

# Lead Service Line Replacement Plan

Water System ID Number: IL1190250

July 2025

## Summary

In 2021, the State of Illinois passed the Lead Service Line Replacement and Notification Act. With this act, the City of Edwardsville is to create and maintain an inventory of the water service lines and create a plan to remove any water services that were made of lead piping.

The water service is the piping that connects the water user's house or building to the water main. Overall the City has 9,185 service lines that the City distributes water to. Service material can be either plastic, copper, galvanized metal piping, or lead. The City has kept material logs as these service lines have been installed or replaced over time, but a sizable gap remains in unknown service line material. Figure 1 represents a summary of the material type as well as the amount of unknown service lines.

<b>Figure 1: Water Service Line Material Summary July 1, 2025</b>	
Copper	5,483
PVC	2,011
Galvanized	91
Cast Iron	10
Lead	0
Unknown	1,590
<b>Total</b>	<b>9,185</b>

## Lead Service Line Replacement

The City of Edwardsville follows the Illinois Environmental Protection Agency's guidance for lead service line replacement, if a lead service line is discovered. Below is an order of operations upon the discovery of a lead service line.

- Notification of Customer (See Attachment A and E)
- An easement document that will seek permission to replace the service line at the City's expense. (See Attachment B)
- If the customer does not want their service line replaced, the Illinois Department of Public Health asks that the City provide a waiver to the customer. (See Attachment F)
- Upon the property owner's approval, the City will replace the service line at no cost to the homeowner.

## Lead Service Line Replacement Implementation

Since 2020 the City has replaced 78 lead service lines that were previously listed as unknown services.

Currently the City has no known lead service lines. But based on the historical replacements of water mains, we know that if a house was built before 1940 and the water main serving the customer has not been replaced over the last few decades, there is a chance the service line may contain lead piping. It is these areas where the City is focusing its water main replacements and identification of lead service lines.

Within the next two years, the City's goal is to reduce the number of unknown material service lines to zero. In addition, the City will prioritize identifying and replacing any high risk facilities as identified by the IEPA.

Attachment C shows a map of all parcels that have unidentified service materials. However, not all of these services are suspected to be lead. By using the data gathered from other water main replacement projects, we expect there to be at most 1,134 lead services. Attachment D shows a map of the areas of potential lead service lines.

In 2019, the City implemented a capital replacement plan where aging water mains are to be replaced on an annual basis. Since then 4.36 miles have been replaced along with 50 discovered lead service lines.

Moving forward, the City has annual water main replacement projects planned to continuously upgrade its water infrastructure while removing lead service lines. In 2025, the City plans to replace 0.70 miles of water main, all within the area of suspected lead service lines.

These projects will continue for the next 29 years until the water mains are completely replaced within the boundary area identified in Attachment D. In addition to the City's capital replacement plan, it has been Public Works operating procedure to replace a lead service line within 30 days of discovery.

The City follows a public bid opportunity for all of its water main replacement projects. As part of all of the City's Notice to Bidders, the City follows the Illinois Wages of Employees on Public Works Act, which requires prevailing wage to all people working on the City's capital projects. The City encourages minority business firms to submit bids for all projects. The City also encourages

successful bidders to utilize minority businesses as sub-contractors for supplies, equipment, services, and construction.

Figure 2 represents a cost analysis associated with removing a lead service line whether the service line is replaced as its own project versus if the service line is replaced with a water main replacement project. There is a significant cost savings to replace the service line during a water main replacement project as contractors are already on site and excavation to tap the main is already occurring.

Project	Lead Services Replaced	Cost	Cost Per Service Line
North Kansas and E. High St. Water Main Replacement	1	TBD	TBD
Single Service Replacements	8	\$52,052.90	\$6,506.61

\*Due to unknown 2025 costs for LSL replaced with water main replacement projects, prices from the year 2024 will be used for the Financial Impact on Users analysis shown in Figure 3.

## Financial Impact on Users

If every unknown service turns out to be a lead service line and the City replaces them, the overall costs for replacement will be between \$7.1 million and \$11.2 million over the remaining 29 years of the 30 year plan implemented in 2024. This is shown in an annual cost breakdown in Figure 3. Currently, the city is in Year 2 of the Lead Service Line Replacement Plan.

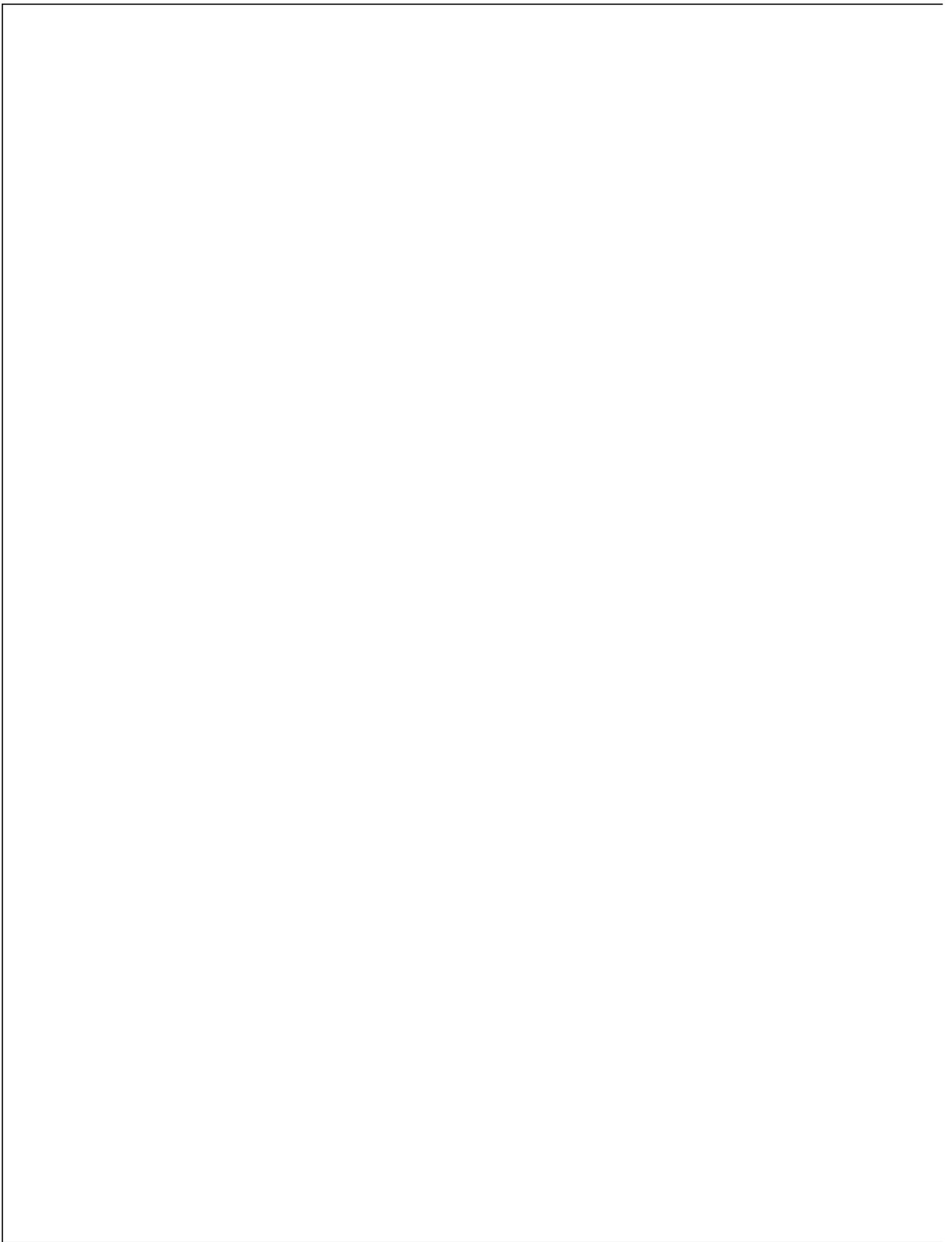
The City of Edwardsville's water and sewer systems are funded fully out of users fees collected. As shown in Figure 2, there is a cost to replacing lead service lines, but these costs are reduced when completed with water main replacements. When a water main is replaced, the service line from the new main to the meter pit / isolation valve has to be replaced with the main. For this reason, these costs are included in our capital replacement plan.

To ensure the City has a sustainable water system, the water mains have to be replaced to prevent system failure. The City's goal is to replace water mains before they reach 100 years of operation. Also included in the City's capital plan is the upgrade and replacement of the City's water meters. This will allow the City to switch to a monthly billing cycle rather than the current billing cycle of every two months. This will reduce bills that see high usage from leaks thus helping reduce shut-offs and help the affordability for the City's water and sewer customers.

Figure 3: Assuming All Unknown Services are Lead Service Lines and are Replaced Uniformly over the next 30 Years

Assuming 3% inflation per year	Cost of Single LSL Replacement	Cost of 38 Service Line Replacements	LSL Replaced w/Water Main	Cost of 38 Service Lines Replaced with the Water Main
1	\$5,313.00	\$201,894.00	\$4,020.49	\$152,778.62
2*	\$6,506.61	\$247,251.18	\$4,141.10	\$157,361.98
3	\$6,701.81	\$254,668.72	\$4,265.34	\$162,082.84
4	\$6,902.86	\$262,308.78	\$4,393.30	\$166,945.32
5	\$7,109.95	\$270,178.04	\$4,525.10	\$171,953.68
6	\$7,323.25	\$278,283.38	\$4,660.85	\$177,112.29
7	\$7,542.94	\$286,631.88	\$4,800.68	\$182,425.66
8	\$7,769.23	\$295,230.84	\$4,944.70	\$187,898.43
9	\$8,002.31	\$304,087.76	\$5,093.04	\$193,535.38
10	\$8,242.38	\$313,210.40	\$5,245.83	\$199,341.45
11	\$8,489.65	\$322,606.71	\$5,403.20	\$205,321.69
12	\$8,744.34	\$332,284.91	\$5,565.30	\$211,481.34
13	\$9,006.67	\$342,253.46	\$5,732.26	\$217,825.78
14	\$9,276.87	\$352,521.06	\$5,904.23	\$224,360.55
15	\$9,555.18	\$363,096.69	\$6,081.35	\$231,091.37
16	\$9,841.83	\$373,989.59	\$6,263.79	\$238,024.11
17	\$10,137.09	\$385,209.28	\$6,451.71	\$245,164.84
18	\$10,441.20	\$396,765.56	\$6,645.26	\$252,519.78
19	\$10,754.43	\$408,668.53	\$6,844.62	\$260,095.37
20	\$11,077.07	\$420,928.58	\$7,049.95	\$267,898.23
21	\$11,409.38	\$433,556.44	\$7,261.45	\$275,935.18
22	\$11,751.66	\$446,563.13	\$7,479.30	\$284,213.24
23	\$12,104.21	\$459,960.03	\$7,703.67	\$292,739.63
24	\$12,467.34	\$473,758.83	\$7,934.78	\$301,521.82
25	\$12,841.36	\$487,971.59	\$8,172.83	\$310,567.48
26	\$13,226.60	\$502,610.74	\$8,418.01	\$319,884.50
27	\$13,623.40	\$517,689.06	\$8,670.55	\$329,481.04
28	\$14,032.10	\$533,219.74	\$8,930.67	\$339,365.47
29	\$14,453.06	\$549,216.33	\$9,198.59	\$349,546.43
30	\$14,886.65	\$565,692.82	\$9,474.55	\$360,032.83
<b>Total</b>		<b>\$11,180,414.07</b>		<b>\$7,115,727.74</b>

Current Year\*



## Water Quality

The City has had a very successful corrosion control program by implementing a treatment program at the water treatment plant. The City has never had a single sample exceed the States maximum contaminant level.

Sampling information as well as the City's yearly consumer confidence report can be found at [www.cityofedwardsville.com/waterreport](http://www.cityofedwardsville.com/waterreport)

The City of Edwardsville also holds regular public meetings that discuss the City's water and sewer infrastructure. The Public Services Committee currently meets the second and last Tuesday of every month at 4:30 PM at City Hall, 118 Hillsboro Avenue, Edwardsville, IL 62025.

ATTACHMENT A



*City of*  
**Edwardsville**  
*Third Oldest City in Illinois*

**Department of Public Works**  
Ryan Zwijack, P.E., Director

Date

Resident Name  
Address  
Edwardsville, IL 62025

LEAD SERVICE NOTIFICATION

As part of the **STREET NAME** Water Main Replacement Project, all water services are being transferred from the existing water main to the newly installed water main. During the excavation for service transfer of **ADDRESS**, an existing and active lead service line was discovered.

The Illinois Act HB3739 requires any lead service line to be replaced "from the water main or source of potable water supply to the building plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter."

All lawn, sidewalk, pavement, and gravel areas disturbed during the service line transfer will be restored as close to existing conditions as possible following the completion of construction.

The City of Edwardsville, not the customer, will pay for the installation of the new service line to your home. For The City to perform this necessary work on your private property, we must receive a signed authorization from the property owner (see attached form).

Please contact me at the phone number or email located below if you have any questions or concerns.

Sincerely,

David Sirko, PE  
City Engineer  
618-692-7535  
publicworks@cityofedwardsville.com

200 East Park Street Edwardsville, Illinois 62025-0407 Tel 618.692.7535 Fax 618.692.7505 [www.cityofedwardsville.com](http://www.cityofedwardsville.com)

ATTACHMENT B



*City of*  
**Edwardsville**  
*Third Oldest City in Illinois*

**Department of Public Works**  
Ryan Zwijack, P.E., Director

DATE

RESIDENT NAME

ADDRESS

Edwardsville, IL 62025

WATER SERVICE LINE REPLACEMENT LICENSE

The undersigned \_\_\_\_\_ and \_\_\_\_\_ ("Customer") grants to The City of Edwardsville ("City") and to its approved subcontractors a license to enter upon Customer's property at ADDRESS, Edwardsville, Illinois ("Property") for the purpose of connecting Customer's residence to a City water mains, at no cost to Customer. The term of the license shall be six (6) months following the date set forth below.

City or its approved subcontractors will install the City service connection from the water main to a new City meter installation (consisting of a meter, meter set, and meter vault) at Customer's Property line. City will determine the location of the City meter installation. The City service connection and meter installation will be owned and maintained by City.

In addition, City or its approved subcontractors will install a service line from the City meter installation to Customer's residence. The Customer service line will be owned and maintained by the Customer. The City will provide a warranty of the material and workmanship of the Customer service line for 12 months following the date set forth below.

Upon completion of the work necessary to affect the new connection – including disconnecting from the old water main, and installing the City service connection, the City meter installation, and the Customer service line – City will restore Customer's Property as nearly as practicable to its former condition.

DATE:

CUSTOMER:

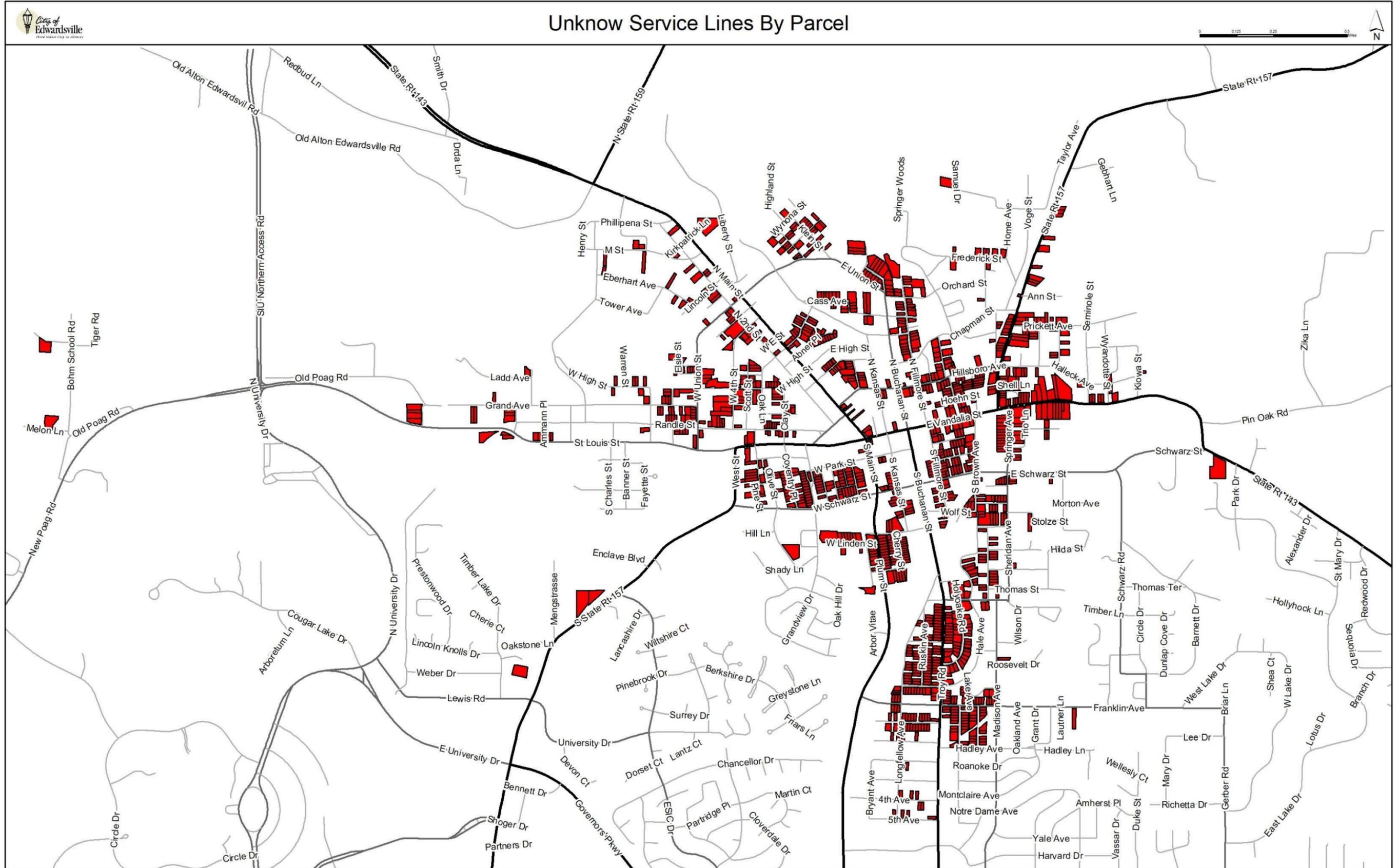
\_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[Print Name]

\_\_\_\_\_  
[Print Name]

ATTACHMENT C





# ATTACHMENT E

## Lead Information Notice

### IMPORTANT NOTICE ABOUT YOUR DRINKING WATER



Dear XXXXXXXX

Today's Date: 1/31/24

The City of Edwardsville has recently completed a repair made to the water service line at the curb stop that may affect the lead content of your potable water supply. Lead, a metal found in natural deposits, is harmful to human health, especially young children, and pregnant women. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that can carry oxygen to all parts of your body. The most common exposure to lead is swallowing or breathing in lead paint chips and dust. However, lead in drinking water can also be a source of lead exposure. In the past, lead was used in some water service lines and household plumbing materials. Lead in water usually occurs through corrosion of plumbing products containing lead; however, disruption (construction or maintenance) of lead service lines may also temporarily increase lead levels in the water supply. This disruption may be sometimes caused by water main maintenance/replacement or repairs to the water service line. As of June 19, 1986, new or replaced water service lines and new household plumbing materials could not contain more than 8% lead. Lead content was further reduced on January 4, 2014, when plumbing materials must now be certified as "lead-free" to be used (weighted average of wetted surface cannot be more than 0.25% lead).

The purpose of this notice is for informational purposes only. While it's not known for certain whether or not this particular repair will adversely affect lead plumbing (if present) in and outside your home, below describes some information about the project and some preventative measures you can take to help reduce the amount of lead in drinking water.

Repair Date: \_\_\_\_\_ 1/31/24 \_\_\_\_\_ Full Replacement: X

Repair location and description:

Found galvanize line on both sides replacement of water line from City main to curb stop by City Staff. City hired Contractor to replace from curb stop to through foundation up to 18 inches inside.

---

---

---

---

---

---

---

---

## ATTACHMENT E

### What you can do to reduce lead exposure in drinking water during this repair:

- Run your water to flush out lead. If the plumbing in your home is accessible; you may be able to inspect your own plumbing to determine whether or not you have a lead service line. Otherwise, you will most likely have to hire a plumber.
  - If you do not have a lead service line, running water for 1-2 minutes at the kitchen tap should clear the lead from your household plumbing to the kitchen tap. Once you have done this, fill a container with water and store it in the refrigerator for drinking, cooking, and preparing baby formula throughout the day.
  - If you do have a lead service line, flushing times can vary based on the length of your service line and the plumbing configuration in your home the length of lead service lines varies considerable. Flushing for at least 2-3 minutes is recommended.
- Use cold water for drinking, cooking, and preparing baby formula. Do not cook or drink water from hot water tap; lead dissolves more easily into hot water. Do not use water from the hot tap to make baby formula.
- Look for alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter that is certified to remove "total lead".
- Clean and remove any debris from faucet aerators on a regular basis.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Purchase lead-free faucets and plumbing components.
- Remove the entire lead service line.
- Test your water for lead. Call us at: (618) 692-7535 to find out how to get your water tested for lead. While we do not do the testing, we can provide a list of laboratories certified to do the testing. Laboratories will send you bottles for sample collection. Please note that we are not affiliated with the laboratories and they will charge you a fee.
  - If test results indicate a lead level of 15ug/L, bottled water should be used by pregnant women, breast feeding women, young children, and formula-fed infants.

To view the City of Edwardsville Annual Water Quality Report, it can be viewed at <http://www.cityofedwardsville.com/2016water-report>

For more information, please contact the local IEPA office at (618) 346-5120

## ATTACHMENT F



525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • [www.dph.illinois.gov](http://www.dph.illinois.gov)

### WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

You are receiving this form because your property has been identified by your community water supply (CWS) as being served by a lead service line or galvanized service line located downstream of lead and you are refusing to allow the community water supply (CWS) to replace your entire service line.

The purpose of this form is to provide you, the property owner, with information necessary to make an informed decision about replacing your service line. In accordance with the Lead Service Line Replacement and Notification Act, Public Act 102-0613, the owner or operator of your CWS is required to replace your lead service line in its entirety, including any portion of the service line running on private property and within the building's plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter. If you deny the CWS the ability to perform a complete lead service line replacement, then you, the property owner, must sign this waiver form in accordance with 415 ILCS 5/17.12 (ff)(1)(D) and 17.12 (ii).

The following items should be considered by property owners regarding lead service line replacement:

- **Lead service lines and galvanized service lines downstream of lead can be significant contributors of lead contamination in drinking (tap) water through the corrosion of these materials.** Service lines are pipes that carry drinking water from the CWS water main to a home or building. A study published by American Water Works Association (AWWA) Water Research Foundation (2008) "Contributions of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues" (Sandvig et al, 2008) estimates that 50% – 75% of lead in drinking water comes from lead service lines.
- **Lead is a toxic metal that is harmful to human health even at low exposure levels.** Young children are particularly vulnerable to lead. The adverse health effects of lead exposure include damage to the brain and nervous system, slowed growth and development, learning and behavior problems, hearing and speech problems, lower IQ, decreased ability to pay attention, and underperformance in school. Please see the CDC's website, <https://www.cdc.gov/nceh/lead/prevention/health-effects.htm> for additional information regarding health effects of lead.
- **Partial lead service line replacements can increase lead levels for long periods of time.** Partial lead service line replacement means replacement of only a portion of a lead service line or a galvanized service line downstream of lead. Following a partial lead service line replacement, lead levels increase and construction activities such as digging and cutting release particulate lead. Particulate lead is a concern because the lead content can be very high. Additionally, new materials from partial lead service line replacements can increase corrosion or create galvanic corrosion.
- **Property owners of nonresidential properties or properties operating as rental property have responsibilities under the Lead Service Line Replacement and Notification Act after denial of complete lead service line replacement.** In accordance with 415 ILCS 5/17.12 (ff), owners of nonresidential buildings or a residence operating as a rental property shall be responsible for installing and maintaining certified point-of-use filters for the reduction of lead (NSF/ANSI Standard 53) and

PROTECTING HEALTH, IMPROVING LIVES

Nationally Accredited by PHAB

PG 1 OF 3

ATTACHMENT F

particulates (NSF/ANSI Standard 42) at all plumbing fixtures intended to supply water for the purposes of drinking, food preparation, or making baby formula until such time that the property owner has affected the remaining portions of the lead or galvanized service line to be replaced.

- **Unsafe conditions and knowledge of the remaining lead piping must be disclosed appropriately.** Waiver or denial of complete replacement of a lead service line may create unsafe concentrations of lead and/or unsafe conditions relating to the remaining lead water pipe. If the property is a residential real property as defined by the Residential Real Property Disclosure Act (765 ILCS 77/5), appropriate disclosure shall be made at any transfer of sale, exchange, installment land sale contract, assignment of beneficial interest, lease with an option to purchase, ground lease, or assignment of ground lease.
- **Service lines are plumbing and are required to be replaced by individuals authorized by the Plumbing License Law (225 ILCS 320/3).** Service lines are plumbing as defined by the Plumbing License Law (225 ILCS 320/3). As plumbing, service lines are required to be repaired, replaced, and installed by authorized individuals and in accordance with the requirements of the Illinois Plumbing Code (77 Ill. Adm. Code 890).
- **If the property is operating as a childcare operation, there are additional requirements regarding lead in drinking water under Department of Family and Children Services (DCFS) licensing standards.** Under DCFS licensing standards, changes in water profile including changes to the water service line require retesting of the drinking water for presence of lead. Where lead is detected at or above DCFS's action level, a mitigation plan to reduce the concentration of lead is required.

More information about lead in drinking water and the effects of lead can be found at IDPH's website: <https://dph.illinois.gov>.

In consideration of the above information, IDPH strongly recommends you allow your CWS to replace your lead service line in its entirety. If you choose to waive and deny a complete lead service line replacement at your property, this form must be completed and returned to your CWS. Sections 1,2, and 3 of this form are to be completed by the CWS and Sections 4 and 5 of this form are to be completed by, you, the property owner of the affected property.

# ATTACHMENT F

## WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

Sections 1, 2, and 3 must be completed by the CWS prior to providing the form to the property owner.

SECTION 1: COMMUNITY WATER SUPPLY INFORMATION	
CWS Name <b>Edwardsville</b>	ID Number <b>IL1190250</b>
Phone <b>618-692-7535</b>	Email <b>publicworks@cityofedwardsville.com</b>
CWS Mailing Address <b>200 East Park Street</b>	
CWS City <b>Edwardsville</b>	Zip Code <b>62025</b>
SECTION 2: SERVICE LINE ACTIVITY INFORMATION	
<input type="checkbox"/> Emergency Repair	Date of Activity
<input type="checkbox"/> Planned Replacement	
SECTION 3: AFFECTED PROPERTY	
Street Address	
City <b>Edwardsville</b>	Zip Code <b>62025</b>

Sections 4 and 5 must be completed by the owner of the affected building identified above and returned to the community water supply.

SECTION 4: Property Owner Information	
Full Name (First Name Last Name)	
Phone	Email
SECTION 5: DENIAL OF COMPLETE LEAD SERVICE LINE REPLACEMENT	
<input type="checkbox"/> By signing this waiver, I acknowledge that I am the property owner of the affected property located at the address listed in Section 3 of this form and I have been informed by the CWS that my property has a lead service line. I have read and understand the information provided within this waiver regarding the hazards of lead in drinking water, partial lead service line replacement, and Illinois laws about responsibilities of property owners for providing filters, disclosing the presence of lead water service lines, and requirements for child care facilities.	
<input type="checkbox"/> By signing this waiver, I acknowledge that I am waiving the community water supply's requirement to replace my lead service line in its entirety. I acknowledge that this waiver will result in a partial lead service line replacement and it may be unsafe to drink, cook with, or otherwise consume water from the tap, unless it has been filtered with a filter certified to meet NSF/ANSI Standard 53 and 42.	
Signature	Date

All parties should retain a copy of this form for their records. The Community Water Supply must also provide notification to IDPH using the electronic forms located at <https://dph.illinois.gov/topics-services/environmental-health-protection/lead-in-water.html>.