

Stafford County Utilities Commission  
Tuesday, October 13, 2020  
**7:00 p.m.** – Activities Room, Ground Floor  
George L. Gordon, Jr. Government Center  
1300 Courthouse Road  
Stafford, VA 22554

- I. Call to Order
- II. Roll Call
- III. Approval of Meeting Minutes
  - A. July 14, 2020 Meeting Minutes
- IV. Presentations by the Public (3 Minutes)
- V. Reports by Commission Members
- VI. Director's Report (Jason Towery)
  - A. Utilities Fund FY2020 Year-End Review & 1<sup>st</sup> Quarter Report (Deidre Jett)
  - B. Future Rate Increases/Connection Fees (Paul Santay)
  - C. Update on Capital Construction Projects (Bryon Counsell/Gary McCollum)
  - D. 3R Projects/Facilities Progress Report (Chris Edwards/Nathan Huber)
- VII. Unfinished Business
- VIII. New Business
  - A. Vendor Contact re. Improvement to Sewage Treatment Plants
- IX. Adjournment

DRAFT Minutes – July 14, 2020  
UTILITIES COMMISSION MEETING

- I. Call to Order:  
Chairman Kent Carson called the meeting to order at 2:00 p.m. in the Board Chambers, 1300 Courthouse Road, Stafford, VA.
- II. Roll Call:  
Members present were Moses Boulden, Sr., Kent Carson, Gregory Cox, Alan Glazman, and Mickey Kwiatkowski. Nancy Sullivan participated remotely via telephone and Bill Tignor was absent.
- III. Approval of the March 10, 2020 Meeting Minutes – Ms. Kwiatkowski motioned to approve the minutes as presented, seconded by Mr. Boulden, passed 5 – 0.
- IV. Presentations by the Public:  
There were no members of the public present.
- V. Reports by Commission Members:  
Ms. Kwiatkowski said that she was troubled by vendors being outbid or not given consideration due to new JOC (job order contracts) contracts even if the JOC contract was more expensive than the lower or lowest bid. She also noted that water/sewer delinquent accounts were out of control and said that Paul Santay was looking into payments being received by Wells Fargo; possibly using Treasurer staff/funds to enhance collections now that they were no longer going to be processing payments. She asked that a report brought back at the next meeting.
- VI. Director's Report:  
Mr. Towery provided an update on COVID-19 and steps being taken by Public Works (Utilities) to keep staff and customers safe. He thanked Chris Edwards and his staff for doing an excellent job with scheduling and keeping the daily work flow going smoothly. Customer Service staff worked remotely doing on-line chats; there have been on-going process improvements resulting in no lapse of service or workload. An increase in wipes being flushed and fats, oils, and grease (FOG) resulted in increased overflows, which have been brought under control and although not stopped, they have stabilized.  
  
Mr. Towery provided an update on the recently signed Memorandum of Understanding between Public Works and the Sheriff's Office for its use of the vacated Abel Lake property to store seized vehicles and evidence. The Sheriff's Office has assumed full responsibility for the cost, permit, and installation of fencing the designated area as well as all utilities costs associated with its use and maintaining full liability insurance coverage. At present, the Sheriff's Office is also using the area for K-9 training.

Regarding the use of a lockbox for receipt of water/sewer payments, Mr. Towery said that this system was used several years ago and was being reinstituted due to the volume of payments being more than the current Treasurer's Office staff can manage (in excess of 600+ payments received daily). Ms. Kwiatkowski said that this was a great idea. Mr. Towery said that initially a position was to be hired, dedicated to water/sewer bill processing but with the COVID-19, and due to necessary budget cuts, that position was not filled. A start date for the Lockbox has yet to be determined.

Regarding delinquencies, Ms. Kwiatkowski said that last month the collection agency only collected \$799, which was a joke. Customer Service Manager, Jeanine Denno, said that with COVID-19, things were on hold; that a lien could only be placed if the account was more than 30 days past due and over \$150.00; she would need approval from Mr. Towery and/or Mr. Santay to begin that process again. Ms. Denno added that renters accounted for a large percentage of delinquent accounts and with turn-offs not being permitted (since COVID-19), there was no recourse at this time. Regarding the small percentage of collections, Ms. Denno noted that it was in line with the approximate 10% collected by other localities on delinquent accounts. Ms. Kwiatkowski said that placing liens would be difficult since the Courts were so far behind. Mr. Glazman asked about going after the property owners when a renter was delinquent. Mr. Towery said that about two years ago, there was a change in the deposit amount that property owners could request from renters, a portion of which could be used to pay past due utility bills, but it was not currently in the County Code that property owners could be made to pay renter's delinquent bills. The County Code would have to be amended in order to enable the practice of billing property owners and in the past, it was not looked on favorably by the Board of Supervisors. Mr. Carson inquired about the percentage being paid to the collection agency. Ms. Denno explained that the agency added a percentage on top of the amount owed to the County, which is how they made their money and the County still recouped the full amount owed to it. Mr. Towery noted that in a report at the next meeting, he would 1. Look at the possibility of charging the property owners; and 2. Have a direct conversation with the Treasurer about wage garnishments.

Next, Mr. Towery provided the Commission with an overview of Utilities items approved by the Board of Supervisors at its June 16, 2020 and July 7, 2020 meetings. These included a contract with Jacobs Engineering for preliminary engineering, design engineering, bid and contract administration services for *installation of a second centrifuge at the Lake Mooney Water Treatment Plant*; executing of contracts for *water and wastewater chemicals*; a contract with The Engineering Groupe, Inc., for survey, environmental review, design engineering services for *two sewer extensions from the Lower Accokeek gravity sewer and force main project*; a contract for *replacement of the Aquia Wastewater Treatment Plant centrifuge*; and a contract for *redesign of a segment of the Lower Accokeek gravity sewer*.

At its meeting on July 7, 2020, the Board chose to deny extending the County's Pump and Haul loan program to include the availability of loans for alternative discharging systems.

Following the update on Board action, Mr. Towery provided an overview of water/sewer revenues noting that while commercial accounts were down, residential accounts were up, due in part to COVID-19. He said accounts were tracking well.

Mr. Towery introduced Ms. Briana Hairfield, Public Works Public Information Officer, who introduced a video tour of the Little Falls Wastewater Treatment Facility. Ms. Hairfield said that it was done in conjunction with the Schools Science Standards of Learning (SOL), which was incorporated into the video. Public Works would continue partnering with the Schools with live Q & A sessions with students. Mr. Towery noted that the video was available on the County's website and a virtual tour of a water treatment plant would be available in the coming months.

Chris Edwards, Deputy Director of Public Works/Operations, spoke about the new amalgam rule being enforced by the Department of Environmental Quality (DEQ), which required the installation of an amalgam separator (for disposal of silver fillings) at dentist offices to remove mercury from the waste stream. The County is charged with contacting all dentists in the County to ensure they are compliant with this rule. Jon Brindle will head up this effort and will write-up the County's compliance plan for DEQ by January, 2021.

Byron Counsell, Deputy Director of Public Works/Construction, Capital Engineering, Transportation gave a Power Point presentation on construction projects currently underway in the County including: *Claiborne Run Parallel Force Main, Phase 1A* (piping is complete, site restoration is underway, bankruptcy from the original contractor is hindering final completion; staff is working with the former contractor's surety to resolve uncompleted work) – Mr. Cox asked about the bankruptcy proceedings. Mr. Counsell noted that the contractor's references had been checked and were all good; that the contractor had cash flow problems and completed as much of the work as possible before being sent home. Mr. Cox asked about letters of credit. Mr. Counsell explained about receiving two bonds on each job, one performance and one payment in addition to keeping 5% of the amount of the payment retainage to leverage timely completion of projects. *Claiborne Run Parallel Force Main, Phase 1B* – 24" line running underneath the Blue/Gray Parkway; ready to bid in the fall – it will cross National Park Service land and go through VDOT's Chatham Bridge project, a betterment bore to run underneath the road while the Bridge is under construction (design alignment almost complete, staff is reviewing challenges with the western connection with proposed Falls Run Force Main, ongoing discussion w/ VDOT regarding the final alignment along Route 3, and ongoing discussion with property owners along Route 3 and George Washington Square) – Mr. Glazman asked if this would delay the Chatham Bridge project. Mr. Counsell assured the Commission that it would not.

*Falls Run Force Main* (preliminary alignment mostly complete, reviewing challenges at eastern connection with Claiborne Run Parallel force main, phase 1B, reviewing challenges with alignment on National Park Service property, 42" bore under Route 3 is a VDOT betterment as part of the Chatham Bridge project). *Falls Run Gravity Interceptor Sewer Phase 2* (alignment established, surveying begun, geotechnical investigation begun, right-of-way/easement acquisition identification ongoing). *Lower Accokeek Gravity, Force Main & Pump Station* (steady progress on gravity pipeline and force main pipeline, access road construction complete, preparing for bore under Route 1 near Regional Jail). *Little Falls Run Wastewater Treatment Plant – Facility and Regulatory Upgrades* (Board approved and appropriated funding for design, kick-off design meeting held 6/24/2020) – Mr. Carson asked if the upgrades to Little Falls Run would expand capacity. Mr. Counsell replied that the upgrades were regulatory, not to increase capacity, however, the upgrades would increase collateral capacity and efficiency. *342 Pressure Zone Upgrades (342-05)* (all project clearing complete, 42" bore under Route 17 complete, pipe crews working along Beagle Road, staff working with local residents regarding work); *342 Pressure Zone Upgrades (342-06)* (design alignment complete, working on final identification of affected properties, 42" bore under I-95 is a VDOT/JV betterment as part of the I-95 FedEx Express Extension Project, completion of construction to be coordinated with the Enon Road elevated water storage tank). *342 Pressure Zone Upgrades-Enon Road Elevated Water Storage Tank* (site plan in review, permit application submitted to VDH, project scheduled to coincide with completion of 342-06). Ms. Kwiatkowski asked about the visual of the new water tank at Enon Road. Mr. Counsell replied that it had to do with the topography of the land where the tower was being placed and as it was at a higher elevation, the tank would be only 94' tall vs. some other tanks that were higher due to lower topography depending on the location.

Mr. Counsell then spoke about the JOC (job order contracts) referenced earlier in the meeting by Ms. Kwiatkowski. He said that Prince William County and Fairfax among others in Northern Virginia used Gordian who established rates for work in the region, these rates were all encompassing and advertised so that when a contractor submitted a bid, they knew that payment would be at the advertised rate. He said there were varying conditions and being attached to Northern Virginia, some of the costs were higher than normally charged in this area. Mr. Counsell said that it was a wonderful idea and program developed by the County's Procurement division. When using Gordian, projects up to \$250,000 did not require Board approval. However, Capital Construction has not been able to avail itself of the program because proposals have been very high. Ms. Kwiatkowski asked if the Board was aware of that. Mr. Counsell said he did not know. He said that fortunately, the County could still work with Invitations for Bid (IFB) and Requests for Proposals (RFP) and go with the most responsive and responsible bidder. He added that sometimes going with the lowest bid was not the best course of action but rather going with a bidder that had worked successfully with the County on other projects proved to be in the County's best interest. Mr. Edwards spoke about on-call contractors and a new version being put in place vs. using JOC.

Mr. Towery said there were concerns about balancing between reasonable costs of contracts and budgets; that Public Works was working with Procurement and the County Attorney's Office. Mr. Carson thanked staff for the updates.

### VII. Unfinished Business

Jon Brindle, the County's pre-treatment coordinator, gave a presentation on the FOG Program proposal, which he said was a follow-up to a presentation given to the Commission at a previous meeting. Mr. Brindle outlined what FOG was, where it was found and how it clogged and blocked sinks, drains, sanitary sewers, and manholes. He noted that 50% of sanitary sewer overflows (SSO) and backups were caused by FOG that damaged infrastructure and threatened the environment. In 2018, there was a total of 13 SSO and 191 backups that resulted in a cost of \$1,634,900 and 11,984 labor hours. SSO is a DEQ priority and FOG control is a key to reducing SSOs. The proposed program is designed to avoid expensive testing and requires commercial kitchens to use best management practices. Mr. Carson asked about the diameter of the pipes shown in the presentation. Mr. Brindle said they were stock photographs, not taken in Stafford County so he did not know the diameter.

In talking about residential outreach, Mr. Brindle said that a webpage was created [StaffordCountyVA.Gov/FOG](http://StaffordCountyVA.Gov/FOG) and FOG flyers were sent to 38,000 customers in water/sewer bills. A social media campaign was underway in the ongoing effort to educate residential customers.

Previously in a commercial kitchen survey, 368 kitchens were identified and a FOG packet was delivered to identified kitchens. Ms. Kwiatkowski asked where Mr. Brindle got the information on the commercial kitchens in Stafford since there was no business license requirement in the County. Mr. Brindle replied that he obtained a food service establishment list from VDH as well as a list from the Department of Agriculture and did extensive driving around the County. A FOG questionnaire was sent out by mail in January 2020 with a 50% response to date. The program has been delayed due to COVID-19. Moving forward, the program will restart in July 2020 with ongoing outreach. Pre-inspections will begin in July 2021 with full implementation anticipated in January 2022. Commercial kitchens will be resurveyed in hopes of receiving 100% response to the questionnaire. A stakeholder meeting will be planned regarding general permit specifications and when the hiring freeze is lifted a FOG program coordinator will be hired. There will be site visits to high-risk facilities to help them understand the requirements. FOGBMP.com will be activated as an on-line outreach tool. From January 2022 forward, if approved by the Board and the Commission, there will be a FOG permit requiring annual inspections, a \$100 annual fee (of which 33% will be used to help fund grease control device (GCD) requirements via a grant program), and a GCD requirement in commercial kitchens. The grant program will be used for installation or upgrade of GCD with a 50/50 split of installation costs (\$1000 cap), offered on a first come/first served basis. Currently 5% of inspected Stafford facilities do not have a GCD installed. The goal is to have a GCD installed in all



commercial kitchens within three years. Mr. Carson asked about commercial kitchens not using them correctly. Mr. Brindle said that maintenance was as important as having one installed and depending on usage, it may have to be pumped out quarterly, monthly, or weekly or require daily maintenance. Mr. Carson asked if there was anywhere in the County to dispose of the grease or any contractors in the County that would collect it. Mr. Brindle replied that there were contractors within the County to pick up the grease but neither of the County's wastewater treatment plants were set up to receive it. Ms. Kwiatkowski asked what kitchen staff was supposed to do with it. Mr. Brindle said it should be thrown out with the trash. Mr. Cox asked if the County could use it to be converted into a heat source. Mr. Brindle said that the County did not have facilities with that capability. Mr. Towery noted that Spotsylvania County had such a system but there was not one in Stafford. He said it would be a major capital expense so the focus now was on education. Ms. Kwiatkowski said the grant was a wonderful idea to help cover the expenses associated with obtaining and installing a GCD.

Mr. Carson said the proposed program seemed logical and well thought out with workable timelines. Mr. Towery said staff was still in the education and information collection phase but appreciated the vote of confidence from the Utilities Commission. The program will be brought back to the Commission and the Board of Supervisor before final implementation in FY2022.

### VIII. New Business

Mr. Carson asked about a water/sewer user fee increase. Mr. Towery said it was brought to the Board in late February but staff recommended not approving the increase at that time due to COVID-19. Because it is a fee, not a tax, it can be brought back to the Board at any time but now is not yet the appropriate time to do so. Mr. Towery said most likely it will be brought back to the Board early next year adding that he would see what circumstances were in about six months.

Mr. Glazeman asked about usage during the pandemic and if COVID-19 created a significant impact. Mr. Towery said that commercial use was down but residential use was up and usage was steady. Public Works Finance and Budget Manager, Deidre Jett, said that it had been a dry spring and there was a slight decline but not drastic and that the increase in residential usage made up for the decrease in commercial usage. She said that growth was tracking at 2%, which was average historically. She said the Department was doing better than was originally thought. She said that not charging late fees and penalties was having a slight impact on the budget.

### IX. Adjournment

Mr. Carson thanked staff for its good work, thanked members of the Commission and adjourned the meeting at 3:30 p.m.

Director's Report  
October 13, 2020  
Utilities Commission Meeting

The following items are on the Board's **October 20<sup>th</sup>** meeting for review and approval:

PUBLIC WORKS (UTILITIES); AUTHORIZE THE COUNTY ADMINISTRATOR TO EXECUTE JOB ORDER CONTRACTS FOR ON-CALL WATER AND SEWER MAINTENANCE, REPAIRS, AND CONSTRUCTION  
Proposed Resolution R20-316

BACKGROUND SUMMARY: Approves Contracts.

Public Works, Utilities requires additional professional services for water and sewer maintenance, repairs and construction that are beyond the capabilities of the Utilities staff. The County solicited seal bids pursuant to Invitation for Bid #21-003-5030SB-R for Job Order Contracts (JOC) for On-Call Water and Sewer Maintenance, Repairs, and Construction to provide these additional services. Determined to be the lowest responsive and responsible bidder to provide these services are WC Spratt, Inc., A&M Concrete Corporation s and Sagres Construction Corporation. Funds for these services are available in the Utilities Enterprise Fund.

PUBLIC WORKS (UTILITIES); AUTHORIZE THE COUNTY ADMINISTRATOR TO EXECUTE A CONTRACT FOR THE TRANSPORTATION AND DISPOSAL OF BIOSOLIDS FROM A WASTEWATER FACILITY

Proposed Resolution R20-317

George Washington

BACKGROUND SUMMARY: Approves Contract.

Little Falls Run Wastewater Treatment Facility (LFRWWTF) requires professional services for the transportation and disposal of bio-solids. The County solicited competitively sealed bids pursuant to Invitation for Bid #21-006-5060SB to provide the transportation and disposal of biosolids for one year with four optional one-year renewals. Synagro WWT, Inc. was determined to be the lowest responsive and responsible bidder to provide these services from LFRWWTF at a cost of \$27.97 per wet ton. Funds are available in the Utilities Operating fund.

PUBLIC WORKS (UTILITIES); AUTHORIZE THE COUNTY ADMINISTRATOR TO EXECUTE A CONTRACT FOR WATER AND WASTEWATER TREATMENT POLYMER CHEMICALS

Proposed Resolution R20-318

BACKGROUND SUMMARY: Approves Contract.

The County solicited competitively sealed bids pursuant to IFB 21-00515030SB to provide polymers to water and wastewater facilities. Each facility completed performance testing on the sludge that is produced at the facility. Aquia WWTF shows best results with XTC-880DB polymer, Little Falls Run WWTF testing show XTC-C6272 polymer with the best results. Both XTC-880DB,



\$1.1387 per pound and XTC-C6272, \$1.1387 per pound, polymers will be procured with X2O t/a Xelera2. Lake Mooney WTF performance testing showed Praestol 835BS, polymer showed the best performance results. Praestol 835BS, \$1.36 per pound, will be procured with Solenis. Funds for the treatment chemicals are available in the Utilities Operating Budget.

**PUBLIC WORKS (UTILITIES); AUTHORIZE THE COUNTY ADMINISTRATOR TO EXECUTE A DEED OF WATER TOWER LEASE AGREEMENT WITH CELLCO PARTNERSHIP**

Proposed Resolution R20-319

Aquia

**BACKGROUND SUMMARY:** Approves Lease Agreement.

A Deed of Water Tower Lease Agreement with Cellco Partnership, doing business as, Verizon Wireless, would allow Cellco to lease a portion of certain space on the Stone River Tank located at 17 Jason Lane, Stafford, Va 22554. The Agreement would grant permission to Cellco to install, maintain, and operate communication equipment and antennas at an annual rental of \$28,800 dollars to be paid in monthly installments of \$2400.00. The first 5-year rental renewal will increase of 102% over the prior year rental and 102.5% of the prior years' rental over the next three, five-year renewals.

Public Hearing –

**PUBLIC WORKS (UTILITIES); CONSIDER VACATION OF VARIOUS 20-FOOT-WIDE EXCLUSIVE WATER-SEWER EASEMENTS**

Proposed Resolution R20-308

**BACKGROUND SUMMARY:** Approves Vacation of County-Owned Easements.

The public hearing was authorized by the Board on September 15, 2020 (R20-286) authorizing the vacation of 17, 20-foot sanitary water/sewer easements due to the Truslow Road Neighborhood Sewer Project being denied due to budgetary constraints and revision to the Neighborhood Extension Policy. This impacts properties in the Falmouth and Hartwood Districts and has no financial impact to the County. There is no cost to the County associated with vacating these easements.

### **Customer Service Update**

Total Water Accounts	38,779
Meters Read	34,101
Total Sewer Accounts	35,443
Customer Service Calls In/Outbound	2,748
Walk-in Customers	178
E-mails	911
Live Chats	32
60-Day Extensions due to COVID-19	0
Payment Plans due to COVID-19	2
Total Delinquent Accounts	2451
Final Delinquent Accounts Total Owed	\$643,422.39

- During Virginia's Legislative Special Session, proposed SB 5118 was introduced but not yet approved. If approved, it would require utilities to implement an Emergency Debt Relief Program (EDRP) to residential customers due to the impacts of COVID-19. Among the requirements of the program would be providing specialized payment plans to customers (for up to 24 months) who have been affected by COVID-19; establishing criteria for qualifying applicants; additional reporting to the State Corporate Commission. Timing of the legislative action is unknown.

### **Capital Construction/Engineering Update**

#### **Wastewater**

- The Lower Accokeek project is progressing (75%) as the pipework has been ongoing for nearly a year and the pump station sitework and access road have continued (30%).
- The first phase of the Claiborne Run Parallel Force Main is nearly complete. We are discussing project completion with the Contractor's Surety after bankruptcy.
- Design efforts continue for the next phase of the Claiborne Run Parallel Force Main.
- The Wayside Interceptor project is complete.
- Design is underway for the replacement of the large gravity interceptor on the west side of I95 along Falls Run.
- A large dewatering centrifuge project has begun construction at Aquia WWTF.

- Design efforts beginning in order to substantially improve operations at both wastewater treatment facilities. A design proposal for significant remedial and regulatory work has been accepted for the Little Falls Run WWTF.

### Water

- A 24" water transmission line has begun near I95/Route 17. There are three phases totaling about 20,000 linear feet. The first phase is 75% constructed.
- Construction will begin shortly for the 2 Million Gallon Elevated Storage Tank to be located on Enon Road. We hope to advertise this project by the end of Fall 2020.
- Final reviews are taking place for the substantial regulatory improvements to the emergency spillways at Abel Lake. Staff continues to work with NRCS to plan and coordinate work.
- Numerous system modelling, emergency SOP's, Risk Assessments, and Benchmarking tasks are underway for system improvements.
- Two major equipment additions to Lake Mooney Water Treatment Facility are beginning. Design is starting for a new additional dewatering centrifuge and a new additional sludge thickener tank.
- Two large projects at Smith Lake Water Treatment facility are in design to replace outdated and troublesome electrical drives for the WTP and update the finished water pump station electrical components.

### **Field Operations Update**

- All facilities are compliant with permits and have continued carrying out normal operations. Field Operations Division plans to complete the 2020 unidirectional flushing program the week of October the 12<sup>th</sup>. Unfortunately, due to a late start because of the pandemic and a brief stop in flushing as a result of drought conditions, the number of hydrants flushed was lowered from 700 to 450 hydrants. Staff plans to resume flushing in the Spring of 2021.

October 13, 2020  
Utilities Commission Meeting

Item VI.

A. Utilities Fund FY2020 Year-End Review and 1<sup>st</sup> Quarter Report (Deidre Jett)

1. FY 2020 – Preliminary Results

- a. Overall operating revenues were 99% of budget estimates, or \$521,000 under the FY 2020 Budget projections. Water and sewer fees were \$1.6 million below budget however interest revenues exceeded budget by \$1.1 million. On a year over year basis, operating revenues increased 5.3% based on a 1.5% rate increase, growth in the system, and strong fourth quarter water and sewer revenues.
- b. Availability revenues were 97% of budget estimates or \$261,000 or under the FY 2020 Budget projections.
- c. Operating expenditures were 89% of budget and reflect debt service saving over budget since revenue bonds were not issued in FY 2020 as well as cautious spending in the latter half of the year due to the current economic climate.
- d. On a cash basis, capital spending totaled \$8.6 million.

2. FY21 – First Quarter

- a. First quarter operating revenues and expenditures are on target with budget estimates.
- b. Availability revenues are projected to meet budgeted projections.
- c. Robust capital spending is anticipated in FY2021 as the County completes ongoing projects and focuses on 3R needs.

October 13, 2020  
Utilities Commission Meeting

Item VI.

B. Future Rate Increases/Connection Fees (Paul Santay)

In March 2020, the Utilities Commission recommended approval of a 1.5% user fee increase to the water/sewer rates. This was presented to the Board of Supervisors as part of the FY2021 budget process. Due to the impacts of COVID-19, however, the Board decided against any rate increase for FY2020. Staff will continue to monitor the impacts to the budget and discuss with our Utilities Fund rate consultant regarding FY2021 rate proposals.

Currently, requests from applicants for connection to the County water/sewer system are required to pay connection fees in the amount of \$1,450 (water) and \$2,100 (sewer). Staff is considering changes to the fees, as in many cases, the actual costs accrued by Public Works staff is higher than those collected.



# UtilitiesCapital Project Summary Report

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Fiscal Year 2021, First Quarter  
Item VI. C


Presented October 13, 2020



## Claiborne Run Parallel Force Main – Phase 1A

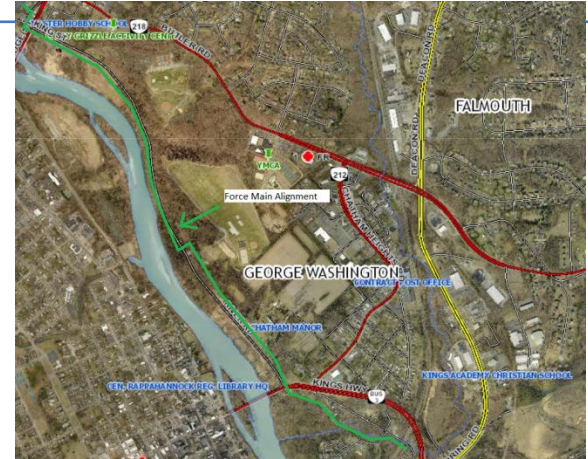
Description	Construct parallel 24" sewer force main from the Claiborne Run Pump Station to Little Falls Run Wastewater Treatment Facility	
Project Budget	Budget and Funding Sources	\$ 3,250,000 (Phased Project of overall \$8,214,000 Budget) (County Utility Fund)
	Appropriated through FY20	\$ 3,250,000 (for this phase of overall \$8,214,000 appropriated)
Completion Date	July 2, 2019 (Delayed due to weather, Contractor delays, and Contractor default) New Date TBD	
Current Status	Discussions with Contractor Surety	
Recent Activity	<ul style="list-style-type: none"><li>• Phase 1A piping is complete</li><li>• Site restoration underway</li><li>• Planning the interconnect to new pipeline</li><li>• Project is enduring the bankruptcy of the contractor, Staff is working with the former Contractor's Surety to resolve uncompleted work</li><li>• Work anticipated to resume late October 2020 and into December 2020</li></ul>	

# Claiborne Run Parallel Force Main – Phase 1B

<b>Description</b>	Construct parallel 24" sewer force main from the Claiborne Run Pump Station to Little Falls Run Wastewater Treatment Facility	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$ 4,964,000</b> (Phased Project of overall \$8,214,000 Budget) (County Utility Fund)
	<b>Appropriated through FY20</b>	<b>\$ 4,964,000</b> (for this phase of overall \$8,214,000 appropriated)
<b>Completion Date</b>	Spring 2022	
<b>Current Status</b>	Design, 90% Complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"><li>• Design alignment mostly complete</li><li>• Reviewing challenges at western connection with proposed Falls Run Force Main (LFR-120)</li><li>• Continuing discussions with VDOT regarding final alignment along Route 3</li><li>• Continuing discussions with private property owners along Route 3 and George Washington Square</li></ul> 	

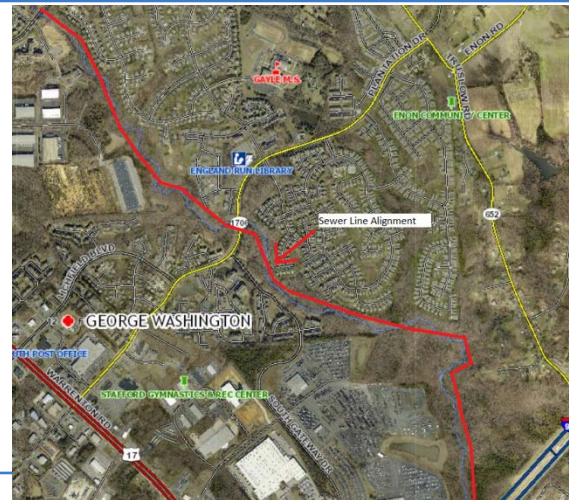
# Falls Run Force Main

<b>Description</b>	Design and construction of a 24" wastewater force main from the Falls Run Pump Station to connection with Claiborne Run Parallel wastewater force main (Claiborne Run Para FM Phase 1B)	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$3,893,000</b> (County Utility Fund)
	<b>Appropriated through FY20</b>	\$ 364,787
<b>Completion Date</b>	Design, Fall 2020	
<b>Current Status</b>	Design, 80% Complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"> <li>Reviewing challenges at eastern connection with Claiborne Run Parallel FM Ph 1B</li> <li><u>Reviewing challenges with alignment on National Park Service property, may have to avoid NPS at greater cost and time</u></li> <li>42" bore under Route 3 is a VDOT betterment as part of the Chatham Bridge Replacement Project</li> </ul>	




## Falls Run Gravity Interceptor Sewer Phase 2

Description	Design and construct a 24" gravity sewer line approximately 13,000 linear feet from I-95 westward to Berea Church Road to replace existing gravity sewer line and increase collection capacity	
Project Budget	Budget and Funding Sources	\$4,100,000 (County Utility Fund)
	Appropriated through FY20	\$ 436,736
Completion Date	Design Completion Spring 2021	
Current Status	Design, 50% Complete	
Recent Activity	<ul style="list-style-type: none"><li>• Surveying underway</li><li>• Geotechnical underway</li><li>• Right-of-Way/Easement acquisition identification has begun (anticipate 10 acquisitions)</li></ul>	




# Lower Accokeek Gravity, Force Main & Pump Station

<b>Description</b>	Design and construction a 3 MGD sewage pumping station and associated force main and gravity lines to serve the southern Courthouse Area	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$15,721,000</b> (County Utility Fund)
	<b>Appropriated through FY20</b>	<b>\$ 15,721,000</b> (current projected costs well within budget)
<b>Completion Date</b>	March 3, 2021 (Construction)	
<b>Current Status</b>	Approximately 60% Complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"><li>• Steady progress being made on gravity pipeline</li><li>• Steady progress being made on force main pipeline</li><li>• Construction of access road for pump station is complete</li><li>• Preparing for bore under US 1 near Regional Jail and Courthouse Road</li><li>• Anticipate weather caused time extension to the pipeline project</li></ul>	



# Little Falls Run Wastewater Treatment Plant – Facility and Regulatory Upgrades

Description	Provide significant treatment plant upgrades, repairs, rehabilitations, replacements, and adapt to new regulatory requirements	
Project Budget	Budget and Funding Sources	\$20,200,000 (County Utility Fund)
	Appropriated through FY20	\$ 1,484,775 (Preliminary Design, Final Design, Permitting)
Completion Date	April 2021 (Design)	
Current Status	Preliminary Engineering	
Recent Activity	<ul style="list-style-type: none"><li>• Board approved and appropriated funding for design activities on June 2, 2020</li><li>• Kick-off meeting for design was June 24, 2020</li></ul>	



## 342 Pressure Zone Upgrades (342-05)

<b>Description</b>	Pressure Zone Upgrade Project to continue the extension of approximately 6,500 linear feet of transmission pipeline from Old Forge Drive to Truslow Road as part of the overall distribution and storage system from Lake Mooney Water Treatment Facility into the 342 Pressure Zone	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$7,800,000</b> (Part of Multi-Phase Project) (County Utility Fund)
	<b>Appropriated through FY20</b>	<b>\$ 7,800,000</b> (First of Three Phases – 2,800,000 Budgeted this Phase)
<b>Completion Date</b>	December 21, 2020	
<b>Current Status</b>	Construction – 30% Complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"><li>• All project clearing complete</li><li>• 42" bore under US 17 complete</li><li>• Pipe crews currently working along Beagle Road</li><li>• Staff provided notice and continues to work with local residents regarding the work</li></ul>	



## 342 Pressure Zone Upgrades (342-06)

<b>Description</b>	Pressure Zone Upgrade Project to continue the extension of approximately 8,500 linear feet of transmission pipeline from Truslow Road to Enon Road Elevated Storage Tank (342-101) as part of the overall distribution and storage system from Lake Mooney Water Treatment Facility into the 342 Pressure Zone	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$3,360,000</b> (County Utility Fund)
	<b>Appropriated through FY20</b>	<b>\$ 432,914</b>
<b>Completion Date</b>	Design, Late 2020   Construction, Late 2022	
<b>Current Status</b>	Design, 15% Complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"><li>• Design alignment complete</li><li>• Working on final identification of affected properties</li><li>• 42" bore under I-95 is a VDOT/JV Betterment as part of the I-95 FedEx Express Extension Project</li><li>• Completion of construction to be coordinated with the Enon Road Elevated Water Storage Tank (342-101)</li></ul>	



## 342 Pressure Zone Upgrades-Enon Road Elevated Water Storage Tank (342-101)

<b>Description</b>	Design and construction of new 2MG elevated water storage tank in the northern part of the 342 Pressure Zone as part of the overall distribution and storage system from Lake Mooney Water Treatment Facility into the 342 Pressure Zone	
<b>Project Budget</b>	<b>Budget and Funding Sources</b>	<b>\$6,168,000</b> (County Utility Fund)
	<b>Appropriated through FY20</b>	<b>\$ 6,168,000</b>
<b>Completion Date</b>	Construction, late 2022	
<b>Current Status</b>	Design, 95% complete	
<b>Recent Activity</b>	<ul style="list-style-type: none"><li>• Site Plan in review by Stafford County Dept. Planning</li><li>• Permit application submitted to Va Department of Health</li><li>• Project to be scheduled to coincide with the completion of 342-06</li></ul>	



Graphic of Proposed Tank

October 13, 2020  
Utilities Commission

Item VI.

D. 3R Projects/Facilities Progress Report (Chris Edwards/Nathan Huber)

### **Water System**

Chatham Water Line Replacement – The project initially started to replace a 1500' section of 1950's cast iron water line running from Chatham Heights Road to Chatham Manor, to improve fire flow for the Chatham sprinkler system. The project evolved into a 4000' replacement and new water line that will remove dead-end waterlines at Chatham and the YMCA and create a loop through Pratt Park, increasing fire flow and water quality for the entire area. Due to the complexity of working at an historic site, the project will take County crews the remainder of the year.

Ferry Farm Water Line Upgrade – The majority of the water line in Ferry Farm was constructed in the 1950's-1960's and is approaching the end of its useful life. Staff has been working with on-call engineers to work to design upgrades to the water system. The majority of the construction work will be completed through a new on-call services contract that is scheduled to go to the Board of Supervisors on October, 20th. This will allow the County to replace approximately 3.5 miles of water line and several hundred water services in the existing neighborhood. This is scheduled to take approximately 3-4 years and will be completed in 5 phases.

Ferry Farm is an excellent example of neighborhood upgrade project. As subdivisions throughout the County continue to age, more of these projects must be completed to keep the water system in good working order.

### **Sewer System**

Sewer Line Rehabilitation - Approximately 3 miles of lining has been completed since the spring. The majority of the work has been in Ferry Farm. Sections of Aquia Harbor are also scheduled to be rehabbed this fiscal year. Utilities Operations plans to rehab sewer lines in Argyle Heights and additional areas within Aquia Harbor next fiscal year.

In previous reports to the Utilities Commission, we explained how the County was going to use a new technology known as Electroscan to determine the exact lines that would need to be lined in Aquia Harbor. Gary McCollum with Capital Construction, along with Electroscan, were selected to give a presentation at the American Waterworks Association's Joint Annual Meeting to highlight the technology and how we used it in Stafford County's Capital Improvement Program to improve our water system.

Manhole Rehab – Manhole coating and rehab will start in Boscobel the week of October 12<sup>th</sup>. The rehab will help preserve the concrete and stop leaks into the sewer system. This prevents sewer gas (hydrogen sulfide) from compromising the existing concrete and minimizes the amount of infiltration and inflow (I&I). The County has approximately 300 manholes that it plans to rehab over the next two-year period.

Claiborne Run Pump Station Repair – The Claiborne Run Pump Station pumps all of the wastewater in the southern end of the County. During Tropical Storm Isaias, it was determined that repairs would need to be made to the pump station. Utilities Operations started a two-month long project to bypass and repair the station.

Aquia Creek Pump Station – This station was scheduled to receive new pumps, electrical drive units (VFDs), and the wet well was to be completely rehabbed. The work was scheduled to commence at the beginning of September. Unfortunately, each VFD is custom built and parts to build the VFDs have been significantly delayed. Once the VFDs are delivered, work on the station will commence.

### **Plant Upgrades**

Hypochlorite Tank Replacement and Smith Lake WTP – Designs began in spring, 2020 to replace the hypochlorite (chlorine or bleach) feed system and storage at the Smith Lake Water Treatment Plant. The bid solicitation has been released by Procurement and we expect to begin work in early 2021.

Aquia (AWT) and Little Falls Run (LFR) Wastewater Plant concrete upgrades – The top of the concrete tanks has started to show significant signs of wear due to the weight of the operating equipment at the plant. Designs to repair the concrete started in the summer of 2020. The bid solicitation has been released by Procurement and we expect to begin work in early 2021.

### **System Evaluations**

Several utility system evaluations have commenced that will be used to help the department build a long-term 3R program. This includes:

Water Criticality Analysis – This study combines break history, pipe material and age, with system demands to determine the most critical pipes in the distribution. The model then considers the consequence of the pipe failure to help the utility to determine the priority in which we should replace distribution and transmission lines. To date, neighborhood projects such as Ferry Farm and distribution lines along Route 1 and Butler Road are determined to be the top priority for replacement.

Tank Evaluation - This is an interior and exterior inspection of all of the tanks in our distribution system. This will allow Operations to develop a Capital Improvement Program budget for tank rehabilitation and repairs for the next five years.