

## Coping with the problems trees can cause

Property owners have four major complaints about street trees:

Tree roots lift sidewalks

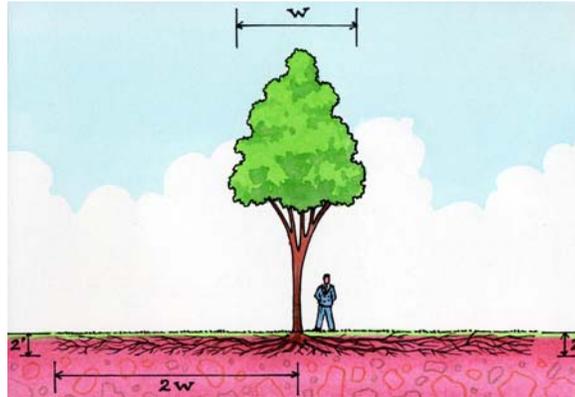
Tree roots sometimes get into sewer lines

Trees drop leaves which must be raked and occasionally cleaned out of gutters

Trees sometimes drop "sap" that falls on cars and attracts bees

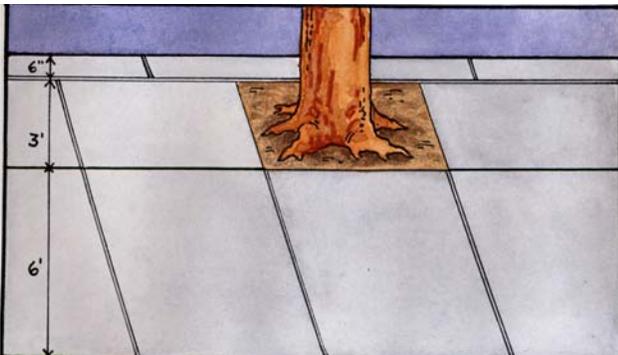
### Lifted sidewalks

Tree roots extended a great distance laterally – twice the width of the tree canopy – but they are very shallow. About 90% of a tree's roots are within the top 30 inches of soil. That means they sometimes lift sidewalks. Lifted sidewalks are part of the price we must pay to have street trees in Pottstown.



### Best sidewalk solution: enlarge tree pit

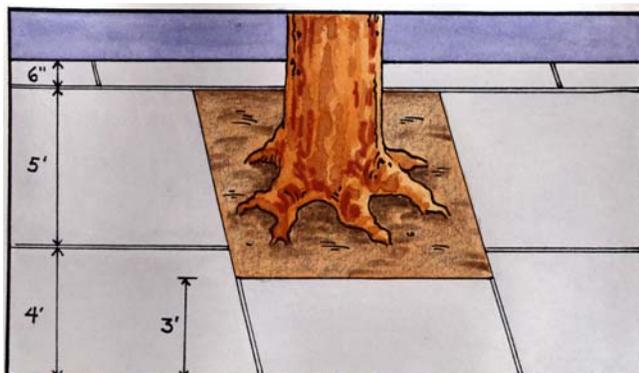
The tree pit is the area removed from a sidewalk for the tree. The larger the tree pit, the healthier the tree will be and the less likely it is that sidewalks will be lifted. Except in Pottstown's downtown commercial district, there is no reason any sidewalk needs to be more than 4 feet wide.



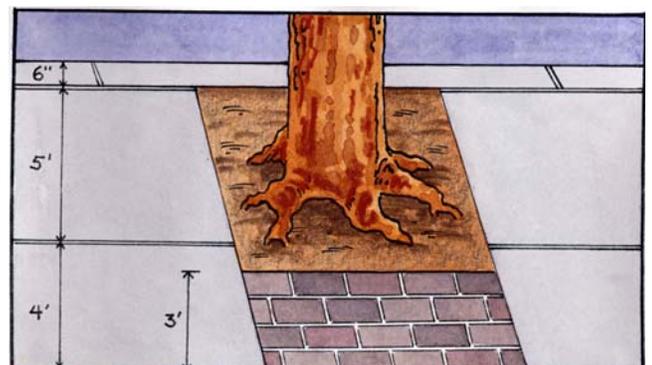
This tree pit is too small.



Tree pits can be expanded by removing excess concrete to form a planting strip to allow tree roots space to grow and reduce the chance of a lifted sidewalk. It also allows rain to permeate the ground.



If necessary, sidewalks can be reduced to 3 feet wide.

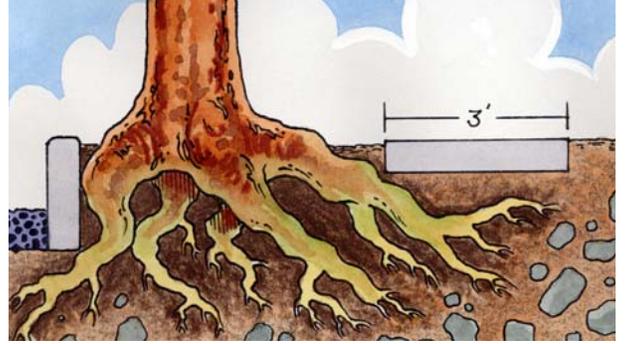


Brick can provide a walking surface around the tree.

### Enlarging the tree pit



When tree roots lift a sidewalk, the best solution is ...



...to reduce the width of the sidewalk.

#### If you have room...

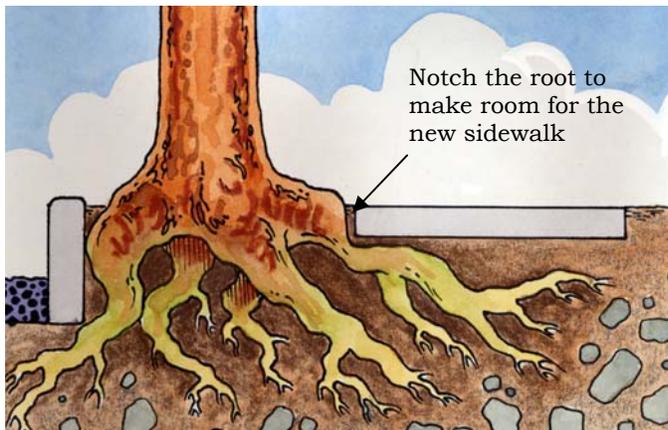


If you are installing a new sidewalk, you can go around a tree, or create a large tree pit covered with bricks that can be removed as the tree grows.

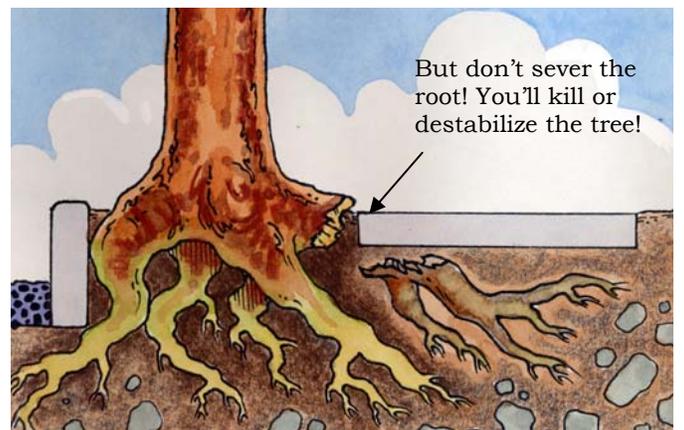
#### If you don't have room...



If you don't have room to go around tree roots, you can "shave" the roots with a hatchet by removing small roots and notching large ones about 3 inches below ground level to allow room for a new sidewalk over the roots.

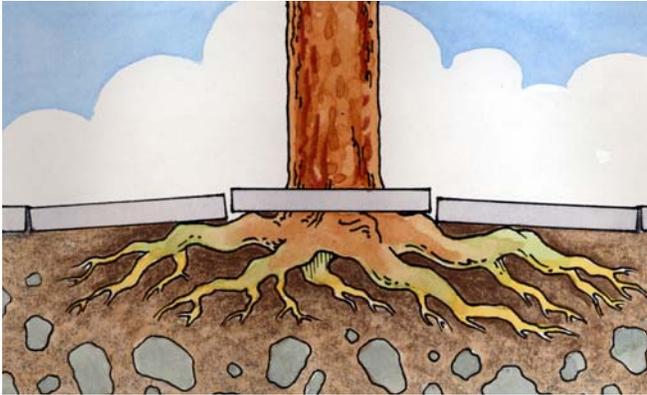


When pouring a new sidewalk, you can shave down large roots with a hatchet or root grinder to allow 3 inches for pouring concrete or putting down bricks.

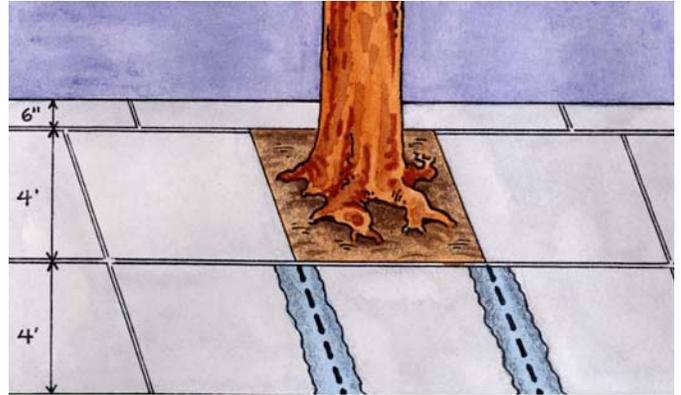


Don't sever big roots! You could kill the tree, or destabilize the tree so it might fall over in high winds or a storm.

### Patching sidewalks



When a block of cement in a sidewalk is lifted by tree roots, the "lip" creates a tripping hazard.



The lip can be covered over with patch cement like Top 'n Bond or Sactrete to fill the joint.



In severe cases, the cement block can be removed and filled with patch cement or blacktop. The borough prefers Sactrete or patch cement to blacktop.



When installing new curbing, use a metal plate adjacent to the tree. Plates in various lengths are available from Pottstown Metal Welding Inc.

### Three methods for patching sidewalks



Blacktop

Blacktop is used to eliminate tripping hazard.



Patch cement

Patch cement is preferred to fill the gap in a lifted sidewalk.



Slate

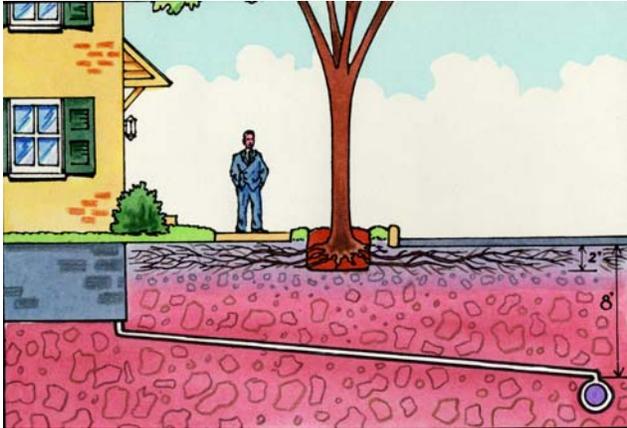
This property owner used pieces of slate to patch a lifted sidewalk.

## Defective sewer lines

Tree roots will not penetrate a sound sewer line. If tree roots enter a sewer line, it is because the pipe is faulty. When a sewer pipe breaks or leaks because of age or improper installation, nutrients and water ooze into the surrounding soil. This will attract any nearby roots, which will thrive and may even enter the defective pipe and block the passage.

Many older sewer pipes in Pottstown are made of clay, which eventually cracks because of soil settlement or earth tremors. Modern sewer pipe is made of iron or plastic. Problems can be prevented by:

- \* Proper construction of new sewer lines, including tight joints and a firm soil base.
- \* Repair or replacement of defective sewers. Repeated blockage may indicate a damaged pipe.



90% of a tree's roots grow in the top 30 inches of soil, well above sewer pipes, which are generally buried 6 feet or more below the surface.



Even so, the only way tree roots can enter a sewer pipe is if there is a break or leak in the pipe, just as the only way rain can enter a building is through a leaky roof.

## Falling leaves

Trees drop their leaves in the fall. Some people find raking leaves annoying. Others welcome leaves as a sign of the changing seasons. Children particularly love leaves. Falling leaves enrich the environment and give people a reason to get outdoors in the autumn and enjoy nature.



## “Sap” from aphids

Some trees are susceptible to infestations of small bugs called aphids. Aphids usually appear in July and August, secreting a sweet sticky substance that falls on cars and attracts bees. Aphids usually disappear by the first frost.

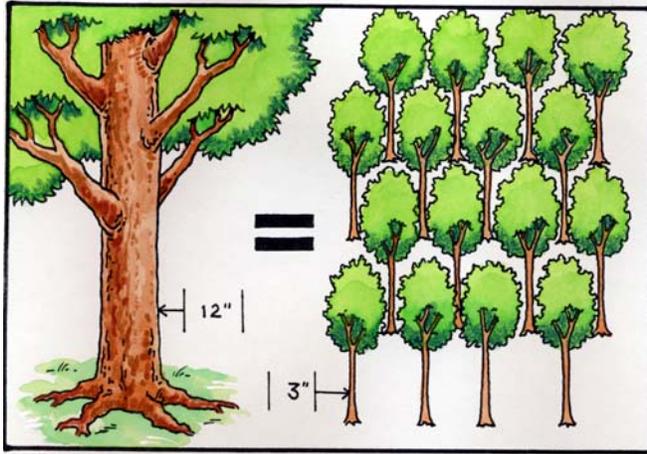
Trees can be sprayed to remove aphids, although the tree commission does not have the resources to do this.

The tree commission will be happy to provide permits to private property owners who wish to have their trees sprayed by pest control professionals.



## Lifespan of a street tree

A Pottstown street tree can live 75 years or more. For example, the trees in front of the Pottstown Middle School and The Mercury office are about 70 years old. Each year a tree grows, it becomes more valuable to the community. One mature tree 70 feet high and 50 feet wide provides more environmental benefit than scores of young trees just starting to grow.



A tree whose trunk is 12" inches in diameter provides more environmental benefit than 16 trees with a 3" diameter trunk. Trees cool our town and absorb pollutants from the air.

## Pottstown Shade Tree Commission Policy

In 1954, Pottstown Council created the Pottstown Shade Tree Commission and enacted the borough's Shade Tree Ordinance. Under the ordinance, the Shade Tree Commission has jurisdiction over all street trees in Pottstown.

The written permission of the Shade Tree Commission is required to plant, trim, or remove a street tree.

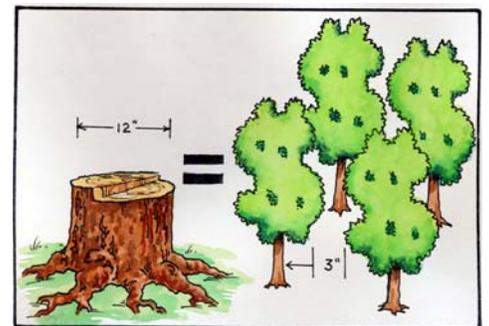
The ordinance requires that street trees shall be maintained by the adjacent property owner. At the request of the Shade Tree Commission, dead or dying trees must be removed by the adjacent property owner, and the stump ground to a depth of 2 feet to allow for a replacement tree. The Shade Tree Commission may also require adjacent property owners to trim trees with dead or low-hanging branches.

This is the usual arrangement among most Pennsylvania municipalities. A small number of boroughs, such as Wyomissing and State College, pay for all the costs of planting, trimming and removing street trees.

At present, Pottstown government allocates \$20,000 annually for street trees in Pottstown. This is an expenditure of \$1 per resident, which is 50% of the minimum recommended by the National Arbor Day Foundation.

If a property owner is requested to remove a dead or dying tree, and does not do so after receiving two notices, the borough will remove the tree and may place a lien against the property to recover the cost.

People who illegally remove a street tree must pay the replacement cost on an inch-per-inch basis. If a person illegally removes a tree with a 12-inch diameter trunk, for example, the borough will plant four 3-inch diameter trees to replace it and bill the offender for the cost of those four trees. Failure to pay the bill can also result in a lien placed against the offender's property.



### Trees Inc.

In 1983, a non-profit corporation called Trees Inc. was established to encourage the planting and maintenance of street trees in Pottstown. Using a maintenance fund from Borough and private donations, Trees Inc. performs routine maintenance of street trees in Pottstown and plants new trees to replace ones that have died.

## Citizen cooperation needed

Pottstown lacks the new houses and large lots of the suburbs. To attract and retain middle class families, the borough must create and maintain desirable neighborhoods. Despite the occasional problems they cause, trees are essential to keep our town green and beautiful. Thanks for your help.