

Cheltenham Township  
Sanitary Sewer

Private Sanitary Sewer Lateral  
Maintenance and Repair  
Ordinance

May 11, 2016 Public Works Committee Meeting

# What is the history of the Sanitary Sewer System?

- Township Collection system consists of approx. 120 miles of 8" to 33" diameter pipes which convey sewage to Philadelphia for treatment.
- Much of the Collection system is nearly 90 years old.
- Most of the Collection system is made of Vitrified Clay Pipe.
- Over time, the pipes can crack or break, pipe joints can become separated, roots can intrude into the system causing blockages.
- Brick manholes can lose bricks through the deterioration of mortar, and manhole rims can become dislodged.
- Inflow and Infiltration (I/I) becomes a problem.

# What is Inflow and Infiltration (I/I)?

- Inflow is the direct flow of stormwater into the sanitary sewer such as through sump pumps, area drains and roof drains or the direct flow of stormwater into the top of an open manhole.
- Infiltration is groundwater entering the sanitary sewer through cracks, open joints, and other defects in a pipe or manhole.



# Why is it necessary to remove I/I from the Sanitary Sewer?

- I/I costs the Township money to treat at the treatment plant.
- I/I takes up valuable space in the treatment plant.
- I/I takes up valuable space in the Township's Collection System.
- When the capacity of the Township's Collection System is taken up by I/I, there may not be enough room for the actual sanitary sewer flows. This can cause the flows to leave the pipes and manholes and go into people's homes or onto the ground or into the streams. These are SSOs (Sanitary Sewer Overflows).

# Regulatory Actions on the Township's Sanitary Sewer System

- 2005 – The first Corrective Action Plan (CAP) was developed to reduce I/I in the system.
- 2005 – An inspection program for illegal sump pump connections was started.
- 2006 – PADEP required the Township to enter into a Consent Order and Agreement due to excessive SSOs.
- 2010 – Temporary sanitary sewer bypass pipe (the “black snake”) was installed to accommodate I/I flows and reduce SSOs until system repairs are made.

# Repairs on the Township's Sanitary Sewer System

- Various repairs have been performed on the system since at least 2000.
- Repairs have intensified in nature since 2011 with pipe replacements and pipe re-lining.
- Updated Corrective Action Plans (CAP) were prepared in 2010 and 2012 per PADEP. A CAP revision is underway for 2016 with oversight from PADEP and PWD.
- Per the 2016 CAP, neighborhood sanitary sewer rehabilitation projects are set to start in late 2016.
- Interceptor A, Phases 2A, 2B, 3, and part of 4 is scheduled for replacement in 2017.
- Sewer mains and manholes are only one piece of the puzzle. What is the other piece?

# The Private Sanitary Sewer Lateral

- What is it? Typically a 4-inch diameter pipe from the structure to the sewer main.
- Carries wastewater from toilets, tubs, washer, kitchen, etc. from the structure to the sewer main.
- Most property owners don't think about their lateral until there is a blockage in the pipe.

# Why we need a Private Sanitary Sewer Lateral Maintenance and Repair Ordinance

- Laterals are usually as old as the structure they serve.
- They are usually made of Cast Iron Pipe (CIP) which corrodes over time.
- DEP has found that as much as 75% of a system's I/I can be coming in through private laterals.

# What does the Ordinance mean to property owners?

- The Township will be undertaking intensive neighborhood sanitary sewer repair projects for the next 8 years.
- Part of these projects will involve using a small camera to look into the Township's collection system and into the private laterals.
- Using the camera, we will be able to see cracks, joint separation, roots, broken pipes, illegal connections, etc. that are causing I/I to enter into the Township's sewer system.



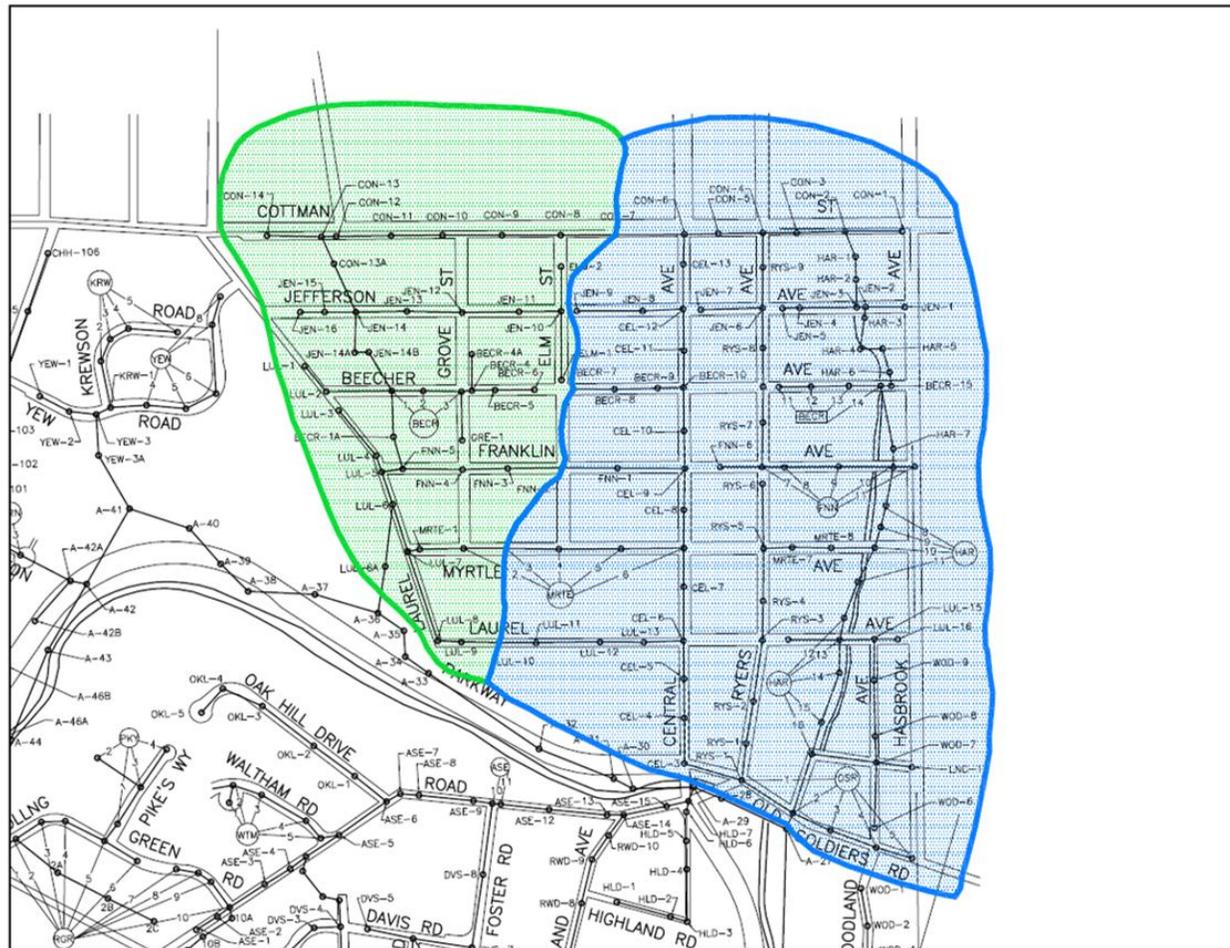
# What does the Ordinance mean to property owners?

- The Township will be installing a pipe lining repair in the collection system that will extend a short way into the private lateral to seal off leakage through that joint.
- Property owners will receive a copy of the camera inspection of their private lateral along with a report indicating if any defects were found that require repair.
- Property owners will have 60 days to complete the required repair.

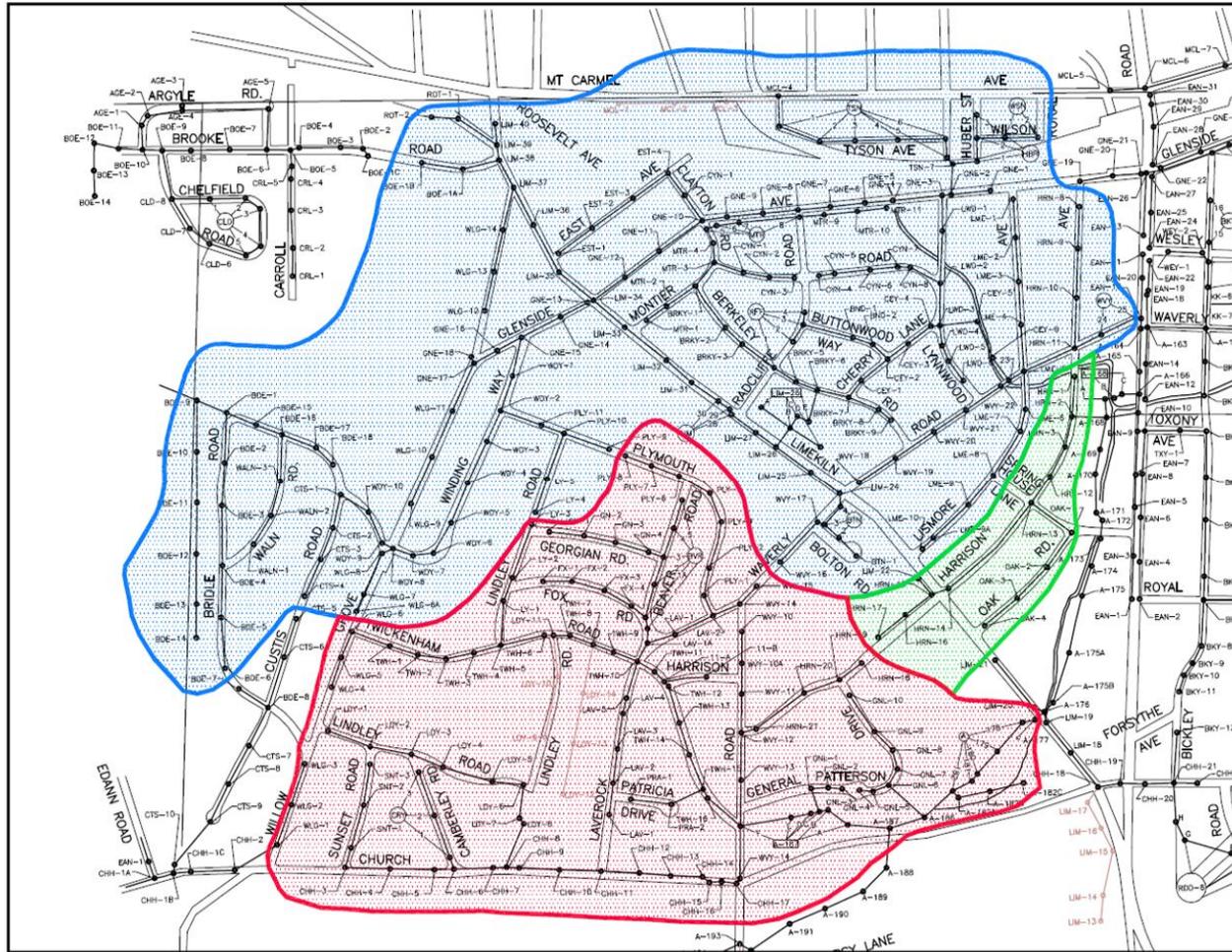
# Where will the neighborhood sewer work take place?

- The work will take place throughout the entire Township over the course of the next 8 years. All neighborhoods will be addressed.
- The first 4 project areas have been identified based on high flows in wet weather.
- Additional specific project areas will be identified as work progresses.

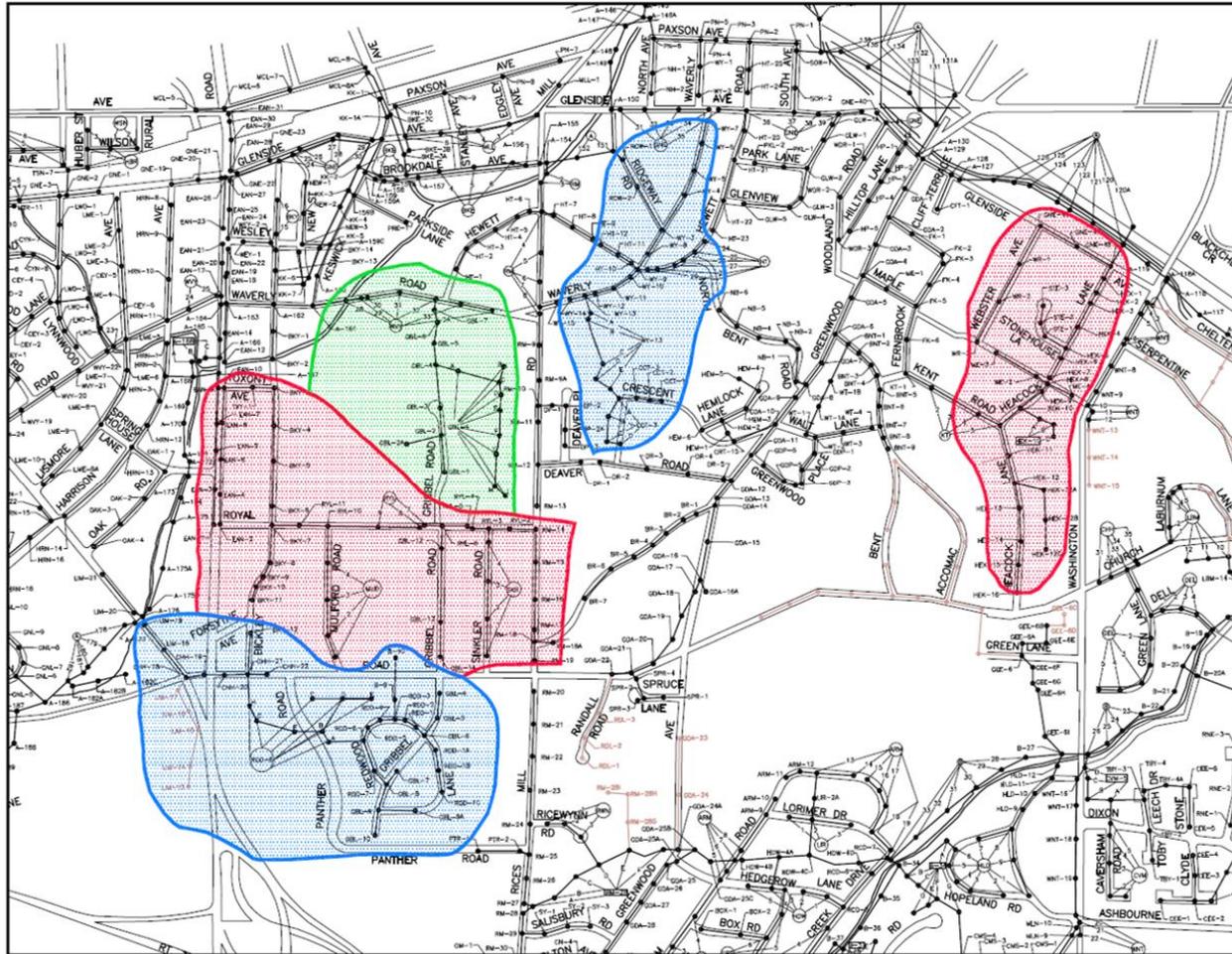
# Cheltenham Village – 2016 Start



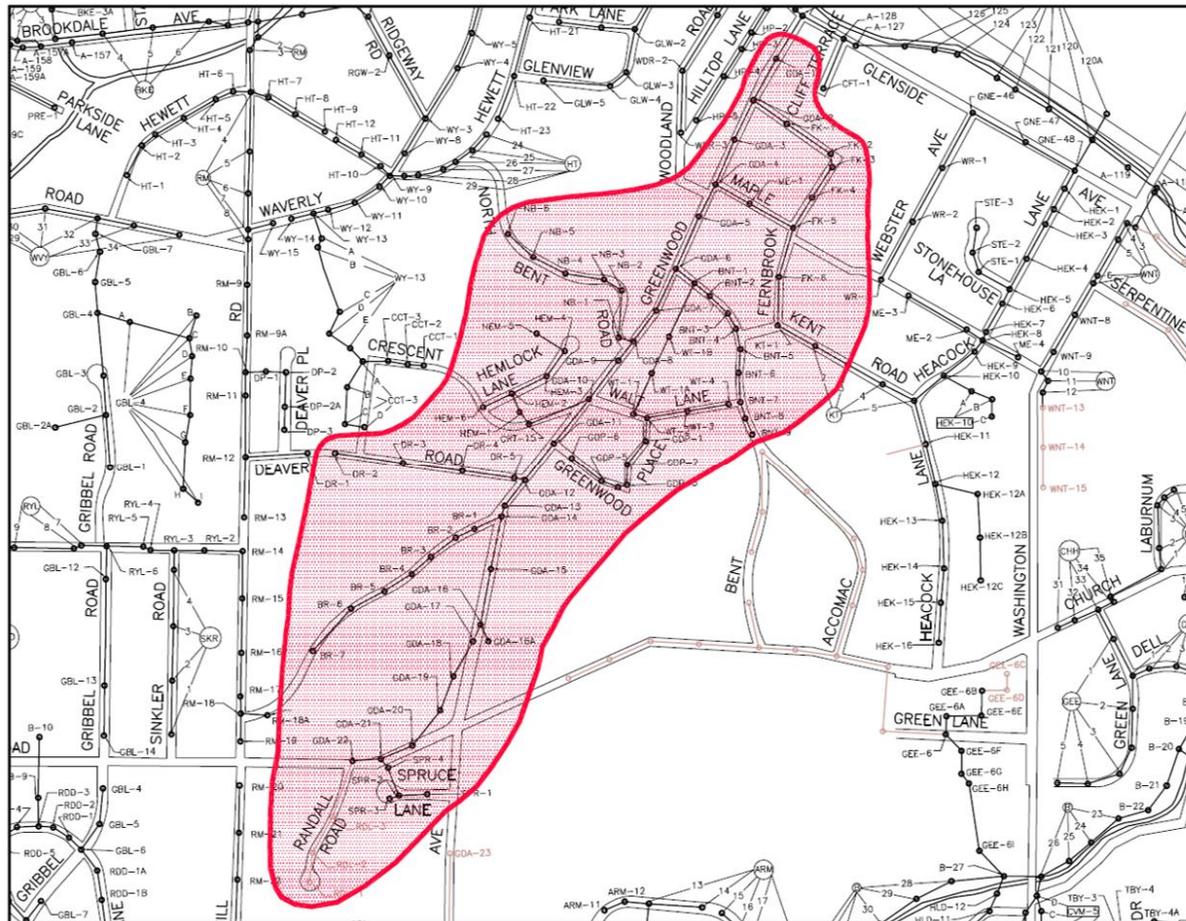
# Glenside – 2016 Start



# Wyncote – 2017 Start



# Wyncote – 2017 Start



# Melrose Park East – 2017 Start



## What actions should Property Owners undertake prior to the Sanitary Sewer Lateral inspection?

- Permanently disconnect and remove any and all downspout, gutter, sump pump, area drain, yard drain, hose and other connections to the sanitary sewer system conveying drainage, rainwater, surface water and/or groundwater. These types of connections are currently illegal and will remain illegal in the future.
- Look into the use of rain gardens, rain barrels and/or the disbursement of collected rain water over a large lawn area as an acceptable substitute for the above.
- Replace any missing clean out and/or vent cap on your property.

## What actions should Property Owners undertake prior to the Sanitary Sewer Lateral inspection?

- Report any damaged or missing manhole covers on your property.
- Avoid placing objects which are not water-soluble in the sanitary sewer system. Other than septic-safe toilet tissue, no other objects should be placed in the toilet except human bodily discharge. Feminine hygiene products and disposable diapers should not be placed in the toilet. Clearing obstructions from the private sanitary sewer lateral are the responsibility of the private property owner.

## What actions should Property Owners undertake prior to the Sanitary Sewer Lateral inspection?

- Budget and prepare for potential Sanitary Sewer Lateral repair expenses.
- Consider the advisability of entering into a maintenance plan with a company such as Home Serve. Cheltenham Township's partnering with Home Serve actually lowers the price of Home Serve's maintenance plans to individual property owners. (It is not a requirement of the Private Sanitary Sewer Lateral Maintenance Program of Cheltenham Township for private property owners to enter into an agreement with Home Serve).

Questions?