SOME THOUGHTS ABOUT ORANGEBURG PIPE REPLACEMENT

or

HOW TO AVOID UNINTENTIONAL RECYCLING

A neighbor recently replaced their Orangeburg pipe after suffering from a relatively minor Orangeburg pipe backup. Pat Priest and the Boscherts decided to explore replacement of our pipes before such an opportunity announced itself.

I was hesitant to spend the money to replace our Orangeburg pipe, but a quick search about building material lifetimes convinced me to join the prevention replacement effort. If properly installed, cast iron lasts from 75-100 years, PVC (Polyvinyl Chloride) pipe (the replacement material) lasts 400+ years, and Orangeburg pipe has a designed lifetime of 50 years. That’s right, the Orangeburg pipe still in use in Kings Park is at or past its designed lifetime.

Pat did most of the Orangeburg pipe research. The following summarizes her findings.

**Point of Contact:** Department of Public Works and Environmental Services, 12000 Government Center Parkway, Room 358, Fairfax Virginia, 22035, (703) 324-5015. You will find the staff very helpful if you visit the office.

**Services Provided:** When you visit the office, the staff will show you site maps and a list of plumbers/excavation companies (no recommendations by staff are intended by the appearance of any company on the list). However, a little time spent examining the list can narrow down the possibilities. Pat chose to use the following as filter criteria: length of time in business, have the companies dealt with Orangeburg pipe, and do the companies have experience with VDOT should the cast iron connectors to the house and to the main sewer line also need replacement. Why VDOT? Fairfax County states the homeowner is responsible for connectors and pipes to the main sewer line. The main sewer line is underneath the street. Fairfax County maintains the sewer line. VDOT is in charge of the street. The street may need excavation and subsequent milling/repair to reach the main sewer line when replacing the cast iron connectors. The company you select should have experience with this tangle of Public Works responsibilities. A **pipe diagram** specific to your home will cost $25 and take 7-10 days to arrive at your address.

**Jargon that you may encounter:**

**Repair:** Replace Orangeburg pipe only.

**Replacement:** Replace Orangeburg Pipe and Cast Iron connectors at both home and main sewer line.

**Bursting:** Companies that use this technique do not need to excavate the overlying soil. They use Orangeburg pipe as a conduit and “burst” the pipe to install the new PVC pipe. However, if the Orangeburg pipe is not in a straight line from the street sewer connection, the company will also need to excavate the overlying soil over that part of the pipe. Also, some companies using this technique may not place gravel underneath the replacement PVC pipe. The gravel is recommended to prevent formation of a “belly” in the PVC pipe should the pipe settle.

**Excavation:** Dig up the overlying soil and/or street.

**Estimated Cost Ranges:** We provide these estimates to give you an idea of the cost of various options. We found that the companies that we dealt with fell within these ranges.

 **Street Excavation Bond -** If you need to dig up the street, VDOT requires a $20,000 bond. Be sure that the bond is in the company’s name, not yours. If in your name, you are responsible for the entire $20,000 and any problems that may arise. You pay only $500 of the bond if the company carries a continuous bond.

**Orangeburg Pipe Repair** $6,000 - $7, 000 (We opted for repair rather than replacement).

**Orangeburg Pipe Replacement** $16,000 - $23,000 which includes the cast iron connectors. Add another $5,000 for any street repairs.

**And then there are the trees:** If trees lie in the path of the excavation, I recommend a visit by an arborist. An arborist can advise you as to what needs to be done to any tree in the path of the work. Actions on a tree can range from excavation around the tree, in an attempt to save the tree and its roots, to removal of the tree, to include trunk/roots. If excavating around a tree, you may want to invest in treatments that will encourage root and leaf growth to help the tree recover. **Estimated cost range per tree:** Help tree recover: $200 - $500. Tree removal: $800 - $2000.

**Day of the repair:** Plan for 2 days, a few hours of which no waste water can be generated. You should have over-night use of house facilities between the first and second day. Also, some companies will strip off existing grass to use as sod after the work is done.

**After the repair:** Company should seed the excavated area. Saved sod will be restored.

Finally, after 50 years, we have a sewer pipe that will outlast generations of humans (some legacy, huh?). Now about those cast iron connectors in 25-50 years? Watch for our article in a 2038 edition of the Kings Park Gazette.