



## **FIRM QUALIFICATIONS**

Water Service Line Inventories



## **ABOUT US**

MSK Engineers is a Vermont-based multidisciplinary civil engineering consulting firm that has been supporting public, nonprofit, and private sectors for over 30 years. We specialize in supporting our clients throughout all stages of the infrastructure development process that accompany revitalization and redevelopment. Our professional services include:

- Civil Site
- Construction Administration
- Environmental Remediation
- Geotechnical
- Lead & Copper Rule Compliance
- Permitting & Planning
- Stormwater & Wastewater
- Survey & Mapping
- Water Systems

Through our technical solutions and civic engagement, we embrace a people-centered approach to managing our business; our primary mission is to advance infrastructure that helps communities thrive by keeping people safe, healthy, and connected.

### **HOW WE WORK**

Headquartered in Bennington, we support a highly collaborative work environment for staff with multiple offices in Vermont, currently serving clients in VT, NY, and CO. We invest in the development of our people in order to maximize the value we bring to clients through vision, specialized knowledge, and custom solutions. MSK's staff bring decades of experience, and our junior staff are regularly mentored and trained across each division, allowing us to provide consistent, high-quality results. Our relationships are built on collaboration because it is through partnership that we are best able to meet client needs.

### PARTNERSHIP

Our portfolio of projects reflects our commitment to safeguarding public health where it is needed most. We actively seek projects that assist disadvantaged communities, and we are intimately familiar with the unique challenges that small rural water systems face. Some of our recent collaborations include:



**Town of Bennington, VT** Municipal Line Extension for PFOA Remediation



Shires Housing Lake Paran Village Affordable Housing



DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State of Vermont Water Service Line Inventory Assistance



Southern Vermont Medical Center Hospital Campus Improvements



**Town of Bennington** Lead Service Line Replacement project



### **DEVELOPING AN APPROACH FOR YOUR WATER SYSTEM**

Every water system is unique. For all new projects, we work with water system staff to develop a stepwise approach for their inventory that works for them.

#### HOW A STEPWISE APPROACH WORKS

No method is 100% accurate at identifying pipe materials. For systems with unknown pipe materials, we use a stepwise approach to layer multiple identification methods where needed. This helps maximize our effectiveness at identifying lead, nonlead, and galvanized pipe, while minimizing costly methods like test digging.



#### **OUR IDENTIFICATION METHODS**

Below are some of the methods we select from when crafting an approach for a water system.

#### **Records Reviews**

We review information like tie cards, permits, property development records, and other sources to classify pipe where possible. This can be an opportunity to digitize paper records, maps, and plans.



#### **Basement Observations**

Our staff have years of experience identifying pipe materials in customers' basements. These observations can be scheduled by telephone, return postcard, or even a QR code leading to our scheduling page.



Some property owners don't want anyone entering their building. We also offer an option for them to locate their own pipe, take a photo, and submit it for us for review.

#### Water Sampling

We worked with US EPA Office of Research & Development to craft water sampling methods that can identify lead service lines. This is an excellent option for water systems that know they have partial lead service lines outside the foundation wall.



#### Test Excavation & Hydro-Vacc

We aim to minimize the need for test excavations or hydro-vaccing. In most situations, these methods are far more expensive than observations or water sampling. They also create a water quality risk by disturbing existing pipes.



#### **Artificial Intelligence & Statistical Methods**

We typically avoid relying on artificial intelligence to classify service line pipes. Due to the nature of rural development, we are doubtful of statistical attempts to classify a service line in the absence of historic records. However, artificial intelligence can be a valuable planning tool for targeting which areas to investigate first.



### **PUBLIC OUTREACH**

Identifying unknown service lines usually requires engaging directly with customers. MSK has been doing this unique type of customer engagement since 2017. We offer a set of options that have routinely achieved response rates of **80-100%** in other water systems. When outreach is required, we work with water system staff to select methods that make the most sense for their system. Below are examples of outreach methods we have used in the past:

#### **OUTREACH**

- Mail
- Telephone & Email
- Water Bill Inserts
- Door-to-Door Canvassing
- Social Media Campaigns
- Public Meetings
- Web Maps
- Zero Contact Sample Kit Dropoff

#### RESPONSE

- Return Postcard
- Telephone & Email
- QR Code to Schedule an Observation
- QR Code to Complete a Self-Observation
- Portals on Web Pages
- Zero-Contact Sample Kit Pickup

#### **MULTILINGUAL TELEPHONE SERVICES**

We partner with AnswerNet, a 24/7 call center to provide telephone services for these projects where necessary. This allows us to provide telephone services in over 100 languages, any time of day, 356 days per year.

#### **SELF-OBSERVATION OPTION**

Some property owners don't want anyone entering their building. To serve these customers, we offer an option to locate your own pipe, take a photo, and submit it to us using an online form.





#### BE ON THE Lookout for MSK Engineers Going Door To Door!

Town of Bennington Lead Line Replacement







#### WE MISSED YOU!







See Reverse for Self-Observation Instructions



Instead of having MSK observe your water line, you may submit a photo of your water line using the instructions below.

1



3. Complete the online form and click submit. This includes taking a photograph of the water service line.





### **RELEVANT EXPERIENCE**

## SL Inventory, Identification & Replacement

Town of Bennington, Bennington VT

Project Dates: 2017 – present Project Total: \$11 million (100% subsidy from the VT DWSRF) Contact: Stuart Hurd, Town Manager Town of Bennington (802) 442-1037 shurd@benningtonvt.org



#### THE BENNINGTON LEAD REPLACEMENT PROJECT Town of Bennington, VT www.benningtonvt.org/lead

MSK Engineers has been executing a comprehensive SL identification and LSL replacement project for the Town of Bennington since 2017, all at no cost to homeowners and residents.

MSK helped the Town of Bennington secure \$11 million in federal funds from the Vermont Drinking Water State Revolving Loan Fund (DWSRF). MSK then worked with the US EPA Office of Research & Development to develop a novel stepwise approach to identify LSLs. This includes partial LSLs which cannot be seen from the basement or at the curb stop.

The stepwise approach executed in Bennington has proved to be 98% effective at identifying LSLs, while dramatically reducing costs compared to widespread test digging.

#### Combined Water Service Line Mapping and Asset Management Grants

Prior to developing the stepwise approach, MSK worked with the Town of Bennington to combine two efforts: mapping the extent of lead and unknown SLs in the water system and digitizing the inventory of distribution assets.

MSK compiled historic records, public GIS data, rand list information and new survey data to develop GIS files for all water distribution infrastructure types. MSK used this information to populate a digital asset management system, transforming daily maintenance activity for the Town. This effort also preserved institutional knowledge that was about to be lost as several senior operators retired.



The resulting inventory also revealed approximately 40% of the Town's 3,800 service lines to be "lead" or "lead status unknown."



#### **SL Inventory Development**

Champlain Water District, Burlington, VT

Project Dates: May 2022 – present Project Total: \$272k Contact: Jay Nadeau, Distribution Division Director Champlain Water District (802) 497-7195



MSK is supporting the Champlain Water District in the developing service line inventories for four public community water systems in Colchester, VT. We provide technical assistance and direction to support records review, customer outreach, and SL observations at each connection served by each water system. Service line inventories are scheduled to be completed by the summer of 2023.

#### **SL Inventories and LSL Replacement Plans**

VT Department of Environmental Conservation

Project Dates: Dec 2022 – present Project Total: \$200,000 Contact: Bruce King, PE, Supervisor, Sustainable Infrastructure VT Agency of Natural Resources (802) 497-7195 Bruce.King@vermont.gov

In 2022, MSK was contracted by the Vermont Department of Environmental Conservation (VTDEC) to prepare service line inventories and LSL replacement plans as a direct technical assistance service to ten very small public community water systems around the state. Project activities include coordination meetings with water system staff, records reviews, public outreach, and on-site observations of SL pipes at all connections. To date, inventories are complete for four our of eleven systems. We expect to complete inventories for the remaining systems in June 2023.

#### **SL Inventory and LSL Replacement Plan**

Town of Milton, VT

Project Dates: Dec 2022 – present Project Total: \$298,000 (2,500 service connections) Contact: Don Turner, Town Manager Town of Milton (802) 891-8021

MSK is working with the Town of Milton, VT to prepare a service line inventory and lead service line replacement plan for its municipal water system, approximately 2,500 service lines. We are in the initial planning and coordination phase of this project, expecting to submit a DWSRF planning loan application in the spring of 2023.



#### Service Line Inventory and Identification: Firm Qualifications

### SL Inventory and LSL Replacement Plan

Town of Hinesburg, VT

Project Dates: Dec 2022 – present Project Total: \$100,000 Contact: Joy Dubin Grossman, Assistant Town Manager Town of Hinesburg (802) 482-4207

MSK is working with the Town of Hinesburg, VT to prepare a service line inventory and lead service line replacement plan for its municipal water system, approximately 905 service lines. We are in the process of reviewing historic records for the water system, with public outreach and on-site observations expected to begin in summer 2023.

#### **SL Inventory and LSL Replacement Plan**

Shelburne Water Department, Shelburne, VT

Project Dates: Feb 2023–presentProject Total: \$120,000 Contact: Bart Sherman, Water Superintendent Town of Shelburne (802) 985-5122 bsherman@shelburnevt.org



MSK is working with the Town of Shelburne to prepare a service line inventory for their municipal water system, approximately 2,600 service connections. Our services include developing a data management system, reviewing available records and permit files, and supporting the town's meter replacement contractor with completing service line observations and uploading information to the project database.

#### **SL Inventory and LSL Replacement Plan**

Village of Jericho Water System, Jericho, VT

Project Dates: Jan 2023 – present Project Total: \$72,178 Contact: Donna Malinowski, Assistant Clerk Village of Jericho (802) 899-2938 jerichovtvillage@comcast.net

MSK has contracted with the Village of Jericho to prepare a service line inventory and lead service line replacement plan for the village's water system, approximately 575 service lines. Project activities include coordination meetings with water system staff, records reviews, public outreach, and on-site observations of SL pipes at all connections



### **Municipal Water Line Extension for PFOA Remediation**

Town of Bennington, VT

Project Dates: 2016–2021 Project Total: \$25 million (Settlement funding + DWSRF) Contact: Stuart Hurd, Town Manager Town of Bennington (802) 442-1037 shurd@benningtonvt.org Total Sites Included: 397

Total New Water Main: 17 miles



TUESDAY xfinity

In 2016, following the discovery of PFOA in groundwater in Hoosick Falls, residents of the west end of Bennington began asking the State of Vermont to test their well water, given their proximity to a former CHEMFAB Industries plant that manufactured PFOA-containing products. The State discovered more than 400 contaminated wells. Town officials recognized that they needed to respond to this discovery without delay. In a matter of days, MSK provided the Town with a comprehensive proposal to extend the Town's municipal water lines to affected residences. The plan called for the construction of 8 miles of new main and associated individual service lines. Much of the water line extension would reach into higher-elevation rural areas and would require costly technical solutions. Despite the complexity and scale of the project, the Town, facing a public health mandate, moved forward with the plan.

We provided the Town with a preliminary engineering report, including cost projections. The State of Vermont requested additional work to determine if the Town's current water supply would be sufficient to serve the new connections. The State also asked the Town to examine whether water quality could be maintained in the new line, given that the formation of disinfection by-products is positively correlated with residence time, which would be longer in this extension to low-usage areas. MSK addressed these concerns by developing an extended period simulation model that calculated water aging as well as the influence of the water source. The State approved our plan to connect the entire rural western sector of town to the municipal water system. We obtained necessary easements from landowners, carried out all right-of-way surveys, and provided construction observation and administration services. Construction was completed in 2019.

As the West End upgrades neared completion, we finished design work for a second phase of this project, as the result of a settlement negotiated between the State of Vermont and Saint-Gobain after contaminated well water was discovered in the northeastern side of Bennington. MSK obtained necessary easements from landowners and carried out all right-of-way surveys, construction administration and observation services.

Following our mapping all of the water valves in water system, the Town hired us to design a replacement for an aging cast iron water main in the heart of the town's commercial district. The main was located directly under the crown of the state highway and was flanked on both sides by sewer mains. We surveyed and secured private easements along the mile-long stretch of main. We developed existing conditions drawings, completed a phased design plan, and oversaw bidding. Construction was completed over 5 seasons, keeping annual municipal outlays within the capital improvements budget and avoiding bond financing. In the course of providing construction administration services, MSK coordinated nightly shutdowns with private landowners, observed directional drilling under the state highway, and the observed installation of a new pressure-reducing valve vault.

So far, approximately \$20 million in settlement funds from negotiations between Saint-Gobain and the State of Vermont have been placed in escrow to fund project construction. On behalf of the Town, we are managing all disbursements and associated accounting, including billing, contractors payments, and record keeping. Our services have allowed the Town to focus its resources on a range of other priorities while making timely contractor payment more straightforward.



## **OUR TEAM**

Our project team has been supervising the inventory and identification of lead service lines since 2017. We'd like to introduce the principal staff members who currently play key roles to support our program:

PATRICK SMART, P.E. Senior Engineer, Environmental Engineering *Primary Contact for the Project* <u>psmart@mskeng.com</u> (802) 461-3206

Experience: 3 years with MSK, 11 with other firms

#### Education:

• MS, Environmental Science & Engineering, Colorado School of Mines

• BS, Environmental Engineering, University of New Hampshire Durham

#### Licensure:

Registered Professional Engineer, VT, NY, & CO



Pat has decades of experience managing water quality in both the public and private sectors. He currently oversees all water service line identification activities for MSK, from project conception and funding to submittal of inventories and replacement of lead service lines. He has spearheaded our development of a systematic stepwise approach to identify service lines that has shown itself to be 98% effective, while reducing costs by half. He has recently been sharing this unique expertise to guide the implementation of our techniques at national conferences and educational forums across the industry and is also currently collaborating with the USEPA Office of Research and Development to submit a journal on our techniques for publication.

#### JASON DOLMETSCH, P.E. President

idolmetsch@mskeng.com (802) 284-4722

Experience: 26 years with MSK

Education: • BS, Civil Engineering, Rensselaer Polytechnic Institute

Licensure: • Registered Professional Engineer, VT, NY & CT

Jay is originally responsible for accepting the challenge of eliminating lead service lines in partnership with the Town of Bennington. He supports the project team in identifying, planning, and executing these complex and non-traditional public health projects.





#### LIAM MCRAE Technician

Imcrae@mskeng.com (802) 432-9080

Experience: 6 years with MSK

*Education:* • BA, Environmental Science & Public Action, Bennington College

Liam has supervised outreach and operations for lead service line identification projects since 2018. He draws on a unique combination of backgrounds, including GIS, data management, environmental justice, natural sciences, and health education to craft effective projects and public outreach campaigns.

#### **STEPHANIE MULLIGAN**

Director of Operations smulligan@mskeng.com (802) 999-9640

Experience: 7 years with MSK

*Education:* BS, Business Administration, University of Vermont

Stephanie manages MSK's operations, finances, and human resources, drawing on her wide and varied experience in business administration. Under her leadership she helped the Town of Bennington secure \$11 million in federal funds from the Vermont Drinking Water State Revolving Loan Fund (DWSRF), and she is currently supporting project contracts and funding applications for 10+ very small water systems across Vermont.

#### NICHOLAS RATZER Staff Engineer nratzer@mskeng.com

(505) 503-3858

Experience: 7 years with MSK, 1 with other firms

*Education:* • BS, Civil Engineering, New Mexico State University

Nicholas manages design and construction for complex infrastructure projects. He supports the lead program with project management, billing, contracts, design, and construction administration expertise.









#### **ETHAN LOVELAND**

Technician eloveland@mskeng.com (802) 447-1402

Experience: 3 years with MSK

Education:

- BS, Natural Resource Management SUNY-ESF
- AAS, Environmental & Natural Resource Conservation, SUNY-ESF Ranger School

Ethan has worked on lead water line identification projects since 2020. He assists with data management, onsite observations, public outreach, sample kit fulfillment, and survey for LSL replacements.

#### JUSTIN D'AMOUR

Technician jd'amour@mskeng.com (802) 447-1402

1 year with MSK

Education:BS, Computer EngineeringMS, Software Engineering, Vermont Technical College

Justin draws on a background in software design to support database development and service line identification efforts. He assists with public outreach, onsite observations, and water sample kit fulfillment.

#### JASON HAYDEN

Technician Jhayden@mskeng.com (907) 590-0250

Experience: 1 year with MSK

Jason completes records review, public outreach, on-site observations, construction observation, and preparation of water service line inventories.









#### **BRIANNA SULLIVAN**

Staff Engineer bsullivan@mskeng.com (802) 447-1402

Experience: 3 years with MSK, 1 with other firms

*Education:* • BS, Civil Engineering, Wentworth Institute of Technology

Brianna supports lead water line identification efforts by completing on-site observations, water sample kit fulfillment, and generating design plan sets for water service line replacement projects.

#### MICHAEL MAZZU Staff Engineer mmazzu@mskeng.com (413) 672-2467

Experience: 3 years with MSK

*Education:* • BS, Civil Engineering, University of Massachusetts Amherst

Mike supports lead service line replacement effort with takeoffs calculations, field observation, daily reports, and other construction administration activities. He also assists with on-site water line observations and water sampling.

#### JOHN SMALL, P.E. Staff Engineer jsmall@mskeng.com

Experience: new to the firm, 32 years with other firms

*Education:* • BS, Mechanical Engineering, California Polytechnic State University

#### Licensure:

• Registered Professional Engineer, CA

John recently joined MSK Engineers. He brings a wealth of experience in infrastructure design and development. John supports water service line inventory efforts as needed in areas such as permitting, records reviews, and water service line observations.









#### MARINA GODLEY-FISHER Staff Engineer

Experience: new to the firm

Education:

• BS, Environmental Engineering, University of Vermont

Marina recently joined MSK Engineers. She supports water service line efforts with records reviews, public outreach, and completing water service line observations.

#### MATTHEW DIETZ, E.I. Staff Engineer

Experience: new to the firm, 1 with other firms

*Education:* • BS, Environmental Engineering, University of Oklahoma

Matthew recently joined MSK Engineers. He supports water service line efforts with records reviews, public outreach, and completing water service line observations.







## **APPENDICES**

## **APPENDIX 1**

## Talks, Presentations & Media

## **Talks & Presentations**

We are sharing our unique technical expertise in implementing these methodical approaches across the industry, both within Vermont and at national conferences. Throughout 2022, MSK presented at various industry events including:

- USEPA 19<sup>th</sup> Annual Small Systems Workshop, Cincinnati, OH
- Vermont ACEC Annual Environmental Protection Technical Workshop, South Burlington, VT
- NEWWA Annual Membership Meeting, Quincy MA
- NEWWA Spring Joint Regional Conference, Worcester MA

Additional publications and educational leadership include:

#### | Development and Optimization of a Systematic Approach to Identifying Lead Service Lines: One Community's Success Pending

We have collaborated with USEPA-ORD (office of research and development) to prepare and submit a peer-reviewed journal article for publication. Article is currently undergoing the peer review process.

#### | Engineering Decision-Making and Its Impacts on Public Health

April 2022, Rensselaer Polytechnic Institute (RPI)

Jason Dolmetsch, P.E., President of MSK Engineers delivered a talk for RPI students and faculty on seeking out environmental justice work in the civil engineering profession.

#### | Lead Service Line Identification, Inventory, and Replacement

January 18, 2022, and April 5, 2022, VT Rural Water Association

MSK delivered a 3-hour operator training course facilitated by Vermont Rural Water Association, led by Patrick Smart and Liam McRae of MSK Engineers. Discussion focused on the requirements of LCRR, techniques available to inventory and identify SL pipe materials, methods for engaging the public, and the stepwise approach used to identify SLs in Bennington.

#### | Lead Remediation and Asset Management in Bennington, VT

June 4, 2019, VT Rural Water Association

MSK delivered two 3-hour courses for VT Rural Water Association members on completing records reviews and on-site inspections for LSL identification. This included a segment on how MSK and the Town of Bennington combined initiatives to populate a new asset management system, transforming daily maintenance for the utility.

### Media

VT DIGGER, Jan 08, 2023: Lead water pipes in 300 Bennington homes have been replaced in pioneering project MSK's work on this multimillion-dollar project has put Bennington ahead of the curve compared with the rest of the state. Read it here.

BENNINGTON BANNER, March 21, 2022: MSK wins \$25K to identify lead water pipes, will lead to skilled jobs Our work in identifying and replacing lead drinking water lines won the company the \$25,000 Lever Challenge prize to assist with the costs of business innovation. Read it here.

#### VICE NEWS, June 23, 2021: The Bennington Lead Service Line Replacement Project

VICE featured our Bennington Lead Replacement Project as a success story alongside the city of Chicago in a segment on lead service lines in the United States. Read it here.

VT DIGGER, September 3, 2021: Bennington receives \$11 million to extract last remaining lead water pipes In August 2020, MSK helped the Town of Bennington obtain a one-time transfer of \$11 million in fully reimbursable loans through the State of Vermont's Drinking Water State Revolving Fund, a nationally significant award at that time. Read it here.

#### PROMO VIDEO: Our Bennington Story

A video piece illustrating the success of the Bennington Lead Replacement Project. Watch it here.

## **APPENDIX 2**

- Self-observation instructions
- Return postcard
- Zero contact paper response form
- Door hanger



## **Self-Observation Instructions**

Instead of having MSK Engineers observe your water service line, you may complete a selfobservation using the instructions below.

- Scan the QR code to reach the online form. (To scan the code: open a smartphone camera, focus on the code, then click the link that appears.)
- 2. Locate where your water service line enters the building. In most buildings it is a small pipe (less than 2") entering at or below knee-level.
- 3. Complete the fields in the online form, including taking a photograph of the service line. Then click submit.



If you are unable to complete any of these steps, please allow MSK to complete a pipe observation.



Photographing Your Water Line





## THE BENNINGTON LEAD REPLACEMENT PROJECT

Town of Bennington, VT www.benningtonvt.org/lead

#### 1. RESPONSE TYPE (please check one):

- I am interested in a free service line inspection and service line replacement if necessary, or I am unsure about my service line materials.
- The service line installed at this building is copper, plastic, or ductile iron pipe (skip section 4).
- The service line has already been completely replaced with copper, plastic, or ductile iron pipe (skip section 4).

#### 2. STREET ADDRESS: \_\_\_\_\_

#### 3. CONTACT INFORMATION:

Primary Contact Name: \_\_\_\_\_

Phone (cell): \_\_\_\_\_\_

Email:

#### 4. SCHEDULING:

Please check your preferred days and times for a 30-minute water line inspection. We will schedule an inspection and send you a confirmation message by text and/or email. This confirmation message will include an option to choose a different date or time if needed.





PO Box 139 Bennington, VT 05201





### Property Information

□ I am interested in a **free** lead service line replacement. (After receiving this form, MSK will drop off a water sampling kit on the front step.)

□ This property is not served by a lead service line, or the line has already been replaced.

#### Street Address

Primary	Contact	Information
· · · · · · · · · · · · · · · · · · ·	oomaor	mormadon

Name

Phone

Email

□ I have a water filtration system installed at this location.

### Service Line Size

Please choose one of the following options.

#### $\Box$ I know the diameter of my service line.

□ 1/2" □ 3/4" □ 1"

#### $\Box$ I can measure my service line.

To measure your service line, cut the ruler from the bottom of this form. Locate where your water service line enters the building (small 1/2-1" pipe; see diagram 1). Wrap the ruler around the outside of the pipe close to where it enters the basement wall. Write the measurement below.

Service line circumference \_\_\_\_\_

#### □ I can't locate my service line.



## ■ Location of Water Line, Sewer Line, and Kitchen Tap

1. Mark the general location of the kitchen on the diagram below. This will allow us to estimate the length of plumbing between the tap and the service line.

2. If possible, locate where your water service line enters the building (small 1/2-1" pipe; see diagram 1). Mark the general location on diagram 2, below.

3. If possible, locate where your sewer line exits the building (large 4-6" pipe; see diagram 1). Mark the general location on diagram 2, below.



 2
 3
 4
 5
 6
 7
 8
 9
 10



[Water System Name] Water Service Line Inventory Project

## WE MISSED YOU!

MSK Engineers, a state contractor, arrived at this property to observe your water service line, but was unable to reach a resident.

We will be conducting a 2nd round of door-to-door water line observations on the dates below.

between 3pm and 8pm

If you will have limited avilability in the afternoons/early evenings, please choose one of the following instead:

- 1. Submit a photograph of your water service line (see reverse).
- 2. Call MSK to schedule a 10-minute observation at a different time.



802-445-5085 aferris@mskeng.com 150 Depot St, Bennington, VT 05201

See Reverse for Self-Observation Instructions

### Other Information About the Project:

Your water utility has been selected by the State of Vermont to receive a water service line inventory prepared by a state contractor, MSK Engineers. This inventory must classify the pipe material for each water service line in the water system. Water service lines are the pipes that connect individual buildings to drinking water mains.

This effort is in accordance with new regulations passed in December 2021 by the United States Environmental Protection Agency (USEPA). Inventories must be completed before October 2024.

Instead of having MSK observe your water line, you may submit a photo of your water line using the instructions below.

1.

## Scan this QR code to reach the online form.

To scan the code: open a smartphone camera, focus on the code, then click the link that appears.

[Project QR Code Here]

## 2 Locate where your water line enters the building.

In most buildings, the water service line is a small pipe (less than 2") entering at or below knee-level.

## **3** Complete the online form and click submit.

This includes taking a photograph of the water service line.



If you are unable to complete any of these steps, please allow MSK to complete a pipe observation.



# Thank you!

