

# **LEAD FREE** is the WAY TO BE!

(Lead Service Line Replacement Project - Example Cover Letter and Application)

City of Bootheville P.O. Box 137 Bootheville, Minnesota xxxxx bootheville@gofast.net

February 6, 2024

Minnesota Department of Health DWRF Program P.O. Box 64975 St. Paul, Minnesota 55164-0975

Dear Revolving Fund Coordinator,

Enclosed is the Bootheville proposal to place the watermain (Main Street) and lead service line replacement projects (Main Street and East Side) on the fiscal year 2025 Drinking Water Revolving Fund Project Priority List.

Thank you for your consideration.

Sincerely,

Jean Boothe, Mayor

**Enclosures** 

cc: Janet Meyers, Meyers Planning and Engineering

# Lead Service Line Replacement Application (Example Application-Including Watermain)

# **Project Priority List**

## **Project Owner**

City of Bootheville

## **Project Name**

Watermain Replacement (Main Street)
Lead Service Line Replacement (Main Street)
Lead Service Line Replacement (East Side)

#### Contacts

#### **City Representative**

Jack Leech, City Administrator City of Bootheville P.O. Box 137 Storm Prairie, MN xxxxx 507-860-xxxx bootheville@gofast.net

#### **Proposal Writer**

Janet Meyers
Meyers Planning & Engineering
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Slide Rule, MN xxxxx
320-439-xxxx
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## **Community Statistics & Population**

Bootheville is located in Buffalo County, Minnesota. Incorporated in 1869, the economy was based on agriculture and light industry. A recent distribution center has added 40 new full time jobs. The company is expecting to double the number of employees in the next five years.

Current Population: 1283 Current Households: 513

Projected 2030 Population: 1345

2022 Median Household Income: \$38,472

## System description

#### General

The public water system consists of two municipal wells, an iron & manganese filtration plant, one elevated storage tank, and a distribution system that serves all developed properties within the corporate city limits. The average water use in 2022 was 240,050 gpd, and the maximum

#### EXAMPLE LSLR APPLICATION

water use was 552,114 gpd. Many of the water service lines in the older part of town are lead. All service connections are metered.

#### **Distribution**

The community is served by cast and ductile iron watermain. Most lines are four, six, and eight inches in diameter. The cast iron lines are primarily in the Main Street area and were installed in the early 1930's. The ductile iron watermain, which was installed in the 1970's is located throughout the rest of town. As a result of the recently completed service line inventory, a total of 350 services were found that need to be replaced (lead and galvanized requiring replacement). The ownership of the service lines is split between the city and homeowner. The city owns from the main to the curb stop and the homeowner is responsible from the curb stop to the house.

## **Need for Improvements**

#### **Watermain (Main Street)**

The city is planning on repaving Main Street next year. The Main Street watermain was installed in the early 1930's. There have been several watermain breaks in the last year along Main Street. One of the breaks resulted in a loss of pressure and caused the city to issue a Drinking Water Advisory. The city would like to replace the watermain and sanitary sewer in conjunction with the street repaving project. The city has applied to the Clean Water Revolving Fund for the sanitary sewer replacement.

#### **Lead Service Lines**

As mentioned above, the city completed its service line inventory and previously submitted the information to MDH. A total of 350 services were determined to need replacement. 300 of the services are lead service lines. 50 of the services are galvanized requiring replacement. The entire service line needs to be replaced for each service.

The Main Street watermain project area has 40 lead service lines and 10 galvanized requiring replacement services that need to be replaced. The east side of town area has 30 lead service lines that need to be replaced.

## **Alternatives**

The city would like to list the watermain replacement and lead service line replacement projects on the Project Priority List at this time.

## Watermain (Main Street)

The following alternatives were evaluated for the watermain distribution system:

- 1. **Replace Watermain under Main Street** Replace the old cast iron watermain under Main Street when the street repair is being done. Estimated cost \$2,640,000
- 2. **Do Nothing** People will continue to complain. Repairs will be ongoing for Main Street. Replacement costs will increase after Main Street has been repayed.

#### **Lead Service Line Replacement (Main Street)**

- Replace Lead Service Lines with Main Street watermain project Fully replace the 50 services needing replacement in the area during the Main Street watermain project. There are 40 lead service lines and 10 galvanized requiring replacement in the area. Estimated cost \$500,000
- 2. **Replace Lead Service Lines delayed** Fully replace the 50 service lines in the Main Street watermain replacement project area after the Main Street construction has finished. This will result in higher construction costs to dig up the new Main Street after it's done. Estimated cost \$750,000
- 3. **Continue City's Standard Practice** Continue to optimize corrosion control treatment while encouraging residents to replace their portion of the lead service. The city will replace the city portion if the resident chooses to replace their portion of the service line.

#### **Lead Service Line Replacement (East Side)**

- 1. **Replace Lead Service Lines** Fully replace the 30 lead service lines in the area. Estimated cost \$375,000
- 2. **Continue City's Standard Practice** Continue to optimize corrosion control treatment while encouraging residents to replace their portion of the lead service. The city will replace the city portion if the resident chooses to replace their portion of the service line.

#### **Prioritization Plan**

**Lead Service Line Replacement (Main Street)** – Due to the timing of the watermain and street project on Main Street, the city plans to replace the lead service lines in the area in conjunction with the Main Street project. This allows for the most efficient use of construction funds.

**Lead Service Line Replacement (East Side)** – The MDH LSL Health Equity Tool was used to evaluate the city and project area. The tool showed that this area has a higher than average percentage of kids with elevated blood lead levels. Kids under the age of 5 is 7.8% of the population. 73% of the people in the area live in lower income households. There are also several schools and childcare facilities in this area.

These projects will replace 80 of the 350 total services that require replacement in Bootheville. The Main Street area will replace 50 services and the east side area will replace 30 services. The remaining 270 services will be replaced in future projects.

## **Alternative Selected**

**Watermain (Main Street)** – Due to the timing of the repaving project, the city believes now is the best time to complete the watermain replacement on Main Street. This is scheduled for construction in 2025.

**Lead Service Line Replacement (Main Street)** – Due to the timing of the Main Street project, the city believes now is the best time to complete the 50 service line replacements on Main Street in conjunction with the watermain project. This is scheduled for construction in 2025.

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**Lead Service Line Replacement (East Side)** – The city would like to replace the 30 lead service lines in the area. This is scheduled for construction in 2025.

# Address List

The following service line addresses are proposed to be replaced during these projects:

Main Street		
101 Main Street	140 Main Street	
102 Main Street	202 Main Street	
103 Main Street	203 Main Street	
104 Main Street	205 Main Street	
106 Main Street	206 Main Street	
107 Main Street	208 Main Street	
108 Main Street	211 Main Street	
110 Main Street	212 Main Street	
111 Main Street	221 Main Street	
112 Main Street	224 Main Street	
114 Main Street	226 Main Street	
115 Main Street	227 Main Street	
117 Main Street	228 Main Street	
119 Main Street	229 Main Street	
120 Main Street	307 Main Street	
121 Main Street	308 Main Street	
123 Main Street	311 Main Street	
124 Main Street	312 Main Street	
125 Main Street	314 Main Street	
127 Main Street	317 Main Street	
128 Main Street	319 Main Street	
129 Main Street	321 Main Street	
131 Main Street	327 Main Street	
133 Main Street	334 Main Street	
134 Main Street	335 Main Street	

East Side		
802 E. Oak Lane	127 Crandall Street	
807 E. Oak Lane	134 Crandall Street	
811 E. Oak Lane	138 Crandall Street	
817 E. Oak Lane	141 Crandall Street	
820 E. Oak Lane	144 Crandall Street	
827 E. Oak Lane	514 Atrium Way	
834 E. Oak Lane	515 Atrium Way	

East Side		
835 E. Oak Lane	518 Atrium Way	
839 E. Oak Lane	521 Atrium Way	
842 E. Oak Lane	528 Atrium Way	
103 Crandall Street	531 Atrium Way	
107 Crandall Street	535 Atrium Way	
111 Crandall Street	542 Atrium Way	
114 Crandall Street	547 Atrium Way	
119 Crandall Street	551 Atrium Way	

# **Cost Summary**

#### Watermain (Main Street) - \$2,640,000

Description	Cost
Replacement Construction Costs	\$2,200,000
Engineering & Admin (15%)	\$ 330,000
Contingency (5%)	\$ 110,000
Total	\$2,640,000

#### Lead Service Line Replacement (Main Street) - \$500,000

Description	Cost
Replace 50 service lines @ \$8,000 each	\$400,000
Engineering & Admin (15%)	\$ 60,000
Contingency (10%)	\$ 40,000
Total	\$500,000

#### Lead Service Line Replacement (East Side) - \$375,000

Description	Cost
Replace 30 service lines @ \$10,000 each	\$300,000
Engineering & Admin (15%)	\$ 45,000
Contingency (10%)	\$ 30,000
Total	\$375,000

# **Project Schedule**

## **Watermain Replacement (Main Street)**

Engineering Plans and Specifications: February 2025

Bid Project: April 2025 Award Contract: May 2025

#### EXAMPLE LSLR APPLICATION

Begin Construction: June 2025

Substantial Completion: August 2025 Final Completion: September 2025

#### **Lead Service Line Replacement (Main Street)**

Engineering Plans and Specifications: February 2025

Bid Project: April 2025 Award Contract: May 2025 Begin Construction: June 2025

Substantial Completion: August 2025 Final Completion: September 2025

#### **Lead Service Line Replacement (East Side)**

Engineering Plans and Specifications: February 2025

Bid Project: April 2025 Award Contract: May 2025 Begin Construction: June 2025

Substantial Completion: August 2025 Final Completion: September 2025

## Water Supply Plan

A plan was submitted to the Minnesota Department of Natural Resources in January 2018. It was reviewed, revisions were made, and the plan was approved in August 2019.

## Miscellaneous

Maps of the project areas are included. The maps include Main Street and East Side project areas. Properties with proposed service line replacement are noted on the maps.

# Main Street Project Area

Green represents area of watermain construction on Main Street

Pink represents properties for service line replacement



# East Side Project Area

Pink represents properties for service line replacement

