

# Mount Vernon

*Community & Economic Development Department*

## RECOMMENDED STREET TREE VARIETIES & GENERAL INFORMATION FOR MOUNT VERNON, WA 2012

**IN GENERAL:** Always select the tree variety that fits available growing space above and below ground and that considers the limitations and attributes of the species. New varieties are continually being evaluated and discovered.; as such, the lists provided herein are reviewed and updated periodically by the City. Also included are planting specifications that the City code requires.

### **Tree Size and Crown:**

The City requires a minimum 2" caliper street trees. The lowest limbs or crown shall be at least 5 feet above grade.

### **Tree Quality:**

All trees shall meet or exceed the most recent American Standards for Nursery Stock. They shall have a central leader or maintain the proper spreading form of that species. They shall exhibit vigorous growth in leaf, twig or bud form, of appropriate color and size. The trunks and limbs shall be free of damage, deadwood and disease. The root systems shall meet or exceed the Standards for their size and shall be free of excessive circling or dead roots. The city shall have the opportunity to inspect trees for acceptance before installation.

### **Planting Space Width:**

Planting trees in **planting widths narrower than four feet** is generally not recommended. However, when no alternative is possible, consult the Arborist for planting and species recommendations. Narrow planting widths severely limit the health and longevity of street tree plantings. The following are general guidelines to follow:

- **Small Trees**-No less than 4-foot wide planting strip.
- **Medium Trees**- No less than 5-foot wide planting strip.
- **Large Trees**-No less than 8-foot wide planting strip.

### **Planting Space Soil and Drainage:**

Street trees utilize the entire planting strip (and more) to grow to any reasonable size. In fact, studies have indicated that for a tree to grow to a functional large canopy size tree, it would need a minimum area that measures 20 feet x 20 feet x 3 feet deep. The entire planting strip should consist of un-compacted and acceptable soils. The planter strips should be well draining or, sub-surface perforated drain pipe surrounded by drain rock should be installed 40-inches deep to ensure drainage. The ridged perforated drain pipe should be connected to a storm drain. Roots might eventually grow under and beyond the sidewalk if soil conditions are favorable but that is not always the case and the planter strip is the first area it will grow into. Other techniques can be used to expand the soil area available to the tree. Lacking adequate soil volume will result in trees that fill up the soil area with roots in 5 or 10 years, like a root bound house plant, and slowly decline.

### **Tree Installation:**

All foreign materials shall be removed from the root ball before planting. The root crown of the tree shall be placed at 1-inch above grade, no higher. A water dam 2-inches high shall be placed around the tree, 18-inches from the trunk. A rectangular area, measuring 5 feet by 5 feet between curb and sidewalk shall be free of grass and covered with 3-inches of woodchips or bark mulch.

### **Watering:**

Immediate and regular watering of newly planted trees is critical to their growth and establishment. Newly planted trees should be thoroughly watered right after planting and then **at least 2 times per week** for the first month of the growing season. Then water at least once per week through the balance of the first summer until October. Watering once per month is also beneficial the second growing season for long-term establishment. Tree Gators are excellent devices to maintain regular and focused application.

The following lists of street trees are organized into these categories:

- Small street trees to 30' with a spreading habit; and small street trees to 30' with a narrow habit.
- Medium street trees to 45' with a spreading habit; and medium street trees to 45' with a narrow habit.
- Large street trees over 45' with a spreading habit.

### Small street trees to 30', spreading habit:

(Can be placed under utility lines)

#### FLOWERING CRABAPPLES:

- Golden Raindrops Crabapple (*Malus transitoria* 'Schmidtcutleaf')
- Royal Raindrops (*Malus* 'JFS-KW5' PP 14375)

#### FLOWERING PLUMS:

- Krauter Vesuvius Flowering Plum (*Prunus cerasifera* 'Krauter Vesuvius')
- Newport Flowering Plum (*Prunus cerisifera* 'Newport')
- Thundercloud Flowering Plum (*Prunus cerisifera* 'Thundercloud')

#### FLOWERING CHERRIES:

- Canada Red Chokecherry (*Prunus virginiana* 'Canada Red')
- Cascade Snow Cherry (*Prunus* 'Berry') most disease resistant.
- Kwanzan Oriental Cherry (*Prunus serrulata* 'Kwanzan') Use Root Barrier
- Royal Burgandy Cherry (*Prunus serrulata* 'Royal Burgandy') Use Root Barrier
- Snow Goose Cherry, (*Prunus* Snow Goose) Use Root Barrier

#### HORNBEAMS:

- American Hornbeam (*Carpinus caroliniana*) and cultivars.
- Japanese Hornbeam (*Carpinus japonica*)

#### OTHER ASSORTED VARIETIES:

- Autumn Brilliance Serviceberry (*Amelanchier x grandiflora* 'Autumn Brilliance')
- Globe Ash (*Fraxinus excelsior* 'Globosa') use Root Barrier
- Jack Pear (*Pyrus calleryana* 'Jaczam')
- Lavalley Hawthorn (*Crataegus x lavalleyi*) with vase shape.
- Crimson Cloud Hawthorn (*Crataegus laevigata* 'Crimson Cloud')
- Paperbark Maple (*Acer griseum*)
- Parrotia Persica (*Persian parrotia*)

### Small street trees to 30', narrow habit:

(Can be placed under utility lines)

#### ASSORTED VARIETIES:

- Red Cascade Mountain Ash (*Sorbus americana* 'Dwarfcrown') to 20'
- Adirondack Crabapple (*Malus* 'Adirondack') to 20'
- *Tschoonoskii Flowering Crab* (*Malus Tschoonoskii*)
- Ruby Vase Parrotia (*Parrotia persica* "Ruby Vase" or 'Venessa')
- Summer Sprite Linden (*Tilia cordata* 'Halka')

### Medium street trees to 45', spreading habit:

(Varieties that need root barriers are noted)

#### ASH:

- Autumn Purple Ash (*Fraxinus americana* 'Junginger') use Root Barrier
- Patmore Ash (*Fraxinus pennsylvanica* 'Patmore') use Root Barrier
- Summit Ash (*Fraxinus pennsylvanica* 'Summit') use Root Barrier

#### FLOWERING PEARS:

- Aristocrat Callery Pear (*Pyrus calleryana* 'Aristocrat') use Root Barrier
- Redspire Flowering Pear (*Pyrus calleryana* 'Redspire') use Root Barrier

#### MAPLES:

- Norwegian Sunset Maple ((*Acer truncatum* x *A. platanoides* 'Keithsform') use Root Barrier
- Pacific Sunset Maple (*Acer truncatum* x *A. platanoides* 'Warrenred') use Root Barrier
- Parkway Norway Maple (*Acer platanoides* 'Columnarbroad') and Cleveland. use Root Barrier
- Queen Elizabeth Hedge Maple (*Acer campestre* 'Evelyn') use Root Barrier
- Red Maple (*Acer rubrum*) (selected varieties including Red-point, Northwood, October Glory, Red Sunset, Autumn Flame, Autumn Spire, Brandywine) use Root Barrier

#### ZELKOVAS:

- Green Vase Japanese Zelkova (*Zelkova serrata* 'Green Vase')
- Village Green Zelkova (*Zelkova serrata* 'Village Green')

#### ASSORTED VARIETIES:

- American Yellowwood (*Cladrastis kentukea*)
- Chinese Tulip (*Liriodendron chinense*) use Root Barrier
- Emerald City Tulip Tree (*Liriodendron tulipifera* 'JFS-Oz') Use Root Barrier
- Elms (*Ulmus* spp.) (any medium maturing height Dutch Elm Disease Resistant variety) New Horizon (*Ulmus japonica* x *pumila* 'New Horizon'), Emerald Sunshine (*Ulmus propinqua* 'JFS-Bieberich', Triumph (*Ulmus* 'Morton Glossy') Frontier (*Ulmus* 'Frontier') has purple fall color.
- Katsura Tree (*Cercidiphyllum japonicum*)
- Kobus Magnolia (*Magnolia kobus*)
- Little Leaf Linden (*Tilia cordata* 'Green Spire') use Root Barrier
- Sour Gum (*Nyssa sylvatica*) and cultivars
- Whitebeam (*Sorbus aria* 'Magnifica' and 'Majestica')
- Worplesdon Sweetgum (*Liquidambar styraciflua* 'Worplesdon') use Root Barrier

## Medium street trees to 45', narrow habit:

(Varieties that need root barriers are noted)

(Narrow is a relative term—some varieties widen as they age)

### FLOWERING PEARS:

- Cambridge Flowering Pear (*Pyrus calleryana* 'Cambridge') use Root Barrier
- Chanticleer Pear or Cleveland Select Flowering Pear (*Pyrus calleryana* 'Chanticleer' or 'Cleveland Select') use Root Barrier

### MAPLES:

- Karpick Maple (*Acer rubrum* 'Karpick') use Root Barrier
- Armstrong Red maple (*Acer rubrum* 'Armstrong') use Root Barrier
- Bowhall Red Maple (*Acer rubrum* 'Bowhall')[same as *Acer rubrum* 'Scanlon'] use Root Barrier
- Emerald Queen Norway Maple (*Acer platanoides* 'Emerald Queen') as well as Easy Street and Columnar Norway, use Root Barrier

### OAKS:

- Crimson Spire Oak (*Quercus alba* x *Q. robur* 'Crimschmidt') use Root Barrier

### ASSORTED VARIETIES:

- Cardinal Royal Mountain Ash (*Sorbus aucuparia* 'Michred')
- Chancellor Linden (*Tilia cordata* 'Chancole') use Root Barrier
- Corinthian Linden ('*Tilia cordata*'Corzam') use Root Barrier
- Dawn Redwood (*Metasequoia glyptostroboides*) use Root Barrier
- Emerald Sentinel Sweetgum (*Liquidambar styraciflua* 'Clydesform') use Root Barrier
- Fastigate Arnold Tulip Tree (*Liriodendron tulipifera* 'Fastigiatum') use Root Barrier
- Musashino Zelkova (*Zelkova serrata* 'Musashino')
- Ginkgo (*Ginkgo biloba*, male cultivars only) Autumn Gold, Princeton Sentry, Maygar, Fastigiata, and others- use Root Barrier
- Pyramidal Dawyckii Beech (*Fagus sylvatica* 'Dawyckii') use Root Barrier
- Slender Silhouette Sweetgum, (*Liquidambar styraciflua* 'Slender Silhouette') Use Root Barrier

## Large street trees to 45', spreading habit:

(Varieties that need root barriers are noted)

### OAKS:

- English Oak (*Quercus robur*) use Root Barrier
- Pin Oak (*Quercus palustris*) use Root Barrier
- Red Oak (*Quercus rubra*) use Root Barrier
- Scarlet Oak (*Quercus coccinea*) use Root Barrier

### LARGE TREES CONTINUED:

### MAPLES:

- Freemanii maples, (Autumn Blaze, Autumn Fantasy, Celebration, and Marmo) use Root Barrier
- Silver Queen Maple (*Acer saccharinum* 'Silver Queen') use Root Barrier
- Sugar Maple (*Acer saccharum*) (several cultivars) use Root Barrier

### ASSORTED VARIETIES:

- Bigleaf Maple (*Acer macrophyllum*) use Root Barrier
- London Plane Tree (*Platanus x acerifolia* 'Exclamation' or 'Ovation', ) use Root Barrier
- European Beech (*Fagus sylvatica*)(Green or Purple leaf) use Root Barrier
- Tulip Tree (*Liriodendron tulipifera*) use Root Barrier
- Accolade Elm (*Ulmus japonica x wilsoniana* 'Morton' use

### Root Barriers :

Use of root barriers may be recommended depending on tree species, soil types, width of planting strip, and thickness of sidewalk and curb. Root barriers do not guarantee protection from hard surface damage, but have been shown to delay lifting of sidewalks and curbs from roots for many years when properly installed.

Root Barriers are recommended for use with tree varieties with the most aggressive root systems. Root barrier use may be disregarded if the recommended planting width is greater than the planting width recommended for the tree size above or as determined by the City.

Root barrier installation is most effective and beneficial when installed along the edge of a sidewalk and/or curb on either side of the tree to allow the tree roots some growing room before roots contact the root barrier. Placing the root barrier around the root ball at planting time severely restricts the growth of the tree and is not recommended. The tree may not become anchored and stable especially if there is poor draining or impervious soil below the root barrier. Root barrier typically comes in 12-inch, 18-inch and 24-inch depths. Depth to install usually depends on tree species, soils and distance between tree and barrier.



Urban Forestry Services, Inc.

(360) 428-5810 • [www.urbanforestryservices.com](http://www.urbanforestryservices.com)

The City's arborist, Jim Barborinas, has provided this list of street trees, that he updated in 2012 for the City.