



**Date:** December 4, 2012  
**To:** Thomas J. Bonfield, City Manager  
**Through:** Keith Chadwell, Deputy City Manager  
**From:** Donald F. Greeley, Director, Water Management  
Vicki Westbrook, Assistant Director, Water Management  
Jerry F. Morrone, Utility Engineering Supervisor  
**Subject:** Contract CCC-1 - Residential Backflow Prevention Assembly Testing and Repair Contracts

### Executive Summary

The City of Durham Department of Water Management requires the annual testing of all backflow prevention assemblies (BPA) connected to the City of Durham distribution system. This requirement includes irrigation systems installed on residential properties connected to the City's system. Tests must be conducted by testers licensed with the City of Durham; once tests are complete, reports must be filed with the Cross-Connection Control Program within the Department. If a test fails, indicating a lack of adequate backflow prevention, repairs to the assembly are required within 30 days of the test failure. To assist residential customers in completing annual backflow preventer testing requirements, the Department will initiate a new Residential Backflow Prevention Assembly Testing Program beginning in 2013. Residential customers will be allowed to "opt-in" and allow the City of Durham to manage the annual testing and repair process. If residential customers choose not to "opt-in" they will be responsible for the annual testing with a certified contractor.

Customers choosing to participate in the program will be assessed an annual fee for the annual testing. The Department does not have staff to perform the testing so the testing will be contracted out to certified companies. The Department solicited proposals from certified companies to perform the work and are recommending the City enter into two-year contracts with Acme Services of Durham, Inc (dba Ben Franklin Plumbing) and Brown Brothers Heating Plumbing Company, Inc (Brown Brothers).

### Recommendations

The Department of Water Management recommends that the City Council:

1. Authorize the City Manager to execute two year contracts with Acme Services of Durham, Inc, and Brown Brothers Plumbing and Heating, Inc for the 2013-2014 Residential Backflow Prevention Assembly Testing and Repair Contract for the amounts of \$68,000.00 and \$71,000.00, respectively
2. Authorize the Department of Water Management to assess participating customers \$67.50 per year in the first year of the contract, and \$68.50 per year for the second year of the contract.
3. If repairs are needed to bring the Backflow Prevention Assembly into compliance, authorize the Department of Water Management to assess participating customers \$75/hour for necessary repairs in the first year of the contract, and \$76/hour for necessary repairs in the second year of the contract.

**Background**

Chapter 70, Article 7 of the City of Durham Ordinance sets forth uniform requirements for all non-potable connections to the City’s potable water system. One such requirement is the annual testing of backflow preventers. After an approved backflow prevention assembly has been installed, inspected and tested, it must be re-tested annually by individuals who have been certified by an approved testing school. Currently, there are 3,822 backflow preventers for irrigation and 10,560 backflow preventers for non-irrigation purposes that are tracked by CCC staff. There are 4,781 customers that must maintain and have their backflow preventers annually tested. The City maintains a list of approved testers from which customers may choose; the list is posted on the webpage and a web link is provided in the annual testing notification letter. Testers approved by the City of Durham are also approved to test in other jurisdictions that have reciprocity with the City of Durham. Likewise, testers approved by other jurisdictions with reciprocity are accepted for testing in the City of Durham.

To assist residential customers in completing annual backflow preventer testing requirements, the Department will initiate a new Residential Backflow Prevention Assembly Testing Program beginning in 2013. Residential customers will be allowed to “opt-in” and allow the City of Durham to manage the annual testing and repair process. If residential customers choose not to “opt-in” they will be responsible for the annual testing with a certified contractor.

Customers choosing to participate in the program will be assessed an annual fee for the annual testing. The contract establishes unit prices for annual testing for each year of the contract, the fee charged to the participating customers an average of each contract year. The contract also establishes hourly unit prices for repairs to BPAs that do not pass the test; the hourly fee charged to customers is an average of the contract prices provided by each contractor for each contract year. The Department does not have staff to perform the testing so the testing will be contracted out to certified companies.

**Issues and Analysis**

The Department solicited proposals from Contractors to perform these tests for residential irrigation customers and to make minor repairs as required to ensure adequate backflow prevention. The Contractors, once selected, would be utilized in a residential BPA testing program administered by the Department. The solicitation requires the Contractor to perform the testing of approximately 400 BPAs per year: approximately 100 hours of minor repairs are anticipated. The Contract term will be for two years, with unit prices provided for each of the two years of the contract.

The Department received proposals from proposed Contractors for the above-referenced testing and repair contract. An addendum to the request for proposals was issued to include the option that the City may contract with two Contractors to perform the work. The proposals were evaluated based upon the firm’s demonstration that it has the best combination of qualifications, experience and price to perform the proposed work.

Below is a summary of the seven proposals received:

Plumbing and Pipe Technologies	\$55,000.00
Tom Bacon Plumbing, Inc	\$55,400.00
PlumbV	\$57,800.00
Acme Services of Durham, Inc	\$68,000.00*

Brown Brothers Plumbing and Heating	\$71,000.00*
Blake Quality Plumbing Services	\$75,000.00
Sparrow and Sons	\$85,000.00

\*Contractors recommended for award

The two Contractors recommended for award displayed significant experience testing and repairing residential BPAs, and maintain the required staffing levels to meet the testing requirements listed above. The Contractors not recommended for award either are more expensive than the selected firms, did not submit the required EO/EA documentation or could not demonstrate significant testing experience or sufficient staffing.

**Alternatives**

One alternative would be to reject all proposals and require affected customers solicit proposals from contractors directly. This alternative is the current system. Under this alternative, customers would contact licensed plumbers and schedule the testing and necessary repairs without City involvement. Customers would likely see widely varying prices for this service under this alternative, and would bear the risk of underperforming or nonresponsive contractors. These impacts to customers have been experienced in the past and would likely continue.

A second alternative would be to reject all proposals and perform all tests and repairs with City staff. City staff does not currently have the availability or funding to perform this level of service, and additional staffing would be necessary to fulfill this obligation. City staff could also not perform the testing in the time frame required for less than the pricing received in the proposals.

**Financial Impacts**

For budgetary purposes, the Department will fund this initiative with revenue charged to the customer for these services recorded in a new account 5100P650101 Backflow Device Inspection. Such charges will be posted to the customer’s water account, minimizing cost and effort of collection. Expenditures will be budgeted as Special Contractual Services in the division of Regulatory Compliance 5100P200-728600. Any customer who elects to use an outside contractor may do so, but will be responsible for paying that contractor and complying with all other requirements under the current inspection and notification process which shall remain in place.

**SDBE Summary**

The Equal Opportunity/Equity Assurance Department reviewed the proposals submitted by Acme Services, dba Ben Franklin Plumbing Durham, NC and Brown Brothers Plumbing and Heating, Inc and has determined that they are in compliance with the Ordinance to Promote Equal Business Opportunities in City contracting.

**SDBE REQUIREMENTS**

There were no goals for this project.

**Workforce Statistics**

Workforce statistics are as follows:

	Acme Services of Durham		Brown Brothers Plumbing and Heating, Inc	
Total Workforce	20		93	
Total Females	3	15%	6	7%
Total Males	17	85%	87	93%
Black Males	2	10%	15	16%
White Males	15	75%	67	72%
Other Males	0	0%	5	5%
Black Females	1	5%	0	0%
White Females	2	10%	6	7%
Other Females	0	0%	0	0%