



SHAKER HEIGHTS

Memorandum

To: Members of Council

From: Ramona Lowery-Ferrell, Director of Public Works

cc: Mayor David E. Weiss
Chief Administrative Officer Matthew Carroll
Shannon Marlin, Public Works Building Superintendent

Date: January 26, 2026

Re: Backflow Preventer Inspection and Service Contract

The Cleveland Water Department's water distribution system provides water to the City of Cleveland and most of the communities around the Cleveland area. CWD draws its water from Lake Erie. CWD then filters, treats and tests the water before it enters the distribution system. This allows communities to conveniently receive reliable quality potable water for their use. Each of the Shaker Heights' city buildings receive their water supply from the Cleveland Water Department's distribution system.

There are many factors that help keep the water supply safe. One of these factors is water system integrity control. If pressure within the system reduces then water which is within buildings could flow backward and enter the distribution system. All commercial and industrial buildings are required by law to have a functioning backflow preventer valve. The backflow preventer stops water that is in the building from flowing back into the CWD system and taking any impurities with it. Commercial buildings also use backflow preventers on treated water loops, like boiler water heating loops, to keep chemically treated water from entering the building's potable water system. All of these backflow locations are designed and intended to keep the water supply and its users safe. By law, every backflow must be tested once each year to ensure that it is functioning properly. Any valves that fail testing must be repaired or replaced. The city's backflow preventer valves range in size from 3/4" to 6" in diameter. Valves that are over 2 1/2" in diameter are considered large valves. In total, there are 31 backflow preventer valves in the City's different facilities.

The City issues multi-year Requests for Quotes to ensure reasonable rates for the Backflow Preventer Maintenance Program. The contracted backflow maintenance program provider for the 2024 – 2027 period is Brakefire Inc dba Silco Fire and Security.

Many of the city building's backflow preventer valves are coming to the end of their useful life. The average price to repair a small valve is \$1,316.50 and for a large valve is \$7,122.50. The average price to replace a small valve is \$1,731.50 and for a large valve is \$15,352.00. See the below table for a summary of activity for 2024 and 2025. The current costs of the 2025 backflow preventer valve repairs and replacements are \$43,259.00. There are additional valve repairs and replacements which will make the 2025 total \$62,188.00; this is over the \$50,000 threshold that would require formal competitive bidding.

Year	Inspection Fee Paid	Failed Testing	Repaired	Replacement required	Cost for Repairs & Replacements
2024	\$4,612.50	13	11	2 – completed	\$25,602.00
2025	\$4,612.50	15	12	1 – completed, 2 – pending	\$57,575.50

Public Works presented our recommendation to Safety and Public Works on January 9, 2026 and there was unanimous support.

Council member Chengelis inquired about the typical service life of a backflow preventer valve. It was noted that many of the valves are over 10 years old, but several factors including water main breaks may affect the life of the valve.

Citizen member Hren asked if the work had been completed. No, the contract will need to be increased in order to finish the work.

Public Works presented our recommendation to Finance on January 20, 2026 and there was unanimous support.

We are requesting City Council waive competitive bidding due to the emergency nature of this contract; it is imperative to complete the 2025 Backflow Maintenance as quickly as possible. Additionally, we request to amend the agreement with Brakefire Inc to increase the contract value to \$62,188.00. We request that this be passed as an emergency and under suspension of the rules.

ORDINANCE NO.
BY:

Authorizing the purchase of backflow prevention valves repair services and replacement valves from Brakefire Inc. dba Silco Fire and Security at a cost of \$62,188, and waiving public bidding, and declaring an emergency.

WHEREAS, during 2025 the Public Works Department found backflow preventer valves in many City buildings were coming to the end of their useful life and a number of valves needed urgent repair or replacement at a cost of \$62,188; and

WHEREAS, the City has used the services of Brakefire Inc. dba Silco Fire and Security for the inspection of the valves under a three-year contract, through 2026, and Brakefire discovered the valves needing repair or replacement and conducted the necessary urgent work for the City in 2025; and

WHEREAS, pursuant to Section 141.03 of the Codified Ordinances this Council has the authority to waive competitive bidding for an expenditure over \$50,000 for an urgent emergency.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Shaker Heights, State of Ohio:

Section 1. This Council declares that, pursuant to Section 141.03 of the Codified Ordinances, it hereby waives public bidding and authorizes the purchase from Brakefire Inc. dba Silco Fire and Security of backflow prevention valves repair services and replacement valves in the total amount of \$62,188.

Section 2. This ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health, safety and welfare for the reason that it is necessary in the current operation of the City as an urgent emergency and, therefore, this ordinance shall take effect immediately upon its enactment and approval by the Mayor.

Enacted

Approved this _____ day of _____, 2026.

DAVID E. WEISS, Mayor

Attest:

MATTHEW P. CARROLL
Clerk of Council
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