

**PROPOSED REVISIONS TO
PUBLIC HEARING DRAFT OF
UNIFIED DEVELOPMENT ORDINANCE**



PLANNING COMMISSION: JANUARY 7, 2019

CITY COUNCIL PUBLIC HEARING: MARCH 19, 2019

Bicycle Access-Facility
&
Bicycle Parking
Revisions

(c) Access, Mobility, and Circulation Standards

Development subject to the requirements of this Section shall comply with the following standards.

(1) Multimodal Access and Circulation System

All new developments shall be served by a system of sidewalks, paths, roadways, accessways, and other facilities designed to provide for multiple travel modes (vehicular, transit, bicycle, and pedestrian), as appropriate to the development's size, character, and relationship to surrounding development and development patterns and existing and planned community transportation systems. Vehicular, transit, bicycle, and pedestrian access and circulation systems shall be coordinated and integrated so as to provide transportation choices within and to and from the proposed development, as appropriate.

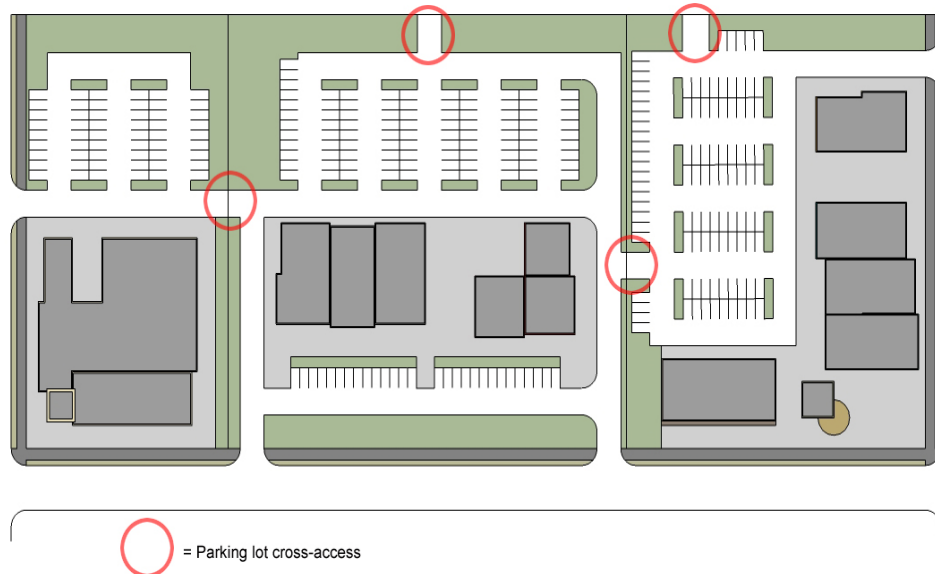
(2) Cross Access Between Adjoining Developments

a. Parking Lots

1. An internal vehicular circulation system in new nonresidential and mixed-use development shall be designed and constructed to provide vehicular cross-access between any parking lots within the development and any parking lots on adjoining parcels containing nonresidential or mixed-use development, and to the boundary of adjoining vacant land if it is in a Mixed-Use, Activity Center, and Corridor base zoning district (see Figure 17-5.1(c)(2)a: Example of Parking Lot Cross-Access). The cross-access shall consist of a driveway or drive aisle that is at least 22 feet wide or two one-way driveways or aisles that are each at least 14 feet wide.
2. Easements allowing cross-access to and from lands served by a vehicular cross-access in accordance with 1 above, along with agreements defining maintenance responsibilities of land owners pertaining to the vehicular cross-access, shall be recorded with the Register of Deeds.

3. The Land Development Administrator or Zoning Administrator, as appropriate, may waive or modify the requirement for vehicular cross-access established in 1 above on determining that such cross-access is impractical or undesirable due to the presence of topographic conditions, natural features, or vehicular safety factors.

Figure 17-5.1(c)(2)a: Example of Parking Lot Cross-Access



b. Pedestrian Cross-Access

1. An internal pedestrian circulation system in new multifamily, nonresidential, or mixed use development shall be designed to allow for pedestrian walkway cross access between the development's buildings and parking areas and those on adjoining lots containing multifamily, nonresidential, or mixed-use development, and to vacant lands.
2. Easements allowing cross-access to and from properties served by a pedestrian cross-access in accordance with 1 above, along with agreements defining maintenance responsibilities of land owners, shall be recorded with the Register of Deeds.
3. The Land Development Administrator or Zoning Administrator, as appropriate, may waive or modify the requirement for pedestrian cross-access established in 1 above on determining that such cross-access is impractical or infeasible due to the presence of topographic conditions or natural features.

c. Bicycle Cross-Access

1. An internal bicycle circulation system in the MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, or MC district, or on the site of an elementary, middle, or high school located in any other district, shall be designed and constructed to provide bicycle cross-access between it and any

internal bicycle circulation system on adjoining parcels containing a multifamily, nonresidential, or mixed-use development, and to vacant lands in the MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, or MC district.

2. Easements allowing cross-access to and from properties served by a bicycle cross-access in accordance with 1 above, along with agreements defining maintenance responsibilities of land owners, shall be recorded with the Register of Deeds.
3. The Land Development Administrator or Zoning Administrator, as appropriate, may waive or modify the requirement for bicycle cross-access established in 1 above on determining that such cross-access is impractical or undesirable for typical bicyclists' use due to the presence of topographic conditions, natural features, or safety factors. Undesirable conditions shall be defined as those limiting mobility for bicycles as a form of transportation, such as steep grades, narrow connections bounded on both sides by walls or embankments, or limited visibility when straight-line connections are not achievable.

(3) Sidewalks Required

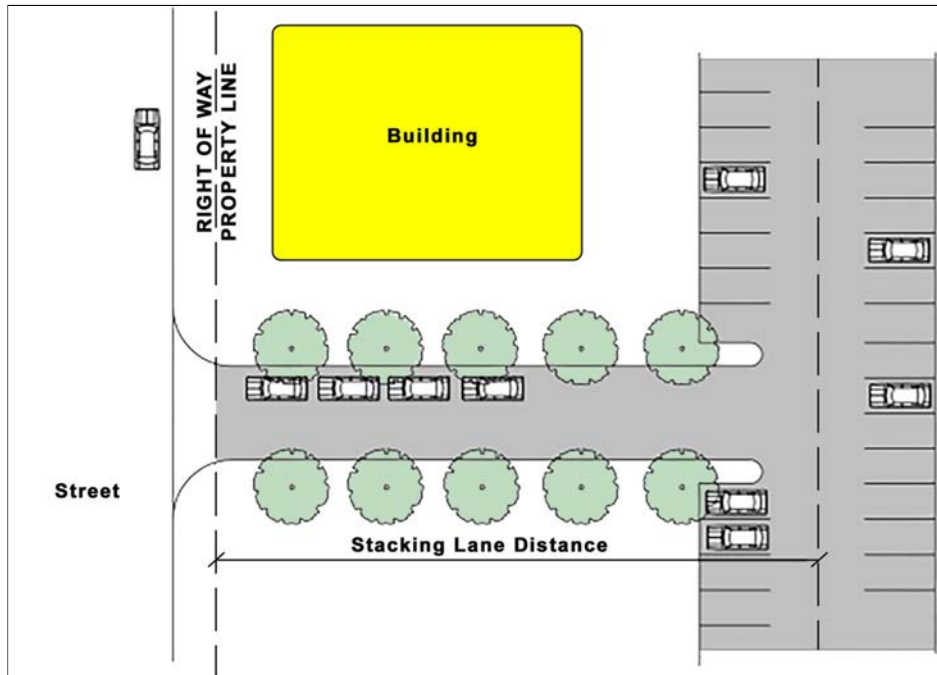
- a. In all districts except the LI and HI districts, sidewalks that comply with the Specifications for Roadway Design are required on both sides of all streets within a new development and along the entire frontage of the development with an existing street (unless an existing sidewalk that complies with the Specifications for Roadway Design is already in place).
- b. In the LI and HI districts, sidewalks are required on one side of all streets within a new development and along the entire frontage of the development with an existing street (unless an existing sidewalk that complies with the Specifications for Roadway Design is already in place). The sidewalks shall comply with the Specifications for Roadway Design and shall have a minimum width of eight feet.
- c. Where a new development fronts an existing street with insufficient right-of-way width to accommodate installation of a required sidewalk along the frontage, the developer shall install a sidewalk on the development site within a dedicated public easement running parallel and adjacent to the public street.
- d. The Land Development Administrator or Zoning Administrator, as appropriate, may waive or modify the requirement for sidewalks on determining that such sidewalks are impractical or infeasible due to the presence of topographic conditions or natural features, such as steep grades that do not allow connections to be made without stairs.

(4) Bicycle Facilities

~~In the MU L, MU M, AC D, AC N, AC/C C, AC/C R, and MC districts, a~~New development served by shall include bike lanes, bike paths, or other bicycle facilities sufficient to allow safe and efficient bicycle access and circulation within the development when the development includes vehicular surface area that is new, where the vehicular surface area is expanded greater than 50 percent, or where greater than 50 percent of the existing vehicular surface area is modified.

The Land Development Administrator or Zoning Administrator, as appropriate, may waive or modify the requirement for bicycle facilities in LI, HI, GC, and EC districts on determining that the development is not now or in the foreseeable future served by adequate facilities to safely accommodate bicycles.

Figure 17-5.2(h)(2)b: Measurement of Stacking Lane Distance for Vehicular Surface Area Entrance Driveway



(i) Bicycle Parking Standards

(1) Minimum Bicycle Parking Required

~~In the MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, and MC districts, the following shall include s~~Short-term and long-term bicycle parking spaces shall be provided based upon principle use type in accordance with Table 17-5.2(i)(1)b: Bicycle Parking Standards ~~in the MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, and MC Districts:~~

- a. All new development; and
- b. Any individual expansion or alteration of a building existing prior to **insert** *the effective date of this Ordinance* if the expansion increases the building's gross floor area by 50 percent or more, or the alteration involves 50 percent or more of the building's gross floor area (including interior alterations), provided no long-term bicycle parking is required if the building has a gross floor area of less than 2,500 square feet after the expansion or alteration.

Article 5: Development Standards

Sec. 17-5.2. Off-Street Parking, Bicycle Parking, and Loading

(i) Bicycle Parking Standards

TABLE 17-5.2(I)(1)B: BICYCLE PARKING STANDARDS IN THE MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, AND MC DISTRICTS		
PRINCIPAL USE TYPE	REQUIRED BICYCLE PARKING SPACES [3][4]	
	SHORT-TERM [1] [2]	LONG-TERM [2]
Residential Uses		
Dwelling, Multifamily	1 for every 20 dwelling units	1 for every 4 dwelling units
Dormitory, private	1 for every 16 bedrooms	1 for every 4 bedrooms
Fraternity or sorority house	1 for every 16 bedrooms	1 for every 4 bedrooms
Rooming house or boardinghouse	No minimum	1 for every 10 required automobile parking spaces
Use type in the Residential Uses classification not elsewhere listed	No minimum	No minimum
Public, Civic, and Institutional Uses		
Correctional facility	2	1 for every 20,000 gsf
Place of worship	1 for every 1,500 gsf of assembly area	1 for every 15 employees
Use type in the Community Service Uses category not elsewhere listed	1 for every 2,000 gsf	1 for every 6,000 gsf
Elementary, middle, or high school	1 for every 10 students of planned capacity	1 for every 10 employees plus 1 for every 20 students of planned capacity
Park and ride	1 for every 50 required automobile parking spaces	1 for every 10 required automobile parking spaces
Parking lot (as a principal use)	1 for every 10 automobile parking spaces	1 for every 20 automobile parking spaces, with a minimum of 4 and a maximum of 40 required spaces
Parking structure (as a principal use)	2	1 for every 20 automobile parking spaces, with a minimum of 6 and a maximum of 40
Passenger terminal, surface transportation	1 for every 50 projected a.m. peak period daily riders	1 for every 10 projected a.m. peak period daily riders
Airport	No minimum	No minimum
Railroad facility	No minimum	No minimum
Utility facility, minor	No minimum	No minimum
Use type in the Public, Civic, and Institutional Uses classification not elsewhere listed	1 for every 10,000 gsf	1 for every 20,000 gsf
Commercial Uses		
Use type in the Animal Care Uses category	2	2
Bank	1 for every 2,000 gsf	1 for every 10,000 gsf
Use type in the Eating or Drinking Establishment Uses category	1 for every 2,000 gsf	1 for every 10,000 gsf
Amusement park	8 for every acre	2 for every per acre
Arena, stadium, or outdoor theater	1 for every 40 seats plus 1 for every 3,000 gsf of non-seated assembly area	1 for every 10,000 gsf
Performing arts center	1 for every 40 seats	1 for every 10,000 gsf
Recreation facility, indoor, not	1 for every 40 seats plus 1 for every	1 for every 10,000 gsf

TABLE 17-5.2(I)(1)B: BICYCLE PARKING STANDARDS IN THE MU-L, MU-M, AC-D, AC-N, AC/C-C, AC/C-R, AND MC DISTRICTS

PRINCIPAL USE TYPE	REQUIRED BICYCLE PARKING SPACES [3][4]	
	SHORT-TERM [1] [2]	LONG-TERM [2]
elsewhere listed	3,000 gsf of non-seated assembly area	
Recreation facility, outdoor, not elsewhere listed	1 for every 40 seats plus 1 for every 3,000 gsf of non-seated assembly area	1 for every 10,000 gsf of assembly area
Use type in the Retail Sales Uses category	1 for every 2,000 gsf	1 for every 10,000 gsf
Use type in the Vehicle Sales and Services Uses category	2	1 for every 10,000 gsf
Use type in the Visitor Accommodations Uses category	2	1 for every 20 lodging units
Use type in the Commercial Uses classification not elsewhere listed	1 for every 5,000 gsf	1 for every 10,000 gsf
Agricultural Uses		
Use type in the Agricultural Uses use classification	No minimum	No minimum
Industrial Uses		
Use type in the Manufacturing Uses category	No minimum	1 per 40,000 gsf
Use type in the Industrial Uses classification not elsewhere listed	No minimum	No minimum
<p>NOTES:</p> <p>[1] Unless otherwise specified, a minimum of two short-term parking spaces are required</p> <p>[2] The required number of spaces shall be based on any portion of the base number rounded up (for example, a multi-family development with 17 units would have to provide 5 long-term parking spaces).</p> <p>[3] "No minimum" indicates that no bicycle parking spaces are required.</p> <p>[4] Spaces listed are the minimum number of spaces unless otherwise specified.</p>		

Greenhouse Conditional Use Standards Revisions

**PROPOSED REVISION TO PUBLIC HEARING DRAFT OF UNIFIED DEVELOPMENT ORDINANCE
DECEMBER 2018**

Article 4: Use Regulations. Sec. 17-4.2. Principal Uses (c) Standards for Specific Principal Uses

(4) Agricultural Uses

a. Agriculture and Forestry Uses

1. Community Garden

Community gardens shall comply with the following standards:

- (i)** Accessory buildings shall be limited to sheds for the storage of tools, greenhouses, and seasonal farm stands. The combined area of all buildings and other structures, excluding greenhouses, shall not exceed 15 percent of the area of the parcel. Greenhouses may not exceed 75 percent of the area of the parcel.
- (ii)** Areas used for communal composting shall be limited to 20 percent of the area of the parcel.

Perimeter fences, including trellises, are allowed in community gardens, subject to the standards in Sec. 17-5.8, Fences and Walls.

- (iii)** Before issuance of a permit for a community garden, it shall have an established set of operating rules addressing the governance structure of the garden, hours of operation, assignment of garden plots, and maintenance and security requirements and responsibilities.

Community Character Overlay
OV-CCP
Revisions

(I) OV-CCP: Community Character Protection Overlay District

(1) Purpose

- a. The Community Character Protection Overlay (OV-CCP) District is intended to minimize the possibility that construction and demolition activity within a residential community would drastically negatively affect the existing character of that community by limiting new construction that is significantly out of scale with existing structures and/or preserving structures that establish the character of the district.
- b. The OV-CCP designation and the associated measures for community character protection are not intended to be utilized as a stand-alone zoning district classification, but as a set of regulations which are overlaid and supplemental to the regulations of the existing zoning district.

(2) Applicability

- a. Unless exempt in accordance with subsection c below, new construction of primary structures on or subdivision of land within the OV-CCP District that is located within a Residential base zoning district or residentially used shall comply with the standards in this Section.
- b. For the purpose of this Section, "new construction" includes the placement of a structure moved from another site.
- c. The following are exempt from this Section:
 1. Subdivision of a parcel five acres or larger;
 2. Lots of record existing upon the 1999 Richland County Tax Maps.

(3) Modifications of Otherwise Applicable Development Standards

a. Side Yard Setbacks

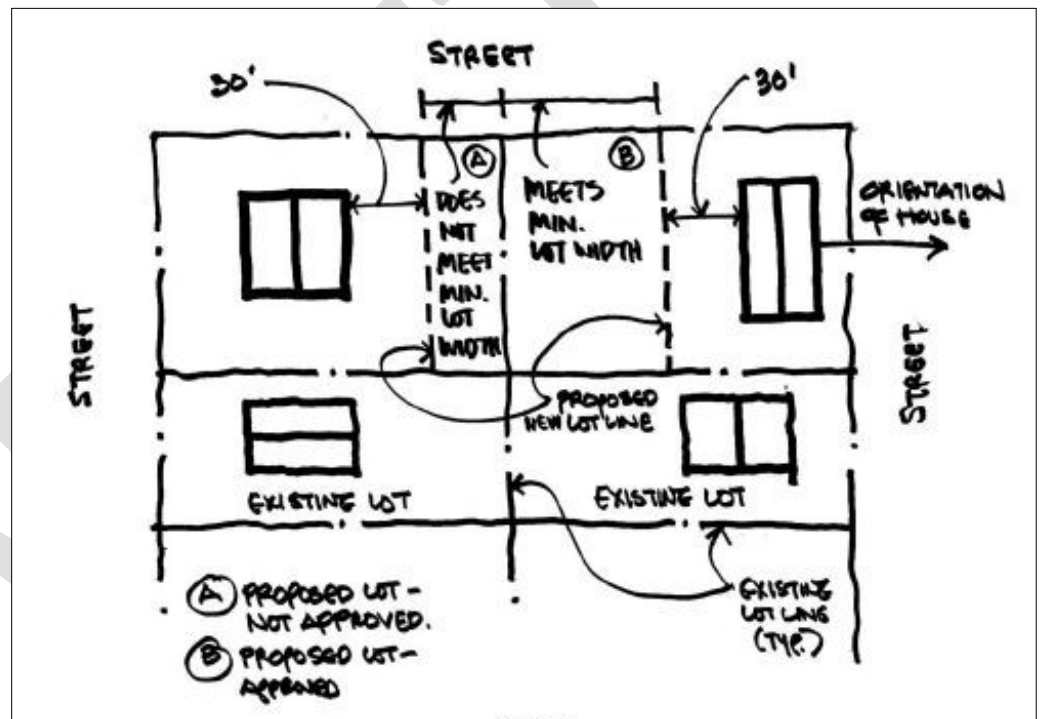
1. The side yard setbacks for new construction on a residential lot shall be the mean side yard setback for all improved residential lots located on the same block face, except that:
 - (i) Side yard setbacks shall not reduce the width of a building pad upon a newly subdivided residential lot to a width of less than 30 feet; and
 - (ii) Side yard setbacks upon a newly subdivided residential lot shall not be less than five feet.
2. For the purpose of this Sec. 17-1.1(a)(3)a, "newly subdivided residential lot" means any residential lot created by a plat of subdivision filed and recorded after [insert the effective date of this Ordinance] upon which no more than a single-family or two-family dwelling can be constructed.

b. Subdivisions of Improved Corner Lots

The following shall apply to an application to subdivide a new residential lot from an improved corner lot:

1. If the application for subdivision seeks to orient a structure perpendicular to the existing structure located upon the "remaining" corner lot, no new lot line shall be closer to the existing structure than 30 feet. Covered or enclosed landings, porches, or patios incidental to the structure having less than 75 square feet gross floor area may encroach into this thirty-foot setback (see Figure 17.3.7(I)(3)b.1: Minimum Lot Line Distance for Perpendicular Structure).

Figure 17.3.7(I)(3)b.1: Minimum Lot Line Distance for Perpendicular Structure



2. If the application for subdivision seeks to orient a structure in the substantially same orientation as the existing structure located upon the "remaining" corner lot, the front yard setback of the new lot shall be the same as the same street setback of the existing structure upon the "remaining" corner lot (see Figure 17.3.7(I)(3)b.3: Front and Side Yard Setbacks).
3. Side yard setbacks shall be established pursuant to Sec. 17-1.1(a)(3)a above (see Figure 17.3.7(I)(3)b.3: Front and Side Yard Setbacks).

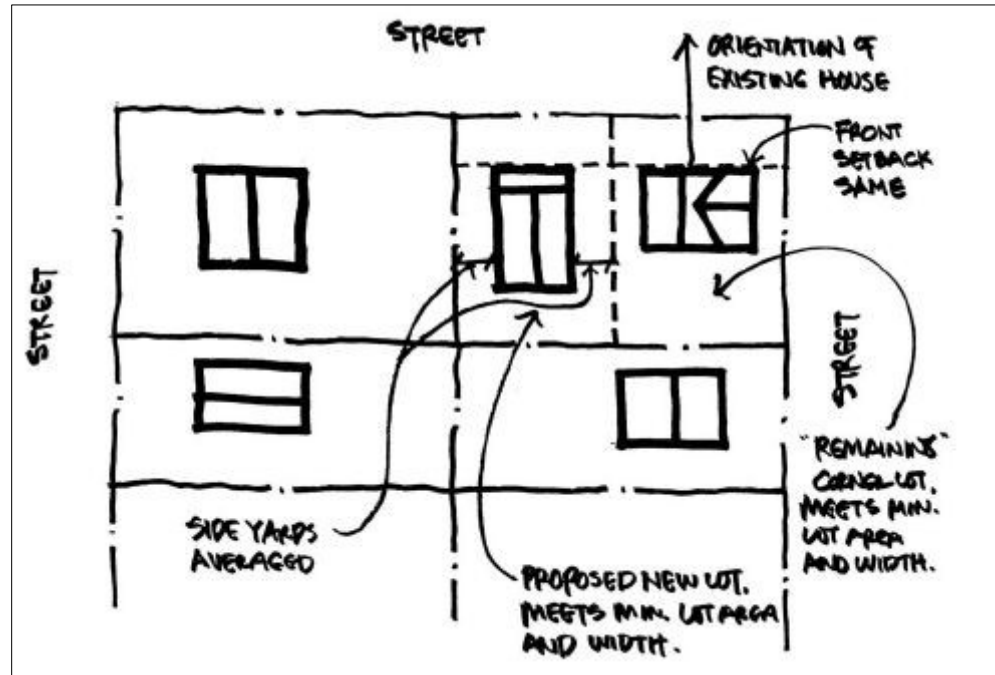
Article 3: Zoning Districts

Sec. 17-3.7. Overlay Districts

(l) OV-CCP: Community Character Protection Overlay District

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Figure 17.3.7(l)(3)b.3: Front and Side Yard Setbacks



c. Subdivisions of Vacant Corner Lots

The following shall apply to an application to subdivide a new residential lot from a vacant corner lot (see Figure 17.3.7(l)3: Setbacks on Vacant Corner Lot Subdivision):

1. The subdivision shall be platted so the structure built upon the "remaining" corner lot has setbacks from both street lot lines that align with the existing setbacks of existing structures in each direction.
2. The setback from the street lot line for any new "interior" lot shall align with the existing setback of an existing adjacent structure. If no adjacent structure exists to establish the setback, or if the setback of an existing structure is atypical for the area, the setback from the street lot line shall be determined by the average of all similarly oriented setbacks along the same or immediately adjacent block face.
3. Side yard setbacks shall be established pursuant to Sec. 17-1.1(a)(3)a above.

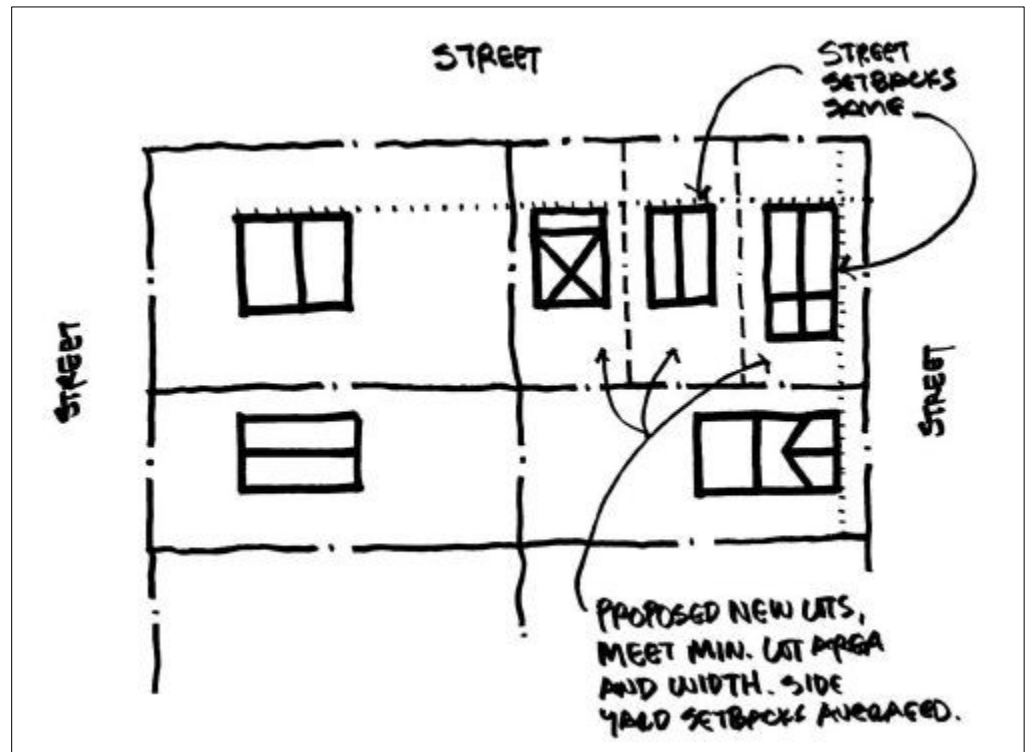
Article 3: Zoning Districts

Sec. 17-3.7. Overlay Districts

(l) OV-CCP: Community Character Protection Overlay District

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Figure 17.3.7(l)(3)c: Setbacks on Vacant Corner Lot Subdivision



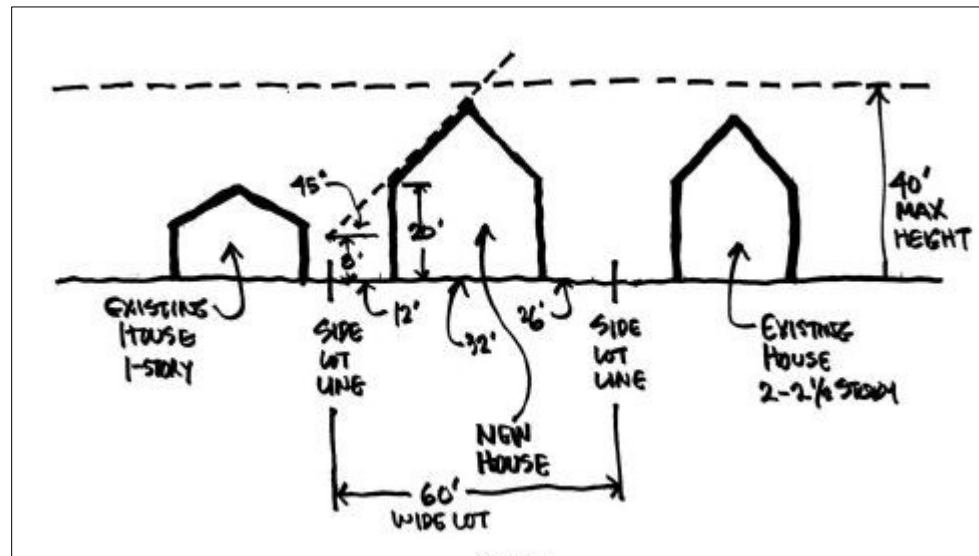
d. Subdivisions of Corner Lots Generally

The Zoning Administrator may require a different orientation or setback than that required by this Section if a different orientation or setback would further the intent of this Section, or where such orientation would preserve a grand and/or significant tree. The applicant for subdivision may appeal this determination in accordance with Sec. 17-2.5(u), Appeal - Zoning.

e. Height

New construction of primary structures on a residential lot which is contiguous to a lot upon which a structure 1½ stories high or less exists shall be no higher than a line drawn at a 45-degree angle from a point eight feet above the common lot line or than the maximum allowance within the underlying zoning district, whichever is less. These provisions shall not apply to chimneys and other unoccupied appurtenances attached to the structure (see Figure 17.3.7(l)(3)e: Maximum Height).

Figure 17.3.7(I)(3)e: Maximum Height



(4) Limits to Demolition

- a. The city shall not issue a demolition or relocation permit for any structure 50 years old or more within any geographic area to which this overlay applies without prior review and approval by the design development review commission (DDRC).
- b. The following demolitions and relocations are exempt from this section:
 1. Structures deemed "noncontributing" by City staff.
 2. Partial demolitions where city staff determines that the portion of structure to be demolished does not contribute to the design integrity of the structure or the character of the structure.
 3. The structure poses an immediate and substantial threat to the public safety as determined by the Building Official.
- c. The age of a structure shall be established by the records maintained by the Richland County Assessor's Office. If the age of the structure cannot be established by the records maintained by the Richland County Assessor's Office, the applicant for a demolition or relocation permit shall present other documentation to the city to establish the age of the structure.
- d. The property upon which the structure is located shall be posted with notice of the application to demolish or relocate at least 15 days prior to the consideration of the application by the DDRC.
- e. The DDRC shall approve a request for demolition or relocation only if it finds one or more of the following:
 1. The physical integrity of the structure is compromised to such a degree that it is no longer salvageable and/or represents a hazardous or unsafe condition.

Article 3: Zoning Districts

Sec. 17-3.7. Overlay Districts

(l) OV-CCP: Community Character Protection Overlay District

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2. The structure does not contribute to the historic architectural character of the district.
 3. The structure or property cannot be put to any reasonable economic beneficial use for which it is or may reasonably be adapted without approval of demolition.
- f. For applications to demolish or relocate a structure, the DDRC shall apply the following criteria for review:
1. Determination of the architectural significance and whether it contributes to the character of the district. The Commission shall consider the significance of the structure individually, in relation to the street, and as a part of the district as a whole. The architectural significance of the structure is defined by being fifty (50) years or older and meeting at least one of the following criteria:
 - (i) Individually listed in or has been determined eligible for listing in the National Register of Historic Places.
 - (ii) Contributes to a Historic District listed in the National Register of Historic Places.
 - (iii) Distinctive characteristics in architectural design.
 - (iv) Rare type within Columbia.
 - (v) Belonging to a style of buildings of which it is a good example.
 - (vi) A distinguished work of an architect of local or national importance.
 - (vii) A good example of a style or type of building which is becoming, or in danger of becoming extinct locally.
 2. The existing structural condition as assessed by a licensed engineer or architect with experience in historic rehabilitation projects in a report with visual and written documentation of any structural issues to include whether it endangers public safety;
 3. A determination of the building use and economic viability. The applicant shall submit information, prepared by qualified professionals, sufficient to demonstrate all of the following:
 - (i) The current use does not generate a reasonable economic return (may include market report of like uses and building scale in the same or similar neighborhood);
 - (ii) That appropriate and reasonable alternate uses in the building could not generate a future reasonable economic return;
 - (iii) That alterations or additions to the existing building could not make the current or future use generate a reasonable economic return; and

Article 3: Zoning Districts

Sec. 17-3.7. Overlay Districts

(l) OV-CCP: Community Character Protection Overlay District

Proposed Revision - December 2018

- (iv) Potential Federal tax credits, local abatements or incentives, or other funding sources are not feasible to bridge the gap identified above.

DRAFT

Tree Protection
&
Tree Removal Decision Standards
Revisions

Article 5: Development Standards

Sec. 17-5.4. Tree Protection

(a) Purpose

- a. Screening shall be accomplished with one or more of the following:
 1. A closed fence, made of wood or composite material approved by the Land Development Administrator, with the finished side facing away from the area to be screened;
 2. A masonry wall; or
 3. Natural plants.
- b. At least 75 percent of the periphery of the display area, excluding driveways and sight areas, shall be screened to an average height of three feet. Any screening material higher than 60 inches shall be excluded when determining the average height of screening.
- c. Any gap in screening along the periphery of the display shall not exceed six feet, except where a larger gap is necessary for a driveway or sight area.
- d. A minimum of 60 percent of any shrubs used for screening shall be evergreen species. Shrubs shall be a minimum of 18 inches tall when planted and expected to reach a mature height and width sufficient to provide the required screening within three years of planting.

(6) Utility Service Areas

- a. Screening shall be accomplished in such a manner as to provide complete, opaque screening of the utility service area from the public right-of-way or residential zones, and to allow safe operation and access to the utility service area.
- b. All required screening shall be located outside the public right-of-way.
- c. Any plantings used for screening shall be locally adapted evergreen species that are a minimum of 24 inches tall when planted and expected to reach a mature height and width sufficient to provide the required screening of the utility service area within three years of planting.

(7) Stormwater Retention or Detention Ponds

Screening for a stormwater retention or detention pond shall, at a minimum, consist of:

- a. Evergreen shrubs that are expected to reach four feet in height within three years of planting, at a maximum spacing of five feet on center; and
- b. Trees, at least 50 percent of which are an evergreen species, at a maximum spacing of 25 feet on center.

Sec. 17-5.4 Tree Protection

(a) Purpose

The purpose of this Section is to establish standards for the preservation of significant trees in order to achieve a higher quality of life, enhance the appeal and

economic value of properties in the City, and otherwise contribute to the public health, safety and welfare.

(b) Applicability

(1) General

Unless exempted in accordance with Sec. 17-5.4(b)(2), Exemptions, ~~the standards in this Section apply to all development and any other activity involving the cutting, destruction, removal, relocation, transplantation, pruning, or limbing of a tree. no protected tree shall be cut, relocated, removed, or destroyed, except with approval of a Tree Removal Permit and in accordance with the standards of this Section.~~

(2) Exemptions

The following activities are exempt from the standards in this Section:

- a. Any activity with the INS-FJ zoning district;
- b. The removal or modification of any tree located on an individual lot on which an existing single-family detached or two-family dwelling is located;
- c. Routine or seasonal pruning in accordance with Sec. 17-5.3(c)(11), Maintenance of Landscape Areas;
- d. The removal or pruning, after providing documentation to the Zoning Administrator of the condition of the tree(s), of dead or naturally fallen trees; trees damaged during a hurricane, tornado, ice or wind storm, flood, wildfire or any other such act of nature; or trees that are found by the Zoning Administrator to be a threat to the public health, safety, or welfare;
- e. The selective and limited removal or pruning of trees or vegetation necessary to obtain clear visibility at driveways or intersections;
- f. The removal or pruning of trees within a utility easement by a utility company
- g. The removal of trees when required by the Federal Aviation Administration;
- h. The removal or pruning of trees or vegetation on land zoned or lawfully used for commercial cultivation of trees to be sold for transplantation, outside of any right-of-way, transitional buffer yard, street protective yard, or interior planting area in a vehicular surface area;
- i. Forestry activities shielded from local development regulation in accordance with S.C. Code Ann. § 48-23-205, provided, any development application for the parcel of land where the forestry activities occur that is submitted within three years of the conclusion of the forestry activities shall be denied; and
- j. Timber harvesting that the Zoning Administrator determines is a commercial timber operation (see Sec. 17-9.4, Definitions), if notification is

provided, a forestry plan is submitted, and the timber harvesting complies with best management practices published by the South Carolina Forestry Commission, in accordance with Sec. 17-5.4(g), Timber Harvesting, provided, any development application for the parcel of land where a commercial timber operation occurs that is submitted within three years of the conclusion of the commercial timber operation shall be denied.

(c) General

(1) Protected Tree

For the purposes of this Section, a “protected tree” is:

- a. Any grand tree (see Sec. 17-9.4, Definitions);
- b. Any tree identified for use to meet the minimum tree-density requirements set forth in Sec. 17-5.3(h), Site Tree Density;
- c. Any tree used to meet any standard in Sec. 17-5.3, Landscaping;
- d. Any tree in fair or better condition (see Sec. 17-9.4, Definitions) having a trunk that is at least six inches in diameter, measured at four and one-half feet above the ground, that is:
 1. Located in a transitional buffer yard, street protective yard, or interior planting area in a vehicular surface area (see Sec. 17-5.3, Landscaping); or
 2. Identified for use in meeting the tree canopy retention standards in Sec. 17-5.4(d), Retention of Existing Tree Canopy.

(2) Tree Removal Permit Required

A Tree Removal Permit (see Sec. 17-2.5(m), Tree Removal Permit) is required prior to the cutting, destruction, removal, relocation, or transplantation of a protected tree.

(3) Documentation of Existing Trees

Documentation of existing trees on the site, through a tree inventory or tree survey, shall be submitted with a landscaping plan (see Sec. 17-5.3(b)(4), Landscaping Plan Required) in accordance with the requirements in the Procedures Manual.

(4) Tree Protection Plan

A tree protection plan shall be submitted with a landscaping plan (see Sec. 17-5.3(b)(4), Landscaping Plan Required), in accordance with the requirements in the Procedures Manual. A tree protection plan shall clearly indicate what tree protection methods will be utilized.

(5) Tree Protection Zone Established

Unless otherwise established in this Section, the tree protection zone of a protected tree~~s~~ consists of the largest of the following:

- a. The area located within a distance of one foot for each one inch of tree diameter (measured at four and one-half feet above ground level) of the tree;
- b. The area located within a distance of one-half the tree's height of the tree; or
- c. The area within a distance of six feet of the tree.

(6) Prohibited Activity in Tree Protection Zone

- a. Development and any other activity involving the cutting, destruction, removal, relocation, transplantation, pruning, or limbing of a protected tree are prohibited in a tree protection zone, unless otherwise required by this Ordinance.
- b. Compaction of the soil within a tree protection zone over more than ten percent of the area of the tree protection zone is prohibited, except where necessary for pedestrian walkways. Where possible, mulch shall be used to mitigate soil compaction in areas of the tree protection zone where activity on the site may result in soil compaction.
- c. Utility and grading plans shall not modify or disturb the tree protection zone, provided, utilities may be located within a tree protection zone if:
 - 1. There is no alternative location for the utilities;
 - 2. Any tunneling or boring for utility lines occurs at a depth that avoids significant damage to the roots of the protected tree and is at least 25 inches below the ground;
 - 3. Any excavation is limited in extent to the minimum necessary and is accomplished using hand excavation methods that remove soil around tree roots without severing them; and
 - 4. All proposed activity within the tree protection zone is shown on an approved tree protection plan.

(7) Devices to Prevent Vehicular Damage

Curb stops, concrete curb, or other devices to prevent vehicular damage to required trees must be shown on the landscaping plan and installed prior to final inspection.

(8) Trenching Prior to Clearing

The removal of trees adjacent to tree protection zones can cause inadvertent damage to the protected trees. Prior to clearing activities, trenches with a minimum width of one-and-one-half inches and a minimum depth of 12 inches shall be cut along the limits of land disturbance, outside of any tree protection zones, so as to cut, rather than tear tree roots.

(9) Credit Toward Open Space Set-Aside and Landscaping Standards

- a. The area occupied by a tree protection zone may be credited toward the open space set-aside requirements in Sec. 17-5.5, Open Space.
- b. Protected trees meeting the minimum planting requirements in Sec. 17-5.3(c), Sec. 17-5.3(b)(4), Landscaping Plan Required, may be used to meet landscaping requirements, including site tree density standards, in accordance with Sec. 17-5.3(c)(2), Credit for Existing Vegetation.

(10) Maintenance Requirements

The land owner and/or tenant shall maintain protected trees and tree protection zones in accordance with applicable tree protection plans and shall be subject to the requirements in in Sec. 17-5.3(c)(11), Maintenance of Landscape Areas, that apply to landscaping improvements.

(11) Replacement/Mitigation of Protected Trees

a. Grand Tree Removal in Accordance with Tree Removal Permit

As a condition of approval of a Tree Removal Permit that includes removal of grand trees, an equal or greater number of density factor units (see Sec. 17-5.3(h), Site Tree Density) of replacement trees shall be planted on the site to replace the density factor units for grand trees removed. This planting shall consist of shade trees and shall be in addition to the minimum required site tree density (see Sec. 17-5.3(h), Site Tree Density).

b. Protected Tree Removal without Tree Removal Permit

Any protected trees removed without prior approval of a Tree Removal Permit shall be replaced by trees having a total number of density factor units (see Sec. 17-5.3(h), Site Tree Density) that is equal to or exceeds one and one-half times the density factor units for protected trees removed. This planting shall consist of shade trees having a minimum caliper of three-and-one-half inches each at the time of planting and shall be in addition to the minimum required site tree density (see Sec. 17-5.3(h), Site Tree Density).

c. Location of Replacement Trees

Where the planting of replacement trees is required by this subsection, the replacement trees shall be planted on the lot where the protected trees were located prior to their removal and, to the extent practical, within the area that constituted the tree protection zone (see Sec. 17-5.4(c)(5), Tree Protection Zone Established) of the removed trees or adjacent to right-of-way.

d. Establishment Period

Replacement trees required in accordance with this subsection shall be maintained through an establishment period of three years from the time of their planting. Financial surety for the duration of the establishment period shall be provided at the time of planting and shall be of the type and

amount required for installation of required landscaping by Sec. 17-5.3(c)(1)c. The financial surety shall be canceled and/or returned at the end of the establishment period if the required replacement trees have been planted and maintained, otherwise, the City may draw on the surety to ensure replacement trees are provided as required by this subsection.

(d) Retention of Existing Tree Canopy

- (1)** Any development or other activity subject to this Section shall retain a percentage of existing tree canopy on the site in accordance with Table 17-5.4(d)(1): Tree Canopy Cover Retention Standards. Trees retained on site shall be credited toward the site tree density requirements in Sec. 17-5.3(h), Site Tree Density, in accordance with Sec. 17-5.3(h)(5), Credit for Remaining Trees.

TABLE 17-5.4(D)(1): TREE CANOPY COVER RETENTION STANDARDS			
EXISTING TREE CANOPY COVER (AS A PERCENT OF THE SITE AREA) [1]	MINIMUM TREE CANOPY COVER RETENTION BY ZONING DISTRICT (AS A PERCENT OF EXISTING TREE CANOPY COVER) [1]		
	RESIDENTIAL DISTRICTS	ACTIVITY AND CORRIDOR DISTRICTS	INSTITUTIONAL AND CAMPUS DISTRICTS AND INDUSTRIAL DISTRICTS
80% to 100%	30%	15%	12%
60% to 79%	36%	18%	13%
40% to 59%	45%	22%	14%
20% to 39%	48%	24%	15%
19% or less	54%	26%	16%

NOTES:
 [1] Tree canopy cover consists of the horizontal projection onto the ground of the crowns of all healthy self-supporting trees having a trunk diameter of at least eight inches, measured at four and one-half feet above the ground.

- (2)** Priority areas for retention of existing tree canopy cover shall include the following, listed in priority order:
- a. Areas abutting tree protection zones of grand trees;
 - b. Riparian buffers, wetlands, or natural drainage courses;
 - c. Wildlife habitat and other sensitive natural areas;
 - d. Areas abutting greenways, trails, parks, or recreation areas; and
 - e. Transitional buffer yards and street protective yards.

(3) Existing tree canopy that is required to be retained in accordance with Subsections (1) and (2) above may be removed from a development site only if the landowner demonstrates development on the site cannot be located and designed to allow for a beneficial use, after exploration of applicable alternatives and submission and approval of an alternative landscaping plan (See Sec. 17-5.3(b)(5)a, Alternative Landscape Plan) and if the removal of the tree canopy and replacement with new trees complies with the following:

Article 5: Development Standards

Sec. 17-5.4. Tree Protection

(e) Removal of Grand Trees

- a. The trees removed are replaced on a one-to-one basis, based on the DBH of the removed trees;
- b. The replacement trees have a minimum size of three caliper inches;
- c. The replacement trees are clustered in the highest priority areas identified in Subsection (2) above, to the maximum extent practicable, as a means of reestablishing existing tree canopy; and
- e-d. The replacement trees are planted with sufficient room to accommodate future growth.

(e) Removal of Grand Trees

(1) Standards for Evaluating Proposed Removal of a Grand Tree

The following factors shall be considered in evaluating a request to remove a grand tree as part of a Tree Removal Permit application:

- a. The topography of the site;
- b. Any proposed grade changes;
- c. The location of utilities and driveways;
- d. The location of the grand tree;
- e. Proposed tree planting or transplanting to compensate for the grand tree removal;
- f. Public safety;
- g. The health, condition and longevity of the grand tree;
- h. The species of the grand tree; and
- i. Any historic, aesthetic or exceptional quality associated with the grand tree.

(2) Replacement/Mitigation of a Grand Tree

Replacement of removed grand trees shall be in accordance with Sec. 17-5.4(c)(11), Replacement/Mitigation of Protected Trees.

(f) Tree Protection During Construction

- (1)** Construction site activities, including but not limited to parking, equipment or material storage, bury pits, concrete washout, or burning of debris, are prohibited within tree protection zones.
- (2)** Trees located within a tree protection zone shall be protected from chemical contamination from liquids or other materials, including but not limited to paint, chemical solvents, gasoline, oil, diesel fuel, hydraulic fluid, concrete spoils, or rinse water from vehicle cleaning, including rinsing of concrete truck tanks and chutes.

- (3) Prior to machinery passing over any area within a tree protection zone during construction, the area shall be cushioned using plywood sheeting covered by a minimum four-inch-thick layer of wood mulch, or materials providing an equivalent minimum degree of cushioning, as shown on an approved landscaping plan.
- (4) Protective barriers shall be installed prior to, and maintained throughout, the land disturbance and construction process. Such barriers shall:
 - a. Be installed along the outer edge of and completely surrounding all tree protection zones;
 - b. Consist of:
 1. A minimum four-foot-high wooden post and rail fence with two-inch by four-inch posts and a double one-inch by four-inch rail;
 2. A minimum four-foot-high orange polyethylene laminar safety fencing mounted on wooden posts; or
 3. A similar fencing method approved by the Zoning Administrator.
 - c. Be posted with warning signs that:
 1. Are posted not more than 150 feet apart;
 2. Are clearly visible from all sides of the tree protection area;
 3. Have a minimum area of four square feet per sign; and
 4. Identify the fenced area as a tree protection zone and direct construction workers not to encroach into the area (e.g., "Tree Protection Zone: Do Not Enter").
- (5) Any violation of the tree protection standards in this subsection is a violation of this Ordinance and may result in remedies and penalties in accordance with Sec. 17-8.6, Remedies and Penalties. Any action in violation of this subsection that results in damage to a protected tree that jeopardizes its survival shall be deemed removal of a protected tree.

(g) Timber Harvesting

Timber harvesting (see Sec. 17-9.4, Definitions) shall comply with the standards in this subsection.

(1) General

a. Required Notification

The land owner shall notify the Zoning Administrator prior to beginning any timber harvesting.

b. Comply with Best Management Practices

All timber harvesting shall comply with the voluntary protective measures known as "Best Management Practices" that are published by the South

Carolina Forestry Commission, including the provision of an undisturbed buffer that:

1. Extends along the entire perimeter of the parcel, including road frontages, except for approved access crossings; and
2. Has a minimum width of 50 feet or the required setback for the zoning district in which the parcel is located, whichever is greater.

(2) Commercial Timber Operations

a. Burden of Proof of Commercial Timber Operation

1. The land owner shall have the burden of proving by clear and convincing evidence that an activity is a commercial timber operation.
2. The land owner shall submit a forestry plan that demonstrates that the intended forestry activities will contribute to the long term production of marketable forest products and ensure the continued existence of forests through regeneration. Conducting a timber sale as the sole timber management activity does not constitute a commercial timber operation.

Sec. 17-5.5 Open Space

(a) Purpose

Open space set-asides are intended for the use and enjoyment of a development's residents, employees, or users. Open space set-asides serve numerous purposes, including preserving natural resources, ensuring resident access to open areas and active recreation, reducing the heat island effect of developed areas, providing civic and meeting spaces, enhancing storm water management, and providing other public health benefits.

(b) Applicability

(1) General

Unless exempted in accordance with (2) below, all new development in the City shall comply with the standards in this Section.

(2) Exemptions

The following development is exempted from the standards in this Section:

- a. Single-family detached dwellings;
- b. Two-family dwellings;
- c. Utility Uses;
- d. Agricultural Uses; and

Article 2: Administration

Sec. 17-2.5. Application-Specific Review Procedures and Decision Standards

(m) Tree Removal Permit

f. Appeal

Optional (see Sec. 17-2.4(j), Appeal).

(4) Tree Removal Permit Decision Standards

a. A tree removal permit shall be approved only upon a finding that all of the following standards are met:

1. A tree protection zone is established consistent with the requirements of Sec. 17-5.4(c)(5), Tree Protection Zone Established;

2. All trees within the tree protection zone are protected and maintained during and after development in conformance with Sec. 17-5.4, Tree Protection;

3. Any grand tree removed is done so only upon a finding it is in conformance with Sec. 17-5.4(e), Removal of Grand Trees;

4. Any tree protected by Sec. 17-5.4(d)(3), Retention of Existing Tree Canopy, that is removed is done so only upon a finding it is in conformance with Sec. 17-5.4(d)(3).

5. Any other protected tree removed other than a grand tree or a tree that is protected by Sec. 17-5.4(d)(3), Retention of Existing Tree Canopy, is done so only upon a finding:

(i) The application of the standards in Sec. 17-5.4, Tree Protection, would result in unreasonable or impractical situations due to unusual site conditions, such as may be caused by streams, natural rock formations, topography, lot configuration, or utility easements; and

(ii) The approval of the Tree Removal Permit is consistent with the purposes of this Section.

b. If a tree removal permit is approved, conditions of approval shall include the planting of any replacement trees required by Sec. 17-5.4(e), Removal of Grand Trees, and Sec. 17-5.4(d)(3), Retention of Existing Tree Canopy. The Zoning Administrator may require as a condition of approval that an equal number of density factor units (see Sec. 17-5.3(h), Site Tree Density) of replacement trees be planted on the site to replace the density factor units for protected trees removed, in addition to the minimum required site tree density (see Sec. 17-5.3(h), Site Tree Density).

~~**a.** If a grand tree is proposed to be removed, the Zoning Administrator's review, decision, and conditions imposed with respect to the removal of the grand tree shall be in accordance with Sec. 17-5.4(e), Removal of Grand Trees. For the removal of any tree other than a grand tree, the Zoning Administrator may approve a Tree Removal Permit on finding the following:~~

~~**1.** The application of the standards in Sec. 17-5.4, Purpose, would result in unreasonable or impractical situations due to unusual site~~