Chapter 15 - LANDSCAPING AND TREE PROTECTION

ARTICLE I. - IN GENERAL

Sec. 15-1. - Short title.

This chapter may be cited as the "Landscape Ordinance." (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-2. - Compliance with other ordinances.

This chapter is supplemental to all other ordinances. In the case of conflicting requirements, however, the most restrictive shall apply. The provisions of this chapter are intended to be harmonious, compatible and supportive of those included in the zoning, stormwater management and applicable land development ordinances. The landscaping requirements of this chapter shall overlay rather than add to landscaping specified by related ordinances. Detailed landscaping requirements are provided in this chapter to further the purpose and intent of this and related ordinances.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-3. - Purpose and intent.

The purposes of this chapter are to:

- (1) Heighten the quality of life and contribute to an environment which serves to encourage economic and cultural development.
- (2) Encourage the creative integration of manmade and natural environments, combining in a balanced design such features as existing topography, grading, hydrology, structures, pedestrian and vehicular use areas, vegetation and views.
- (3) Screen automobiles and vehicular use areas, dumpsters, buffer conflicting land uses, and enhance the appearance of the public right-of-way.
- (4) Break up the visual continuity and mass of parking lots into more attractive subareas and provide channelization for internal traffic circulation.
- (5) Conserve energy by providing protective barriers from wind and other natural elements which would otherwise increase heating and cooling cost, provide shade and preserve large trees.
- (6) Provide for opaque screening and barriers as needed.
- (7) Encourage the proper protection and maintenance of new and existing healthy and quality trees and shrubs.
- (8) Encourage green/sustainable practices as a purpose to aspire towards for all applicable landscape projects.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-4. - Scope.

(a) The provisions of this chapter shall be applicable to all properties in the city except:

- (1) Those districts zoned agriculture and forestry (AF) and mining (M);
- (2) Properties of two (2) acres or less zoned R1, R2, R3, R4 and R7A; and
- (3) Those areas of the city designated "mature" by the department of planning and development and approved by the planning commission and the city beautiful commission. The city official may grant not more than a twenty-five (25) percent reduction of these provisions for developments within mature areas. A map of mature areas is available at the department of planning and development;
- (4) Wireless communications facilities which have separate landscape requirements under chapter 36 of this Code.
- (b) This chapter also applies to new and expanded developments and vehicular use areas which are located in a zone or use of higher density than two-family and when the existing landscaping is nonconforming. Additionally, it applies to the rehabilitation of an existing structure exceeding fifty (50) percent of its current cost and to the expansion of an existing structure exceeding ten (10) percent of its current floor area when the existing landscaping is nonconforming and the structure is in a zone or use of higher density than two-family. Based on this scope, this chapter shall apply:
 - (1) To all future vehicular use areas as they are developed.
 - (2) To any expansion or addition to existing vehicular use areas or changes in the land use intensity of vehicular use areas when such expansions or changes are considered by a public body.
- (c) The city may establish site guidelines which may be referred to in order to clarify these regulations.

Sec. 15-5. - Exemptions.

This article shall not apply to the maintenance of overhead or underground utility lines, nor does it apply to the development of subdivisions in the construction of streets, curbs, gutters, storm sewers and overhead or underground utility lines. It is expected that proper care and planning are used in the construction so that the maximum number of trees can be preserved. (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-6. - Definitions.

For the purpose of this chapter, certain words or terms applicable hereto are defined as hereinafter provided. Words and terms used in this chapter but not defined in this chapter shall have the meanings ascribed elsewhere in this Code. Words used in the present tense shall include the future, words used in the singular number shall include the plural number and words used in the plural shall include the singular. Rules of construction of terms are designated in chapter 1 of this Code.

Automatic irrigation means the watering of land or plant material by artificial means to foster plant growth by the use of underground pipes, valves, sprayheads, and/or drip lines. Automatic irrigation shall be in compliance with all state and city standards and must include an RPZ, a backflow preventer, and an automatic controller.

Buffer, hillside means a strip of land which separates large cuts or fills from abutting properties, public right-of-way or from other large cuts or fills on a site. Its purpose is to facilitate

effective drainage and erosion control and to encourage preservation of large trees of a site and reduce public view of cuts and fills.

Buffer, land use means a strip of land lying parallel and adjacent to a property line common to a dissimilar use of a more restrictive nature. This strip shall lie parallel to the property line at any point. The purpose of this buffer is to provide for visual and physical separation of uses of a dissimilar nature.

Buffer, street means a strip of land lying parallel and adjacent to a public street right-of-way. This strip shall lie parallel to the street right-of-way line at any point. The purpose of this buffer is to provide for a separation of traffic movements, both on and off the site, and provide for a visual and spatial separation of certain uses and/or activities from the public right-of-way.

Building landscape area means the on-site landscape area which separates parking from the building. The principle purpose of this area is to improve the appearance of the building from the street and vehicular use area.

Caliper means the diameter of a tree as measured twelve (12) inches above ground level for nursery stock trees and at breast height (four and one-half $(4\frac{1}{2})$ feet) for preserved trees.

Canopy means the outermost spreading branch layer of a tree.

City official means the employee of the city who is designated by the city manager as having responsibility for the administration and enforcement of this chapter.

Critical root zone means the area of undisturbed natural soil around a tree defined by a concentric circle with a radius equal to the distance from the trunk to the outermost portion of the dripline.

Damaged tree means a tree that has been damaged or diseased greater than fifty (50) percent. An inspection and approval by the city official is required prior to removal and replacement of a damaged tree.

Deciduous means the tendency of a plant to drop or lose its leaves during a particular season of the year, generally during the winter months.

Design professional means a landscape architect, an architect, an engineer, a horticulturalist or a certified nurseryman.

Diameter at breast height (DBH) means the diameter of a tree measured four and one-half (4½) feet above ground level.

Dripline means a vertical line extending from the canopy of a tree to the ground.

Driveway access means an area intended to provide entrance, exit or maneuvering for vehicular traffic from a public right-of-way to an off-street vehicular use.

Earth berm means a mounding of soil volume in order to create a screen or change in elevation between the use area and adjacent areas. The berm shall be constructed to minimize erosion and should normally be completely covered with ground cover or lawn grass.

Evergreen means the tendency of a plant to retain its leaves during all seasons of the year.

Ground cover means planting materials which reach a maximum height of not more than eighteen (18) inches in height and may be used in lieu of grass. Ground cover shall present a reasonably complete cover appearance within two (2) years of planting.

Hydroseeding means a planting process which utilizes a slurry of seed and mulch. The slurry is transported in a tank, either truck- or trailer-mounted, and sprayed over prepared

ground in a uniform layer; helicopters may be used in cases where larger areas must be covered. Hydroseeding is an alternative to the traditional process of broadcasting or sowing dry seed. Hydroseeding promotes quick germination and inhibits soil erosion.

Interior landscape area means any landscape area within the perimeter of the vehicular use area excluding the building landscape area. Its primary purpose is to break up the mass of the vehicular use area and to channelize traffic circulation on the site.

Irrigation means an adequate supply of water which can be made available to landscape plant materials.

Land alteration is defined in chapter 29 of this Code.

Landscape area means that area within the boundaries of a lot or tract of land which consists of planting materials including, but not limited to, trees, shrubs, ground covers, grass, flowers, and native plant materials; also including, but not limited to, inorganic features such as concrete planters, stone, brick, and aggregate forms, water, and other landscape elements. Inorganic elements shall not predominate over the use of organic plant material. Artificial plants are not considered landscape materials.

Landscape and tree protection plan means a document approved by the city containing the landscaping, tree protection, buffers and other site requirements of a particular development project. This document may be referred to as the "landscape plan."

Lawn grass means all species normally grown as permanent lawns in Pulaski County. Grass sod shall be required in all required planting beds and planting strips where bark or other approved ground cover is not proposed. Grass sod shall be reasonably free of weeds and noxious pests or disease.

Massing, shrubs, means three (3) or more shrubs planted within close proximity.

Massing, trees, means existing contiguous tree groupings with the associated undergrowth.

Nursery stock means all plants, trees, shrubs, vines, cuttings and grafts, scions and buds grown or kept for, or capable of, propagation, distribution or sale; provided, that vegetable, grass and other soft-wood herbaceous plants shall not be considered nursery stock except when grown by a producer of hardwood plants. At that point, it becomes nursery stock and subject to fees based on acreage and other requirements that govern the sale of nursery stock.

Off-street parking space means a space on private land accessible from a usable street or alley, not less than nine (9) feet wide and twenty (20) feet long, with the necessary maneuvering room within the private property.

Perimeter landscape strip means a landscaped area which separates the vehicular use area from adjoining property or public right-of-way. Its purpose is to enhance the visual appearance of the site and to provide screening of the vehicular use area and certain other uses and activities from the public right-of-way and abutting properties.

Preserved tree means a tree selected for preservation by the responsible party and approved by the city. A tree is considered preserved if a minimum of seventy-five (75) percent of the critical root zone is maintained at undisturbed natural grade and not more than twenty-five (25) percent of the canopy is removed.

Property line means the legal boundary between two (2) lots or parcels of land. Property line shall also include property lease lines which separate independent uses or activities except:

(1) When abutting common driveways; or

(2) When abutting areas designed for interior circulation.

Protective fencing means colored fencing of vinyl or wire construction not less than four (4) feet in height.

Remove or removal means the taking from the property or causing damage to trees with DBH of six (6) inches or greater. This term shall not include responsible pruning of trees.

Replacement trees means trees that are planted to replace trees that have been severely damaged or have died or have been otherwise removed. Fifty (50) percent of replacement trees shall be a minimum of three (3) inches in caliper at planting and the balance shall be four (4) inches in caliper or greater at planting.

Required tree means a tree other than a preserved tree which is included in a landscape plan.

Responsible party means the following:

- (1) The permit applicant who is the designated agent for development related activities for purposes of obtaining all required permits. The permit applicant relinquishes responsibility to the construction superintendent when all necessary permits have been issued by the city; or
- (2) The construction superintendent who is that person designated as the on-site agent for the project and responsible for all construction related activities until the issuance of a final certificate of occupancy; or
- (3) The lessee or any person or entity having control of the property subject to this chapter; or
- (4) The owner, which is the person, firm, corporation or other entity holding current legal title to the property. The responsibility of the owner shall commence upon the date of issuance of the certificate of occupancy.

Rip rap means a foundation or sustaining wall of stones placed together without order on an embankment slope to prevent erosion. The rip-rap shall be covered from both the top and bottom with vegetative cover.

Screening means the use of natural or manmade topography, berms, fences, walls, trees, shrubs, ground cover or any combination thereof which partially or completely blocks the view of one (1) area from another.

Screening, opaque means a manmade device on, or a natural feature of, a property which restricts access or visibility the purpose of which is to provide privacy, separation of use, and to reduce the impact of automobile lights on an adjacent use. Such screening shall be opaque in nature and prevent the passage of visible light frequencies.

Shrubs and hedges means self supporting, woody, evergreen species and shall have a minimum height of eighteen (18) inches at installation.

Soil means a medium in which plants will grow.

Stop work order means an order issued by the city official directing the parties involved in an activity to cease and desist all work on the devel opment or to cease only that portion which is not in compliance, except such remedial work necessary to bring the project into compliance.

Street is defined in chapter 31 of this Code.

Tree means any self-supporting woody perennial plant of two (2) inches or more DBH reaching an overall height at maturity of at least fifteen (15) feet. The canopy of the mature tree shall be ten (10) feet or more above ground level with the height of the canopy of the immature tree being proportional to the current size of the tree. Large woody shrubs shall not constitute a tree.

Tree, multitrunk means a tree having three (3) or more trunks.

Tree topping means cutting the main vertical leader of the tree or the severe cutting back of limbs to stubs larger than two (2) inches in diameter within the crown of the tree to such an extent as to remove the normal canopy and disfigure the tree.

Undisturbed means the condition of a land area which remains in a natural state including topography, trees and vegetation, except that enhancements such as additional landscaping, replacement of underbrush and other treatments may be utilized within the land area when approved by the city official.

Vehicular use area means that area of private development subject to vehicle traffic, including access ways, driveways, loading and service areas used for parking, maneuvering, or storage of vehicles, boats, or portable construction equipment, and all land which vehicles travel over as a function of the primary use.

Vine means an herbaceous or semiwood plant requiring support upon which to grow. Vines are generally used to soften the effect of inorganic elements such as fences, walls, and arbors, as well as to provide screening or buffering effects.

Wall or fence means a structure of wire, posts, boards, pickets or rails commonly used to border, secure or delineate a yard, field, lot or other land area. All fences intended as screening fences to fulfill a code or site plan requirement shall be opaque and placed with the decorative or face side toward the subject to be protected. (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-7. - Enforcement.

- (a) [Penalties.] Any person convicted of a violation of any of the provisions of this chapter shall be punished as provided in section 1-9 of this Code.
- (b) [Approved landscape plan required.] All property subject to the requirements of this chapter shall be developed in conformance with an approved landscape plan. The removal or improper preservation of each required tree shall be considered a separate violation. Each violation shall be considered a separate offense.
- (c) [Inspection, certification.] No final certificate of occupancy shall be issued for any structure within a development requiring a landscape plan until the city official has conducted an inspection and has certified that the project is in conformance with the landscape plan.
- (d) [Notice of violation.] When a violation of this chapter is determined to exist the city official shall issue a written notice of the violation to the responsible party. The notice shall specify those sections of this chapter which are determined to be violated and shall include the time and conditions under which the violation(s) shall be corrected. If the responsible party has been issued other notices within the preceding twelve-month period the notice may require the violation(s) to be corrected within twenty-four (24) hours. If the city official determines that the current season of the year is not conducive to sustaining life for trees, the time for compliance with these provisions may be extended for not more than one hundred twenty (120) days.

- (e) [Stop work orders, citations.] If the responsible party refuses to comply with the written notice of violation the city official may issue a stop work order and citation and revoke or withhold the issuance of all permits including the building permit and certificate of occupancy. Additionally, when the city official determines that an emergency exists an order to immediately cease and desist may be issued.
- (f) [Appeals.] The responsible party shall have a maximum of thirty (30) days to appeal the issuance of the stop work order to the city beautiful commission. However, the appeal of a stop work order shall not stay the prosecution by the city of a violation in court.
- (g) Conflicts. Where provisions of this chapter conflict with any other ordinance, regulation, or resolution of the city, the most stringent provision shall be enforced. The provisions of this chapter are considered minimum requirements.

Secs. 15-8—15-25. - Reserved.

ARTICLE II. - CITY BEAUTIFUL COMMISSION

Sec. 15-26. - Created.

There is created a commission to be known as the "city beautiful commission." (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-27. - Members.

- (a) The city beautiful commission shall be composed of eleven (11) members who shall be qualified electors of the city.
- (b) Members shall be appointed by the board of directors for terms of three (3) years each. Should any commission member fail to attend three (3) successive commission meetings, his term shall be automatically terminated and a new member appointed by the board of directors for the remainder of the unexpired terms.

(Ord. No. 20,181, § 1, 10-20-09; Ord. No. 20,395, § 1, 1-18-11)

Sec. 15-28. - Officers.

Officers of the city beautiful commission shall be elected by full membership of the commission and shall include a chairman, vice-chairman and treasurer. Terms of officers shall be for one (1) year, and officers may succeed themselves. (Ord. No. $20,181, \S 1, 10-20-09$)

Sec. 15-29. - Meetings.

Meetings of the city beautiful commission shall be held monthly. A majority of the total membership of the commission shall constitute a quorum for the transaction of business, and the concurring vote of a majority of all members of the commission shall represent the action of the commission. The commission shall adopt bylaws for the conduct of its meetings. (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-30. - Aims and goals.

The city beautiful commission is accountable directly to the board of directors and under the general supervision of the city manager. The commission shall be responsible for the establishment and maintenance of plans to ensure a high level of visual aesthetic quality. The goal of the city beautiful commission shall be to raise the level of community expectations for the quality of its environment.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-31. - Role, duties and responsibilities.

- (a) The role of the city beautiful commission is to be responsible for the establishment and maintenance of plans to control litter, weeds, abandoned vehicles and appliances, soil erosion and to otherwise ensure a high level of visual aesthetic quality, specifically including, but not limited to, the visual appearance of parks and open spaces, streams and other bodies of water, drainage ditches, structure, hillsides, riverfronts, utilities, signs, vehicle parking and sales lots, outdoor storage, trees and other natural vegetation, natural landscaping, streets and railroads.
- (b) The commission has the following duties, responsibilities and powers:
 - (1) To promote public interest in the general improvement of the appearance of the city.
 - (2) To prepare and transmit to the board of directors recommended policies implementing the plans prepared by or for the commission.
 - (3) To establish, subject to approval of the board of directors, regulations of aesthetic quality for public and private lands and improvements.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-32. - Fiscal procedure.

The city beautiful commission is subject to all fiscal procedures of the city. (Ord. No. 20,181, 1, 10-20-09)

Sec. 15-33. - Funding.

The planning and development department shall be responsible for relaying budget requests of the city beautiful commission to the city manager and board of directors. The commission shall have the authority to accept any and all donations, and the city shall establish and maintain separate accounts to receive such funds. (Ord. No. 20,181, § 1, 10-20-09)

(OIU. NO. 20,181, § 1, 10-20-09)

Sec. 15-34. - Committees.

The city beautiful commission may appoint any number of citizens to serve on committees as ex officio members.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-35. - Article cumulative.

This article shall not in any manner supersede the authority or duties of any other commission, board or agency duly established by ordinances or resolutions of the board of directors, and shall not in any manner be interpreted to interfere with such duties that have been established by such ordinances or resolutions of any such commission, board or agency. (Ord. No. 20,181, \S 1, 10-20-09)

Sec. 15-36. - Appeals.

- (a) Any person aggrieved by a decision of the city official in the administration of this chapter shall have the right of appeal to the city beautiful commission. The city beautiful commission shall hear requests for variances from the provisions of this chapter upon written application. Following submission of a detailed development proposal the commission may grant variances only when it is demonstrated by the applicant that a variance will be in keeping with the purpose and intent of the provisions of this chapter. The commission may impose reasonable conditions upon the granting of a variance to ensure compliance and to protect surrounding property and the public interest.
- (b) The commission shall also hear and decide appeals where it is alleged by the applicant there is error in any order, requirement, decision or determination made by a city official in the enforcement of this chapter.
- (c) All applications for a hearing before the city beautiful commission shall be accompanied by a fee in the amount of one hundred fifty dollars (\$150.00). The fee shall be paid to the city collector's office for which a receipt will be issued stating the purpose of the payment. The receipt shall be filed with the application as proof of payment of the fee.
- (d) The city beautiful commission shall have final authority except that the applicant or objectors of record aggrieved by a decision of the commission have a right to appeal to the city board of directors. The content of the appeal filing shall consist of the following information delivered to the city clerk:
 - (1) A cover letter addressed to the mayor and board of directors setting forth the request;
 - (2) A copy of the city beautiful commission application indicating the action taken and properly executed by the staff.

This filing shall occur within thirty (30) calendar days of the action by the city beautiful commission. Certified mail notice of appeal hearing shall be provided not less than ten (10) days prior to the date of the hearing, and the affidavit and other supporting evidence of notice shall be filed not less than five (5) days prior to the date of review. This notice shall be given to all parties of record whether for or against the request. The cost of this notice shall be borne by the applicant.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-37. - T.R.E.E fund.

(a) Intent. The board of directors of the city recognizes that from time to time variances from the tree requirements of this chapter will be granted by the city beautiful commission to the responsible party. In an effort to afford the citizens of the city the benefits they would have received from the trees required by this chapter but were lost through development of the site, the city enacts this section establishing a fund to be used for the replenishment of trees in the city entitled the "Tree Restoration for Environmental Enhancement" (T.R.E.E.) fund.

- (b) [Source of funds.] The T.R.E.E. fund shall consist of cash contributions required of the responsible party in-lieu of tree improvements under the following circumstances:
 - (1) The city official determines in a specific written finding that the required minimum number of trees to be planted pursuant to this chapter is not obtainable without undue hardship on the responsible party; or
 - (2) A variance from the requirements of this chapter has been granted by the city beautiful commission which reduces the number of trees that will be planted or preserved from the minimum number of trees required by this chapter.
- (c) The responsible party shall contribute to the city a cash payment equal to one hundred (100) percent of an estimate prepared by a registered professional landscape architect or certified arborist of the cost of the trees required by this chapter that will not be planted under the provisions of subsection (b) above. Such estimate shall also include the cost of installation of the trees.
- (d) The city official shall determine annually the required per tree in-lieu cash payment amount. Such amount shall not exceed two hundred dollars (\$200.00) per tree with annual CPI inflation adjustments commencing in 2001. Any in-lieu cash contribution required shall be limited to a maximum of ten (10) trees per site.
- (e) When in-lieu contributions are required to be made, a responsible party's landscape plan shall not be approved until:
 - (1) The tree requirements pursuant to this section are waived or granted variance pursuant to subsection (b), above; and
 - (2) A copy of the receipt for the required cash contribution has been received by the city official.
- (f) The city finance department shall be responsible for receiving, recording, depositing, reporting and reimbursing in-lieu cash contributions as determined by the city official. A receipt evidencing cash contributions made shall be provided to both the responsible party and to the city official.
- (g) The finance department shall maintain a T.R.E.E account and shall maintain records of all in-lieu cash contributions. The finance department shall produce an annual report summarizing the tree improvement account and provide same to the city official and the city beautiful commission. This report shall include both the principal and the interest earned for the accounting period, and the annual tree plantings by section of the city.
- (h) In-lieu contribution funds shall be dedicated to planting and maintaining trees on public property and rights-of-way within the area of the site where the trees were removed as defined by section map. The Little Rock City Beautiful Commission, in conjunction with the city's urban forester, shall advise about tree selection, planting guidelines, and tree placement.

(Ord. No. 20,181, § 1, 10-20-09; Ord. No. 20,533, § 1, 2-7-12)

Secs. 15-38—15-50. - Reserved.

ARTICLE III. - TREE PROTECTION

Sec. 15-51. - Tree cutting permit.

- (a) Except for public utilities operating within the scope of a valid franchise agreement or otherwise authorized by law, it shall be unlawful to remove any tree located within the public rights-of-way or other city owned property without the appropriate permit. Such permit may be applied for in conjunction with the application for a building permit.
- (b) Except for public utilities operating within the scope of a valid franchise agreement or as otherwise authorized by law, no permit for the cutting down and removal of trees in the public rights-of-way or on city property shall be granted unless the city official finds that one (1) or more of the following conditions exist:
 - (1) The tree is less than three (3) inches in caliper;
 - (2) The tree is diseased or injured and is unlikely to survive;
 - (3) The tree is within the area of a proposed structure on the property or so close as to render it dangerous to the structure or unlikely to survive;
 - (4) It is necessary that the tree be removed to protect existing or proposed public facilities.
 - (5) The area is within a driveway designated on an approved site plan.
 - (6) The area is included within an approved grading plan.
- (c) Any tree removed from the areas described in this section shall be replaced with a tree meeting the specifications of article IV of this chapter within six (6) months of removal.
- (d) No tree growing near a sidewalk shall be removed solely because of interference with the sidewalk unless the city official finds that the sidewalk cannot reasonably be constructed without removal of the tree. It is the intent of this section that sidewalks be reconstructed around trees and that trees are not to be removed solely to facilitate construction of sidewalks.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-52. - Preservation, protection and planting.

- (a) [Compliance.] There is no requirement under this chapter to preserve trees other than within a land use buffer. However, the responsible party may select certain trees to be preserved elsewhere on the site to comply with the provisions of this chapter and to accomplish passive sustainable energy conservation.
- (b) [Protection.] Trees selected for preservation or planted shall have the area within the dripline fenced with protective fencing and protected from development activities in accordance with the design standards contained within this chapter. For each existing tree preserved and incorporated into the landscape design, the following credits shall be applied to the minimum tree requirements:

TREE CREDIT CHART

Preserved Tree DBH	Credits Toward

4—5 inches	2 required trees
6—12 inches	3 required trees
13—18 inches	4 required trees
19—24 inches	6 required trees
25—32 inches	8 required trees
32—48 inches	10 required trees
Above 48 inches	12 required trees

(c) Continuous maintenance. Once a landscape plan has been approved, a digital and hard copy of the approved plan shall be provided to the city and also kept on file with the owner/management company. The plan shall remain on file with the city, and the site shall be maintained in conformance with the landscape plan. Any landscaping materials or preserved or required trees that die within one year of planting shall be replaced one (1) for one (1) by the responsible party unless additional trees are required to be planted to meet the spacing requirements of this chapter in effect on the date of the most recent approved landscape plan.

After one (1) year of planting, any trees that die shall be replaced in accordance with the tree credits set forth in this section. Trees that are destroyed or removed by act or consent of the responsible party shall be replaced in accordance with the tree credits set forth in this section. Replacement shall occur as soon as reasonably possible in accordance with the approved landscape plan and good horticultural practices and in compliance with this chapter.

- (d) [Standards for compliance.] Plant material used for compliance with the provisions of this chapter shall conform to the "American Standards for Nursery Stock, I-73", grade no. 1, American Association of Nurserymen, Inc., or equivalent. This article specifically prohibits the use of artificial plants or trees in landscaping to satisfy the requirements of this chapter.
- (e) [Land use buffers.] Within land use buffers, a minimum of seventy (70) percent of the land area shall be undisturbed.
- (f) [Supervision.] Land alteration work shall be properly supervised in accordance with chapter 29.
- (g) Prohibited activities. It shall be unlawful to allow any of the following activities to occur in protected trees or groups of trees or any area designated "undisturbed" or "preserved" on the landscape plan:

- (1) Material storage. No storage of any kind is permitted within the critical root zone, including, but not limited to, construction materials, waste storage, and excess materials from excavation.
- (2) Equipment cleaning and liquid disposal. Equipment shall not be cleaned nor liquids, including, but not limited to, paint, oil, solvents, asphalt, concrete, and mortar, shall be deposited or allowed to flow within the limits of the critical root zone.
- (3) Tree attachments. No signs, wires, or other attachments shall be attached.
- (4) Vehicular traffic. No vehicular or construction equipment traffic or parking shall be permitted within the critical root zone other than on an existing street pavement except as provided for buffers in chapter 36.
- (5) Grade changes. No grade changes shall be permitted within the limits of the critical root zone unless adequate construction methods are approved by the city official.
- (6) Impervious paving. No paving with asphalt, concrete or other impervious materials in a manner which may reasonably be expected to kill a tree shall be placed within the limits of the critical root zone, except as provided for in chapter 36.
- (h) Tree protection measures. Tree protection measures shall be in place prior to the arrival of any heavy equipment on the site or the beginning of any construction including land alteration except as necessary to install tree protection. Such measures shall remain in place until commencement of final landscaping and shall include:
 - (1) Protective fencing located around the perimeter of the critical root zone, and
 - (2) Flagging with brightly colored vinyl tape wrapped around the main trunk at a height of four (4) feet or more such that the tape is clearly visible to workers on foot or operating equipment.

Sec. 15-53. - Tree pruning.

(a) Required pruning. The owners of all trees adjacent to public roadways shall be required to maintain a minimum clearance of fourteen (14) feet above the public street and eight (8) feet above sidewalks. Owners shall also prune and maintain trees so that they do not interfere with traffic signals or signs, street lighting, or roadway line of sight requirements. Owners shall remove all dead, diseased or dangerous trees, and broken or decayed limbs.

Pruning shall be done in accordance within accepted industry standards that maintain both the appearance and health of the tree. "Tree topping" is specifically prohibited by this section. Crape myrtles shall not be trimmed lower than six (6) feet in height above grade to be classified as a tree.

(b) Construction pruning. In a case where a low-hanging limb may be broken during construction, the limb may be cut. In no instance shall the pruning involve a portion of the trunk or more than ten (10) percent of the canopy.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-54. - Standards for preserved trees.

The city official may visit each site and review photographs of each site for which there is a plan in order to verify that the trees to be preserved pursuant to the plan are of sufficient size,

quantity and quality to warrant preservation. Trees that do not warrant preservation shall not qualify as preserved trees as determined by the city official. (Ord. No. 20,181, § 1, 10-20-09)

Secs. 15-55—15-80. - Reserved.

ARTICLE IV. - LANDSCAPING OF VEHICULAR USE AREAS AND PUBLIC RIGHTS-OF-WAY

DIVISION I. - GENERALLY

Sec. 15-81. - Permit requirements; landscape plan.

- (a) Landscape permit. A landscape permit shall be obtained from the city before constructing or expanding a vehicular use area and before expanding or rehabilitating a building if landscaping is required under this chapter.
- (b) Landscape plan. Before a landscape permit is issued, the applicant shall submit the required number of copies of a landscape plan to the city. When the vehicular use area is accessory to a building or structure, the landscape plan should be submitted concurrently with the building and site plans of the proposed structure. The landscape plan may be shown on the building site plan and need not be a separate drawing. However, development of two (2) acres or more requires the landscape plan be affixed with the seal of a registered landscape architect. Development of sites from one (1) to two (2) acres requires the landscape plan.
- (c) Information required. The landscape plan shall provide at a minimum the following information:
 - (1) Names, addresses and telephone numbers of all responsible parties;
 - (2) A separate document showing all dimensions, property lines and lease lines;
 - (3) North arrow, scale and date of preparation;
 - (4) The location, species and size of all existing trees six (6) inches or more DBH to be designated preserved trees and the outline of all tree masses and shrub masses to be preserved including corresponding critical root zones and areas being preserved. The tree credit chart for each preserved tree as described in section 15-52;
 - (5) Significant water flows, rock outcroppings, etc. occurring in nature;
 - (6) The location of all proposed plant materials and the common and botanical names, together with the quantity, spacing and size of all plant materials;
 - (7) Tree fencing and other methods of protection during construction;
 - (8) Extent of irrigation or water sources;
 - (9) Phasing lines if development is to be constructed in phases;
 - (10) Existing and proposed structures, mechanicals, parking spaces, driveways, sidewalks, dumpster locations and screening, wheel stops and curbing or other vehicular use controls;

- (11) Existing and proposed utility easements and whether the utilities will be above ground or below ground, fire hydrants, and storm sewers. (This would include those in the adjacent right-of-way);
- (12) The location of cuts or fills, drainage, wet or dry detention basins;
- (13) Planting specifications including soil reparation, staking and necessary measures to ensure plants thrive;
- (14) A graphic elevation illustration of proposed opaque screening;
- (15) Procedures and methods to be followed concerning slopes or cuts and associated trees within hillside benches;
- (16) Submittal of evidence of review and approval of requirements stipulated in chapter 29;
- (17) Description of existing soil types, vegetation and other landscape considerations;
- (18) An overlay identifying the outline of existing tree masses and the predominate tree species, the average DBH and condition of the trees in each mass that are to be preserved;
- (19) Identification of trees, vegetation and soils that are to be protected or removed;
- (20) All buffer areas;

(21) A statement indicating timetable for commencing and completing work.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-82. - Surety for deferred improvements.

- (a) Upon request of the responsible party the city official may issue a temporary certificate of occupancy prior to completion of the landscape plan. In such case a final certificate of occupancy shall not be issued until the city official certifies completion of the requirements of the landscape plan.
- (b) When the city official determines that the current season of the year is not conducive to sustaining life or [of] trees and plants required hereunder, compliance with these provisions may be deferred for not more than six (6) months. Either cash, surety bond or letter of credit in favor of the city (collectively referred to as "surety") in an amount equal to the estimated cost of the deferred improvements shall be provided to the city by the responsible party. The responsible party may choose the form of the surety. A temporary certificate of occupancy may be issued conditioned upon such provision.
- (c) Estimates of the cost of deferred improvements shall be prepared by the project architect or engineer, or by a landscape architect or landscape contractor. Such estimate shall include an additional fee as determined by the city official not to exceed five hundred dollars (\$500.00) to cover the administrative expenses of the city in the event of forfeiture of the surety.
- (d) Failure to complete the deferred improvements within the one-year deferral shall effect an automatic forfeiture of the surety. A forfeiture shall not relieve the responsible party of payment of any excess expenses required to complete the approved landscape plan.
- (e) At the option of the city official the forfeited surety shall be used by the city or by the responsible party to complete the landscape plan.

- (f) The forfeiture may be deferred for not more than two (2) years if it is determined by the city official that such delay is excusable or justified. It is incumbent upon the responsible party to demonstrate sufficient reason for this deferral.
- (g) Only one (1) two-year extension shall be permitted by the city official. Extended deferrals may be granted by the city beautiful commission.

Sec. 15-83. - Maintenance.

- (a) All property subject to the requirements of this chapter shall be maintained by regular weeding, irrigating, fertilizing, mowing, and pruning of the plant materials, all in conformance with good horticultural practices.
- (b) Plant materials which are installed or preserved within private property and within the adjacent public right-of-way which exhibit evidence of pest infestation, disease or damage shall be appropriately treated and replaced as determined by the city official.
- (c) The neglect or refusal to maintain as described in this section, after ten (10) days' written notice by the city, shall be considered a violation.
- (d) Trees contained in an approval landscape plan that have been removed or which die shall be replaced in accordance with section 15-52.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-84. - Nursery stock tree caliper requirements.

- (a) Developments with fewer than one hundred fifty (150) parking spaces shall have:
 - (1) Single-trunk trees with a minimum caliper of two (2) inches measured twelve (12) inches above grade at planting; or
 - (2) Multitrunk trees with a minimum of three (3) canes with a minimum caliper of one (1) inch each measured twelve (12) inches above grade at planting.
- (b) Developments with one hundred fifty (150) or more parking spaces shall have:
 - (1) Single-trunk trees with a minimum caliper of three (3) inches measured twelve (12) inches above grade at planting to satisfy fifty (50) percent of the requirement. The remaining minimum caliper requirement may be reduced to two (2) inches measured twelve (12) inches above grade at planting.
 - (2) Multitrunk trees shall have three (3) trunks or canes with a minimum caliper of one and one-half (1½) inches measured twelve (12) inches above grade at planting to satisfy fifty (50) percent of the requirement. The remaining caliper requirement may have three (3) trunks or canes with a minimum caliper of one (1) inch measured twelve (12) inches above grade at planting.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-85. - Remodeling and expansion projects.

(a) All vehicular use areas which were in existence prior to the effective date of this article may continue as nonconforming until such time a building permit is issued to rehabilitate a structure on the property exceeding fifty (50) percent of the current replacement cost of the structure. At such time fifty (50) percent of the existing vehicular use area shall be brought into compliance with this chapter and shall continue to full compliance on a graduated scale based upon the percentage of rehabilitation cost.

- (b) Additionally, all vehicular use areas which were in existence prior to the effective date of this article may continue as nonconforming until such time as a building permit is granted to enlarge or reconstruct a structure on the property exceeding ten (10) percent of the existing gross floor area. At such time ten (10) percent of the existing vehicular use area shall be brought into compliance with this chapter and shall continue to full compliance on a graduated scale.
- (c) The city official may waive not more than twenty-five (25) percent of the requirements of this section when it is demonstrated by the responsible party that compliance with this section will create an undue hardship.

(Ord. No. 20,181, § 1, 10-20-09)

DIVISION 2. - PLANT MATERIAL SELECTION REQUIREMENTS

Sec. 15-86. - Generally.

Plant material used for compliance with the provisions of this article shall conform to the "American Standards for Nursery Stock, 1-73," grade no. 1, American Association of Nurserymen, Inc., or equivalent. Plant material which may be installed in vehicular use areas are defined and should be selected from applicable lists. It is the intent of this division to be flexible; thus the responsible party may select plants not listed in this division for landscaping vehicular use areas other than the public rights-of-way as long as the substitute plants can withstand harsh weather conditions, comply with all other provisions of this chapter, and are approved by the city official.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-87. - Tree species and hillside plantings.

- (a) Recommended list. The following list of trees represents those which have been found to be best suited to this area and require the least amount of maintenance. The following list of trees is recommended for planting in the required landscaped area. For any site, trees from two (2) different genuses are required. At least twenty-five (25) percent of the trees on the site outside of those required for screening purposes are to be of evergreen variety.
- BOTANICAL NAMECOMMON NAME(1)Deciduous—Large (average height 60' × 40' width)Celtis laevigataSugar HackberryFagus grandifoliaAmerican BeechFraxinus pennsyvanicaGreen Ash
- (b) [Street, parking lot.] Street and parking lot (may also be used as interior plantings):

Tulip Poplar Tree	
Cucumber Magnolia	
Sycamore	
Sawtooth Oak	
White Oak	
Southern Red Oak	
Swamp Chestnut Oak	
Water Oak	
Nuttall Oak	
Pin Oak	
Willow Oak	
Shumard Oak	
Deciduous—Medium Trees (average height 40' × 30' width)	
Swamp Red Maple	
Red Sunset Maple	
River Birch	
Ginkgo (male)	
Golden Rain Tree	
Pistachio	
Cypress	

	Ulmus parvifolia	Chinese Elm	
(3)	Trees to be planted under utility lines shall be selected from the following species:		
	Deciduous—Small Trees (average height 20' × 15' width)		
	Acer palmatum	Japanese Maple	
	Cercis canandensis	Redbud	
	Cercis chinensis	Chinese Redbud	
	Cornus florida	Flowering Dogwood	
	Crataegus marshallii	Parsley Hawthorn	
	Crataegus opaca	Mayhaw	
	Crataegus viridis	Green Hawthorn	
	Ilex decidua	Deciduous Holly	
	Magnolia soulangiana	Saucer Magnolia	
(4)	Evergreen—Large Trees (average height 60' × 30' width)		
	Magnolia grandiflora	Southern Magnolia	
	Pinus taeda	Loblolly Pine	
	X cupressocyparis leylandii	Leyland Cypress	
(5)	Evergreen—Medium Trees (average height 40' × 30' width)		
	llex opaca	American Holly	
	Juniperus virginiana	Eastern Red Cedar	
	Magnolia virginiana	Sweet Bay Magnolia	

	X cupressocyparis leylandii	Leyland Cypress
(6)	Evergreen—Small Trees (average height 20' × 15' width)	
	Camellia japonica	Camellia
	Camellia sasanqua	Sasanqua Camellia
	llex attenuata "Fosteri"	Foster's Holly
	Ilex cornuta "Burfordii"	Burford Chinese Holly
	Ilex vomitoria	Yaupon Holly
	Juniperus virginiana "Canaertii"	Canaert Red Cedar
	Juniperus virginiana "Glauca"	Silver Red Cedar

(c) Trees for terraces on hillside cuts.

	BOTANICAL NAME	COMMON NAME	
(1)	Large (average height 60' × 40' width)		
	Celtis laevigata	Sugar Hackberry	
	Pinus taeda	Loblolly Pine	
	X cupressocyparis leylandii	Leyland Cypress	
(2)	Medium (average height 40' ×	Medium (average height 40' × 30' width)	
	Koelreuteria paniculata	Golden Rain Tree	

(d) Shrubs for terraces on hillside cuts.

BOTANICAL NAME	COMMON NAME
Baccharis halimifolia	Groundsel Bush
Elaeagnus pungens	Elaeagnus
Forsythia intermedia	Forsythia
Ilex cornuta "Burfordii Nana"	Dwarf Buford Holly
Lagerstroemia indica	Crape Myrtle
Myrica cerifera	Southern Wax Myrtle
Nandina domestica	Nandina

(e) Ground covers for terraces on hillside cuts.

	BOTANICAL NAME	COMMON NAME
(1)	Vines	
	Gelsemium sempervirens	Carolina Yellow Jessamine
	Lonicera japonica	Wild Honeysuckle
(2)	Hydroseed Mix	
	Cynodon dactylon	Bermuda Grass
	Eragrostis curvula	Weeping Love Grass
	Festuca arundinancea	Kentucky 31 Fescue

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-88. - Trees and shrubs in public rights-of-way.

All tree and shrub species listed in this division may be used in the public right-of-way. (Ord. No. $20,181, \S 1, 10-20-09$)

Sec. 15-89. - Shrub species.

(a) Recommended list. The following list of shrubs are those which have been found to be best suited to this area and require the least amount of maintenance. This list includes those shrubs which may be planted in the required landscaping area. For any site, shrubs from two (2) different genuses are required. At least twenty-five (25) percent of the shrubs on the site outside of those required for screening purposes are to be of evergreen variety.

BOTANICAL NAME	COMMON NAME
Evergreen—Shr	ubs
Ilex cornuta "Burfordii"	Burford Chinese Holly
Ilex cornuta "Rotunda"	Dwarf Rotunda Holly
Ilex crenata "Compacta"	Dwarf Japanese Holly
Ilex vomitoria "Nana"	Dwarf Yaupon
Jasminum mesnyi	Primrose Jasmine
Nandina domestica	Nandina
Ternstroemia gymnanthera	Cleyera

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-90. - Grasses.

The following grasses are commonly installed adjacent to vehicular use areas and may be used to satisfy the requirements of this chapter:

Mayer Z-52 Zoysia;

Emerald Zoysia;

Bermuda grass;

Bermuda grass hybrids;

Centipede;

St. Augustine.

Sec. 15-91. - Ground cover; recommended list.

The following list of ground covers are those which have been found to be best suited to this area and require the least amount of maintenance. This list includes other species of ground cover which may be planted in the required landscaped area.

BOTANICAL NAME	COMMON NAME
Euonymus fortunei "Radicans"	Spreading Euonymus
Gelsemium sempervirens	Carolina Jessamine (Hillside)
Hedera helix	English Ivy
Juniperus species	Junipers
Liriope muscari	Liriope
Lonicera sempervirens	Honeysuckle (Hillside)
Nandina domestica "Harbour Dwarf"	Harbour Dwarf Nandina
Ophiopogon japonicus	Mondo Grass
Vinca minor	Periwinkle
Trachelospermum asiaticum	Asian Jasmine

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-92. - Earth berms.

Earth berms shall be protected from erosion with suitable plant material, ground cover or grass. Earth berms shall not be installed in designated preserved tree zones or designated undisturbed areas within the site. (Ord. No. $20,181, \S 1, 10-20-09$)

(010.110.20,181, § 1, 10-20-03)

Sec. 15-93. - Height of tree trunks.

Tree trunk limbs at maturity shall be a minimum of eight (8) feet above ground. (Ord. No. 20,181, 1, 10-20-09)

Sec. 15-94. - General site development.

Landscaping treatment should be fully integrated into the overall site development, first taking into account requirements for grading, drainage, stormwater detention, buffers, utilities, buildings and retention of existing trees. (Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-95. - Screening requirements.

The grading and landscaping of a site shall be accomplished in such a way as to visually screen the vehicular use area and certain other activities external to buildings on the site from the street and adjacent more restrictive land uses subject to vehicle sight distance requirements of chapter 30. The use of berms is encouraged in all landscape plans. Existing and planted vegetation, berms, fences, walls and other landscaping devices may be used to achieve the required screening in accordance with the following minimum standards which may be exceeded at the option of the responsible party:

- (1) Abutting properties. Where development which requires screening abuts land use of a more restrictive nature at least eighty (80) percent of the view of the vehicular use area and parked vehicles shall be screened so as to not be visible when viewed from the adjacent property. A wooden fence may satisfy sixty-five (65) percent of the requirement and evergreen trees may be used to satisfy the balance.
- (2) Special screening. Dumpsters, loading docks, heating and air conditioning units, external storage of materials, communications equipment and similar outside activities and appurtenances shall be screened from abutting properties and streets. Special screening of dumpsters within industrial sites is not required. The screen shall exceed the height of the dumpster or trash containment areas by at least two (2) feet not to exceed eight (8) feet total height.
- (3) Plant growth. In determining the extent of screening to be provided, consideration shall be given to normal growth characteristics associated with each type of plant material used. Screening standards shall be satisfied based on the following plant conditions:
 (1) the size of each plant at installation; (2) the size of each plant three (3) years after the landscape plan is completed; and (3) the size of each plant at maturity.
- (4) Species and spacing requirements. Screening standards are intended to apply during all seasons of the year. A minimum of fifty (50) percent of the trees and a minimum of seventy-five (75) percent of the shrubs to be used for screening purposes shall be evergreen varieties. Maximum spacings of fifteen (15) feet for trees and three (3) feet for shrubs should normally be utilized in order to provide continuous full screening of the view.
- (5) Security and esthetic concerns. Breaks may be incorporated in the screen for esthetic or security reasons as determined by the city official.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-96. - Perimeter planting strips.

(a) A perimeter planting strip is required along any side of a vehicular use area that abuts adjoining property or the right-of-way of any street, highway or freeway. This strip shall be

at least nine (9) feet wide. The perimeter planting strip adjacent to freeways or expressways shall be at least thirty (30) feet wide except within mature areas.

- (b) Trees shall be planted with an average linear spacing of not less than thirty (30) feet within the required landscape or buffer area. Three (3) shrubs or vines for every thirty (30) linear feet shall be planted in the perimeter planting strip. Massing is permitted as long as trees are spaced not more than one hundred (100) linear feet apart including width of driveway.
- (c) Where a fence or wall is utilized in a perimeter planting strip adjacent to a street, three (3) shrubs or vines shall be planted each thirty (30) linear feet along both sides of the fence or wall.
- (d) Where a fence or wall is utilized in a perimeter planting strip, the fence or wall shall be constructed with the face toward the adjacent property with any supporting structural members screened from view of the adjoining property.
- (e) Where the perimeter strip is part of a wide buffer area which is to be maintained in a natural state with dense undergrowth, up to one hundred (100) percent of the required shrubs may be waived.

(Ord. No. 20,181, § 1, 10-20-09; Ord. No. 20,533, § 2, 2-7-12)

Sec. 15-97. - Interior landscape areas.

- (a) Interior landscape areas shall comprise at least eight (8) percent of any vehicular use area containing twelve (12) or more parking spaces.
- (b) In order to apply toward the required eight (8) percent landscape area, the minimum size of an interior landscape area shall be one hundred fifty (150) square feet for developments with one hundred fifty (150) or fewer parking spaces. For developments with more than one hundred fifty (150) parking spaces the minimum size of an interior landscape area shall be three hundred (300) square feet.
- (c) Trees shall be included in the interior landscape areas at the rate of one (1) tree for every twelve (12) parking spaces.
- (d) Flexibility is permitted with placement of interior landscape islands, however, interior landscaping should be generally distributed throughout the vehicular use areas.
- (e) Interior planting island width shall be not less than seven and one-half (7½) feet in order to receive credit under this section.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-98. - Building landscape areas.

- (a) Landscape areas may be installed in the area immediately adjacent to the building or elsewhere on the site at the discretion of the responsible party. However, landscape areas shall be provided between the vehicular use area used for public parking and the general vicinity of the building, excluding truck loading or service areas not open to public parking. These areas shall be equal to an equivalent planter strip three (3) feet wide along the vehicular use area.
- (b) One (1) tree and four (4) shrubs shall be planted in the building landscape areas for each forty (40) linear feet of vehicular use area abutting the building.

- (c) For buildings greater than forty (40) feet in height at least one-third (1/3) of the trees to be placed in the building landscape area shall be of a species with a mature height greater than thirty (30) feet.
- (d) The size and location of planter areas and the placement of trees and shrubs within these planter areas should be freely adapted to meet local site conditions.

Sec. 15-99. - Exceptions.

Industrial sites shall meet the landscape requirements with the following exceptions:

- (1) Industrial yards and compounds used for storing materials, manufactured products, equipment, truck loading and unloading are excluded from interior landscape requirements.
- (2) Industrial sites adjacent to other industrial sites are not required to provide perimeter planting strips outside of the front yard setback.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-100. - Protection of landscaping.

- (a) Raised concrete curbing or other approved devices shall be placed around the base of each landscaped area to protect plantings from automobile and pedestrian traffic. Such curbing should be offset two (2) feet from planting areas abutting parked vehicles in order to protect plantings from vehicle front end overhang and vehicle doors opening into planter areas.
- (b) The soil within the landscape areas shall be properly prepared prior to plant installation in accordance with acceptable horticultural practices.
- (c) Massing of shrubs is permitted only in mulch beds and not in grass or turf areas.
- (d) An irrigation system shall be required for developments of one (1) acre or larger. Developments of less than one (1) acre shall have a water source within seventy-five (75) feet of the plants to be irrigated.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-101. - Use of live plant material.

At least fifty (50) percent of landscape areas shall be covered by live plant material at the time of plant maturity.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-102. - Treatment of land use buffers.

- (a) Requirements for landscaping in land use buffers shall be the same as perimeter landscaping. Buffer width shall be determined by the zoning ordinance.
- (b) Natural vegetation and undergrowth may be approved by the city official to satisfy landscaping requirements. Each site shall be evaluated on an individual basis.
- (c) A minimum of seventy (70) percent of the land use buffer shall be undisturbed. The right-ofway of any utility easement shall not be used in computing the depth or area of a land use

buffer in developments abutting property used or zoned for single-family or two-family use under R-1, R-2, R-3, R-4, PRD and PDR.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-103. - Treatment of hillside cuts and slopes.

- (a) Hillside cuts shall be reviewed on an individual basis for ground cover requirements and for conformance with chapter 29.
- (b) Existing trees and ground covers shall be protected when feasible and vegetation shall be reestablished within six (6) months of project completion to avoid erosion and siltation.
- (c) Vines may be used as ground cover around exposed large rock formations.
- (d) The following procedures shall be followed according to finished grade of slope:
 - (1) Zero (0) percent to thirty (30) percent grade requires vegetation with sod or ground cover.
 - (2) Thirty-one (31) percent to sixty (60) percent requires vegetation with netting and ground cover either hydroseeded or in containers to be hydroseeded with an erosion control blanket.
 - (3) Over sixty (60) percent requires native field stone or riprap with soil separating fabric. If riprap is used, twenty-five (25) percent of the riprap shall be covered throughout with (1) live plant material or (2) evergreen seedlings. Facing stone or block may be utilized as an option.
- (e) Trees shall be planted along terraces used in hillside cuts and fills. The average spacing between trees shall not be greater than twenty (20) feet. Dense evergreen seedlings may be used to satisfy tree planting requirements.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-104. - Protection of existing vegetation.

- (a) Care shall be exercised during construction to avoid damage to trees and the surrounding ground surface area especially within the critical root zone in order to protect the feeder root system of existing trees.
- (b) Prohibited construction practices include:
 - (1) Compaction of the root system;
 - (2) Scarring or defacing of tree bark;
 - (3) Disturbing surrounding soil by trenching;
 - (4) Modifying elevation of surrounding soil;
 - (5) Placing impervious surfaces such as asphalt or concrete over the root system or drastically modifying the existing drainage system.
- (c) Adequate drainage and aeration of the root system such as installation of tree wells shall be provided when modifying soil elevation around trees.
- (d) Construction practices may include barricading of root system areas and providing a track surface for heavy equipment circulation.

(e) When damage has occurred to the root system, the same percentage of tree canopy as the root system destroyed should be selectively pruned and trimmed back. Root stimulators, deep watering and fertilization should then be implemented to enhance the recovery process.

(Ord. No. 20,181, § 1, 10-20-09)

Sec. 15-105. - Flexibility in applying standards.

- (a) It is the intent of these provisions to allow reasonable and appropriate flexibility for adapting landscaping design standards described in this chapter to the specific conditions of an individual site.
- (b) Areas established for zoning buffers, hillside buffers, stormwater detention basins and utility easements may be used and counted as satisfying landscape area requirements stipulated by this chapter.
- (c) Up to twenty-five (25) percent of the perimeter planter area and associated trees and shrubs may be shifted from one area of the site to another for the purpose of improving visual aesthetics or for other appropriate environmental concerns. Street tree requirements are not included in this flexibility.
- (d) Up to two-thirds (2/3) of the building landscape area and associated trees and shrubs can be shifted to another area of the site for the purpose of improving visual aesthetics or for other appropriate environmental concerns.
- (e) Where a vehicular use area is devoted strictly to access or loading or commercial loading, up to two-thirds (2/3) of the landscape area, trees, and shrubs associated with the vehicular use area may be shifted to other areas on the site.
- (f) Landscape areas located within thirty (30) feet of the right-of-way line may be counted as part of the street side landscape planter strip rather than as interior planting.
- (g) Up to twenty-five (25) percent of the number of trees or shrubs may be reduced for any given landscape area by compensating at the equivalent of one (1) tree for every eight (8) shrubs except within street landscaping areas.

(Ord. No. 20,181, § 1, 10-20-09)