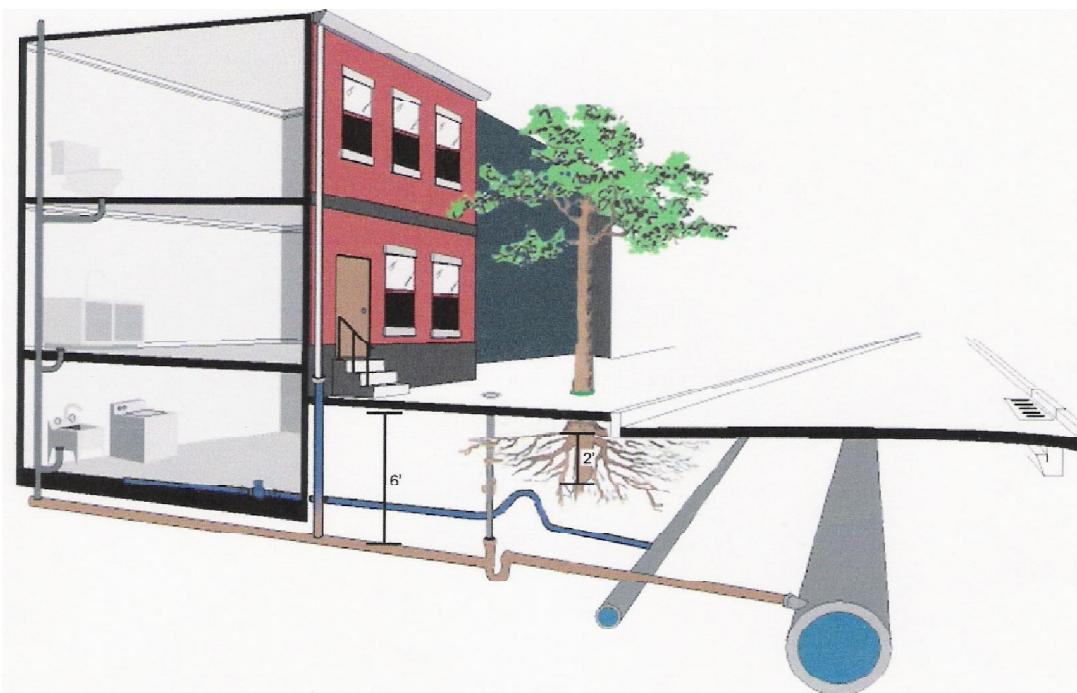




Sidewalk Trees & House Sewer Laterals

Homeowners often engage in a type of “chicken or the egg” discussion concerning the roots of their sidewalk trees and the effect of these roots on their sewer lateral – the pipe that connects the home’s wastewater drainage system to the sewer in the street. You may have heard a neighbor claim that the roots of the tree in front of their house broke through their lateral pipe, causing the pipe to eventually block up so that problem-free flushing became a fond memory.

Tree roots can find their way into a sewer lateral, but normally that occurs only after the lateral has begun to deteriorate as a result of age, settlement or other factors. Most of a tree’s root system is concentrated in the **top 12 – 24 inches of soil** directly beneath the concrete sidewalk. A home’s sewer lateral, beneath the sidewalk slab, is an average of **six to seven feet below ground**, providing a buffer of soil and fill between the lateral and the tree.



The **brown pipe** connecting the house to the sewer in the street is the house sewer lateral. The **blue pipe** connecting the house to the street is the house water service. Note that the sewer lateral is approximately six feet below the sidewalk and that the roots of the tree are approximately two feet below the sidewalk.

When roots are adventurous enough to find their way to the lateral, it is usually a result of a crack or open joint in the pipe that allows water to escape into the surrounding soil, attracting stray tree roots.

Following are a few additional facts to set your mind at ease when contemplating your own sidewalk tree:

- **House laterals** in Philadelphia are made from **cast iron**. Pipes of this material usually last 60 – 70 years. This is based upon average Philadelphia weather (its freeze and thaw cycles), urban loads in streets (cars and trucks), the nature of sidewalk/street fill and electrical currents in the ground. Older homes, built prior to World War II, may have had terra cotta lateral pipes, which are more prone to cracking and breaking.
- **Sidewalk trees** in the City are approved by the Fairmount Park Commission to ensure that only trees that are suitable to urban environments (trees that can withstand urban challenges such as pollution and sidewalks & streets that are filled with infrastructure) are planted along city streets.
- Plumbers have the ability to **check the condition of house laterals** without digging up the pipe if they need to look for blockages caused by roots or other materials. In addition, commercially available products exist that can be poured into your toilet and flushed into your pipe, destroying any roots that may have found their way into the pipe via a crack.

Trees are Good for your House and the Environment

- A 2005 Study by the University of Pennsylvania found that trees translated into **higher property values**. The study found, for example, that planting a tree within 50 feet of a house increased its sale price by nine percent.
- Trees provide a **cooling shade** to a home in the hot summer months, decreasing the amount of energy required to cool a home and the related electric bills. Tree lined blocks can actually decrease local temperatures.
- Trees naturally **clean the air** of pollutants and create a neighborhood **noise buffer**.
- Trees improve **stormwater management**, reducing the amount of polluted stormwater runoff that normally would go directly into storm drains. The **leaves** of trees capture rain drops before they hit the ground, evaporating some of this rain water and sending it back into the air. **Tree roots** allow rainwater to filter back into the soil, recharging the often thirsty earth.

Your House Lateral and You

Property owners are responsible for the care and maintenance of their house lateral, from the point it leaves the property to its connection into the city sewer in the street. PWD has a Homeowner's Emergency Loan Program (HELP) in place to assist residents with the cost of repairing a broken sewer lateral (the average replacement cost is \$3,000). If you receive a notice from PWD about a broken lateral or water service, call the number on the notice – 215-685-xxxx. For water or sewer emergencies, or for general information, call PWD's hotline at 215-685-6300.

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