

STAFF REPORT

Design & Development Manual – Native & Adaptive Plant List Update

March 9, 2021 Town Council Meeting



EXISTING CONDITIONS:

The [Design and Development Manual](#) includes recommended plant lists, planting details, site details, and architectural recommendations for the Small Town Character Overlay District. The last update was completed in 2010. The [2018 Trees & Stormwater](#) study made a number of recommendations, including a few that required updates to the Design and Development Manual. The specific recommendations addressed are listed below:

- Update Town planting lists to include mostly native species and exclude non-native invasive species.
- Divide tree species into three (3) categories (small, medium, and large trees) to match the categories for soil volume requirements.

PROPOSED CHANGES:

For the last eighteen months, the Planning and Community Development Department has worked on updating the recommended plantings lists in the Design and Development Manual. Additional improvements made to the lists stem from feedback received from residents, engineers, developers, and staff over the years. As a result, the following changes are proposed:

- Prohibit invasive species listed on the NC Invasive Plant Council website
- Separate the tree lists into three categories: large, medium & small trees
- List native species first on each list and introduced adaptive species next
- Update and simplify the overall list
- Add separate lists by use or situation
 - Parking Lot Shade Trees
 - Parking Lot Screening Shrubs
 - Suggested Type A Buffer Trees & Shrubs
 - Trees and Large Shrubs Under Power Lines
 - High-Quality Shade Trees

The proposed changes were shared with the Environmental Advisory Board, Tree CAP, and the Bee City Committee. In response, we labeled specific species as bird- or pollinator-friendly.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of the proposed changes.

PLANNING BOARD RECOMMENDATION:

Planning Board will hear the proposed changes at their regularly scheduled meeting on March 8, 2021. Staff will relay their recommendation to Town Council.



APEX
NORTH CAROLINA

Design and Development Manual

Updated 2021

Native and Adaptive Plant Lists

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Native and Adaptive Plant Lists

The Native and Adaptive Plant Lists are in chart form and include descriptions of trees and shrubs. Native species shown are native to the eastern half of the United States. These plant lists are not intended to be all-inclusive. The intent of these lists is to encourage the use of landscape plants that are hardy in Apex and exhibit tolerance of urban conditions. Plants not on the native and adaptive plant list may be used with approval from the Planning Department.

Invasive species are prohibited. Please refer to the NC Invasive Plant Council for a list of prohibited plants.

<http://nc-ipc.weebly.com/nc-invasive-plants.html>

The Native and Adaptive Plant Lists are divided into the following categories:

- Large Trees (50+ feet tall)
- Medium Trees (30 – 50 feet tall)
- Small Trees (up to 30 feet tall)
- Large Shrubs (8+ feet tall)
- Small/Medium Shrubs (2 to 8 feet tall)

The following additional lists are provided, which show specific tree and shrub recommendations for specific situations.

- Parking Lot Shade Trees
- Parking Lot Screening Shrubs
- Trees & Large Shrubs Under Power Lines
- Suggested Type A Buffer Trees & Shrubs
- High-Quality Shade Trees

Large Trees (height ≥ 50 ft)					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Acer rubrum</i>	Red Maple	40-60	30-40	D	Don't Plant Near Pavement; Natural Areas Only; Pollinator Friendly
<i>Acer saccharum</i>	Sugar Maple	60-75	40-50	D	Pollinator Friendly
<i>Acer x fremanii</i>	Freeman Maple	40-60	20-40	D	
<i>Betula nigra</i>	River Birch	40-70	40-60	D	
<i>Carya cordiformis</i>	Bitternut Hickory	50-70	40-50	D	Pollinator Friendly
<i>Carya glabra</i>	Pignut Hickory	50-60	25-35	D	Pollinator Friendly
<i>Carya illinoensis</i>	Pecan	70-100	40-75	D	Large Edible Nuts
<i>Carya ovata</i>	Shagbark Hickory	60-80	30-50	D	Pollinator Friendly

Native and Adaptive Plant Lists

Large Trees (height ≥ 50 ft)					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Celtis laevigata</i>	Sugarberry	40-60	40-60	D	Bird & Pollinator Friendly
<i>Celtis occidentalis</i>	Common Hackberry	40-60	40-60	D	Bird & Pollinator Friendly
<i>Cladrastis lutea</i>	American Yellowwood	30-50	40-55	D	Large Attractive Flowers; Pollinator Friendly
<i>Diospyros virginiana</i>	American Persimmon	30-70	25-30	D	Large Fruit; Plant Away From Parking & Sidewalk
<i>Fagus grandiflora</i>	American Beech	50-70	30-40	D	Edible Nuts
<i>Fraxinus americana</i>	White Ash	50-80	40-50	D	Pollinator Friendly
<i>Fraxinus pennsylvanica</i>	Green Ash	50-60	20-30	D	Pollinator Friendly
<i>Gleditsia triacanthos var. inermis</i>	Thornless Honeylocust	30-70	30-70	D	Pollinator Friendly
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	60-75	40-50	D	
<i>Ilex opaca</i>	American Holly	40-50	20-40	E	Tolerates Some Shade
<i>Juglans nigra</i>	Eastern Black Walnut	50-75	50-75	D	Edible Nuts
<i>Juniperus virginiana</i>	Eastern Red Cedar	40-50	10-20	E	Bird Friendly
<i>Liquidambar styraciflua 'Rotundiloba'</i>	Sweetgum, Fruitless	60-75	20-30	D	Quick Growth
<i>Liriodendron tulipifera</i>	Tulip Poplar	70-90	30-40	D	Quick Growth; Pollinator Friendly
<i>Magnolia acuminata</i>	Cucumber Magnolia	40-70	20-35	D	Pollinator Friendly
<i>Magnolia grandiflora</i>	Southern Magnolia	60-80	40-50	E	Pollinator Friendly
<i>Nyssa sylvatica</i>	Black Gum	30-50	20-30	D	Bird & Pollinator Friendly
<i>Pinus echinata</i>	Shortleaf Pine	50-60	20-35	E	
<i>Pinus palustris</i>	Longleaf Pine	60-80	30-40	E	
<i>Pinus taeda</i>	Loblolly Pine	60-100	25-35	E	Pollinator Friendly
<i>Platanus occidentalis</i>	American Sycamore	75-100	75-100	D	Large Root System; Not Good For Small Areas
<i>Prunus serotina</i>	Black Cherry	50-80	30-50	D	Bird & Pollinator Friendly; Tasty Fruit
<i>Quercus alba</i>	White Oak	50-80	50-80	D	
<i>Quercus bicolor</i>	Swamp White Oak	50-60	50-60	D	
<i>Quercus coccinea</i>	Scarlet Oak	60-80	40-50	D	
<i>Quercus falcata</i>	Southern Red Oak	60-80	60-70	D	
<i>Quercus imbricaria</i>	Shingle Oak	50-60	50-60	D	

Native and Adaptive Plant Lists

Large Trees (height ≥ 50 ft)					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Quercus laurifolia</i>	Laurel Oak	60-70	35-45	D	
<i>Quercus lyrata</i>	Overcup Oak	40-70	35-50	D	
<i>Quercus michauxii</i>	Swamp Chestnut Oak	40-60	30-50	D	
<i>Quercus nuttallii</i>	Nuttall Oak	40-60	35-50	D	
<i>Quercus phellos</i>	Willow Oak	40-60	30-40	D	
<i>Quercus prinus</i>	Chestnut Oak	60-70	60-70	D	
<i>Quercus rubra</i>	Northern Red Oak	60-75	35-45	D	
<i>Quercus shumardii</i>	Shumard Oak	40-60	40-60	D	
<i>Quercus velutina</i>	Black Oak	50-60	40-70	D	
<i>Quercus virginiana</i>	Live Oak	40-80	60-100	E	
<i>Salix nigra</i>	Black Willow	30-60	30-60	D	Pollinator Friendly
<i>Sassafras albidum</i>	Sassafras	30-60	25-40	D	Pollinator Friendly
<i>Taxodium distichum</i>	Baldcypress	50-70	30-40	D	Drought Tolerant
<i>Tilia americana</i>	Basswood	50-80	30-50	D	Quick Growth; Pollinator Friendly
<i>Tsuga canadensis</i>	Eastern Hemlock	40-70	25-35	E	Susceptible To Hemlock Wolly Adelgid
<i>Ulmus americana 'Princeton'</i>	Princeton Elm	50-70	30-50	D	Susceptible to Dutch Elm Disease
Introduced Adaptive Species:					
<i>Cedrus deodara</i>	Deodar Cedar	40-70	20-40	E	
<i>Cercidiphyllum japonicum</i>	Katsuratree	40-60	20-30	D	
<i>Cryptomeria japonica</i>	Japanese Cryptomeria	50-60	20-30	E	Not Drought Tolerant
<i>Cunninghamia lanceolata</i>	Chinese Fir	30-70	10-30	E	
<i>Fagus sylvatica</i>	European Beech	50-60	35-45	D	
<i>Ginkgo biloba</i>	Ginkgo	25-50	25-35	D	Female Trees Have Unpleasant Odor
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	70-100	20-30	E	
<i>Pinus nigra</i>	Austrian Pine	50-60	20-40	E	
<i>Pinus sylvestris</i>	Scotch Pine	30-60	30-40	E	
<i>Pinus thunbergi</i>	Japanese Black Pine	20-60	10-20	E	
<i>Ostrya carpinifolia</i>	European Hop Hornbeam	40-50	30-40	D	

Native and Adaptive Plant Lists

Large Trees (height ≥ 50 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Quercus acutissima</i>	Sawtooth Oak	40-60	40-60	D	
<i>Quercus robur 'Fastigiata'</i>	Fastigiante English Oak	50-60	10-20	D	Narrow Canopy
<i>Salix alba</i>	Weeping Willow	30-40	30-40	D	
<i>Tilia cordata</i>	Little Leaf Linden	50-60	30-40	D	
<i>Tilia tomentosa</i>	Silver Linden	50-70	30-50	D	
<i>Thuja standishii x plicata 'Green Giant'</i>	Green Giant Arborvitae	50-60	10-20	E	Quick Growth
<i>X Cupressocyparis leylandii</i>	Leyland Cypress	60-70	15-25	E	Quick Growth
<i>Zelkova serrata</i>	Japanese Zelkova	50-80	50-75	D	

Native and Adaptive Plant Lists

Medium Trees (height 30-50 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Acer negundo</i>	Boxelder	30-50	35-40	D	
<i>Carpinus caroliniana</i>	American Hornbeam	20-35	20-35	D	
<i>Catalpa bignonioides</i>	Southern catalpa	30-40	30-40	D	Pollinator Friendly
<i>Chamaecyparis thyoides</i>	Atlantic white cedar	40-50	10-20	E	
<i>Cladrastis kentuckea</i>	American yellowwood	30-50	40-55	D	Pollinator Friendly
<i>Halesia Carolina</i>	Carolina Silverbell	30-40	20-35	D	Pollinator Friendly
<i>Ilex opaca</i>	American Holly	40-50	20-40	E	Pollinator & Bird Friendly
<i>Maclura pomifera</i>	Osage orange	30-40	20-40	D	Thorns
<i>Magnolia macrophylla</i>	Bigleaf magnolia	30-40	20-30	D	Large Flowers
<i>Magnolia tripetelata</i>	Umbrella magnolia	20-40	30-40	D	Large Flowers
<i>Oxydendrum arboreum</i>	Sourwood	20-50	10-25	D	Pollinator Friendly
<i>Pinus virginiana</i>	Virginia Pine	15-40	10-30	E	
<i>Thuja occidentalis</i>	Eastern Arborvitae	20-40	10-15	E	Many Cultivars Available; Shrub-Forms Available
Introduced Adaptive Species:					
<i>Acer buergerianum</i>	Trident Maple	25-35	15-25	D	
<i>Alnus cordata</i>	Italian alder	30-50	20-40	D	
<i>Carpinus betulus</i>	European Hornbeam	30-40	20-30	D	
<i>Cupressus arizonica</i>	Arizona cypress	30-40	8-12	E	
<i>Parrotia persica</i>	Persian ironwood	20-40	20-35	D	
<i>Phellodendron amurense</i>	Amur corktree	30-45	30-45	D	
<i>Ulmus parvifolia</i>	Chinese elm	40-50	35-50	D	

Native and Adaptive Plant Lists

Small Trees (height ≤30 ft)					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Acer leucoderme</i>	Chalkbark Maple	20-30	20-25	D	
<i>Aesculus pavia</i>	Red Buckeye	15-20	15-20	D	Toxic; Pollinator Friendly
<i>Amelanchier arborea</i>	Downy Serviceberry	10-25	10-15	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	25-30	15-20	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Asimina triloba</i>	Pawpaw	15-30	15-20	D	Large Edible Fruit
<i>Cercis canadensis</i>	Eastern Redbud	20-30	25-35	D	Early Spring Flowers; Pollinator Friendly
<i>Chionanthus virginicus</i>	White Fringe Tree	15-20	15-20	D	Pollinator Friendly
<i>Cornus florida</i>	Flowering Dogwood	10-30	15-30	D	Spring Flowers; Pollinator & Bird Friendly
<i>Cornus alternatifolia</i>	Pagoda Dogwood	15-30	10-20	D	Spring Flowers; Pollinator & Bird Friendly
<i>Cotinus obovatus</i>	American Smoketree	10-30	15-20	D	Pollinator Friendly
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	25-30	20-25	D	Pollinator & Bird Friendly
<i>Crataegus viridis</i>	Green Hawthorn	20-30	20-30	D	Pollinator & Bird Friendly
<i>Halesia diptera</i>	Two-Wing Silverbell	20-30	20-30	D	Showy Flowers; Pollinator Friendly
<i>Hamamelis virginiana</i>	Common Witchhazel	15-30	15-30	D	Pollinator Friendly
<i>Ilex cassine</i>	Dahoon Holly	20-30	10-15	E	Pollinator Friendly
<i>Ilex decidua</i>	Possumhaw	20-30	15-20	E	Pollinator & Bird Friendly
<i>Ilex vomitoria</i>	Yaupon Holly	15-20	10-15	E	Pollinator & Bird Friendly
<i>Ilex x 'Emily Bruner'</i>	Emily Bruner Holly	15-20	8-10	E	
<i>Magnolia grandiflora</i> 'Little Gem'	Little Gem Magnolia	15-20	8-10	E	Pollinator & Bird Friendly
<i>Magnolia virginiana</i>	Sweetbay Magnolia	10-30	15-20	E	Pollinator & Bird Friendly
<i>Malus angustifolia</i>	Southern Crabapple	25-30	25-30	D	Pollinator & Bird Friendly
<i>Malus coronaria</i>	American/Sweet Crabapple	15-30	20-30	D	Needs Moist Soils; Pollinator Friendly
<i>Morus rubra</i>	Red Mulberry	20-45	35-40	D	Pollinator & Bird Friendly; Messy Edible Fruit
<i>Myrica cerifera</i>	Southern Wax Myrtle	15-25	15-25	E	Bird Friendly
<i>Myrica pennsylvanica</i>	Northern Bayberry	5-10	5-10	D	Bird Friendly
<i>Prunus americana</i>	American Red Plum	15-25	15-20	D	Pollinator & Bird Friendly

Native and Adaptive Plant Lists

Small Trees (height ≤30 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Prunus caroliniana</i>	Carolina Cherrylaurel	20-30	15-25	E	Toxic; Pollinator & Bird Friendly
<i>Prunus virginiana</i>	Common Chokecherry	15-20	10-15	D	Pollinator & Bird Friendly
<i>Rhus copallina</i>	Shining Or Winged Sumac	15-25	15-25	D	Pollinator & Bird Friendly
<i>Rhus typhina</i>	Staghorn Sumac	15-25	15-25	D	Pollinator & Bird Friendly
Introduced Adaptive Species:					
<i>Abies firma</i>	Japanese Fir	20-30	10-15	E	
<i>Acer carpiniifolium</i>	Hornbeam Maple	15-25	15-25	D	
<i>Acer cissifolium</i>	Ivy-Leaved Maple	20-30	20-30	D	
<i>Acer ginnala</i>	Amur Maple	15-20	15-30	D	
<i>Acer griseum</i>	Paperbark Maple	20-30	15-20	D	
<i>Acer palmatum</i>	Japanese Maple	15-20	10-15	D	
<i>Acer tartaricum</i>	Tatarian Maple	15-25	10-15	D	
<i>Acer truncatum</i>	Purpleblow Maple	20-25	15-20	D	
<i>Cephalotaxus harringtonia</i>	Japanese Plum Yew	10-25	20-30	E	
<i>Cercis reniformis</i>	Oklahoma Redbud	15-25	15-25	D	Spring Flowers; Pollinator Friendly
<i>Chionanthus retusus</i>	Chinese Fringe Tree	15-25	10-25	D	Spring Flowers; Pollinator Friendly
<i>Cornus kousa</i>	Kousa Dogwood	10-30	15-30	D	Spring Flowers; Pollinator Friendly
<i>Cornus mas</i>	Cornelian Cherry Dogwood	20-25	15-20	D	Spring Flowers; Pollinator Friendly
<i>Cotinus coggygria</i>	Common Smoketree	10-30	15-20	D	
<i>Hamamelis x intermedia</i>	Hybrid Witchhazel	12-15	12-15	D	
<i>Ilex x attenuata</i>	Hybrid Holly	15-30	10-15	E	
<i>Ilex x 'Dr. Kassab'</i>	Dr. Kassab Holly	15-20	10-15	E	
<i>Ilex x 'Nellie R. Stevens'</i>	Nellie R. Stevens	15-25	10-15	E	Bird & Pollinator Friendly
<i>Lagerstroemia fauriei</i>	Japanese Crapemyrtle	10-25	20-25	D	Summer Flowers
<i>Lagerstroemia indica & hybrids</i>	Common Crapemyrtle	10-25	20-25	D	Summer Flowers
<i>Magnolia stellata</i>	Star Magnolia	15-20	10-15	D	Spring Flowers
<i>Magnolia x loebneri</i>	Loebner Magnolia	20-30	20-40	D	Spring Flowers
<i>Magnolia x soulangiana</i>	Saucer Magnolia	20-30	20-30	D	Spring Flowers

Native and Adaptive Plant Lists

Small Trees (height ≤30 ft)					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Malus spp.</i>	Flowering Crabapple	15-25	10-20	D	Most Crabapples Are Non-Native; Spring Flowers; Bird & Pollinator Friendly
<i>Photinia x fraseri</i>	Fraser Photinia	15-25	10-20	E	
<i>Pistachia chinensis</i>	Chinese Pistache	30-35	25-35	D	
<i>Prunus hybrids</i>	Cherry	Varies	Varies	D	Spring Flowers; Bird & Pollinator Friendly
<i>Prunus mume</i>	Japanese Apricot	15-20	15-20	D	Spring Flowers; Pollinator Friendly
<i>Prunus persica</i>	Common Peach	15-25	15-25	D	Spring Flowers; Pollinator Friendly
<i>Prunus sargentii</i>	Sargent Cherry	20-30	20-30	D	Spring Flowers; Bird & Pollinator Friendly
<i>Prunus serrulata</i>	Flowering Cherry	15-30	20-30	D	Spring Flowers; Bird & Pollinator Friendly
<i>Prunus subhirtella</i>	Higan Cherry	20-40	15-30	D	Spring Flowers; Bird & Pollinator Friendly
<i>Prunus x yedoensis</i>	Yoshino Cherry	20-30	20-30	D	Spring Flowers; Bird & Pollinator Friendly
<i>Quercus glauca</i>	Blue Japanese Oak	20-30	10-15	D	
<i>Styrax japonicus</i>	Japanese Snowbell	20-30	15-30	D	Spring Flowers; Pollinator Friendly
<i>Syringa reticulata</i>	Japanese Tree Lilac	25-30	20-25	D	Spring Flowers; Pollinator Friendly
<i>Thuja orientalis</i>	Western Arborvitae	20-25	10-25	E	

Native and Adaptive Plant Lists

Large Shrub List (8-25 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Aesculus parviflora</i>	Bottlebrush buckeye	8-12	8-15	D	Summer Flowers; Pollinator Friendly;
<i>Aronia arbutifolia</i>	Red Chokecherry	6-10	3-5	D	Pollinator & Bird Friendly;
<i>Calycanthus floridus</i>	Carolina Allspice	6-9	6-12	D	Great Fragrance.
<i>Camellia sasanqua</i>	Sasanqua Camellia	6-10	5-7	E	Showy Early Spring Flowering.
<i>Chimonanthus virginicus</i>	Fringetree	12-20	12-20	D	Showy Flowers.
<i>Clethra acuminata</i>	Cinnamonbark	8-15	4-6	D	Summer Flowers; Pollinator Friendly;
<i>Cornus amomum</i>	Silky Dogwood	10-15	6-12	D	Summer Flowers; Pollinator Friendly;
<i>Corylus americana</i>	American Hazelnut	12-15		D	Edible Nuts. Suckers. Pollinator & Bird Friendly;
<i>Fothergilla major</i>	Large Fothergilla	6-10	6-8	D	Showy Flowers; Pollinator Friendly;
<i>Hamamelis vernalis</i>	Witchhazel	6-10	6-10	D	Showy Flowers; Pollinator Friendly;
<i>Ilex verticillata</i>	Winterberry Holly	6-10	6-10	D	Berries; Pollinator & Bird Friendly;
<i>Ilex vomitoria</i>	Yaupon Holly	15-20	8-12	E	Many Cultivars Available.
<i>Illicium floridanum</i>	Florida Anise	10-15	6-8	E	Showy Flowers; Pollinator Friendly
<i>Illicium parviflorum</i>	Yellow Anise	10-15	6-10	E	Showy Flowers; Pollinator Friendly
<i>Kalmia latifolia</i>	Mountain Laurel	7-15	7-15	E	Showy Flowers; Pollinator Friendly
<i>Leucothoe populifolia</i>	Florida Leucothoe	8-12	6-8	E	Toxic; Forms Thickets; Pollinator & Bird Friendly;
<i>Lindera benzoin</i>	Spicebush	8-15	6-10	D	Pollinator & Bird Friendly;
<i>Myrica cerifera</i>	Wax Myrtle	10-15	8-12	E	Good For Light Screening. Ice Damage.
<i>Rhododendron catawbiense</i>	Mountain Rosebay	6-10	8-10	E	Spring Flowers; Pollinator Friendly;
<i>Rhododendron periclymenoides</i>	Pinxter Azalea	4-10	4-5	D	Spring Flowers; Pollinator Friendly;
<i>Rhododendron vaseyi</i>	Pinkshell Azalea	5-15	5-10	E	Spring Flowers; Pollinator Friendly;
<i>Sambucus canadensis</i>	American Elderberry	5-12	6-12	D	Suckers; Pollinator & Bird Friendly; Tasty Berries
<i>Vaccinium corymbosum</i>	Highbush blueberry	6-12	3-10	D	Good Fall Color; Pollinator & Bird Friendly; Tasty Berries
<i>Viburnum dentatum</i>	Arrowwood Viburnum	6-10	6-10	D	Pollinator & Bird Friendly;
<i>Viburnum lentago</i>	Nannyberry Viburnum	12-18	6-12	D	Pollinator & Bird Friendly;
<i>Viburnum prunifolium</i>	Smooth Blackhaw	12-15	6-12	D	Pollinator & Bird Friendly;
<i>Viburnum nudum</i>	Possumhaw or Witherod	5-12	5-12	D	Pollinator & Bird Friendly;
<i>Viburnum trilobum</i>	American Cranberrybush	8-15	8-10	D	Pollinator & Bird Friendly;

Native and Adaptive Plant Lists

Large Shrub List (8-25 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Weigela florida</i>	Weigela	6-9	6-12	D	Showy Spring Flowers.
Introduced Adaptive Species:					
<i>Aucuba japonica</i>	Acuba	6-10	4-8	E	Dwarf Varieties Available. Tolerates Poor Drainage
<i>Berberis julianae</i>	Wintergreen Barberry	6-8	6-8	E	Thorns. Good For Screening.
<i>Buxus sempervirens</i>	Common Boxwood	15-20	15-20	E	Many Cultivars Available
<i>Camellia japonica</i>	Japanese Camellia	10-15	6-10	E	Showy Early Spring Flowering
<i>Chimonanthus praecox</i>	Fragrant Wintersweet	10-15	8-12	D	Fragrant Winter Flowers.
<i>Cleyera japonica</i>	Japanese Cleyera	8-12	6-7	E	
<i>Cotoneaster salicifolius</i>	Willowleaf Cotoneaster	10-15	7-12	E	
<i>Deutzia scabra</i>	Pride of Rochester	6-10	4-8	D	Showy Spring Flowers.
<i>Euonymus japonicus</i>	Dwarf Japanese Euonymus	10-15	5-7	E	
<i>Euonymus kiautschovicus</i>	Spreading Euonymus	8-10	4-8	D	
<i>Exochorda racemosa</i>	Pearlbush	10-15	10-15	D	Spring Flowering.
<i>Forsythia x</i>	Forsythia	8-10	10-12	D	Early Spring Flowers.
<i>Hibiscus syriacus</i>	Rose of Sharon	8-12	6-10	D	Showy Summer Flowers; Aggressively Self-Seeds.
<i>Hydrangea paniculata</i>	Panicle Hydrangea	10-20	10-20	D	
<i>Ilex aquifolia</i>	English Holly	8-12	8-12	E	
<i>Ilex cornuta</i>	Chinese or Burford Holly	8-10	8-10	E	Many Cultivars Available
<i>Ilex latifolia</i>	Lusterleaf Holly	20-25	7-11	E	
<i>Ilex x 'Nellie R. Stevens'</i>	Nellie Stevens Holly	15-25	15-25	E	Good For Screening; Bird Friendly.
<i>Illicium anisatum</i>	Anisetree	6-10	6-10	E	Good For Screening.
<i>Lonicera fragrantissima</i>	Winter Honeysuckle	8-12	6-10	D	
<i>Loropetalum chinense</i>	Chinese Fringe-flower	6-10	6-10	E	
<i>Magnolia figo</i>	Banana Shrub	6-8	6-8	E	
<i>Magnolia stellata</i>	Star Magnolia	15-20	10-15	D	
<i>Osmanthus fragrans</i>	Sweet Osmanthus	10-12	10-14	E	
<i>Osmanthus heterophyllus</i>	False Holly	8-10	8-10	E	
<i>Prunus laurocerasus</i>	English Laurel	10-18	25-30	E	Many Cultivars Available
<i>Viburnum dilatatum</i>	Linden Viburnum	8-10	6-8	D	Red Fruit.

Native and Adaptive Plant Lists

Large Shrub List (8-25 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Viburnum opulus</i>	Cranberrybush Viburnum	8-12	10-15	D	
<i>Viburnum plicatum</i>	Doublefile Viburnum	8-10	9-12	D	Accent Plant. Spring Flowers.
<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum	10-15	10-15	E	
<i>Virurnum x burkwoodii</i>	Burkwood Viburnum	8-10	5-7	S	Fragrant Pink Spring Blossoms. Nice Accent Plant.
<i>Vitex agnus castus</i>	Chaste Tree	10-12	8-10	D	Summer Flowers; Bee Favorite

Native and Adaptive Plant Lists

Small to Medium Shrub List (height ≤ 8 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Amorpha canescens</i>	Lead Plant	2-3	2-6	D	Pollinator Friendly; Showy Flowers.
<i>Amorpha nana</i>	Fragrant False Indigo	1-2	1-3	D	Pollinator Friendly; Showy Flowers.
<i>Aronia melanocarpa</i>	Black Chokeberry	3-5	3-5	D	Pollinator Friendly; Spring Flowers.
<i>Callicarpa americana</i>	American Beautyberry	3-8	4-6	D	Pollinator & Bird Friendly; Showy Berries.
<i>Ceanothus americanus</i>	New Jersey Tea	2-3	3-4	D	Pollinator Friendly; Showy Flowers.
<i>Cephalanthus occidentalis</i>	Buttonbush	5-8	3-6	D	Pollinator Friendly; Showy Flowers.
<i>Clethra alnifolia</i>	Summersweet Clethra	4-8	4-6	D	Pollinator Friendly; Summer Flowers
<i>Cornus stolonifera</i>	Red Osier Dogwood	7-8	4-6	D	Pollinator Friendly; Summer Flowers
<i>Diervilla sessilifolia</i>	Southern Bush Honeysuckle	3-5	3-5	D	Pollinator Friendly; Summer Flowers
<i>Diervilla lonicera</i>	Bush Honeysuckle	2-4	2-4	D	Pollinator Friendly; Showy Flowers.
<i>Euonymus americanus</i>	Strawberry Bush	4-5	3-5	D	Pollinator Friendly; Summer Flowers
<i>Fothergilla gardenii</i>	Dwarf Fothergilla	2-3	2-3	D	Pollinator Friendly; Summer Flowers
<i>Hydrangea arborescens</i>	Smooth Hydrangea	3-5	3-5	D	Pollinator Friendly; Summer Flowers
<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea	6-8	6-8	D	Pollinator Friendly; Summer Flowers
<i>Hypericum densiflorum</i>	Dense St. Johns Wort	4-6	4-6	D	Pollinator Friendly; Summer Flowers
<i>Hypericum prolificum</i>	Shrubby St. Johns Wort	1-4	1-4	D	Pollinator Friendly; Summer Flowers
<i>Ilex glabra</i>	Inkberry Holly	6-8	8-10	E	Pollinator & Bird Friendly
<i>Itea virginica</i>	Virginia Sweetspire	3-5	4-6	S	Pollinator Friendly; Summer Flowers
<i>Juniperus horizontalis</i>	Creeping Juniper	1	4-8	E	Good For Banks/Slopes As A Groundcover.
<i>Leucothoe axillaris</i>	Doghobble	3-4	4-6	D	Pollinator Friendly; Spring Flowers.
<i>Leucothoe fontanesiana</i>	Drooping Leucothoe	3-5	2-3	E	Pollinator Friendly; Spring Flowers.
<i>Lyonia lucida</i>	Fetterbush	3-6	3-6	E	Pollinator Friendly; Spring Flowers.
<i>Physocarpus opulifolius</i>	Ninebark	5-8	4-8	D	Pollinator Friendly; Summer Flowers.
<i>Rhododendron atlanticum</i>	Dwarf or Coastal Azalea	2-6	2-5	D	Spring Flowers; Pollinator & Bird Friendly
<i>Rhododendron carolinianum</i>	Carolina Rhododendron	3-6	3-6	E	Spring Flowers; Pollinator & Bird Friendly
<i>Rhododendron calendulaceum</i>	Flame Azalea	4-8	8-10	D	Pollinator Friendly; Late Spring Flowers
<i>Rhus aromatica</i>	Fragrant Sumac	2-6	6-10	D	Stabilizes Slopes; Pollinator Friendly; Appearance Similar To Poison Ivy.
<i>Rosa carolina</i>	Carolina Rose	3-6	5-10	D	Stabilizes Slopes; Pollinator Friendly

Native and Adaptive Plant Lists

Small to Medium Shrub List (height ≤ 8 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Rosa paulstris</i>	Swamp Rose	3-6	3-6	D	Pollinator Friendly
<i>Spiraea alba</i>	Meadowsweet	3-4	3-4	D	Pollinator Friendly
<i>Spiraea betulifolia</i>	White Spirea	2-3	2-3	D	Pollinator Friendly
<i>Spiraea tomentosa</i>	Steeplebush	2-4	3-5	D	Pollinator Friendly
<i>Vaccinium ashei</i>	Rabbiteye Blueberry	4-6	3-5	D	Edible Fruit; Pollinator & Bird Friendly
<i>Vaccinium pallidum</i>	Lowbush Blueberry	2-3	2-3	D	Pollinator & Bird Friendly; Spring Flowers; Edible Fruit;
<i>Virburnum acerifolium</i>	Mapleleaf Viburnum	4-6	3-4	D	Pollinator & Bird Friendly; Spring Flowers.
<i>Viburnum cassinoides</i>	Witherod Viburnum	5-6	5-8	D	Pollinator & Bird Friendly; Spring Flowers.
<i>Viburnum nudum</i>	Smooth Witherod	4-6	5-8	D	Pollinator & Bird Friendly; Spring Flowers.
Introduced adaptive species:					
<i>Abelia x grandiflora</i>	Glossy Abelia	4-6	3-5	S	Showy Summer Flowers.
<i>Berberis verruculosa</i>	Warty Barberry	3-6	3-6	E	Thorns; Many Cultivars Available;
<i>Berberis x chenaultii</i>	Chenault Barberry	3-4	3-4	E	Thorns; Many Cultivars Available;
<i>Berberis x mentorensis</i>	Mentor Barberry	4-6	5-7	D	
<i>Buxus microphylla</i>	Littleleaf Boxwood	3-4	3-4	E	
<i>Callicarpa japonica</i>	Japanese Beautyberry	4-6	4-6	D	Showy Berries
<i>Chaenomeles japonica</i> <i>Japanese</i>	Flowering Quince	2-3	2-3	D	Spring Flowering.
<i>Cotoneaster divaricatus</i>	Spreading Cotoneaster	5-6	6-8	D	Red Berries.
<i>Cotoneaster horizontalis</i>	Rockspray Cotoneaster	2-3	5-8	S	Red Berries.
<i>Cytisus scoparius</i>	Scotch Broom	5-6	5-8	D	
<i>Deutzia</i>	Deutzia	2-4	3-4	D	Showy Spring Flowers.
<i>Hydrangea macrophylla</i>	Mophead Hydrangea	3-6	3-6	D	Large Flowers;
<i>Ilex crenata</i>	Japanese Holly	5-10	5-10	E	Many Cultivars Available. Low Screening.
<i>Jasminum nudiflorum</i>	Winter Jasmine	3-4	4-7	D	Showy Flowers. Stabilizes Slopes
<i>Juniperus chinensis</i>	Chinese Juniper	2-6	2-6	E	
<i>Juniperus conferta</i>	Shore Juniper	1-2	6-9	E	Many Cultivars Available; Stabilizes Slopes.
<i>Juniperus procumbens</i>	Japanese Garden Juniper	1-2	10-15	E	
<i>Kerria japonica</i>	Japanese Kerria	3-6	6-9	D	Yellow Flowers In The Spring.
<i>Lonicera nitida</i>	Box Honeysuckle	5-6	3-4	E	Fragrant White Flowers.

Native and Adaptive Plant Lists

Small to Medium Shrub List (height ≤ 8 ft)

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Mahonia aquifolium</i>	Oregon Grape Holly	3-6	3-5	E	
<i>Prunus laurocerasus</i>	Dwarf English Laurel	3-4	3-4	E	
<i>Rosmarinus officianalis</i>	Rosemary	4-6	3-6	E	Edible;
<i>Spiraea japonica</i>	Japanese Spiraea	4-5	4-5	D	
<i>Spiraea thunbergii</i>	Thunberg Spirea	3-5	3-5	D	
<i>Spiraea x bumalda</i>	Bumald Spiraea	2-3	3-5	D	Good Fall Color, Spring Flowers.

Native and Adaptive Plant Lists

Parking Lot Shade Tree List

This list is intended to provide trees that adapt well to parking lot conditions and meet the requirements of UDO Sec. 8.2.5.C.2.

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	25-30	15-20	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Honeylocust	30-70	30-70	D	Pollinator Friendly
<i>Liquidambar styraciflua</i> 'Rotundiloba'	Sweetgum, Fruitless	60-75	20-30	D	Quick Growth
<i>Nyssa sylvatica</i>	Black Gum	30-50	20-30	D	Pollinator & Bird Friendly
<i>Quercus lyrata</i>	Overcup Oak	40-70	35-50	D	
<i>Quercus nuttallii</i>	Nuttall Oak	40-60	35-50	D	
<i>Quercus shumardii</i>	Shumard Oak	40-60	40-60	D	
<i>Taxodium distichum</i>	Baldcypress	50-70	30-40	D	Drought Tolerant
<i>Ulmus americana</i> 'Princeton'	Princeton Elm	50-70	30-50	D	
Introduced Adaptive Species:					
<i>Acer buergerianum</i>	Trident Maple	25-35	15-25	D	
<i>Acer truncatum</i>	Purpleblow Maple	20-25	15-20	D	
<i>Carpinus betulus</i>	European Hornbeam	40-60	30-40	D	
<i>Ginkgo biloba</i>	Ginkgo	25-50	25-35	D	Flowers On Female Trees Have Unpleasant Odor
<i>Lagerstroemia indica</i> & hybrids	Common Crapemyrtle	10-25	20-25	D	Summer Flowers
<i>Parrotia persica</i>	Persian ironwood	20-40	20-35	D	
<i>Pistachia chinensis</i>	Chinese Pistache	30-35	25-35	D	
<i>Tilia tomentosa</i>	Silver Linden	50-70	30-50	D	
<i>Ulmus parvifolia</i>	Chinese elm	40-50	35-50	D	
<i>Zelkova serrata</i>	Japanese Zelkova	50-80	50-75	D	

Native and Adaptive Plant Lists

Vehicle Use Area Screening Shrubs

This list is intended to provide evergreen shrubs that adapt well to parking lot conditions and meet the requirements of UDO Sec. 8.2.5.B.2.a.

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Sun/Shade	Comments
Native Species:					
<i>Ilex glabra</i>	Inkberry	6-8	8-10	Sun	Pollinator & Bird Friendly
<i>Ilex vomitoria</i>	Yaupon Holly	3-5	3-5	Sun	Pollinator & Bird Friendly
<i>Illicium floridanum</i>	Florida Anise	10-15	6-8	Shade – Part Shade	Showy Flowers; Pollinator Friendly
<i>Juniperus virginiana</i>	Red Cedar – shrub form	3-8	3-6	Sun	Bird Friendly
<i>Kalmia latifolia</i>	Mountain Laurel	7-15	7-15	Sun – Part Sun	Showy Flowers; Pollinator Friendly
<i>Myrica pusilla</i>	Dwarf Wax Myrtle	5	5	Sun – Part Sun	Bird Friendly
<i>Pinus strobus</i> ‘Nana’	Dwarf Eastern White Pine ‘Nana’	6	10	Sun	
<i>Rhododendron carolinianum</i>	Carolina Rhododendron	3-6	3-6	Sun – Part Shade	Pollinator & Bird Friendly
<i>Thuja occidentalis</i>	Arborvitae – shrub form	2-10	2-6	Sun	
<i>Tsuga Canadensis</i>	Dwarf Eastern Hemlock	5-8	3-6	Sun – Part Shade	
Introduced Adaptive Species:					
<i>Abelia x grandiflora</i>	Glossy Abelia	4-6	3-5	Sun – Part Sun	Bird Friendly
<i>Acuba japonica</i>	Japanese Acuba	6-10	4-8	Shade	
<i>Buxus microphylla</i>	Littleleaf Boxwood	3-4	3-4	Sun – Part Sun	
<i>Buxus sempervirens</i>	Boxwood	15-20	15-20	Sun – Part Sun	
<i>Camellia japonica</i>	Japanese Camellia	10-15	6-10	Shade – Full Shade	
<i>Euonymus japonicus</i>	Japanese Euonymus	10-15	5-7	Sun – Part Sun	
<i>Gardenia jasminoides</i>	Gardenia	3-10	2-10	Part Sun	
<i>Ilex cornuta</i>	Chinese Holly	8-10	8-10	Sun – Part Sun	
<i>Juniperus chinensis</i>	Chinese Juniper	2-6	2-6	Sun – Part Sun	
<i>Prunus laurocerasus</i>	English Laurel	3-4	3-4	Sun – Part Sun	
<i>Rhododendron x</i>	Azalea	3-15	3-12	Shade – Part Shade	
<i>Spirea japonica</i>	Japanese Spirea	4-5	4-5	Sun – Part Sun	
<i>Viburnum awabuki</i>	Chindo Viburnum	6-12	6-10	Sun – Part Sun	Bird Friendly
<i>Viburnum tinus</i>	Laurustinus ‘Compactum’	6-10	6-10	Sun – Part Sun	Bird Friendly
<i>Viburnum x pragense</i>	Prague Viburnum	10-12	8-10	Sun – Part Sun	Bird Friendly

Native and Adaptive Plant Lists

Recommended Trees & Large Shrubs Under Electric Lines

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Aesculus pavia</i>	Red Buckeye	15-20	15-20	D	
<i>Amelanchier arborea</i>	Downy Serviceberry	10-25	10-15	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Amelanchier x grandiflora</i> 'Autumn Brilliance'	Autumn Brilliance Serviceberry	15-20	15-20	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Aronia arbutifolia</i>	Red Chokecherry	8-12	4-6	D	Spring Flowers; Pollinator & Bird Friendly
<i>Chionanthus virginicus</i>	White Fringe Tree	15-20	15-20	D	Spring Flowers; Pollinator & Bird Friendly
<i>Cotinus obovatus</i>	American Smoketree	15-25	20-25	D	Spring Flowers; Pollinator & Bird Friendly
<i>Ilex vomitoria</i>	Yaupon Holly	15-20	10-15	E	Pollinator & Bird Friendly
<i>Ilex x 'Emily Bruner'</i>	Emily Bruner Holly	15-20	8-10	E	Pollinator & Bird Friendly
<i>Juniperus virginiana</i> 'Blue Arrow'	Blue Arrow Red Cedar	10-15	4-6	E	Bird Friendly
<i>Juniperus virginiana</i> 'Skyrocket'	Skyrocket Red Cedar	10-20	3-4	E	Bird Friendly
<i>Magnolia grandiflora</i> 'Little Gem'	Little Gem Magnolia	15-20	8-10	E	Pollinator & Bird Friendly
<i>Magnolia virginiana</i>	Sweetbay Magnolia	10-30	15-20	E	Pollinator & Bird Friendly
<i>Myrica cerifera</i>	Southern Wax Myrtle	15-25	15-25	E	Bird Friendly
<i>Prunus americana</i>	American Red Plum	15-25	15-20	D	Pollinator & Bird Friendly
<i>Prunus caroliniana</i>	Carolina Cherrylaurel	10-20	10-15	E	Pollinator & Bird Friendly
<i>Prunus virginiana</i>	Common Chokecherry	15-20	10-15	D	Pollinator & Bird Friendly
<i>Rhus copallina</i>	Shining Or Winged Sumac	15-25	15-25	D	Pollinator & Bird Friendly
<i>Rhus typhina</i>	Staghorn Sumac	15-25	15-25	D	Pollinator & Bird Friendly
<i>Thuja occidentalis</i>	"Emerald" Arborvitae	15-20	5	E	
<i>Viburnum lentago</i>	Nannyberry Viburnum	12-18	15	D	Pollinator & Bird Friendly
Introduced Adaptive Species:					
<i>Acer buergerianum</i>	Trident Maple	30	30	D	
<i>Acer carpinifolium</i>	Hornbeam Maple	15-25	15-25	D	
<i>Acer ginnala</i>	Amur Maple	15-20	15-30	D	
<i>Acer palmatum</i>	Japanese Maple	15-20	10-15	D	
<i>Acer tartaricum</i>	Tatarian Maple	15-25	10-15	D	
<i>Acer truncatum</i>	Purpleblow Maple	20-25	15-20	D	
<i>Cephalotaxus harringtonia</i>	Japanese Plum Yew	10-25	20-30	E	

Native and Adaptive Plant Lists

Recommended Trees & Large Shrubs Under Electric Lines

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
<i>Cercis reniformis</i>	Oklahoma Redbud	15-25	15-25	D	Pollinator Friendly
<i>Chionanthus retusus</i>	Chinese Fringe Tree	15-25	10-25	D	Spring Flowers; Pollinator Friendly
<i>Cornus mas</i>	Cornelian Cherry Dogwood	20-25	15-20	D	Spring Flowers; Pollinator Friendly
<i>Cornus kousa</i>	Kousa Dogwood	20	20	D	Spring Flowers; Pollinator Friendly
<i>Cotinus coggyria</i>	Smoketree	15	15	D	Spring Flowers; Pollinator Friendly
<i>Ilex x 'Dr. Kassab'</i>	Dr. Kassab Holly	15-20	10-15	E	Bird Friendly
<i>Ilex x 'Nellie R. Stevens'</i>	Nellie R. Stevens	15-25	10-15	E	Bird & Pollinator Friendly
<i>Juniperus scopulorum 'Wichita Blue'</i>	Wichita Blue Juniper	10-15	6-8	E	Bird Friendly
<i>Lagerstroemia fauriei</i>	Japanese Crapemyrtle	10-25	20-25	D	Summer Flowers
<i>Lagerstroemia indica & hybrids</i>	Common Crapemyrtle	10-25	20-25	D	Summer Flowers
<i>Magnolia stellata</i>	Star Magnolia	15-20	10-15	D	
<i>Photinia x fraseri</i>	Fraser Photinia	15-25	10-20	E	Bird Friendly
<i>Prunus cerasifera</i>	Cherry Plum	15-20	15-20	D	Spring Flowers; Bird & Pollinator Friendly
<i>Prunus mume</i>	Japanese Apricot	15-20	15-20	D	Spring Flowers; Pollinator Friendly
<i>Prunus persica</i>	Common Peach	15-25	15-25	D	Spring Flowers; Pollinator Friendly
<i>Prunus serrulata</i>	Flowering Cherry	15-25	20-30	D	Spring Flowers; Bird & Pollinator Friendly
<i>Styrax japonicas</i>	Japanese Snowbell	20-25	20-25	D	Spring Flowers; Pollinator Friendly
<i>Syringa oblata</i>	Early Lilac	10-15	10	D	Spring Flowers; Pollinator Friendly
<i>Syringa reticulata</i>	Japanese Tree Lilac	25	20-25	D	Spring Flowers; Pollinator Friendly
<i>Viburnum sieboldii</i>	Siebold Viburnum	20	15	D	Spring Flowers; Bird & Pollinator Friendly

Native and Adaptive Plant Lists

Type A Buffer Tree List

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Sun/Shade	Comments
Native Species:					
<i>Chamaecyparis thyoides</i>	Atlantic white cedar	40-50	10-20	sun	
<i>Ilex cassine</i>	Dahoon Holly	20-30	10-15	sun	Pollinator Friendly
<i>Ilex opaca</i>	American Holly	40-50	20-40	sun	Pollinator & Bird Friendly
<i>Ilex vomitoria</i>	Yaupon Holly	15-20	10-15	sun	Pollinator Friendly
<i>Juniperus virginiana</i>	Eastern Red Cedar	40-50	10-20	sun	Bird Friendly
<i>Magnolia grandiflora</i>	Southern Magnolia	60-80	40-50	sun – part sun	Pollinator & Bird Friendly
<i>Magnolia virginiana</i>	Sweetbay Magnolia	10-30	15-20	sun – part sun	Pollinator & Bird Friendly
<i>Pinus virginiana</i>	Virginia Pine	15-40	10-30	sun	
<i>Prunus caroliniana</i>	Carolina Cherry Laurel	20-30	15-25	sun	Toxic; Pollinator & Bird Friendly
<i>Thuja occidentalis</i>	Eastern Arborvitae	20-40	10-15	sun	Many Cultivars Available; Shrub-Forms Available
<i>Tsuga canadensis</i>	Canadian Hemlock	40-70	25-35	sun	
Introduced Adaptive Species:					
<i>Abies firma</i>	Japanese Fir	20-30	10-15	sun – part sun	
<i>Cedrus deodara</i>	Deodar Cedar	40-70	20-40	sun – part sun	
<i>Cryptomeria japonica</i>	Japanese Cryptomeria	50-60	20-30	shade	
<i>Cunninghamia lanceolata</i>	Chinese Fir	30-70	10-30	sun – part sun	
<i>Cupressus arizonica</i>	Arizona cypress	30-40	8-12	sun – part sun	
<i>Ilex x attenuata</i>	Hybrid Holly	15-30	10-15	sun – part sun	
<i>Ilex x 'Dr. Kassab'</i>	Dr. Kassab Holly	15-20	10-15	sun – part sun	Bird Friendly
<i>Ilex x 'Nellie R. Stevens'</i>	Nellie R. Stevens	15-25	10-15	sun – part sun	Pollinator & Bird Friendly
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	70-100	20-30	sun – part sun	
<i>Photinia x fraseri</i>	Fraser Photinia	15-25	10-20	sun – part sun	Pollinator Friendly
<i>Pinus nigra</i>	Austrian Pine	50-60	20-40	sun – part sun	
<i>Pinus sylvestris</i>	Scotch Pine	30-60	30-40	sun – part sun	
<i>Pinus thunbergi</i>	Japanese Black Pine	20-60	10-20	sun – part sun	
<i>Thuja orientalis</i>	Western Arborvitae	20-25	10-25	sun – part sun	
<i>Thuja standishii x plicata 'Green Giant'</i>	Green Giant Arborvitae	50-60	10-20	sun – part sun	
<i>X Cupressocyparis leylandii</i>	Leyland Cypress	60-70	15-25	sun – part sun	

Native and Adaptive Plant Lists

Type A Buffer Shrub List

This list is intended to provide evergreen shrubs that meet the requirements of UDO Sec. 8.2.2.B.3.d. and 8.2.6.B.5.a.

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Sun/Shade	Comments
Native Species:					
<i>Camellia sasanqua</i>	Sasanqua Camellia	6-10	5-7	Part Shade	Showy Flowers; Pollinator Friendly
<i>Ilex glabra</i>	Inkberry Holly	6-8	8-10	Sun	Pollinator & Bird Friendly
<i>Ilex verticillata</i>	Winterberry Holly	6-10	6-10	Sun – Part Sun	Berries; Pollinator & Bird Friendly;
<i>Illicium floridanum</i>	Florida Anise	10-15	6-8	Sun – Part Sun	Showy Flowers; Pollinator Friendly
<i>Illicium parviflorum</i>	Yellow Anise	10-15	6-10	Shade – Part Shade	Showy Flowers; Pollinator Friendly
<i>Juniperus virginiana</i>	Eastern Cedar – shrub form	2-10	2-10	Sun	Bird Friendly
<i>Kalmia latifolia</i>	Mountain Laurel	7-15	7-15	Shade – Part Shade	Showy Flowers; Pollinator Friendly
<i>Leucothoe populifolia</i>	Florida Leucothoe	8-12	6-8	Shade – Part Shade	Toxic; Forms Thickets; Pollinator & Bird Friendly;
<i>Myrica cerifera</i>	Wax Myrtle	10-15	8-12	Sun – Part Sun	Good For Light Screening. Ice Damage.
<i>Rhododendron catawbiense</i>	Mountain Rosebay	6-10	8-10	Part Shade	Spring Flowers; Pollinator Friendly;
<i>Rhododendron vaseyi</i>	Pinkshell Azalea	5-15	5-10	Shade – Part Shade	Spring Flowers; Pollinator Friendly
<i>Thuja occidentalis</i>	Arborvitae – shrub form	3-15	2-6	Sun	
<i>Tsuga canadensis</i>	Eastern Hemlock – shrub form	2-8	2-6	Sun – Part Sun	Susceptible To Hemlock Woolly Adelgid.
Introduced Adaptive Species:					
<i>Aucuba japonica</i>	Acuba	6-10	4-8	Shade – Part Shade	Dwarf Varieties Available. Tolerates Poor Drainage
<i>Buxus sempervirens</i>	Common Boxwood	15-20	15-20	Sun	Many Cultivars Available
<i>Camellia japonica</i>	Camellia	10-15	6-10	Shade – Part Shade	Showy Early Spring Flowering
<i>Cleyera japonica</i>	Japanese Cleyera	8-12	6-7	Sun – Part Sun	
<i>Ilex crenata</i>	Japanese Holly	5-10	5-10	Sun – Part Sun	Many Cultivars Available. Low Screening.
<i>Ilex aquifolia</i>	English HollyS	8-12	8-12	Sun – Part Sun	Bird Friendly
<i>Ilex cornuta</i>	Chinese or Burford Holly	8-10	8-10	Sun – Part Sun	
<i>Ilex latifolia</i>	Lusterleaf Holly	20-25	7-11	Sun – Part Sun	
<i>Illicium anisatum</i>	Anisetree	6-10	6-10	Sun – Part Sun	
<i>Juniperus chinensis</i>	Chinese Juniper	Varies	Varies	Sun – Part Sun	Choose Disease Resistant Cultivars.
<i>Lonicera nitida</i>	Box Honeysuckle	5-6	3-4	Sun – Part Sun	Fragrant White Flowers.
<i>Mahonia aquifolium</i>	Oregon Grape Holly	3-6	3-5	Sun – Part Sun	Bird Friendly

Native and Adaptive Plant Lists

Type A Buffer Shrub List

This list is intended to provide evergreen shrubs that meet the requirements of UDO Sec. 8.2.2.B.3.d. and 8.2.6.B.5.a.

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Sun/Shade	Comments
<i>Prunus laurocerasus</i>	English Laurel	10-18	25-30	Sun – Part Sun	Many Cultivars Available.
<i>Rosmarinus officianalis</i>	Rosemary	4-6	3-6	Sun – Part Sun	Edible
<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum	10-15	10-15	Sun – Part Sun	Bird Friendly

Native and Adaptive Plant Lists

High Quality Shade Trees					
Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Native Species:					
<i>Acer rubrum</i>	Red Maple	40-60	30-40	D	Don't Plant Near Pavement; Natural Areas Only
<i>Acer saccharum</i>	Sugar Maple	60-75	40-50	D	
<i>Acer x fremanii</i>	Freeman Maple	40-60	20-40	D	
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	25-30	15-20	D	Very Early Spring Flowers; Pollinator & Bird Friendly
<i>Betula nigra</i>	River Birch	40-70	40-60	D	
<i>Carya glabra</i>	Pignut Hickory	50-60	25-35	D	Bird & Pollinator Friendly
<i>Carya illinoensis</i>	Pecan	70-100	40-75	D	Edible Nuts
<i>Carya ovata</i>	Shagbark Hickory	60-80	30-50	D	Pollinator Friendly
<i>Celtis laevigata</i>	Sugarberry	40-60	40-60	D	Bird & Pollinator Friendly
<i>Cladrastis lutea</i>	American Yellowwood	30-50	40-55	D	Large Attractive Flowers; Pollinator Friendly
<i>Fagus grandiflora</i>	American Beech	50-70	30-40	D	Edible Nuts
<i>Fraxinus americana</i>	White Ash	50-80	40-50	D	
<i>Juglans nigra</i>	Eastern Black Walnut	50-75	50-75	D	Edible Nuts
<i>Liquidambar styraciflua</i> 'Rotundiloba'	Sweetgum, Fruitless	60-75	20-30	D	Quick Growth
<i>Nyssa sylvatica</i>	Black Gum	30-50	20-30	D	Bird & Pollinator Friendly
<i>Platanus occidentalis</i>	American Sycamore	75-100	75-100	D	Large Root System; Not Good For Small Areas
<i>Tilia americana</i>	Basswood	50-80	30-50	D	Quick Growth; Pollinator Friendly
<i>Quercus alba</i>	White Oak	50-80	50-80	D	
<i>Quercus bicolor</i>	Swamp White Oak	50-60	50-60	D	
<i>Quercus coccinea</i>	Scarlet Oak	60-80	40-50	D	
<i>Quercus lyrata</i>	Overcup Oak	40-70	35-50	D	
<i>Quercus michauxii</i>	Swamp Chestnut Oak	40-60	30-50	D	
<i>Quercus phellos</i>	Willow Oak	40-60	30-40	D	
<i>Quercus rubra</i>	Northern Red Oak	60-75	35-45	D	
<i>Taxodium distichum</i>	Baldcypress	50-70	30-40	D	Drought Tolerant
<i>Ulmus americana</i> 'Princeton'	Princeton Elm	50-70	30-50	D	Susceptible to Dutch Elm Disease

Native and Adaptive Plant Lists

High Quality Shade Trees

Scientific Name	Common Name	Height (Feet)	Spread (Feet)	Evergreen/Deciduous	Comments
Introduced Adaptive Species:					
<i>Acer truncatum</i>	Purpleblow Maple	20-25	15-20	D	
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	70-100	20-30	E	
<i>Parrotia persica</i>	Persian Ironwood	20-40	20-35	D	
<i>Pistachia chinensis</i>	Chinese Pistache	30-35	25-35	D	
<i>Quercus acutissima</i>	Sawtooth Oak	40-60	40-60	D	
<i>Ulmus parvifolia</i>	Chinese Elm	40-50	35-50	D	
<i>Zelkova serrata</i>	Japanese Zelkova	50-80	50-75	D	