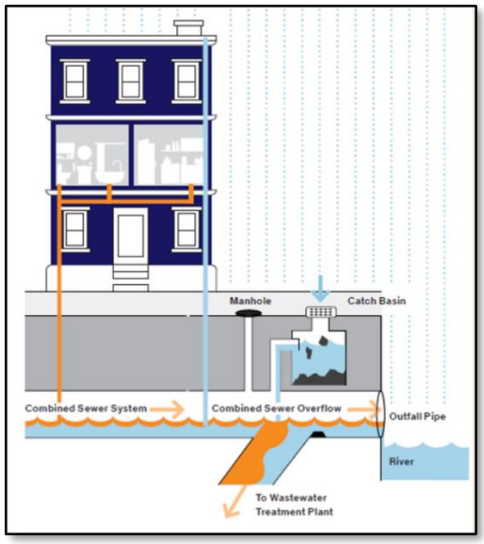
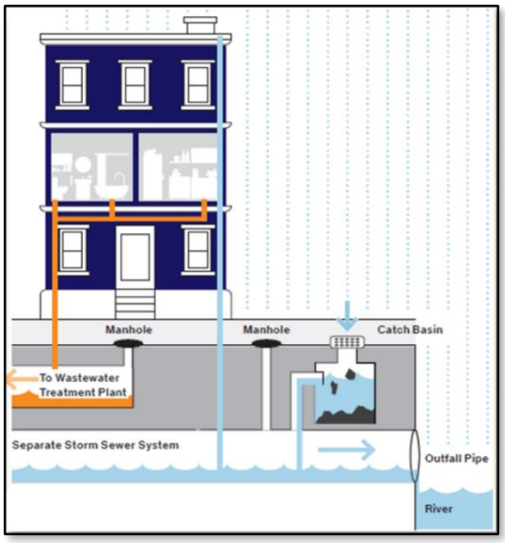
NYCHA Capital Projects Fact Sheet: SEWER LINE REPLACEMENTS

1. **Project Overview**
   - Projects in this scope repair outdated or damaged plumbing systems and reduce vulnerability to future sewage backflow.
   - Sewer line replacements support NYCHA resident and environmental health through reliable and resilient plumbing and sanitary systems. These projects also provide for a seamless sewer line connection between NYCHA's buildings and the NYC city sewer line.

2. **Key Terms**
   - Backwater Valve: A valve that is installed to allow water to flow one-way and away from the building towards a main sewer line.
   - Catch Basin: A device used for drainage and stormwater management that redirects water runoff away from a building's foundation.
   - Combined Sewer System: A type of gravity sewer system that uses a single pipe to collect and convey the flow of wastewater and stormwater runoff to a local wastewater treatment plant.
   - Fresh Air Inlet: Allows fresh air into the plumbing system, releases sewer gases/odors and maintains wastewater flow.
   - Sanitary House Drain: The interior plumbing in a building that collects wastewater from the bathroom water closets, bathtubs, toilets and kitchen sinks. The drain includes vertical riser and horizontal connection piping.
   - Sanitary House Sewer: The pipe running from the house trap pit through the building foundation wall to the exterior and terminates at the connection to the municipal sanitary sewer.
   - Separate Sewer System: One pipe carries stormwater runoff to the nearest waterway, while a separate pipe carries wastewater to the nearest wastewater resource recovery facility.
   - Stormwater: Rain and melting snow that falls on our rooftops, streets and sidewalks. Stormwater makes its way to the sewer system through storm drains via catch basins.
   - Wastewater: Mixture of used water and sanitary waste that flows down sink drains or toilets.



Combined Sewer System



Separate Sewer System

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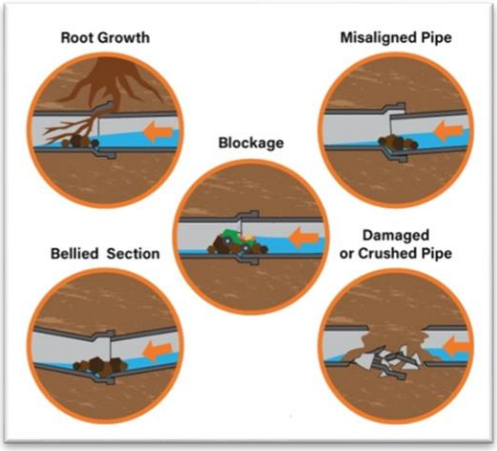
3. **Why is this project needed? Why is it important?**
   - Sewer line replacements target pipes that are collapsed, broken or back pitched due to household item and grease buildup, storm debris build up, root growth and being outdated.
   - Narrow pipes that are out of compliance with current plumbing code are also replaced with wider pipes, increasing sewer line capacity.
   - Other scenarios that require sewer line replacements can be seen in the image on the right.



4. **Scope of Work Details**
   - The basic steps of sewer line replacement projects are as follows:
     1. Preparation and Planning: The existing sewer line is located, and calculations are made about the required specifications for the new pipe.
     2. Excavation: A trench is excavated along the path of the old sewer line.
     3. Removal of Old Pipe: The old sewer line is cut into manageable sections and removed from the trench. Debris and dirt are removed from the trench to prepare for new pipe installation.
     4. Installation of New Pipe: The new pipe is laid in the trench and the pipe sections are fitted together.
     5. Backfilling and Restoration: The trench is backfilled around the new pipe with compacted soil. The ground surface is restored through landscaping and concrete repairs.

5. **Construction Trades & Other Roles Involved**

Type	Possible Roles	
Trade	• Concrete Worker • Electrician • Laborer (including Flaggers, Demolition Workers)	• Plumber • Teamster
Non-Trade	• Admin • Timekeeper	• Superintendent • Supervisor

6. **Typical Project Timeline**
   - The typical construction duration for this scope is three (3) years.

Planning (3 – 6 months) → **Design (6 – 8 months)** → **Procurement (3 – 6 months)** → **Construction (12 – 36 months)**

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7. **What to Expect During Construction**
   - Project will require **planned water service interruptions** over construction duration. The Contractor must notify the Superintendent and the Project Manager at least 48 hours before. The Contractor must also notify the Fire Department.
   - The Contractor must also provide for **pest management services** of a licensed, NYCHA-approved exterminating company from the time work is started.
   - The Contractor must notify Property Management no less than 72 hours in advance of **noise disruptions due to drilling**.
   - A **parking plan** must be coordinated by Property Management, the Resident Association Board, and NYCHA's parking consultant.

8. **Mitigating Construction Impacts**
   - Pest Management: Contractors are responsible for:
     - Thorough inspection of the construction site and staging area(s) for signs of rodents, roaches, water beetles and other pests.
     - Submitting a Pest Control Plan at least five (5) working days prior to the contract start date.
     - Providing tamper-proof bait stations and/or pesticide use when applicable (must post notices at publicly accessible locations at least 24 hours to any such application).
   - Utility Outages: There is typically minimal interruption to the domestic hot and cold-water supply to residents. All utility shutdowns must be coordinated with NYCHA Property Management and must be scheduled between 8 AM and 4 PM on weekends. Prior to restoration of water service, the Contractor shall inspect all apartments affected by the water shutoff.

Photos from Mariner's Harbor Sewer Line Replacement circa 2023.
From left to right: shoring and bracing for soil stabilization, pipe replacement, re-pavement.