



# **Lead Service Line Replacement Plan**

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0234998.01

**City of Monmouth,  
Illinois**

April 2024

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## 1. INTRODUCTION

The City of Monmouth (City), located in Warren County, is submitting the first draft of its Lead Service Line Replacement (LSLR) Plan outlining the City's approach to replacing all known lead and galvanized service lines within the City's service area. Replacement of lead and galvanized service lines is necessary to improve the health and safety of the City's residents and is required by the Illinois Lead Service Line Replacement and Notification Act (the Act), codified as 415 ILCS 5/17.12. This act requires the submission of a LSLR Plan yearly on April 15 from 2024 through 2027 to the Illinois Environmental Protection Agency (IEPA). The final LSLR Plan is due April 15, 2027. Following the final submission, the City will continue to submit an updated plan annually for the first 10 years. After this period of time, the City will submit the report every three years until all lead and galvanized service lines have been replaced.

### 1.1 Background

The City of Monmouth owns and operates a public, community water system that provides water to approximately 9,840 people. It operates under the Water System Name and Number: Monmouth, IL1870150. The system includes: a North and South Water Treatment Plant, distribution system piping, six (6) groundwater wells, and three (3) elevated storage tanks.

### 1.2 Makeup of Customer Base

The current customer base consists of approximately 3,750 metered services which includes industrial, commercial, and residential users. Of these users, the City has identified 55 high-risk facilities that are detailed further in Section 2.2.1. Since 2020, records show that the City has replaced at least 18 lead service lines.

## 2. LEAD SERVICE LINE REPLACEMENT PLAN

### 2.1 Existing Service Line Inventory

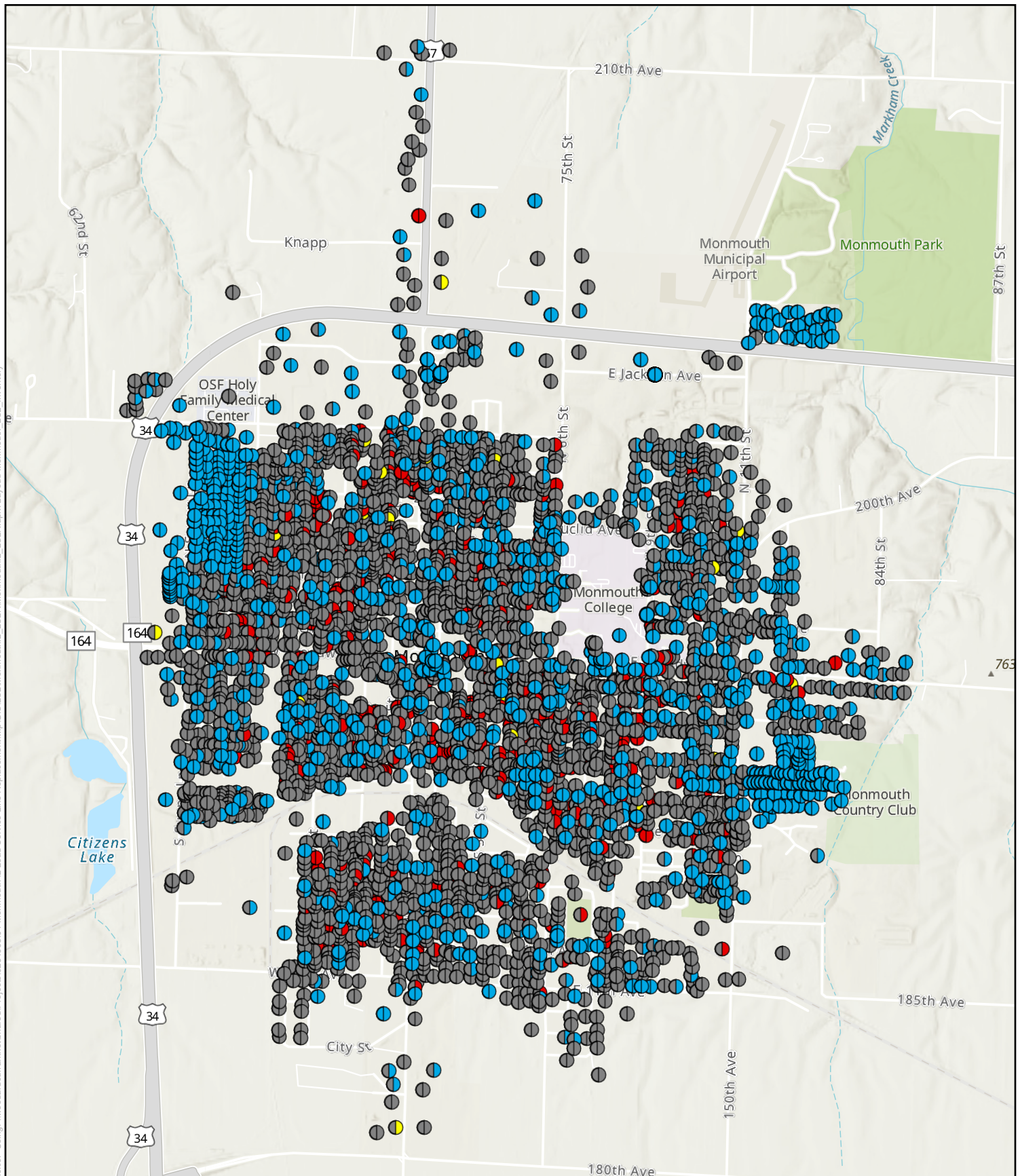
The City has compiled a Lead Service Line Inventory (LSLI), to the best extent possible utilizing local construction records, historical knowledge, public outreach, and/or visual inspections. The material classification for both the private and public side of the service connection is quantified in Table 2-1 below. A high number of unknown service line materials remain. These will be investigated via potholing or other approved methods as the City continues the replacement of service lines. These numbers will continue to be updated as more information becomes available. Of the 3,750 service connections, the City will be required to investigate, verify, and accordingly replace 3,030 total connections. This includes public-side only, private-side only, and full replacements, dependent on material. Figure 2-1 provides a map showing the current LSLI.

**TABLE 2-1: SERVICE LINE MATERIAL CLASSIFICATION**

Service Line Material	Private Side Quantity	Public Side Quantity
Copper	764	539
Plastic	225	170
Unknown, Not Lead	1	1
Cast / Ductile Iron or Transite	25	27
<b>Total Not Requiring Replacement</b>	<b>1,015</b>	<b>737</b>
Lead	430	219
Galvanized	25	0
Unknown	2,280	2,794
<b>Total Requiring Replacement</b>	<b>2,735</b>	<b>3,013</b>

**FIGURE 2-1: CURRENT LEAD SERVICE LINE INVENTORY MAP**

Figure Exposed: 3/20/2024. By: KStreckler. Using: \WoodardCurran\ne\shared\Projects\0234998.01\Monmouth\_IL\_Lead\_Service\_Line\_Replacement\Map\GIS\SLI\_Monmouth\_IL\_SLR.aprx Layout: Monmouth\_IL\_Inventory

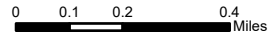


# Lead Service Line Inventory

Monmouth, IL

## Legend

- Unknown,Unknown (2284)
- Unknown,Lead (206)
- Unknown,Non-Lead (293)
- Unknown,Galvanized Requiring Replacement (25)
- Lead,Lead (217)
- Lead,Non-Lead (2)
- Non-Lead,Unknown (18)
- Non-Lead,Non-Lead (695)



Project #: 0234998.01  
Map Created: March 2024

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## 2.2 Long-term Plans & Goals

Based on the current state of the LSLI, the City has identified a long-term plan to replace all lead service lines within the service area. Since the total number of service lines requiring investigation and/or replacement is 3,030, based on regulations in the Act, the City must replace 6% of those lines per year, over 17 years. The yearly replacement rate currently stands at 182 lines per year. This number is expected to decrease as current “unknown” lines are investigated and classified appropriately.

### 2.2.1 Prioritization of High-Risk Facilities

High-risk facilities are facilities that have the greatest risk associated with its occupants drinking lead-contaminated water due to known health risks; the greatest risk being to young children and pregnant women. High-risk facilities, according to the Act, include the following: preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, as well as any high-risk areas identified by the City. These facilities will be prioritized when LSLI investigation and replacements begin. As part of the public outreach, the City will ask for high-risk facilities, namely day care homes, to identify themselves and provide their address so that they can be verified and put on the priority list.

The City has identified the following as high-risk facilities. There are seven that will require investigations and potential replacements; these are bolded in the list below.

- Lincoln Early Childhood School
- Simulation Sports
- Immaculate Conception Catholic School
- Julie’s Little Libraries (115 N B St)
- YMCA of Warren County
- Courtyard Estates of Monmouth
- AmericInn by Wyndham
- Head Start Kindergarten
- **Monmouth Early Learning Center**
- **First Lutheran Church (Lutheran Pre-school & Day Care)**
- **Barrera’s Daycare**
- Pattee Park
- Monmouth College Associated Buildings, Residences, and Facilities
- Julie’s Little Libraries (200 S B St)
- Knights of Columbus
- Jamieson Community Center
- Harding Primary School
- Central Intermediate School
- Monmouth-Roseville High School
- MDH Monmouth Clinic, Sports Medicine and Rehabilitation
- **Warren Achievement Center**
- **Macomb Audiology at Monmouth**
- **Eagle View Community Health System - Monmouth**
- **OSF Holy Family Medical Center**



### **2.2.2 One-Year Replacement Plan and Schedule**

Year one of the lead service line replacement efforts are planned to begin in late 2024. During this phase, the City is prioritizing known lead and galvanized lines within disadvantaged areas of the City. This first phase will plan to replace up to a total of 275 lines. The actual number replaced is dependent on pending funding availability and is subject to change. Appendix A shows the proposed lines to be replaced during Phase one, assuming the ideal funding availability scenario.

### **2.2.3 Two – Five-Year Replacement Plan and Schedule**

Phase two plans to replace 182-278 service lines in the City’s more disadvantaged census tract, dependent on pending funding opportunities. The proposed lines for replacement in Phase two are shown on the map in Appendix B. Once the known lead or galvanized service lines within the more disadvantaged census tract are replaced, the City will focus on the unclassified service lines in the same census tract before moving to the City’s northern census tract.

The City plans to complete the replacement of all known lead or galvanized lines in both census tracts by the end of Phase three. Phase three will replace a minimum of 182 service lines. The proposed lines for replacement during Phase three are shown on the map in Appendix C.

Following Phase three, the remaining phases of the LSLR Plan will include the investigation and replacement, as required, of a minimum of 182 service lines of currently unknown materials in varying regions of the City. These are shown in Appendix D. The replacement regions will be prioritized based on locations with a higher number of anticipated lead or galvanized service lines and within the disadvantaged areas of the City.

### **2.2.4 Six – Ten-Year Replacement Plan and Schedule**

Phases six through ten will continue with material investigations and the replacement of a minimum of 182 service lines, as required, of currently unknown materials in varying regions of the City. These are shown in Appendix D. The replacement regions will be prioritized based on locations with a higher number of anticipated lead or galvanized service lines and within the disadvantaged areas of the City.

### **2.2.5 11 – 15-Year Replacement Plan and Schedule**

Phased 11 through 15 will continue with material investigations and the replacement of a minimum of 182 service lines, as required, of currently unknown materials in varying regions of the City. These are shown in Appendix D. The replacement regions will be prioritized based on locations with a higher number of anticipated lead or galvanized service lines and within the disadvantaged areas of the City.

### **2.2.6 16 – 30-Year Replacement Plan and Schedule**

#### Phase 16:

Phase 16 will continue with material investigations and the replacement of a minimum of 182 service lines, as required, of currently unknown materials in varying regions of the City. These are shown in Appendix D. The replacement regions will be prioritized based on locations with a higher number of anticipated lead or galvanized service lines.

### Phase 17:

Phase 17 will replace the final remaining service lines. With the current inventory status, it's expected that Phase 17 will include the replacement of 24 lines. As unknown service connections are investigated, it is likely that many will be a material not requiring replacement, thus reducing the total number of assumed lead lines. This could shorten the period of time needed to complete lead service line replacements within the City's service area, potentially eliminating the need for at least Phase 17.

### Phases 18-30:

Based on the replacement schedule outlined in the Act, communities with 1,200 – 5,000 service lines needing replacement should finish the work within 17 years. It is not anticipated that service line replacement work will exceed the 17-year mark for the City.

## **2.2.7 Anticipated Lead Service Line Locations**

As discussed in the above sections, several service lines of unknown material remain in the City's inventory. Investigations will be completed in unison with the replacement efforts. Service line replacements will first prioritize known lead or galvanized requiring replacement, followed by the unknown material service lines. These unknown lines will be sequenced for replacement based on the anticipated number of lead or galvanized lines in the area. This is determined by reviewing surrounding known service line materials, and the dates of construction, if known. Appendix C shows the anticipated high priority areas with the sequencing shown as phases.

## **2.3 Lead Service Line Replacement Procedure**

Lead service lines will be replaced in full. No partial service line replacements will occur. This will be executed by following the procedure detailed below and summarized in Figure 2-2.

Customers will then be notified at least 45 days in advance of replacement and provided with a Consent Form to be completed by the Customer to allow the replacement of the service line. Customers will then be notified again, 15 days in advance of the replacement detailing the work and its potential effects. The City (or its Contractor) will confirm the appointment date with the Customer.

On the day of replacement, the City or its Contractor will confirm the pipe material at the three locations including: the meter, the water main (extending 2 feet from the main along the service), and the curb stop (extending two feet towards the main and to the property line in the opposite direction along the service) to verify existing service line materials. If lead, galvanized, or unknown materials are found, City or Contractor will continue with the service line replacement.

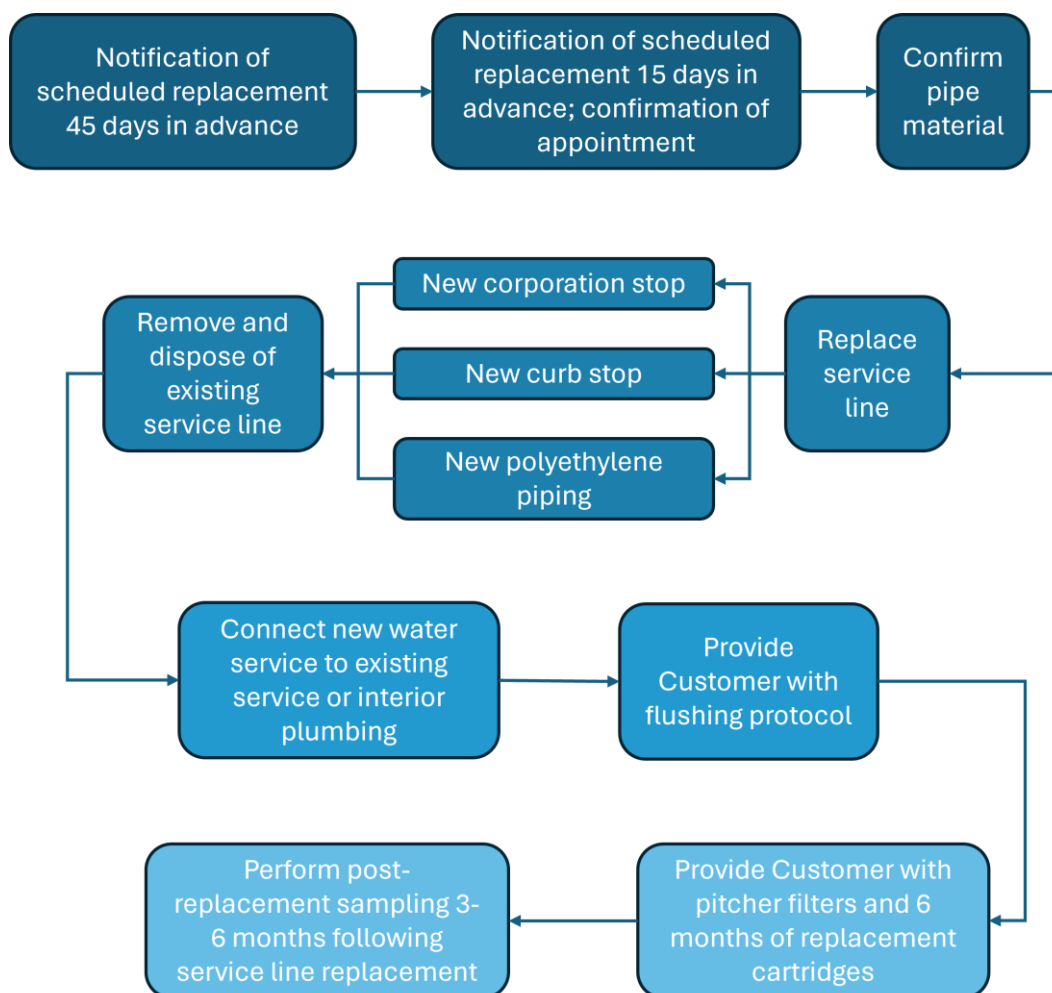
For every service replacement, a new corporation and curb stop will be installed. The existing service will be replaced with new polyethylene piping in the same location as the existing service. The existing service is to be removed and disposed of.

City or Contractor will connect the new water service to the existing service or interior plumbing equipment 18 inches beyond the interior building foundation wall or to the first shut-off valve (whichever is shorter) and will install a new angle ball meter valve between the foundation wall and the connection to existing plumbing.

Following the replacement of a service line, the Customer will be provided with a flushing protocol, pitcher filter and replacement cartridges, and a notification that the City will provide sampling at 3 to 6 months post-replacement.

At 3-months post replacement, the City will send notice to customers that they will provide post-replacement sampling kits at no cost to analyze for the presence of lead. The City or Contractor will make three attempts (monthly, beginning at 3 months) to contact customers for post-replacement sampling. The City will provide sampling results to the Customer once received.

The 15-day notification letter, flushing protocol, pitcher filter notification, and sampling notification are included in Appendix E.



**FIGURE 2-2: SERVICE LINE REPLACEMENT PROCEDURE**

## **2.4 Public Outreach**

The City will publish this LSLR Plan along with the LSLI on the City's website by April 15, 2024. The announcement will include information on a public comment period including how to comment, the deadline for comments, and the date of a city council meeting where the comments will be addressed (date TBD). A similar informational advertisement will be published in the City newspaper to notify citizens where to find the LSLR and LSLI online. Additionally, in the Fall / Winter of 2023-24, public outreach letters were mailed to all residents with service lines of unknown material requesting that they either self-classify their service line material (using the guide provided) or request for a member of the water department to investigate the line.

## **2.5 Good Faith Effort**

In order to encourage diversity in hiring, the City will make a good faith effort to hire contractors and vendors owned by minority persons, women, and persons with a disability for no less than 20% of the total contracts following Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act. This 20% of contracts is split among the groups as follows: 11% awarded to minority-owned businesses, 7% awarded to women-owned businesses, and 2% awarded to businesses owned by persons with a disability. Following subsection (n) of the Act, the City will take the following steps to make a good faith effort.

1. When economically feasible, the City will divide projects into contracts of smaller size to allow small business contractors and vendors to have the ability to qualify in the applicable bidding process.
2. The City will solicit through reasonable and available means the interest of businesses that have the capability to perform the work of the contract with sufficient time to allow certified businesses to respond.
3. The City will provide interested certified businesses with adequate information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the solicitation.
4. The City will meet in good faith with interested certified businesses that have submitted bids.
5. The City will effectively use the services of the State, minority or women community organizations, minority or women contractor groups, local, State, and federal minority or women business assistance offices, and other organizations to provide assistance in the recruitment and placement of the certified businesses.
6. The City will make efforts to use the appropriate forums for purposes of advertising subcontracting opportunities suitable for certified businesses.

### 3. COSTS & FINANCING

#### 3.1 Cost Estimates

Table 3-1 shows a detailed construction cost estimate for service line replacement within the City for Fiscal Year (FY) 2025. In FY 2025, the total construction costs are anticipated to be **\$2,519,000** since the City is planning to replace 275 lines, funding dependent. This cost estimate will be updated following bid openings to more accurately reflect the unit prices in the region.

**TABLE 3-1: FY 2025 CONSTRUCTION COST ESTIMATE (275 SERVICE LINE REPLACEMENTS)**

CITY OF MONMOUTH, IL - LSLR					
ENGINEER'S COST ESTIMATE					
Bid Item	Description	Quantity	Unit Price	Unit	Total Price
1	Mobilization / Demobilization	1	\$20,000	LS	\$20,000
2	Traffic Control	1	\$10,000	LS	\$10,000
3	Inspection Pits in Unpaved Areas	275	\$500	EA	\$137,500
4	Inspection Pits in Paved Areas	275	\$1,000	EA	\$275,000
5	Water Service Replacement - Property Line to Building Interior (Private Side)	275	\$2,000	EA	\$550,000
6	Long Water Service Replacement - Water Main to Property Line (Public Side)	138	\$4,500	EA	\$621,000
7	Short Water Service Replacement - Water Main to Property Line (Public Side)	137	\$3,000	EA	\$411,000
8	1-inch Curb Stop and Box	273	\$600	EA	\$163,800
9	1-1/2-inch Curb Stop and Box	1	\$1,000	EA	\$1,000
10	2-inch Curb Stop and Box	1	\$1,200	EA	\$1,200
11	Hot Mix Asphalt Surface Replacement	206	\$300	TON	\$61,800
12	Portland Cement Concrete Roadway Pavement, 8-inch (Replacement)	206	\$100	SY	\$20,600
13	Portland Cement Concrete Driveway Pavement, 6-inch (Replacement)	39	\$100	SY	\$3,900
14	Concrete Sidewalk Removal and Replacement	612	\$100	SY	\$61,200
15	Curb and Gutter Removal and Replacement	1375	\$50	LF	\$68,750
16	Lead Removal Pitcher Including 6 Month Supply of Replacement Filters	275	\$95	EA	\$26,125
17	Post-Replacement Water Sampling	275	\$41	EA	\$11,275
	<b>Subtotal</b>				\$2,445,000
	Contingency		3%		\$74,000
<b>TOTAL BASE BID CONSTRUCTION COST ESTIMATE</b>					<b>\$2,519,000</b>

The cost estimate shown in Table 3-2 provides the basis for all future years past FY 2025 where 182 lines are planned to be replaced. The total construction cost in 2024 dollars is \$1,677,000.

**TABLE 3-2: CONSTRUCTION COST ESTIMATE FOR REPLACEMENT OF 182 LINES PER YEAR**

CITY OF MONMOUTH, IL - LSLR					
ENGINEER'S COST ESTIMATE					
Bid Item	Description	Quantity	Unit Price	Unit	Total Price
1	Mobilization / Demobilization	1	\$20,000	LS	\$20,000
2	Traffic Control	1	\$10,000	LS	\$10,000
3	Inspection Pits in Unpaved Areas	182	\$500	EA	\$91,000
4	Inspection Pits in Paved Areas	182	\$1,000	EA	\$182,000
5	Water Service Replacement - Property Line to Building Interior (Private Side)	182	\$2,000	EA	\$364,000
6	Long Water Service Replacement - Water Main to Property Line (Public Side)	91	\$4,500	EA	\$409,500
7	Short Water Service Replacement - Water Main to Property Line (Public Side)	91	\$3,000	EA	\$273,000
8	1-inch Curb Stop and Box	180	\$600	EA	\$108,000
9	1-1/2-inch Curb Stop and Box	1	\$1,000	EA	\$1,000
10	2-inch Curb Stop and Box	1	\$1,200	EA	\$1,200
11	Hot Mix Asphalt Surface Replacement	137	\$300	TON	\$41,100
12	Portland Cement Concrete Roadway Pavement, 8-inch (Replacement)	137	\$100	SY	\$13,700
13	Portland Cement Concrete Driveway Pavement, 6-inch (Replacement)	26	\$100	SY	\$2,600
14	Concrete Sidewalk Removal and Replacement	405	\$100	SY	\$40,500
15	Curb and Gutter Removal and Replacement	910	\$50	LF	\$45,500
16	Lead Removal Pitcher Including 6 Month Supply of Replacement Filters	182	\$95	EA	\$17,290
17	Post-Replacement Water Sampling	182	\$41	EA	\$7,462
	<b>Subtotal</b>				\$1,628,000
	Contingency		3%		\$49,000
<b>TOTAL BASE BID CONSTRUCTION COST ESTIMATE</b>					<b>\$1,677,000</b>

Table 3-3 provides the anticipated FY25 total project cost, including design and construction engineering and other professional services.

**TABLE 3-3: TOTAL FY 2025 PROJECT COST ESTIMATE**

FY 25 Total Project Cost Estimate Table (275 Service Line Replacements)		
1	Design Engineering (including planning and form preparation):	\$51,000
2	Construction Engineering (including bidding):	\$126,000
3	Other Professional Services (separate legal, loan admin, etc.):	\$51,000
4	Construction:	\$2,445,000
5	Contingency (at 3% of estimated construction costs):	\$74,000
6	Total Estimated Project Costs:	\$2,747,000

Table 3-4 provides the anticipated total project cost for year one of replacing 182 service lines, including design and construction engineering and other professional services in 2024 dollars.

**TABLE 3-4: TOTAL PROJECT COST ESTIMATE FOR 182 SERVICE LINE REPLACEMENTS**

Non-Escalated Total Project Cost Estimate Table		
1	Design Engineering (including planning and form preparation):	\$34,000
2	Construction Engineering (including bidding):	\$84,000
3	Other Professional Services (separate legal, loan admin, etc.):	\$34,000
4	Construction:	\$1,628,000
5	Contingency (at 3% of estimated construction costs):	\$49,000
6	Total Estimated Project Costs:	\$1,829,000

A cost escalation table for the next four years is provided in Table 3-5: Four-Year Cost Escalation Table 3-5. This shows the total project cost from Table 3-4 escalated by 3% each year.

**TABLE 3-5: FOUR-YEAR COST ESCALATION**

Cost Escalation (Assumed 3% per Year)	
Year	Cost
Total Estimated Project Costs (FY 2026)	\$1,884,000
Total Estimated Project Costs (FY 2027)	\$1,941,000
Total Estimated Project Costs (FY 2028)	\$2,000,000
Total Estimated Project Costs (FY 2029)	\$2,060,000

### 3.2 Customer Affordability

**TABLE 3-6: CURRENT WATER RATES**

Water Charges	Rate - Inside City	Rate - Outside City
First 1,250 CF	\$ 0.0851	\$ 0.1702
Next 1,250 CF	\$ 0.0771	\$ 0.1542
Next 27,500 CF	\$ 0.0705	\$ 0.1409
All thereafter	\$ 0.0565	\$ 0.1130

City water usage is billed monthly with rates in charged per cubic foot. The average water use per residential customer is approximately 404 cubic feet (CF). The average water bill per residential customer is approximately \$35.75, representing the weighted average bill of residential customers both inside and outside the city with weighting factors based on the percentage of residential customers inside or outside the city (Inside: average monthly water consumption of 404 CF X \$0.0851 per cubic foot = \$34.38; Outside: average monthly water consumption of 404 CF X \$0.1702 per cubic foot = \$68.76; weighted average: inside City bill of \$34.38 X weighting factor of ~ 96% + outside City bill of \$68.76 X weighting factor of ~ 4% = \$35.76).

Wastewater service users inside the city pay \$0.064 per cubic foot of water used. Wastewater service users outside the city pay \$0.074 per cubic foot of water used. Average use per customer is 404 cubic feet. The weighted average wastewater bill is \$26.02.

Median Household Income (MHI) in Monmouth is \$58,991. Monmouth ratepayers currently pay an average of \$35.76 for water service, and \$26.02 for sewer service. The average combined water and sewer bill is \$61.77/month, or \$741.28 a year. The average water and sewer charge is currently 1.26% of MHI.

### 3.3 Payment Structure Options

The cost of replacing service lines in Monmouth is estimated at \$1,829,000/year in 2024 dollars. Replacements are expected to take place over the next seventeen (17) years. Three options were considered:

#### Option 1 – Financing all costs using state LSLR loan

The state of Illinois offers a 30-year loan @ 0% interest for lead service line replacements. If Monmouth can take advantage of this program, they would borrow \$40.7 million over the next 17 years. By 2040, annual debt service payments would be \$1,359,267/year. These payments would continue through 2053, and then steadily decrease (as debt is amortized and retired) until they end in 2068.

There are currently around 3,750 service connections to the water system. Based on recent census data, the population in Monmouth is decreasing by 0.574% per year. If this trend continues, the number of connections will decrease to 3,173 by 2053. Therefore, in 2053 the debt service cost will be \$428.39/connection (\$1,359,267/3,173 users). Total water and sewer costs per ratepayer would equal \$1,169.66 (\$741.28 current costs + \$428.39 in new debt service costs). This projected bill is 1.98% of MHI.

#### Option 2 – Paying cash for all LSLR



The cash option would have utility users pay cash for all service line replacements in the year the work is done, without any borrowing. The cost of all the work is projected to be \$40.7 million from 2024 to 2040. The costs per water connection run from \$732.53/user (2024) up to \$860.53/user (2040). When these LSLR costs are added to the existing water & sewer bills, the average bill will increase to \$1,601.80/year by 2040. This is 2.72% of current MHI. This option has a larger impact on user bills for the next 17 years, but there is no long-term debt service. All work would be fully paid for when it is completed in 2040.

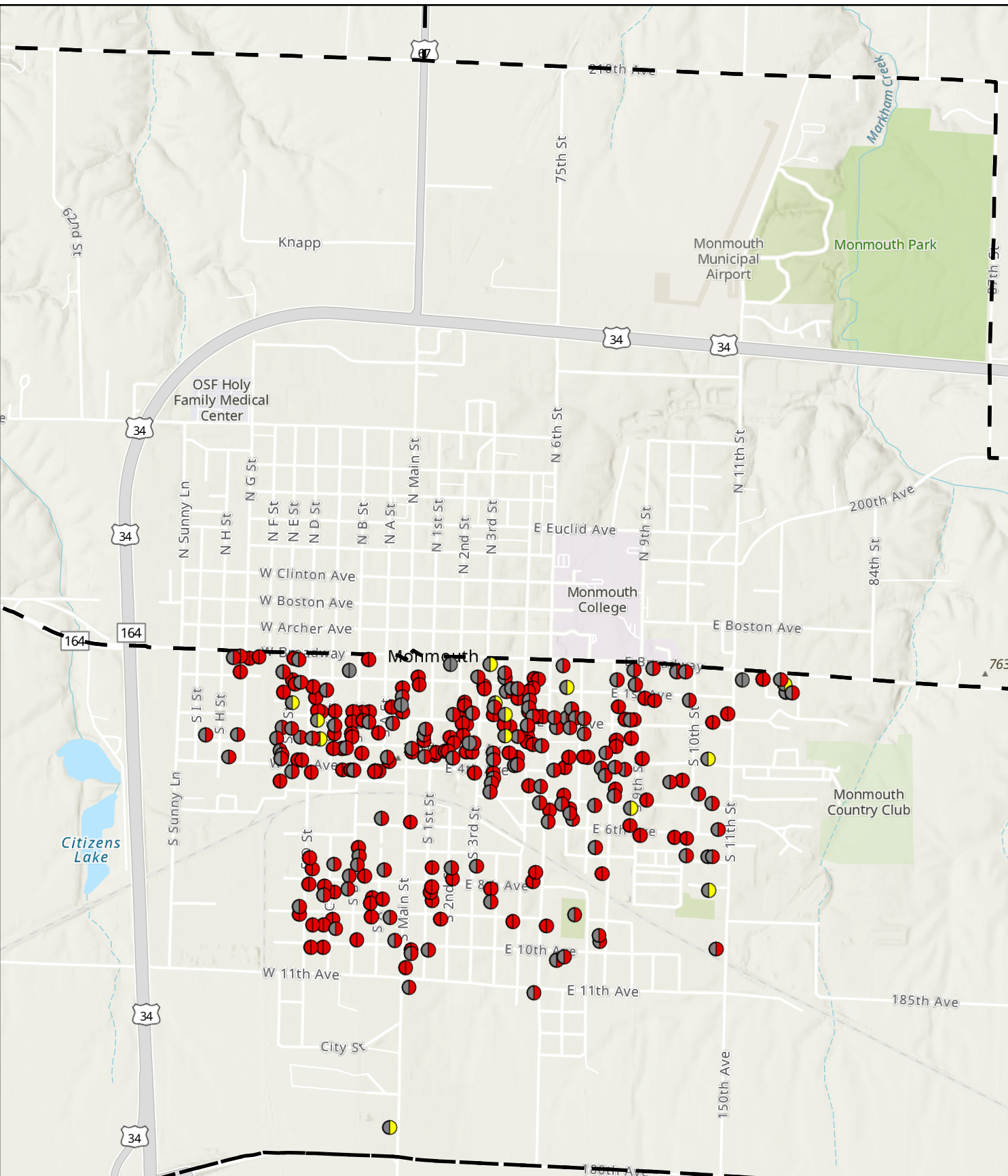
### **Option 3 – Financing all costs using state LSLR loan, with 49% principal forgiveness**

The state of Illinois offers a 30-year loan @ 0% interest for lead service line replacements. Principal forgiveness is also available to disadvantaged communities. If Monmouth can qualify for this program with 49% principal forgiveness, they would borrow \$20.8 million over the next 17 years. By 2040, annual debt service payments would be \$694,227/year. These payments would continue through 2053, and then steadily decrease until they end in 2068.

There are currently 3,750 service connections to the water system. This number is projected to decrease to 3,173 by 2053. Therefore, in 2053 the debt service cost will be \$218.79/connection (\$694,227/3,173 users). Total water and sewer costs would equal \$960.07 (\$741.28 current costs + \$218.79 in new debt service costs). This projected bill is 1.63% of MHI.

**APPENDIX A: LEAD SERVICE LINE INVENTORY MAP – PHASE 1  
REPLACEMENTS**

Figure Exposed: 3/27/2024. By: KStreckler. Using: \\woodardcurran.net\shared\Projects\0234998.01\Monmouth\_IL\Lead\_Service\_Line\_Replacement\Map\GIS\SLI\_Monmouth\_IL\_SLR.aprx Layout: Monmouth\_IL\_SLI\_Inventory



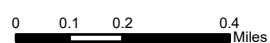
# Lead Service Line Inventory

Phase 1

Monmouth, IL

Legend

- Unknown,Unknown (5)
- Unknown,Lead (118)
- Unknown,Non-Lead (1)
- Unknown,Galvanized Requiring Replacement (13)
- Lead,Lead (138)

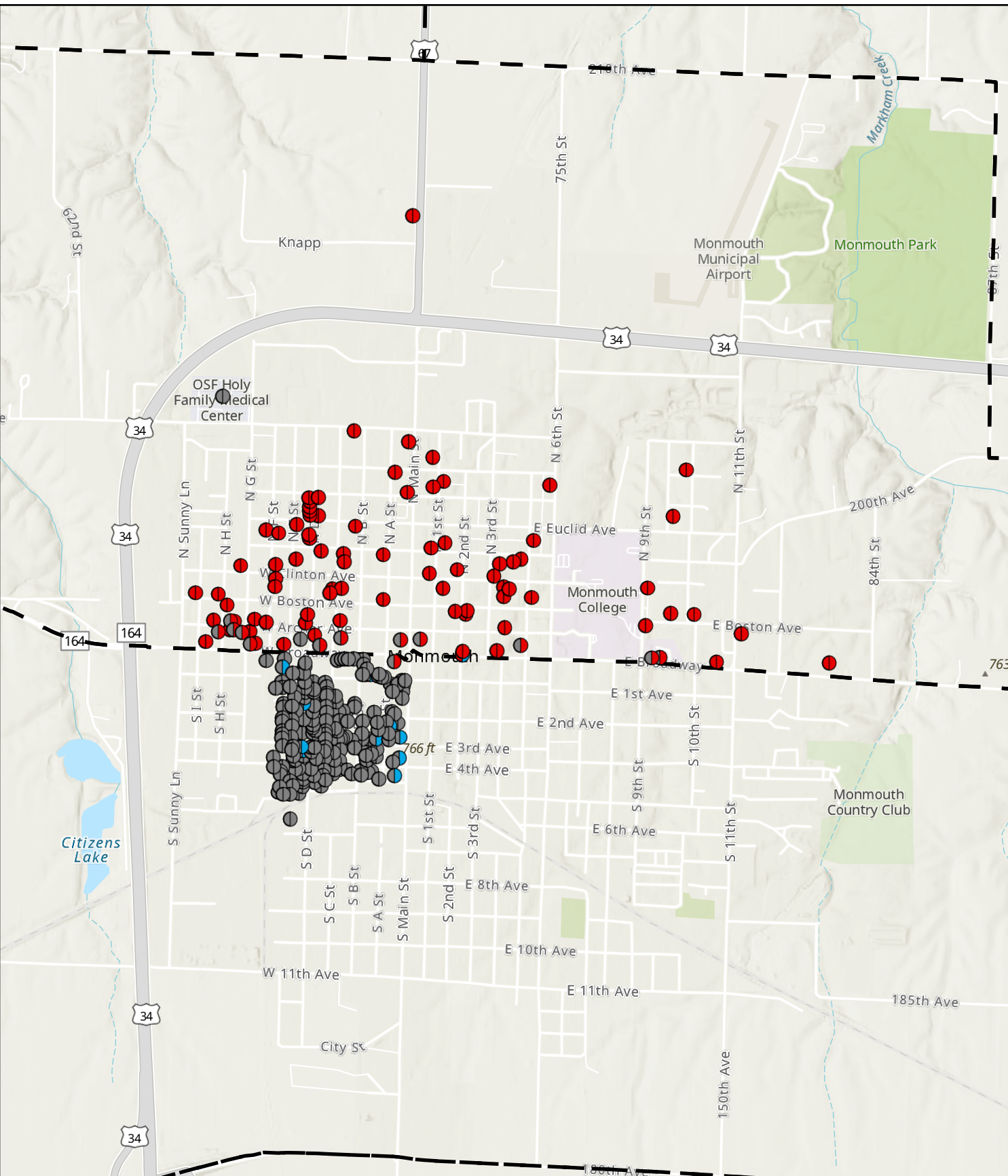


Project #: 0234998.01  
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**APPENDIX B: LEAD SERVICE LINE INVENTORY MAP – PHASE 2  
REPLACEMENTS**

Figure Exposed: 3/27/2024. By: KStreckler. Using: \\woodardcurran.net\shared\Projects\0234998.01\Monmouth\_IL\Lead\_Service\_Line\_Replacement\Map\GIS\SLI\_Monmouth\_IL\_SLR.aprx Layout: Monmouth\_IL\_Inventory



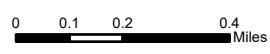
# Lead Service Line Inventory

Phase 2

Monmouth, IL

## Legend

- Unknown,Unknown (173)
- Unknown,Lead (15)
- Unknown,Non-Lead (10)
- Lead,Lead (79)
- Lead,Non-Lead (1)

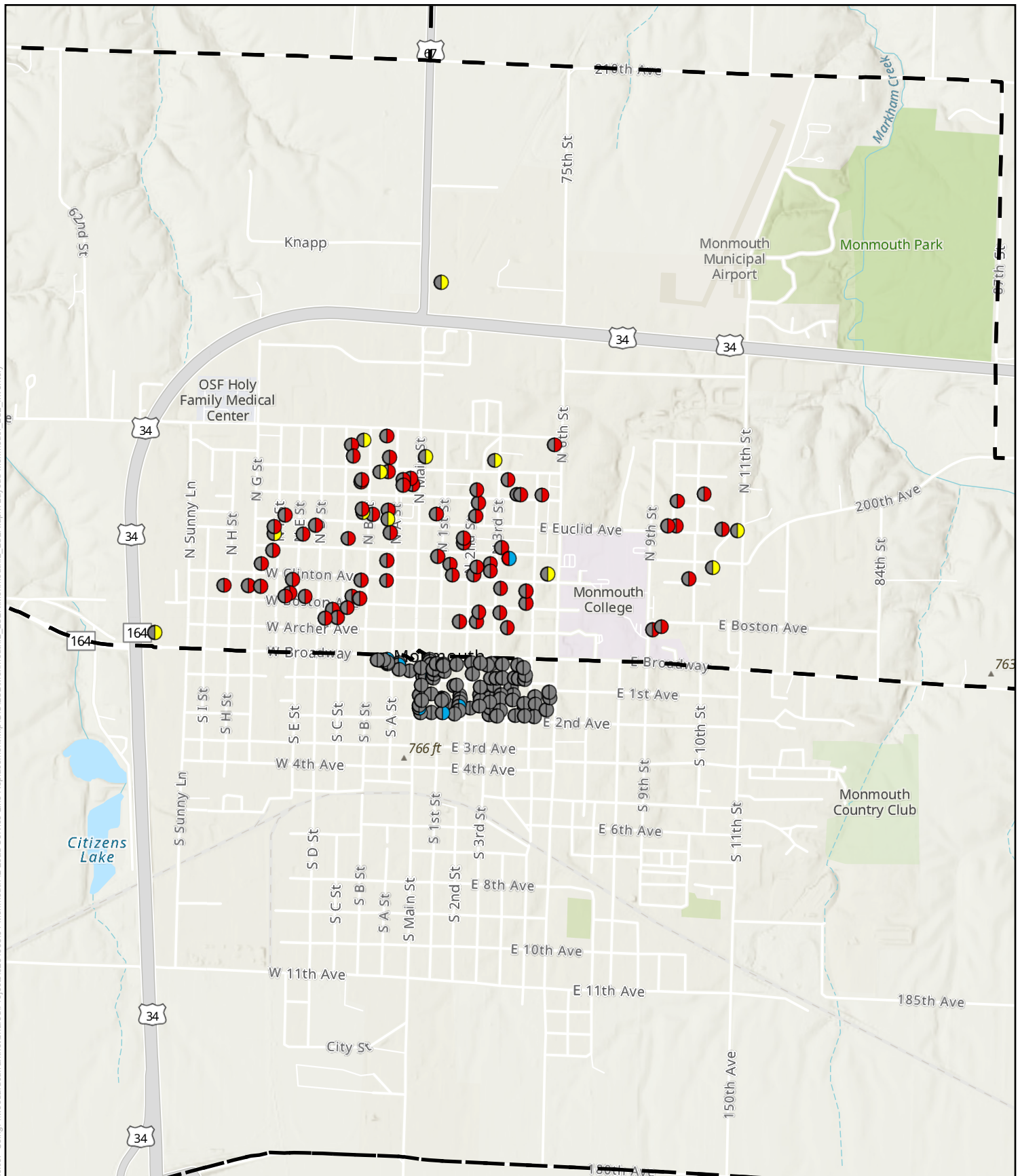


Project #: 0234998.01  
Map Created: March 2024

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:**

**APPENDIX C: LEAD SERVICE LINE INVENTORY MAP – PHASE 3  
REPLACEMENTS**

Figure Exposed: 3/27/2024. By: KStreckler. Using: \\woodardcurran.net\shared\Projects\0234998.01\Monmouth\_IL\Lead\_Service\_Line\_Replacement\Map\GIS\SLI\_Monmouth\_IL\_SLR.aprx Layout: Monmouth\_IL\_Inventory



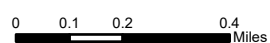
# Lead Service Line Inventory

Phase 3

Monmouth, IL

## Legend

- Unknown,Unknown (90)
- Unknown,Lead (73)
- Unknown,Non-Lead (6)
- Unknown,Galvanized Requiring Replacement (12)
- Lead,Non-Lead (1)



Project #: 0234998.01  
Map Created: March 2024

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:**

**APPENDIX D: LEAD SERVICE LINE INVENTORY MAP – PHASES 4-16  
REPLACEMENTS**



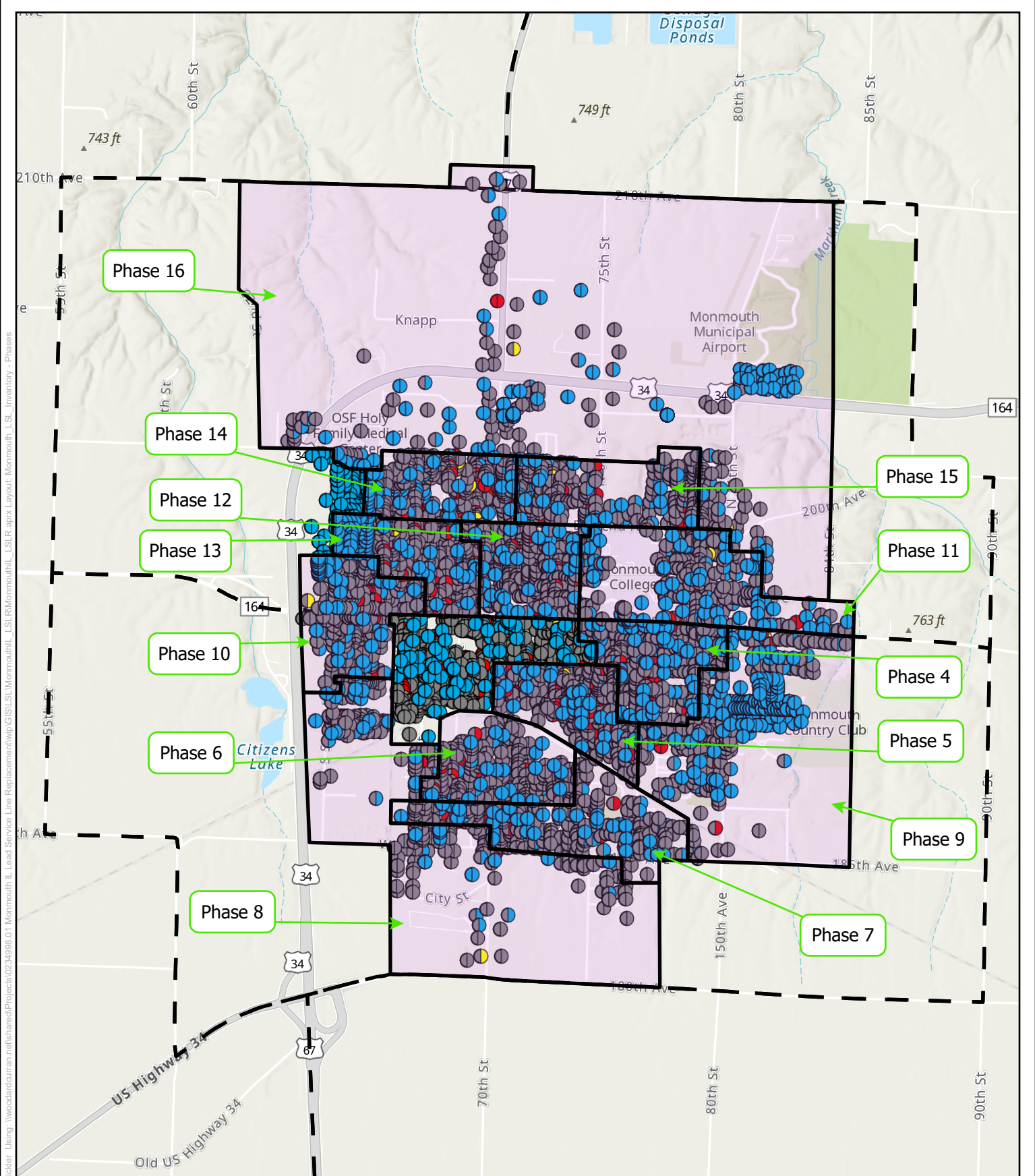
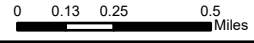


Figure Exposed: 3/27/2024. By: KStreckler. Using: \woodardcurran\external\Projects\0234998\_01\_Monmouth\_IL\_Lead\_Service\_Line\_Replacement\Map\GIS\SLI\_Monmouth\_IL\_SLR.aprx Layout: Monmouth\_IL\_Inventory - Phases

# Lead Service Line Inventory

Phases 4 - 16  
Monmouth, IL



## Legend

- Unknown,Unknown (2283)
- Unknown,Lead (206)
- Unknown,Non-Lead (293)
- Unknown,Galvanized Requiring Replacement (25)
- Lead,Lead (217)
- Lead,Non-Lead (2)
- Non-Lead,Unknown (18)
- Non-Lead,Non-Lead (696)
- tracts
- Phase Polygons



Project #: 0234998.01  
Map Created: March 2024

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:**

**APPENDIX E: LEAD SERVICE LINE REPLACEMENT PROCEDURE  
SUPPORTING DOCUMENTS**

## Lead Informational Notice

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Dear Water Customer:

Today's Date: \_\_\_\_\_

This notice contains important information about your water service and may affect your rights. We encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice.

Diese Mitteilung beinhaltet wichtige Informationen über Ihre Wasserversorgung und könnte Ihre Rechte beeinflussen. Wir bitten Sie, dass Sie diese Mitteilung vollständig in eine Sprache übersetzen lassen, die Sie verstehen, bevor Sie eventuelle Entscheidungen treffen, welche im Zusammenhang mit dieser Benachrichtigung erforderlich sind.

Ang abisong ito ay naglalaman ng mahalagang impormasyon tungkol sa iyong serbisyo sa tubig at maaaring makaapekto sa iyong mga karapatan. Hinihikayat namin kayo na isalin nang buo ang abisong ito sa wikang naiintindihan ninyo at bago kayo gumawa ng anumang mga desisyon na maaaring kailanganin sa abisong ito.

આ સૂચનામાં તમારી પાણીની સેવા વિશે મહત્વપૂર્ણ માહિતી શામેલ છે અને તમારા અધિકારોને અસર કરી શકે છે. અમે તમને પ્રોત્સાહિત કરીએ છીએ કે તમે આ સૂચના હેઠળ જરૂરી હોય તેવા કોઈપણ નિર્ણયો લો તે પહેલાં તમે આ સૂચનાને તમે સમજો છો તે ભાષામાં સંપૂર્ણ ભાષાંતર કરો.

Niniejsze zawiadomienie zawiera ważne informacje na temat Państwa przyłącza wodociągowego i może mieć wpływ na Państwa prawa. Przed podjęciem jakichkolwiek decyzji, które mogą być wymagane na mocy niniejszego zawiadomienia, zachęcamy Państwa do przetłumaczenia całości niniejszego zawiadomienia na język, który będzie dla Państwa zrozumiały.

يحتوي هذا الإشعار على معلومات مهمة حول خدمة المياه لديك، وقد يؤثر على حقوقك. قبل اتخاذ أي قرارات قد تكون مطلوبة بموجب هذا الإشعار فإننا نشجعك على ترجمته بالكامل إلى لغة تفهمها.

اس نوٹس میں آپ کی پانی کی سروسز سے متعلق اہم ترین معلومات موجود ہیں اور یہ آپ کے حقوق کو متاثر کر سکتا ہے۔ ہم آپ کو ترغیب دیں گے کہ آپ اس نوٹس کا مکمل طور پر اس زبان میں ترجمہ کروائیں جو آپ سمجھتے ہوں اور ممکن ہے کہ آپ کے کوئی فیصلہ لینے سے قبل اس نوٹس کے تحت یہ درکار بھی ہو۔

Este aviso contiene información importante sobre su servicio de agua y puede afectar sus derechos. Lo animamos a que traduzca este aviso a un idioma que comprenda antes de tomar cualquier decisión que pueda ser necesaria en virtud del mismo.

이 통지서에는 귀하의 권리에 영향을 미칠 수 있는 수도 서비스에 관한 중요한 정보가 제시되어 있습니다. 이 통지서에서 요구하는 결정을 내리기 전에 이 통지서를 귀하가 이해할 수 있는 언어로 번역하시기 바랍니다.

本通知包含有关您的供水服务的重要信息，可能会影响到您的权利。在您做出本通知所要求的任何决定之前，我们鼓励您将本通知完整地翻译成您可理解的语言。

## Lead Informational Notice

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Our water system will soon begin a water line maintenance and/or construction project that may affect the lead concentrations in your drinking water. 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.

The purpose of this notice is for informational purposes only. While it's not known for certain whether this construction project will adversely affect the lead (if present) plumbing 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.

Project Start Date: \_\_\_\_\_ Project expected to be completed by: \_\_\_\_\_

Project location and description: \_\_\_\_\_

\_\_\_\_\_

What you can do to reduce lead exposure in drinking water during this construction project:

- *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 you have a lead service line or lead solder. Otherwise, you will most likely have to hire a plumber.
  - If you do not have a lead service line, running the 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 lead service line and the plumbing configuration in your home. The length of lead service lines varies considerably. Flushing for at least 3 – 5 minutes is recommended.
- *Use cold water for drinking, cooking, and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water 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: \_\_\_\_\_ 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 the bottles for sample collection. Please note that we are not affiliated with any laboratory, and they will charge you a fee.
  - If test results indicate a lead level above 15 ug/L, bottled water should be used by pregnant women, breast-feeding women, young children, and formula-fed infants.

## **Lead Service Line Replacement Program**

### **Flushing Procedures**

*This notice contains important information about your drinking water.  
Have someone translate it for you or speak with someone who understands it.*

Dear Water Customer,

For the City of Monmouth, the health and safety of the public is our top priority. We deliver safe, clean water to our community and are taking action to ensure that continues into the future through the replacement of all lead service lines in our water system.

You are receiving this notice because part or all of the water service line to your property has been replaced. After replacement, it is very important to flush your plumbing to ensure any lead particles disturbed during construction are removed from the system before use.

#### **The following should happen immediately after your service line replacement:**

1. Turn off or bypass any water softener or filtration system.
2. Remove all aerators or screens from all faucets and clean debris with vinegar solutions if needed.
3. Turn on cold-water faucets on the lowest floor and leave all faucets running at the highest rate that the drain will allow. Do not use any hot water.
4. Turn on cold-water faucets on the next highest floor. Continue until all faucets are running. Record the order the faucets were turned on.
5. Leave water running for at least 15 minutes. Turn off the faucets in the order they were turned on and reattach aerators or screens to all faucets.
6. Continue to use your system as normal with the provided pitcher filter for 6-months and collect the required faucet sample 3-6 months after the date of replacement for analysis at a certified water quality laboratory. See separate notices for details about both.

## **Lead Service Line Replacement Program**

### **Pitcher Filter Guidance**

*This notice contains important information about your drinking water.  
Have someone translate it for you or speak with someone who understands it.*

Dear Water Customer,

For the City of Monmouth, the health and safety of the public is our top priority. We deliver safe, clean water to our community and are taking action to ensure that continues into the future through the replacement of service lines made of lead or lead-containing materials throughout the city. A water service line is the pipe that connects your home or business to the water distribution system.

You are receiving this notice because the water service line to your property will soon be replaced. The City of Monmouth is supplying you with *(Manufactures Name of Pitcher Filter)* lead removal pitcher and filter certified or tested to NSF/ANSI Standard 53 and *(# of Filter Replacement Cartridges)* filter replacement cartridges to be replaced *(Manufacturer Specific Language on useful life of filter, e.g. "Rated for 2 Months of Usage Each Based on 2 Gallons of Water Consumption Per Day")*. This will provide you a supply of replacement cartridge estimated for 6 months post service line replacement. The actual number of replacement cartridges needed per household will range based on water usage and household size.

**You should begin using your pitcher and filter for all water consumption immediately after your lead service line is replaced.** This measure is intended to mitigate any potential elevated lead concentrations in your drinking water following your lead service line replacement. Lead is not dangerous unless ingested and you are able to shower and bathe normally immediately after your system is properly flushed. However, you should utilize your pitcher filter for all consumptive use to minimize exposure to lead. Follow the below instructions as well as the manufacturer's instructions for proper flushing and filter cartridge removal and replacement, to ensure proper use and removal of lead.

#### **The following should happen immediately after replacement:**

- 1) Use this filter pitcher for all water that you consume for drinking, cooking, and making baby formula for 6 months following your lead service line replacement.
- 2) Each time you fill the pitcher, fill it with cold fresh tap water after allowing the water to run for at least 5 minutes.
- 3) For this 6-month period, you have been provided an initial *(# of Filter Replacement Cartridges)* filter replacement cartridges *(Manufacturer Specific Language on useful life of filter, e.g. "Rated for 2 Months of Usage Each Based on 2 Gallons of Water Consumption Per Day")*.
- 4) Follow the manufacturer's instructions for filters, which have been provided with the filters. The filter provided to you is *(Manufactures Name & Model)*. Filter cartridges should be replaced when the filter indicates such. For *(Manufactures Name & Model)*, *(Insert Statement on How Indication is Shown on the Specific Model)*.

Should you require additional filter replacement cartridges within 6-month period, please call *(Appropriate Contact Information)* to exchange previously used filter replacement cartridges with new filter replacement cartridges.

- 5) Clean faucet aerators/screens every 3 to 4 weeks.
- 6) Please remember to take a lead water sample in your home 3-6 months after your service line replacement using the sampling kit and instructions provided by the city or its contractor. See separate informational letter for sampling instructions.

**MANUFACTURER'S INSTRUCTIONS  
(TO BE DETERMINED)**



## **Lead Service Line Replacement Program**

### **Sampling Instructions**

*This notice contains important information about your drinking water.  
Have someone translate it for you or speak with someone who understands it.*

Dear Water Customer,

For the City of Monmouth, the health and safety of the public is our top priority. We deliver safe, clean water to our community and are taking action to ensure that continues into the future through the replacement of service lines made of lead or lead-containing materials throughout the city. A water service line is the pipe that connects your home or business to the water distribution system.

You are receiving this notice because some or all of the water service line to your property has been replaced as part of the Lead and Copper Rule Revisions (LCRR) (40CFR Parts 141 and 142, January 2021). Per LCRR requirements, the City of Monmouth is seeking a tap sample to be collected and analyzed at a laboratory within 3 to 6 months after the replacement of your water service. Follow the below instructions for the final step in the replacement process:

#### **Homeowner Tap Sample Instructions:**

1. Water must be stagnant in the pipes for 6-12 hours before sampling. Collecting samples early mornings or evenings after returning home are common times to ensure the water has been stagnant water.
2. Find a kitchen or bathroom faucet and remove any treatment device or filter. Place the open sample container below the faucet and gently open the cold-water tap. Fill the entire container.
3. Tightly cap the sample container, review the label, and fill out the top portion of the next attached page.
4. Place the sample kit outside the residence in the location of the kits delivery for department staff to pick up.
5. Results will be provided when reports are generated for the state unless excessive lead levels are found. In that case, you will be notified immediately.



**Woodard  
& Curran**

[woodardcurran.com](http://woodardcurran.com)