### CITY OF CEDAR RAPIDS TREE PLANTING LIST

In alphabetical order by common name, followed by botanical name and recommended cultivars. (Revised 11/10/20)

The Cedar Rapids Municipal Code requires that new street (ROW) and parking lot trees shall be shade trees (overstory or mid-canopy species) unless overhead utilities do not allow planting of these trees [32.05.030 Development Standards].

Note: The use of trees native to Iowa and the Midwest is recommended wherever possible, particularly in larger yards and public greenspaces. Native trees are adapted to local growing conditions and ecosystems and often perform best over the long run. Most trees native to the Midwest (climate zone 4-5) should also perform well here in Iowa. The lists below also include many non-native tree species that are adapted well to this area and the stresses of urban environments. Exotic trees that exhibit invasive properties and are known to compete with native species are not included on the list. The best approach for selecting a tree to plant is to evaluate sunlight, soil volume and quality, water sources, and other physical conditions of the site. Planting success may vary with specific circumstances. None of the following lists are meant to be all inclusive. Requests to plant trees not included on this list will be handled by the City Arborist on a case by case basis.

PLEASE REFER TO THE RESTRICTED PLANTING LISTS AT THE END OF THIS DOCUMENT FOR SPECIES THAT ARE NOT ALLOWED TO BE PLANTED ON THE CITY RIGHT-OF-WAY (ROW) OR AS PART OF REQUIRED LANDSCAPING.

OVERSTORY TREES (>= 1,600 sq. ft. of canopy at maturity): Overstory trees typically reach a diameter-atbreast-height (DBH) in excess of 25 inches and a height in excess of 60 feet at maturity. Per the Municipal Code, the spacing requirement for planting is 40 feet on center between both existing and replacement trees. New trees are to be 1 inch DBH (diameter at breast height or 4.5 ft. above grade). Please note: Some species may not be permitted on the ROW but make fine private trees.

'Shawnee Brave' 'Green Whisper' **Baldcypress** Taxodium distichum Catalpa, Northern \* Catalpa speciosa Dawn Redwood Metasequoia glyptostroboides 'Gold Rush' Elm. American/ Hybrid Ulmus Americana/Ulmus x 'New Horizon', 'Triumph' Ginkgo (male only) Ginkgo biloba 'Samurai', 'Saratoga', 'Shangri-la' 'Prairie Pride', 'Chicagoland' Hackberry, Common Celtis occidentalis Hickory, Bitternut\* Carya cordiformis Hickory, Mockernut \* Carya tomentosa Hickory, Shagbark \* Carya ovata Honeylocust 'Northern Acclaim', 'Trueshade' Gleditsia triacanthos inermis Horsechestnut 'Baumanii' (seedless)\*\* Aesculus hippocasteana 'PrairieTitan', 'Espresso' (seedless)\*\* Kentucky Coffeetree Gymnocladus diocus Linden, Silver\* Tilia tomentosa 'Sterling'(Japanese beetle resistant) Locust, Black 'Chicago Blues' Robinia psuedoacacia 'Marmo', 'Firefall' (seedless) \*\*\* Maple, Freeman Acer x freemanii 'Crescendo', 'Flax Mill Majesty' Maple, Sugar Acer saccharum Oak, Black Quercus velutina Oak. Bur\* Quercus macrocarpa Oak, MacDaniel's Quercus x macdanielli 'Heritage' Oak, Northern Red Quercus rubra Oak. Pin\* Quercus palustris Oak, Swamp White Quercus bicolor Oak, White Ouercus alba

Walnut, Black\* Juglans nigra Zelkova, Japanese Zelkova serrata 'Green Vase', 'Village Green',

Sweetgum

Sycamore

Tulip Tree

Liquidambar styraciflua

Platanus occidentalis

Liriodendron tulipifera

'Rotundaloba' (seedless)\*\*

'Emerald City'

<sup>\*</sup>These species are not approved for the parkway based on the restricted list for the city of due to the recommendations by the Iowa DNR.

<sup>\*\*</sup>Only this cultivar is approved for the ROW.

<sup>\*\*\*</sup> Only these two cultivars of Freeman Maple are allowed. Permission from the city arborist shall be requested prior to planting; approval will be given on a very limited basis.

MID-STORY/MID-CANOPY TREES (approx. 900 sq. ft. of canopy at maturity): Mid-canopy trees typically reach a diameter-at-breast-height (DBH) of 10 - 25 inches and a height of 30 - 60 feet at maturity. Per the Municipal Code, spacing requirement for planting is 40 feet on center between both existing and replacement trees. New trees are to be 1 inch DBH (diameter at breast height or 4.5 ft. above grade). Please note: Some species may not be permitted on the ROW but make fine private trees.

Alder, Black Alnus glutinosa 'Pyramidalis', 'Fastigiata'

Alder, Manchurian Alnus hirsute 'Prairie Horizon'

Amur Corktree *Phellodendron amurense* 'Eyestopper', 'His Majesty', Beech, European\* 'Eyestopper', 'His Majesty', 'Cuprea', 'Asplenifolia', 'Riversii'

Birch, River Betula nigra 'Heritage', 'Dura-Heat'

Birch, Yellow Betula alleghaniensis

Black Gum/Tupelo Nyssa sylvatica 'Snow Flurries', 'Wildfire'

Buckeye\* Aesculus sylvatica 'Autumn Splendor'

Buckeye, Red \* Aesculus pavia

Buckeye, Ohio\* Aesculus glabra 'Sunset'

Butternut\* Juglans cinerea

Catalpa, Purple\* Catalpa x erubescens 'Purpurea' Elm, Lace Bark Ulmus parvifolia 'Bosque' 'Allee'

Hardy Rubbertree Eucommia ulmoides
Hophornbeam, American / Ironwood Ostrya virginiana

Hornbeam, European Carpinus betulus 'Fastigiata', 'Frans Fontaine' 'Ft. McNair', 'Autumn Splendor'

Japanese Pagodatree Sophora japonica 'Regent', 'Halka' Katsura tree Cercidiphyllum japonicum 'Red Fox'

Katsura tree Cercidiphyllum japonicum 'Red Linden, American (+),\* Tilia americana

Linden, American (+),\*

Linden, Crimean (+),\*

Tilia x euchlora

Linden Littleleaf (+) \*

Tilia cordata

Linden, Littleleaf (+),\* Tilia cordata 'Shamrock', 'Chancole' London Planetree Platanus x acerifolia 'Exclamation', 'Ovation'

Magnolia, Cucumbertree Magnolia acuminata

Maple, Black Acer nigrum

Maple, Miyabe Acer miyabe 'State Street' 'Rugged Ridge'

Oak, Bebb Quercus x bebbiana
Oak, Chinkapin Quercus muehlenbergii

Oak, English\* Quercus robur 'Regal Prince', 'Skymaster'

Oak, Hills/Northern Pin Quercus ellipsoidalis 'Majestic Skies'

Oak, SawtoothQuercus acutissimaOak, ScarletQuercus coccineaOak, ShingleQuercus imbricaria

Oak, Ware's *Quercus x warei* 'Chimney Fire', 'Nadler'

Turkish Filbert Corylus colurna

Yellowwood, American Cladrastis kentukea 'Perkins Pink'

(+)-Due to excessive defoliation by Japanese beetle, there is a temporary restriction on Linden plantings. Silver Lindens are allowed with permission of the City Arborist only, due to the resistance of the 'Sterling' cultivar. \*These species **are not approved for the parkway** based on the restricted list for the city of due to the recommendations by the Iowa DNR.

UNDERSTORY AND ORNAMENTAL TREES (approx. 400 sq. ft. of canopy at maturity): Understory trees typically reach a diameter-at-breast-height (DBH) of  $\leq$ 15 inches and a height of less than or equal to 30 feet at maturity. Per Municipal Code, spacing requirement is a minimum of 40 feet on center, between both existing and replacement trees. These trees are permitted only where site conditions do not allow the planting of overstory or mid-canopy trees. New trees are to be 1 inch DBH (diameter at breast height or 4.5 ft. above grade). These species will also be considered if the width of the parkway is 4 feet wide or less, pending review by the City Arborist. Please note: Some species may not be permitted on the ROW but make fine private trees.

American Smoketree Cotinus obovatus
Amur Maackia Maackia amurensis 'Summertime'
Bald Cypress Taxodium distichum 'Skyward'\*\*

Crabapple (misc. cultivars)

Malus sp. ½ inch or smaller, non-pendulous

'Golden Glory'

Dogwood, Flowering\*

Cornus florida

Dogwood, Corneliancherry

Cornus mas

Dogwood, Kousa\* Cornus kousa
Dogwood, Pagoda\* Cornus alternifolia

Ginkgo Ginkgo biloba (male only) 'Chi Chi'\*\*

Goldenraintree Koelreuteria paniculata 'Fastigiata', September'

Hawthorn, Thornless Cockspur Crataegus crus-galli inermis
Hawthorn, Washington\* Crataegus phaenopyrum

Hawthorn, Winter King Green\* Crataegus viridis 'Winter King'

Hoptree/Waferash\* Ptelea trifoliata

Hornbeam, American. (Musclewood) Carpinus caroliniana 'J.N. Upright', 'Palisade'
Lilac, Japanese Tree Syringa reticulata ssp. reticulata 'Ivory Silk', 'Summer Snow'

Lilac, Peking (China Snow) Syringa pekinensis
Linden, Mongolian (+),\* Tilia mongolica 'Harvest Gold'
Magnolia, Edith Brogue Magnolia grandiflora 'Edith Brogue'

Magnolia, Edith Brogue Magnolia granaijiora

Magnolia, Sweetbay Magnolia virginiana

Maple, Amur Acer ginnala 'Flame', 'Ruby Slippers' Maple, Hedge Acer campestre 'Panacek', 'Evelyn'

Maple, Korean Acer pseudosieboldianum

Maple, ShantungAcer truncatum'Norwegian Sunset'Maple, SugarAcer saccharum'Sugar Cone'\*\*Maple TartarianAcer tartaricum'Hot wings'

Maple, Three-flower Acer triflorum

Maple, TridentAcer buergeranum'Aeryn'Redbud, EasternCercis canadensis'Rising Sun'

Serviceberry Amelanchier sp. 'Cumulus', 'Snowcloud'

Seven Son Flower\* Heptacodium miconoides
White Fringetree\* Chionanthus virginicus

Zelkova, Japanese Zelkova serrata 'Wireless'\*\*

<sup>\*</sup>These species are not approved for the parkway based on the restricted list for the city of due to the recommendations by the Iowa DNR.

<sup>\*\*</sup> Must use this cultivar. Standard species will not be approved.

<sup>(+)-</sup>Due to excessive defoliation by Japanese beetle, there is a temporary restriction on Linden plantings.

#### PLANTING RECOMMENDATIONS FOR SPECIFIC LOCATIONS:

(Many trees below also are listed above; some are added because of their suitability for challenging locations.) Please note: All previous conditions apply regarding planting on the ROW, parking lots and other required landscaping. Some species may not be permitted on the ROW but make fine private trees. These lists include both ornamental and overstory/mid-story species.

**EVERGREEN SCREENING TREES:** This list is for use in buffer strips and on private property <u>only</u>. As a rule, evergreens require full sun and do not perform well in shade or partial shade.

Arborvitae (White Cedar) Thuja occidentalis 'Nigra', 'Techny'

Abies balsamea Fir, Balsam Fir, Concolor/White Abies concolor

Fir, Douglas Pseudotsuga menziesii

Fir, Fraser Abies fraseri Hemlock, Eastern Tsuga canadensis

'Vanderwolf's Pyramid' Pine. Limber Pinus flexilis

Pine, White Pinus strobus

Red cedar. Eastern Juniperus virginiana 'Canaertii'

Spruce, Norway Picea abies Spruce, Serbian Picea omorika

Oak, Bur

Spruce, White Picea glauca 'Densata'

**COLUMNAR TREES FOR NARROW SPACES:** (Canopy heights with columnar form can vary, but canopy width is typically 15-25 feet). Some of these cultivars may not be as hardy as the standard species.

**Bald Cypress** 'Shawnee Brave', 'Skyward' Taxodium distichum

Beech, European Fagus sylvatica 'Red Obelisk'

Dawn Redwood Metasequoia glyptostroboides

Crabapple Malus sp. 'Red Baron', 'Marilee', 'Pink spires'

Crabapple, Siberian Columnar Malus baccata 'Columnari'

Crabapple, Tschonoski Malus tschonoskii Ginkgo (male only) Ginkgo biloba 'Princeton Sentry' Goldenraintree Koelreuteria paniculata 'Fastigiata' Hackberry, Common Celtis occidentalis 'Prairie Sentinel' Honevlocust Gleditsia triacanthos inermis 'Street Keeper' 'Fastigiata' Hornbeam, European Carpinus betulus 'Corinthian' Linden, Littleleaf Tilia cordata Maple, Black Acer nigrum 'Green Column' Maple, Sugar Acer saccharum 'Endowment'

Quercus macrocarpa Oak, English Quercus robur 'Rose Hill', Regal Prince',

Oak, English/White 'Crimson Spire' Quercus bimundorum Oak, Pin Ouercus palustris 'Green Pillar'

Oak, Ware's Quercus x warei 'Regal Prince', 'Chimney Fire' Liquidambar styraciflua 'Emerald Sentinel', 'Happidaze' Sweetgum

'Urban Pinnacle'

Tulip Tree Liriodendron tulipifera 'Fastigiatum' Zelkova, Japanese Zelkova serrata 'Musashino'

TREES SUITABLE FOR FLOOD PLAINS AND WET SITES: These species have variable degrees of tolerance to wet soils, from occasional pooling of water to regular flooding for a few days. (See categories above for size of tree.)

Alder, Red Alnus rubra
Bald Cypress Taxodium distichum

Princh Pierre

Birch, River Betula nigra

Blackgum, Tupelo Nyssa sylvatica, Nyssa aquatica

Buckeye, Ohio Aesculus glabra

Dawn Redwood Metasequoia glyptostroboides

Dogwood, Pagoda

Elm, Hybrid American

Hackberry, Common

Hornbeam, American. (Musclewood)

Kentucky Coffeetree

Linden, American

Maple, Amur

Cornus alternifolia

Ulmus americana

Celtis occidentalis

Carpinus caroilniana

Gymnocladus diocus

Tilia americana

Acer ginnala

Oak, Bur
Oak, Swamp White
Quercus macrocarpa
Quercus bicolor
Redbud, Eastern
Cercis canadensis
Serviceberry
Amelanchier sp.
Sweetbay Magnolia
Sweetgum
Liquidambar styraciflua
Sycamore
Platanus occidentalis

## TREES MODERATE OR GREATER TOLERANCE OF AEROSOL AND SOIL SALTS: (See categories above

for size of tree.) Cultivars noted are tolerant. Otherwise, the species is tolerant.

Amur Maackia Maackia amurensis Bald Cypress Taxodium distichum

Blackgum, Tupelo Nyssa sylvatica, Nyssa aquatica

Catalpa, Northern Catalpa speciosa

Ginkgo Ginkgo biloba (male only)
Goldenraintree Koelreuteria paniculata
Hackberry, Common Celtis occidentalis
Hardy Rubbertree Eucommia ulmoides

Honeylocust Gleditsia triacanthos inermis

Horsechestnut Aesculus hippocasteana 'Baumanii' (seedless)

Kentucky Coffeetree Gymnocladus diocus

Lilac, Japanese Tree Syringa reticulata ssp. reticulata 'Ivory Silk', 'Summer Snow'

Lilac, China Snow Peking

Locust, Black

London Planetree

Maple, Hedge

Maple, Miyabe

Syringa pekinensis

Robinia psuedoacacia

Platanus x acerifolia

Acer campestre

Acer miyabe

Oak, Bur Quercus macrocarpa
Oak, English Quercus robur

Oak, MacDaniel's Quercus x macdanielli Oak, Sawtooth Quercus acutissima Oak, Swamp White Quercus bicolor Oak, White Quercus alba Red cedar, Eastern Juniperus virginiana Serviceberry Amelanchier sp. Spruce, Serbian Picea omorika Spruce, White Picea glauca

Sycamore Platanus occidentalis

Walnut, Black Juglans nigra

Zelkova, Japanese Zelkova serrata 'Village Green'

# **TREES THAT TOLERATE PARTIAL SHADE:** Listed by genus unless noted (See categories above for size of tree.)

Hornbeam, American. (Musclewood)

Hophornbeam, American / Ironwood

Amur Maackia

Birch, River

Buckeye

Dogwood

Carpinus caroliniana

Ostrya virginiana

Maackia amurensis

Betula nigra

Aesculus sp.

Cornus sp.

Hornbeam, American/Musclewood Carpinus caroliniana

Maple, AmurAcer ginnalaRedbud, EasternCercis canadensisServiceberryAmelanchier sp.

# **TREES THAT TOLERATE DRY CONDITIONS:** *Listed by genus unless noted (See categories above for size of tree.)*

Catalpa, Northern Catalpa speciosa

Elm, American/ Hybrid Ulmus Americana/Ulmus x

Hackberry, Common Celtis occidentalis
Hawthorn Crataegus sp.

Honeylocust Gleditsia triacanthos inermis

Hophornbeam, American / Ironwood

Kentucky Coffeetree

Locust, Black

Ostrya virginiana

Gymnocladus diocus

Robinia psuedoacacia

Maple, Amur Acer ginnala
Maple, Freeman Acer x freemanii 'Autumn Blaze'

Oak, Bur Quercus macrocarpa
Oak, Chinkapin Quercus muehlenbergii
Oak, Hills/Northern Pin Quercus ellipsoidalis

**TREES RESISTANT TO DEER DAMAGE:** It is important to note that "resistant to" does not mean "immune to". If deer are hungry enough, they will feed on these species. Deer will "rub" any species of tree.

Elm, American/ Hybrid Ulmus Americana/Ulmus x

Ginkgo (male only) Ginkgo biloba Hawthorn Crataegus sp.

Honeylocust Gleditsia triacanthos inermis

Kentucky Coffeetree Gymnocladus diocus Locust, Black Robinia psuedoacacia

MagnoliaMagnolia sp.MapleAcer sp.OakQuercus sp.

Tulip Tree Liriodendron tulipifera

### **RESTRICTED PLANTING LISTS:**

**PROHIBITED TREES:** The following classes and types of trees shall not be planted on the ROW or as part of required landscaping. With the exception of Red Maple, it is recommended that any specific Genus/species listed below also not be planted on private property.

Ash (All species and cultivars) Fraxinus sp.

Austree Salix alba x matsudana
Birch, White/Paper Betula papyrifera
Boxelder Acer negundo

Conifers (evergreen species)

Cottonwood Populus deltoides
Elm, Siberian Ulmus pumila
Empress Tree/Princess Tree Paulownia tomentosa

Fruit and Nut trees over 1" (walnut, apple, etc.)

Maple, Red (All hybrids and cultivars)Acer rubrumMaple, Silver (All hybrids and cultivars)Acer saccharinumMountainashSorbus Americana

Mulberry (All species and cultivars) *Morus sp.* 

Multi-Stem/Clump Form Trees

Pear (All species and cultivars)

Poplar (All species and cultivars)

Populus sp.

Populus sp.

Russian Olive Elaeagnus angustifolia
Tree of Heaven Ailanthus altissima

Trees with thorns on the main stem or lower canopy Willow (All species and cultivars)

Salix sp.

Woody, bushy shrubs

#### THE PLANTING OF THE FOLLOWING SPECIES IS TEMPORARILY SUSPENDED IN THE PUBLIC

**ROW:** Contact the City Arborist for more information on this moratorium.

Catalpa (All species and cultivars)

Catalpa sp.

Linden (All species and cultivars)

Catalpa sp.

Tilia sp.

Oak, Pin Quercus palustris