

CITY OF BEL AIRE
STAFF REPORT

DATE: August 8, 2022
TO: Ty Lasher, City Manager
FROM: Dave Leiker, Public Works Director

RE: Aurora Park and 41 St. Waterline Replacement Proposal

SUMMARY

The water distribution system maintenance program covers the replacement of old non-radio read water meters, the replacement of old outdated fire hydrants and water lines. We also focus on water tower(s) and pump house maintenance and upgrades. This report is for the recommendation of water line replacements in two different subdivisions.

HISTORY

Generally cast iron pipes have offered us the most maintenance and problems as of recently and most of these pipes are 50-60 years old. Unlike ductile iron pipe which was introduced in the late 60's, cast iron pipes are susceptible to "graphitic" corrosion where which an electrochemical reaction occurs between the cathodic graphite component (flakes) and the anodic iron matrix causing metal loss. This process creates cracks and holes in the pipe which leak. Listed below are water lines that were replaced from 2019-2021 and all these lines were cast iron.

Previous water lines replaced:

Year	Neighborhood	Street (section)
2019	Aurora Park	39 th St. N (Harding to Parkwood)
2019	Aurora Park	Parkwood 38th St. to 39 St.
2019	Aurora Park	Parkwood (39th St. to 40th St.)
2020	Aurora Park	Parkwood 40th to Eagle Lake Park)
2020	Aurora Park	40th St. (Edgemoor to Parkwood)
2021	Woodlawn	Lines replaced as part of street project

DISCUSSION

The city has studied areas of town that are in need of water line replacement and have prioritized these lines based on pipe size, repair history, and pipe material. The following water lines have been identified for replacement and are prioritized and listed below:

2022

1. Aurora Park - 40th St (Oliver to Harding)
2. Aurora Park - Battin (Harding to dead end)
3. Pearson's - 41st St. (Edgemoor to Danbury)

2023

4. Lawn Terrace – Krueger (46st N. to Harding)
5. Lawn Terrace – Harding (Kruger to 48 St.)
6. Pearson's - Hanover (Auburn to Janesville)

Repairs are costly and do not always happen during normal working hours, yard restoration is required in most cases and driveways and sidewalks are replaced sometimes as well. Looking at records, staff has made a total of thirteen waterline repairs since 2019, all in the targeted areas in the replacement plan. In fact, we just had a line break Aug 8th 9:00 AM Saturday on 41 St., this is the second repair made at this location.

Staff has solicited bids from five local companies for the replacement of the waterline on 41 St. in Pearson's Addition and two sections in Aurora Park. These were bid separately and four companies responded. Deadline for proposals to be submitted was 8/5/22.

41st Street Water Line Replacement	Price
Utility Maintenance Contractors LLC.	\$ 210,771.00
Nowak Construction	\$ 217,030.00
Mies Construction	\$ 302,552.84
McCullough Excavation	\$ 462,500.00
Apex Excavating LLC.	No bid

Aurora Park Water Line Replacement	Price
UMC	\$ 219,717.00
Nowak	\$ 255,400.00
Mies	\$ 303,905.31
McCullough	\$ 637,500.00
Apex	No Bid

RECOMMENDATION

Staff recommends selecting the lowest bidder on these projects.

Utility Maintenance Contractors, LLC	
Pearson's - 41st St.	\$210,771.00
Aurora Park - 40th St & Battin	\$219,717.00
TOTAL	\$430,488.00