

City of Joplin

Tree Planting & Maintenance Plan

August 20, 2023

These comprehensive tree care tips will guide you through the process of selecting, planting, and caring for the right tree for your space. It's important to remember that proper tree care starts when you select a tree. And what you do to your tree in its first few years of life will affect its shape, strength, and even its lifespan. Following these steps will make sure your tree gets a good start for a healthy life.

Choosing the Right Type of Tree

- Proper tree care begins with selecting the right tree and planting it in the right place. Make sure your tree will thrive — especially once fully grown — where you want to plant it. Things to consider include:

- **The tree's purpose.** Are you planting it for aesthetics, privacy, shade/energy reduction, windbreak, or as a street tree? Your end goal will determine the suitability of different trees.
- **Planting site limitations.** What is your hardiness zone? What is the maximum height and spread for a tree in the space? What are the sun exposure and soil conditions?

Right Tree, Right Place

- Short, flowering trees don't clash with overhead utility lines. Large deciduous trees on the southeast, southwest, and west provide cooling shade in the summer but don't obstruct the warming winter sunlight. An evergreen windbreak to the north block's cold winds in winter.

- **Height.** Will the tree bump into anything when it is fully grown?
- **Canopy spread.** How wide will the tree grow?
- **Is the tree deciduous or evergreen?** (Will it lose its leaves in the winter?)
- **Form or shape.** A columnar tree will grow in less space. Round and V-Shaped species provide the most shade.
- **Growth rate.** How long will it take for your tree to reach its full height? Slow growing species typically live longer than fast growing species.
- **Soil, sun, and moisture** requirements.
- **Fruit**. No one wants messy droppings on busy sidewalks.
- **Hardiness zone** indicates the temperature extremes in which a tree can be expected to grow. For the purposes of this quiz hardiness zone considerations have been disregarded. Check with your community's tree board or forestry department or a local county cooperative extension agent for a list of trees suitable for planting in your specific hardiness zone.



Selecting a Healthy Tree

Bare-Root Seedlings

- Roots should be moist and fibrous.
- Deciduous seedlings should have roots about equal to stem length.

Balled and Bur Lapped Trees

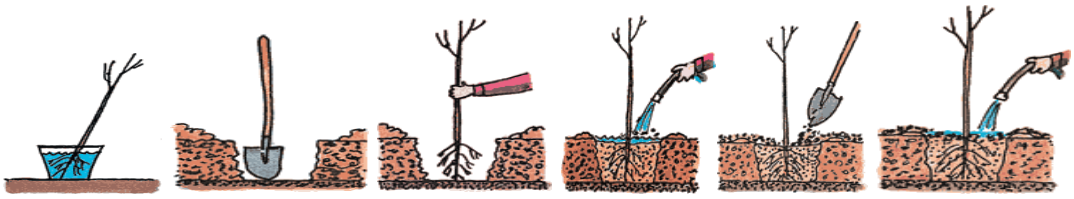
- Root ball should be firm to the touch, especially near the trunk.
- Root ball should be adequate for the tree's size.

Container-Grown Trees

- Container should not contain large, circling roots.
- Pruned roots should be cut cleanly, none wider than a finger.
- Soil and roots should be joined tightly.

How to Plant Bare Root Trees

- Unpack your trees, remove all packing materials, carefully untangle the roots and soak the roots in water 3 to 6 hours. Do not allow the roots to dry out.
- Dig a hole, wider than seems necessary, so the roots can grow outward without crowding. Remove any grass within a 3-foot circular area. To aid root growth, turn soil in an area up to 3 feet in diameter.
- Plant the tree at the same depth it stood in the nursery, with plenty of room for the roots. Partially fill the hole, firming the soil around the lower roots. Do not add soil amendments such as peat or bark. Do not use fertilizer, potting soil, or chemicals on your new trees.
- Shovel in the remaining soil. It should be firmly but not tightly packed. Construct a water-holding basin around the tree. Give the tree plenty of water.
- After the water has soaked in, spread protective mulch two inches deep in a 3-foot diameter area around the base of the tree, but not touching the trunk.
- The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year. Water slowly at the dripline.



How to Plant Balled and Bur Lapped Trees

- You'll need to dig a saucer-shaped hole. If you can, rototill an area five times the diameter and as deep as the root ball. The prepared soil will make the hole easier to dig and encourage root growth. Measure the depth of the root ball to make sure the root collar will be at or a little above ground level when your tree is planted.

- Dig the hole 2 or 3 times as wide and as deep as the root ball. The hole should have sloping sides, and don't disturb the soil at the bottom of the hole.

- Set the tree in the center of the hole. When moving the tree, handle it by the root ball. Don't move or lift the tree by the trunk as this can cause the root ball to separate from the trunk. Check the planting depth. If the root collar is below ground level, compact some soil under the root ball to bring the root collar up to slightly above ground level.

- Once the tree is in position, use wire cutters to cut vertically up the side the wire basket and peel it away. Remove all the rope and twine from the ball and all the nails that hold the burlap together. Pull the burlap back and cut away any loose material. Don't worry about regular burlap under the root ball. It can stay put. But vinyl or treated burlap should be removed completely.

- Make sure your tree is straight and then firmly pack the original soil around the root ball making sure there aren't any air pockets. Keep backfilling until the soil is just below the root collar.

- Create a water-holding basin around the tree and give the tree a good watering. After the water has soaked in, spread protective mulch 2-4 inches deep covering the entire area of backfilled soil, keeping the mulch 4 inches away from the trunk.

- Remove any tags and labels from the tree as these will affect the tree as it grows. You may need to prune any broken or dead branches.



How to Plant Containerized Trees

- Dig a hole 3 to 4 times wider than the container. The hole should have sloping sides like a saucer to allow for proper root growth.

- Carefully remove the tree from the container keeping the soil around the roots intact. It helps to tap the outside of the container to loosen the edge. Carefully slide the tree from the container. Don't yank the tree out of the container as this can separate the roots from the tree.

- Sometimes containerized trees become root-bound or the roots look like they're about to circle the root ball. If your tree is like this, cut an *X* across the bottom of the root ball and four vertical slices along the sides of the root ball with a sharp knife.

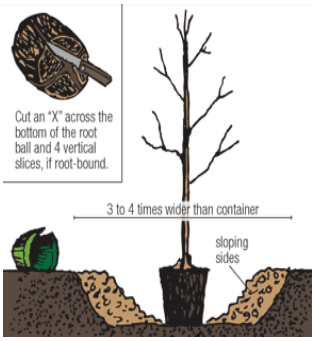
- Set the tree in the middle of the hole. Avoid planting the tree too deep. If the root collar sits below the top of the hole, compact some soil under the tree so that the root flare at the base of the trunk is slightly above ground level. Using some soil, secure the tree in a straight position, then fill and firmly pack the hole with the original soil, making sure there aren't any air pockets. Keep backfilling until the soil is just below the root collar.

- Create a water-holding basin around the hole and give the tree a good watering. After the water has soaked in, spread protective mulch 2–4 inches deep in a 3-foot diameter area around the base of the tree, but not touching the trunk.

- Remove any tags and labels from the tree as these will affect the tree as it grows. You may need to prune any broken or dead branches.

- Fertilizer? *Do not* use fertilizer, potting soil, or chemicals on your newly planted trees. Such products will kill your young trees.

- Watering: Keeping your trees watered is important during their first year. Keep the soil and mulch moist but not soggy. In dry weather, you should water generously every 7–10 days. The water should soak into the soil and mulch. Avoid watering so much that you see standing water.







Tree and Shrub Maintenance Schedule

The Plant Groups referred to are as follows:

Group I	Deciduous shade trees, flowering trees, and non-flowering or inconspicuously flowering shrubs
Group II	Deciduous early flowering shrubs (before June 1)
Group III	Deciduous late flowering shrubs (after June 1)
Group IV	Conifers (trees and shrubs).

A. January and February; weeks 1-4: Prune trees, as per the attached guidelines provided by the Missouri Department of Conservation, in Group I, as needed when temperatures are above forty degrees Fahrenheit. Examine Group IV trees for scales and mites and treat as necessary. Prune shrubs in Groups I, III, and IV when temperature is above 40 degrees Fahrenheit. Apply mulch to tree and shrub beds to achieve (a four-foot diameter area around trees) a two-inch depth of cover. * Replenish mulch as needed to two-inch depth.

B. March; weeks 1 and 2: Examine plants for winter damage. Repair damaged areas as necessary. Stake trees, if required, per the attached guidelines provided by the Missouri Department of Conservation unless otherwise specified. Replace dead trees and shrubs. Complete pruning of shrubs in Group III, as per the attached guidelines provided by the Missouri Department of Conservation. Fertilize shrub beds per the recommendations of the soil test. Do not allow fertilizer to fall on turf areas.

C. April; weeks 1-4: Complete work from previous month.

D. May; weeks 1 and 2: Prune shrubs in Group II immediately after flowering is completed, per the attached guidelines provided by the Missouri Department of Conservation. Examine plants for insect and disease pests. Remove, by hand, any weeds from mulched tree areas and shrub bed areas. Begin watering as necessary.** Weeks 3 and 4: Continue to complete work from previous two weeks. Prune Group IV plants, only if specified, as per the attached guidelines provided by the Missouri Department of Conservation.

E. June; weeks 1-4: Continue pruning Group III shrubs, as per the attached guidelines provided by the Missouri Department of Conservation. Remove, by hand, any weeds from mulched areas. Water as necessary to achieve the equivalence of one inch per week throughout planting areas. **

F. July; weeks 1-4: Examine all plants for aphids, scale and mites and treat as necessary. Continue watering as specified.** Remove, by hand, any weeds from mulched areas.

G. August; weeks 1-4: Continue work from previous month.

H. September; weeks 1 and 2: Continue work from previous month. Weeks 3 and 4: Begin to rake early fallen leaves. Continue watering as specified.** Remove, by hand, any weeds from mulched areas.

I. October; weeks 1-4: Beginning in second growing season of tree, fertilize three feet beyond drip line per the recommendations of the soil test. Examine trees for damage. Repair damaged areas as necessary. Stake trees, if required, as per the attached guidelines provided by the Missouri Department of Conservation unless otherwise specified. Replace dead trees. Continue work from previous month.

J. November; weeks 1-4: Apply mulch to tree and shrub areas as needed to replace or replenish to the required depths.* Complete work from previous month.

K. December; weeks 1-4: Prune Group I and III plants, as per the attached guidelines provided by the Missouri Department of Conservation.

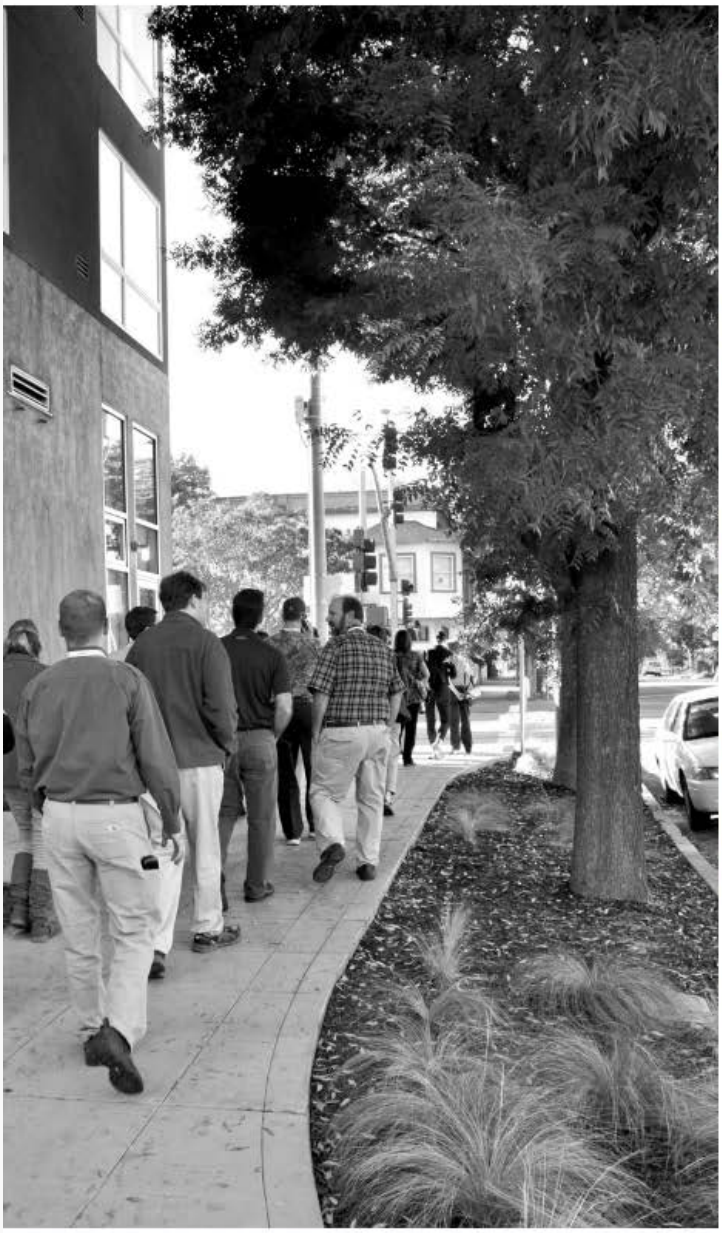
* Replace mulch a maximum of two times per year.

** Water all plants to maintain an adequate supply of moisture within the root zone. **An adequate supply of moisture is the equivalent of one inch of absorbed water per week either through natural rainfall or augmented by periodic waterings.** City will provide rainfall information from nearest rain gauge. Apply water at a moderate rate (1 gallon per minute) so as not to displace mulch or erode soil. One inch of absorbed water per week is approximately equivalent to 10 gallons of water for each 1” of tree caliper (a two-inch caliper tree = 20 gallons of water per week).

APPENDIX A:

Resolving Tree/Sidewalk Conflicts

TREE CITY USA® BULLETIN No. 3 Editor: Dr. James R. Fazio • $3.00



In resolving conflicts between trees and sidewalks, as in so much of life, an ounce of prevention is worth a pound of cure.

With careful planning there are many ways to avoid such conflicts. Bulletin editor Jim Fazio describes the ways well: wide treelawns, proper species selection, tree wells, root barriers, and better built sidewalks are examples.

I hope you will follow his good advice to head off problems between your own trees and sidewalks, and that you will work to bring about this kind of foresight throughout your community.

With good planning, the cost of tree/sidewalk conflicts can be substantially reduced.

Dealing with tree roots and sidewalks that are already tangled can be a more difficult matter. The solutions may require compromises, such as narrowing the sidewalk beside the tree, adjusting the new sidewalk's location, or wisely accepting imperfect concrete if that saves beautiful trees.

Solutions to tree/sidewalk problems can enhance your city's landscape. Brick pavers, tree grates, and retaining walls can be interesting visual elements in the urban fabric. These features, together with the specimen trees they preserve, can give your town a feeling of quality and distinction. They'll advertise to your residents and visitors that you care about the things that matter.

When conflicts between trees and sidewalks arise, I hope you will do everything possible to resolve them in favor of the trees.

Matt Harris, Chief Executive
Arbor Day Foundation

Arbor Day Foundation®
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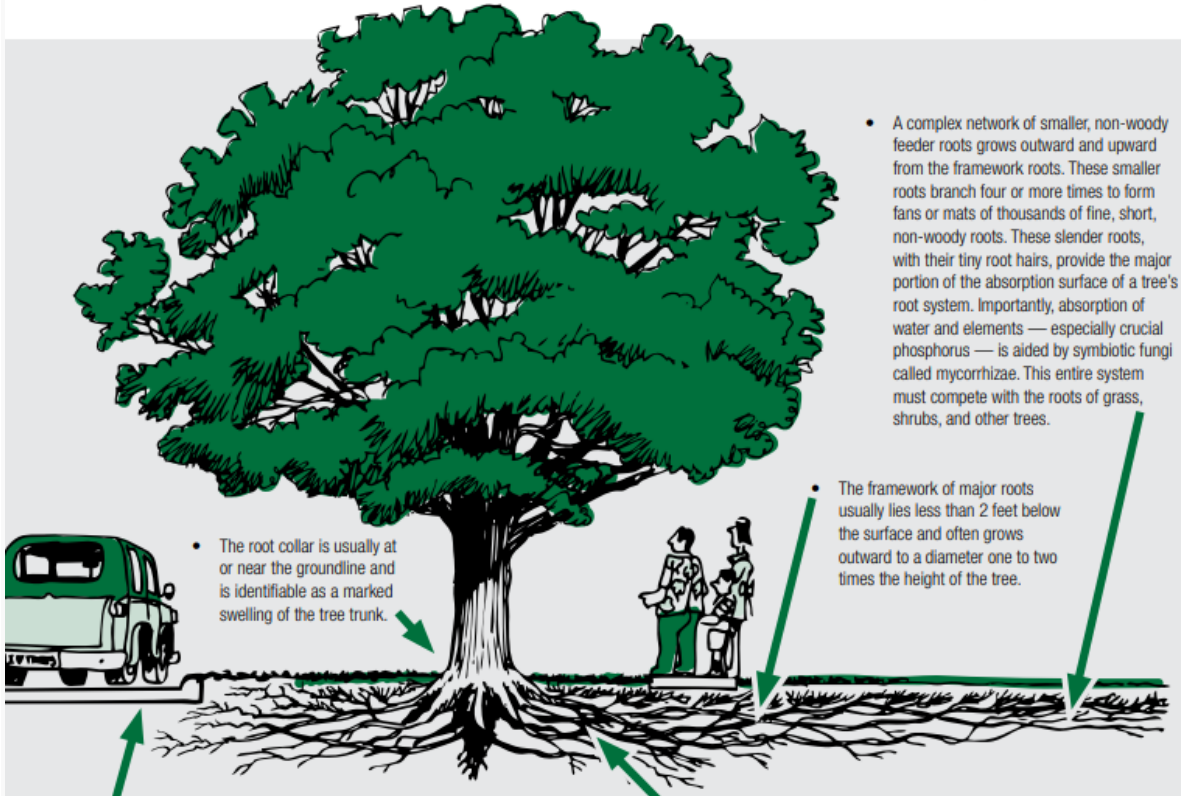
How Roots *Really* Work

Tree roots are active, opportunistic extensions of the tree that provide support and supply water, oxygen, and essential elements needed to feed the tree and sustain its life. The anatomy of a tree consists of approximately 5 percent leaves, 15 percent branches, 60 percent trunk, 15 percent large transport roots, and 5 percent fine feeder roots. Roots can range in size from more than a foot in diameter to less than .008 inch.

The woody transport roots increase regularly in diameter, and even display annual rings. It is this increase in size that swells the base of trees, raises the earth around them, and lifts sidewalks.

Roots can be damaged in a number of ways. Extremes of heat and cold, drying, and frost heaving in the upper layers of soil can kill many of the delicate, non-woody feeder roots. Foraging by soil creatures and digging by humans take their toll on roots. New roots form rapidly after injuries, but there is a limit to how much root mortality a tree can withstand. The severing of even a few major transport roots quickly reduces the total system.

Roots will also die when oxygen supplies are cut off by soil compaction, flooding, or construction of large, impervious pavement areas on the ground surface.



- A complex network of smaller, non-woody feeder roots grows outward and upward from the framework roots. These smaller roots branch four or more times to form fans or mats of thousands of fine, short, non-woody roots. These slender roots, with their tiny root hairs, provide the major portion of the absorption surface of a tree's root system. Importantly, absorption of water and elements — especially crucial phosphorus — is aided by symbiotic fungi called mycorrhizae. This entire system must compete with the roots of grass, shrubs, and other trees.
- The framework of major roots usually lies less than 2 feet below the surface and often grows outward to a diameter one to two times the height of the tree.
- The root collar is usually at or near the groundline and is identifiable as a marked swelling of the tree trunk.
- Because roots need oxygen in order to grow, they don't normally grow in the compacted, oxygen-poor soils under paved streets.

Note: A few species have a taproot that grows straight down 3 to 7 feet or more until it encounters impenetrable soil or rock layers or reaches layers with insufficient supplies of oxygen.

- Between four and 11 major woody roots originate from the root collar and grow horizontally through the soil. These major roots branch and taper over a distance of 3-15 feet from the trunk to form an extensive framework of long, rope-like roots which are ¼-1 inch in diameter. These are important structural roots, supporting the tree against wind and other elements.

Plan to Avoid Future Conflicts

The best way to prevent tree/sidewalk conflicts is to keep the combatants separated from each other. This, of course, is not easy under crowded conditions, especially given a tree's natural tendency to spread its roots laterally in the upper soil layers where nutrients, water, and oxygen are most plentiful. There is no single solution to the problem, but here are some techniques that may help.

CAREFUL SELECTION

One simple solution to the tree/sidewalk problem that is available to anyone is to select the right tree for the right place.

- ☑ Match tree size to the width of the treelawn

TREELAWN	TREE SIZE
4' - 6'	Small
6' - 8'	Medium
8' or more	Large

Less than 4 feet is generally insufficient space for growing trees. (Select trees with a single trunk in narrow treelawns.)

- ☑ Where construction, sidewalk replacement, or other work is predictable and root cutting is inevitable, use species that arborists have found to be more tolerant to root damage. Opinions and local conditions vary, but examples include Norway maple, ginkgo, hackberry, hawthorns, ironwoods, cherries, and river birch. (Note: Oaks, beeches, and redbuds are among the species that often cannot withstand root damage.)

- ☑ Always plant any tree at the correct depth. According to the late tree expert Dr. Alex Shigo, many, if not most, tree problems are caused by planting too deep.

- ☑ Deep-rooted trees like oaks are best near sidewalks.

BETTER SIDEWALKS

Sometimes trees take a bum rap. As proof of this, notice that there are sometimes uneven sidewalks on streets where trees have never been planted. The reason is that soil type was not considered in construction of the sidewalk.

Where the soil type is one that shrinks and swells as moisture content changes, a higher standard of sidewalk construction is necessary to prevent lifting and sinking. This might include mechanically compacting the soil before paving (as is done on streets) and using thicker concrete with wire mesh reinforcement. This adds to the expense, but it will prolong the life of the sidewalk whether tree roots are present or not.

For help with identifying the soil properties under a sidewalk, obtain a soil survey map of the area from your local office of the USDA Natural Resources Conservation Service. These maps usually rate soils for construction stability. If the soil is fill or mixed with other materials, a Natural Resources Conservation Service specialist can tell you how to have the soil analyzed.



Careful selection of species to plant next to sidewalks is the single best way to prevent conflicts.

Avoiding Conflicts (continued)

USE PAVERS AND GRATES

There are many ways to provide expansion space for sidewalk trees while at the same time providing adequate water and aeration.

Whatever is used to cover planting wells, have a plan for enlarging the cover as the tree ages and the trunk widens. Otherwise, the cover will damage and eventually kill the tree. Inspection and adjustment must be planned into the community forestry program just like pruning or watering.



One method is simply to leave a patch of earth, sand, or decorative gravel, delineated and held in place by landscaping timbers or concrete. However, if the border is raised, as in this one, it can be a potential tripping hazard and would be illegal in some cities.



Decorative grates are popular, but regardless of material (for example iron or plastic), cutting is essential — and often ignored — as the tree trunk expands.



The use of planting wells with covers such as 2-inch-thick wood planks provides a smooth walking surface. This method also allows deeper planting, helping to keep roots away from the surface as they begin to spread. By filling the space under the cover with coarse gravel, problems with rodents and trash buildup can be reduced.

Tree wells should be as large as practical, at least 4-6 feet square, and ideally joined under the sidewalk using soil vaults or materials such as those noted on page 8.





An attractive alternative to bare earth or loose mulch is to cover the soil with a layer of sand, then bricks or paving blocks. As the tree grows, the bricks or blocks must be removed to enlarge the growing space.



Porous Pave Permeable Tree Surround is made from recycled rubber chips, which allow water to penetrate.



In Reno, Nevada, a section of steel plates has been used instead of concrete during sidewalk replacement to "bridge" roots of a valued street tree. Although more costly, this helps save trees and provides good public relations with the property owner.

Encourage Deep Root Growth

You can encourage the roots of your trees to grow deep and out of harm's way.

WATERING

Short, frequent waterings wet only the top few inches of soil and encourage roots to grow near the surface. Water longer and less frequently, letting the soil become moist to a depth of several feet. Drilling can aid deep watering. One inch of water per week is recommended, applied slowly within the entire drip line (area under the spread of the tree's crown) and just beyond. Holes 1–2 inches in diameter drilled under the tree will allow better penetration of water and oxygen.

BETTER GROWING SPACE

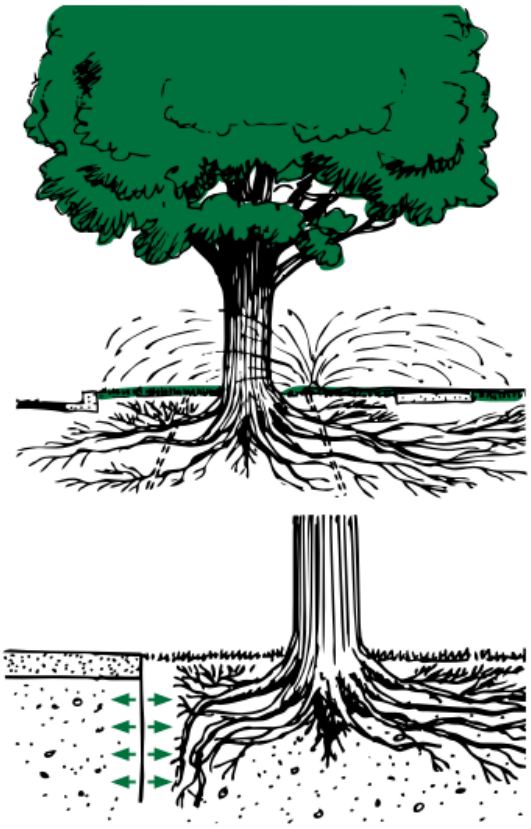
Providing space and favorable growing conditions for roots will encourage roots to stay deep. See page 8 for some effective methods.

ROOT BARRIERS

Barriers force root growth downward. Research is beginning to show that in well-drained, loamy soils, the trick works. Where soil aeration is poor from either compaction or excessive water, roots sometimes quickly turn back up toward the surface after passing the barrier. However, the roots seem to be less massive when this occurs. Gravel surrounding planter-type barriers like the one shown in the photo on the right below may also help supply enough water and oxygen to greater depths to meet the needs of the roots and keep them deep.

A variation of the solid barrier is a herbicide-impregnated fabric that upon contact retards root growth by preventing cell division. The chemical is not taken up in the plant system like most herbicides, so there is no danger of killing the tree or spreading it to other trees through root grafts. The chemicals involved are said to be long-lasting, environmentally safe, and non-toxic to animals. The fabric is flexible and can be wrapped around drain pipes to prevent clogging or spread like a curtain to deflect growth from beneath sidewalk slabs.





Compacting soil beneath the sidewalk can also create a barrier.



In the case of this newly planted tree, the strategy is to place backfill outside the barrier that will favor root growth after it is forced downward by the barrier.

Community Forestry and Sidewalk Conflict

An active urban forestry program can be the best means of preventing conflicts between roots and sidewalks. By focusing attention on a few preventive methods, any community can cut the costs of sidewalk replacement, reduce the mess from torn-up streets, safeguard its trees, and protect people and parked cars from blown-over trees. But it takes planning, leadership, and a willingness to compromise.

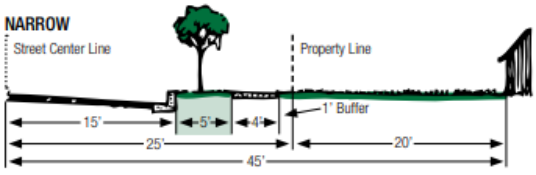
WHEN YOU START WITH A CLEAN SLATE

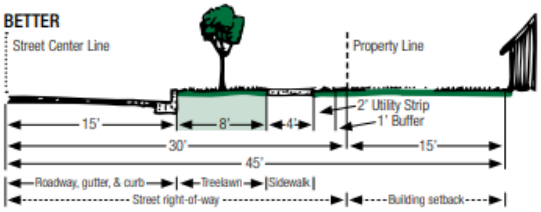
The most efficient way of preventing conflicts is to plan for growing space before streets and houses are even built. Urban foresters and interested citizens need to work with developers and review all subdivision plans prior to their official approval. Space for tree planting must be addressed in the plans just like streets and sewers, and criteria need to reflect what is best for the community, not what is most expedient for the developer.

CURBSIDE TREELAWNS

Curbside treelawns are disappearing as new neighborhoods expand the boundaries of our cities and towns. They are ignored by planners, written out by specifications calling for contiguous curbs and sidewalks, or they are built so narrowly they become a nuisance and soon get filled in with concrete. A revival of curbside treelawns would lend grace and beauty to our new developments, provide a place for piling snow off the street and sidewalks, and give an added measure of protection to pedestrians or children playing on the walks.

Although there is little agreement about the minimum width of a curbside treelawn, consider that even in an 8-foot strip, a mature tree planted in the center will still only have approximately 3 feet separating it from the sidewalk. This space needs to absorb the raised soil that accompanies the swelling of most older trees at ground level. The treelawn must also provide room for a large portion of the spreading lateral root system.

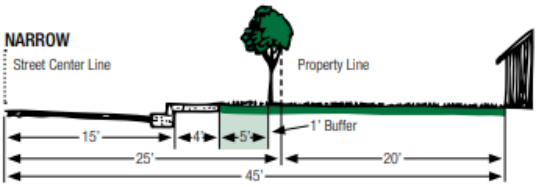


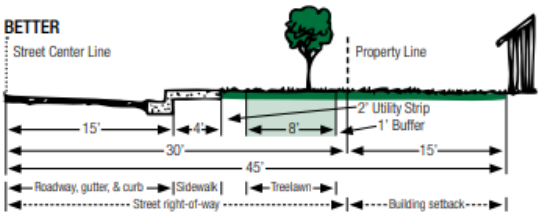


BOUNDARY TREELAWNS

By planting trees at least 3 feet from the edge of the walk, there should be no problem with uplifting as the lower trunk expands.

It is possible to provide either curbside or boundary treelawns of adequate width without reducing the number of lots per subdivision (a major objection from developers and tax-conscious officials). As illustrated by U.S. Forest Service researchers, the difference between adequate and inadequate space for urban trees can be made up by reducing the required distance between the street right-of-way and the closest edge of a house or other building. The space between the house and the actual street remain the same. This is illustrated in the schematic below. Notice, too, that under improved conditions, a utility strip is provided and located far enough away from the trees that root damage is minimized when digging becomes necessary.

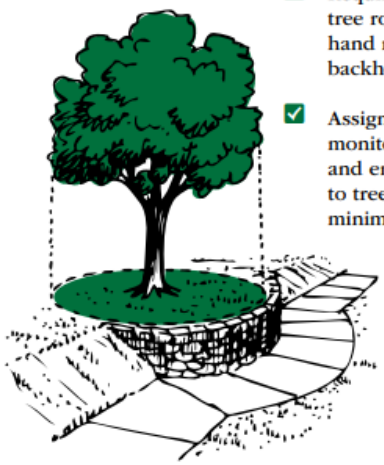




WHEN YOU REPLACE A SIDEWALK

In established neighborhoods, there is much that a good forestry program can do to prevent trees (and people) from being the losers when roots must be cut during sidewalk replacement. Here are some suggestions offered by experienced urban foresters:

- ☑ Prune a year in advance to reduce mechanical stress on the roots and to allow recovery before the tree receives additional trauma from root cutting.
- ☑ Do sidewalk work early in the spring and end all root cutting by mid-summer. This will allow maximum root recovery before dormancy.
- ☑ Provide a coordinated service in which the municipality does the pruning, then fertilizes immediately following construction. A needle-injected, soluable compound that is low in nitrogen and high in phosphorus and potassium is recommended for aiding root recovery.
- ☑ Provide residents who are affected by sidewalk replacement with literature about adequate watering (slow application of at least 1 inch of water per week.) Better yet, give them a copy of this bulletin.
- ☑ Write into any contract that excavated roots will be back-filled the same day to prevent drying. When this method is not possible, roots should be covered with wet burlap and watered. Cleanly prune off the jagged ends of cut roots.



- ☑ Require that digging near tree roots be done by hand rather than with a backhoe.
- ☑ Assign an arborist to monitor construction and ensure that damage to trees is kept to a minimum.
- ☑ When grade changes are necessary, use retaining walls on cuts, or wells (covered by a grate) in fills, to minimize root cutting and to keep the base of the trunk at the original ground level.
- ☑ Make ordinances and street plans flexible enough to allow variations in sidewalk widths to accommodate existing mature trees.
- ☑ Match sidewalk construction standards to soil properties.



- ☑ Consult an arborist to evaluate the effects of root cutting. Species, prevailing wind patterns, lean, and condition of the tree help to predict the risks involved when roots are cut for sidewalk replacement. For safety, tree removal and replacement is sometimes necessary.

WHEN MINOR REPAIRS WILL DO

The root in the photo below has raised the sidewalk. One option is to move the sidewalk a foot or two away from the tree — with the homeowner's permission. A less expensive solution is the addition of a sloped ramp, as shown below, to reduce tripping. Another way to solve the problem without damaging the tree is to use a concrete saw or grinder to cut off the protruding edge.



Add a small concrete or asphalt "ramp" to reduce tripping.

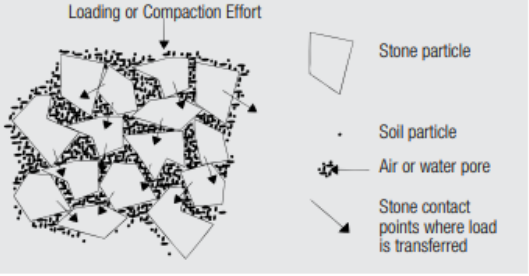


Making More Room for Roots

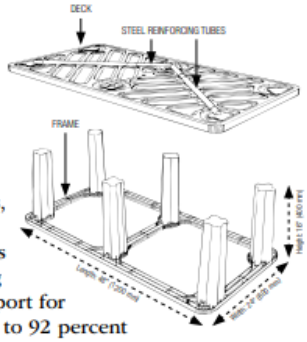
Two inventions in recent years offer a win-win solution to a dual problem. When sidewalks, parking lots, or roadways are installed, compaction of the subsoil is necessary to bear the surface material without cracking or breaking. Unfortunately, the compaction creates a barrier or hostile growing environment for healthy tree roots. These two innovations provide the strength necessary to satisfy engineers while at the same time providing space for tree root growth.

C-U STRUCTURAL SOIL™

This is a patented product resulting from research at Cornell University's Urban Horticulture Institute. C-U Structural Soil™ is a mixture that contains .75"–1.5" angular crushed stone to provide the weight-bearing capacity. Clay-loam is added to provide a good growth medium in the spaces between the rocks. Hydrogel is also added to the mix to hold the soil to the stone surfaces rather than letting it completely fill the pores needed for aeration, or to compromise the weight-bearing job done by the stone. All is done by licensed producers to ensure adherence to the exacting standards of the formula.



SILVA CELLS



Silva Cells were developed by landscape architect James Urban of Annapolis, Maryland, and Deep Root Partners, LP of San Francisco.

The concept is a series of modular, interlocking "cells" that provide support for surface material and up to 92 percent of the space available for uncompacted soil and healthy root growth.

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Arbor Day Foundation in cooperation with the U.S. Forest Service and National Association of State Foresters. To achieve the national recognition of being named as a Tree City USA, a town or city must meet four standards:

Standard 1: A tree board or department
Standard 2: A tree care ordinance
Standard 3: A community forestry program with an annual budget of at least $2 per capita
Standard 4: An Arbor Day observance and proclamation

Each recognized community receives a Tree City USA flag, plaque, and community entrance signs. Towns and cities of every size can qualify. Tree City USA application forms are available from your state forester, the Arbor Day Foundation at **arborday.org/treecity,** or your state forestry agency.

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FOR MORE INFORMATION

For additional information to help reduce conflicts between roots and sidewalks, please visit **arborday.org/bulletins**.

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