

Sec. 117-326. Landscaping and Screening

This section sets out the minimum landscaping and screening and tree preservation requirements for new development in the city as follows:

1. Applicability exemptions. The following shall be exempt from the standards of this section:
 - a. Residential. The AG, RR, R-O, RS-1 – RS-8, R-1, R-1A, and RU-I districts shall be exempt from all standards of this section.
 - b. Existing development. Improvements or repairs to existing development that do not result in an increase in floor area, or changes in use that do not result in an increase in floor area and do not result in an increase in intensity, shall also be exempt from all the standards of this section.
2. General Landscaping requirements. All new development and redevelopment must provide a landscape plan meeting the requirements below.
3. A percentage of the total land area currently under development will be devoted to landscaping.
 - a. If the total current development area is two acres or more, the developer must provide either a minimum of 20 percent green space with at least one new tree or shrub meeting the plant criteria herein for each 2,000 square feet of the total development area; or, a minimum of 15 percent green space with one tree or shrub for every 1,000 square feet of total development area. If the developer opts to use the 15 percent green space option, tree size must be increase from two and one-half inch ball and burlap to four-inch ball and burlap.
 - b. If the development is less than two acres, at least one new tree or shrub meeting the plant criteria herein must be provided for each 1,000 square feet of the total land area for developments up to two acres.
4. Criteria for plant materials:
 - a. A minimum of 25% of the plant materials required under this code shall consist of trees of which 40% shall be native species.
 - b. Parking lots containing ten (10) or more spaces shall be landscaped in the following manner:

1. Narrow tree lawn. A continuous landscape strip between rows of parking. The minimum width of a tree lawn shall be ten feet (10') and a minimum length of eighteen feet (18'), or an area of not less than three hundred twenty-four square feet (324 sf). If the parking area is a double bay parking area, the tree island shall be a minimum width of eighteen feet (18') and a minimum length of thirty-six feet (36'), or an area of not less than six hundred forty-eight square feet (648 sf). One tree shall be planted for every 15 parking spaces with this option, with the maximum run of 15 parking spaces permitted without a tree island.

Interior trees shall be placed on either side of points of access (entrance drives, exit drives) within tree islands. In addition, all street trees must be spaced at a minimum of forty feet (40'). All tree planted to meet these requirements shall be deciduous shade trees.

- c. New plants may be selected from the recommended plants list provided by the Planning and Zoning Department. Plants should be selected for hardiness in local zones. Plants should be arranged to facilitate growth and avoid damage by development. The following trees shall not be used in a landscape plan:
1. Black locust (*Robinia Pseudacacia*)
 2. Cottonwood (*Populus Trichocarpus*)
 3. Bradford pear (*Pyrus Calleryana "Bradford"*)
 4. Southern live oak (*Quercus Virginiana*)
 5. Mimosa (*Albizia Julibrissin*)
 6. Privet (*Ligstrum Sinese*)
- d. Deciduous ornamental trees must be balled and burlapped, have at least two and one-half inch caliper, and be at least eight (8) feet tall. Deciduous shade trees must be balled and burlapped, have at least two and one-half inch caliper by at least eight (8) feet tall. Evergreen trees

must be balled and burlapped and be at least ten (10) feet in height above natural grade.

No more than 25% of the total number of trees may be ornamental trees, and at least 10% of the trees shall be evergreen. Shrubs are to be five-gallon size, minimum.

- e. Perennials from the recommended plants list qualify as a plant selection to meet minimum requirements in the ratio of 20:1. Twenty perennials, six inch pot size, equal one shrub. Perennials qualify as plant selections to a maximum of 15% of the required number of plants.
- f. Credit to the plant requirement will be considered for existing trees, provided: they are of a desirable type, are healthy specimens, they contribute to the compatibility of the development, and they are not threatened by the construction or placement of the proposed development. Existing trees may not have a change in grade under the tree canopy greater than +_4. In addition, the health of existing trees must be certified by a licensed arborist. Qualification or placement of the proposed plant material must be verified with the Planning and Zoning Department.

5. Landscape buffer zones, screening fences, or walls will be required where nonresidential zones abut residential zones. Landscape buffer zones, screening fences, or screening walls may also be required where multi-family zones abut low-density residential zones. The width of the required buffer shall be verified with the Planning and Zoning Department. If plants are to be used for screening, they must be evergreen and planted to provide a solid screen within three (3) years.

6. Installation, maintenance, and replacement

- a. Installation. All landscaping shall be installed according to sound nursery practices and in a manner designed to encourage vigorous growth. All landscape material, both living and nonliving, shall be in place prior to issuance of a certificate of occupancy or a bond or letter of credit for the full amount of the landscaping.
- b. Maintenance and replacement. Trees, shrubs, fences, walls and other landscape features, which includes screening depicted on plans approved by the city, shall be considered as elements of the

project in the same manner as parking, building materials, and other details are elements of the plan. The landowner, or successors in interest, or agent, if any, shall be jointly and severally responsible for the following:

1. Regular maintenance of all landscaping, must be kept in good condition and in a way that presents a healthy, neat, and orderly appearance. All landscaping shall be maintained free from disease, pests, weeds and litter. This maintenance shall include weeding, watering, fertilizing, pruning, mowing, edging, mulching or other maintenance, as needed and in accordance with acceptable horticultural practices;
2. The repair or replacement of required landscape structures e.g., fences and walls, to a structurally sound condition;
3. The regular maintenance, repair, or replacement, where necessary, or any landscaping required by the section; and
4. Continuous maintenance of the site.

Recommended Plant List

Large Shrubs/small trees appropriate under power lines.

Scientific Name	Common Name	Landscape Size: height x width	Remarks
<i>Acer Buergerianum</i>	Trident Maple	25' x 20'	Fall color variable and rare
<i>Acer Ginnala</i>	Amur Maple	18' x 15'	Flame fall color
<i>Acer Griseum</i>	Paperbark Maple	20' x 10'	Exceptional bark; partial sun
<i>Acer Palmatum</i> 'Bloodgood'/T Rompenburg'	Japanese Maple	variable	
<i>Acer Tataricum</i>	Tatarian Maple	20' x 20'	Variable fall color
<i>Acer Truncatum</i> (<i>'Fire Dragon'</i>)	Shantung Maple	20' x 20'	Yellow/orange fall color
<i>Amelanchier Stolonifera</i>	Running Serviceberry	5' x 5'	

<i>Carpinus Caroliniana</i>	American Hornbeam	25' x 25'	Variable fall color (orange/red)
<i>Cercis Canadensis</i>	Eastern Redbud	20' x 20'	No fall color; showy March/early April
<i>Chionanthus Retusus</i>	Chinese Fringetree	20' x 24'	No fall color; flws. late April
<i>Chionanthus Virginicus</i>	White Fringetree	20' x 20'	No fall color; flws. late April
<i>Cornus Kousa</i>	Kousa Dogwood	25' x 25'	
<i>Cornus Florida</i>	Florida Dogwood	20' x 25'	Excpt flowers; avoid full sun
<i>Cotinus Coggygria</i>	Smoketree	12' x 12'	Intense purple foliage
<i>Hamamelis Vernalis</i>	Vernal Witchhazel	10' x 15'	
<i>Koelreuteria Pediculate</i>	Goldenraintree	25' x 25'	Attractive, flws, summer
<i>Lagerstroemia sp.</i>	Crapemyrtle	8' to 40' tall	Summer flowers
<i>Maclura Pomifera</i>	Osage-orange	25' x 28'	No fall color, large fruit
<i>Magnolia Stellate</i>	Star Magnolia	15' x 15'	Attractive white flws. March;
<i>Magnolia Kobus</i>	Kobus Magnolia	30' x 30'	
<i>Hybrids ('Jane', 'Ricki', 'Susan')</i>		15' x 15'	
<i>Magnolia x Soulangeriana</i>	Saucer Magnolia	25' x 25'	White/pink saucer flws
<i>Magnolia Virginia</i>	Sweetbay Magnolia	18' x 12'	Semi-evergreen
<i>Malus sp.</i>	Crabapple	6 to 20' tall	Attractive white flws, March
<i>Morus Alba "Pendula"</i>	Weeping White Mulberry	15' x 15'	Specimen; weeping habit
<i>Prunus Serrulata "Kwanzan"</i>	Yoshino cherry	20' x 25'	Crown shaped like a martini
<i>Rhus aromatic</i>	Fragrant Sumac	8' x 8'	
<i>Rhus Glabra/R. Copalina</i>	Smooth Sumac/ Flameleaf Sumac	18' x 18'	Red Fall color; suckering habit

Focal Trees (not to be used as a substitute for street trees)

<i>Amelanchier Arborea</i>	Downy Serviceberry	30' x 30'
<i>Carpinus Caroliniana</i>	American Hornbeam	30' x 25'
<i>Hamamelis Virginiana</i>	Common Witchhazel	20' x 20'
<i>Lagerstroemia Indica</i>	Crape Myrtle	30' x 20'

Trees appropriate in urban settings as street trees.

Scientific Name	Common Name	Landscape Size: H x W	Remarks
<i>Acer Rubrum</i>	Red Maple	65 x 60	Red fall color
<i>Carpinus Betulus "Fastigiata"</i>	European Hornbeam	25' x 15'	Yellowish fall color
<i>Carpinus Caroliniana</i>	American Hornbeam	30' x 25'	
<i>Ginkgo Biloba (male)</i>	Ginkgo	70' x 55'	Butter yellow fall color
<i>Gleditsia Triacoanthos</i>	Thornless Honeylocust	45' x 45'	Small leaf litter
<i>Gymnocladus Dioicus (male)</i>	Kentucky Coffeetree	60' x 60'	
<i>Liquidambar Styraciflua</i>	Sweetgum	55' x 35'	Fruitless only
<i>Ostrya Virginiana</i>	American Hophornbeam	40' x 25'	
<i>Pistacia Chinensis</i>	Chinese Pistache	25' x 25'	Fall color variable
<i>Taxodium Distichum</i>	Baldcypress	60' x 35'	
<i>Tilia Cordata "Greenspire"</i>	Littleleaf Linden	45' x 30'	
<i>Ulmus Americana</i>	American Elm	65' x 50'	DED resistant variety
<i>Ulmus Parvifolia</i>	Chinese/Lacebark Elm	40' x 35'	
<i>Zelkova Serrata</i>	Zelkova	35' x 35'	Vase Shaped

Narrow or columnar trees.

Scientific Name	Common Name	Landscape Height x width	Remarks
<i>Acer Sacchuram "Reba"</i>	Belle Tower Sugar Maple	35' x 10'	
<i>Carpinus Betulus "Fastigiata"</i>	European Hornbeam	25' x 15'	
<i>Ginkgo Biloba</i>	Ginkgo	55' x 15'	
<i>Liquidambar Styraciflua</i>	Sweetgum	65' x 35'	Bears fruit
<i>Quercus Robur</i>	English Oak	50' x 50"	
<i>Quercus X Crimson Spire</i>	Oak	45' x 15'	
<i>Taxodium Ascendens</i>	Pondcypress	45' x 15'	
<i>Zeldova Serrata</i>	Zelkova	75' x 55'	

Shade or lawn trees.

Scientific Name	Common Name	Landscape Height x width	Remarks
<i>Acer Rubrum</i>	Red Maple	65' x 60'	Red fall color
<i>Acer Saccharum</i>	Sugar Maple	65' x 60'	Flame fall color
<i>Acer X Freemanii</i>	Freeman Maple	60' x 50'	Very fast growing
<i>Gymnocladus Dioicus male</i>	Kentucky Cofftree	60' x 60'	
<i>Liquidambar Styraciflua</i>	Sweetgum	55' x 45'	Fruitless varieties only
<i>Liriodendron Tulipifera</i>	Tuliptree	80' x 50'	Soft yellow fall color
<i>Magnolia Grandiflora</i>	Southern Magnolia	75' x 65'	
<i>Metasequoia Glyptostroboides</i>	Dawn Redwood	55' x 30'	Cooper brown fall color
<i>Nyssa Sylvatica</i>	Black Tupelo	50' x 50'	True Red fall color
<i>Quercus Alba</i>	White Oak	75' x 65'	Maroon fall color
<i>Quercus Michauxii</i>	Swamp Oak	70' x 70'	Fall color not significant
<i>Quercus Coccinea</i>	Scarlet Oak	70' x 70'	Maroon fall color
<i>Quercus Falcate</i>	S. Red Oak	75' x 75'	Fall color not significant
<i>Quercus Imbricaria</i>	Shingle Oak	60' x 60'	Yellow-brown fall color
<i>Quercus Muehlenbergii</i>	Chinkapin Oak	50' x 50'	Fall color not significant
<i>Quercus Nigra</i>	Water Oak	75' x 75'	No fall color
<i>Quercus Palustris</i>	Pin Oak	65' x 50'	Maroon fall color
<i>Quercus Phellos</i>	Willow Oak	60' x 40'	Muted orange fall color
<i>Quercus Rubra</i>	N. Red Oak	70' x 70'	Maroon fall color
<i>Quercus Shumardii</i>	Shumard Oak	70' x 70'	Orange red fall color
<i>Taxodium Distichum</i>	Bald Cypress	60' x 35'	Cooper brown fall color
<i>Tilia Cordata</i>	Littleleaf Linden	45' x 30'	Fragrant flowers in June
<i>Ulmus Americana</i>	American Elm	70' x 55'	Select DED resistant variety
<i>Ulmus Parvifolia</i>	Chinese/Lacebark Elm	40' x 30'	
<i>Zelkova Serrata</i>	Zelkova	35' x 35'	Vase shaped

Shrubs

Scientific Name	Common Name	Size	Remarks
<i>Ilex Glabra</i>	Inkberry	Large	Evergreen
<i>Aesculus Parviflora</i>	Bottlebrush Buckeye	Large	Deciduous
<i>Euonymus Americanus</i>	Strawberrybush	Large	Deciduous
<i>Fothergilla Major</i>	Fothergilla	Large	Deciduous
<i>Hydrangea Quercifolia</i>	Oakleaf Hydrangea	Large	Deciduous
<i>Lindera Benzoin</i>	Spicebush	Large	Deciduous
<i>Styrax Americana</i>	American Snowbell	Large	Deciduous
<i>Viburnum Dentatum</i>	Arrowwood	Large	Deciduous
<i>Leucothoe Axillaris</i>	Leucothoe	Medium	Deciduous
<i>Hydrangea Arborescens</i>	Wild Hydrangea	Medium	Deciduous
<i>Itea Virginica</i>	Virginia Sweetspire	Medium	Deciduous
<i>Forsythia x Intermedia</i>	Forsythia	Med/Large	Deciduous
<i>Rhododendron Catawbiense</i>	Catawba Rhododendron	Med	Deciduous
<i>Rhododendron x Gable</i> "Stewartstonian"	Stewartstonian Azalea	Medium	Deciduous
<i>Rhododendron "Gibraltar"</i>	Gibraltar Azalea	Medium	Deciduous
<i>Rhododendron "Golden Oriole"</i>	Golden Oriole Azalea	Medium	Deciduous
<i>Kalmia Latifolia</i>	Mountain Laurels	Medium	Deciduous
<i>Hibiscus Syriacus</i>	Rose of Sharon	Med/Large	Deciduous
<i>Spiraea Japonica</i>	Goldenflame	Small	Deciduous
<i>Viburnum Dentatum</i>	Arrowwood Viburnum	Small	Deciduous
<i>Hamamelis x Intermedia</i>	Witch Hazel	Large	Deciduous
<i>Viburnum Prunifolium</i>	Korean Spice Viburnum	Small/Medium	Deciduous
<i>Aronia Melanocarpa</i>	Viking Black Chokeberry	Medium	Deciduous
<i>Ilex Crenata</i>	Sky Pencil Holly	Medium	Deciduous
<i>Ilex Verticillata</i>	Winterberry Holly	Medium	Deciduous
<i>Corylus Avellana</i>	Harry Lauder's Walking Stick		Deciduous
<i>Aronia Arbutifolia</i>	Red Chokeberry	Medium	Deciduous

<i>Amelanchier Stolonifera</i>	Running Serviceberry	Small	Deciduous
<i>Calycanthus Occidentalis</i>	Spice Bush	Small	Deciduous
<i>Lex Vomitoria</i>	Yaupon Holly	Medium/Large	Evergreen

Perennials

Common Name

Rose Sensation False Hydrangea Vine

Prairie Glow Black Eyed Susan

Forever Pink Phlox

Josephine Clematis Vine

Pillow Talk Sedum

Border Music Reblooming Daylily

Allium Millenium

Mariachi Sombrero Helenium

Allium Summer Beauty

Gracillimus Miscanthus Grass

All Gold Japanese Forest Grass

Vera English Lavender

Balmy Beebop Bee Balm

Tuff Stuff Red Reblooming Hydrangea

Sapphire Blue Oat Grass

Black Sea Coral Bells

Green Twister Echinacea

Invicibelle Wee White Hydrangea

Snowflake Creeping Phlox

Lavance Deep Purple English Lavender

Big Blue Liriope Grass

Hot Lips Sage

Goldfinch Shasta Daisy

Pumila Dwarf Pampas Grass

Arizona Apricot Gaillardia
Luna Rose Hibiscus
Home Fires Creeping Phlox
EverColor Everillo Sedge Grass
Showtime Ruffles Helleborus
Little Goldstar Black Eyed Susan
Junior Walker Nepeta
Harvest Moon Sedum
Champagne Coral Bells
Giles Van Hees Veronica
Let's Dance Rave Reblooming Hydrangea
Amazing Grace Creeping Phlox
Pastor's Pride English Lavender
Bronze Beauty Ajuga
Tiny Tuff Stuff Reblooming Hydrangea
Black Mondo Grass
Rainbow Marcella Echinacea
Korean Feather Reed Grass
Wedding Party Helleborus Mix
Double Scoop Orangeberry Echinacea
Mary Reed Daylily
PowWow White Echinacea
Blue Moon Woodland Phlox
Blue Paradise Phlox
Monch Frikart's Aster
Silvery Sunproof Liriope Grass
Emerald Pink creeping Phlox
Aureola Japanese Forest Grass
Matrona Desum

Mayflower

Raspberry Ruffles Daylily

Siloam Double Classic Daylily

Stella'd Oro Daylily

Little Blue Stem Grass

Dwarf fountain Grass

Purple Coneflower

Goldstem Blackeyed Susan

Variegated Liriope

Native Perennials:

Common Name

Butterfly Weed

Dense Blazing Star

Wild Bergamot

Rose Mallow

Swamp Coneflower

Swamp Milkweed

Gray Headed Coneflower

Purple Coneflower

Rattlesnake Master

Soft Rush

Carex Spp.

Native Grasses:

Common Name

Little Bluestem

Indian Grass

Switch Grass

Prairie Dropseed

Gulf Muhly Grass

Blue Lovegrass

Sand Lovegrass

Sec 117-??? Tree preservation removal permit

Any person proposing to engage in clearing, filling, cutting, quarrying, construction, or similar activities that would result in a disturbed area of one acre or larger shall apply to the Planning Department for a tree removal permit as specified in this article. A site development plan shall be submitted to the City before removal of more than seven significant trees from a site within a twelve (12) month period without first obtaining a permit. The City official may exempt the need for the permit on a limited case-by-case basis. No land shall be cleared to the extent regulated in this article, unless approved by a permit.

If more than seven significant trees are to be removed by the owner/developer he or she must submit a tree protection or replacement plan to the Planning and Zoning Department. This plan must show all significant trees on site. This list shall include size and species of the trees. The plan shall show all roads, utilities, building footprints, driveways, and areas to be disturbed. If significant trees are in the disturbed area they are to be replaced at a rate of one to five (one tree to be planted for every five trees removed). If the drip line of the significant tree is adjacent to a construction area, measures must be made to protect the tree with fencing and other protective measures.

If a significant tree is removed from a nonconstruction area it must be replaced at a replacement rate of five to one.

Replacement trees shall be replanted with trees that meet the following specifications:

- (1) Deciduous: At least two and a half inches in diameter and at least eight feet in height above natural grade;
- (2) Evergreen: At least ten feet in height above natural grade; and
- (3) Ornamental: At least two and a half inches in diameter and at least eight feet in height above natural grade.

A tree is significant, if it is a tree and it is:

- (a) At least eighteen inches in diameter at the height of four and a half feet above natural grade;
- (b) Growing with multiple stems and at least one of the stems measured at a point six inches from the point where the stems digress from the main trunk is at least six inches in diameter;
- (c) An ornamental tree with a diameter in excess of three inches at the height eight inches above natural grade; or
- (d) Planted to meet the requirements of the current landscape ordinance.

A tree is not significant if it is less than eighteen (18) inches in diameter at four and a half feet above natural grade, unhealthy, or dead, or those included on the following list, regardless of size:

- (a) Black locust (*Robinia Pseudoacacia*);
 - (b) Cottonwood (*Populus Trichocarps*);
- and
- (c) Bradford pear (*Pyrus Calleryana* "Bradford");

Groups of trees and individual trees that are not to be removed and required undisturbed buffer areas shall be protected during construction by protective fencing and shall not be used for material storage or for any other purpose. Tree protection barriers shall be a minimum of four feet high, constructed of chain link, or polyethylene laminar safety fencing or similar material, subject to approval by the Planning and Zoning Department. "Tree Protection Area" signs shall be posted visibly on all sides of the fenced areas. On large or multiple project sites, the Planning and Zoning Department may also require that signs requesting subcontractor cooperation and compliance with tree protection standards be posted at site entrances. The tree protection barrier must be placed at the outside edge of the drip line of the existing trees.

Fees

A fee for each tree removal permit shall be paid to the City as currently established or as hereafter adopted by resolution of the City Council.

Fines

Any person or persons who violates the provisions of this ordinance shall be fined a minimum of two hundred and fifty (\$250) dollars per day and up to a maximum of five hundred (\$500) dollars per day with each day being a separate offence.