

Oaklyn Borough USDA Funded Sanitary Sewer Improvements

February, 2020





Sewer System Background

- How the existing sewer system was designed
 - Terra cotta pipe segments 2 feet long. Joints made with Jute Rope
 - Cast iron force main
 - Brick manholes
- How age has effected the pipe network
 - Jute Rope disintegrated
 - Tree root intrusion
 - Cracked and settled piping
 - Brick manholes and mortar are deteriorating
 - Grease build-up



Existing Sewer Issues

Severe blockages due to:

- Cumulative grease build-up
- Significant tree root intrusion
- Severe groundwater infiltration in pipe joints and manholes
- Isolated pipe collapses



How Does It Affect Me?

- Basement backups; unsanitary conditions.
- Ground water infiltration and illegal sump pump connections; Increased treatment costs.
- Heavy rainfall events; sanitary sewer overflows in street.
- Aging infrastructure; Increased risk of system failure.

Example of Terra Cotta Pipe in Good Condition



Minor Root Intrusion



Offset Joints/Pipe Settlement

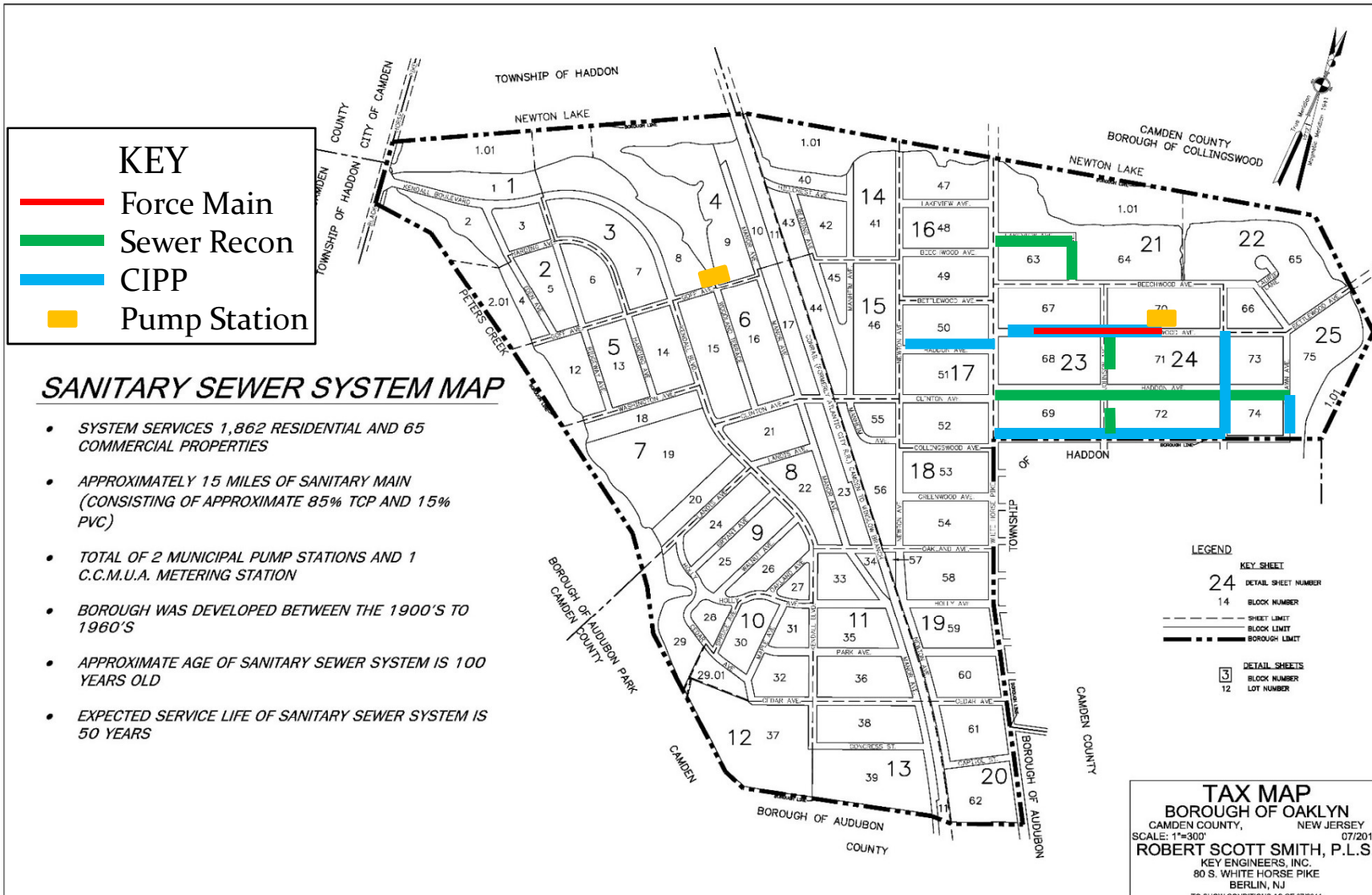


Pipe Failure



Scope of Work

INDEX



INDEX

Scope of Work (Cont.)

- **9 Total Streets / Locations for Sewer Improvements**

- 4 Locations of full sewer reconstruction

- E. Lakeview Dr. from White Horse Pike to Johnson Ave. **514 LF (FR)**
 - Johnson Ave. from Lakeview Ave. to E. Beachwood Ave. **360 LF (M/O)**
 - E. Haddon Ave. from White Horse Pike to Oaklawn Ave. **2092 LF (WHP to Johnson – FR) (Johnson to Oaklawn – M/O)**
 - Johnson Ave. from E. Clinton Ave. to Sta. 12+50 and Johnson Ave. from Station 15+50 to E. Bettleground Ave. *(CR 648) **500 LF (M/O)**

- **5 Streets are Slip Lining**

- W. Haddon Ave. from White Horse Pike to Newton Ave. (CR743) **651 LF (FR)**
 - E. Clinton Ave. from White Horse Pike to Coldsprings Ave. (Oaklyn side) **94 LF Recon, 1536 LF C.I.P.P. (Half M/O)**
 - E. Bettleground Ave. (CR648) from the White Horse Pike to Pump Station 974 LF Recon, **1650 LF C.I.P.P. (Select FR)**
 - Coldsprings Ave. from E. Clinton Ave. to E. Bettleground Ave. (CR648) **54 LF Recon, 774 LF C.I.P.P. (Leveling & Surface)**
 - Oaklawn Alley Way (from E. Haddon Ave. to Manhole Station) **314 LF (No Roadway)**

- **2 Pump Station Upgrades**

- Goff Ave. Pump Station
 - E. Bettleground Ave. Pump Station



Scope of Work (Cont.)

- Sewer Lateral Replacements
 - Laterals to be replaced in all full recon areas
 - Connection provided for underdrain system
- Roadway Upgrades
 - New Asphalt Roadway New Concrete Curb
 - Mill/Overlay
 - Select Driveway Aprons
 - Select Concrete Sidewalk Replacement
- Pump Station Upgrades
 - Goff Ave. Pump Station
 - East Bettleground Ave. Pump Station

What To Expect?

- Open Cut Sewer Replacement
 - Why open cut construction method?
 - Sewer down time? Use restrictions?
- Open Cut Lateral Replacement
 - Why open cut construction method?
 - Sewer down time? Use restrictions?
- Sewer Main Slip Lining
 - Why slip lining construction method?
 - Installation process
- Roadway Reconstruction
 - Curb
 - Driveways
 - Sidewalk
 - Roadway
- Construction Noise & Vibration
- Access Limitations During Construction

Open Cut Installation



CIPP Installation



Roadway Upgrades





Construction Schedule

- Construction Start Date: March 2, 2020
- Working Hours: 7am to 5pm, Monday through Friday
- Construction Completion Projection: September 1, 2020

Construction Schedule (Cont.)

- Overall Schedule By Street:
 - W. Haddon Ave. – 3/2 to 5/11
 - E. Clinton Ave. – 3/18 to 5/20
 - Coldsprings Ave. – 4/3 to 5/25
 - E. Haddon Ave. – 4/8 to 7/3
 - Johnson Ave. (Clinton to Bettleground) – 4/10 to 7/7
 - Goff Ave. Pump Station – 6/22 to 6/30
 - E. Bettleground Ave. Pump Station – 7/1 to 7/9
 - E. Bettleground Ave. (CIPP & FM) – 5/29 to 7/13
 - Oaklawn Alley – 6/15 to 6/16
 - E. Lakeview Ave. – 4/13 to 7/20
 - Johnson Ave. (Lakeview to Beechwood) – 6/18 to 7/24
 - Final Punchlist – 7/27 to 8/4



Construction Schedule (Cont.)

Slide reserved for graphic of construction schedule to be provided by Pioneer.



Coordination

- Written Notices of Construction to Residents (24 hours in advance)
- Emergency Access
- School Bus Routes & Bus Stop Adjustments
- Driveway Access
- Business/Facility Access
- Trash Collection
- Street Parking
- Daily Street Sweeping
- Final Restoration



Coordination (Cont.)

- Safety
 - Equipment on Street
 - Materials Storage
 - Road Closures & Detours
 - All Excavations Closed Each Day
- We Need Your Help!



What Can The Public Do?

- Communication is Critical!
- Disconnect your basement or crawl space sump pump from the sanitary sewer piping in your home.
 - Now is the time to disconnect!
- Remove trees on your property and at the curb line if you know they are near your sewer lateral or clean out.



Existing Ordinances

- The Borough Zoning Code, Chapter 108, Article 2, Section § 108-12 prohibits the use of the sanitary sewer system for the disposal of discharge from the following shall be removed forthwith:
 - A. Sump Pumps
 - B. Cellar Drains
 - C. Leaders
 - D. Downspouts
 - E. Developer's Cellar Pits
 - F. Foundation Underdrains
 - G. Floor Drains
 - H. Area or Yard Drains
 - I. Industrial or Manufacturing Equipment Drains
 - J. Conductors
 - K. Air-Conditioning Equipment
 - L. Stormwater Inlets
 - M. Catch Basins



Questions