MEMORANDUM

TO: Park Advisory Commission

FROM: Colin Smith, Parks & Recreation Services Manager

DATE: January 26, 2021

SUBJECT: Resolution to Recommend Approval of a Contract with Aquatic

Source, LLC for the Outdoor Pool Ultraviolet Disinfection

Improvements Project (\$188,503.00)

Attached for your review is a resolution to recommend approval of a \$188,503.00 contract between Aquatic Source, LLC and the City of Ann Arbor for the Outdoor Pool Ultraviolet Disinfection Improvements Project.

Budget/Fiscal Impact

Funding is available in the approved FY2021 Parks Maintenance and Capital Improvements Millage budget.

Project Description

The new Ultraviolet (UV) disinfections systems will be installed at the outdoor pools at Veterans Memorial Park, Fuller Park and Buhr Park. Mack Pool had a UV disinfection system installed in 2019. The Ann Arbor community shortly thereafter experienced a cryptosporidium outbreak that shut most pools for an extended period of time. Because of the UV system at Mack we only had to shut for one day, and then were able to resume offering a safe recreational opportunity for residents. While UV is not a requirement at this time the Model Aquatic Health Code (MAHC) stipulates the use of UV (or other *secondary disinfection*, limited at this point in time to ozone) as best practice in pools that have high risk bathers; namely kids and the elderly. It is likely that legislation in the future will require a secondary disinfection.

The UV systems will be secondary to the existing chlorine disinfection systems and are anticipated to provide the following benefits:

- Reduced chemical demand. Since UV will be a secondary disinfection method to chlorine, there will be reduced chlorine demand to maintain the required levels of free chlorine in the pool.
- Improved disinfection. Pools with chlorine as their sole disinfection method are more susceptible to outbreaks from chlorine-resistant pathogens such as cryptosporidium. UV disinfection is highly effective against cryptosporidium and other chlorine-resistant pathogens.

Reduced chloramines. As chlorine reacts with organic compounds such as
debris, sweat and urine, the byproduct of these reactions are chloramines.
Chloramines build up in the water and off gas from the water to the air above.
Since they are heavier than air, they can buildup on top of the water's surface
without good air movement. UV treatment systems breakdown chloramines,
reducing their presence in the water and the air above.

The Parks and Recreation Open Space Plan identifies maintenance and improvements of the recreation facilities as a priority. The installation of UV disinfection systems at the City's three outdoor pools was identified as a project which will improve pool user experience.

The project meets multiple sustainability goals:

- Active living and learning
- Safe community
- Responsible resource use

The contract documents for the project were bid through the City's Procurement Unit following standard procedures. On January 12, 2021, one bid was received for from Aquatic Source, LLC in the amount of \$188,503.00. Attached is a tabulation of the bids received for the project.

Staff is recommending award of a contract to Aquatic Source, LLC in the amount of \$188,503.00 for the Outdoor Pool Ultraviolet Disinfection Improvements Project. A 15% construction contingency (\$28,275.00) is requested to cover potential contract change orders to be approved by the City Administrator. It is requested that a \$216,778.00 contract and contingency amount be approved for the life of the project without regard to fiscal year.

Resolution to Recommend Approval of a Contract with Aquatic Source, LLC for the Outdoor Pool Ultraviolet Disinfection Improvements Project (\$188,503.00)

Whereas, The Parks and Recreation Open Space Plan identifies improvements and maintenance of mechanical systems at the recreation facilities as a priority;

Whereas, Funding for the Outdoor Pool Ultraviolet Disinfection Improvements Project is available in the approved FY2021 Park Maintenance and Capital Improvement Millage budget;

Whereas, The City of Ann Arbor received one bid for this work on January 12, 2021, and Aquatic Source, LLC of Brighton, Michigan was the low responsible bidder with a bid amount of \$188,503.00;

Whereas, It is now necessary to enter into a contract with Aquatic Source, LLC for the performance of this work; and

Whereas, Aquatic Source, LLC has submitted all required Non-Discrimination, Prevailing Wage, Living Wage, and Conflict of Interest Disclosure forms and complies with the requirements of the City's Non-Discrimination, Prevailing Wage and Living Wage Ordinances;

RESOLVED, That the Park Advisory Commission recommends approval of a contract with Aquatic Source, LLC of Brighton, Michigan for the Outdoor Pool Ultraviolet Disinfection Improvements Project (\$188,503.00) and recommend approval of a construction contingency of \$28,275.00 (15%) to cover potential contract change orders for a total contract amount of \$216,778.00 for the life of the project without regard to fiscal year.