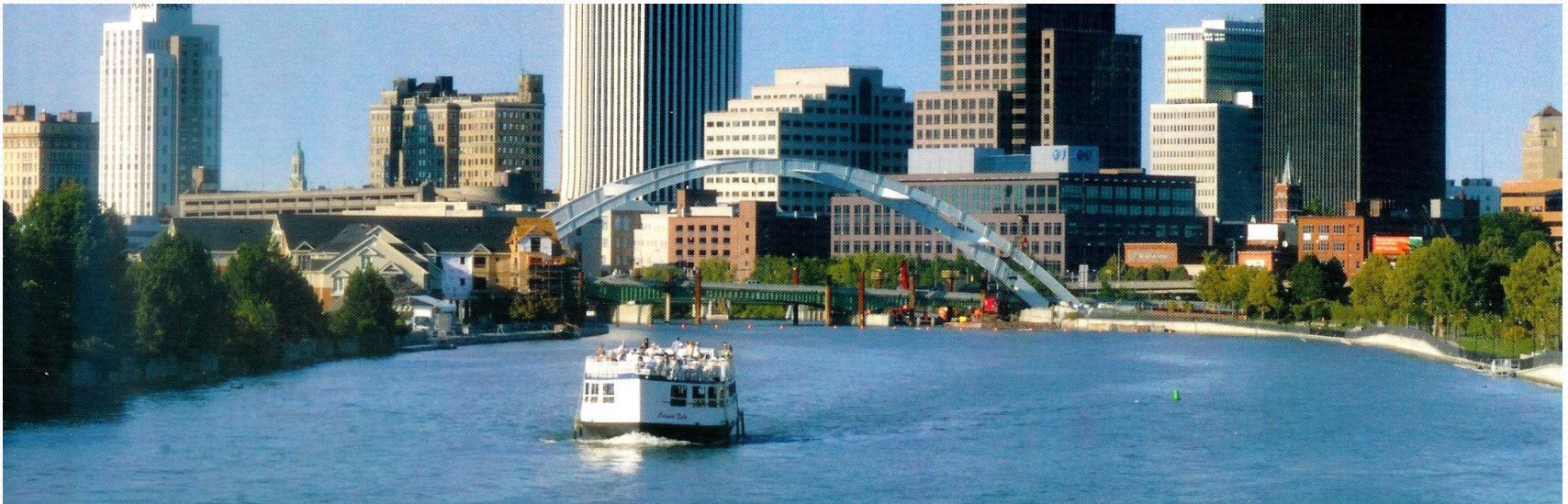
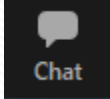



2022 Water Main Lining and Lead Service Line Replacement Project



Zoom Webinar Format

- Attendance: Please use the “**chat**”  feature to provide your name and address.
- Questions: Meeting participants will be muted during the presentation. Questions will be addressed at the end of the presentation.
 - Meeting participants on a computer can type **Alt+Y** (or Option+Y if using a Mac) to “raise your hand” to ask a question or simply click on the hand symbol  on your screen.
 - Meeting participants on a phone can dial ***9** to “raise your hand” to ask a question.



2022 Water Main Lining and Lead Service Line Replacement Project

Public Information Meeting

Monday, May 23, 2022

5:30 PM

Malik D. Evans, Mayor

Richard Perrin, AICP Commissioner, DES
Geoffrey Gugel, Director Bureau of Water

Public Meeting Outline

- Key Personnel
- Drinking Water Safety – Concerns about Lead
- Project Location
- How is it done
 - Means & Methods
- Summary and Schedule of Project
- Questions & Comments

Rochester Water Bureau

- **Director of Water:** Geoffrey Gugel
- **Managing Engineer:** Michael Bushart, PE
- **Laboratory Director:** John Maier
- **Project Designer:** Jamie Treuthart
- **Field Engineer:** Jamie Treuthart

Mainlining America, LLC

- **Project Superintendent:** Dave Misuraca

2022 Water Main Lining and Lead Service Replacement

- Project Designed and Administered by Engineering Division of the Rochester Water Bureau
 - Project Inspection – Rochester Water Bureau
 - Contractor – Mainlining America, LLC.
 - Project Cost \$ 2,494,731
 - Footage of Pipe 18,080
 - Cost per foot **\$78.82**
- Compare Pipe Replacement cost per foot >\$500.00
 - Total number of Lead Service Renewals 195
 - Average Cost per service **\$4,240**



Lead: Keep Your Water Safe

- Rochester Water Bureau
- Together- Lets get the Lead Out!

Lead & Drinking Water

- Where does it come from?
 - There is NO LEAD in our water sources.
 - There is NO LEAD in water that leaves the treatment plant.
- So how does lead get into drinking water?
 - Corrosion of
 - Service lines
 - Indoor plumbing
 - Indoor water fixtures

Sources and Contributors to Lead

Lead service lines

Old fixtures
(kitchen faucets,
water fountains)
and lead solder

Kitchen faucet
aerators
(routinely clean)

Brass installed prior
to 2014 (EPA Lead-
Free Act reduced
allowable lead in brass from
8% to 0.25%)

Galvanized iron
service lines

Galvanized iron pipe in
home plumbing



Faucet aerator



Lead in plumbing-

- Lead pipes
- Copper pipes with lead solder joints
- Old fixtures
- Until 1986 there was no “Lead Free” standard
 - No limit on lead content in brass
 - Solder was up to 50% lead
- Until 2014, fixtures sold as “Lead Free” were allowed to have as much as 8% lead in them.

Construction Impacts on Lead-

- Lead corrosion forms scales
- Normal Conditions- Stable
- Construction can release these scales
 - Drained pipes
 - Reversed flows
 - Moving pipes
- Lead levels- may be increased temporarily
 - ~3 months

Easy Steps to Mitigate Lead-

- Flush
- Clean your aerators
- Flush
- Use Cold Water
- Flush!
- Use a filter

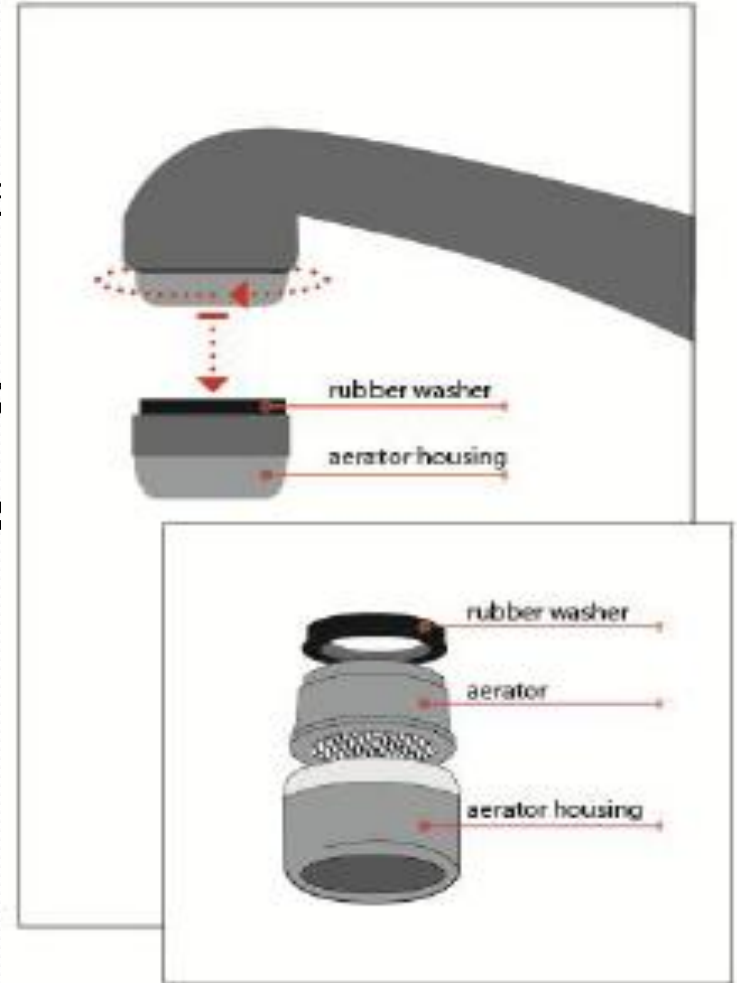
Initial flush-

Before using water, flush all your faucets using these 5 steps:

- 1** Remove aerators from all faucets. An aerator is a screen at the tip of the faucet that helps to eliminate splash.
- 2** Open all **cold** water faucets fully, starting at the lowest level in your house.
- 3** Let the water run through the faucets for at least **30 minutes**. Be sure to run cold water in all bathtubs and showers,
- 4** Close all faucets, starting at the lowest level.
- 5** Reinstall faucet aerators after cleaning them

Steps you can take-

- Run water for 3-5 minutes before and cooking.
- Use ONLY COLD water for drink
- Routinely clean faucet aerators (if possible)
- Use a filter-
 - FREE!



Flushing Works!

| 2016- 2020- | First Draw (ppb) | Service Sample (ppb) | Flush sample (ppb) |
|---------------------|---------------------|-------------------------|-----------------------|
| Average: | 4.5 | 1.8 | 1.0 |
| Maximum: | 75 | 13 | 7.5 |
| Minimum: | 0 | 0 | 0 |
| % spls 1ppb or less | 20% | 55% | 75% |

Results consistently show benefits of flushing



Free Lead Testing-

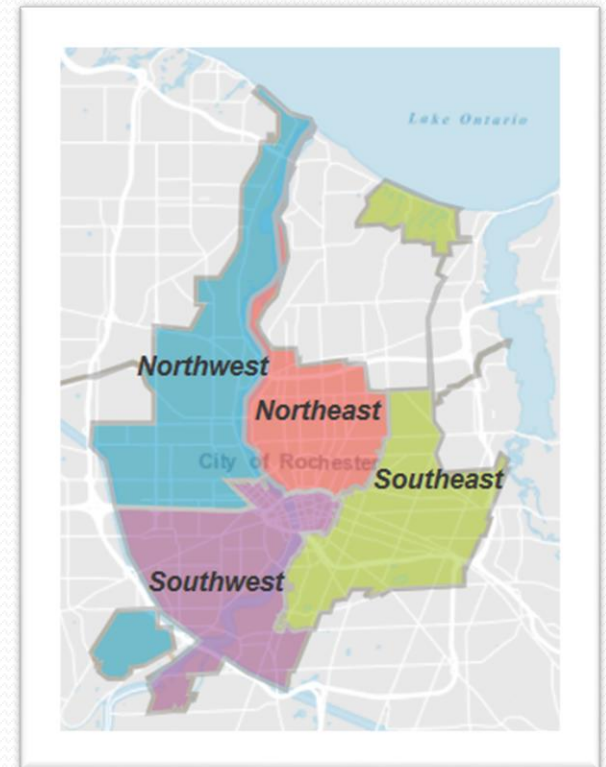
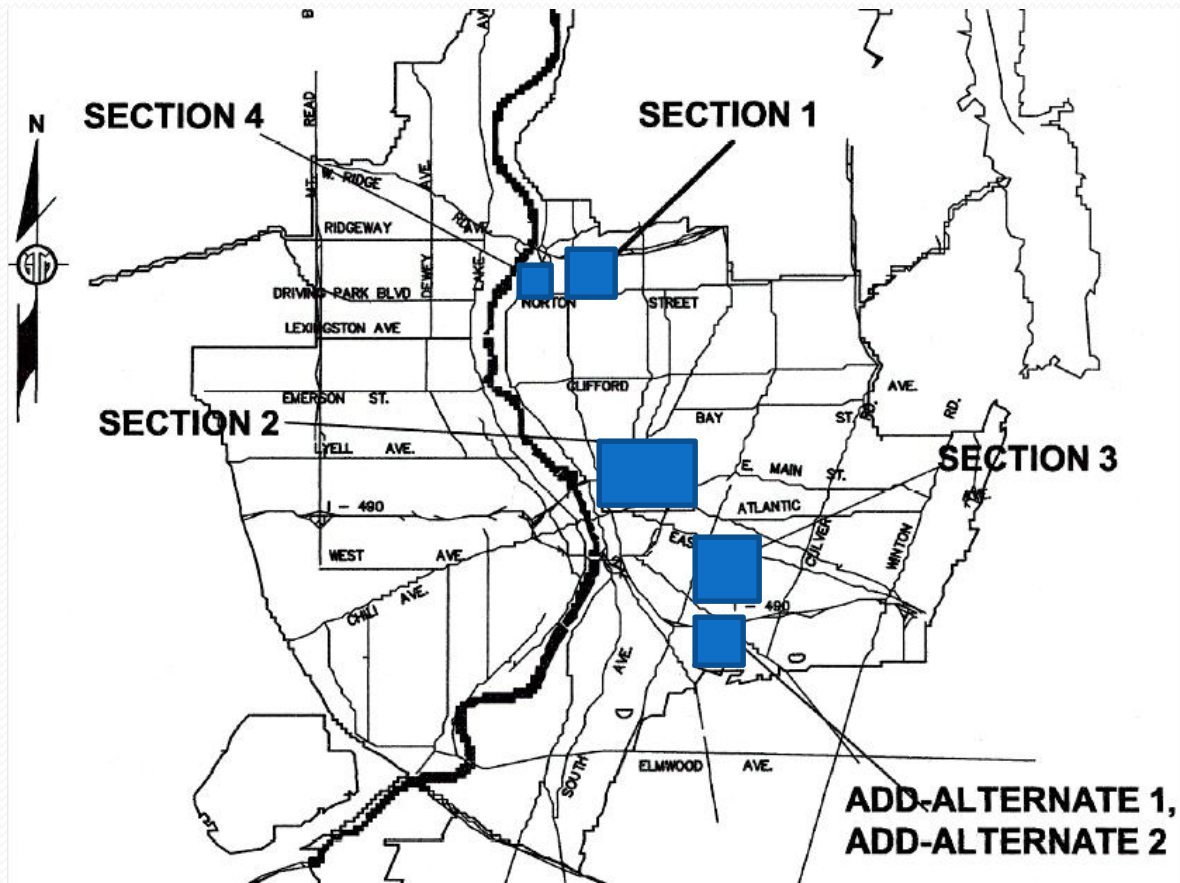
1-3 months after construction

Phone- 428-6680 Ext 1

Email- watertest@cityofrochester.gov

Project Area

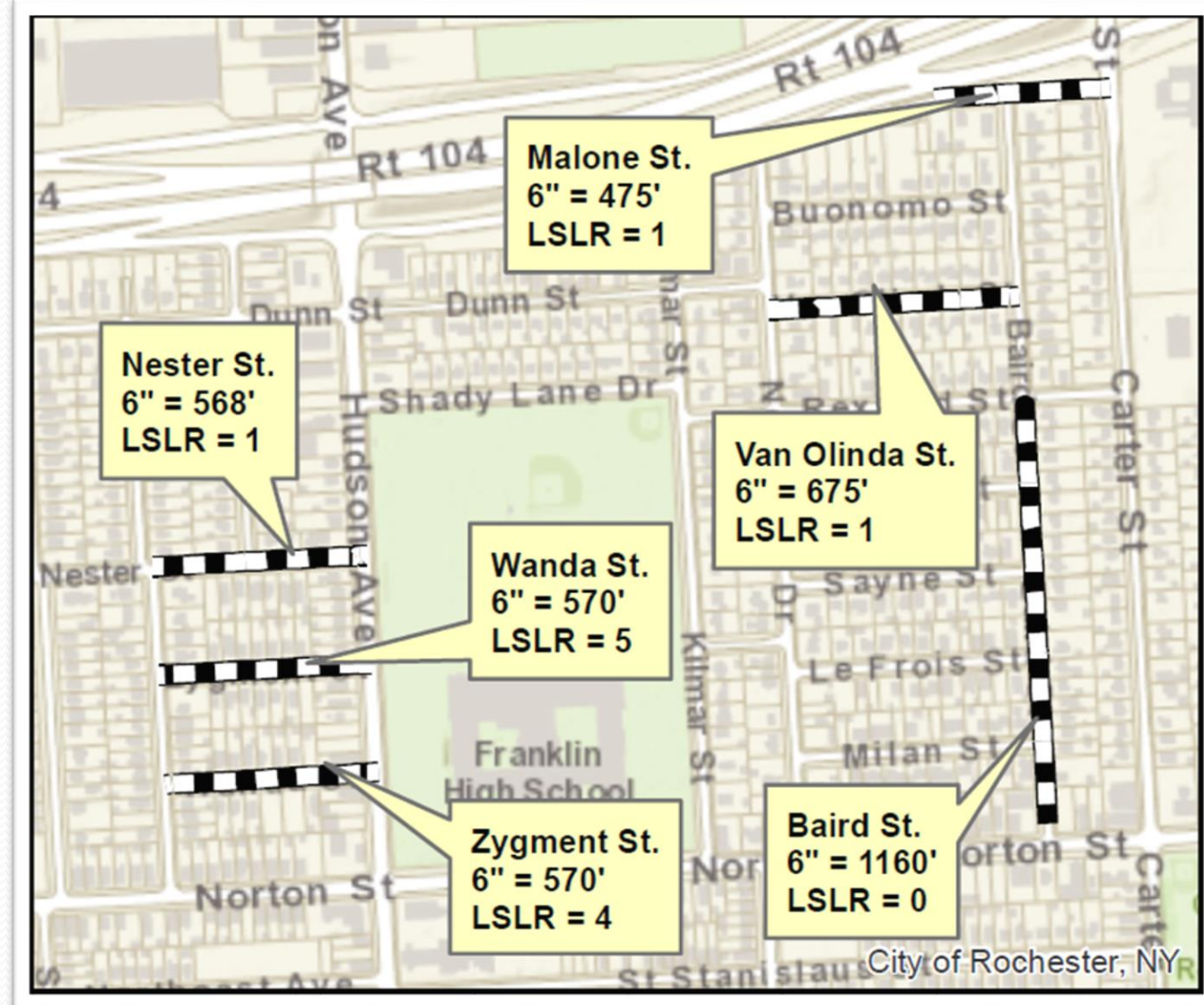
NE & SE Quadrants



Area Map

Section 1

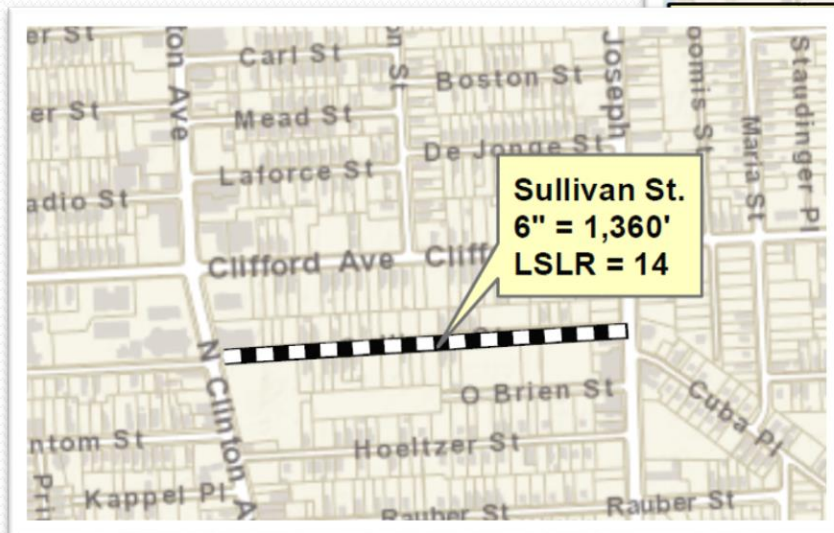
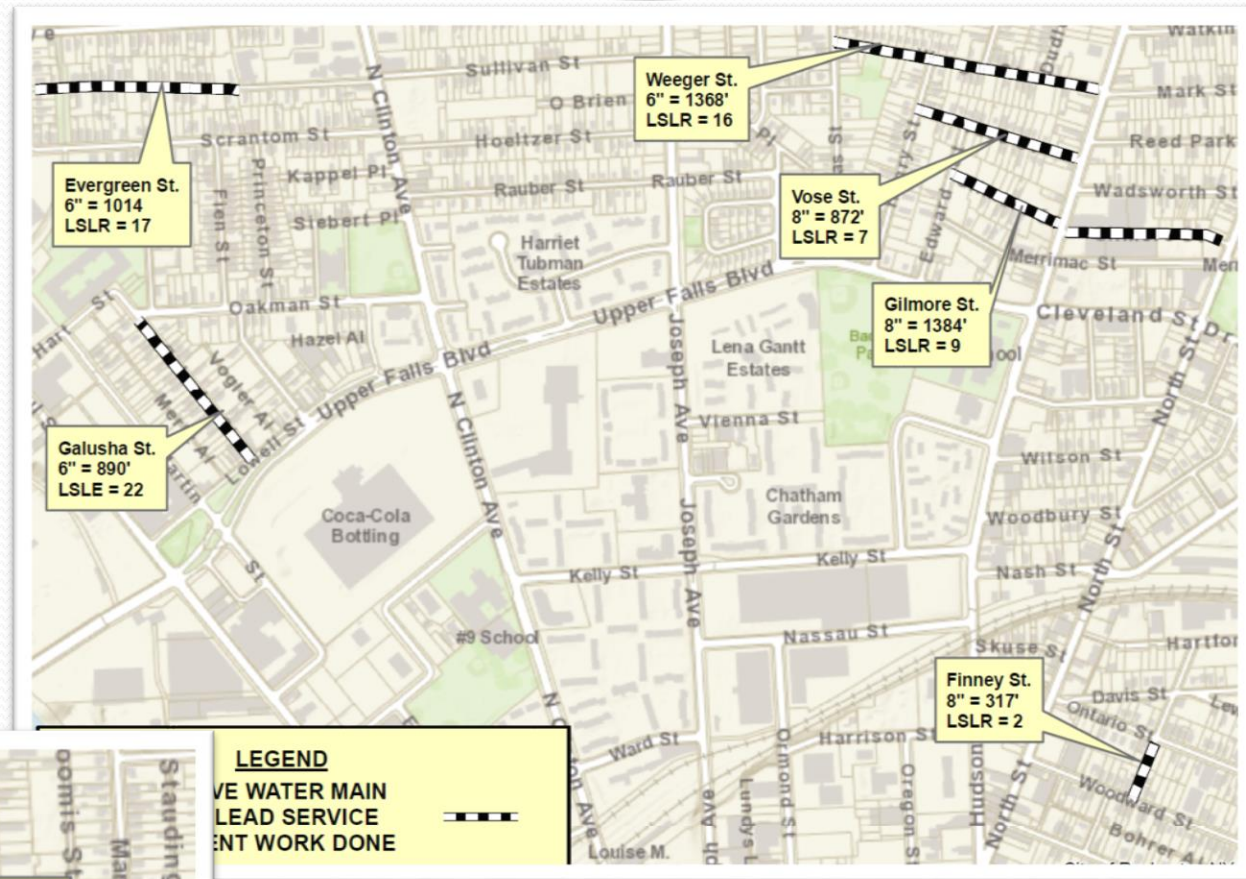
- 6 Streets
- 4,018 LF of Water Mains
- 12 Total Services



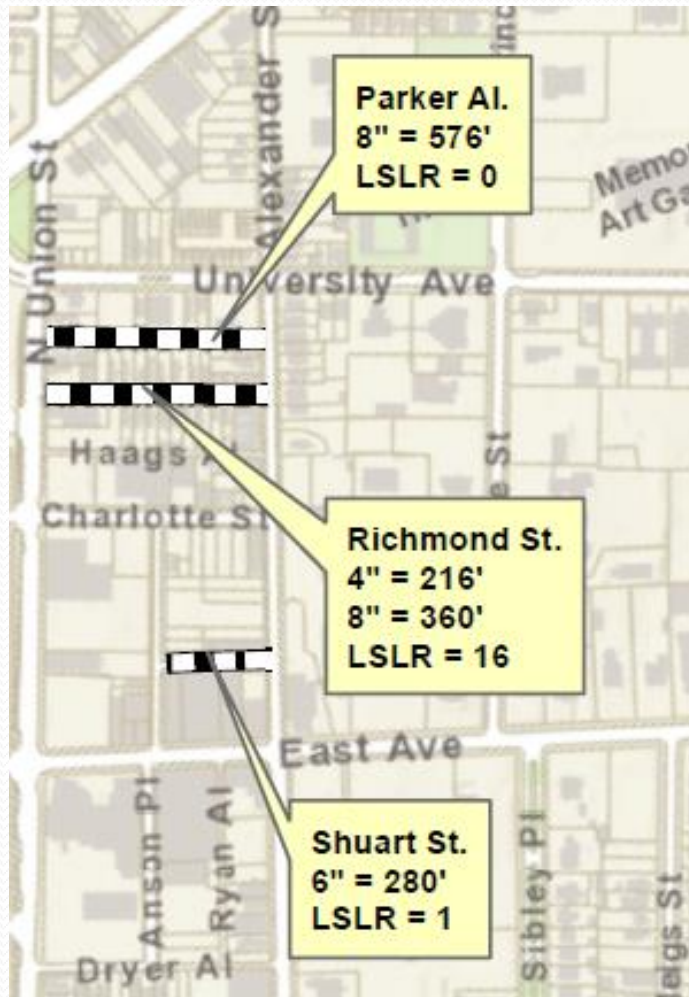
Area Maps

Section 2

- 7 Streets
- 7,205 LF of Water Mains
- 87 Total Services

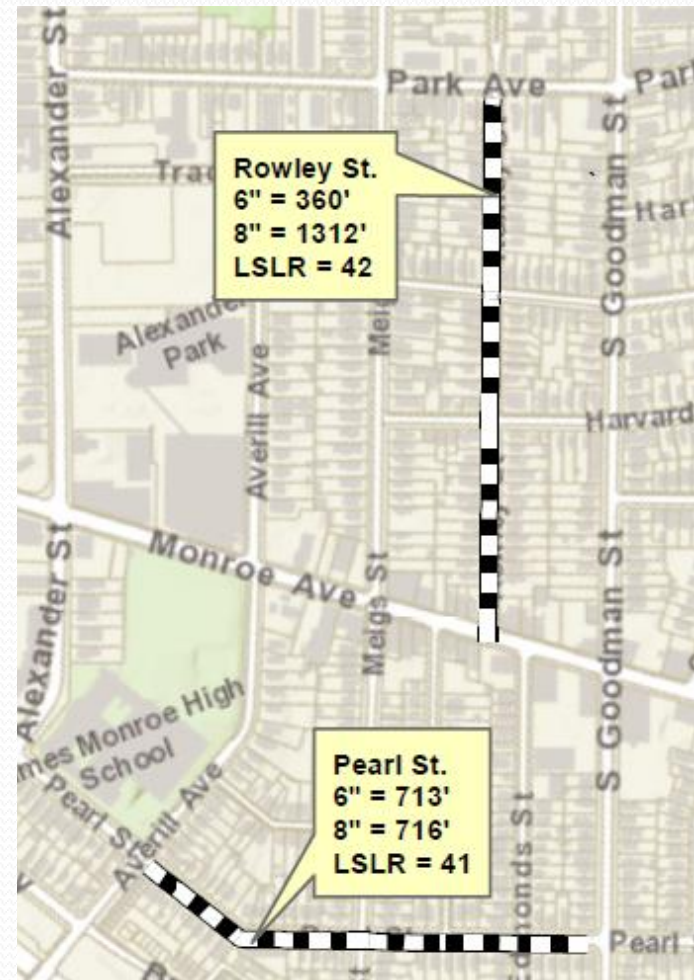


Area Maps

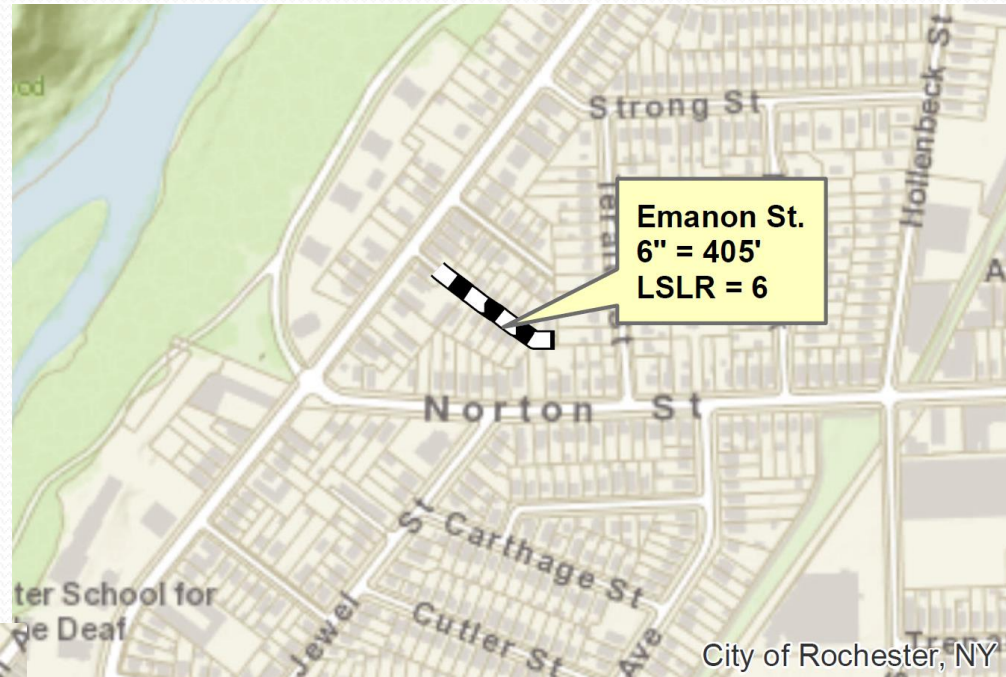


Section 3

- 5 Streets
- 4,524 LF of Water Mains
- 100 Total Services



Area Maps



Section 4

- 2 Streets
- 741 LF of Water Mains
- 15 Total Services

Area Map



Add Alternates

- 2 Streets
- 1,843 LF of Water Mains
- 64 Total Services

Criteria for LSLR Street Selection

- large numbers of Lead, Lead lined and galvanized outside water services
- water mains that are structurally sound.
- water mains selected to be cleaned and lined.
- scheduled for pavement rehabilitation

What is Cleaning & Lining?

- interior of water main is scraped clean of deposits and coated with a cement mortar lining.



Tuberculation

Why Clean and Line?

- Less costly and disruptive than replacement. (**\$80/ft. vs >\$500/ft.**)
- Improves water quality.
- Increases flows for fire protection.
- Protects from future rust build-up.
- Extends life of the pipe.
- Reduces maintenance and leakage.



Cleaning and Lining

The Process in Pictures

Laying Bypass Pipe 2" & 4"



Driveway Ramps



05/02/2006

Bypass Pipe Connection to Existing Water Main at Hydrant



Temporary Fire Hydrant on Bypass Pipe



Temporary Service Connection



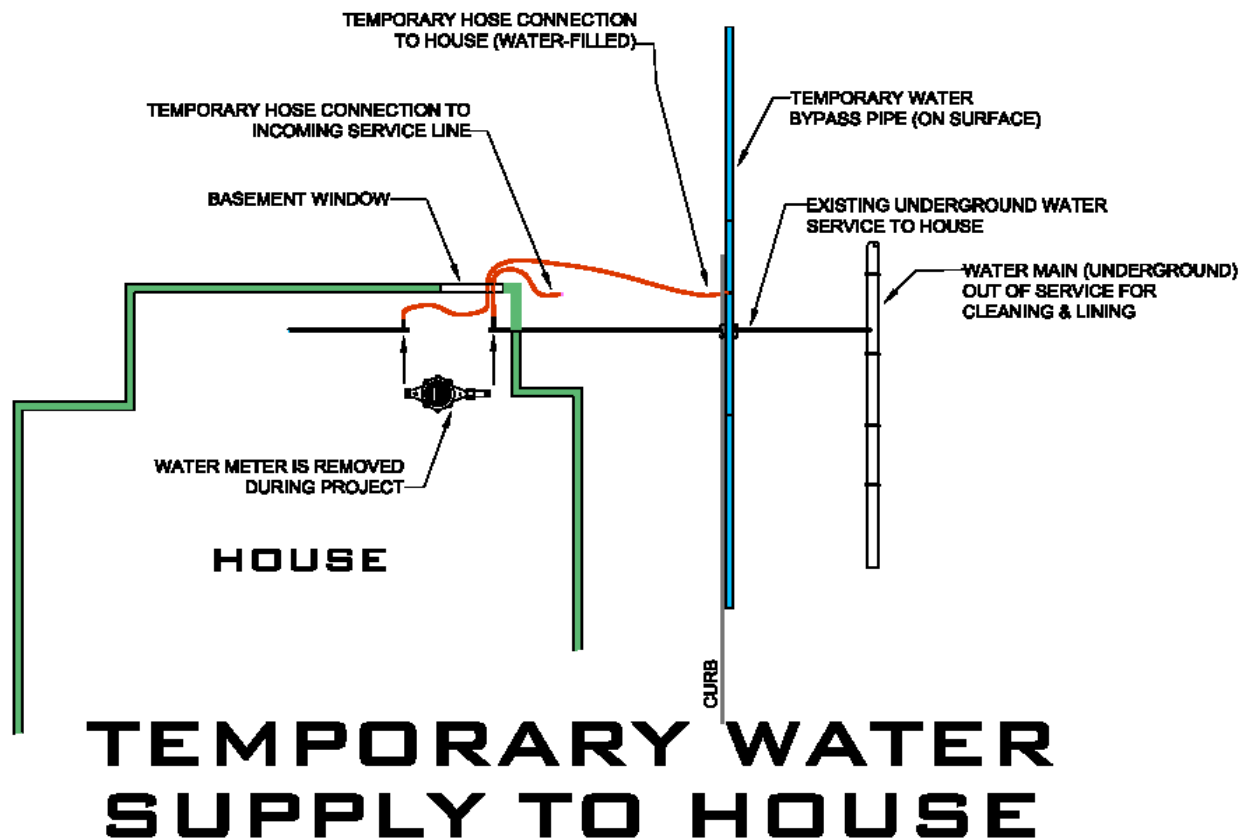
Temporary Service Pipe Extended to House



Temporary Service Into Basement Window



Temporary Service Schematic



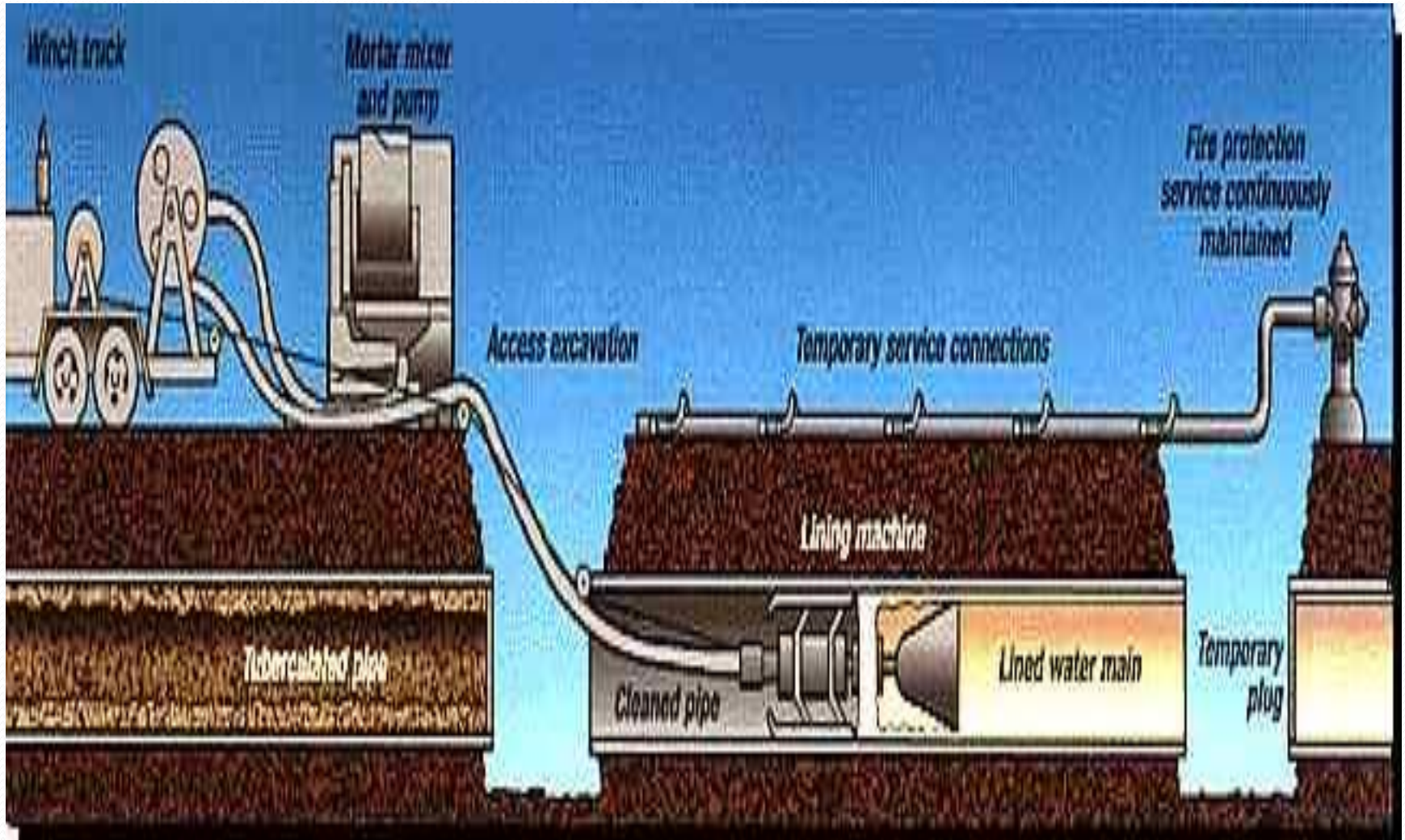
Access Hole



Access Hole Plated



How It's Done



Cleaning Tools and Winch Truck



Cleaning Scraper



Squeegee Used to Remove Water & Debris Dislodged by Scraper



Mixing Cement Mortar



Pumping Cement Mortar



Spray Head and Trowel



Lead Service Removal

Get the lead out!

LSLR- Getting the Lead Out

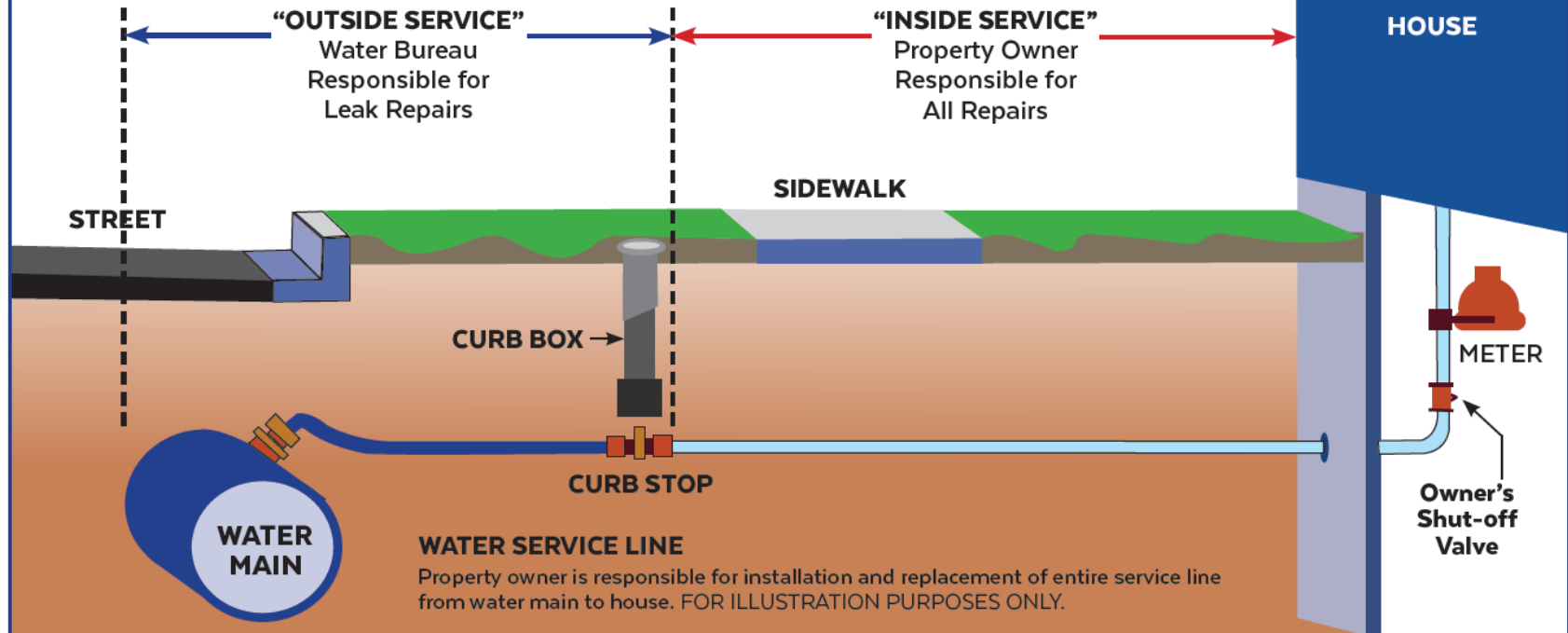


Typical Water Service Line



CITY OF ROCHESTER
Department of Environmental Services
Water Bureau

585-428-7500

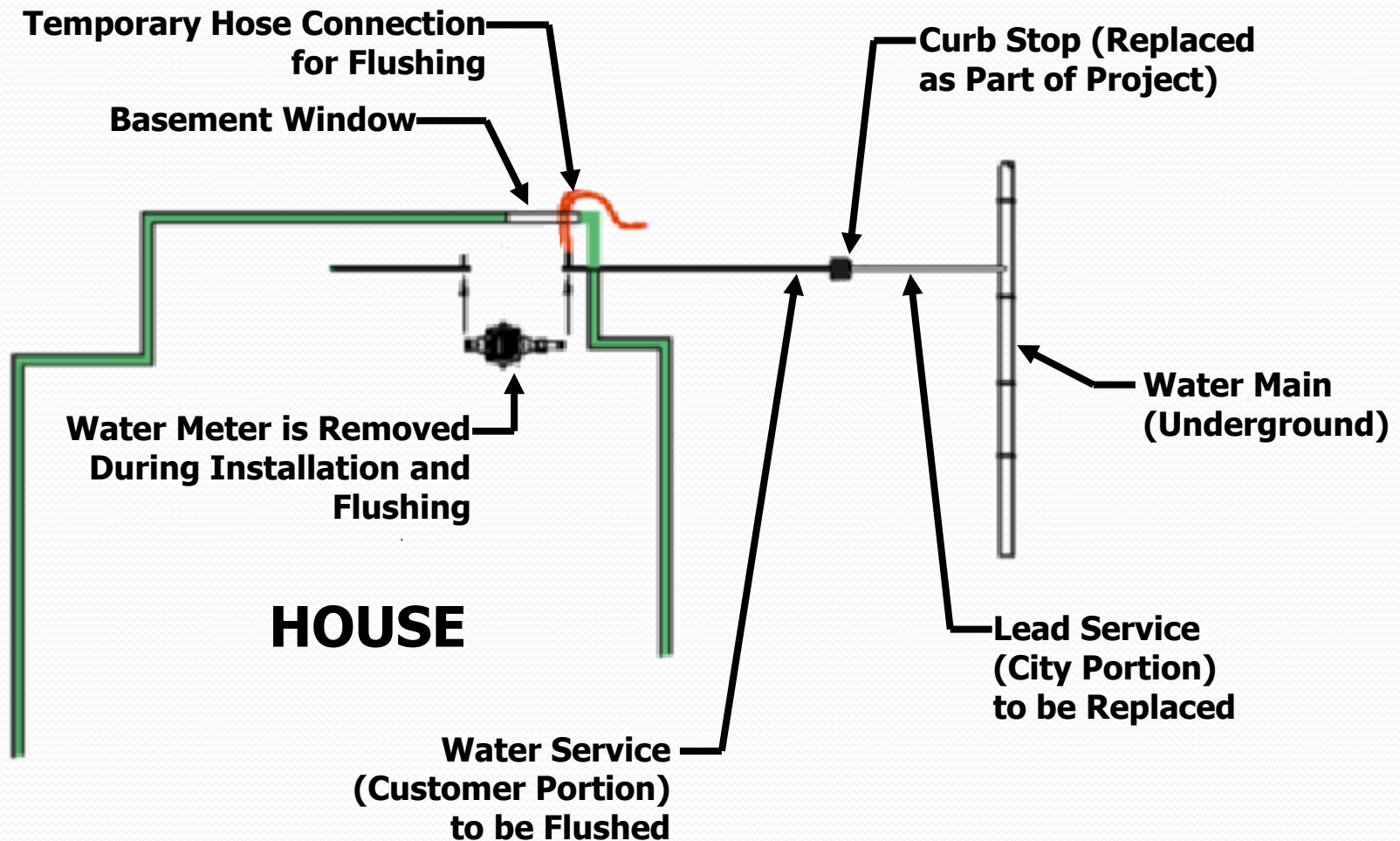


Malik D. Evans, Mayor



City of Rochester, NY
Rochester City Council

Lead Service Replacement Schematic



2021 Water Main Lining & Lead Service Replacement Project

- 18,340 feet of 4", 6", and 8" water mains (3.4 miles) to be cleaned and lined
 - 216 Lead Service Line Replacements
 - Construction Start: May 2022
 - Construction Completion: May 2023

Summary of Project Events C&L

1. Distribute Advance Notification Letters to residents.
2. Install bypass pipes, driveway ramps, flush, disinfect and obtain Health Sample for testing by MCDPH.
3. Orange Notification Hanger to enter basements, remove water meters and hook up bypass hoses.
4. Shut water main, excavate water main at various access hole locations, cut out pipe sections to provide access for cleaning and lining operations.
5. Clean and Line water main
6. Remove all hoses and bypass piping, remove driveway ramps

Advance Construction Notice



City of Rochester

Department of Environmental Services
10 Felix Street
Rochester, New York 14608
www.cityofrochester.gov

Bureau of Water

ADVANCE CONSTRUCTION NOTICE

Dear Water Customer:

Water Main Rehabilitation and Lead Service Line Replacement work will soon begin on your street. The Water Bureau's contractor, Mainlining America, LLC, will be cleaning the interior of the water main and then applying a cement mortar lining to prevent rust and other deposits from reforming. Some properties within the project area currently have water services composed of lead containing materials.

Those properties that contain Lead, or Galvanized services will have their services replaced from the water main to the curb shut off valve with new plastic service tubing. Although we are replacing your "Outside Service", the "Inside Service", located between the curb valve and your home, is the responsibility of the home owner.

Your "Inside Service" will be visually inspected. We will inform you if it is made of lead or galvanize materials and if so encourage you to replace it. If it is possible that the water service might be highly corroded and could be leaking. If the "Inside Service" is highly corroded, it may not be possible for the contractor to connect the new polyethylene or copper water service. If the contractor is unable to make the connection due to the condition of the existing service material, it may be necessary for the property owner to replace the "Inside Service". The contractor will make every effort to protect the existing "Inside Service" when making the connection at the curb valve.

During Cleaning and Lining the water main must be taken out of service. Temporary bypass water pipes and service hoses will be installed to provide your home or business with water during construction. Bypass pipes are located above ground, alongside the curbs on each side of the street and are disinfected by the contractor and approved by the Monroe County Department of Public Health before temporary service connections are made to your home or business. Ramps are installed where bypass pipes cross driveways.

In most cases, your water meter will be removed to make the service hose connection. These connections are normally made through a basement window. Any opening used for installing the hose will be covered and made secure by our contractor. Access to your basement to make this temporary service hose connection will be scheduled by the contractor. Access will also be needed to reinstall the meter when complete.

Your water service will be thoroughly flushed by the contractor prior to reconnecting the meter. The contractor will leave you a copy of an **Important Notice Regarding Your Water Service** which has instructions on how to flush your internal plumbing before using water for drinking or cooking. Work in your basement should take about 30 minutes to complete. It is important that you allow the contractor to do this work in your basement for the following reasons:

- To maintain water service to your building during construction.
- To flush out your entire water service before it is reconnected for use.
- To ensure that the cement applied during the lining process does not plug your water service.

Please be aware that if cement hardens and plugs your service because the contractor was not able to work in your basement, the property owner is responsible for all costs necessary to unplug the service. These costs could amount to several thousand dollars.

You will also receive the letter "Post Lead Service Line Replacement Guidance" with instructions for long term methods of minimizing your exposure to lead.

The Water Bureau will also provide you with a free NSF certified water filter pitcher and a 6-month supply of filters. To request a free filter pitcher, please let our field inspector know or contact our 24-hour Dispatch Office at (585) 428-7500. Free lead testing of your water is available and can be arranged by calling the Water Bureau's Laboratory at (585) 428-6680 Ext 1, or send an email to: watertest@cityofrochester.gov. For more information on Lead and "Keeping Your Water Safe", please visit our web site: www.cityofrochester.gov/drinkingwatersafety

- The Contractor's employees will have a photo ID badge issued by the Water Bureau for identification. If you have any questions or concerns about a worker wanting access to your basement, please call our 24-hour Dispatch Office at 428-7500.
- Residents will be notified by our contractor 24 hours prior to any planned water shutoffs. Notification will be in person whenever possible, or by a blue door hanger notice.
- Some temporary parking and traffic restrictions may be necessary.
- Large amounts of water are used to flush the pipes after they have been lined.
- All paved areas, sidewalks and grass areas disturbed by our contractor will be restored
- Basement windows will be restored to pre-construction conditions.
- Work on your block of the street may take approximately 4 to 6 weeks to complete. Additional time may also be needed to complete all permanent surface restoration work.
- You will not be billed for water used while your meter has been removed. However, the normal quarterly base charge will still apply.

The water may become temporarily discolored and stain laundered clothes. Repeated washings with clean water and, if needed, commercial rust remover should remove these stains. The water may at times be warm (particularly on hot, sunny days) and have an odd taste or odor. This is caused by the above ground temporary service hoses and is not harmful to your health. If this happens, run water through a faucet so that the water does not remain stagnant. You may also want to keep a pitcher of water in your refrigerator. If you experience any water quality or quantity problems, please call our Dispatch Office at 428-7500.

We will make every effort to prevent construction related problems and inconveniences. There will be some noise, dust and traffic challenges to overcome. However, if any occur during construction you can be assured that the city and our contractor will do everything possible to minimize and/or correct the situation.

If you have any special needs, please contact our Project Manager Lauren Monaghan at (585) 428-7023 or lauren.monaghan@cityofrochester.gov who can assist in coordinating your needs with the contractor.

Any other issues arising from this project should be directed to the **Water Bureau Dispatch Office at (585) 428-7500**. We also encourage you to visit our project website at www.cityofrochester.gov/cleaningandlining for more detailed information about the project and for weekly construction updates.

We thank you for your patience and cooperation while we work to improve the water system to keep your water safe.

Sincerely,

Geoffrey Gugel
Director of Water



Contractor Notifications

Access to Meter Notice Water Shut Notice



City of Rochester, New York
Department of Environmental Services
Water Bureau

NOTICE: Water Main Work

The Contractor performing the water main rehabilitation for the City of Rochester will need access to your building to connect/remove your temporary water supply lines.

Please call _____
or 428-7500 to arrange to have this work performed.

Thank you for your cooperation.



City of Rochester, New York
Department of Environmental Services
Bureau of Water

NOTICE: Water Main Shut Off

The Bureau of Water has/will shut off the water supply to this building on:

Day: _____

Date: _____

From: _____ To: _____

We are sorry for this inconvenience, but this shutoff is necessary in order to make water system repairs/improvements.

Summary of Project Events - LSLR

7. Put main back together, fill pipe, flush main from hydrants, disinfect, flush and take health sample.
8. Excavate at curb stop – determine service material
9. Excavate at water main – abandon existing lead service and install new polyethylene water service from main to curb stop.
10. Fill access holes.
11. Contractor will then flush the entire water service from the water main to the meter and reset water meter.
12. Provide resident with **Important Notice Regarding Your Water Service** which instructs resident on how to flush the internal plumbing lines in the home.

Summary of Project Events - LSLR

- 13. Provide resident with point of use Filter Pitcher and spare filter cartridges as requested.
- 14. Notify resident of free lead test 30 to 90 days after service line replacement.
- 15. Restore roads cuts and disturbed lawn areas.
- 16. Clean up site, remove all debris.

Important Notice Regarding Your Water Service.



City of Rochester, New York
Dept. of Environmental Services Water Bureau

IMPORTANT NOTICE REGARDING YOUR WATER SERVICE



Recent construction activities may have caused particles to dislodge from inside your water service. If your service is made of lead, some lead scale or sediment may have been released during the work.

Follow these instructions to improve the water quality in your home.

Before using water, flush all your faucets using these 5 steps:

- 1** Remove aerators from all faucets. An aerator is a screen at the tip of the faucet that helps to eliminate splash.
- 2** Open all **cold** water faucets fully, starting at the lowest level in your house.

3

Let the water run through the faucets for at **least 30 minutes**. Be sure to run cold water in all bathtubs and showers.

4

Close all faucets, starting at the lowest level.

5

Reinstall faucet aerators after cleaning them.

Every day-If your water has been sitting for more than 6 hours, let the cold water run for 3-5 minutes before drinking or cooking.

More information about drinking water safety can be found at our website:
www.cityofrochester.gov/drinkingwatersafety
or call (585) 428-7500

Project Schedule

- Anticipated Schedule:
 - Sullivan St.: May 30th – Mid July
 - Section 1: June – September
 - Starting with Malone St, Van Olinda St & Baird St
 - Section 2: July – October
 - Section 3: August – November
 - Section 4: April 2023 – May 2023
 - Add Alternates: TBD
- All work to be completed by May 2023

Contact & Information

- Concerns or problems should be reported to the Water Bureau Dispatch Office (428-7500), which is staffed 24 hours a day, 7 days a week, 365 days a year.

428-7500

- Additional information and weekly construction updates will be available at:

www.cityofrochester.gov/cleaningandlining

Questions?

Michael.Bushart@cityofrochester.gov

