

# CITY OF WARRENVILLE

## MEMO

To: Mayor, City Council, and City Administrator Coakley  
From: Deputy Public Works Director Kuchler   
Subject: Aqua Backflow for Cross-Connection Control Program  
Date: Updated April 5, 2017

The purpose of this memorandum is to explain what a cross-connection control program is, why it is necessary, and why staff is recommending the use of Aqua Backflow for this service.

### **Cross-Connections**

Each City water customer who uses the City's potable (drinking) water for a non-potable use, such as irrigation of their lawns and some types of fire suppression systems, is required to install a device to prevent the backflow of non-potable water into the potable water system ("backflow preventer"). The purpose is to protect the City's potable water system from possible contamination. The Illinois Plumbing Code requires the installation and annual inspection of backflow preventers.

The Illinois Environmental Protection Agency (IEPA) requires the City to have a cross-connection control program. As part of this program, the City is required to have a cross-connection control ordinance, survey water customers for information on their backflow preventers every 2-3 years, and receive and maintain a file of all inspection reports for each backflow preventer. The City has an ordinance and receives reports, but does not have detailed information on every backflow preventer. Staff receives and files reports, but currently does not have the time to organize and review those reports, let alone follow up to make sure that all known backflow preventers are inspected and results reported.

### **Staff Recommendation**

Staff worked with the City Attorney to review the City's existing cross-connection control ordinance which is located in section 7-4A-18 of the City Code. The City Attorney provided the attached *Exhibit A* with proposed changes to the City Code, with some staff input.

Many communities utilize a private third party to administer their programs. The cost to the community is nominal compared to the amount of staff time that would be required to administer this program in-house. Staff obtained and considered proposals from three different companies to administer this program for the City. All three companies would provide cross-connection control data management, backflow preventer and tester tracking, and public education for the City's cross-connection control program. There are various options for this service.

Staff is recommending a three year contract with Aqua Backflow, Inc. of Elgin, for their base program at no cost to the City. Their proposed Cross-Connection Control Program Services document is attached as *Exhibit B*, and their proposed contract is attached as *Exhibit C*.

A representative of Aqua Backflow was present for the discussion at the March Committee of the Whole Meeting when this item was first discussed. Afterward, Aqua Backflow offered to eliminate the annual City costs. When the required annual inspections are completed by the backflow preventer owner's inspector, the inspector will be required to file the report online for a fee of \$9.95 each, paid to Aqua Backflow. This fee is slightly lower than the other two companies considered, which were \$12.95 and \$12.00 each. The inspector will pass this cost through to the owner of the device.

Aqua Backflow will send "test due" notifications to the customer, and if necessary, "past due" and "final notice" notifications. If the device fails its inspection, "test failure" notifications will be sent. Ultimately, if the customer does not comply with this requirement, their water could be shut off until they comply, as the City cannot risk contamination of its potable water distribution system.

***Staff is recommending that City Council pass an ordinance adopting changes to section 7-4A-18 of the City Code, and approving a three year contract with Aqua Backflow, Inc. of Elgin, to administer the City's cross-connection control program at no cost to the City.***

Staff is recommending this contract with Aqua Backflow, because of their experience with thirty Illinois communities in the cross connection control field. Of the companies considered, they have the best combination of experience and price for both the City, and the owners of the backflow prevention devices.

## CITY OF WARRENVILLE CODE

## 7-4A-18.5: SURVEY AND INVESTIGATIONS:

A. The consumer's premises shall be open at all reasonable times to the approved cross-connection control device inspector for the inspection of the presence or absence of cross-connections within the consumer's premises, and testing, repair and maintenance of cross-connection control devices within the consumer's premises.

B. On request by the Director of Public Works superintendent of water, or his authorized representative, the consumer shall furnish information regarding the piping system or systems or water use within the consumer's premises. The consumer's premises shall be open at all reasonable times to the Director of Public Works superintendent of water for the verification of inspections, information submitted by the consumer to the city regarding cross-connection inspection results.

C. It shall be the responsibility of the water consumer to obtain and pay for annual surveys and associated reporting requirements of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system. All cross-connection control or other plumbing inspections must be conducted in accordance with Illinois Revised Statutes 1987, ch. 111, paragraph 1103(1) Illinois Plumbing Code Section 890.1130 (g)(5).

D. It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

1. All cross-connections are removed; or approved cross-connection control devices are installed for control of backflow and back-siphonage.

2. Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.

3. Cross-connection control devices shall be inspected at the time of installations and at least annually by a person approved by the State of Illinois Agency as a cross-connection control device inspector (CCCDI) in accordance with Illinois Plumbing Code Section 890.1130(b). The inspections of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.

4. Testing and Records:

- a. Each device shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer.

b. Records submitted to the City shall be available for inspection by State Agency personnel in accordance with Illinois Revised Statutes 1987, ch. 111<sup>1/2</sup> paragraph 1004(e), appropriate Illinois Statutes, codes and administrative law.

c. Each device shall have a tag attached listing the date of most recent test, name of CCCDI, and type and date of repairs.

d. A maintenance log shall be maintained and include:

- (1) Date of each test;
- (2) Name and approval number of person performing the test;
- (3) Test results;
- (4) Repairs or servicing required;
- (5) Repairs and date completed; and
- (6) Servicing performed and date completed.

#### **7-4A-18.9: INSPECTION AND MAINTENANCE:**

A. It shall be the duty of the consumer at any premises on which backflow prevention devices required by these regulations are installed to have inspection, tests, maintenance and repair made in accordance with the following schedule or more often where inspections indicate a need or are specified in manufacturer's instructions.

1. Fixed proper air gap separations shall be inspected to document that a proper vertical distance is maintained between the discharge point of the service line and the flood level rim of the receptacle at the time of installation and at least annually thereafter. Corrections to improper or bypassed air gaps shall be made within twenty four (24) hours.

2. Double check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within five (5) days.

3. Reduced pressure principle backflow prevention assemblies shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five (5) days.

B. Testing shall be performed by a person who has been approved by the State of Illinois Agency as competent to service the device. Proof of approval shall be in writing.

C. Each device shall have a tag attached listing the date of most recent test or visual inspection, name of tester, and type and date of repairs.

D. A maintenance log shall be maintained and include:

1. Date of each test or visual inspection;
2. Name and approval number of person performing the test or visual inspection;

3. Test results;
4. Repairs or servicing required;
5. Repairs and date completed; and
6. Servicing performed and date completed.

E. Whenever backflow prevention devices required by these regulations are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay as required by subsection A hereof.

F. Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the Director of Public Works Superintendent of Water.

G. Copies of all test results shall be forwarded immediately to the Director of Public Works or his designee at the time of each inspection as described in Section 7-4A-18.5 of this Chapter. Contractors who perform such testing are required to electronically submit all compliant and non-compliant reports to the City of Warrenville Director of Public Works via a method approved by the Director of Public Works, which may include the filing of reports with a third party contractor and the payment of any filing fees.

March 21, 2017

### - Cross Connection Control Program Services -

**This proposal/information packet is being provided to:**

John Satter  
Responsible Water Operator In-Charge  
City of Warrenville  
3S258 Manning Ave  
Warrenville, IL 60555  
Phone (630) 836-3051  
E-Mail: [jsatter@warrenville.il.us](mailto:jsatter@warrenville.il.us)



**This proposal/information packet is being provided by:**

Tom Staroske  
Chief Operating Officer  
Aqua Backflow, Inc.  
977 Elizabeth Street  
Elgin, IL 60120  
Phone: (866) 777-2124  
Fax: (866) 777-2125  
E-Mail: [tom@aquabackflow.com](mailto:tom@aquabackflow.com)



Respectfully Submitted by:

(signature)

*The information contained within this packet may be proprietary and is true and complete to the best of my knowledge.*

3/21/17

(date)

***Aqua Backflow is pleased to submit our qualifications and interest in providing professional Cross Connection Control and/or FOG consulting and management services to your community. Our professional services are available to begin immediately upon award of the contract***

# Aqua Backflow

977 Elizabeth Street, Elgin, IL 60120 (847) 742-2296 (847) 214-9696 fax

Protecting your water supply from contamination

[www.AquaBackflow.com](http://www.AquaBackflow.com)

[www.TrackMyBackflow.com](http://www.TrackMyBackflow.com)

John Satter  
City of Warrenville  
3S258 Manning Ave  
Warrenville, IL 60555

Dear John,

March 21, 2017

Thank you for the opportunity to provide you with a guide to our professional services. As you will see by the information in this packet, Aqua Backflow has a unique approach to solving a decades old paper-consuming and data entry nightmare.

Aqua Backflow utilizes a specialized SQL computer program specifically designed to allow us tracking and management capabilities of multiple communities with immediate and easy access to all data.

Each and every tracking program is unique and is set up to the specifications or requests of the water purveyor. We can and will assist with test bids, installation bids, site surveys and/or inspections, and more. Remember too, that all forms and letters can be customized to you.

Just one interesting feature of our program is our available Hazard ID tracking system. A tag can be sent to each hazard location and is hung on the hazard. The online data entry website is listed on the tag as well as the water hazard and a Hazard ID #. The water purveyor or municipality name is on each tag as well. The Hazard ID number never changes...not even if the backflow preventer is replaced! A QR Code is also on the tag for easy scanning and data entry via tablet or smart phone while at the test site. There is no additional cost for tagging.

In review, Aqua Backflow truly is unique and innovative. Not only will your program be effective, eco-friendly, and low cost, it will also be easy to use for your local testers. We regularly receive testimonials from backflow testers stating that they love the simplicity of our program, love dealing with our courteous staff, and have also noted that they have seen an increase in work since we took over the program. Water purveyors love us too, as witnessed by the accolades Aqua Backflow receives from its many customers.

There is no cost to you for this program - NOTHING! Utility-owned assemblies are entered by your tester at no charge. New installations are entered by our staff at no cost. Note too that you can lock in your contract pricing for up to 3 years! (We have never raised our prices!)

Thank you again for your time and consideration. Feel free to contact me if you have any questions.

Sincerely,



Tom Staroske  
Chief Operating Officer



## Cross Connection Control Program Services

### City of Warrenville, IL

March 21, 2017

Population: 13,368                      Total Water Connections: 4,400                      Non-Residential Connections: 400 (est)  
 Total Backflow Preventers: 500 (est)                      Total Utility-Owned Backflow Preventers: 15 (est)

► **BASE PROGRAMS:** Add this cost to all options ..... Purveyor Annual Cost .....\$ N/C

*BASE PROGRAM includes:* Notifications, educational material, creation of database, software, maintenance, secure online water purveyor dashboard with full real-time data access on a mobile platform, and much more! *Also includes:* Tracking all backflow preventers, testers, testing companies, test kits & calibrations, etc. for annual certifications.

Base program is tester funded whereby testers pay \$9.95 per test submission entered online.

► 1-3 year contract: Initial here \_\_\_\_\_ to accept Base Program for \_\_\_\_\_ years

**SAMPLE OPTIONS**  
*based on the quantities shown above*

**OPTION #1: Utility funded** - Initial here \_\_\_\_\_ to accept this option for \_\_\_\_\_ years

► 1-3 year contract includes *BASE PROGRAM* above

Testers pay (\$ 0.00ea) for entering test results online.....Estimated Purveyor Annual Cost     \$ 4,975.00

**OPTION #2: Tester funded & revenue generator** - Initial here \_\_\_\_\_ to accept this option at \$ \_\_\_\_\_ for \_\_\_\_\_ years

► 1-3 year contract includes *BASE PROGRAM* above

EX: Testers pay (\$ 19.95ea) for entering test results online.....Estimated Purveyor Annual Cost     <\$5,000.00>

Any amount can be used as a tester fee. The water purveyor selects the fee to be implemented. Amounts above our minimum cost of \$ 9.95 per test can be utilized to help cover other purveyor administrative costs (surveys, site visits, etc.) and can be banked or returned via check, funds transfer, similar to the water purveyor monthly, quarterly, or annually.

**ADDER:** Initial here \_\_\_\_\_ to accept this adder (Can be added to base program, Option #1, or Option #2)

► Send registered & certified 3<sup>rd</sup> (Final) Test Due Notices at \$10 additional cost per test result filed after test due date

*Costs and revenues are estimated and are based on the quantity of tests entered each month.*

**Mailed Surveys:** (required biennially by the IEPA) *Initial here to accept:* Service a) \_\_\_\_\_ Service b) \_\_\_\_\_

a) Template by us. Printed, stuffed, and mailed by you. Tracked by Aqua..... \$ 1.00 ea

b) Template, printed, stuffed, mailed, and tracked by Aqua Backflow..... \$ 1.45 ea

Aqua Backflow includes free easy-access survey forms online for your water customer to complete. Most surveys are returned in this manner.

**Notes:**

\* Other than what is noted on this page, there are no start-up, program, registration, tester, or filing fees.

\* Purveyor-owned backflow preventers do not incur any data entry filing fees

*Aqua Backflow recommends Base Program or Option #2 as your annual cost will never change. Realize that any utility-funded program may see an increase in costs as more backflow preventers are found and are placed into the system.*

## Scope of Services

### *Program and scope of work:*

1. Track all existing as well as newly found and/or installed backflow assemblies
2. Track all testers, tester licensing, certifications, test kits and annual test kit calibrations.
3. Track the testing companies, employees, licensing, and certifications.
4. Track the quality and skill level of the testers. Verify that they are performing the tests per recommended practices.
5. Send notifications of “test due” to the customer. Educational tri-fold brochure included
6. Send notifications of “past due” to the customer
7. Send notifications of “final notice” via registered/certified mail to the customer *(only if approved by the utility as there are additional costs associated with this service...can be funded by increased test entry fee)*
8. Send “test failure” notices for backflow tests that have been submitted to us indicating a test failure.
9. If the water purveyor has a cross connection control inspector, we will work with him/her to gain compliance. “Installation Due” notices, follow-up notifications, and compliance are all included.
10. We will train and educate your employees and local testers about your program.
11. We will educate the public with mailers, brochures, written newspaper articles, informative websites, by answering phones with educated office employees, etc.
12. ALL letters, brochures, educational material, etc are fully customized to each water purveyor.
13. Educational brochures will be forwarded to water customers as needed. We include a brochure in our initial and 2<sup>nd</sup> year contact letters with your water customer. The Purveyor will also receive up to 300 additional brochures annually to pass out as it pleases.
14. We will receive an electronic Excel, Access, or similar database and your loose test reports from you initially listing all water connections, backflow prevention devices, contact/ mailing information etc. We immediately begin tracking of the existing backflow prevention assemblies.
15. Once testers are registered, they are issued a user name and password. Data is easily entered into our TrackMyBackflow.com website by using the Hazard ID assigned to each device or by serial number and/or address. *Each CCC hazard is given an ID tag. The tag and # stays with the hazard indefinitely!*

## **Scope of Services**

(cont'd)

16. We encourage online data entry but will allow and accept occasional “off-line” backflow test results for those testers that do not have access to a computer or are computer illiterate. Off-line fees apply.
17. Our offices are fully staffed from 7am – 5pm Central Time daily. We can be reached via our toll-free phone number, fax, or email at any time during the business day & nights/weekends for emergencies.
18. Utility staff will also receive emergency contact information and can reach us 24 hours a day.
19. There are never any licensing costs, software upgrade fees, new release expenses, hardware costs...we are all-inclusive. GIS and GPS integration is available. Utilities have unlimited user access to all data.
20. Large utility customers such as hospitals, universities, etc can be invoiced directly through us.
21. You and your staff will have full online access to all tester, backflow, customer, customer and/or tester notes, reports, photographs, and much, much more through your unique and secure Utility Dashboard. Sample reports may include: Tests Due, Tests Past Due, New Assemblies Entered, Letters Sent, and any other report you may desire from our database. If you would like a specialized report, we can create and store that report template for you.
22. At this point, most functions of your program will operate out of our corporate Elgin, IL offices. We are just a few minutes away from you and will hire additional professional, experienced staff in your area as the need arises.
23. Your utility will not need any special hardware, software, equipment, training, or anything to access your data online. A basic computer workstation, laptop, tablet, smart-phone, etc. is all that’s needed!
24. We have included the computer software and data entry costs of adding your database into our systems.
25. Aqua Backflow cannot be held responsible for tester mistakes, items and/or overlooked water connections during surveys, circumstances beyond our control, etc and does not accept liability or responsibility for any errors or omissions.
26. All data received on behalf of the water purveyor or directly from the water purveyor remains the property of the water purveyor. Water and backflow information is kept in the strictest confidence and is not accessible or distributed to anyone without the express written consent of the water purveyor. Upon completion of the contract, all paper and electronic files will be returned to the water purveyor.
27. Informational and/or tracking websites maintained by us:  
www.AquaBackflow.com      www.BackflowCases.com      www.TrackMyBackflow.com  
www.TrackMyFOG.com

## **Corporate Background...The Aqua Backflow Organization:**

What differentiates our organization, programs, and services from others? Aqua Backflow has earned a nationwide reputation for proactive, innovative, and professional cross connection control services and management. With over 50 years in the plumbing and backflow prevention industry, we have strived to develop programs that meet the needs of our customers, ensuring that you will receive the best possible services while conserving your and your water customers' dollars. John Skirmont is president, while Tom Staroske is the Chief Operating Officer and both direct the company from corporate offices in Elgin, Illinois along with expert consultants and software, programming, and other intellectual technology professionals. Our support staff is second to none.

While there are many attributes that set us apart from others in this industry, a few of these we consistently hear from our customer-partners include:

### Customer Service = Customer Loyalty:

Our ability to customize to meet our customer's needs is unsurpassed. Aqua Backflow is consumer focused and result driven and as such, we can customize services according to a customer's needs & requirements rather than trying to make a client fit "our box." While Aqua Backflow is recognized as a leader in the industry, we try to maintain the "small company" approach to customized and personalized service. Even though we are living in a society where names rarely matter, we feel it is important to know and build relationships with customers and we do that by continued contact and visits to our customers.

### Staff:

Aqua Backflow's office and field staff set us apart from our competition. Our average in-field of expertise time is 8 years. Most have numerous cross connection control certifications for surveying, ordinance creation, and/or program management. All have been professionally trained in customer service, software programs, plumbing issues, and backflow prevention. Staff walks a fine line as strong and compassionate advocates for your water customers, while working to gain regulation compliance in order to protect your water distribution systems.

### IT:

Aqua Backflow has a very strong internal IT department with programmers on staff, as well as long-term relationships with several software, hardware, and web development professionals. This allows us to offer immediate problem solving solutions to any issues that may arise. In addition, specialty reports can be programmed to meet the customer's needs rather than only giving a customer the option of utilizing "canned" report data.

# Aqua Backflow

Exhibit C

## CONTRACT

### *Cross Connection Control Program*

This agreement is made this March 21, 2017 by and between, and shall be binding upon, the City of Warrenville herein after referred to as (the “Purveyor”) and Aqua Backflow, Inc, an Illinois corporation licensed throughout the U.S. (the “Contractor”).

Witnesseth that in consideration of the mutual promises of the parties delineated in the Contract Documents (attached hereto and made a part hereof), and herein, the Contractor agrees to provide services and the Purveyor agrees to pay at a minimum, every 30 days (if applicable) for the following described items and the management of the program as set forth in the Contract Documents:

*Provide labor, software/data input, software maintenance, and management services as necessary to complete cross connection control data management, backflow preventer & tester tracking, and public education for a System-Wide Cross Connection Control Program. Purveyor costs and specific program details are to be determined by the attached documents.*

*Simply initial at the selected Option(s) on page 3 of the proposal packet and fill in the term (years) of the contract. Then, complete & return this contract along with proposal page 3*

1. This contract shall embrace and include all of the applicable Contract Documents listed below as if attached hereto or repeated herein:
  - A. Cross Connection Control Program Services dated March 21, 2017
2. The Purveyor agrees to pay, and the Contractor agrees to accept as full payment for the work described, which is the subject matter of this contract, in accordance with the provisions of the Local Government Prompt Payment Act or any other applicable State or Federal Regulation regarding the payment of Local Government Contractual expenses and the provisions of the Contract Documents.
3. Risk of loss, destruction, or damage of or to goods under this Contract shall be assumed by the Contractor until acceptance of the goods and services by the Purveyor. All data obtained by Aqua Backflow on behalf of or from the Purveyor remains property of the Purveyor.
4. The Contractor represents and warrants that it will comply with all applicable Federal, State, and local laws concerning prevailing wage rates regarding the services provided under this Contract and all Federal, State, and local laws concerning equal employment opportunities.

5. This Contract represents the entire understanding between the parties and supersedes any contracts, agreements or understandings (oral or written) of the parties, with respect to the subject matter hereof. In the event of any conflict between the terms and conditions set forth in this agreement and the terms and conditions set forth in any Contract Documents annexed hereto, the terms and conditions of this Contract Documents shall govern. No term of this Agreement may be amended except upon written agreement of both parties.
6. Contract will be automatically renewed until thirty (30) days written notice via registered and certified U.S. Mail is received by either party in reference to contract cancellation. Terms may be renegotiated after initial contract expiration and annually thereafter. All notices shall be in writing and shall be deemed given when received or refused, to the parties at the following addresses:

If to Contractor:

*Aqua Backflow, Inc.  
977 Elizabeth Street  
Elgin, IL 60120*

If to Purveyor:

*City of Warrenville  
3S258 Manning Ave  
Warrenville, IL 60555*

7. Aqua Backflow shall receive \$1,500 from the Purveyor if the Purveyor elects to terminate this contract within the first year after implementation for any reason other than lack of performance by the contractor. This reimbursement helps defray start-up costs.
8. Where the terms of this contract conflict with the provisions of the Contract Documents, the Contract Documents shall be binding.
9. Purveyor acknowledges that the services provided by Contractor are intended to assist the Purveyor in implementation and management of Purveyor services. Purveyor agrees that it does hold Contractor harmless and releases Contractor of any claims of any kind or nature whatsoever related to any incident or injury resulting from any act or omission not caused by Contractor. Further Purveyor does hereby release Contractor from any claims asserted by Purveyor or any third party on behalf of Purveyor related to any injury to property or person resulting from an event or occurrence alleged to be caused by any act or omission of Contractor, including but not limited to backflow incidents, latent or non visible cross connections, third party damage or the acts or omissions of third parties.

- 10. The failure of either party to insist upon strict compliance with any term of this Agreement in any one or more instances will not be deemed to be a waiver of its rights to insist upon such strict compliance with respect to any subsequent failure. If any term of this Agreement is declared invalid or unenforceable by a court or other body of competent jurisdiction or any arbitrator, the remaining terms of this Agreement will continue in full force and effect.
- 11. In any dispute resolution or suit filed between the parties in connection with this Agreement, the prevailing party will be entitled to recover its' reasonable attorney's fees and costs in such proceeding from the other party.

IN WITNESS WHEREOF, the City of Warrenville, by \_\_\_\_\_  
name

\_\_\_\_\_, \_\_\_\_\_  
title  
of the City, and the Contractor have hereunto set their hands this 21<sup>st</sup> day of March, 2017.

\*\*\*\*\*

Signed this 21<sup>st</sup> day of March, 2017.

Aqua Backflow, Inc  
An Illinois Corporation



By: \_\_\_\_\_  
John Skirmont, President

\*\*\*\*\*

Accepted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

The City of Warrenville, Illinois

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position/Title: \_\_\_\_\_

ATTEST:

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position/Title: \_\_\_\_\_