

How TREES Plants Trees

focus on depth of hole, location of trunk flare, and staking the tree

Remove Sod and BEGIN digging the hole:

- Slice off sod 3”- 4” deep within painted circle. Remove all the painted sod – and the hole will be the correct diameter. Encourage homeowner to keep sod **but do not leave by the tree when finished.** Experience has taught that if sod is left near tree, the homeowner might plant it around the tree inside the mulch ring ... we don’t want that.
- Depth: **Dig the hole only shovel-depth – i.e. 10-11 inches deep.** Do not dig the hole too deep. The tree needs to sit on firm ground.
- Width: 48” – the size of the painted circle.
- Shape the hole the shape of root ball. Slope sides of planting hole as the roots grow into top layer of soil first.
- Place soil on tarp and break into small pieces for use in re-filling hole.
- Score the sides of the hole with the shovel or 3-prong claw. This is particularly important if you are working in clay soil because if sides are slick, you’ve just created a clay flower pot that will hold water.

Locate The Trunk Flare – while hole is being dug:

- While the tree is lying on its side, cut off any strings holding the crown (branches) together.
- Stand tree upright by using hay hooks on the wires on the basket – secure the tree to keep it from tipping over – you can do this by pushing soil under the basket if you need to.
- Unwrap the top of the packaged B&B tree: cut the ropes that are holding the tree in place, remove any nails and pull back burlap or remove this part of the burlap with a utility knife. **Do not scar the trunk of the tree.**
- Using fingers or a garden 3-prong claw tool, carefully dig down through the soil along the trunk until you locate the trunk flare.
- Place the excess soil from the top of the root ball on the tarp.
- Expose the trunk flare. This trunk flare is to be planted even with the ground level or 1” – 2” higher than soil level. It is not to be planted deeper than soil level.

(Sometimes the trunk flare is relatively near the top of the root ball and soil can be removed so the top of the root ball can be made level with the trunk flare at this point – the wire basket will not be in the way. Other times, the trunk flare may be very deep in the root ball, well below the top of the basket – hence, the soil cannot be removed from the entire surface of the root ball until the tree is in the ground and staked.)

Measure and Adjust Depth of Hole:

- **Depth:** measure depth of root ball from where it sits on the ground to the bottom of the trunk flare (use measuring tool) and subtract 1 to 2 inches.
- **The tree should eventually sit in the hole so trunk flare is at ground level or 1 to 2 inches higher. Make sure the hole is not too deep.** Plant higher rather than lower.
- If the hole needs to be deeper, now is the time to make it deeper. If the hole is too deep, put some soil back in and stomp it firm. The tree needs to be on firm ground so it doesn’t sink later on.

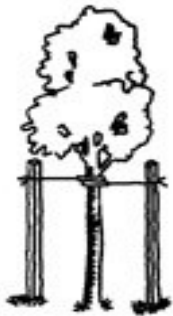
Position Tree in Hole and Straighten the Tree:

- Lift tree into center of hole – using hay hooks on the basket.
- **There really is no need to touch the trunk of the tree.**
- If not touching the trunk makes you nervous, then someone can steady the tree and gently guide the trunk while others move the tree by the root ball basket using hay hooks.
- **Now is the time to get the tree straight.** Straighten the tree using the hay hooks and using the 2 x 4 board as a lever under the root ball. Put soil under the rootball to steady the tree and keep it straight. Get the base of the tree securely in place. Look at the tree from all directions – get the tree straight and secure before doing anything else. Do not fill the hole at this point.
- **Do not straighten the tree by tugging on the trunk!**

Stake the Tree:

- Once the tree is straight and situated correctly, stake the tree with two stakes prior to refilling the hole. The stakes should be placed outside the root ball just beyond the edge of the 48-inch circle into firm soil. They are to be parallel to the street – the teeth on the stakes face away from the tree.

To stake the tree:



- Drive the stakes into undisturbed soil just beyond the edge of the 48 inch circle deep enough that they are stable and sturdy. The post's flange will be just below ground level.
 - Use the post driver tool provided – drive so both stakes are the same height to look nice – parallel to the street; teeth on stakes facing away from tree.
 - Place the straps: Don't measure – just estimate – 2/3 of the trunk will be below the ties; 1/3 above the ties.
- Use wire and straps provided – wrap a strap around the tree – then use one end of the wire to hold the two grommets together – wrap the other end of the wire around the stake a couple turns and then twist it closed. Cut off ends of wire and make sure remaining ends are pointing downward – use pliers to bend the ends of the wire in so the ends are not poking out.
 - The straps should be straight out to the stakes, but should have a little give so the trunk can sway and grow. The ties are to keep the tree from blowing over in the wind – not to hold it straight.

Remove Basket:

- Using the bolt cutters, cut the wire basket on each side and remove as much as possible.
- Remove the burlap as much as possible also.

Remove excess soil from top of root ball:

- Now that the basket is out of the way: remove the excess soil from the top of the root ball so the trunk flare and entire ball are level. This is best done with the 3-prong claw or our hands. Don't use the shovel or trowel for this. Careful not to scar the bark. Put this excess soil down in to the hole.

Inspect Roots:

- Inspect the roots – if any roots are curling around and up – pull them away from the root ball and stretch them out into the outer part of the hole, pinning them down with soil. Those poking up higher than the trunk flare are to be cut off – make a clean cut with loppers or hand pruners rather than twisting them off.

Fill the Hole:

- Fill the hole with soil that was removed when digging. Every so often, lightly tamp the soil around the remaining root ball with the 2 x 4 to remove any air holes and slightly compact the soil. If you made a mess in the area where the tree was sitting and you were locating the flare, use the leaf rake and put this soil into the hole.

Mulch:

- When hole is filled to the level of surrounding ground, mulch the tree. Shape mulch like a doughnut to hold water. **PULL MULCH AWAY FROM TRUNK ABOUT 6”** – the diameter of the doughnut hole will be about 12 inches – the trunk flare will show. Cover all 48 inches of the original hole area (except the doughnut hole.) – plus mulch around the stakes. Use all the mulch provided.
- **Whatever you do: Do not cover the trunk flare.** You’ve worked hard to get it to ground level and visible. The tendency is to bury it with either soil or mulch – please don’t.
- Show homeowner how to mulch properly so they can do this for the following two years. Mulch is to provide a weed barrier and to protect the tree from weed eaters and lawn mowers. If you put mulch too close to the trunk, you are inviting trunk damage and insects.

Water:

- Have the homeowner water the tree - slowly.

Clean up:

- Look at the trees you are yet to plant – if the site check indicates a gravel area, you might want to take the good soil with you to the next sites – otherwise try to have homeowner keep soil and sod but put it where they want it. Sweep the sidewalk and rake the area around tree to leave site clean and neat. If homeowner can’t or won’t keep the soil or sod, put it in a mulch bag and bring back to Fairbanks Park to be disposed of there.
- Be sure you do not leave ends of wire or the nails that were holding the burlap in place at the site.
- Tell homeowner we’ll be back in twelve months to unstake the tree. Point out the Purdue Extension number on the red alert tree-care card – ask them to call that number if any troubles come up and ask for a TREES volunteer to return their call.

FINALLY: IS TREE STRAIGHT? If not, fix it now. Please!

www.tlcfortrees.info/root_system.htm (that’s T L C FORTREES) – will tell more than you want to know, but scroll down to (Figure 3-2A) Excavating to Find the Trunk Flare and you will see how deep you might have to go to find the trunk flare. Having seen this done, it’s not frightening – but it explains why we are staking the trees.