

ARTICLE 1400

LANDSCAPING, SCREENING AND BUFFERING

SEC. 1400.1 PURPOSE

The purpose of this article is to ensure a minimum of open space and green area as an integral part of new development and to protect the health and welfare of its citizens through the regulation of landscaping of new multi-family, commercial and industrial developments.

- A. Landscaping enhances the environmental and visual character of the community.
- B. Green space requirements preserve and stabilize the area's ecological balance by establishing a healthier environment.
- C. Green areas help to mitigate the negative effects of air and noise pollution by using plants as buffers.

SEC. 1400.2 OBJECTIVES

Landscaping should be an integral part of a development. This article is designed to promote high quality developments, protect property values and public investment in our community. Objectives of this ordinance include, but are not limited to, the following:

- A. To moderate the effects of sun, wind, and temperature changes.
- B. To filter pollutants from the air and release oxygen.
- C. To stabilize soil and prevent corrosion.
- D. To encourage preservation of desirable trees.

SEC. 1400.3 APPLICABILITY

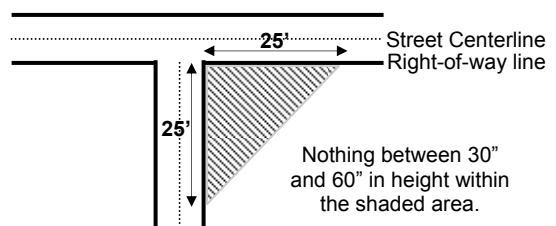
The requirements of this ordinance shall apply to:

- A. **New development.** All new public, private, and institutional developments.
- B. **Additions.** Additions over ten (10) percent of the gross floor area of the building or more than 2,500 square feet, whichever is more.

SEC. 1400.4 EXEMPTIONS

- A. **Residential.** Single family residential and duplex residential are exempt from these regulations with the exception of Sec. 1400.10 Residential Landscaping and Sec. 1400.17 Fence and Wall Requirements. (*Ord. No. 2010-71*)
- B. **Additions.** Additions to existing structures that are under ten (10) percent of the gross floor area of the building or 2,500 square feet, whichever is less, are exempt.
- C. **Previous approval.** Previously approved developments, which have been given a permit to begin building construction are exempt.
- D. **Downtown Districts.** Development and redevelopment in the DC, Downtown Core and DE, Downtown Edge shall be exempt from Sec. 1400.7 Landscape Street Frontage Buffer and Sec. 1400.9 Landscaped Perimeter, however, shall comply with the Landscaping and Streetscape Standards in Sec. 401.8-B Downtown Districts of the Zoning Code.

Sight Triangle



D.

SEC. 1400.5 GENERAL PROVISIONS

- A. **Sight distances.** Safe sight distances at intersections and points of access must be maintained. No landscaping shall constitute a hazard to traffic including, but not limited to landscaping located within the sight triangle of an intersection.
- B. **Wheel stops.** Except as provided below, all landscape areas at the front line of off-street parking spaces may be protected from

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encroachment or intrusion of vehicles through the use of wheel stops.

1. **Minimum height.** Wheel stops shall have a minimum height of six inches (6") above finished grade of the parking area.
2. **Anchoring.** Wheel stops shall be properly anchored and shall be continuously maintained in good condition by the property owner.
3. **Location.** Wheel stops shall not be placed in locations of anticipated pedestrian traffic.

C. Soil and climatic conditions. Trees and other vegetation shall be planted in soil and climatic conditions which are appropriate for the growth habits. Plants used in the landscape design shall to the greatest extent be:

1. Appropriate to the conditions in which they are to be planted;
2. Have non-invasive growth habits;
3. Encourage low maintenance, high-quality design; and
4. Be otherwise consistent with the intent of this chapter.

D. Replacement. Vegetation planted or preserved according to an approved plan shall remain alive for a minimum of three (3) years from date of certificate of occupancy. Vegetation planted or preserved that does not remain alive for three (3) years shall be replaced with equivalent vegetation. Preserved trees for which credit was awarded but which subsequently die, shall be replaced in accordance to the Tree Preservation Credits table in Sec. 1400.3 Tree Preservation Credits.

E. Irrigation. Required landscaping shall be irrigated by one of the following methods:

1. An underground sprinkling system;
2. Automatic drip system; or,
3. A hose attachment within 100 feet of all landscaped areas.

SEC. 1400.6 LANDSCAPE PLANS

The landscaping plan is required to address three requirements:

- (1) Street frontage buffer as required in Sec. 1400.7;

(2) Interior parking lot landscaping as required in Sec. 1400.8; and,

(3) Perimeter landscaping as required in Sec. 1400.9.

The following information is required on landscape plans and shall be completed by a licensed landscape architect or landscape professional in order for staff to review for compliance with this article.

A. Existing vegetation. Location, general type and quality of existing vegetation, including specimen trees.

B. Preservation. Existing vegetation to be saved.

C. Protection. Methods and details for protecting existing vegetation during construction and approved sediment control plan, if available.

D. Proposed plants. Locations and labels for all proposed plants.

E. Landscape details. Plant lists with the botanical and common names, quantity, spacing and size of all proposed landscape improvements such as earth berms, walls, fences, screens, sculptures, fountains, street furniture, lights, and courts or paved areas.

F. Installation details. Planting and installation details as necessary to ensure conformance with all required standards.

G. Sight triangle. The sight triangle, as described in Sec. 1400.5 (A) Sight Distances, shall be indicated on the plan with a dimensioned shaded area.

H. Irrigation. The plans shall indicate the type of irrigation to be used, in accordance with Sec. 1400.5 (E). If a hose bib is proposed, the location shall be shown on the plan.

I. Three-year guarantee. Guarantee from the developer that all plant materials will be warranted for a period of three (3) years from the time of installation. If any of the material should fail to survive during that period it would be replaced during the appropriate planting season.

SEC. 1400.7 LANDSCAPED STREET FRONTAGE BUFFER

street frontage. A minimum of 50% of shrubs required shall be evergreen.

The street frontage buffer is the planting area parallel to the public street right-of-way.

A. Purpose. The landscaped street frontage buffer serves two primary purposes:

1. When a parking lot is located adjacent to a public right-of-way, a strip of landscaping helps shield projecting headlights that may impair the vision of passing motorists or pedestrians therefore creating a safer environment.
2. It also provides an aesthetically pleasing transition from the public right-of-way to private property.

B. Prohibitions. Parking, merchandise display and off-street loading are prohibited in the landscaped street frontage buffer.

C. Buffer Options. The site plan for any development, other than that exempt in Sec. 1400.4 Exemptions, shall show a landscaped street frontage buffer along all public right-of-ways. The applicant may choose one or a combination of five (5) options illustrated below to meet the particular site constraints of the development.

1. 10' Buffer Strip:

- (a) *Minimum width:* Ten (10) feet.
- (b) *Minimum number of trees required:* One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- (c) *Minimum number of shrubs:* Ten (10) shrubs per twenty-five (25) linear feet of street frontage. A minimum of 50% of shrubs required shall be evergreen.

2. Earth Berm:

- (a) *Minimum height.* Two and one-half (2 1/2) feet higher than the finished elevation of the parking lot.
- (b) *Minimum number of trees:* One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- (c) *Minimum number of shrubs:* Three (3) shrubs per twenty-five (25) linear feet of

3. 6' Buffer Strip:

- (a) *Minimum width.* Six (6) foot landscaped street buffer with three (3) feet of fall.
- (b) *Minimum number of trees.* One (1) shade tree and one (1) ornamental tree per twenty-five (25) linear feet of street frontage.
- (c) *Minimum number of shrubs.* Three (3) shrubs per twenty-five (25) linear feet of street frontage. A minimum of 50% of shrubs required shall be evergreen.

4. Wall.

- (a) *Minimum height.* Three (3) foot high wall made of brick, stone, or finished concrete.
- (b) *Minimum buffer area.* Four (4) foot buffer area along street right-of-way.
- (c) *Minimum number of trees:* One (1) shade tree per twenty-five (25) linear feet along street frontage.

5. 25' Buffer Strip: A landscaped buffer area with existing woodlands maintained in twenty-five (25) foot strips along the street frontage.

D. Groundcover.

1. **Living material.** Living materials, such as grass, shall make up a minimum of 80% of the groundcover for the landscaped street frontage buffer. 100% of living materials is strongly encouraged.
2. **Mulch.** Wood mulch may make up 20% of the groundcover for the landscaped street frontage buffer. Weed barrier shall be required. Gravel, concrete, brick pavers or other pavement is not appropriate groundcover for the street frontage buffer.

E. Massing. Massing is multiple rows of alternating plant materials with a combination of trees and shrubs. Massing is strongly encouraged. The maximum distance between massing is 25 feet. Massing should be

integrated into a bed or in a curb to ease maintenance.

150,000 sq. ft or larger	15%
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F. Street Tree Corridor Plan. For developments along a street designated on the Street Tree Corridor Plan, developers are encouraged to use the trees recommended in the plan. If a developer follows the Street Tree Corridor Plan, the Planning Commission may approve up to a 10 percent reduction in the number of shrubs required.

SEC. 1400.8 INTERIOR PARKING LOT LANDSCAPING

Interior parking lot landscaping is the planting area within and adjacent to parking areas.

A. Purpose. The interior parking lot landscaping requirement serves several purposes:

1. It provides necessary green space to give relief to expansive parking areas with nothing but asphalt.
2. Trees provide shade and serve as windbreaks.
3. Planting islands assist with vehicular circulation.

B. Applicability. Interior parking lot landscaping requirements apply to all parking lots that are required in the Zoning Code, Article 501 Parking and Loading to have 14 or more parking spaces.

C. Requirement. The site plan shall show interior parking lot landscaping. A sliding scale to determine the amount of landscaping area per lot has been included in order for the applicant to include these landscaping requirements as an integral part of the site development.

1. **Standard.** Percent (%) of the total area of parking lot dedicated to interior planting shall be as follows:

Interior Landscaping Requirements	
Total Area of Parking Lot	Minimum % Dedicated to Interior Landscaping
3,000-49,999 sq. ft.	8%
50,000-149,000 sq. ft.	10%

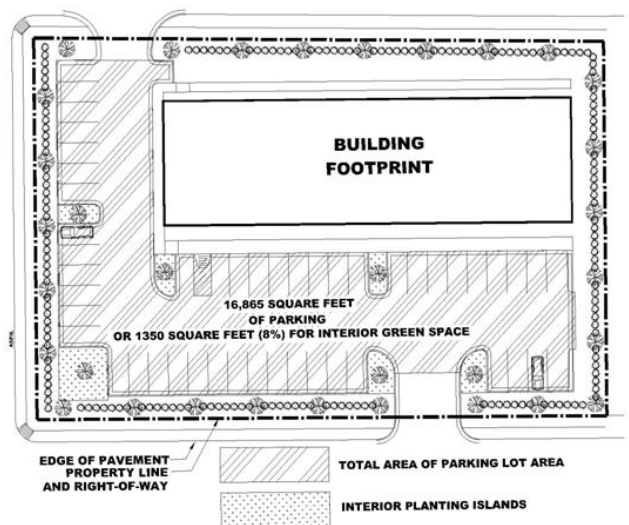
2. Calculating Lot Area. Diagram A, Calculating Lot Area, illustrates what areas of the lot are considered when determining the total area of the parking lot. The total amount of landscape area for the interior lot is determined by figuring 8%, 10%, or 15% of the total parking lot area as explained below.

(a) *Included in calculation.* The square footage of all areas within the parking lot's perimeter are counted, including the planting islands required, curbed areas, corner lots, parking spaces and interior driveways and aisles.

(b) *Excluded from calculation.* Driveways and aisles with no parking spaces located on either side, buildings, street frontage buffer, and perimeter strips are not counted. Landscaped areas outside the parking lot may not be used to meet the interior planting requirement

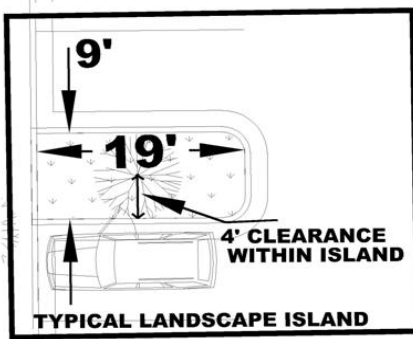
3. Planting islands. Planting islands are required as a part of the landscape area percentage in the interior parking lot area.

(a) *Dimensions.* The dimensions of a parking island must be a minimum of nine (9) feet by nineteen (19) feet, the same as a parking space, and must be curbed to protect landscaping and trees.



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- (b) *Minimum number required.* No more than 15 parking spaces shall be permitted in a row without interruption by a parking island. If 13 or more spaces remain, a parking island is required. In parking lots over 150,000 square feet, the number of parking islands can be reduced but the total square footage of landscape area must remain according to the requirements.



4. **Trees.** Trees are required to be planted in the interior parking area to offer shade from the heat and sun.
- (a) *Minimum number required.* One (1) shade tree per planting island is required for the interior parking area.
- (b) *Location.* These trees shall be planted within the island.
- (c) *Clearance.* Four-foot (4') clearance shall be left for car doors to open from adjacent parking spaces.
5. **Groundcover.** All interior parking lot landscaped areas not dedicated to preservation of existing vegetation shall be landscaped with groundcover. Weed barrier shall be required.
- (a) *Living material.* Living materials, such as grass, shall make up a minimum of 60% of the groundcover for the interior parking lot landscaping. 100% of living materials is strongly encouraged.
- C. *Non-living material.* Non-living materials, such as wood mulch or decorative rock ($\frac{3}{4}$ " or smaller gravel in a natural color tone), may make up 40% of the groundcover for the interior parking lot landscaping. Weed barrier shall be required.

- (a) Brick pavers or other pavement is not appropriate non-living groundcover.

D. **Vehicular display areas.** Applicants shall select one of the following options for vehicular display areas:

1. **Compliance with standard.** Comply with the interior parking lot landscaping requirements described in this section and the required street frontage requirements in Sec. 1400.7; or,
2. **Increase street frontage buffer.** In lieu of the interior parking lot landscaping requirements, increase the required street frontage buffer to 15' wide and install the number of trees required for the interior landscape requirements within the street frontage buffer.

SEC. 1400.9 LANDSCAPED PERIMETER

Perimeter landscaping is a peripheral planting strip along rear and side lot lines that separates uses.

A. **Purpose.** Perimeter landscaping:

1. Defines parking areas;
2. Prevents two adjacent lots from becoming one large expanse of pavement;
3. Provides vegetation in densely developed areas; and,
4. Enhances the appearance of individual properties.

B. **Requirement.** The site plan for any development, other than that exempt in Sec. 1400.4 Exemptions, shall show perimeter landscaping, in addition to the landscaped street frontage buffer required in Subsection 1400.6(A)..

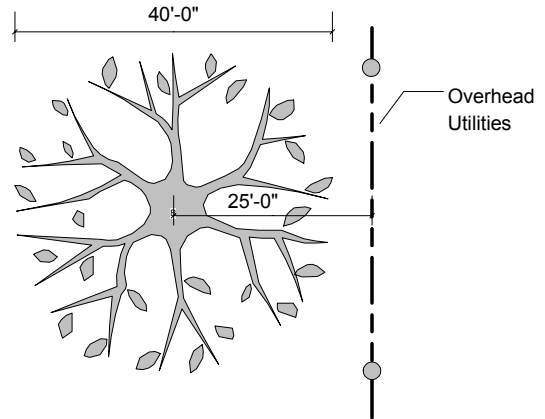
1. **Width.** A five (5) foot landscaped strip is required along the side and rear lot lines of a development.
2. **Minimum number of trees.** One (1) tree per fifty (50) linear feet.
3. **Groundcover.** All perimeter landscaped areas not dedicated to preservation of existing vegetation shall be landscaped with groundcover.

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- (a) *Living material.* Living materials, such as grass, shall make up a minimum of 80% of the groundcover for the landscaped perimeter. 100% of living materials is strongly encouraged.
- (b) *Mulch.* Wood mulch may make up 20% of the groundcover for the landscaped perimeter. Gravel, concrete, brick pavers or other pavement is not appropriate non-living groundcover. Weed barrier shall be required.

shall be planted a minimum distance from overhead utilities that is half the mature width of the subject tree species plus five feet.

Example: Pin Oak has a mature width of 40 ft: $(40 \text{ ft} \div 2) + 5 \text{ ft} = 25 \text{ ft}$. Pin Oak should be planted a minimum of 25 ft from overhead utilities



- C. Vehicular access.** The perimeter landscaping requirement does not preclude the need for vehicular access to be provided between lots.
- D. Adjacent properties.** The five (5) foot perimeter strip is required for each development regardless if one is already in place from an adjacent, developed lot.
- E. Pavement.** No pavement may extend within five (5) feet of the property line on any lot unless it is included with an ingress/egress location.

- (b). Suitable Trees Under Overhead Utilities.** In cases where it is not possible to meet the landscape code without planting trees under overhead utilities or meeting the spacing requirements in Section A.2(a) Shade/ Large Trees above, the following tree species shall be used:

SEC. 1400.10 RESIDENTIAL LANDSCAPING

A minimum of one shade tree or two ornamental trees, as specified by 1400.11 B. Minimum size, shall be planted in the front yard of each new residential lot in the RE, R1 and R2 residential districts. Trees existing in the front will be credited. The tree or trees shall be installed at the time of Certificate of Occupancy.

SEC. 1400.11 LANDSCAPE INSTALLATION REQUIREMENTS

(Amend: Ord. No. 2010-6, 01-12-10)

- A. Location.**
 - 1. **Drainage.** Trees shall not be placed where they interfere with site drainage.
 - 2. **Overhead utilities.** Trees shall not be placed where they require frequent pruning in order to avoid interference with overhead power lines. In such locations, small ornamental trees are encouraged. Every effort shall be made to avoid placing trees directly under overhead utilities.
- (a) Shade / Large Trees.** Tree species with a mature height greater than 30'

(b) Suitable Trees Under Overhead Utilities			
Common Name	Mature Height (in feet)	Mature Width (in feet)	Growth Rate
American Hornbeam, Ironwood	25	25	Slow
Amur Maple/Tatarian Maple	15	18	Medium / Fast
Chinese Fringetree	25	25	Medium / Fast
Chinese Pistache	30	30	Medium
Crabapple	12-25	15-25	Medium
Common Winterberry / Possumhaw	12	12	Medium
Crapemyrtle	15-30	8-18	Fast
Dwarf Southern Catalpa	18	22	Medium
Eastern Flowering Dogwood	20	20	Slow
Goldenraintree	30	35	Medium / Fast
Kousa Dogwood	15-25	25	Slow / Medium
Kwanzan Cherry Tree	15-25	15-20	Medium
Persian Parrotia	30	25	Medium
Prairiefire Crabapple Tree	20	20	Medium
Redbud Tree	25-30	15-25	Medium
Saucer Magnolia	20-30	25	Medium
Shantung Maple	15-30	25	Slow / Medium
Southern Magnolia	20	10	Medium
Star Magnolia	15	15	Slow / Medium
Sweetbay Magnolia	25	15	Medium
Thornless Cockspur Hawthorn	20	28	Medium
Thornless Osage - orange	25	30	Fast
Trident Maple	30	25	Medium
White Fringetree / Grancy Gray-beard	20	20	Medium
Yoshino Cherry	25	30	Medium / Fast

(c) Substitution of Shade/Large Trees.

Where shade/large trees are required by this article and placement under or near overhead utilities is necessary to meet the landscaping requirements, trees from the list in Section A.2(b) Suitable Trees Under Overhead Utilities may be used to substitute for a required shade/large tree at a ratio of 2 substituted trees for 1 required shade/large tree.

Example: 100 ft of linear street frontage

Requirement:

1 shade tree per 25 linear ft =
4 shade trees required

Substitution:

(2 utility trees for each shade tree):
2 x 4 = 8 trees from list in Section A.2(b) above.

- 3. Underground utilities.** Landscaping shall be installed at locations that avoid placement directly above water lines. Where possible, tree plantings shall be located a minimum of 5 feet from all underground utilities.
- 4. Fire hydrants.** Landscaping shall not be placed within three (3) feet of a fire hydrant.
- 5. Right of Way.** Trees may be planted in the public right-of-way when the street is classified as an arterial on the Master Street Plan and the necessary right-of-way is dedicated.

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B. Minimum size. Immediately upon planting, trees shall meet the minimum requirements:

Minimum Tree Size	
Type	Minimum size
Ornamental trees	1.5" caliper
Evergreen trees	6' in height
Shade	2.5" caliper
Shrubs	18" in height

All plant material shall meet the requirements established by the American Association of Nurserymen publication "American Standard for Nursery Stock" (ANSI Z60.1 latest edition.)

C. Species Mix. When more than ten (10) trees are to be planted to meet the requirements of this ordinance, a mix of species shall be provided. The number of species to be planted shall vary according to the overall number of trees required to be planted. The minimum number of species to be planted is listed in the table below. Species shall be planted in proportion to the required mix. This species mix shall not apply to areas of vegetation required to be preserved by law.

Required Species Mix	
Required Number of Trees	Minimum Number of Species
11-20	2
21-30	3
31-40	4
41+	5

4. Readily available from area nurseries.

B. Plant selection. When selecting new plantings for a particular site, a developer should first consider the type of plants that are thriving on or near that site. However, if an introduced species has proven highly effective for screening or shading in this area, it too may be a proper selection.

Recommended Shrubs	
EVERGREEN	
Creeping Juniper	Japanese Holly
Shore Juniper	Pfitzer Juniper
Foster Holly	Helleri Holly
Youpan Holly	Inkberry Holly
Abelia	Euonymus
Nandina	Viburnum Wintergreen
Barberry	Azalea
Mugo Pine	
DECIDUOUS	
Japanese Barberry	
Viburnum	Flowering Quince
Cotoneaster	Spirea
Azalea	Forsythia

SEC. 1400.12 RECOMMENDED TREES AND SHRUBS

A. Criteria. The following lists indicate plantings that meet the landscaping requirements of this article. The lists are by no means comprehensive and are intended merely to suggest the types of flora which would be appropriate for screening and shading purposes. Plants were selected for inclusion on these lists according to four principal criteria:

1. General suitability for the climate and soil conditions for this area.
2. Unconstrained maintenance.
3. Tolerance of city conditions.

Recommended Trees		
Common Name	Mature Height (in feet)	Growth Rate
SHADE		
Bald Cypress	50-70	Medium
Chinese Elm	30-40	Medium
Ginkgo	80-100	Slow
Green Ash	50-60	Fast
Hackberry	40-60	Medium/Fast
Japanese Zelcova	40-50	Medium/Fast
Pin Oak	60-75	Fast
Red Maple	40-60	Medium/Fast
Red Oak	60-75	Fast
Sugar Maple	60-75	Slow/Medium
Thornless Honey Locust	50-75	Medium
Tulip Poplar	60-150	Medium
White Ash	50-80	Medium
EVERGREEN		
Austrian Pine	40-60	Medium/Fast
American Holly	40-50	Slow/Medium
Loblolly Pine	60-90	Fast
Japanese Black Pine	50-70	Slow
Norway Spruce	40-60	Medium
ORNAMENTAL		
Amur Maple	15-20	Medium
Chinese Pistache	25-35	Medium
Dogwood	20-25	Medium
Eastern Redbud	20-30	Medium
Golden Raintree	30-40	Medium/Fast
Japanese Red Maple	15-20	Slow/Medium
Purpleleaf Plum	15-30	Fast
River Birch	40-70	Medium/Fast
Saucer Magnolia	20-30	Medium
Serviceberry	15-20	Medium
Trident Maple	25-35	Medium
Washington Hawthorn	25-30	Medium
Yoshino Cherry	20-40	Fast

SEC. 1400.13 TREE PRESERVATION CREDITS

A. Healthy trees. No tree preservation credits will be allowed for any dead tree, any tree in poor health or any tree subjected to grade alterations.

B. Protection during construction. Trees for which credit is given shall be protected during construction from:

1. Mechanical injuries to root, trunk and branches;
2. Injuries by chemical poisoning;
3. Injuries by excavation; and
4. Injuries by paving.

C. Credit options. If an applicant is preserving trees, he may use the existing trees as credit either toward a reduction in parking requirements or in a reduction of the number of trees required, as described below and as approved by the Planning Commission.

1. **Reduction of parking requirements.** To allow an existing or new development to preserve trees within or adjacent to a parking lot, the number of required off-street parking spaces may be reduced as described below

Parking Space Reduction Credits	
Total Diameter of all Preserved Trees	Number of Parking Spaces Credited
4 – 7.9 inches	1 parking space
8 – 22.9 inches	2 parking spaces
23 – 29.9 inches	3 parking spaces
30+ inches	4 parking spaces

2. **Reduction of required trees.** Preservation and protection of existing trees on the lot may be credited toward the tree planting requirements. Credit for preserved trees shall be permitted at the following rates:

Tree Reduction Credits	
Diameter of Preserved Tree	Number of Trees Credited
4 – 7.9 inches	1 shade tree
8 – 22.9 inches	2 shade trees
23 – 29.9 inches	3 shade trees
30+ inches	4 shade trees

SEC. 1400.14 ENFORCEMENT AND MAINTENANCE

- A. Final Occupancy Permit.** The Community Development Director or his or her designee has the authority to enforce the requirements of this chapter. Final occupancy permits and/or final plats will be held for those who fail to complete landscaping requirements. Any landscaping in excess of \$2500.00 (materials and labor) shall comply with Sec. 1700.3 Guarantee of Completion and Installation. A contract with costs for materials and labor from a recognized landscaping company must be approved by the Community Development Director prior to the issuance of a certificate of occupancy.
- B. Maintenance.** Once approved, the applicant is required to guarantee the plants for 36 months or the owner must replace them. The property owner shall maintain all trees and vegetation.

SEC. 1400.15 ALTERNATIVE METHODS OF COMPLIANCE

An application for alternative landscaping schemes is justified only when one or more of the following conditions apply:

- A. Space limitations.** The site involves space limitations or unusually shaped parcels.
- B. Site conditions.** Topography, soil, vegetation, or other site conditions are such that full compliance is impossible or impractical.
- C. Change of use.** Due to a change of use of an existing site, the required buffer yard is larger than can be provided.
- D. Safety.** Safety considerations require a change.

SEC. 1400.16 SCREENING

- A. Standards.** Every development shall provide sufficient screening that meets these standards:
 - 1. Adjacent properties.** Neighboring properties are shielded from any adverse external effects of that development.
 - 2. Developing property.** The development is shielded from the negative impacts of adjacent uses such as major street or railroads.

- 3. Dumpsters.** Trash dumpsters are enclosed with opaque screening materials on all sides.

- B. Requirements.** Screening required shall be determined by the Table of Screening Requirements.

Table of Screening Requirements (Letters indicate screen type as described in Subsection C)					
	SF	Duplex/ Townhouse	MF	Commercial	Industrial
SF	None	B	A	A	A
Duplex/ Townhouse	C	None	C	A	A
MF	A	C	None	B	A
Commercial	A	A	B	None	C
Industrial	A	A	A	C	None

- C. Description of screens.** The following three types of screens are hereby established and are used as the basis for the Table of Screening Requirements in Sec. 1400.14 B Requirements.

- 1. Type A: Opaque Screen.** An opaque screen is intended to exclude all visual contact between uses and to create a strong impression of spatial separation.
 - (a) *Minimum height.* The screen shall be opaque from the ground to a height of at least six (6) feet, with intermittent visual obstructions from the opaque portion to a height of at least 20 feet.
 - (b) *Materials.* The opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation.
 - (c) *Vegetative screens.* Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The opaque portion of the screen shall be opaque in all seasons of the year. At maturity, the portion of intermittent visual obstructions should not contain any completely

unobstructed openings more than ten (10) feet wide. The portion of intermittent visual obstructions may contain deciduous plants.

2. **Type B: Semi-Opaque Screen.** The semi-opaque screen is intended to partially block visual contact between uses and to create a strong impression of the separation of spaces.
 - (c) *Minimum height.* The screen shall be opaque from the ground to a height of three (3) feet, with intermittent visual obstruction from above the opaque portion to a height of at least 20 feet.
 - (d) *Materials.* The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation.
 - (e) *Vegetative screens.* Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species or field observation of existing vegetation. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than 10 feet wide. The zone of intermittent visual obstruction may contain deciduous plants.
3. **Type C: Broken Screen.** The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces.
 - (a) *Height.* The broken screen shall be composed of intermittent visual obstruction from the ground to a height of at least 20 feet.
 - (b) *Materials.* The broken screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation.
 - (c) *Vegetative screens.* The screen may contain deciduous plants.

Sec. 1400.17 FENCE AND WALL REQUIREMENTS

(Ord. No. 2006-166, 11-14-2006)

- A. **Applicability.** The requirements of this section shall apply to the following conditions in all zoning districts, except as exempted in B. Exemptions, below:
 1. **New Construction.** Construction of a new fence or wall;
 2. **Extension.** Extension of an existing fence or wall;
 3. **Replacement.**
 - (a) Replacement of an existing fence or wall that is a different size, at a different location or of a different material (e.g. a chain link fence being replaced by a wood privacy fence); or
 - (b) Replacement of more than 50 percent of the linear length of an existing fence.
- B. **Exemptions.** This section shall not apply to:
 1. **Zoning Districts.** The A-1, Agricultural and R-E, Residential Estate zoning districts, except requirements of placement of razor wire, barbed wire, or electric fences near sidewalks and rights-of-way identified in Subsection E.4 Fence types.
 2. **Replacement.** Replacement of less than 50% of the linear length of an existing fence, except that the portion being replaced shall not:
 - (a) impede visibility at the sight triangle,
 - (b) impede a natural drainage way;
 - (c) be located in certain utility easements that require gated access; or,
 - (d) encroach neighboring property lines.
- C. **Permit Required.** A fence permit shall be obtained prior to beginning construction and replacement of all applicable fences and walls, except those shown on an approved preliminary plat or large scale development.
 1. **Application.** To obtain a fence permit, a completed application form and a plot plan (site plan) must be submitted to the Building Inspection Office. The plot plan shall show:

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- (a) Location of all property lines;
- (b) Location of all existing structures;
- (c) Location of existing or proposed pools or spas;
- (d) Location of existing fencing on or adjacent to the property that is to remain in place;
- (e) Portions of existing fence that will be replaced;
- (f) Location of new fencing; and,
- (g) A note indicating the height of the proposed fence and the type of fence construction (i.e. wood privacy, wrought iron, brick, etc.)

2. Review and Approval. Once all the required information is submitted, it will be reviewed by Planning for compliance. If the application is approved, the applicant shall pay the permit fee and the fence permit will be issued.

3. Compliance. All fences or walls must be installed in compliance with the fence regulations and with the information shown on the approved plot plan and fence permit application form.

4. Inspection Required. The applicant shall contact Building Inspections to request a final inspection upon completion of the fence. If the building inspector determines that the fence is constructed in accordance with the ordinance requirements and the approved fence permit, a Certificate of Compliance will be issued. If the fence does not pass the inspection, the building inspector shall prepare an inspection report detailing the deficiencies.

D. Fence Location

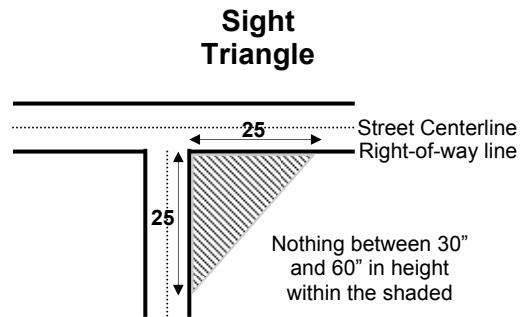
- 1. Private Property.** All fences and walls shall be located on private property and shall be built with the consent of the property owner. The fence installer and/or property owner shall be responsible to correctly locate property boundaries. Fences and walls shall not encroach neighboring property lines.
- 2. Front Yard.** A fence over 36 inches in height shall not be located in the front yard or be positioned any closer to the front property line than the front surface of the

building for a typical residential lot. Decorative fencing not exceeding 36" is allowed in front yards.

3. Rear and Side Yards. A fence or wall may be located in the rear or side yard, but shall be in compliance with other regulations of this section.

4. Adjacent to Right-of-Way. Fences and walls adjacent to a public right-of-way shall be placed no closer than five (5) feet to the right-of-way.

5. Sight Triangle. Fences or walls constructed near street intersections shall stay clear of the "sight distance triangle", shown below, in order to provide a reasonable degree of traffic visibility.



6. Easements.

(a) **Utility Easements.** Walls used as fences and footings for retaining walls are prohibited in a utility easement. Construction of all other fences in utility easements is permitted, but the fence installer and/or property owner assumes some risk by doing so. The fence enclosing utility easement(s) shall have a gate installed to permit access to the easement.

(b) **Drainage Easements.** Fences or walls shall not impede the normal flow of storm water and shall not cross an open drainage channel. Fences or walls proposed in drainage easements shall be approved on a case by case basis.

(c) **Access Easement.** Fences or walls shall not be constructed over a public access easement. Fences or walls proposed over private emergency access easements must be approved by the Fire Department to ensure

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adequate access for emergency vehicles and equipment at all times.

street right-of-way where a public sidewalk does not exist. Underground electric pet fences shall be permitted.

E. Design Standards. The following design standards shall apply to any new or replacements of any fence or wall where the length of the replacement exceeds 50 percent of the length of the existing fence.

1. **Height.** Maximum height shall be eight feet (8') above average grade.
2. **Finished Surface.** Finished surface shall face outward from the property when visible from a public right-of-way. Posts and support beams shall be inside the finished surface or designed to be an integral part of the finished surface.
3. **Gates.** All fence segments abutting a thoroughfare, except for corner lots, shall provide one gate opening per lot to allow access to the area between the fence and the street pavement for maintenance and mowing. An exception may be granted if the City receives a letter from the Home Owners Association stating that this area is maintained by the association and not by individual homeowners.

4. Fence types.

1. **Razor wire.** Razor wire shall be prohibited.

Exception. Razor wire shall be permitted in A-1, Agricultural and R-E, Residential Estate districts and shall not be placed within five (5) feet of a public sidewalk or within four (4) feet of a street right-of-way where a public sidewalk does not exist.

2. **Barbed wire.** Barbed wire shall be prohibited in residential zoned areas. Barbed wire shall be permitted in commercial and agricultural zones and shall not be placed within five (5) feet of a public sidewalk or within five (5) feet of a street right-of-way where a public sidewalk does not exist

3. **Electric fences.** Electric fences shall be prohibited.

Exception. Electric fences shall be permitted in A-1, Agricultural and RE residential Estate Districts and shall not be placed within five (5) feet of a public sidewalk or within four (4) feet of a

F. Pools and Spas. Outdoor pools, spas and hot tubs shall be protected by an enclosure designed to restrict access by children. If a fence is intended to serve as the required enclosure, it shall meet the following requirements in addition to those that apply to a fence or wall.

1. **Height.** The minimum height of the fence enclosure shall be at least 48 inches. The maximum clearance between the bottom of the fence and the ground shall be 2 inches.
2. **Gates.** Gates in the enclosing fence shall swing away from the pool/spa area and be designed to be self-closing and self-latching. If the latch or latch-release hardware is on the outside of the fence, it shall be at least 54 inches above the ground. If the latch hardware is on the inside of the fence, it must be at least 3 inches below the top of the fence and there shall not be any openings more than 1/2 inches in width within 18 inches of the latch. Gates more than 5 feet in width and designed for equipment access to the fence area are not required to be self-closing or self-latching provided they are locked at all times except when needed for equipment access.
3. **Design.** The fence shall be designed so that there are no openings large enough to allow the passage of a 4 inch diameter sphere and so that no "ladder effect" is created on the outside. If a chain link fence material is used, the maximum size of the openings (i.e., the distance between parallel wires) shall not exceed 1-1/4 inches.

G. Detention/Retention Ponds. If a fence or wall is installed around a detention or retention pond with permanent water two feet (2') deep or more, the fence or wall shall meet the requirements of F. Pools and spas, above.

SEC. 1400.18 LANDSCAPING FOR WIRELESS COMMUNICATION FACILITIES (WFF)

(Ord. No. 2010-4, 01-12-10)

The following requirements shall govern the landscaping surrounding towers for which a Special Use permit is required. The landscaping requirements set forth in this section are required for telecommunication tower and antenna sites only, all other development within the City of Bentonville must comply with the requirements set forth in Landscaping Ordinance.

- A.** Communication facilities shall be landscaped with a buffer of plant materials that effectively screens the view of the communication facility from adjacent properties.
1. Along the street frontage a minimum buffer of ten (10) feet in width shall be provided, planted with a minimum of one (1) evergreen tree and four (4) shrubs per twenty-five (25) linear feet of street frontage.
 2. The remaining perimeter shall consist of a continuous landscaped area around the communication facility. This shall consist of at least two (2) courses of evergreen trees that are, at the time of initial planting, at least six (6) feet in height.
- B.** Existing mature tree growth and natural landforms on or surrounding the communication facility shall be preserved to the maximum extent possible. In some cases (such as for towers situated on large, wooded lots), natural growth around the property perimeter may be a sufficient buffer. In such cases, the requirements listed above in the preceding subsection hereof may be waived.

*Rev. 11-23-10
Ord. No. 2010-
71*