



Kent County Water Authority

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PUBLIC UTILITIES COMMISSION

November 4, 2021

Mrs. Luly Massaro
Commission Clerk
Public Utilities Commission
89 Jefferson Boulevard
Warwick, Rhode Island 02888

Re: Capital Improvement Program

Dear Mrs. Massaro:

In accordance with Kent County Water Authority rate order Docket #5012, we are required to file a Capital Improvements Report semi-annually. The attached reports on Capital Improvements are through June 30, 2021.

If you have any questions or members of your staff would like further information, please feel free to call at any time.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "D. Simmons", with a long horizontal flourish extending to the right.

David L. Simmons, P.E.
Executive Director/Chief Engineer

cc: Board Members

KENT COUNTY WATER AUTHORITY
Report of Progress of CIP Project
As of June 30, 2021

<u>Description</u>	<u>Estimated</u>	<u>Expended</u>	<u>Estimated Funds to Complete</u>
Design North/South High Svc Connect (295)	\$11,390,554	\$10,293,417	\$1,097,137
New Office Facility (298)	\$1,084,610	\$231,450	\$853,161
East Greenwich Well (299)	\$359,817	\$148,832	\$210,985
TOTAL	\$12,834,981	\$10,673,698	\$2,161,283

CIP Report

This report contains information on the approved programs under the restricted funding approved by the Rhode Island Public Utilities Commission. Kent County Water Authority (KCWA) receives CIP funding available to advance approved projects on cash-based pay as you go basis. The CIP 2012 Series A bond was defeased January of 2021 as approved under KCWA's most recent abbreviated rate filing Docket #5012. Also approved under Docket #5012 was the use of a portion this restricted account to fund debt service on project(s) that require bonding. The restricted CIP account is currently fully funded at \$3.6 million annually with the debt service rolling off upon defeasance of the bond.

North/South High Service Connection:

This project connected the north high service gradient with the south high service gradient to provide essential resiliency in the system and enhance water quality. D'Ambra Construction was awarded the bid for \$9,153,473.60. Commencement of construction for the North/South interconnection began in Mid-April 2019 between the high service gradients using accumulated capital generated under our Capital Improvement Program. The project was slated to be completed in late 2020 except for final paving in early Spring 2021. There was a delay in final construction due to damages that occurred to KCWA's transmission pipe bridge on Sandy Bottom Road in Coventry during the progression of an adjacent RIDOT bridge project. This delayed the project until Summer of 2021. The pipe bridge damages were repaired by the contractor and RIDOT verbally agreed to pay for the damages. RIDOT recanted the offer to pay and KCWA filed suit against RIDOT and the contractor to recover damages incurred by the Authority to just under \$1 million dollars. Even with these unfortunate circumstances, the project is under budget by \$1.3 million dollars. This much needed project is now active and is allowing storage tank redundancy and enhanced access to the northern reaches of the system from our treatment facilities in the south.

New Office and Maintenance Facility:

The Authority currently operates out of its office and maintenance facilities located at 1072 Main Street, West Warwick, Rhode Island. These facilities were originally built at the turn of the century with modifications and new garages in the 1970's. Several additional renovations have been accomplished to support increased operations, and accommodate capital equipment

acquisitions, spare parts warehousing and workforce needs. The existing facilities have no usable area for additional expansion and the Authority believes they can no longer support the Authority's daily operations. Furthermore, there is inadequate public parking to properly service KCWA customers. Customers have to park on the street in the lane of traffic in front of the building and exit their vehicle into oncoming traffic to conduct business at the Authority.

In 1999, Camp Dresser & McKee conducted a feasibility study for a new KCWA Facility. In 2016, C&E Engineering Partners prepared a Water Supply System Five-Year Capital Improvement Program Update 2017- 2022 for KCWA and the Public Utilities Commission (PUC). The updated Capital Improvement Project (CIP) plan recommended a new facility supporting the 1999 findings, deeming the project as essential to provide the expected level of service goals required by State Regulatory Requirements and the Authority's Strategic Plan.

A new updated feasibility study was necessary to support and supplement future Capital Plan implementation, Commission rate filings, and bond issues because the original study was over 20 years old. The Authority requested proposals from qualified professional architects and engineers to conduct the update to the facilities analysis and evaluation study (2020 Study). The Authority publicly engaged the professional services of Vision 3 Architects (V3A) partnered with Pare Engineering to complete the study.

As a part of due diligence, the 2020 study re-evaluated the potential modification and retrofitting the existing facility and concluded that the buildings have far exceeded their useful lives and are no longer adequate to support the future increase in capital equipment acquisitions, warehousing and administrative responsibilities of the KCWA. The study also calculated that a minimum net five acres would be required to meet the needs of the Authority. The Authority's current complex occupies in its entirety approximately one acre on 1072 Main Street. Exploring the viability of remaining at its current location by means of renovating the existing facility and /or constructing additional buildings would involve acquiring multiple separate sites, either adjacent to or in very close proximity to 1072 Main Street. Thus, it was reaffirmed that KCWA's current location was not an option. The efforts were then focused on spatial programming needs, potential site locations, and schematics.

The 2020 study submitted to the Authority detailed a comprehensive spatial programming analysis, conceptual building schematic options, and eleven available site locations. Based on

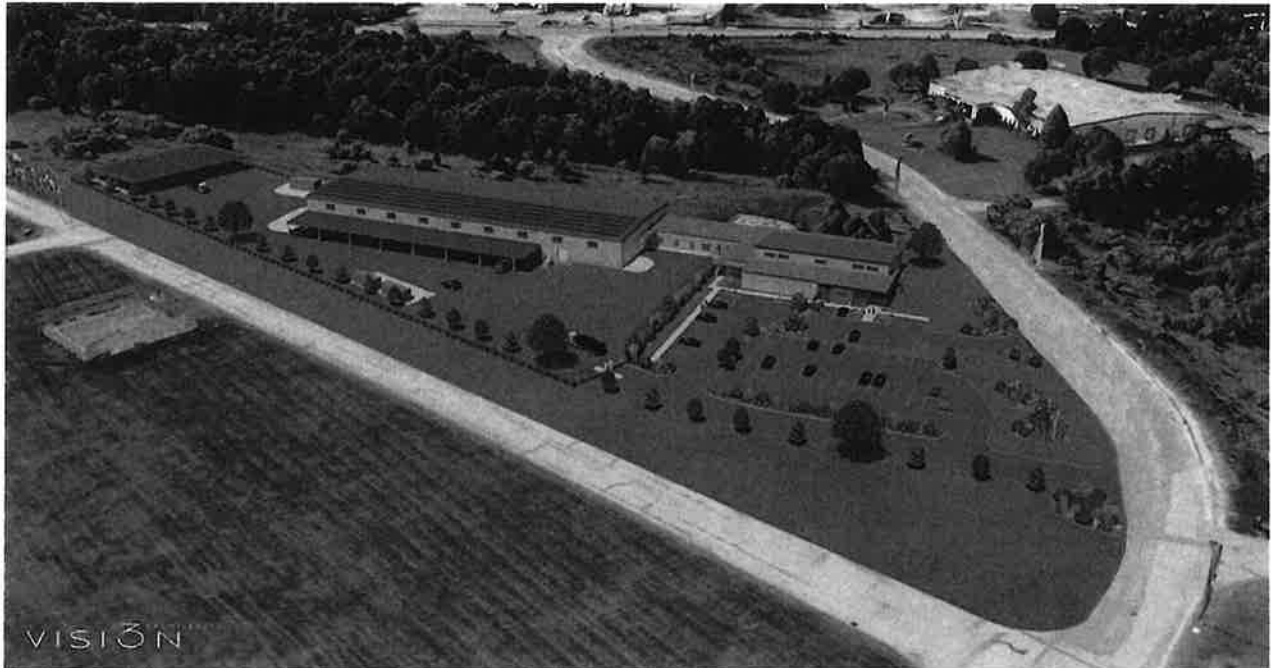
spatial and programming needs, the study further recommended the sites that could best fit the Authority's facilities' requirements. Included in the study were pricing valuations, construction/site cost estimates, and energy efficient design components such as, rooftop solar and electric vehicle charging stations.

In addition to the 2020 study, the Board decided to perform additional due diligence in searching for potential other property locations by issuing a public RFP, which was added to the study. The RFP resulted in three property submissions satisfying the RFP requirements. Of the three properties, two new properties were added for consideration because the third property was



already identified in the original updated study from Vision 3/Pare Engineering. After reviewing the thirteen properties in detail, the Board settled on one location that seemed the best fit for the next phase. A subcommittee was formed to order a formal appraisal and negotiate and provide detailed information regarding the site and its ability to satisfy the Authority's future facility needs to the full Board. The Authority entered into a purchase and sales agreement contingent upon the satisfactory full site due diligence evaluation inclusive of geotechnical, Phase 1 environmental, wetlands delineation and verification, pre-application planning review, and a full ALTA survey. The site was purchased in Sept of 2021 and the Authority is currently in the process of preparing the Debt filing and expects to file it by the end of this calendar year. In October 2021, the Board signed a resolution authorizing the Authority to finance a new central operations facility at its monthly board meeting.

"RESOLUTION AUTHORIZING THE KENT COUNTY WATER AUTHORITY TO FINANCE A NEW CENTRAL OPERATIONS FACILITY, INCLUDING, BUT NOT LIMITED TO, ACQUISITION OF REAL PROPERTY, DEMOLITION, DESIGN, ENGINEERING, PAVING, LANDSCAPING, AND ALL ATTENDANT EXPENSES, CAPITALIZED INTEREST, THE FUNDING OF A DEBT SERVICE RESERVE FUND AND COSTS OF ISSUANCE AND APPROVING THE FINANCING THEREOF BY THE ISSUANCE OF WATER REVENUE BONDS IN AN AMOUNT NOT TO EXCEED \$20,000,000 AND APPROVING THE EXECUTION AND DELIVERY OF A MASTER TRUST INDENTURE AND FIRST SUPPLEMENTAL INDENTURE AND OTHER MATTERS IN CONNECTION WITH THE FINANCING"



The Authority is currently researching bonding from the Rhode Island Infrastructure Bank through the State Revolving Fund as compared to the open market. The anticipated debt service will be fully funded using the CIP restricted account without the need to increase rates. These activities are alignment with approved settlement agreement between KCWA and DPUC in Docket # 5012. KCWA It is the Authority's goal to put the final design out to RFP late this fall to have bid ready construction documents in early 2022. Preliminary site and building designs with renderings are all complete.

Updated East Greenwich /Warwick Well Treatment Facility

The design and cost estimate for the construction of a new treatment plant at the existing East Greenwich/Warwick Well site. The East Greenwich well is a critical facility designed to

maximize water quality and allow sufficient hydraulic capacity to meet the needs of the KCWA system now and into the future. This source in combination with KCWA's Mishnock treatment facility provide sufficient capacity to continue provide essential service to its critical customers, and emergency interconnections, in the event something goes wrong with water supplied from Providence Water and/or major disruption to the associated transmission systems.

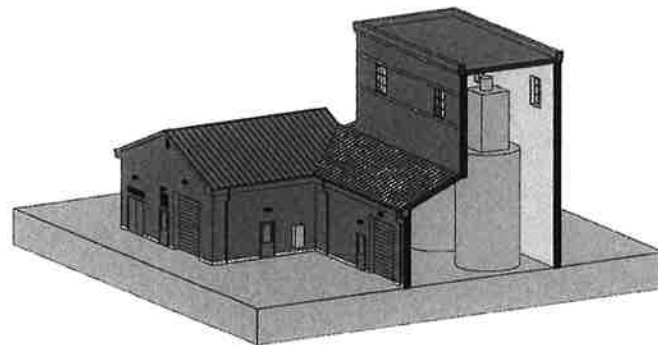
The East Greenwich/Warwick Well has a full production yield capability of approximately 2000 gallons per minute. The East Greenwich/Warwick Well is located at 5870 Post Road, in the general vicinity of the intersection of Post Road and Franklin Street, along the East Greenwich and Warwick city line within the Hunt River Aquifer. The existing facilities consist of one submersible pump well, emergency power, SCADA control and monitoring disinfection and pH adjustment. The Authority requested proposals from qualified Professional Engineering firms to conduct an inspection, evaluation and review of the newly constructed well facilities and prepare final design and contract documents for construction of a new water treatment facility at the existing site under its Capital Improvement initiatives. Pare Engineering in partnership with Stantec was chosen and awarded the contract to design the updated facility in December of 2019. A preliminary design report and plans were completed and reviewed by the Rhode Island Department of Health and Rhode Island Department of Environmental Management during 2021. Final bid ready documents should be completed in early 2022.

The updated treatment plant will include an addition to the rehabilitated well facilities constructed in 2018 under the KCWA Infrastructure Replacement initiative. The facility is being designed to provide an average daily output capacity of 1.44 MGD (1,000 gpm) to the system with one treatment unit offline and to provide for a maximum daily output capacity of 3 MGD (approx. 2,000 gpm) with both treatment units online. The output capacity is being designed at a maximum of 3 MGD to ensure resiliency and redundancy of individual unit processes, treatment trains, and discharge pumping. The design will also allow the ability to treat additional well(s) if acquired in the future. The proposed well pump that will feed the station will only pump to a maximum of 2.5 MGD. This design and subsequent responsible operation will not adversely affect the Hunt River, today or in the future, as it reflects significantly less volumes than historic withdrawals from this basin.

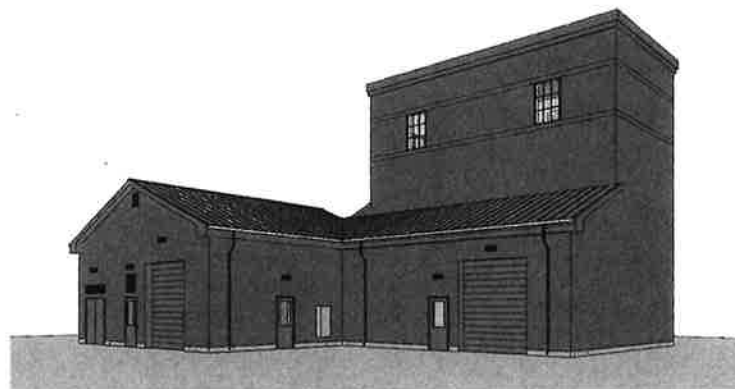
The 2018 updates to the facility also did not encompass treatment/removal of the elevated manganese levels in the water supply system. The goal of the new treatment facility design is to

reduce the secondary contaminant levels to below the applicable standards and provide disinfection treatment and radon removal to facilitate improving water quality in the use of the supply capacity of this source. The proposed treatment plant and major unit processes at the facility were evaluated based on achieving the primary objective of protecting public health by providing a reliable source of potable water that meets or exceeds current and foreseeable future proposed drinking water regulations.

Per- and polyfluoroalkyl substances (PFAS) are an emerging contaminant of concern in groundwater throughout the United States. An evaluation of per- and polyfluoroalkyl substances (PFAS) in raw water was performed and found below 10 parts per trillion (10 ppt) which is below the current EPA health advisories of 70 ppt. However, there is legislation being discussed to set a maximum contaminant level to 20 ppt, or potentially even less in Rhode Island. Although no treatment for PFAS is proposed in this design, accommodations have been made for building expansion should PFAS treatment be required in the future. This project is awaiting comments from RIDOH regarding the preliminary design. KCWA is hoping to go to full design this Spring.



SECTION AXONOMETRIC



PERSPECTIVE - SOUTHEAST