MINUTES
PUBLIC HEARING
FAIRFIELD JOINT WATER AND SEWER SYSTEM COMMISSION
FEBRUARY 25, 2020

Present: Roger A. Gaddy, Neil Robinson, Don Wood, Jason Taylor, Kyle Crager, Commissioners.

Others Present: C. D. Rhodes, Patti L. Davis, Chris Clauson, Ty Davenport, Lisa Muzekari, Jeff deBessonet.

In accordance with the South Carolina Code of Laws, 1976, Section 30-4-80 (e), as amended, the following persons and/or organizations have been notified of the time, date and location of this meeting: The Independent Voice of Blythewood and Fairfield, The Country Chronicle and one hundred forty other individuals.

1. **CALL TO ORDER**

   Chairman Gaddy called the meeting to order at 6:00 p.m.

2. **UPDATE ON STATUS OF WASTEWATER TREATMENT PLANT AND PROPOSED LOCATION**

   Mr. Chris Clauson began the presentation stating the Community Development Department looks at population projections and, in particular, there is an alarming trend with Fairfield County in that the population is almost declining. The population rates are almost to the pre-Civil War amount. The County is obviously in need of a population increase. The Central Midlands COG did their population projection two years ago for 2020 to 2050, and that number for Fairfield County to have by 2020 alarmingly was only 26,925 people which is only about a 2,500 person increase. This is not sustainable for the County. We have to look at how to grow the County, how can it be more sustainable and how do we develop. One of the biggest impediments is that the County does not have the utility infrastructure, in particular, wastewater. The desire for planned development is going to be big. Currently, more sporadic development is being seen in the County because there are limited locations where there is wastewater available. Everything else is supported by septic tanks, which is not a quality treatment. Long term wastewater solutions are vital for the County's growth and development. The Comprehensive Plan completed in 2011, as well as the 208 Plan, which has been the topic of discussion, both have documented there is a need for a wastewater treatment plant in the County to address the need. There have been multiple studies in the past. Hazen and Sawyer was the most in depth with the alternatives analysis, which was done in 2015, and there have been additional studies with Alliance and Thomas & Hutton. The current engineering firm, Thomas & Hutton, has also done

studies over the last 10 years. The options that have been considered include a 2M gallon per day treatment plant that is expandable to 4M gallons. This is mainly driven by the expected need and what is able to come online in the near future. The 2M is mainly for the economic development and the Mega Site, and the 4 is hopefully for the future development that can be spurred. The numbers currently are about $30M to discharge to Big Cedar Creek, and this is just for the plant. There would be an additional $40M needed to discharge to Broad River. Discharging to Lake Wateree is not an option because the limits could not be met. In 2015, connecting to the City of Columbia system was looked into, and 40 miles of line and pump stations would be needed costing approximately $87M. Obviously, we are looking at what is the best option for the County, what can be afforded and what is the safest and most environmentally friendly option.

Mr. Davenport then took over the presentation further discussing the sewer capacity. Ridgeway and Winnsboro are at or near capacity, so they cannot be expanded. Jackson Creek is at its limit. Winnsboro spent $3M on their system and is well run and well managed; however, it cannot be expanded. Ridgeway is a very small system and is in the same situation. The County has to do something in order to move forward. This is why a new facility is needed in order to benefit from residential, industrial and commercial growth so the people who live in the County have places to work, shop, eat and places for recreation. The County is in great shape with its water capacity infrastructure and well positioned for the future. There is also ample natural gas, plenty of power, but we do not have sewer capacity. In our industrial parks, there is about 34,000 gallons per day, which is minimal. A group recently went to Waxhaw, North Carolina to visit a wastewater treatment plant, and they are operating on a daily basis with 5.5 million gallons. It is built to expand to 15 million gallons. Council Members and interested citizens also went on this trip. One interesting thing was the location of the plant. In 1998, there was nothing in the area but the sewer plant. Today, there is a tremendous amount of development around the plant. The plant did not cause developers or residential buyers to shy away. There is a new shopping center going up right now. The environmental impact was negligible, and it has not restricted growth in the area at all. Mr. Davenport then showed slides depicting the sewer plant alone and then today with all the development. The sewer facility did not prohibit, inhibit or deter growth at all, in fact, it appears that it spurred growth. The options the County has to build a plant on are fairly remote, and they are all secluded. It will not be seen, smelled or heard. The rooftop may be seen on Syrup Mill Road. Mr. Davenport then listed the location options with associated prices:

- Syrup Mill Road: The plant itself would cost $32,650,000 to build. This would include grading, etc. The numbers are different due to grading costs of the land and land development costs. The initial users will be the industrial park and businesses along Highway 34. These flows will be redirected from the Town's current facility to the new facility. The cost to connect the plant to these users would be over

$20M. Total cost would be around $53M. All sites would go into Cedar Creek.

- The next site, Site 1A, which is the preferred site, would cost $7M to connect to the plant. Total cost would be around $40M. This site is very secluded.
- Site 1B would cost around $7M to connect to the plant. This site is very secluded.
- Fairfield County Industrial Property would cost $13M to connect to the plant.
- Site 2 would cost $7.5M to connect to the plant.

Mr. Davenport stated the County has had tremendous success in the last 14 months with over 600 new jobs, $60M in new investment and more projects to come. One of those projects will consume almost all of the $34M gallons that is available. This will be a good thing with a lot of jobs and investment, but there will be no more capacity to grow, develop, generate jobs, etc. The County has to do something relatively quickly. Mr. Davenport then turned the presentation over to Thomas & Hutton.

Ms. Lisa Muzekari began with the proposed design of the facility and will attempt to address some of the concerns that have been voiced by citizens and neighboring counties later in the presentation. A similar wastewater treatment facility was shown. It does not have a typical look of an activated sludge plant where there would be a lot of open basins or open lagoons. It is contained within the building and has a very small footprint. The odor control scrubber was shown. This helps address any potential odors from the treatment facility. The technology of the proposed plant is known as MBR (membrane bio-reactor). This treats the wastewater to tertiary level, the highest level of treatment currently available, and has a Class 1 reliability classification. The proposed construction time would be 24-30 months. With the MBR, there would be a small footprint with less land disturbance, it is compact so less odor, it is the highest level of biological treatment available and it is state of the art. The effluent was shown to see what the water would look like coming out after treatment at the plant. This is close to drinking water standards. The raw wastewater coming into the plant is enclosed. This allows control of the odor and this is addressed immediately as the wastewater comes into the facility. The effluent is a reuse quality. If an industry or another end user would have the ability to reuse the water as process pooling water or other industrial process, instead of being discharged to a receiving stream, it can be sent to that end user as reuse water. A lot of the processes and pumps will also be enclosed which will help address noise concerns as well as odor. The facility is state of the art and has automatic alarms and SCADA, which allows the facility to be operated remotely. It allows for data acquisition at all times to make sure the plant is running at its optimal performance and in accordance with its permit. There will be an on-site testing lab with the ability to test the influent/effluent and other indicator parameters that will show the plant is performing correctly.

Environmental Impacts: Ms. Muzekari stated the water being discharged from the facility will be of much higher quality than the water in the creek. It will be designed and constructed using state of the art MBR technology and equipment. It will be permitted through DHEC and this must be maintained. DHEC sets the limits that the plant must meet. The limits are set based upon the receiving stream. A wastewater treatment plant is permitted under the property's current zoning classification. All zoning classifications in Fairfield County do allow for wastewater treatment. Septic tanks are considered wastewater treatment.

Flooding and Erosion: Ms. Muzekari stated one of the concerns in discharging to Big Cedar Creek is the amount of water that would enter the creek. There is concern about when heavy rain travels down the creek. For instance, a two year peak storm, which is a small rain storm, is about 850M gallons a day that will come down Big Cedar Creek. If the plant was full build out, 4M gallons a day would only equate to an additional 0.5% of the total flow in the creek. This discharge will be continuously discharged and not a slug of water being discharged all at once. For a 25 year storm event that is equivalent to 2.5B gallons a day travelling down Big Cedar Creek, 4MGD from the wastewater plant is just an additional 0.16% of the total flow. In a 100 year storm event, which is a sizeable storm and almost 3.5B gallons a day, the treatment plant would be only 0.12% of the flow. The 4M gallons a day does sound like a lot, but during a rain event and what does travel down Big Cedar, all of them are at less than half a percent or even smaller of the total flow in the creek. The facility will be constructed to meet local and state regulations as with any development in terms of being above the 100 year flood plane elevation, meaning the processes will not be impacted and will not be contained within a flood zone. Again, the discharge will not be released all at once and will not be a large surge of water that is released quickly out of the plant. It is a continuous flow. Erosion is usually seen with a slug of water; however, this is a continuous flow, so it will not impact the creek in this way. DHEC did review the proposal, reviewed the proposed flow to enter into the creek, and they set the conditions to protect creek quality. They set the limits, and then the plant had to be designed to meet those limits. Ms. Muzekari then demonstrated what the typical influent would look like coming into a wastewater treatment plant, similar to what goes in septic tanks for residential or commercial units that utilize septic tanks. Then the treated water or effluent was demonstrated that will come out of an MBR plant. This is the result of the treatment technology that will be utilized. It is crystal clear water, and the treatment technology is exceptional.

Impact on Drinking Water Wells: Ms. Muzekari believes there has been some concern for this and whether or not it would negatively affect water quality. In their opinion, it would not affect water quality. It will be treated to meet the permit limits and remove all solids and, therefore, they do not feel it will have any impact on the ground water in the area, meaning it would not affect any drinking water wells. In looking at any sanitary sewer overflows, the facility will be constructed above flood elevation as stated earlier. In the

event of a power outage, the facility will still be able to operate because it will be equipped with backup generators. Wastewater would still be treated to meet those permits even if power has been disrupted from the main power source. The sewer lines that will convey the wastewater to the facility will be constructed primarily of water tight PVC pipe and manholes will be constructed with frames above the 100 year flood elevations. This will minimize any infiltration in flow that could occur that could also overwhelm the plant.

Local Impact: As Mr. Davenport stated, the trip was made to Waxhaw to see what impact the wastewater treatment facility had on that community. This type of facility is used often in densely populated areas due to their enclosed treatment processes and small footprint and because they do not typically look like a wastewater treatment plant. Significant voluntary buffers will be used around the facility to help hide it from site, sounds, etc. Addition of the sewer service in the area will allow for growth and development and will likely increase property values. A typical odor control scrubber was illustrated earlier in the presentation. The facility would include an enclosed odor control system that can remove and reduce odor. There are no emissions from the facility that would require any kind of state or federal air permitting. Noise is another concern. The pumps and noise causing processes are enclosed to significantly reduce the noise. Sound barrier attenuation panels will be installed surrounding exterior equipment such as blowers and generators. Noise levels at the property line will be targeted to be minimized and will be equivalent or lower than normal office structure levels. Traffic was brought up as a concern. Typical traffic in and out of a wastewater treatment plant is very minimal. It would probably be once or twice a week to be able to remove the solids. The solids are de-watered and would be hauled off site for proper disposal. This facility would be able to treat wastewater that would come from industry. Industrial process wastewater is separately regulated as well by DHEC. The Joint Water and Sewer System would also be responsible for the regulation of the industrial wastewater process. When an industry locates, they will have to go through a discharge questionnaire process with the Joint System. They will disclose what processes they will utilize, the nature of the industry, the proposed flows and what kind of pollutants, and then the Joint System along with DHEC previously having approved a pre-treatment program and Federal standards, the industry will be issued a discharge permit that they would have to meet. Some industry wastewater will require pre-treatment. This will be done at the industry's facility before it is discharged into the system and sent to the Joint System's wastewater treatment plant for treatment. This process is regulated on the State and Federal level. Chairman Gaddy thanked everyone who participated in the presentation for the update and insight for what the Joint System is trying to do for Fairfield County to help improve the standard of living for the residents in offering more opportunities.

3. PUBLIC HEARING

A. For the Purpose of Receiving Public Comments Regarding the Construction of a Wastewater Treatment Plant (the "Plant") with a Planned Discharge of Treated Effluent into Big Cedar Creek Located in Southern Fairfield County. The Fairfield Joint System will Provide an Update to the Public on the Status of the Plant and its Proposed Location, and all Interested Parties will be given an Opportunity to be Heard and Express their Views at the Hearing.

Chairman Gaddy opened the public hearing at 6:30 p.m. with a brief listing of the rules for the Public Hearing section of the meeting. The following signed to speak:

- William L. DuBard
- Ruchelle Gee
- Lynn B. Robertson
- Garry Coats
- Shirley Greene
- Bill Resseguie

Chairman Gaddy closed the public hearing at 6:50 p.m. He stated a common theme he is hearing is examples of having high flow through the creek but asked the engineers to respond to occasions with low flows. Mr. Jeff deBessonet stated he is working with Thomas & Hutton with water environment facilities. He worked formerly with DHEC and is retired from working the permitting process. DHEC by rule is required to evaluate discharges like this under critical conditions. They look at low flow conditions in warm weather in making a permit decision. For example, if you are discharging to a larger water body, the requirements on the permit are less stringent. If you're discharging to a water body that dries up or has very little flow, the requirements for those permits are much more stringent. DHEC has to protect the uses of the stream for fishing, swimming and for drinking after conventional treatment, and it would write a permit in a way that protects those uses. The whole basis of their permitting decision would be under critical conditions and would evaluate the low flow conditions. There are a lot of low flow discharges across the State, some with actually no flow during dry weather, but the requirements on the permits are much more stringent. Chairman Gaddy appreciates everyone for coming to express their opinions, and the Commission is sensitive to this. This process is a balancing act to try to address people's concerns and also the concerns of what can be done to

help Fairfield County grow and prosper. The Commission will continue to look at the available options.

4. Adjournment

At 6:32 p.m., the Regular Meeting was adjourned by motion of Vice Chair Robinson, properly seconded by Commissioner Taylor. ***The motion carried unanimously 5-0.***

Patti L. Davis

PATTI L. DAVIS
SECRETARY

ROGER A. GADDY
CHAIRMAN