

A Quarterly
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WAUFORD

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THE CLARIFIER

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Company News

On February 21, 2019, Kevin S. Young, P.E. was recognized by Tennessee Technological University's College of Engineering as the 2018 Engineer of Distinction. This is the highest honor given out by the College of Engineering. Kevin graduated from Tennessee Tech with a Bachelor of Science in Civil Engineering in 1978 and taught upper level Civil and Environmental Engineering classes at TTU from 2008 to 2017. Pictured right are Stephen Lee, Kevin Young, Greg Davenport, and Daniel Tribble.



Conferences

The annual meeting of the Tennessee Municipal League (TML) will be held June 23-25 at the Memphis Cook Convention Center in Memphis, Tennessee. We hope that all of our clients and friends will visit

us at the Ice Cream Parlor. This event gives our firm an opportunity to express our gratitude to all those who serve Tennessee's communities.

**For more
information, please
visit our website
www.jrwauford.com**

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Project Updates

Bristol, Tennessee

An evaluation of the condition of two 1.5 MG Concrete Storage Reservoirs has begun with the East State Street Tank Condition Assessment report complete and submitted to the Owner.

An evaluation of the existing Lakeview Drive SPS pumping capacity to handle stormwater flow and eliminate SSO's is complete and final plans and specifications were submitted to TDEC.

An evaluation for the existing capacity of the SPS at the Pinnacle Development area and the Holiday Inn Booster Station is underway.

A preliminary engineering report for Water Treatment Plant improvements including the replacement of valves and painting of the gallery is complete and has been submitted to the Owner.

Chapel Hill, Tennessee

Construction on the Morningside Drive 8-inch Force Main project has begun and the Contractor is planning to begin laying pipe soon. This project has a completion date of November 2019. John T. Hall Construction, Inc., of Sparta is the Contractor with a budget of \$830,334, which is being funded by a CDBG and SRF loan.

Survey is scheduled for a 4,200 foot sewer line extension to an industrial area north of town.

A revision to the Sewer Master Plan to include new developments and WWTP renovation is underway.

Cleveland Utilities Cleveland, Tennessee

Updated selections for UV Equipment in relation to the WWTP Alternate Disinfection Study project have been received. Data is being collected regarding the Biosolids Evaluation Study and Blower Evaluation Study.

Columbia, Tennessee

All reports required for the EPA Administrative Order of Consent have been submitted. The first project required by the Order consists of the renovation of the Santa Fe SPS and GE SPS. Final plans and specifications are being sent to the Owner.

Columbia, Tennessee (Cont'd)

Field investigations are completed and a detailed survey is underway for the Sewer System Rehabilitation project.

Crossville, Tennessee

Plans and specifications for the Meadow Park Lake sewer and water line have been submitted to TDEC for review. This project consists of 6,000 L.F. of 10-inch water line, 16,000 L.F. of 4-inch force main, and a waste solids sewage pumping station. This project reinforces the water transmission system as well as providing sewer service to the Meadow Park Lake area.

Preliminary work in relation to the supply of future raw water is underway to determine required treatment and system improvements for two alternatives, both of which include raising Meadow Park Lake Dam.

Dayton, Tennessee

Design of the new 4.0 MGD SBR WWTP is ongoing with the design of the 24-inch gravity sewer complete. The TDOT Permit has been issued and all other permit applications have been submitted. An application for EDA funding has been submitted for \$2.8M for the WWTP portion of the work.

Bids are expected to be received soon for the \$525,000 CDBG for sewer rehabilitation. This project consists of the replacement of two small diameter sewer crossings under Highway 27 with a new 24-inch sewer.

The \$269,290 State Route 30 utility relocation project, with Mayse Construction Company of Chattanooga, TN is complete.

Preliminary work is complete for water supply to the Summer City System consisting of 54,000 L.F. of water line, a 750,000 gallon elevated storage tank, and two 2,100 GPM booster stations.

Award for a \$1M ARC has been announced for a new 500,000 gallon water tank and 16-inch water line to increase flow to the Nokian Tire site. Design is complete and plans and specs have been approved by TDEC.

The bid opening for the Brookstone Heights Water Line Improvements project was held April 16 with Roy Joe Angel Construction, of Pikeville, Tennessee, being the apparent low bidder at \$129,900.

Fentress County Utility District Fentress County, Tennessee

Design work is underway for the Highway 127/62 utility relocation project through TDOT, which has a letting date of December 2019.

Construction on the 12-inch Water Transmission Line from FCUD's Clarkrange Tank to the Industrial Park is complete with John T. Hall Construction, Inc., of Sparta, TN the Contractor at \$376,717.05. The project was funded through a TN ECD Site Development Grant for the Fentress County Industrial Development Board.

Plans and specifications are complete for the painting of the Pinehaven Tank. A bid opening will be held May 14.

Survey is complete for the North Booster Station project.

Halls, Tennessee

The semi-annual report has been submitted for the pre-treatment program.

Henderson Water Utility Henderson, Kentucky

Preparation of a preliminary engineering report for improvements to the International Paper sewage pumping station is underway and design has begun for renovation of the 4-Star water storage tank renovation.

Construction of the Myrene Drive Sewage Pumping Station project will begin soon with M. Bowling, Inc., of Henderson, KY, being the Contractor with a budget of \$637,025. This contract is the first of four and includes replacement of an existing submersible sewage pump station. A preliminary engineering report for the South WTP Temporary Backwash Pumps has been submitted for the Owner's use in preparing grant applications. Design will be completed once a funding source has been determined.

Design of the Center and Julia Street Stormwater Improvements project, which includes the installation of three 54-inch reinforced concrete pipes under CSX railroad, is underway. Survey work will begin soon for the South Raw Water Intake Renovation project.

Improvements to the South WWTP Aeration Basins are complete. All three basins are in service and close-out will begin soon. The Contractor was M. Bowling, Inc. with a budget of \$3.2 million.

Henderson Water Utility Henderson, Kentucky (Cont'd)



**Completion of Aeration Basins-South WWTP
Henderson, Kentucky**



**Completion of Aeration Basins-South WWTP
Henderson, Kentucky**

Hohenwald, Tennessee

A \$525,000 CDBG project for an electrical upgrade to the Swan Avenue Well and continued water system leakage rehab is underway with draft plans sent to both electrical and mechanical engineers.

The \$525,000 CDBG for continuing water system leakage rehabilitation at Cane Creek Road, S. Oak Street, and replacement of residential service lines awarded to Lewis County is complete and closed out. Contracting Services was the Contractor with a \$502,785 budget.

The semi-annual report has been submitted for the pre-treatment program.

Project Updates

Hopkinsville Water Environment Authority (HWEA), Hopkinsville, Kentucky

KDOW submittal documents are complete and will be submitted to KDOW soon for the Hammond Wood WWTP Expansion. This \$40 million project includes a new influent pumping station with coarse screening, headworks with fine screening and grit removal, anaerobic zone with submersible mixers for enhanced biological phosphorus removal, renovation of the existing oxidation ditches, fine bubble aeration and submersible mixers, a new 110 foot diameter final clarifier, renovation of the existing return activated sludge pumping station, renovation of the existing chemical feed facilities, and permanent chemical feed facilities for peracetic acid disinfection. Biosolids are proposed to be stored in two 750,000 gallon aerated prestressed concrete sludge holding tanks before being dewatered by screw presses and solar dryers resulting in a class "A" product. A new operations and laboratory building is part of the project which includes facilities for operator training.

Humboldt, Tennessee

Bids for the new 5.0 MGD Wastewater Treatment Plant which includes grants from Economic Development Administration (EDA), FastTrack Infrastructure Development Program (FIDP), Delta Regional Authority (DRA), and State Revolving Funds Loan Program (SRF) were received on March 21 with Smith Contractors, Inc. being the low bidder at \$25,530,000.

Bids for the new Municipal Raw Water Supply Well were received on April 16 with Layne being the low bidder at \$402,640.

Plans for the Gibson County Industrial Park Elevated Water Storage Tank and Water Distribution Improvements have been approved by TDEC and SRF and will be advertised for bids soon.

Construction of the Gibson County Industrial Park Sewer Improvements which includes a Site Development Grant (SDG) has a commencement date of May 20 with Marbury Construction Co. being the low bidder at \$1,573,139.

Humboldt, Tennessee (Cont'd)

A Preliminary Engineering Report for the 2019 CDBG Application was submitted and awards are expected to be made in the Fall.

Huntingdon, Tennessee

Bids for the 2018 CDBG Sewer Improvements will be received on May 21.

Construction of the FIDP funded Buena Vista Road sewer pumping station has a commence date of April 29 with Barsto Construction being the low bidder at \$401,096.

Construction of the Highway 22 Lagoon Disinfection System Improvements has a commencement date of May 13. Miller Contractors, Inc. is the low bidder at \$260,000.

Approval was received from TDEC for the Lake Area Sewer Service Extension project.

A grant was awarded to the Carroll County Watershed Authority for a Pavilion and Walking Trail and design will begin soon.

A Preliminary Engineering Report was prepared for a FIDP grant to renovate the Behlen sewer pumping station.

Jackson Energy Authority (JEA) Jackson, Tennessee

Progress continues on the \$13.3M Disaster Community Development Block Grant focusing on five separate projects. The first project, 54-inch Riverside Interceptor Rehabilitation, is complete and closed out.

Construction for the Johnson Creek and SFFD River SPS renovation project, which was awarded to Ronald Franks in the amount of \$1,150,000, is underway. Work on the South Fork Forked Deer Station is mostly complete and work at the Johnson Creek station is underway.

A pre-construction meeting will be held May 7 for the Miller Avenue Wastewater Treatment Plant Improvements project with W. Rogers Co. with a budget of \$6,064,000.

Construction for the HDD Water Line River Crossings is set to begin May 20. The low bidder was Memphis Road Boring Co., Inc. of Byhalia, MS at \$988,070. Survey is complete for the Bells Highway SPS.

Project Updates

Lewisburg, Tennessee

Construction of water and sewer relocations for State Route 50/431 is nearing completion with water work complete, tested, and in service. 355 feet of sewer lines and two manholes remain to be installed.

Construction for the replacement of an existing 18-inch interceptor sewer with a new 24-inch sewer is underway with John T. Hall Construction being the low bidder at \$553,424. Original project sewers have been installed and tested. This project is funded by a \$525,000 CDBG.

Construction for the Snell Branch Sewage Pumping Station Renovation project with Richland, LLC of Pulaski, TN at \$1,059,850, is underway with project demolition largely complete. Pumps and VFD's have arrived and the screen is to arrive soon. The Contractor is currently working on piping.

A Raw Water Capacity Increase Evaluation is underway.

Construction of the WWTP Chemical Feed Building is underway with Contracting Services, Inc. of Culleoka, TN at \$1,091,743. Building footings have been placed and the Contractor is working on grade beams and walls. The methanol tank has arrived. The project has a completion date of June 1, 2019.

Livingston, Tennessee

The WWTP renovation project, funded by a \$525,000 CDBG, is substantially complete with W&O Construction of Livingston, TN being the Contractor. Closeout documents have been sent to the funding agency. Contractor is working on punch list items.

Aerial survey work for the Hilham Water System Improvements is complete and drafting is underway.

Construction for the Sewage Pumping Stations Renovation project, with John T. Hall Construction of Sparta, TN being the low bidder at \$473,850, is complete with the Contractor working on punch list items. The project consisted of the renovation of two sewage pumping stations and 1,400 L.F. of sewer line rehabilitation.

Livingston, Tennessee (Cont'd)



Taylor Street SPS Renovation
Livingston, Tennessee



Old County Plant SPS Renovation
Livingston, Tennessee

Maryville, Tennessee

Design of a new Sludge Thickener Building and two new belt presses is 50 percent complete.

A preliminary Alternative Disinfection Study is underway to investigate the use of alternate disinfectants and technologies at the WWTP.

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Project Updates

Ohio County Water District Ohio County, Kentucky

The Hoover Hill Interconnect Water Line project, with Ernie Davis & Sons Mechanical, Inc. of Owensboro, KY being the Contractor, is substantially complete. The Contractor has completed paving and is performing clean-up. The total project cost was \$276,303.

Paducah McCracken Joint Sewer Agency (JSA) Paducah, Kentucky

Construction on the 15 MG Prestressed Concrete Combined Sewer Storage Tank, with Crom being the Contractor at \$6,700,000, is underway. The Contractor has placed 2/3 of tank floor. This tank is proposed to store wet weather combined sewer flows and utilizes a deep pile foundation. The project has a completion date of September 4, 2019.



Concrete being poured in Three Phases
Paducah, Kentucky

Paducah McCracken Joint Sewer Agency (JSA) Paducah, Kentucky (Cont'd)



First Phase of Concrete Pouring: 1,557 cubic yards
Paducah, Kentucky



Second Phase of Concrete Pouring: 1,761 cubic yards
Paducah, Kentucky

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Pulaski, Tennessee

The Industrial Wastewater Survey (IWS) and calculation of the Plant Protection Criteria and Industrial Wastewater Discharge Limits (local limits) have been submitted to TDEC for approval.

Construction for the \$394,279 rehabilitation of approximately 5,000 L.F. of gravity sewer using pipe bursting methods is substantially complete with Contractor MG Underground, LLC. Contractor is completing punch list items.

Field investigations of all aerial sewer crossings are complete and preparation of the CAP/ER is underway. A proposal from MR Systems for system integrators in relation to the WTP Controls and Tank Telemetry was recommended to the Owner with a cost of \$553,471 and they are currently preparing shop drawings.

Construction of the West College Street Sewer Replacement project with the low bidder being LTS Construction, LLC of Winchester, TN at \$124,760 is complete and closed out.

Plans for Murtco/Integrity Mold Sewer Extension have been approved by TDEC and a bid date is set for May 14.

Savannah, Tennessee

Final plans have been submitted to TDOT for the SR128 project from Pyburns Road to Airport Road. Design is wrapping up for the 2018 CDBG Sewer Rehabilitation and East Main Sewer Pumping Station Renovation.

The semi-annual report has been submitted and assistance was provided for the pretreatment compliance inspection.

A final NPDES Permit has been received.

Shelbyville Power, Water & Sewerage System (PW&SS), Shelbyville, Tennessee

The IWS and local limits have been submitted to the State for preliminary approval before adoption.

Construction for the 2017 CDBG Phase III Sewer Rehab project has begun with John T. Hall Construction, Inc. of Sparta, TN being the low bidder at \$770,470. The Contractor has completed road bore and is laying pipe.

Construction at the Shoffner-Bomar and U.S. Pencil SPS sites is ongoing. Both SPS's are in service. The

Shelbyville Power, Water & Sewerage System (PW&SS), Shelbyville, Tennessee (Cont'd)

Contractor is awaiting delivery of a new manhole section before closing out the project. Gillispie Construction is the Contractor on the project at \$722,000.



**Shoffner-Bomar
SPS
Shelbyville,
Tennessee**



**U.S. Pencil SPS
Shelbyville,
Tennessee**

The Duck River Dam Evaluation is underway. A preliminary engineering report for water system improvements was submitted for inclusion in the 2019 CDBG application.

Smithville, Tennessee

Technical assistance continues to be provided for pretreatment.

A preliminary engineering report for sewer system improvements was submitted for inclusion in the 2019 CDBG application.

Trenton Light and Water Trenton, Tennessee

Construction of the new 1.6 MGD Sequencing Batch Reactor (SBR) Wastewater Treatment Plant is approaching completion with Smith Contractors being

Trenton Light and Water Trenton, Tennessee (Cont'd)

the General Contractor at a project cost of \$8,888,000. Contractor is performing start-up on equipment. The project completion date is May 2019.



**Construction progress of the 1.6 MGD SBR
Trenton, Tennessee**



**Construction progress of the 1.6 MGD SBR
Trenton, Tennessee**

Bids for the 2018 CDBG Sewer Rehabilitation project will be received on May 16.

Union City, Tennessee

TDOT opened bids on March 29 for the last phase of I-69 in Union City which includes utility relocations as part of the project.

Water Authority of Dickson County Dickson, Tennessee

A report for the Jones Creek WWTP Sludge Study which consists of the installation of new screw press and use of existing digesters to produce Class "B" sludge has been provided to the Owner.

A report has been submitted to the Owner related to the Jones Creek Drip Irrigation Site. This project proposes the purchase of land for drip irrigation near the plant.

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Behind the Scenes!

On February 22, 2019, a State of Emergency was declared in Overton County due to historical rainfall. The excessive rainfall caused the operating level of Wolf Creek Dam to reach record levels resulting in a record release of 58,000 CFS. The record release resulted in very high levels in the Cumberland River downstream.



Raw Water Intake along the Cumberland River designed by Wauford in 2008 and functioning properly during a record release from Wolf Creek Dam upstream

a CLEAN, adequate supply of drinking water
and PROPERLY TREATED wastewater
THIS IS OUR BUSINESS