



TREE GUIDE



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TREE GUIDE



Why select the right tree?

The purpose of this Street Tree Selection Guide is to provide specialized information about each tree and their specific properties for different areas of use and planting around Alpine, Utah. Trees are a very important component to our city. Trees clean the air and cool the environment around our homes and businesses. Trees increase property values and provide a natural beauty in our city, which harbors a great quality of life for all of Alpine’s residents.

Tips for Producing a Tree Healthy City

This Guide Book will help you answer some of these important questions;

Q: What is the use for the tree?

A: Aesthetics, Screening, Shade

Q: What is the character of the tree at maturity?

A: Height, Width, Shape

Q: What are the environmental conditions?

A: Full Sun, Partial Sun, Type of Soil

Q: What overhead and underground utilities are near planting location?

A: Power, Water, Sewer, Gas, Telephone, Fiber

Learn how to select the correct tree

The trees recommended in this guide are tolerant of local temperatures and have qualities to be a great tree.

“Picking the right tree is essential to it’s health and longevity. If a tree is not in the right soil, hardiness zone, or proper area for mature growth, the tree suffers. If severe pruning has to take place, stress to the tree happens, which can cause susceptibility to disease and death.”

- PKJ Design Group, L.L.C

IN THIS GUIDE

- Tree Forms and Class
- Tree Planting Instructions
- Tree List and Characteristics



“PLAN BEFORE YOU PLANT”

TREE FORM / CLASS



Tree Forms

The tree forms pictured here are examples of tree shapes at maturity. It should give you a good idea of how the tree will look and help you plan its place in your landscape. These forms are referred to under the tree characteristics in this guide.

You will find specific heights, crown spreads and other tree characteristics found under the description of each tree.

How to Select a Tree

Shade trees are very different in growth and characteristics from one to another. Learning about a tree's shape, mature height, and spread will help in selecting the correct tree for the correct location.

No Cleanup

Most trees produce flowers, seeds and leaves that will drop during part of their natural life cycle. No tree is truly cleanup free, but this guide will help you choose ones that produce less than others.



Round Form

Conifers

Conifer trees provide year round greenery, screening, and serve as excellent wildlife sanctuaries. They generally should not be pruned and therefore need large growing areas away from buildings, sidewalks, and driveways. Space varies with species.



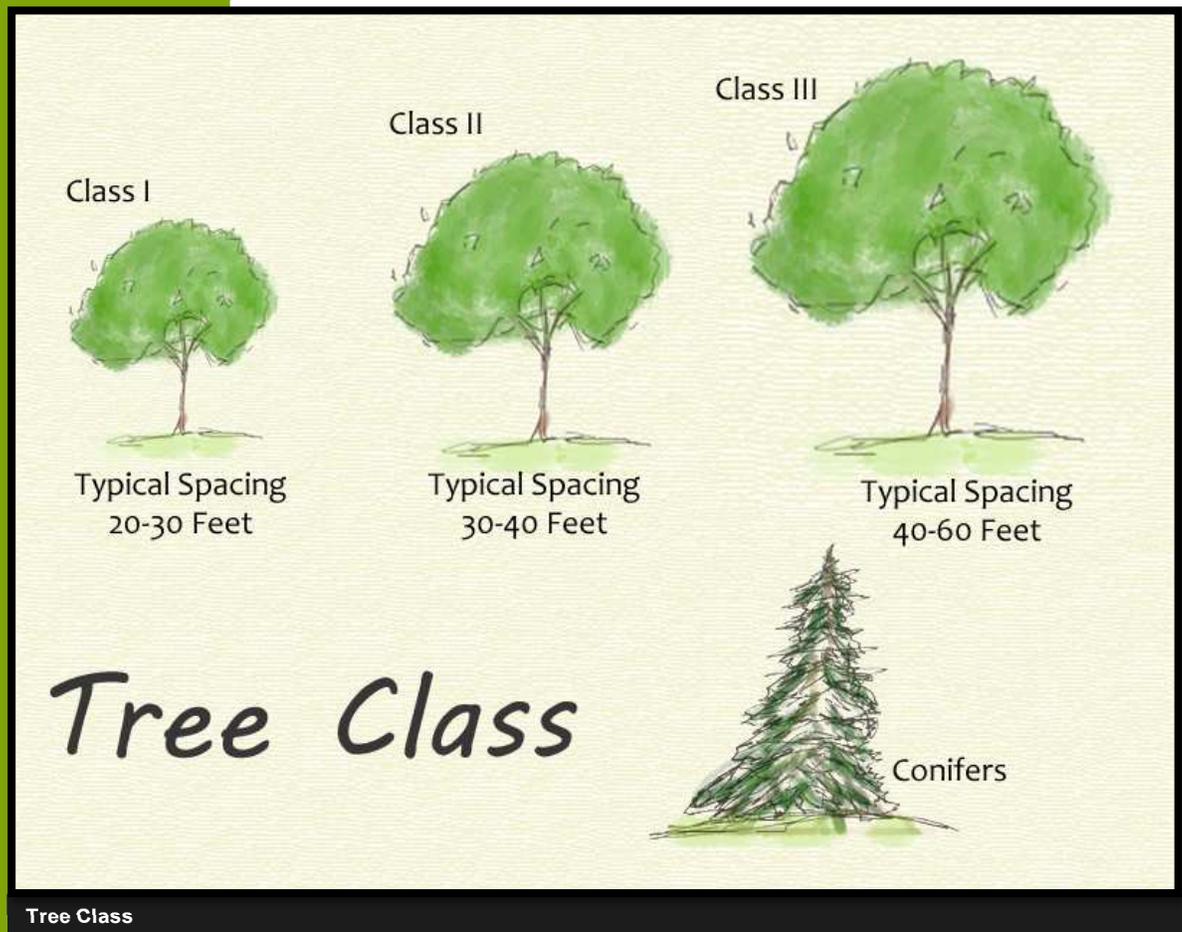
Pyramidal Form

Tree Class

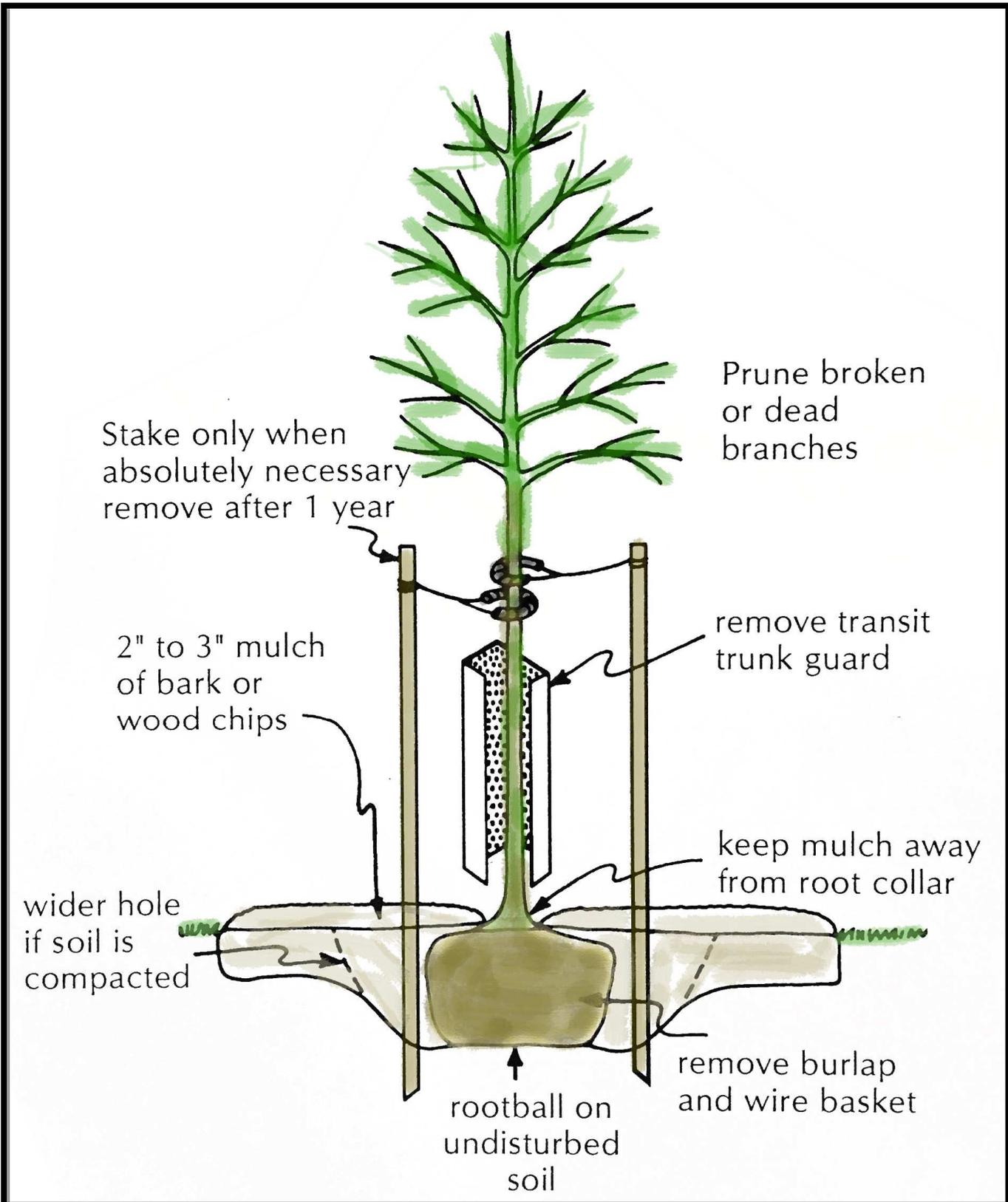
Class I - Smaller trees which normally do not reach a large height or trunk diameter. They are ideal for planting beneath or near power lines and in parking strips that are at least 6 feet wide.

Class II - Medium sized trees that are valued for their aesthetic and shade contributions. These trees are not for planting under power lines or in parking strips that are less than 6 feet wide.

Class III - Large sized trees that are long-lived and have large heights and trunk diameters. These trees are not for planting under or near power lines or in parking strips that are less than 10 feet wide.



TREE PLANTING / MAINTAINING



Planting Detail

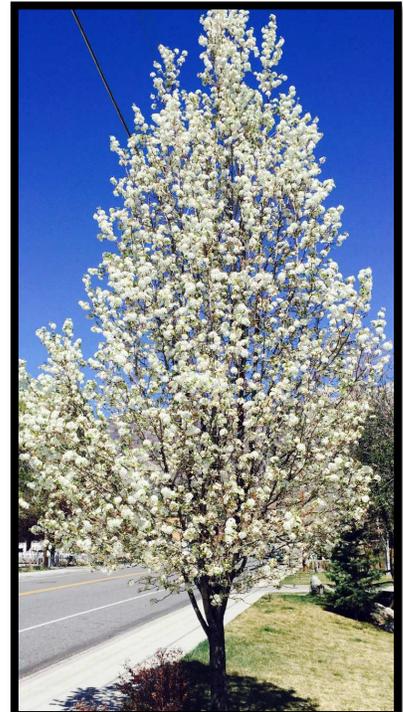
Planting your tree correctly

1. Dig the planting hole at least twice the width of the root ball and only as deep as the root ball. Make sure the tree is planted too high not too low.
2. Remove a tree from a container, gently lay it down. Push on the sides and bottom of the container to break contact between the root ball and container. Hold the trunk near the surface of the soil and push/pull the container away from the root ball. Slide the container off the root ball. Do not pull on the trunk. If the root ball is too large for this process it may be necessary to cut the container off after the tree is placed in the planting site.
3. Prune circling or protruding roots and remove twine from canopy.
4. Handle the root ball with extreme care. Minimize as much as possible any crumbling, cracking, and splitting of the root ball.
5. After gently placing the tree in the hole, remove wire and burlap if the stability of the root ball allows. If not, remove only the top one or two rows of wire and an equal amount of burlap.
6. Use the soil removed from the hole to backfill. Minimize air pockets by removing soil clumps, rocks, sod, and folded burlap.
7. Deeply soak the hole and root ball.
8. Place two to three inches of mulch over the planting area. Avoid direct contact between the mulch and the trunk of the tree.
9. Check moisture content of the backfill and root ball weekly to determine how much and how often to water.

Utah State University Extension Bulletin EC 460, Selecting and Planting Landscape Trees is an excellent reference.

Planting Location

Before choosing the planting location, contact Blue Stakes (1-800-662-4111) for location of underground utilities.

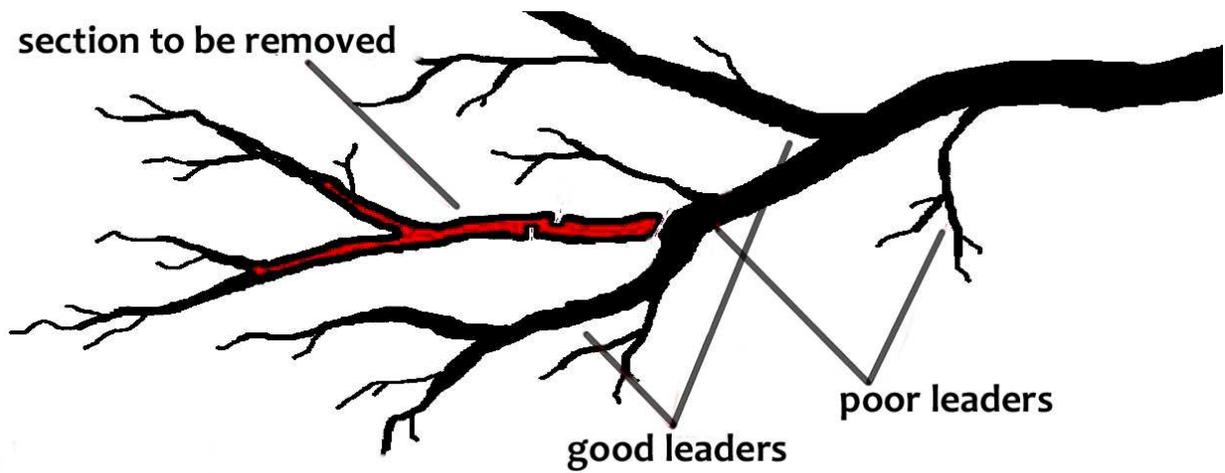


Columnar Form



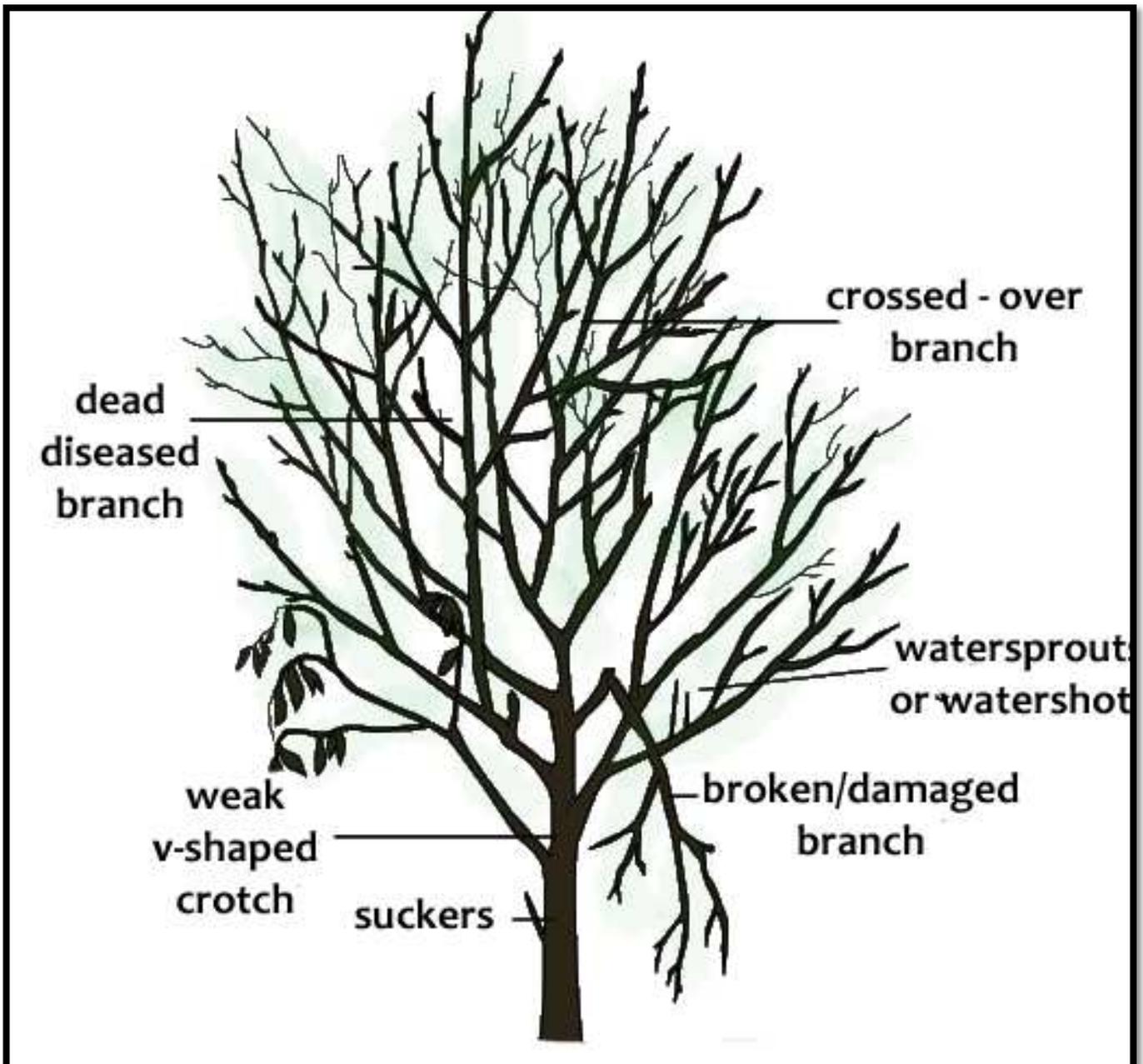
Spreading Form

section to be removed



good leaders

poor leaders



dead
diseased
branch

crossed - over
branch

watersprout
or watershot

broken/damaged
branch

weak
v-shaped
crotch

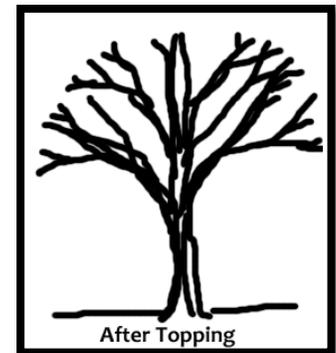
suckers

Maintaining Healthy Trees

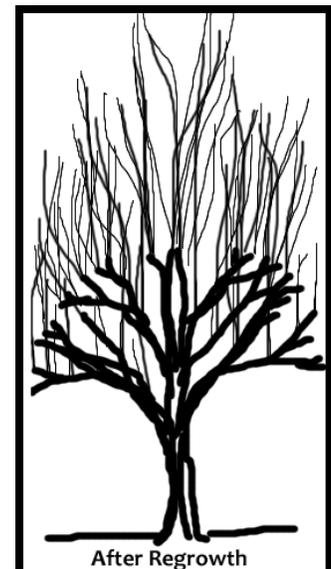
1. **Watering** - Watering the tree regularly during the first year is critical to its establishment. Apply about 1 1/2" of water per week at one time, rather than watering daily. Place a shallow pie pan under the tree canopy and water the area until 1 1/2" accumulates in the pan. Depending on the sprinkler system, it may take 1/2 hour to 3-4 hours. Water from spring to fall and more often during periods of drought.
2. **Mulching** - Mulching is a must! Mulch with wood chips to help retain soil moisture and reduce weeds. It also protects the tree from lawn mowers and weed trimmers. Mulch with 2"-3" of material at a 6' diameter. Keep mulch away from the tree trunk a few inches to avoid trunk rot. As mulch decomposes, it enriches the soil and provides organic matter and beneficial micro-organisms.
3. **Fertilizing** - Fertilizers are naturally or synthetically produced elements applied to the soil or foliage of plants to supply nutrients necessary for normal or accelerated growth. With the exception of nitrogen, fertilizing is usually not required unless a know deficiency exists.
4. **Pests** - Many pest problems occur as a result of improper watering, poor plant stock, or an inferior planting site. Trees that are poorly adapted to a particular site are usually the ones most affected by pests. Choosing the appropriate tree and planting it in an environment capable of sustaining good growth will significantly reduce many pest problems.
5. **Proper Pruning** - Pruning can ensure the tree grows to the size and shape you want. When preformed correctly, it can also improve the structure of the tree. Before pruning any tree, make sure you know how to prune it without damaging the tree. Improper pruning can make the tree more susceptible to diseases and insects, weaken the tree, shorten the life of the tree, and take away from the aesthetics of the tree. Pruning near power lines or any other utility lines should be done by a certified professional.

Never Top Trees

Topping a tree is cutting back large tree limbs to stubs larger than three inches in diameter. It is the most hazardous pruning method available. When a tree is topped, it can lead to weakened limbs and even tree death.



These trees become eyesores in the landscape. It also causes the tree to grow many new limbs around the cuts that are made, these limbs grow rapidly and have weak attachments to the tree. These weak limbs often fall off causing property damage or personal injury or death.



TREE PLANTING LOCATIONS



Tree Planting GuideBook - Diagram A

(Tree Plantings Near Utility Poles)

Class III
Large Trees
70'Tall



| 45' min. |

Class II
Medium Trees
50'Tall



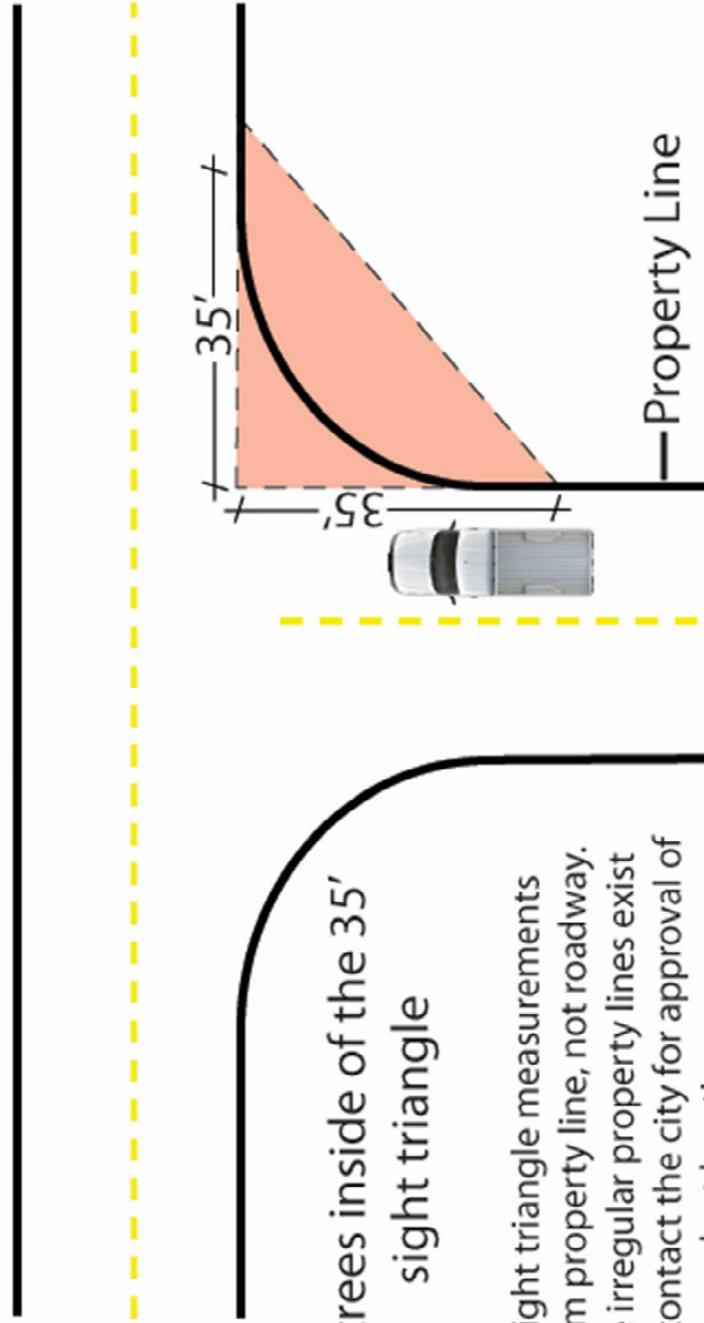
| 35' min. |

Class I
Small Trees
30'Tall



| 15' min. |

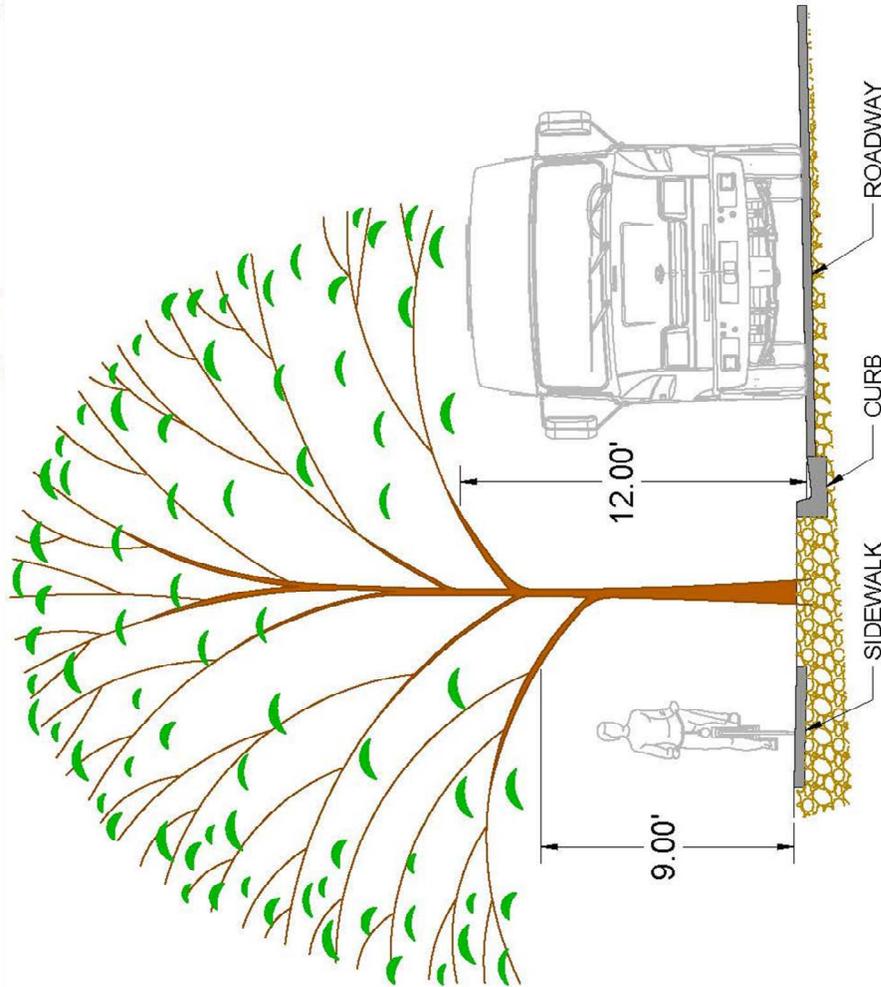
Tree Planting Guide Book - Diagram B (Maintaining Clear Zone)



No trees inside of the 35' sight triangle

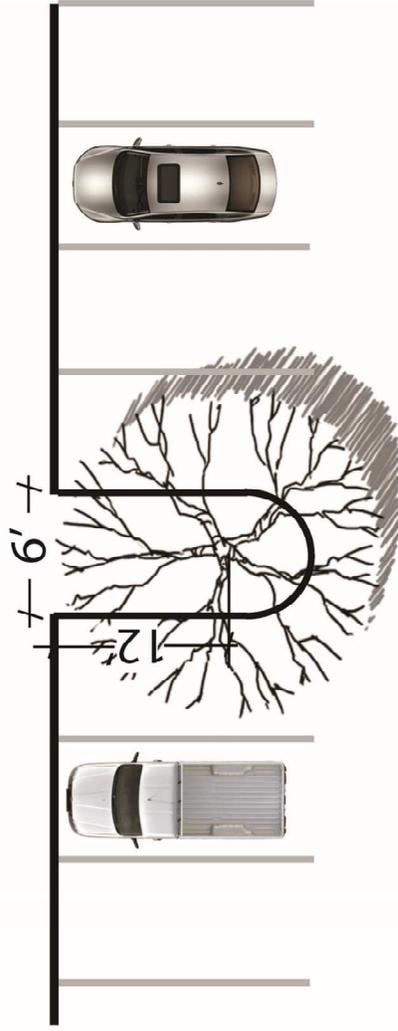
The sight triangle measurements are from property line, not roadway. Where irregular property lines exist please contact the city for approval of plant locations.

Tree Planting Guide Book - Diagram C (Maintaining Sight Lines)



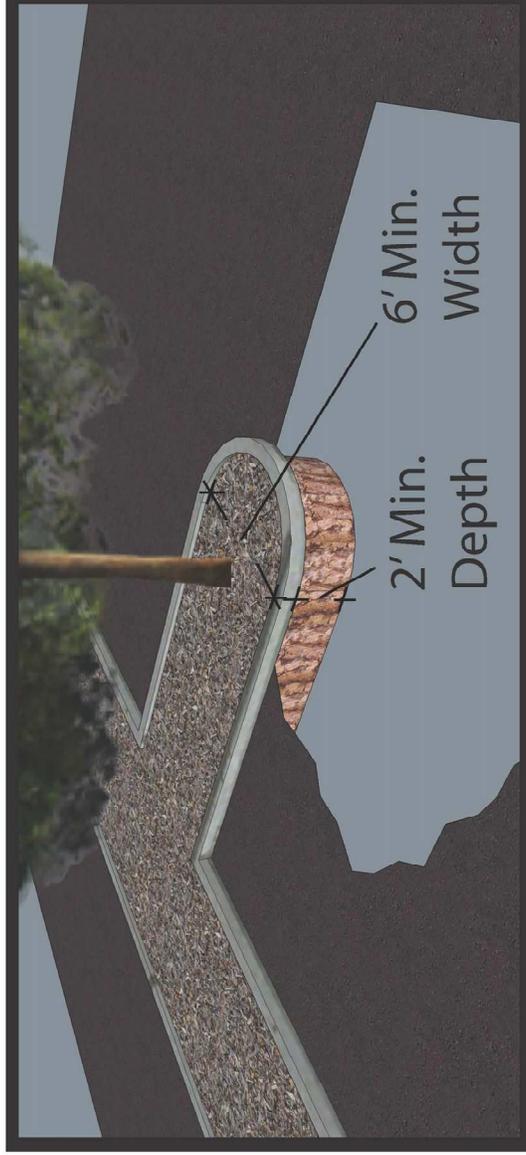
Roadway and Sidewalk Tree Trimming Guide
Branches of trees near roadways or sidewalks shall be trimmed to a minimum height of 12' above the edge of asphalt/lip of curb and 9' above the sidewalk as shown

Tree Planting Guide Book - Diagram D (Parking Island Tree Placement)



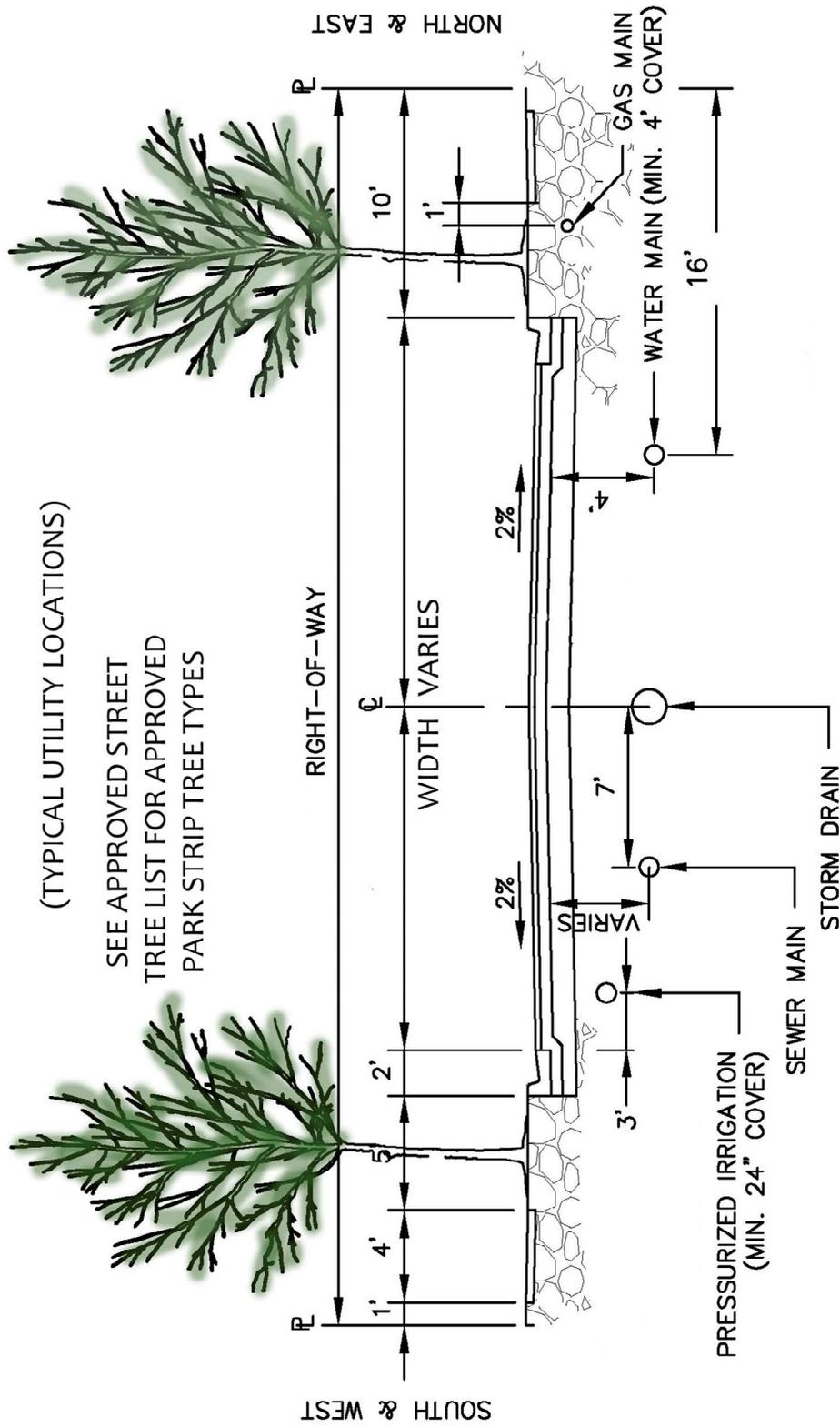
Place tree in parking islands as shown above

Tree Planting Guide Book - Diagram E (Minimum Parking Island Area)

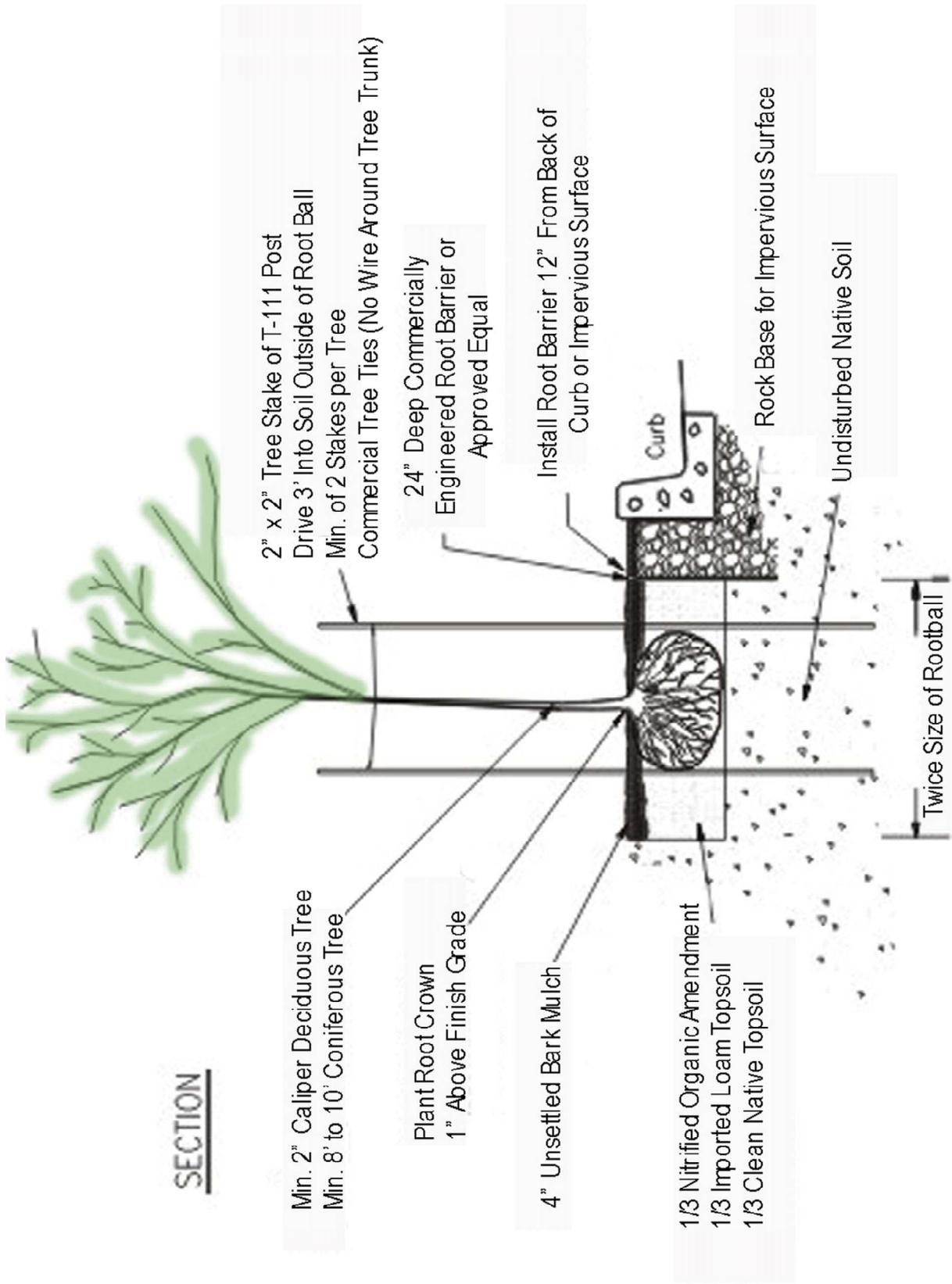


- 2' Minimum depth of soil
- 6' Minimum width of parking island

To ensure tree health within a parking island, a minimum amount of 120 sq. ft. surface area must be installed with each tree. Class I or Class II



SECTION



2" x 2" Tree Stake of T-111 Post
Drive 3' Into Soil Outside of Root Ball
Min. of 2 Stakes per Tree
Commercial Tree Ties (No Wire Around Tree Trunk)

24" Deep Commercially
Engineered Root Barrier or
Approved Equal

Install Root Barrier 12" From Back of
Curb or Impervious Surface

Rock Base for Impervious Surface

Undisturbed Native Soil

Min. 2" Caliper Deciduous Tree
Min. 8' to 10' Coniferous Tree

Plant Root Crown
1" Above Finish Grade

4" Unsettled Bark Mulch

1/3 Nitrified Organic Amendment
1/3 Imported Loam Topsoil
1/3 Clean Native Topsoil

Twice Size of Rootball

TREE CHARACTERISTICS

Symbol Legend



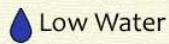
Solar Friendly

Trees that maximize the sun's rays year-round. Solar friendly trees provide shade during the summer and a large percentage of sunlight penetration during the winter.



Drought Tolerance

No tree can survive in permanently dry soil. Some tree species, however, are more tolerant of dry soil conditions than others.



Low Water



Moderate Water



Higher Water



Wildlife Friendly

Trees that attract wildlife.



Deer Resistant

Trees that tend to repel deer from eating them.



Street Tree

Trees that are appropriate to plant in the right-of-way along streets due to growth habit.



Utility Friendly

Trees that are appropriate due to growth habit and lower height to plant under utility lines.



Windbreaks

Trees that help screen and deflect winds

Symbol Legend

Tree Characteristics

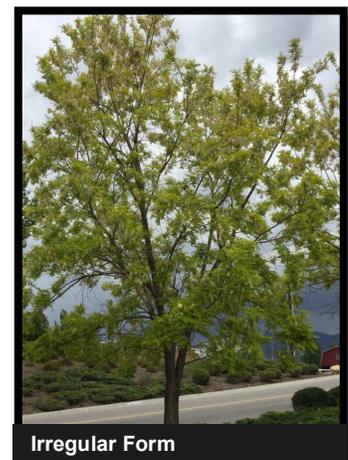
Located at the side of each illustrated tree page there are boxes and symbols denoting additional information about that particular tree. These symbols are explained above.

Submittal Process

If you would like to discuss planting and placement of a tree that is not recommended in this guide book, please submit to the Planning Department the full name of the proposed tree with placement location on your property. It will then be under review on a case by case basis.

Drought Tolerance

Lower water demand does not mean a tree can survive in permanently dry soil. All trees prefer a somewhat moist soil for optimum health and maximum growth. To protect your investment, be sure to water trees regularly in hot, dry periods.



Irregular Form

Know what's below. **811**
 Call **811** before you dig.
BLUE STAKES OF UTAH
 UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
 1-800-662-4111

CLASS I

These trees are smaller trees which normally do not reach a large height or trunk diameter. They are ideal for planting beneath or near power lines and in parking strips that are at least five feet wide. Typical spacing between Class I trees is 30 to 40 feet .

CLASS II

These trees are medium sized trees that are valued for their aesthetic and shade contributions. These trees are not for planting under power lines or in parking strips that are less than five feet wide. Typical spacing between Class II trees is 40 to 50 feet .

CLASS III

These trees are large sized trees that are long-lived and have large heights and trunk diameters. These trees are not for planting under or near power lines or in parking strips that are less than 10 feet wide. Typical spacing between Class III trees is 50 feet or more.

EVERGREEN

These trees are evergreen and hold their needles through the winter providing color through the cold months. These trees also provide wind breaks and great habitats for animals. Evergreen trees range in spread and height. Evergreen trees should not be planted in park strips or parking island areas.

PARK STRIP TREES

Park Strip and Parking Lot Approved Trees:

Common Name _____

Japanese Zelkova 'Musashino'

Chanticleer Pear

Crimson Sunset Maple

Columnar Washington Hawthorn

Crimson Point Flower plum

Columnar English Oak

Columnar Sweetgum

Autumn Purple Ash

Washington Hawthorn

Tatarian Maple

Trident Maple

Hedge Maple

Golden Raintree

Paperbark Maple

Eastern Redbud

Bigtooth Maple

Norway Maple

Autumn Blaze Maple

Littleleaf Lindon

Common Hackberry

Autumn Purple Ash

COLUMNAR TREES

Columnar Trees:

Common Name

Japanese Zelkova 'Musashino'

Chanticleer Pear

Crimson Sunset Maple

Columnar Washington Hawthorn

Crimson Point Flower Plum

Columnar English Oak

Columnar Sweetgum

Columnar Colorado Blue Spruce

Columnar Norway Spruce

Weeping White Spruce

Skyrocket Juniper

Common Hackberry 'Delta'



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