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PUBLIC UTILITIES COMMISSION

October 12, 2022

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's most recent rate order, we are required to file a Capital Improvements Report semi-annually. The attached reports on Capital Improvements are through June 30, 2022.

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 blue ink, appearing to be "DLS", is written over the typed name of David L. Simmons.

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

cc: Board Members

STANT COUNTY WATER AUTHORITY  
Report of Progress of CIP Project  
As of June 30, 2022

<u>Description</u>	<u>Estimated</u>	<u>Expended</u>	<u>Estimated Funds to Complete</u>
Design North/South High Svc Connect (295)	\$11,289,493	\$11,289,493	\$0
New Office Facility (298)	\$2,561,694	\$2,254,167	\$307,528
East Greenwich Well (299)	\$359,817	\$258,818	\$100,999
TOTAL	\$14,211,005	\$13,802,478	\$408,527

## **CIP Report**

This report contains information on the programs under the restricted funding approved by the Rhode Island Public Utilities Commission. The Kent County Water Authority (KCWA, or the Authority) receives Capital Improvement Project funding available to advance approved projects on a cash-based pay as you go basis. The restricted CIP account is funded at \$3.6 million annually without debt service

### ***CIP Bonding/Debt Service:***

The CIP 2012 Series A bond was defeased as approved under the 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. KCWA filed for and received authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operation facility under Docket D-22-03. The debt service funding for this bond will be applied through approved restricted CIP collections. The amount of debt service carved out of the CIP funding is approximately 40%, or \$1.45 million dollars, annually. The annual accrual to the CIP restricted account after meeting the debt service obligation is \$2.15 million dollars.

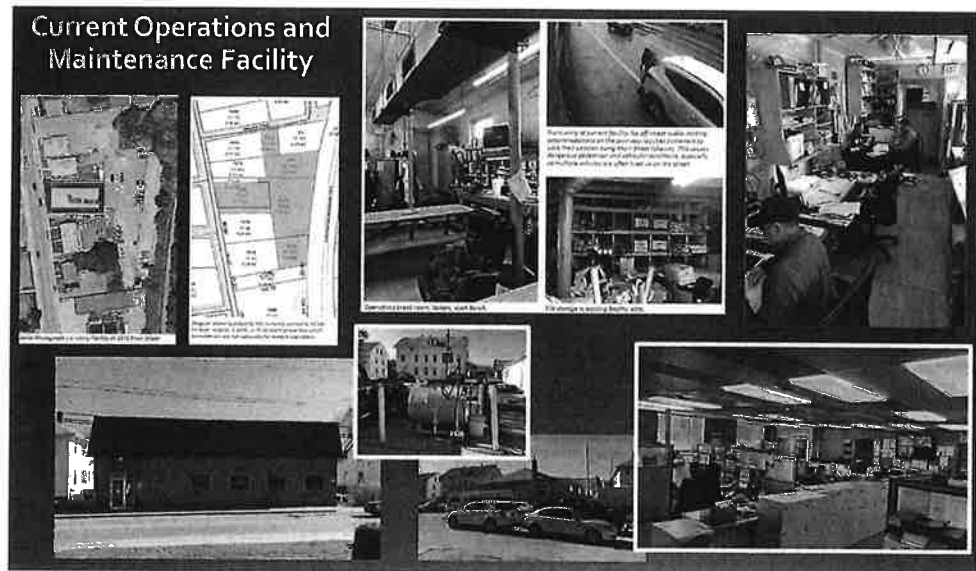
### **North/South High Service Connection:**

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. The lawsuit is currently in Superior Court.

### **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. These 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.

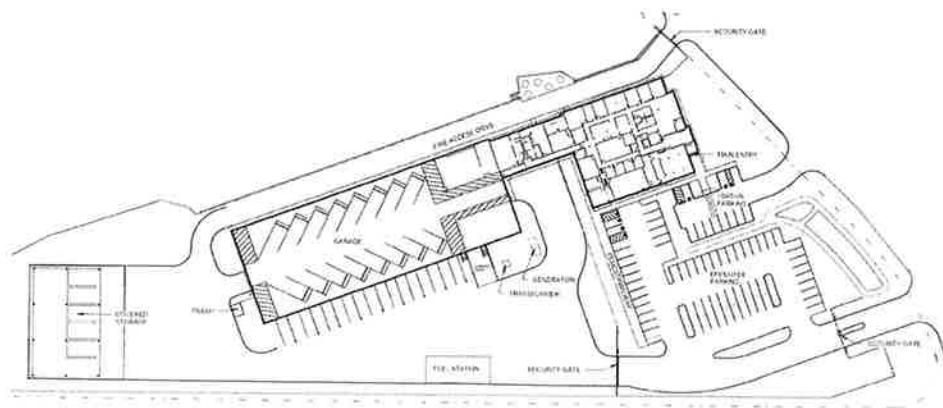
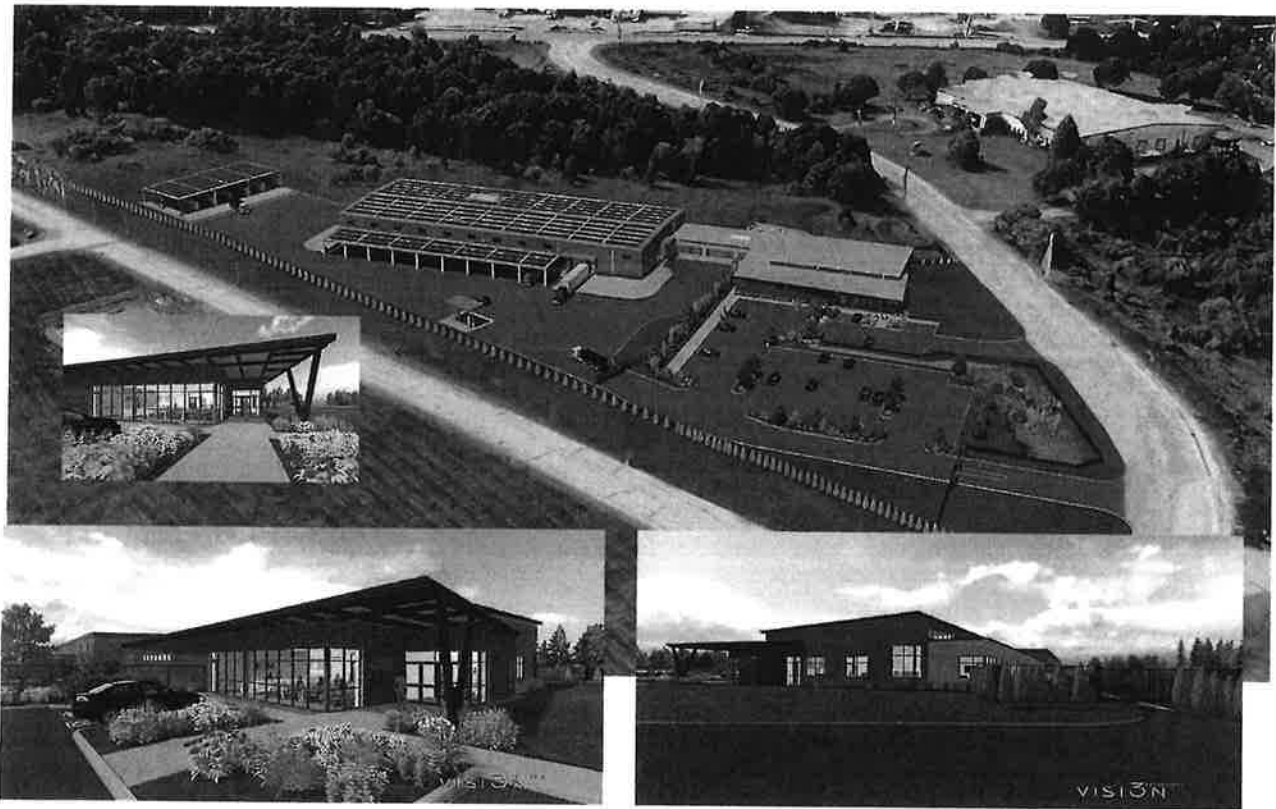
As a part of due diligence, the 2020 study re-evaluated the potential modification and retrofitting the existing facility and concluded that the buildings have far exceeded their useful lives and are no longer adequate to support the future increase in capital equipment acquisitions, warehousing and 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 three 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 pursuing 35 Technology Way in West Greenwich which was deemed 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 and the Board signed a resolution authorizing the engagement of financing for the new central operations facility. The Authority

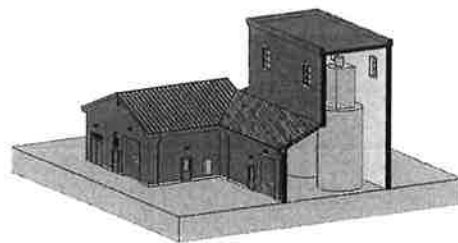
put out an RFP in December 2021 to complete the final design and prepare construction bid documents. The contract was awarded to the V3A and Pare Corporation team. KCWA filed for and received debt service authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operation facility under Docket D-22-03. On April 29, 2022, after completing all of the clearing house procedures, the Authority closed on two bonds with the Rhode Island Infrastructure Bank. The Safe Drinking Water bond (\$18,173,087) and the Efficient Buildings Fund bond (\$1,826,913). These bonds will be used to construct the new office and maintenance facility in West Greenwich. The final design and bid documents were completed for construction and the project was advertised for bid on Sept 9, 2022. The project is slated for award in mid-October with groundbreaking in early November. It is anticipated that the project will be completed in April of 2024.



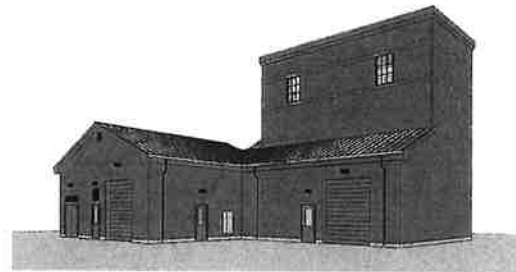
### Updated East Greenwich /Warwick Well Treatment Facility

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 to 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.



SECTION AXONOMETRIC



PERSPECTIVE - SOUTHEAST

**KCWA**  
Kent County Water Authority

The updated treatment plant included 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.

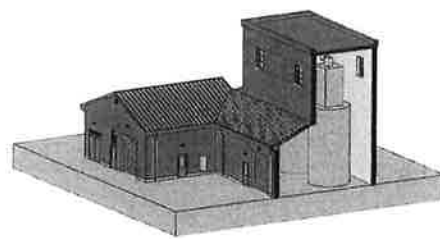
2,000 gpm) with both treatment units online. The output capacity is being designed at a maximum of 3 MGD to ensure resiliency and redundancy of individual unit processes, treatment trains, and discharge pumping. The design will also allow the ability to treat additional well(s) if acquired in the future. 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 goal of the new treatment facility design is to provide a reliable source of high quality potable water that meets and exceeds drinking water regulations. Mainly, the objective of the design was to reduce manganese levels to below the applicable secondary standards to prevent water discoloration and staining, provide enhanced disinfection treatment (4-log inactivation), and facilitate radon removal. However, during the final design and permitting, the EPA tightened the health advisory for Per- and polyfluoroalkyl substances (PFAS) which are currently unregulated under the Safe Drinking Water Act (SDWA). This signaled to the

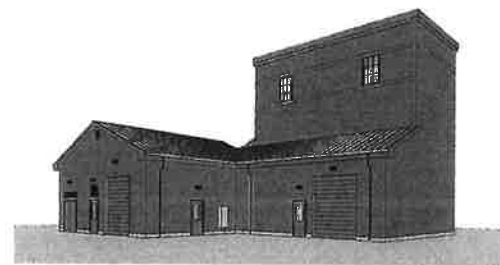
States that regulation is imminent and for affected water utilities to start preparing. The Rhode Island legislature passed a law ahead of the EPA setting interim contaminant concentration standards that now must be incorporated/planned into the design.

*2022 Design changes to comply with State Law and prepare for future EPA PFAS regulation.*

PFAS are an emerging contaminant of concern in groundwater throughout the United States. PFAS are man-made chemicals used to fight fires and in a variety of products and applications that are resistant to water, grease, or stains, including nonstick cookware, carpets, upholstered furniture, clothing, and food packaging. These chemicals are highly recalcitrant to degradation in the environment and can mobilize into surface and groundwater from areas throughout the country that may have been contaminated for various reasons.



SECTION AXONOMETRIC



PERSPECTIVE - SOUTHEAST

**KCWA**  
Kent County Water Authority

June 2022 -The US Environmental Protection agency announced low health advisories for four PFAS substances, based on new data and analyses. Health advisories are not enforceable under the law. The new EPA health advisories are much lower than the previous health advisory of 70 parts per trillion (ppt) set in 2016. Because health advisories are not enforceable and that an SDWA maximum contaminant level (MCL) for PFAS will be forthcoming the Rhode Island legislature signed a PFAS bill into law ahead of the EPA. Legislation was passed and signed by the Governor (S-2298 SUBSTITUTE A) in June of 2022 to set an interim drinking water standard to 20 ppt and for water systems conducting additional sampling before July 2023. Systems that cannot provide water less than 20 ppt are required to find alternative sources.

*One part per trillion is equivalent to one drop in an Olympic sized swimming pool.*

An evaluation of per- and polyfluoroalkyl substances (PFAS) for all KCWA wells water was performed in 2019. During this testing, PFAS were detected at 9.7 parts per trillion (9.7 ppt) at the EG Well. Although currently below the interim standard of 20 ppt, the future enforceable Federal maximum contaminant level (MCL) could be less than 20 ppt. In anticipation of this, KCWA is modifying the treatment plant design and site plan to accommodate PFAS treatment if required in the future. The updated design should be completed by Spring of 2023 and KCWA will be seeking any and all available grants to help facilitate construction of the facility. With the recent passage of the Bipartisan Infrastructure Law (BIL), the Drinking Water State Revolving Fund (DWSRF) will be receiving approximately \$292 million of additional funding for projects, including \$179 million for lead service line replacements and addressing emerging contaminants over the next five years, including Per and Polyfluoroalkyl Substances (PFAS).