
To: Chairman Wetzel and members of the Public Works Commission
From: Peter Hartz – Water Systems Manager
Re: February 28, 2023, Public Works Commission agenda items

February 22, 2023

Water Systems:

1. Review and approve 2022 Water bill write-offs of 'dead' accounts to the respective property tax bill. (Comprised of unpaid charges for water, sewer, garbage, and stormwater)

As required by the auditing firm for the Water & Wastewater Departments, this is an annual item for the Public Works Committee to review for accounting and bookkeeping. Most of these 'write-offs' are for property owners with unpaid balances at the end of November of the previous year. These unpaid balances are 'written off' from the utility bills and placed on the property tax bill for collection by the City of Watertown. 2022 total is \$32,456.73 which is comprised of 242 separate accounts.

2. Review and approve entering into a professional services agreement with Applied Technologies for \$53,000 related to the ultraviolet equipment upgrade project.

We solicited 3 engineering firms (all of whom have worked for Watertown in the past) for a services proposal with a defined scope of work to include, equipment review, final design, preparation of construction drawings & plans (including mechanical and electrical), a final set of drawings and plans, bidding, and construction support services, and DNR plan review submittal if deemed necessary. We received 2 proposals with 1 firm having interest but not time to take on a project such as this one.

Applied Technologies – \$53,000, Symbiont / Mead – Hunt – \$76,790, & Strand declined the project but mentioned they would be in the neighborhood of \$55 - \$65K so mid-range of the two proposals we received. I recommend we enter into an agreement with Applied Technologies.

3. Review and approve entering into a professional services agreement with VMC Inc. for \$8,200 for a new cellular upgrade project with AT&T at the O'Connell water tower.

Each cellular upgrade project is unique, and we have a new upgrade project proposed by AT&T. It is appropriate to enter into a new agreement for services. There have been changes with the staff at SEH since our last service agreement, so I was able to get another quote from the previous project manager who is with a new company that provides the same level of service we have received historically from our previous consulting firm. VMC quoted \$8,200, and SEH quoted \$10,450 for cellular support services. I recommend we work with the previous project manager at VMC for the AT&T project. SEH is still working on the T-Mobile / Spring projects so still involved with Watertown. All the associated expenses are reimbursable to the Water Department from the cellular company per the terms of the respective leases.

4. Review and approve entering into a professional services agreement with Mead–Hunt for the Geographical Information System (GIS) annual asset mapping conducted each year on an as-needed basis.

Since the inception of the GIS mapping database in 2014 the water and wastewater divisions have utilized Symbiont Engineering for support and updates to the geodatabase used for all our assets in the city. Symbiont merged with Mead-Hunt and continues to provide as-needed support to the water and wastewater divisions keeping the database updated with changes made. We have most everything included in our GIS database, water and sewer mains, valves, hydrants, water services, service lines, sanitary manholes, sanitary laterals, private mains and hydrants, water meters, inspection records, and many other layers of data sets.

The GIS database is also used by multiple departments on an annual basis; Examples of additional datasets in the geodatabase include: street signs, brush routes, sanitation routes, recycle routes, police districts, fire districts, property parcel data, aldermanic districts/wards, sidewalks, truck routes, floodplains, neighborhood watch areas, parks, wetlands, schools, section corners, topographic, zoning, building and sub-divisions, TID districts, engineering files, planning land uses – to name a few.

5. Review and update Review and discuss the completion of the corrosion control treatment study report.

On July 29, 2021, the Wisconsin Department of Natural Resources (WDNR) required that the City of Watertown conduct a Corrosion Control Treatment (CCT) Study. The requirement for the CCT Study was the result of a 2020 Lead Action Level Exceedance (ALE) in our water quality testing of the distribution system.

CCT Studies are used by WDNR to review the existing water distribution system and evaluate the alternatives recommended for the treatment of corroding lead and copper lines. This study was time-consuming and expensive (>\$80,000) for the Water Department. The CCT Study reviewed the use of 2 different mixtures of blended poly orthophosphates, commonly used to prevent the corrosion of lead and copper into drinking water by sequestering iron and manganese and depositing as a scale on the interior of the pipes, resulting in a reduction in soluble lead in water.

During the time frame of the CCT Study (late 2020 to late 2022) Watertown Water Department was granted permission to discontinue adding sodium hydroxide (the CCT in use since the mid-1990s) to raise the pH of the water as that was ineffective in raising the pH levels to reduce lead corrosion into the drinking water as Watertown uses air strippers that effectively raise the raw water pH already rendering the sodium hydroxide useless for the intended purpose. Additional water sampling conducted after we discontinued using the sodium hydroxide showed water samples were under the lead action level. Those results were reviewed by WDNR and as of December 9, 2022, WDNR confirmed that we no longer had to complete the CCT Study that we started 2 years prior to the end of the last round of water sampling as we were no longer exceeding the lead action level.

We chose to finish the CCT Study as we were nearly complete and would have to start over from scratch if we were to exceed the lead action level again, completion of the report allows us to move forward without repeating the time-consuming and expensive study.

The recommendations of the CCT Study determined that Watertown should continue replacing the lead services lines and the most cost-effective CCT will be the complete removal of all known lead water service lines from the distribution system. A copy of the report is included for review.

Sincerely,
Peter Hartz

Water Systems Manger