City of Mequon Private Property Lateral Rehabilitation Program



Public Information Meeting August 17, 2021 City Hall

INTRODUCTIONS

o City of Mequon Staff

- Kevin Driscoll, Deputy Director of Utilities
- (262) 236-2937
- Milwaukee Metropolitan Sewerage District, Private
 Property Inflow and Infiltration Reduction Program
 - Jerome Flogel, Program Manager
 - (414) 225-2161
- \circ Contractor
 - Great Lakes TV & Seal, Inc. (Investigations)
 - TBD (Implementation)
- Consultant
 - Ruekert Mielke Jerad Wegner



PURPOSE OF PROGRAM

- Remove clear water from sanitary sewers.
- o Reduce incidents of basement backups.
- Reduce sanitary sewer overflows at City-owned lift stations, and avoid non-compliance with WDNR rules 110 and 210.
- Take advantage of MMSD funding opportunity.



LATERAL AND FOUNDATION DRAINS





ROOT INTRUSION FROM LATERAL





PROGRAM HISTORY

- 1999 Smoke Tested and Replaced Clean-outs
- 2007 Flood Grouted Laterals
- 2008 and 2010 Extreme Rain Events and Clear Water in the System
- 2010 MMSD Reimbursement Program Began
- 2011 Investigated Infiltration & Inflow (Res. 3014)
- o 2017 Implemented Rehab with CIPP (Res. 3447)
- o 2020 Workplan for Additional Investigation (Res. 3657)
- o 2021 Funding Agreement (Res. 3842)

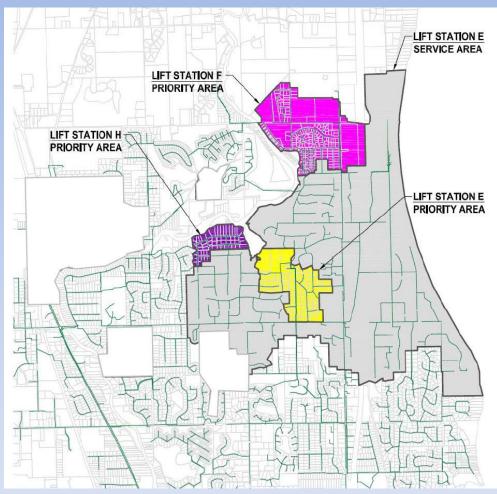


AREAS OF CONCENTRATION

- ME 4001 Riverdale Lift Station "F" service area bounded by Milwaukee River, Liebau Road, vicinity of Highland Road and Port Washington Road (260 parcels);
- ME 4002 Riverland Drive Lift Station "H" service area bounded by the Milwaukee River, Riverland Road, Schwemer Lane and Grace Ave (59 parcels).
- Based on lift station peaking factors during wet weather
- Future areas under consideration and in progress



AREAS OF CONCENTRATION





SPECIFIC ACTIVITIES (Spring 2020)

- First Phase is Investigation (Clear Water Compliance)
 - Inspect Sump Pump Connections
 - Inspect Down Spout Connections
 - Check Foundation Drain Connection
- Perform dye water testing (& smoke testing, if needed)
- Televise laterals to identify sources of infiltration
- Televise and inspect sanitary sewer laterals in the City right of way and locate clean-out access

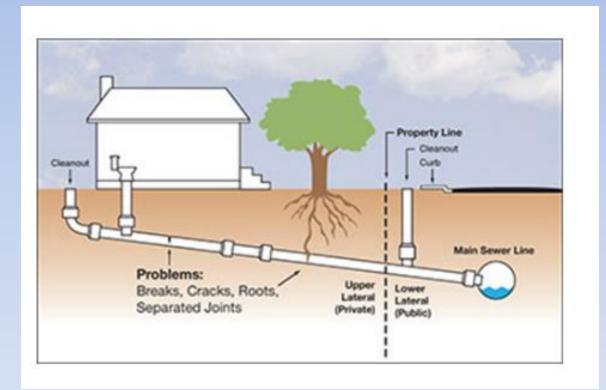


LATERAL AND FOUNDATION DRAINS



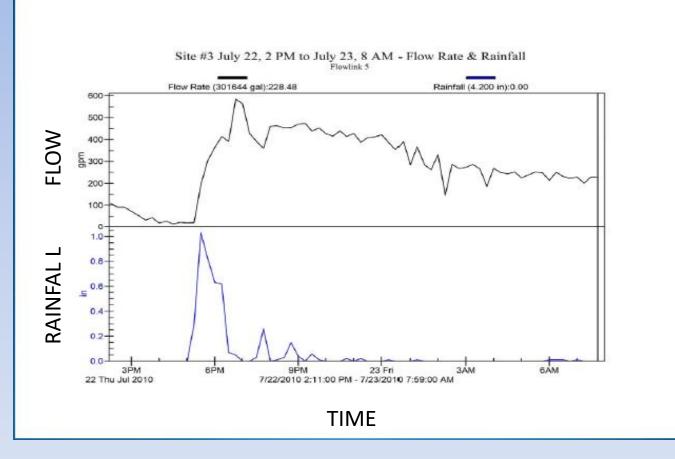


LATERAL CLEAN-OUTS





FLOW DATA





REHABILITATION IN NEXT PHASE (Spring 2022)

 Product Approval by Department of Safety and Professional Services for City Plumbing Permit

Excerpt from Policy

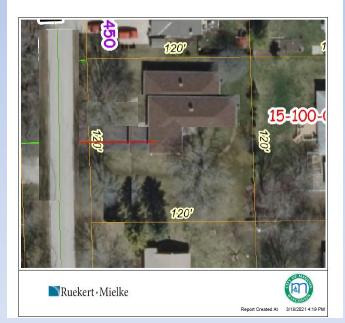
"The City will review the televising reports and develop individual rehabilitation methods to fix each specific lateral. Rehabilitation methods include, but are not limited to: lateral lining, grouting and lateral replacement."

- ✓ Construct Access to Test and Grout Laterals
- ✓ Open Cut Repair Repairs



REHABILITATION IN NEXT PHASE (Spring 2022)

22.9	RMJ	Roots Medium Joint	Flood Grout	Yes	
22.9	DAE	Deposits Attached	Pipe Burst	No	
22.9	IR	Infil Runner			
23.6	MMC	Material Change	Spot Repair	No	
23.6	MSC	Shape or Size Change	Spot Liner		
24.2	LRU	Alignment Right Up	T Liner		
24.5	LRU	Alignment Right Up			
32.4	LD	Alignment Down			
32.4	LD	Alignment Down			
36.4	MSA	Abandoned Survey			
36.4	MGO	General Observation			
63.6	LL	Alignment Left			
72.8	MSA	Abandoned Survey			
72.8	MGO	General Observation			





DO I NEED TO PARTICIPATE?

- Mandatory? No completely voluntary
- Recommended?
- Impacts of foregoing program?
 - Funds anticipated to be allocated to other properties / project areas



COST IMPLICATIONS

- MMSD Funding
 - Allocations based on equalized value of each of the 28 communities
 - City of Mequon's approximate allocation: Annual allocation approx. \$250,000
 Total allocation available \$2,110,000

• Est. rehabilitation cost \$740,000 for 200 lots



REHABILITATION IN NEXT PHASE (Planned Spring 2022)

 Product Approval by Department of Safety and Professional Services for City Plumbing Permit

Excerpt from Policy

"The City will review the televising reports and develop individual rehabilitation methods to fix each specific lateral. Rehabilitation methods include, but are not limited to: lateral lining, grouting and lateral replacement."

- ✓ Install New Cleanout(s)
- ✓ Pipebursting with work-pit
- \checkmark Perform a relay with excavation



PARTICIPATION REQUIREMENTS

- Volunteer for Program to Reduce Infiltration and Inflow

 Read Policy and Sign-up for Sewer Lateral Exam
- 2. Schedule Clear Water Compliance Inspection
- 3. Respond to Rehabilitation Recommendation

 a. Schedule Follow up Site Visit (Optional)
 b. Return Authorization Letter for contractor to work on private property



PROJECT SCHEDULE

- Continue Clear Water Compliance Inspections
- Advertise Contract, September 2021
- Award Contract, October 2021
- Begin Sewer Lateral Work, Spring 2022

 Open to Volunteers until Contract Work is Substantially Complete



IMPORTANCE OF PROJECT

https://www.mmsd.com/what-you-can-do/keep-yourbasement-dry



Grouting Video

https://www.avantigrout.com/link-videos/item/sealunlined-lateral-connection



QUESTIONS?

Kevin Driscoll 11333 N Cedarburg Road Mequon, WI 53092 (262) 236-2937 kdriscoll@ci.mequon.wi.us

