

# Cheltenham Township Sanitary Sewer

## Overview of the Draft 2016 Corrective Action Plan (CAP) & Upcoming Projects

September 28, 2016  
Community Meeting

# CAP Purpose

- To identify means to reduce and ultimately eliminate sewer surcharging and sanitary sewer overflows (SSOs);
- To restore capacity in the sewer system for future residential and non-residential sewer connections to increase the tax base;
- To establish milestone activities for the reduction and elimination of sewer surcharges;
- Reduce sewage disposal costs for the entire system.

# Why Revise the CAP?

- It all goes back to the requirement in an earlier CAP to prepare an Act 537 Sewage Facilities Plan.
- As part of the Act 537 Plan, a new Treatment Agreement with PWD had to be executed.

# Why Revise the CAP?

- 2014 Treatment agreement with PWD required evaluation of 2 options :
  - Option 1 – Construction of a new Interceptor sewer line through Philadelphia to convey additional flow up to a 29 cfs peak.
  - Option 2 – Construction of an equalization tank to control peak flows to 18 cfs.
- Neither Option evaluated was ultimately acceptable to DEP, PWD or the Township and these were both determined to be expensive short-term fixes. The Act 537 Plan could not be finalized as a result.

# Why Revise the CAP?

- DEP and the Board of Commissioners requested the Option 3 evaluation of a substantial and concentrated reduction of Inflow/Infiltration (I/I) and flow diversion to other municipalities or PWD sewer line.
- Option 3 was evaluated. Diversion was found to be unbeneficial for the cost associated. I/I removal modeling did show a potential for significant flow reduction.

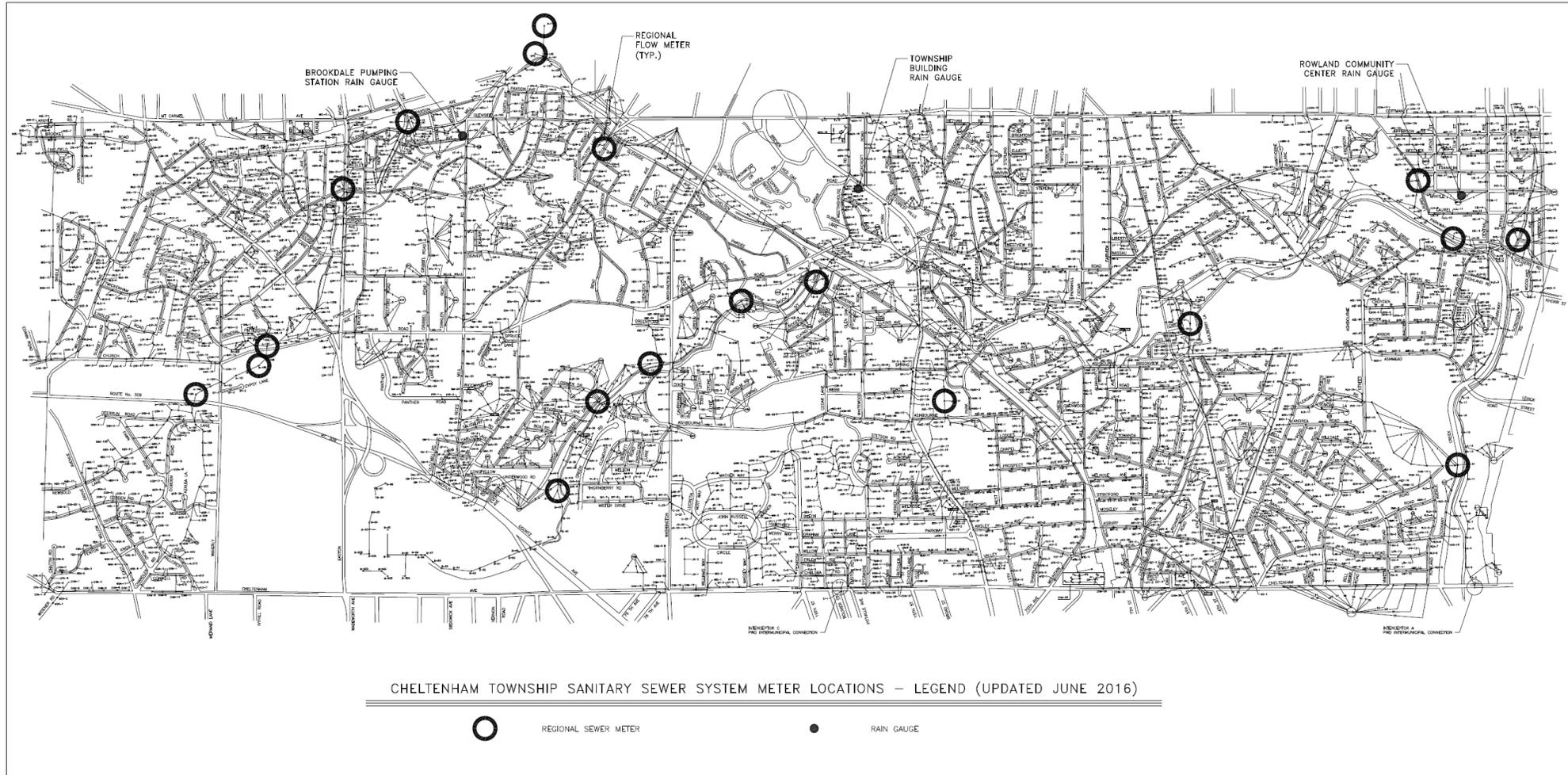
# Why Revise the CAP?

- With DEP's guidance, PWD agreed to evaluate a new agreement with Cheltenham with an 8-year time line for the I/I removal work (Option 3).
- Technical meetings have taken place since early 2016 with all involved parties to work on the detailed I/I reduction plan and milestones (the CAP) which will then be incorporated into the Act 537 Plan and the new agreement with PWD.

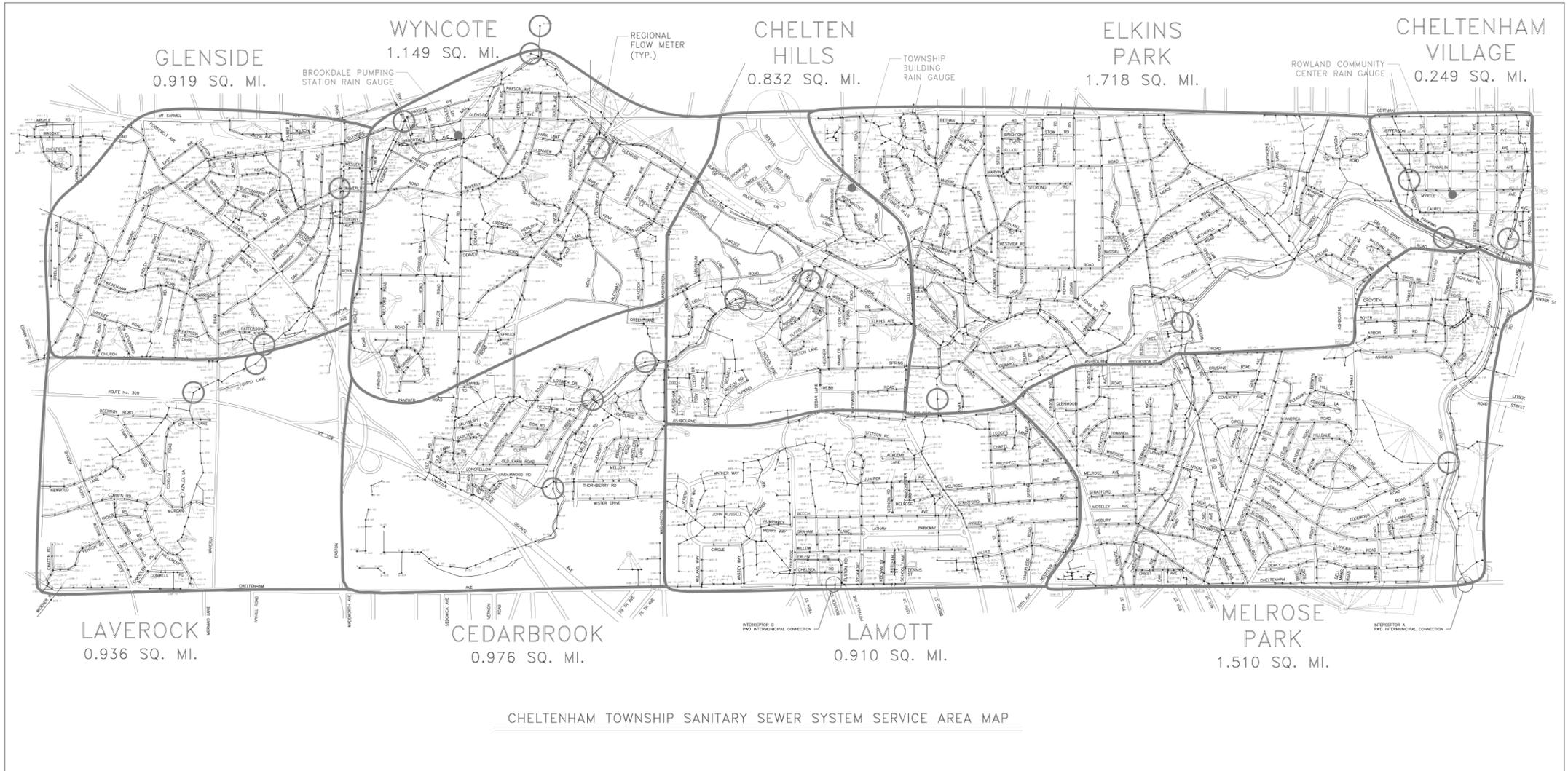
# What is in the Draft CAP?

- Detailed I/I Reduction Plan Includes:
  - Inspection, Testing and Repair of Sewer Mains and Interceptors
  - Manhole Inspection and Repair
  - Roof Drain Inspection and Disconnection
  - Private Lateral Inspection, Rehabilitation/Replacement
  - Sump Pump Inspection and Disconnection
  - Ongoing Flow Monitoring, Metering, Assessment and Data Evaluation
  - Project Schedule and Yearly Work Plan (for 8 years)

# Sanitary Sewer Map showing Regional Meters and Rain Gauges



# Sewer Shed Plan



CHELTENHAM TOWNSHIP SANITARY SEWER SYSTEM SERVICE AREA MAP



# Project Schedule and Yearly Work Plan (for the Public Portion of the Sewer System)

YEAR	ACTIVITY
<b>2018</b>	
	Complete I/I remediation work in Cheltenham Village and Glenside sections of Township system.
	Re-install regional meters in the Cheltenham Village and Glenside sections of Township to monitor post construction flows.
	Complete I/I remediation work for Phases 2, 2B, 3 and 4 (partial) on Interceptor A.
	Monitor and inspect I/I remediation work.
	Continue collection, review and analysis of flow meter data.
	Provide quarterly progress report on I/I work indicating linear footage of sewer mains inspected/repaired, number of laterals inspected/repaired, number of manholes inspected/repaired.
	Begin removal of by-pass pumping system.
	Advertise/award I/I remediation contract for Laverock section of Township system.
<b>2019</b>	
	Complete I/I remediation work in Cedarbrook, Wyncote and Melrose Park sections of Township system.
	Complete I/I flow analysis for Cheltenham Village, Glenside, Phases 2, 2B, 3 and 4 (partial) on Interceptor A, and Wyncote sections.
	Monitor and inspect I/I remediation work.
	Continue collection, review and analysis of flow meter data.
	Complete removal of by-pass pumping system.
	Provide quarterly progress report on I/I work indicating linear footage of sewer mains inspected/repaired, number of laterals inspected/repaired, number of manholes inspected/repaired.
<b>2020</b>	
	Complete I/I remediation work in Cheltenham Hills and Laverock sections of Township system.
	Complete I/I flow analysis for Cedarbrook and Melrose Park sections.
	Monitor and inspect I/I remediation work.
	Continue collection, review and analysis of flow meter data.
	Advertise/award I/I remediation contract for LaMott section of Township.
	Provide quarterly progress report on I/I work indicating linear footage of sewer mains inspected/repaired, number of laterals inspected/repaired, number of manholes inspected/repaired.

# What does the CAP work mean to property owners?

- For the next 8 years, the Township will be undertaking intensive sanitary sewer repair projects.
- Part of these projects will involve using a small camera (CCTV) to look into both the Township's collection system and as far as we can into the residential, commercial, and institutional 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 CAP work mean to property owners?

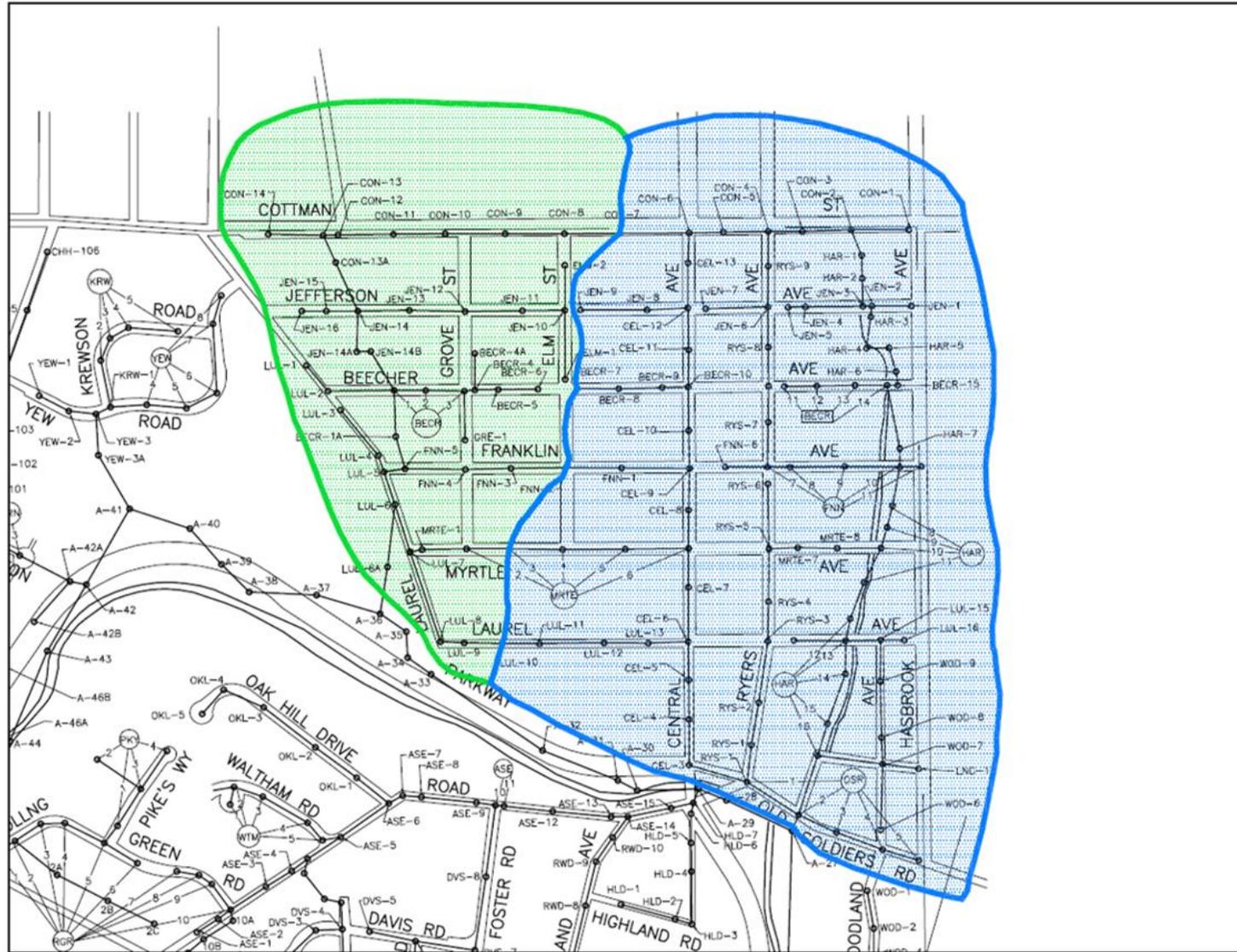
- The Township will be installing a pipe lining repair in the collection system that will extend a short way into the public portion of most laterals to seal off leakage through that joint.
- Property owners will receive a copy of the video inspection and a report on their private lateral.



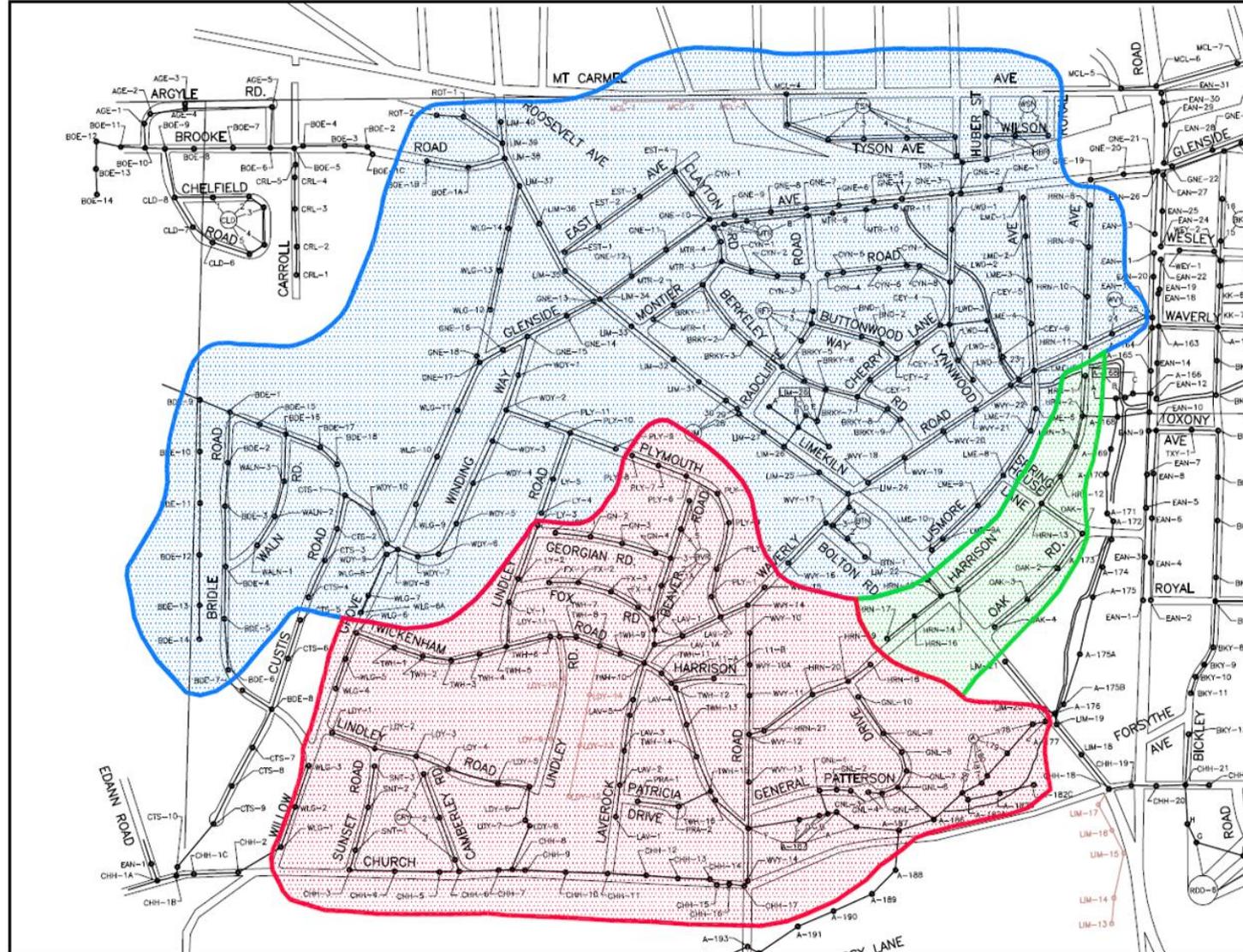
# Where will the Sewer Work take place?

- The work will take place throughout the entire Township over the course of the next 8 years. The entire Township will be assessed; work will take place where needed.
- The first 4 project areas have been identified based on high flows in wet weather and hydraulic modeling utilizing metering data.
  - Cheltenham Village
  - Glenside
  - Wyncote
  - Melrose Park East

# Cheltenham Village Sewer Shed Assessment 2016 Start



# Glenside Sewer Shed Assessment 2016 Start



# Cheltenham Village & Glenside Schedule

- Assessment and Joint Repair Projects to be awarded in late 2016
  - Scope:
    - Sewer main:
      - Cleaning, flushing, televising, root removal, joint testing, joint repairs;
    - Lateral inspection/televising from the sewer main;
    - Manhole inspection;
    - Smoke testing.
  - Completion:
    - Cheltenham Village – May/June 2017
    - Glenside – December 2017
- Additional repair projects in these areas will be determined after the assessment phase.

# Wyncote & Melrose Park East Schedule

- Assessment and Joint Repair Projects to be awarded in 2017

