



Parks Recreation & Waterfront  
Parks Division-Urban Forestry Unit

# Tree Planting Information and Instructions

These instructions are intended for any person, group, or company planting trees on the public right-of-way; but the information can be applied to all basic tree planting. This includes, but is not limited to: citizens that have written permission from the city to plant a tree; trees planted as part of any approved development project; and anybody planting trees under the direction of the City of Berkeley. All tree species and planting locations will be determined by the city during the application process, and will adhere to the *City of Berkeley Tree Planting Location Standards*. Due to the existence of underground utilities, it is very important to mark the area surrounding the designated planting location in white paint and call Underground Service Alert of Northern/Central California and Nevada (USA) prior to planting trees. They can be reached at 1-800-227-2600 or by dialing 811. USA will contact the utility companies who will mark the location of any underground utilities. It is required that the tree be at least 5 feet away from any of these utilities.

## Tree Planting Instructions:

A healthy tree begins with a proper planting depth and continues with maintaining a root flare that is above the soil line. The root flare area (also called the root crown or root collar) is that area where the main stem tissue transitions to root tissue. The bark on the main stem is corky while the “bark” on the roots is smooth and waxy. The root flare needs to be dry and free of soil, mulch, and vines. It is important that the root flare be visible at the top of the root ball. It may be necessary to add or remove soil from the top of the root ball to ensure that the root flare is not buried and that roots are not exposed. If the root flare is buried, the main trunk may decay and the likelihood of girdling roots increases. If the root flare is too high, the soil will wash away, exposing the top roots which will dry out and die.

- 1) Dig a hole that is approximately the depth of the soil in the container, which is also referred to as the root ball. The width of the hole may be limited by how wide the planting location is, but if the planting strip is narrow, you can enlarge the hole lengthwise. The hole does not need to be round. Ideally the planting hole would be two to three times the size of the container, but that is seldom possible when planting in narrow spaces. When the root ball is placed in the hole, the top of the root ball should be one to two inches higher than the final grade of the soil in the planting strip or tree well. The tree will settle during watering so planting slightly higher is very important. You may need to remove the tree from the hole to add or remove soil to get the proper depth.
- 2) Remove the tree from the container. Be careful not to sever any roots while doing this. You may want to lay the container on its side and slowly slide the tree out of the container, being careful not to break any branches. Use a knife or hand pruners to cut any outer roots that are circling the root ball, and loosen the soil that is compacted from being in the container. This prevents the roots from continuing to grow in a circular direction.
- 3) Center the tree in the hole making sure that it is straight. At this time, also make sure that the top of the root ball is one to two inches higher than the final grade of the soil in the planting strip or tree well. If necessary, adjust the height by adding or removing soil under the root ball.
- 4) After setting the tree in the hole at the correct depth, backfill the hole with the same soil that was taken from the hole. Pack the soil firmly around the root ball but do not step on or compact the root ball itself.
- 5) Create a berm of soil around the outside of the root ball two to three feet from the trunk. Depending on the width of the planting location it may not be round, but it should be similar to the shape of the planting hole. The berm should be three to five inches high and will help contain water and mulch.

### **Staking the Tree:**

The function of the tree stake(s) is to keep a young tree from falling over and at the same time, allow the tree to move in the wind. A tree that moves freely in the wind will develop good taper at the base and a strong trunk, which will result in a structurally stable tree. A tree that has been staked too tightly will use energy for growth of the canopy rather than the trunk, and will become dependent on the stake. The goal is to have a tree that can stand on its own within two to three years after planting.

- 1) If using the traditional two wooden tree stakes that are pounded into the ground, be sure that the straps are not so tight that they inhibit tree movement in the wind. Typically, only one strap on each stake is necessary to keep the tree from falling over. If using a steel single stake system, such as the J.R. Partners R2 Stake®, previously known as the Reddy Stake, be sure to follow the included instructions.
- 2) Remove the stake that is tied directly to the tree. This stake has served its purpose. If it is left on the tree, it will impede the growth of the tree and may even damage the tree.

### **Mulch:**

Mulch is very important to the health of trees. This is especially important for trees growing in urban environments where the soil is often compacted with limited nutritional value. After water, mulch may be the next most important component to growing a healthy tree. Mulch will protect the root ball from compaction, maintain soil moisture longer, and as it breaks down it improves the quality of the soil. This occurs by increasing the organic matter in the soil which encourages biological activity and improves aeration. Use only tree mulch, leaves, and/or other natural mulch. Do not use processed ‘mulch’ such as the colored wood chips that are available at many garden stores. These have been processed, stained, painted, and have little or no organic properties that will contribute to the health of the tree.

- 1) Apply and maintain a three to four inch thick layer of mulch around the base of the tree. It should be mostly inside the soil berm but can also extend out further. Do not allow the mulch to pile up against the tree trunk. This can lead to decay of the trunk.
- 2) Reapply mulch as the existing mulch decomposes. This may be done annually or as needed.

### **Tree Watering Instructions:**

Nearly all trees that die within the first few years of being planted die from too little or too much water. Water the tree once every week between March 15 and October 15. Additional watering may be necessary if there is unseasonably warm weather during this timeframe. Trees do not need to be watered while they are dormant (no leaves).

- 1) Water the tree as soon as the tree is backfilled to help settle the soil around the root ball and eliminate air pockets.
- 2) Give each tree a slow soaking, once per week, using about 20 gallons of water. This watering technique will encourage deep rooting. Once the fall rains start, the watering can stop until the following summer as long as it rains at least twice per month. In drier months water the tree.

### **Tree Maintenance:**

All trees in planting strips, tree wells, and medians on the public right-of-way are owned and maintained by the City of Berkeley regardless of who purchased and/or planted them. Adjacent residents may apply to the city’s Urban Forestry Unit for a permit to have a licensed, insured and certified arborist work on city trees.