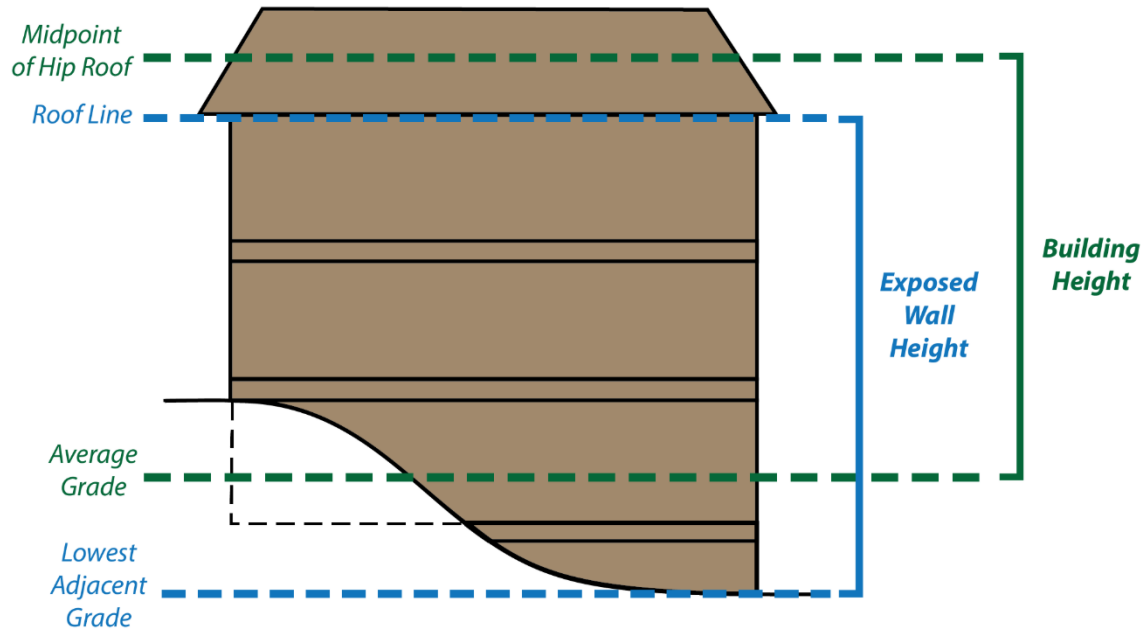
**D. *Buildings of Three or More Stories:***

1. Buildings containing three or more stories shall be regulated by the maximum building height and maximum exposed wall height.
2. Building height and massing dimensions vary based on the zoning district.

~~B. ***Maximum building height***. The maximum building height for a structure varies based on zoning district.~~

| TABLE 2.6.2-A: MAXIMUM BUILDING HEIGHT BY RIGHT | | |
|---|---|---|
| **District** | **Maximum Height by Right** | **Maximum Exposed Wall Height** |
| **GR4** | 40 feet~~35 feet~~ | 30 feet |
| **GR8** | 40 feet~~35 feet~~ | 35 feet |
| **RMX** | 40 feet~~35 feet~~ | 35 feet |
| **NMX** | 40 feet~~35 feet~~ | 35 feet |
| **PGX** | 40 feet~~35 feet~~ | 35 feet |
| **DMX** | 55 feet~~50 feet~~ | 50 feet |
| **CMX** | 55 feet~~50 feet~~ | 50 feet |
| **IC** | 55 feet~~50 feet~~ | 50 feet |
| **GI** | 55 feet ~~50 feet~~ | 50 feet |
| *Note: Projects or development that do not meet the above standards may apply for conditional zoning in accordance with Section 2.1.C.* | | |

**FIGURE 2.6.2-B: ILLUSTRATION OF BUILDING HEIGHT AND EXPOSED WALL HEIGHT**



3. ~~***Computation of building height:***~~ "Building height~~"~~ is measured as the vertical distance ~~above a reference elevation measured~~ from the average finished grade plane to the applicable building height measurement point, as established below.

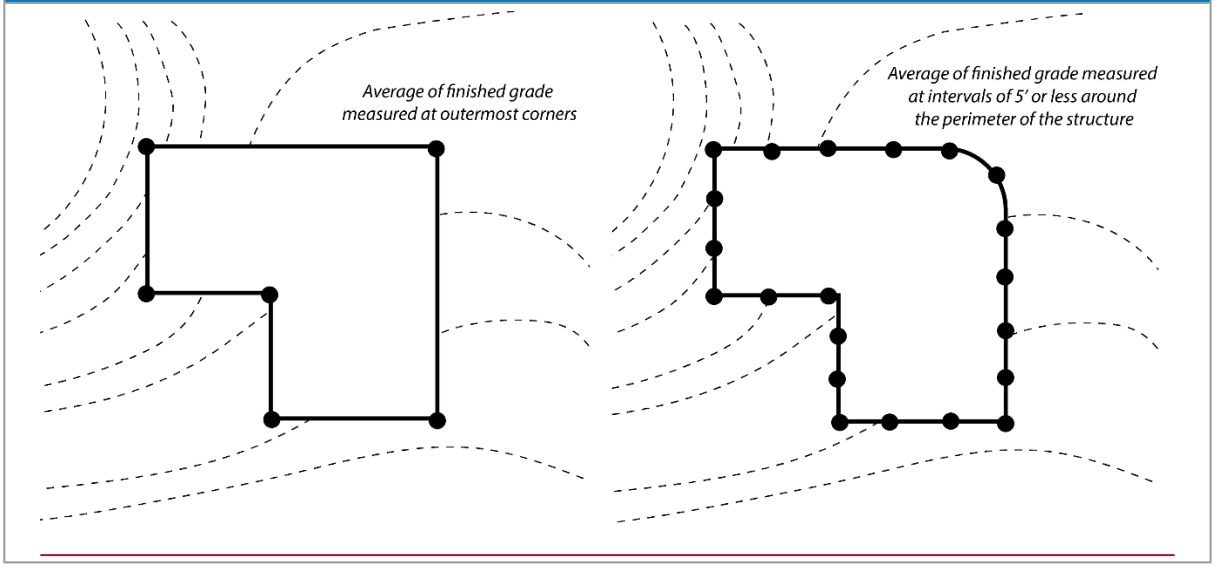
a. The average grade is determined by measuring the grade at the outermost corners of each elevation of the structure and calculating the average. Alternatively, average grade may be determined by measuring the grade at intervals of five feet or less around the perimeter of the structure and calculating the average.

~~1. The reference elevation shall be selected using the greater of either of the following:~~

~~a. The elevation of the highest adjoining sidewalk or ground surface within a five-foot horizontal distance of an exterior wall of the building when such sidewalk or ground surface is not more than ten feet above the lowest grade; or,~~

~~An elevation ten feet higher than the lowest grade when the sidewalk or ground surface described in subsection B.1, above is more than 10 feet above the lowest grade.~~

**FIGURE 2.6.2-C: AVERAGE FINISHED GRADE CALCULATION METHODS**




b. The building height measurement point shall be determined based on the type of roof, as follows:

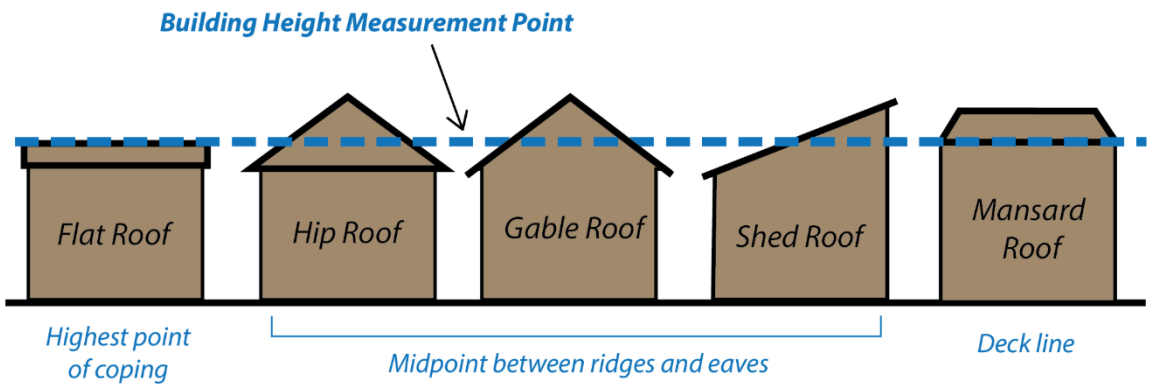
i. ~~to the parapet or roof line of~~ the highest point of the coping or roof deck on a flat roof,

ii. ~~the eave of a pitched roof~~the midpoint between the ridges and eaves on a hip roof, gabled roof, or shed roof, or

iii. the deck line of a mansard roof. ~~The height of a terraced or stepped building is the maximum height of any segment of the building.~~

~~b.~~iv. Where a building incorporates more than one roof form, the applicable measurement point shall be determined for each distinct roof form or building mass. The highest applicable measurement point shall be used to establish the building's overall maximum height.

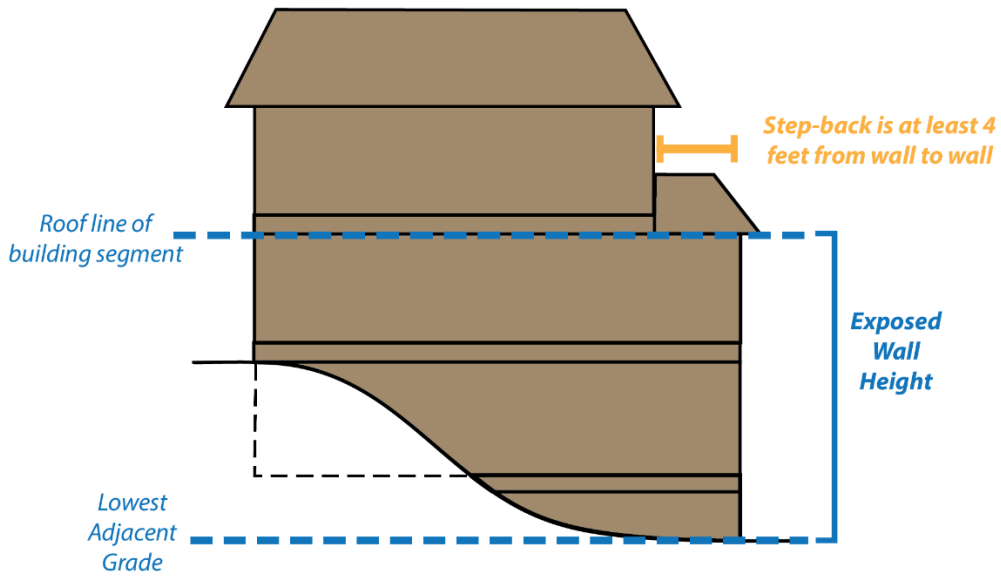
**FIGURE 2.6.2-D: DETERMINATION OF BUILDING HEIGHT MEASUREMENT POINT**




~~3. *Items not included in calculation*: The height limitations of this section shall not apply to church spires, belfries, cupolas, and domes not intended for human occupancy, monuments, water towers, observation towers, transmission towers, chimneys, smokestacks, conveyors, flagpoles, masts and antennas; provided evidence from appropriate authorities is submitted to the effect that such building or structure will not interfere with any airport zones or flight patterns.~~

4. Exposed wall height shall be measured vertically from the lowest adjacent finished grade of the wall to the roofline directly associated with the wall being measured, as established by this section.
   a. For the purposes of this section, roofline is defined as the parapet of a flat roof, the eave of a pitched roof, or the deck line of a mansard roof.
   b. When a structure is stepped-back or terraced, the measurement may be from the lower roof line if the step-back distance is at least 4 feet from exposed wall to exposed wall.

**FIGURE 2.6.2-E: DETERMINATION OF EXPOSED WALL HEIGHT ON STEPPED-BACK STRUCTURE**



~~C. ***Maximum story height***.~~

~~1. A building story shall not exceed 14 feet in height from finished floor to finished floor.~~

~~2. Basements that emerge less than 4 feet from grade or attics not exceeding 4 feet at the knee wall shall not constitute a story.~~

D. ***Bulk and massing on sloping sites.***

1. Buildings on sloping sites are encouraged to utilize step-back or terraced building approach to reduce the visual bulk of the structure and site grading.
2. Retaining walls, fill, excavation, or other grading shall not be used to manipulate the average grade plane for purposes of circumventing the maximum building height, exposed wall height, or story requirements.

E. ***Exceptions*:** The following shall not be subject to the height and massing provisions of this section:

1. Architectural building extensions, such as towers and cupolas; provided they comply with the applicable provisions of Section 5.9.
2. Cases where the administrator waives the development review process, in accordance with Section 16.3; provided evidence from appropriate authorities is submitted to the effect that such building or structure will not interfere with any airport zones or flight patterns. This includes, but is not limited to, flagpoles, water towers, utility poles, and other similar structures.

(Ord. No. 2024-23, § 1(Exh. A), 6-3-24; Ord. No. 2024-43, § 1(Exh. A), 11-18-24; Ord. No. 2025-04, § 1(Exh. A), 1-21-25; Ord. No. 2025-14, § 1(Exh. A), 4-7-25)

# CHAPTER 6. ENVIRONMENTAL PROTECTION

## 6.4. Steep slope area requirements.

In accordance with G.S. 160D-703(d), the provisions contained in this section shall apply to all areas within the planning jurisdiction of the City of Brevard that are classified as "moderately steep slope areas" and "steep slope areas". These provisions do not limit or negate the effect of other provisions of this ordinance which may apply to steep slope areas.

**A.** ***Applicability****:*

1. This section shall apply to any land-disturbing activity, building permit, or any other development proposal on a parcel located at or above 2,250 feet in elevation above mean sea level and with an average slope of 25% or greater.
   a. “Moderately steep slope” areas are defined as those areas with a slope of 25% to 34%.
   b. “Steep slope” areas are defined as those areas with a slope of 35% or greater.
   c. A parcel is considered at or above the elevation if any area within the parcel boundaries is at or above the stated elevation.
2. The provisions in this section are intended to encourage a sensitive form of development and to allow for a reasonable use that complements the natural and visual character of the community.

**B.** ***Determining slope*:** Slope shall be determined in accordance with the methods and procedures contained herein.

1. Prior to commencing any development or land-disturbing activity and prior to issuing any permits and/or other approvals, the calculated slope for the parcel(s) shall be approved by the Planning Department.
    a. Parcels where no portion of the lot is located at or above 2,250 feet in elevation above mean sea level are exempt from this requirement.
    b. Incidental improvements and additions to existing structures, accessory structures less than 1,000 square feet in ground floor area, and interior renovations are exempt from this requirement.
2. Calculations and supporting documentation shall be submitted to the Planning Department for review prior to or in conjunction with the applicable submittals. The administrator shall: (a) request additional information; (b) request revisions to the slope calculation submittal; or (c) issue written concurrence with the determination of slope, as submitted.
    a. Each slope calculation and supporting documentation submitted to the Planning Department for review shall include a scaled map, accurately showing the topography for the entire land tract and the parcel boundaries.
    b. In cases where the applicant or property owner does not agree with the determination made by the administrator, the alternative slope analysis shall be heard and decided on by the Board of Adjustment, following a notice of appeal filed with the City Clerk.
3. Slope shall be determined through use of one of the following methods:
    a. The approved contour interval formula:

| FIGURE 6.4-A: SLOPE CONTOUR INTERVAL FORMULA |
|---|
| Slope **(S%)** is equal to the total length **(L)** of contour lines in feet within a given parcel, multiplied by the contour interval **(I)** of said parcel, then multiplied by .0023, divided by the area **(A)** of the parcel.<br>Or,<br>S% = (L x I) .0023 / A |
| *The calculation shall use the smallest contour interval for which maps are available or at a minimum of five-foot intervals. .0023 is the product of two constants, one of which converts feet into acres and one of which converts a decimal fraction into a percentage, the value of .0023 is the percentage of one square foot of one acre.* |

    b. Analysis conducted and sealed by a professional surveyor, engineer, or landscape architect using recognized, industry-accepted methods.
        i. The administrator may require slope calculations to be sealed by a professional surveyor, engineer, or landscape architect for projects with over an acre of disturbed area.
4. Slope shall be rounded to the nearest whole number and noted on all development plans required by this ordinance.
5. Areas placed in a permanent conservation easement, dedicated to the public for open space, protected as open space by restrictive covenants, or otherwise permanently protected in a natural state with prohibition on vegetation removal and land-disturbing activities may be removed from the calculation of parcel slope.
    a. The applicant shall provide the legal documentation for permanent protection and a closed perimeter line delineating the revised boundaries for calculating slope.

b. Nothing shall limit the ability of moderately steep slope areas, steep slope areas, conservation easements, or other means of permanent land protections to be included in the total parcel area for the means of calculating density.

**C.** ***Geotechnical analysis:***

1. Development in steep slope areas shall be required to undergo geotechnical analysis by a registered professional engineer to determine the stability of the underlying geology and soils to support the proposed project. The geotechnical analysis report shall be required to be submitted prior to the issuance of a zoning permit.
2. If a geotechnical analysis has been performed for subdivision approval that includes building pad analysis of the individual lots, it is unnecessary to submit a new analysis for each lot, provided the location of structures on each lot does not change by more than 20 feet in any one direction.

**D.** ***General standards for development projects with moderately steep slope areas and/or steep slope areas:***

1. Development plans shall be designed to minimize disturbance to the natural landform and should not destroy the visual quality and community character.
   a. To the extent possible given topographic and other physical constraints, land disturbance should be confined to portions of the lot not considered to be steep slope areas.
   b. Developers shall make reasonable efforts to preserve and protect existing natural features of the slope, such as trees and other plant materials, and rock outcroppings which may help to stabilize the slope.
   c. Buildings, parking, and other improvements should be clustered on less steep and less sensitive areas of the site to reduce the amount of grading.
   d. Projects are encouraged to demonstrate terrain-adaptive design and construction techniques.
2. Proposed land-disturbing activity shall meet all applicable local and State regulations relating to soil erosion and sedimentation control.
3. Land disturbance shall be limited to the minimum required for building foundations, driveways, stormwater management measures and immediate areas surrounding these elements as required by this ordinance.
   a. With the exception of approved stockpiling or restoration efforts, substantial earth moving beyond that required for the installation or construction of approved buildings, structures, driveways, or stormwater management measures shall not be permitted.
4. When grading is necessary, it should be blended with the natural land form as much as possible. Rigid contouring should be avoided, and contours should be rounded to appear undulating and natural.
5. The approving authority shall have the right to impose such conditions as are necessary to protect public health, safety, and welfare for projects in moderately steep slope or steep slope areas as authorized under the provisions of this section because the minimum standards set forth in this ordinance are insufficient given the exceptional and unique conditions of topography, location, shape, size, drainage or other physical features of the site, or because of the special nature and character of surrounding development.
   a. Such conditions shall be reasonable and shall be limited to the minimum additional improvements necessary to protect the public health, safety or welfare. Such conditions may, without limitation, pertain to the following:
      i. The retention and planting of vegetation;
      ii. Sedimentation and erosion controls;

iii. Cut and fill slope design and stabilization;

iv. The degree of land disturbance;
The location, form and design of proposed structures and driveways so as to minimize land disturbance and ensure structural integrity; and

v. The location, form and design of streets and utilities, so as to minimize land disturbance and ensure structural integrity.

b. The administrator may reduce the required setbacks in accordance with Section 2.7.1 in order to facilitate compliance with this section.

**E.** ***Conditional zoning districts with steep slope areas:***

1. It is strongly encouraged that any proposed development project containing extensive steep slope areas be considered in accordance with the procedures for conditional zoning districts, which process allows for creative designs that may enhance development potential while achieving the steep slope protection requirements of this section.
2. City Council may allow development on steep slope areas by means of a conditional zoning district. Council may require the clustering of structures and impose any other necessary condition upon the design of the development in order to minimize impacts and uphold the intent of this section.

**F.** ***Grading extent:***

1. The maximum extent of grading on a property with moderately steep or steep slope areas shall be reduced to support the goals and objectives of this section. This shall be governed by the following table:

| TABLE 6.4-A: MAXIMUM GRADING EXTENT BY SLOPE OF PARCEL | |
|---|---|
| **Average Existing Slope** | **Maximum Percent of Site Graded** |
| 25% - 29% | 70% |
| 30% - 34% | 60% |
| 35% - 39% | 50% |
| 40% - 44% | 35% |
| 45% or greater | 20% |

2. Additional grading may be awarded to projects on steep slope areas if any of the following conditions are met. The credits may accumulate to equal the total reduction outlined herein.

| TABLE 6.4-B: MAXIMUM GRADING EXTENT CREDITS | |
|---|---|
| **Credit** | **Conditions** |
| 10% | Buildings and parking areas are properly screened by vegetation to minimize the visual impact from key viewing areas, which include downtown, public parkland and other public recreational areas, and major streets and highways. |
| 10% | The steepest portions and/or most visible portions of the lot are placed in a permanent conservation easement, dedicated to the public for open space, protected as open space by restrictive covenants, or otherwise permanently protected in a natural state with prohibition on vegetation removal and land-disturbing activities. |
| 10% | Exterior colors for new buildings and structures, including roofs, are coordinated with the predominate colors of the surrounding landscape to minimize contrast between the structure and the natural environment. |

3. Additional grading may also be permitted as part of a conditional zoning district.

**G.** ***Density:***

1. Densities of residential development shall be reduced in steep slope areas to support the goals and objectives of this section. This shall be governed by the following table:

| TABLE 6.4-C: MAXIMUM RESIDENTIAL DENSITY BY SLOPE OF PARCEL | |
|---|---|
| **Average Existing Slope** | **Residential Density** |
| 35% - 39% | 20% reduction of underlying zoning district |
| 40% - 44% | 50% reduction of underlying zoning district |
| 45% or greater | 70% reduction of underlying zoning district |

2. Additional density may be awarded to projects on steep slope areas if any of the following conditions are met. The credits may accumulate to equal the total reduction outlined herein.
   a. The maximum residential density shall not exceed the maximum residential density permitted in the underlying zoning district as outlined in Section 2.6, unless such provisions are specified in a conditional zoning district.

| TABLE 6.4-D: MAXIMUM RESIDENTIAL DENSITY CREDITS | |
|---|---|
| **Credit** | **Conditions** |
| 10% | Grading is limited to 10% of more under the maximum allowed under this section |
| 10% | Buildings and parking areas are properly screened by vegetation to minimize the visual impact from key viewing areas, which include downtown, public parkland and other public recreational areas, and major streets and highways. |
| 10% | The steepest portions and/or most visible portions of the lot are placed in a permanent conservation easement, dedicated to the public for open space, protected as open space by restrictive covenants, or otherwise permanently protected in a natural state with prohibition on vegetation removal and land-disturbing activities. |
| 10% | Exterior colors for new buildings and structures, including roofs, are coordinated with the predominate colors of the surrounding landscape to minimize contrast between the structure and the natural environment. |

~~H. *Building height:*~~

~~1. The maximum height of principal structures in steep slope areas shall be limited to 35 feet measured perpendicular from the pre-development grade to the top of the built structure.~~

~~FIGURE 6.4-B: ILLUSTRATION OF MAXIMUM BUILDING HEIGHT IN STEEP SLOPE AREAS~~




~~2. The property owner is encouraged to utilize step-back or terraced building approach to reduce the visual bulk of the structure.~~

~~3. Accessory structures shall not exceed 15 feet in height on any side.~~

~~4. Applicants shall provide architectural plans and building elevations to demonstrate compliance with this section.~~

~~I.~~H. ***Tree and vegetation preservation:***

1. Landscaping / vegetation preservation plans, in accordance with Section 17.9, shall be required for all development projects on steep slopes to ensure compliance with this section.

2. Plant materials should be used that blend with the hillside. Landscape schemes that are rough, natural, and/or subdued in character are encouraged.
3. All trees and other specified vegetation shall be preserved except in the area approved for grading or within 20 feet of the building footprints.
    a. Non-native or invasive species may be removed.
4. ~~In the event a property owner desires to remove trees and other protected vegetation required to be preserved in this section, they may submit an alternative landscape plan for consideration by the Brevard Planning Board.~~
    ~~a. This alternative landscape plan must contain:~~
        ~~i. a tree survey of the property showing which trees and other protected vegetation will be removed and which will remain;~~
        ~~ii. the location of any structures, driveways, and other impervious surfaces; and~~
        ~~iii. an explanation of the reason(s) for removal of required trees and other protected vegetation, including a statement of how the removal of the required trees and other protected vegetation supports the purposes of this section or how such removal can be mitigated consistent with the purposes of this section.~~
    ~~b. The Planning Board may approve, approve with conditions, or deny the alternative landscape plan. If conditions are established, they shall be enforceable in accordance with the provisions of the development permit.~~

~~J.~~ I. ***Infrastructure:***

1. Infrastructure shall be installed in steep slope areas in accordance with the provisions of this section and any other applicable provisions in CHAPTER 13.
2. Roads and driveways created on parcels with steep slopes should follow the natural terrain, unless necessary to accomplish the purpose.
3. The approving authority shall have the authority to modify infrastructure requirements and impose such conditions as are necessary to minimize the disturbance caused by the installation of infrastructure in steep slope areas.
    a. Modifications and conditions shall be intended to minimize disturbance and increase the safety and stability of infrastructure, and shall not be granted or imposed to reduce cost to the developer.
    b. Modifications and conditions may relate but shall not be limited to pavement width, sidewalk width, curb and gutter design and width, and shoulder design. The maximum road grade requirement shall not be modified.
4. *Culs-de-sac:*
    a. The required turnaround on a dead-end street in a steep slope area shall have a roadway diameter of not less than 50 feet.
    b. If the street length does not exceed 300 feet and if construction difficulties will not permit a turnaround, the use of a "Y" or "T" or other turning space of a design such as will allow a vehicle with a wheel base of at least 20 feet to complete a turning movement with a maximum of one backing movement may be permitted.
5. *Grading*:

a. Grading shall not be required for the full right-of-way in steep slope area if the administrator determines that full grading will prevent convenient access to adjoining property or will destroy the natural beauty of the site by excessive cut and fill.

b. Shoulder fill slopes shall not be steeper than 40%.

(Ord. No. 3-07, §§ 2, 3, 2-5-07; Ord. No. 15-08, §§ 17, 18, 12-5-08; Ord. No. 2020-23 , § 1(Exh. A), 10-19-20; Ord. No. 2021-16 , § 1(Exh. A), 4-19-21; Ord. No. 2023-22, § 1(Exh. A), 6-5-23; Ord. No. 2024-23, § 1(Exh. A), 6-3-24)

# CHAPTER 19. DEFINITIONS

## 19.3. Definitions.

**Average grade:** The average elevation of the finished ground surface points at the points where the building intersects the finished grade.

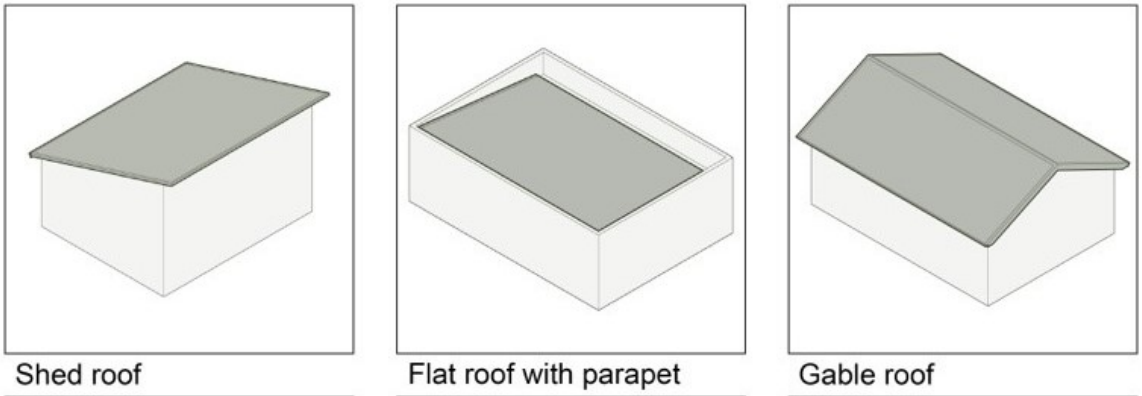
**Highest adjacent grade (HAG)***:* The highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

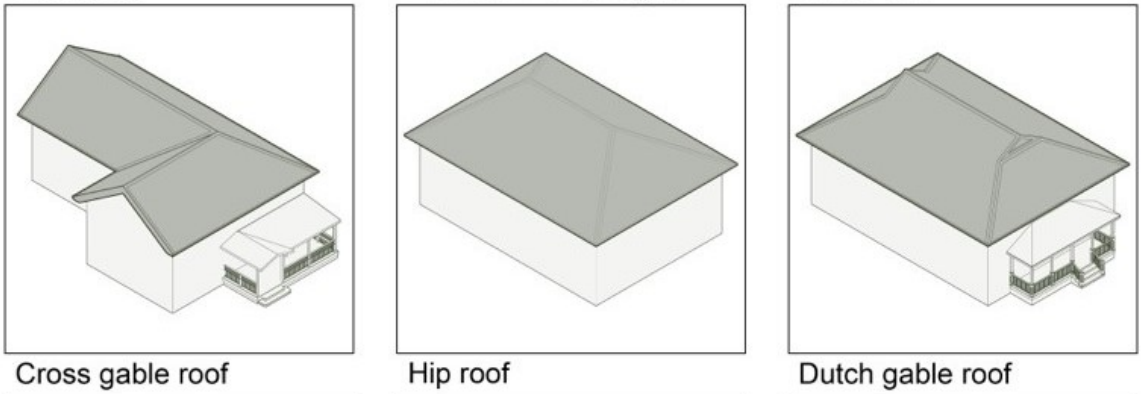
**Lowest adjacent grade (LAG)***:* The elevation of the ground, sidewalk or patio slab immediately next to the building or deck support after completion of the building.

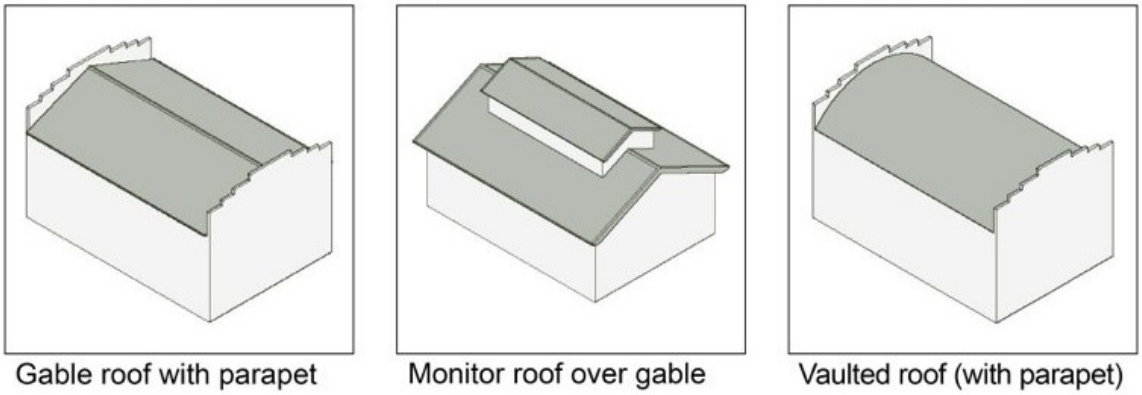
**Natural grade***:* The highest elevation where the base of a sign and the ground meet.

**Roof shape**: The shape of a building roof, which is highly related to architectural style. Common examples include Gable, Hip, Flat, and Shed.

**ROOF SHAPE ILLUSTRATIONS**




**Story**: The habitable level of a building, existing from finished floor to finished floor or ceiling.