



MONROE COUNTY WATER AUTHORITY PROJECT INFORMATION BULLETIN 2018 Lining Program



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Background

Each year MCWA renews selected assets in our distribution system. This year we will be cleaning and cement lining or structurally lining certain water mains in your neighborhood. This work will be performed by a contractor hired by MCWA. This bulletin is designed to provide information about the project, answer frequently asked questions and let you know who to contact if you have any other questions or questions during the work in your neighborhood. A map of the proposed work area is attached.

Project Details – Cleaning and Lining Mains

Before the 1950's cast-iron water mains did not have a cement mortar lining applied to the interior. When an unlined pipe rusts, it forms hard deposits called tuberculation on the interior of the pipe. If this material is dislodged, it can result in diminished water quality. Our contractor will first remove all tuberculation and then place a cement mortar lining on the inside of the pipe to prevent further corrosion. Along with improved water quality, the ability to maintain pressures and flow for firefighting purposes is enhanced because of the much smoother pipeline interior.

There is a significant cost advantage to cleaning and lining instead of replacing mains that allows MCWA to economically address problems associated with unlined mains. With a cleaning and lining project it is only necessary to excavate small holes to access the main at about 500 foot intervals and at locations where water mains intersect. When evaluating whether to line an existing main, or install a new main, we consider its structural integrity. Only the mains that are structurally sound are lined. All or portions of the existing water mains on Inspiration Point Road, Dewitt Road, Volk Road, Bay Road, Lake Road and Forest Lawn Road will be cement lined.

Work Details – Cleaning and Lining Mains

Cleaning and cement mortar lining work generally consists of four phases as described below:

1. Temporary bypass pipe installation,
2. Cleaning and Lining,
3. Appurtenance installation and testing,
4. Final restoration.

The first step of the contractor's work is to lay **temporary bypass piping**. The temporary bypass pipe will be used to supply water to you while the water main work is in progress. After these temporary bypass pipes have been chlorinated and flushed, and water samples have approved by the Department of Health, each existing customer's home is temporarily connected by a hose to the bypass system for the duration of the lining process. If you have a **water softener system** in your house, please contact our Customer Service Department so that we can check your plumbing and determine how to connect you to the bypass.

At this time the contractor also calls in a stakeout which is a request to have the existing utilities in the project area staked

out. You may see small flags or paint marks delineating the location of existing utilities. For example, the Water Authority uses blue paint and flags to mark out its facilities. Please do not remove these markers as they are needed so that the contractor can avoid damaging the existing facilities. If you have private underground facilities, such as an invisible fence or a lawn irrigation system, on your property near the road right-of-way, please contact our Customer Service Department, and they will have a project representative contact you.

As all customers in an area are connected to the temporary bypass system, excavations are made at selected locations, and the main is cut to allow access for preparation and lining work. A scraper is pulled through the pipeline until all tuberculation is removed, and then the main is flushed clean. Next, the contractor coats the main using a special machine, which applies the cement mortar lining. If conditions warrant, old fire hydrants and valves are replaced.

After the mortar sets, the lining is inspected with a video camera and then the main is pressure tested. Before any customers are returned to the refurbished main, it is chlorinated, flushed, and **tested by the Department of Health**. While testing is going on, you may notice that there are fewer workers on the site.

The **final restoration** work completes the project. After the cleaned and lined main is put back in service, the temporary bypass system is removed. Disturbed areas are then restored to their pre-construction condition. Temporary asphalt used on excavations is removed and replaced with permanent asphalt. Lawn areas are graded and seeded and new hydrants are painted. The contractor is responsible for getting all seeded areas to grow properly.

Project Details- Cleaning and Structural Lining

Portions of the existing water main on Lake Road and Vosburg Road will be structurally lined using a cured-in-place-pipe (CIPP) lining product. This product allows us to rehabilitate the existing water main instead of replacing it. Replacing water mains requires a continuous trench for the new main as well as service connection excavations all of which can be disruptive. With this type of project, it is only necessary to excavate and access the main at about 500 foot intervals and at locations where water mains intersect or there are valves or hydrant connections.

The CIPP liner is pulled into the existing pipe using a winch. Once installed, the lining is cured using warm water. When cured, the CIPP is considered equivalent to a replacement pipe and does not rely on the existing water main for strength. Along with reducing the possibility of future water main breaks, the smooth interior of the CIPP will improve water quality and enhance the ability to maintain pressures and flow for firefighting purposes.

Work Details – Structurally Lining Mains

Cleaning and structural lining work also consists of four phases as described below:

1. Temporary bypass pipe installation,
2. Pipe preparation and lining,
3. Appurtenance installation and testing,
4. Final restoration.

The first step of the contractor's work is to lay **temporary bypass piping**. The temporary bypass pipe will be used to supply water to you while the water main work is in progress. After these temporary bypass pipes have been chlorinated and flushed, and water samples have been approved by the Department of Health, each existing customer's home is temporarily connected by a hose to the bypass system for the duration of the lining process. If you have a **water softener system** in your house, please contact our Customer Service Department so that we can check your plumbing and determine how to connect you to the bypass.

At this time the contractor also calls in a stakeout which is a request to have the existing utilities in the project area staked out. You may see small flags or paint marks delineating the location of existing utilities. For example, the Water Authority uses blue paint and flags to mark out its facilities. Please do not remove these markers as they are needed so that the contractor can avoid damaging the existing facilities. If you have private underground facilities, such as an invisible fence or a lawn irrigation system, on your property near the road right-of-way, please contact our Customer Service Department, and they will have a project representative contact you.

As customers in an area are connected to the temporary bypass system, excavations are made at selected locations, and the main is cut to allow access for preparation and lining work. After all preparation work is done, the main is flushed clean. Next, the contractor installs the CIPP lining in the existing main. If conditions warrant, old fire hydrants and valves are replaced.

After the lining cures, the lining is inspected with a video camera, and then the main is pressure tested. Before any customers are returned to the refurbished main, it is chlorinated and flushed, and water samples are **tested by the Department of Health**.

The **final restoration** work completes the project. After the lined main is put back in service, the temporary bypass system is removed. Disturbed areas are then restored to their pre-construction condition. Temporary asphalt used on excavations is removed and replaced with permanent asphalt. Lawn areas are graded and seeded, and new hydrants are painted. The contractor is responsible for getting all seeded areas to grow properly.

Schedule

Project duration depends on a number of factors. However, the contractor is expected to start work in May and be complete by November.

You may be on the temporary bypass system for 10 to 12 weeks during this project.

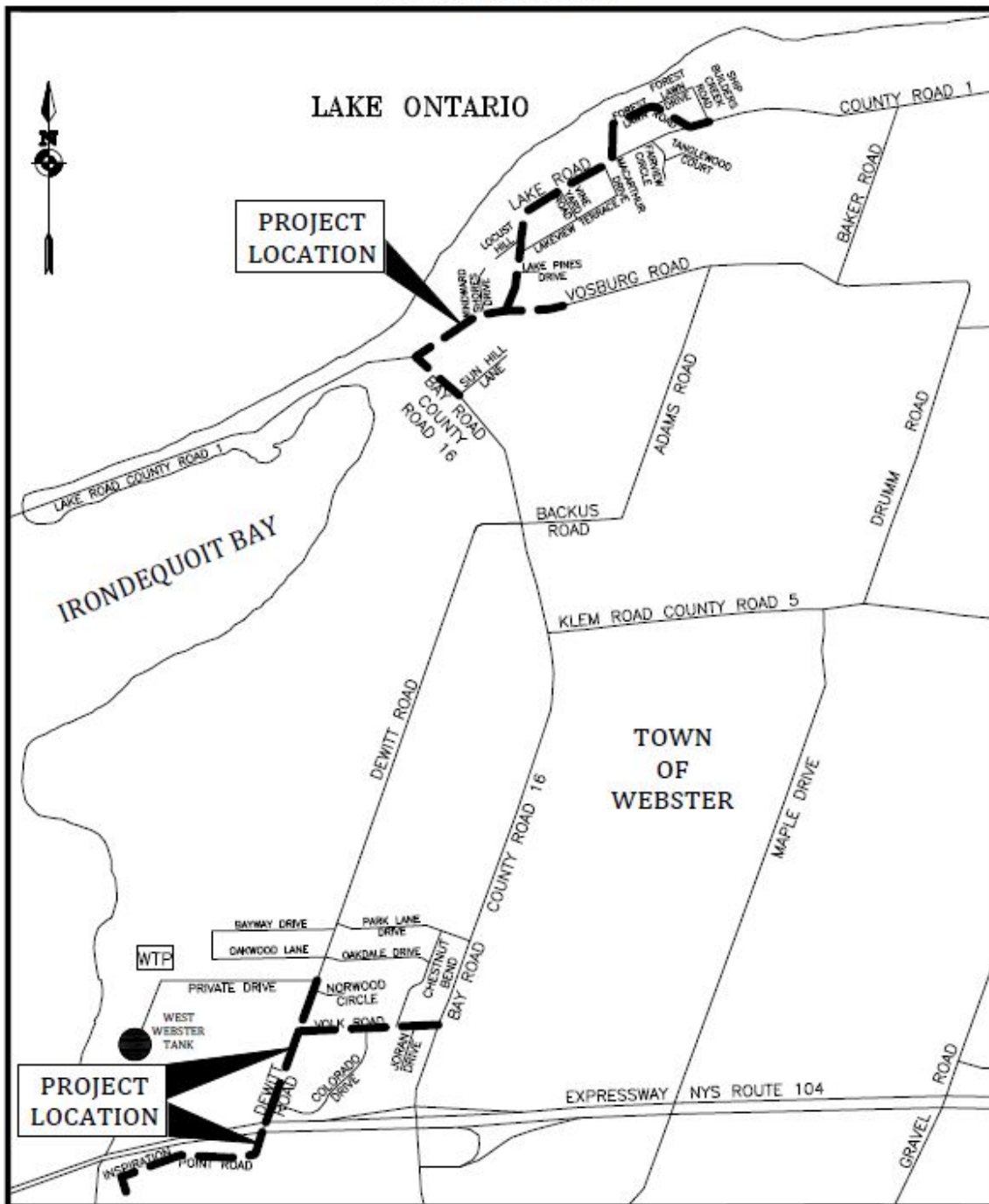
Common Concerns

| <u>Concern</u> | <u>Action</u> |
|-------------------------------|--|
| 1. Warm water | Let cold faucet run until water is cool |
| 2. Air in water | Let cold faucet run until water is clear |
| 3. No water or leaking bypass | Call MCWA or contact MCWA's inspector |

Questions

A MCWA inspector will be on-site throughout the project. All of our inspectors carry a photo ID card, wear MCWA uniforms, and drive a vehicle with a Water Authority logo on it. You can also contact our Customer Service representatives at 442-7200 weekdays from 8:30 a.m. to 4:30 p.m., or our Dispatcher at 442-2009 weekdays before 8:30 a.m., after 4:30 p.m., and on weekends and holidays.

LOCATION MAP



NOT TO SCALE