

**THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
COMMISSION AGENDA ITEM**

SUBJECT: JG Beacham Water Treatment Plant High Service Pump Upgrade

DATE: August 30, 2022

BUDGET INFORMATION:

Revenue:	\$2,372,141	FY23 Replace and Upgrade WTP Facilities and Equipment
Capital Expenses:	\$1,553,949	FY23 Replace and Upgrade WTP Facilities Designated Projects
	<u>\$ 218,192</u>	<u>Expenditures & Encumbrances</u>
	\$ 600,000	Available for WTP HSP Upgrade

FUNDING SOURCE: Water & Sewer Enterprise Fund

COMMISSION ACTION REQUESTED ON: October 4, 2022

PURPOSE:

To request the Mayor and Commission:

- a. Approve the purchase and installation of a Variable Frequency Drive (VFD) and associated material in the amount of \$600,000; and
- b. Authorize the Mayor and appropriate staff to sign all documents related to the work authorization.

HISTORY:

1. On September 7, 2004, the Mayor and Commission approved an appropriation in the amount of \$40,666,355 for the construction and upgrade of the J. G. Beacham Water Treatment Plant (JGB WTP).
2. In 2008 construction and upgrades to the JGB WTP were completed increasing the treatment capacity to 36 million gallons per day.
3. In 2016 the J. G. Beacham Water Treatment Plant celebrated 80 years of service to the Athens-Clarke County community.
4. On January 23, 2019, the Sustainability Office issued a solicitation known as RFP #00940 Energy Resource Coordination to identified consultants capable of providing energy related consulting and project management services.
5. On May 22, 2019, staff executed an on call agreement with The Southface Energy Institute-- and its listed subcontractors, 2KB Energy Services and The Greenlink Group--to provide

energy related consulting and project management services. This agreement is available to be renewed for four additional one-year terms.

6. On August 16, 2021, Public Utilities Department (PUD) issued a Notice to Proceed to Southface Energy Institute to perform an energy audit on the JGB WTP.
7. On February 24, 2022, 2KB Energy presented the findings of the energy audit to PUD staff, which included installing a VFD on the #6 High Service Pump (HSP).
8. On June 7, 2022, the Mayor and Commission adopted the FY23 Capital Budget which included the project Replace and Upgrade Facilities and Equipment.

FACTS & ISSUES:

1. The J. G. Beacham Water Treatment Plant treats raw water and delivers millions of gallons of potable water throughout Athens-Clarke County.
2. Service Pump #6 has one constant speed and works in concert with medium service pumps #1 and #5 to deliver water to all 39,964 accounts.
3. The addition of a VFD on service pump #6 will allow the pump to operate more efficiently, which in turn will reduce costly maintenance issues.
4. Additionally, PUD anticipates a cost savings of \$75,000 to \$125,000 per year with the addition of a VFD to pump #6 as presented in Southface/2KBs Energy Assessment Report.
5. Project Schedule:

Issuance of Notice to Proceed/Equipment Purchase (36 week lead time)	November 2022
Equipment Installation	August 2023
Project Completion	October 2023
6. This recommendation supports the following ACCGov Strategic Plan Goal & Strategy:
 - Built and Natural Infrastructure Goal, Strategy C: *Provide adequate funding for maintenance of existing and newly constructed infrastructure.*

OPTIONS:

1. Mayor and Commission:
 - a. Approve the purchase and installation of a Variable Frequency Drive (VFD) and associated material for the amount of \$600,000; and
 - b. Authorize the Mayor and appropriate staff to sign all documents related to the work authorization.
2. Mayor and Commission deny the request.
3. Mayor and Commission defined option.

DEPARTMENT RECOMMENDED ACTION:

Option 1 a & b

DEPARTMENT: Public Utilities

Prepared by: Hollis Terry IV



August 30, 2022

Hollis Terry IV

Date:

ADMINISTRATIVE COMMENTS:

ADMINISTRATIVE RECOMMENDATION: Option 1 a & b



Manager

September 15, 2022

Date: