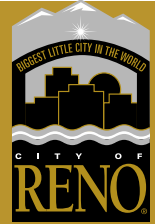


Reno Urban Forestry Commission Approved Street Tree Species List



Reno.gov

The selection of appropriate street trees is very important for the establishment and long term health of the urban forest. The primary factors considered in the development of the following Approved Street Tree List include: drought tolerance, insect and disease resistance, available space above and below ground, size at maturity, cold hardiness, branching habit, and liability issues (thorns, heavy fruit, poisonous, tendency for roots to damage hardscape, etc.). This document contains a list of tree species that are **approved** for use as street trees, as well as a list of tree species that are specifically **not allowed** for use as street trees within the City of Reno. Additionally, there is a section listing trees that are “columnar” in form typically used in narrow locations or in confined tree pits that have minimal setbacks from streets or buildings. It is the intent of the Reno Urban Forestry Commission (RUFC) that this information be used by homeowners, planners, developers, landscape architects, landscape contractors, and others who share a common interest in trees.

Several guidelines have also been developed in conjunction with Reno Municipal Code 8.32 to maximize the success of future tree plantings and minimize maintenance costs. It is important to “**Plant the Right Tree in the Right Place.**”

RMC 8.32.040 Requires a Tree Work Permit be obtained prior to planting, removing, pruning, cutting of or damaging any roots, or treating any tree with pesticides for any tree on City of Reno property. This includes public planting strips and areas within public street rights-of-way. Public planting strips, sometimes called “Parkways”, are the areas between the curb and sidewalk. These areas are within the public rights-of-way and vary in width. The public rights-of-way may also extend a given distance at the back of sidewalk or behind a curb in the absence of a planting strip. The permit must be obtained before any work is done on City of Reno property. Tree permits may be obtained at no cost from the Urban Forester and are valid only for the specified job location. Any person seeking a tree planting, pruning or removal permit must hold a current International Society of Arboriculture Arborist or Tree Worker Certification. For those desiring to obtain a tree planting permit only, a current Nevada Nursery Certification or Certified Landscape Technician is acceptable. The Urban Forester can also assist in determining property ownership. **Please call 775-321-8373 for permits or assistance.**

Species diversity is encouraged. The use of only one or two species on a street or on the same block greatly increases the likelihood of epidemic disease and/or insect infestations. The demise of the American elm is the best documented example of what can happen with the wide spread use of only one species. Landscape architectural principles often suggest the use of one species to promote harmony, and as a thematic element, but the risk associated with this practice is a concern to the Reno Urban Forestry Commission. As a guideline, no single species used as a street tree should exceed thirty-five (35) percent of the population in a row, on the same block, or on the same side of a street. No species should comprise

more than ten (10) percent of the total forest inventory. No more than five (5) individual trees of the same species should be planted in a row. Certain situations may exist that are not compatible with this guideline.

Proper watering is the single most important factor leading to the success or failure of trees in our arid climate! This is true for both newly planted as well as established trees. Newly planted trees require more frequent watering than established or mature trees. For **newly planted trees**, a circular mound of soil 4-6" high around the edge of the planting area should be built. This will force water into the root ball. The bermed area should be slowly filled with water and allowed to soak in, then re-filled again. This should be done 2-3 times a week throughout the summer. In the early spring and late fall, watering 1-2 times per week should be sufficient. Times between watering should be allowed to let the soil drain and dry out. A screwdriver can be used to check soil moisture. Adjust water frequency as necessary. Even with a sprinkler or drip system, new trees need the extra water. After two (2) years, roots should be established but regular watering is still required. For **established and mature trees**, water must reach the entire root zone. This is the area from just beyond the trunk to at least the drip-line (the area underneath the branch spread) and beyond. Avoid frequent light watering because this promotes the development of shallow root systems which are susceptible to summer heat stress and winter injury. If using a drip system only, make sure you add more lines and emitters as the tree matures and move them farther away from the trunk. Check emitters regularly to make sure they do not become clogged. If you have trees in turf and a sprinkler system, make sure that there is adequate coverage. Check for leaks and proper overlap coverage of sprinkler heads. Be sure to provide extra watering with a soaker hose or manual sprinkler attached to a hose during mid-summer. Do this every 10-14 days.

Proper planting depth is another significant factor in the overall success of a tree. The planting hole should be 2-3 times the width of the root ball, and only as deep as the root ball. When planted at the proper depth, the trunk flare (the point at which the trunk expands into the root ball) should be partially visible above ground. This may not be the same level as the tree arrives in a soil pot. Planting the tree even 2-3 inches too low will likely cause decay and stunted root growth and may lead to tree death in 5-7 years.

Tree stakes – If tree stakes were installed when the tree was planted, they should be removed along with all hardware after 1-2 years. This will depend on how soon the tree becomes established, how much wind there is on the tree, and soil conditions. Leaving tree stakes on too long can girdle and kill trees!

Evergreen trees are not allowed as street trees in planting strips due to shading in winter which inhibits melting of snow/ice from walks and streets, and also because the low branches create safety problems from lack of visibility, and interfere with pedestrians, vehicles, and traffic control devices. The RUF recognizes that certain small, columnar or other evergreen trees may be utilized in special circumstances with the approval of the Urban Forester.

Minimum grow space requirements need to be followed. The minimum width for a planting strip suitable for planting trees is five feet. Shrubs may be used in those situations where less than five feet is available for planting. Selected shrub species shall be limited to those which will not grow more than

three feet in height so that they do not block traffic visibility. When planting trees in areas less than five feet wide, problems occur with tree roots lifting sidewalks, cracking pavement, displacing curbs and gutters, heat stress, and mechanical injury to roots. The use of root barriers is considered a short term solution and is not generally acceptable.

Mature tree size should match the available space. For the purposes outlined here, planting strips/parkways have been divided into the following size categories with corresponding tree/shrub sizes:

<u>Parkway Size</u>	<u>Acceptable plants</u>
Less than five feet wide	Shrubs only, no trees
Five feet to seven feet wide	Class I (small trees only)
Seven to ten feet wide	Class I or II (small and/or medium trees)
Greater than ten feet wide	Class II or III (medium and/or large trees)

Overhead Utility Lines

When overhead utility lines are located above the desired planting strip, only Class I trees or shrubs may be planted. This is to prohibit the trees from eventually growing into the lines, creating a safety hazard, and requiring extraordinary pruning techniques to mitigate the hazards.

Generally the largest tree size category that will fit the space should be used so that the community benefits from the maximum shade, environmental benefits and tree longevity. **Minimum spacing between trees** is determined by the Urban Forester depending on the tree species selected. Generally, **small trees can be spaced 15' feet apart; medium trees 25' feet; and large trees 35' feet apart.** If there are special situations such as overhead utility lines, existing walks/driveways, structures, or other utilities, then smaller size categories or columnar tree varieties should be used.

Tree City USA

The City of Reno was the first Tree City USA in the State of Nevada, having been awarded this distinction by the Arbor Day Foundation and the Nevada Division of Forestry every year since 1983. The Tree City USA program recognizes local governments which have adopted standards and implemented programs to foster a sustainable urban forest in their communities.



APPROVED STREET TREE SPECIES

Tree species from the following list are approved by the RUFCA for planting in the City of Reno on parkways and other street locations. They are grouped by size class as determined by trunk diameter, height, and crown spread at maturity. The list below is in alphabetical order by scientific name; common names are also shown on the left. Other tree species not found on the approved list **may** be allowed for planting upon approval from the Urban Forester. For additional tree selections that may be appropriate for use on one's own property, please visit the **Water Efficient Landscape Guide** located on the Truckee Meadows Water Authority (TMWA) web site.

Class I. Small Trees: Small trunk diameter (25' or less in height), good for planting beneath power lines.

<u>Common Name</u>	<u>Botanical Name</u>
Trident Maple	<i>Acer buergeranum</i>
Hedge Maple.....	<i>Acer campestre</i>
Amur Maple	<i>Acer ginnala</i>
Tatarian Maple	<i>Acer tataricum</i>
Eastern Redbud.....	<i>Cercis canadensis</i>
Chitalpa	<i>Chilopsis linearis</i>
Turkish Hazel (Filbert).....	<i>Corylus colurna</i>
Smoke Tree	<i>Cotinus coggygria</i>
Thornless Cockspur Hawthorn	<i>Crataegus crus-galli 'Inermis'</i>
Flowering Dogwood (Pagoda Dogwood)	<i>Cornus alternifolia</i>
Golden Raintree	<i>Koelreuteria paniculata</i>
Crabapple (non or small fruit bearing only).....	<i>Malus spp.(many varieties)</i>
Kwansan Cherry.....	<i>Prunus serrulata 'Kwanzan'</i>
Columnar Sargent Cherry.....	<i>Prunus sargentii 'Columnaris'</i>
Purple Leaf Flowering (non-fruit bearing) Plum... 'Canada Red' Chokecherry	<i>Prunus cerasifera 'Krauter Vesuvius'</i> <i>Prunus virginiana 'Canada Red'</i>
Japanese Tree Lilac.....	<i>Syringa reticulata</i>

Class II. Medium Trees: Moderate trunk diameter (30-50 feet in height)

<u>Common Name</u>	<u>Botanical Name</u>
Autumn Blaze Maple	<i>Acer x freemanii 'Jeffersred'</i>
Norway Maple.....	<i>Acer platanoides</i>
Crimson Sentry Norway Maple	<i>Acer platanoides 'Crimson Sentry'</i>
Sycamore Maple.....	<i>Acer pseudoplatanus</i>
Armstrong Maple.....	<i>Acer rubrum 'Armstrong'</i>
October Glory Maple	<i>Acer rubrum 'October Glory'</i>
Red Sunset Maple	<i>Acer rubrum 'Franksred'</i>
Redpointe Maple.....	<i>Acer rubrum 'Frank Jr.'PP</i>
Legacy Sugar Maple	<i>Acer saccharum 'Legacy'</i>
Heritage River Birch.....	<i>Betula nigra 'Cully'</i>
European Hornbeam.....	<i>Carpinus betulus</i>
Common Hackberry	<i>Celtis occidentalis</i>
Ginkgo – Maidenhair Tree.....	<i>Ginkgo biloba 'Magyar'</i>
Honeylocust.....	<i>Gleditsia triacanthos 'Shademaster'</i>

Sweetgum.....	<i>Liquidambar styraciflua</i> 'Moraine'
Amur Corktree.....	<i>Phellodendron amurense</i> 'His Majesty'
Chinese Pistache	<i>Pistacia chinensis</i>
Flowering Pear	<i>Pyrus calleryana</i> 'Capital' or 'Chanticleer'
Chinkapin Oak.....	<i>Quercus muehlenbergii</i>
Columnar English Oak.....	<i>Quercus robur</i> 'fastigiata'
Yellowwood.....	<i>Cladrastis lutea</i>
Japanese Zelcova.....	<i>Zelcova serrata</i>
American Hophornbeam.....	<i>Ostrya Virginia</i> (Birch Family)

Class III. Large Trees: Large trunk diameter (can reach heights over 50')

<u>Common Name</u>	<u>Botanical Name</u>
Red Horsechestnut.....	<i>Aesculus x camea</i> 'Briotii'
Ohio Buckeye	<i>Aesculus glabra</i>
Northern Catalpa.....	<i>Catalpa speciosa</i>
Hardy Rubber Tree.....	<i>Eucommia ulmoides</i>
European Beech.....	<i>Fagus sylvatica</i>
Kentucky Coffeetree.....	<i>Gymnocladus dioicus</i>
Tulip Tree.....	<i>Liriodendron tulipifera</i>
Japanese Pagoda Tree.....	<i>Sephora japonica</i>
London Planetree	<i>Platanus x acerfolia</i> 'Bloodgood'
Linden spp.....	<i>Tilia spp.</i>
Swamp White Oak.....	<i>Quercus bicolor</i>
Scarlet Oak	<i>Quercus coccinea</i>
Shingle Oak	<i>Quercus imbricaria</i>
Valley Oak.....	<i>Quercus lobata</i>
Bur Oak.....	<i>Quercus macrocarpa</i>
Pin Oak.....	<i>Quercus palustris</i>
Northern Red Oak	<i>Quercus rubra</i>
Chinkapin Oak.....	<i>Quercus muehlenbergii</i>
Blue Oak.....	<i>Quercus douglasii</i>

Other species may be considered with the prior approval of the Urban Forester.

The Street Tree Species List and Guidelines are officially approved by the Reno Urban Forestry Commission.

SPECIAL SELECTION OF APPROVED TREES

Columnar Trees – These selections have an upright growth form and are intended for narrow spaces with minimal setbacks so as not to conflict with pedestrian/vehicular travel or advertising signs near adjacent businesses. They may also be used for planting in 5'x5' tree pits for streetscape projects. Several selections on this list have been used in Reno to date and have shown good success. Planners and Landscape Architects are encouraged to use these selections in designing streetscapes and commercial properties. Columnar trees also make good screens or buffers along driveways or in backyards. Local nurseries are also encouraged to stock and promote the use of these tree types to clients and customers.

Columnar Norway Maple – Height 35' Spread 15'	<i>Acer platanoides</i> 'Columnar'
Crimson Sentry Maple – Height 25' Spread 15'	<i>Acer platanoides</i> 'Crimson Sentry'
Armstrong Maple – Height 45' Spread 15'	<i>Acer rubrum</i> 'Armstrong'
Apollo Maple – Height 25' Spread 10'	<i>Acer saccharum</i> 'Barrett Cole' PP
Frans Fontaine Hornbeam - Height 35' Spread 15'	<i>Carpinus betulus</i> 'Frans Fontaine'
Dawyck Purple Beech – Height 40' Spread 12'	<i>Fagus sylvatica</i> 'Dawyck Purple'
Fastigate Beech – Height 45' Spread 15'	<i>Fagus sylvatica</i> 'Fastigiata'
Princeton Sentry Ginkgo – Height 40' Spread 15'	<i>Ginkgo biloba</i> 'Princeton Sentry'
Emerald Sentinel Sweetgum – Height 30' Spread 12'	<i>Liquidambar styraciflua</i> 'Clydesform'
Columnar Tulip Tree – Height 50' Spread 15'	<i>Liriodendron tulipifera</i> 'Fastigiatum'
Capital Pear – Height 35' Spread 12'	<i>Pyrus calleryana</i> 'Capital'
Green Pillar Oak – Height 50' Spread 15'	<i>Quercus palustris</i> 'Pringreen' PP
Crimson Spire Oak – Height 45' Spread 15'	<i>Quercus robur</i> x <i>Q. alba</i> 'Crimschmidt'
Corinthian Linden – Height 45' Spread 15'	<i>Tilia cordata</i> 'Corzam'

SPECIES NOT APPROVED FOR STREET TREES OR PARKWAYS

Box elder - box elder bugs and seeds are a nuisance	<i>Acer negundo</i>
Silver maple - weak/brittle wood	<i>Acer saccharinum</i>
Russian Olive - thorns and invasive species	<i>Eleagnus angustifolia</i>
Walnut – fruit and insects	<i>Juglans</i> spp.
Goldenchain tree – poisonous	<i>Laburnum anagyroides</i>
Aspen – not adaptable, shallow roots, diseases	<i>Populus tremuloides</i>
Cottonwood – weak/brittle wood, invasive roots, diseases	<i>Populus</i> spp.
Black Locust/Purple Robe Locust – limb failure high, borers	<i>Robinia</i> spp.
Willow – weak/brittle wood, invasive roots	<i>Salix</i> spp.
Tamarisk (Salt Cedar) – invasive/noxious weed listing	<i>Tamarix</i> spp.
Elm – Elm leaf beetle infestations, limb failures	<i>Ulmus</i> spp.
Ash spp – borers and disease	<i>Fraxinus</i> spp.

All fruit trees, such as apples, pears, peaches, plums and cherries are not allowed.