

TERRILL L. HILL
MAYOR - COMMISSIONER

MARY LAWSON BROWN
VICE MAYOR - COMMISSIONER

RUFUS J. BOROM
COMMISSIONER

JUSTIN R. CAMPBELL
COMMISSIONER

JAMES NORWOOD, JR.
COMMISSIONER



BETSY JORDAN DRIGGERS
CITY CLERK

MATTHEW D. REYNOLDS
FINANCE DIRECTOR

JAMES A. GRIFFITH
INTERIM CHIEF OF POLICE

MICHAEL LAMBERT
CHIEF FIRE DEPT

DONALD E. HOLMES
CITY ATTORNEY

Regular meeting 2nd and 4th Thursdays each month at 6:00 p.m.

MINUTES
CITY OF PALATKA WORKSHOP MEETING
June 24, 2015 – 5:00 p.m.

Proceedings of a workshop meeting of the City Commission of the City of Palatka, Florida, held on the 24th day of June, 2015.

PRESENT: Mayor Terrill L. Hill
Commissioner Mary Lawson Brown
Commissioner Rufus Borom
Commissioner Justin Campbell
Commissioner James Norwood, Jr.

Also Present: City Attorney Donald E. Holmes; City Clerk Betsy Jordan Driggers; Interim Police Chief James Griffith; WWTP Superintendent Brian McCann

CALL TO ORDER & Reading of Workshop Meeting Call – Mayor Hill called the meeting to order at 5:00 p.m. and read the following workshop meeting call, which was issued on June 20, 2015:

**TO COMMISSIONERS: MARY LAWSON BROWN, RUFUS BOROM,
JUSTIN CAMPBELL AND JAMES NORWOOD, Jr.:**

You are hereby notified that a workshop meeting of the Palatka City Commission is called to be held at the regular meeting place of the Palatka City Commission at City Hall, 201 N. 2nd Street, Palatka Florida, commencing at 5:00 p.m. on Wednesday, June 24, 2015.

The purpose of the meeting is to hold a workshop concerning Wastewater Treatment Plant Improvements, Sludge Treatment System, and proposed Biosolids Management Facility at the WWTP.

/s/ Terrill L. Hill
Terrill L. Hill, MAYOR

The following commissioners acknowledged receipt of a copy of the foregoing notice of a Workshop meeting on the 20th day of June, 2015.

/s/ Mary Lawson Brown
COMMISSIONER

/s/ Justin Campbell
COMMISSIONER

/s/ James Norwood, Jr.
COMMISSIONER

/s/ Rufus Borom
COMMISSIONER

INVOCATION & PLEDGE OF ALLEGIANCE - Katherine Van Zant

1. **PUBLIC COMMENTS** –There were none
2. **WASTEWATER TREATMENT PLANT IMPROVEMENTS, Sludge Treatment System and Biosolids Management** – Brian McCann, WWTP Superintendent, said the WWTP is working past its life expectancy. It was built with a 20-yr expectancy and is nearing 30 years in operation. Some of the working parts are obsolete and can't be replaced. They need to address this before they have to shut down completely. He distributed aerial maps depicting the plant's layout (filed).

Mr. McCann said the digesters are failing completely. Methane lines are clogged. The natural gas bills go up each year as they can't use the methane gas to its full potential. The belt press is on its last leg. They took some lightning strikes last year; it took two months to find parts to fix the belt press. They found them in a junkyard. It was expensive to repair them to make them useable. This was a \$600 board that cost over \$2,500 to replace. He may not be able to replace it in the future. They did studies and held workshops last year on what they needed to do to address this. They were given three proposals. The third option was to convert to a proprietary system, which is the BCR system, and this was the best option. This takes care of every issue he has today. They won't need many of the obsolete parts they now have. They will need to replace the belt press. They could go with a system that is a little less expensive than a belt press. They have been assured they will receive the necessary training to operate a BCR system.

Commissioner Norwood asked if solids are at 15% dry; and noted the screw press has the capacity of going to 30%, which is cheaper than a belt press and easier to operate. GP recently priced one; it is not inexpensive, but he doesn't know how that compares to the cost of a belt press. Mr. McCann said they have not looked at specs on a screw press as of yet. As to the bio-solids plant, they only use sludge drying beds when the belt press is broken. With the BCR system, BCR would collect them and remove them to their location. They would no longer have that liability. BCR would pick up the final product and it would then become their responsibility.

Mr. Holmes asked what would happen tomorrow if he had to shut the plant down. Mr. McCann said they would have 45 days of using the drying beds before they had to take action. They would have to find \$25 to \$35 thousand immediately to replace the control panel. They would have to pull a drying bed every 2 to 4 weeks; he has five beds. Once those are full he'd have to truck the future sludge to Jacksonville until the drying beds can be cleaned. As to a back-up plan to keep the plant operating until a permanent fix is found, for the various components, with a total failure of the belt press, BCR would be able to bring their trailer here and accept their sludge. Commissioner Norwood asked if they are in jeopardy of being non-compliant with their DEP permit; Mr. McCann said currently, no, but he can't say what will happen in six months.

BCR Presentation – Tom Phillips, BCR Environmental, said they have been working with Palatka and Ayres Associates on the City's WWTP for several years now. He provided a power point presentation (filed). They first engaged with the City in May of 2013 and proposed the CleanB Biosolids Treatment Solution for converting Biosolids waste into safe, valuable, odor free residuals. This method was selected by the City and its consulting engineer in September, 2014. They had to get around some issues with funding, including operating within the current budget and financing the project at virtually no cost to the City. They have worked closely with FDEP, who has endorsed them. FDEP has stated the City would be a candidate for an almost 0% loan to fund this project. This solution meets all the City's criteria. The study stated this option had a cost in excess of \$3 million; however, they came up with creative ways to lower the cost, and have brought it down to \$1.4 million. With removal of the domes, this raises the cost to \$1.5

million. The FDEP is prepared to make a loan of \$1.5 million at zero percent interest over 20 years. They are prepared to offer their system under a design-build agreement at a fixed price of \$1.5 million. They have had 100% success in these public/private partnerships. Their system is endorsed by both FDEP and EPA. There are steps they need to take to get this process moving. They laid out a time frame for application and design at \$75,000. They applied for these funds from FDEP, and it was approved, but the City never drew these funds out. There is a deadline of June 28 to apply for the funds to pay for the design work already done. If the city misses that deadline, they will have to start that process again. They have to file for the permit by September 28. They are working with FDEP to treat this as a "special circumstance" and don't have an answer on that yet. As to contingency plans, they can install their permanent system in as little as 120 days. That is the fastest anything can be done to circumvent the City's digesters short of mobile dewatering, which is a very expensive proposition. They will have quite a bill for that interim period. As a next step, if they decide to proceed they will have to promptly complete the design build and the FDEP checklist to get this rolling. If they delay any further, they run a risk of cost going up dramatically.

Mr. Phillips stated they have many examples of successful projects throughout the State and will provide references. They have done more installations of biosolids treatment systems than any other provider. The closest CleanB system is at NAS Jax.

Commissioner Borom asked as to the drop in cost from \$3 million to \$1.5. Mr. Phillips said they removed some needs and made a few sacrifices; instead of putting a new building around this, they figured out how to install the tanks under the current pole-barn. These cost-saving measures don't impact the efficiency of the system.

David Kemp, Ayres Associates, Engineers, said they started this process last year. He discussed his prior cost analysis of alternatives for the City to rectify its situation. They were strictly tasked with looking for the most cost effective system. When looking at getting to the current price, they originally looked at the project as a whole, and not just the BCR component. It is important to note that the cost evaluation done at the time is no longer being considered as a whole now. There are certain things they can do, which are essential. As to the anaerobic digesters, they haven't been cleaned in 30 years. The tops are deteriorating. He included the cost of taking the tops off those tanks, cleaning them and salvaging them as a contingency measure. They are looking at the plant's needs holistically. Mr. McCann said it would be upwards of \$300,000 to clean the digesters. They can include this in the scope of work.

Jim Christopher, BCR, said the \$1.5 million cost now covers the cleaning of the tanks, plus some other necessary work. They will purchase the pumps and valves and Mr. McCann will install them. As to the digesters, they spoke with a contractor who has agreed to help with this. They can do all of this at the \$1.5 million cost. As to other components that are not being replaced, Mr. McCann said all the equipment problems he is experiencing now will be eradicated with the BCR system and related improvements included in this project. Mr. Christopher said much of what they removed from the cost is the labor; the City is capable of doing it. As to the tanks, they will get the domes off, clean out the grit, and the City can clean out the lines. They are using part of the lines to clean out their system. Instead of using the pump systems from the belt press, they are using a line from the RAS pumps. You won't need the pumps, which will save on energy bills and repairs. This system is set up with the least amount of labor and pumping required. The end product is a Class B biosolid, which they will take and either land-apply or take to a compost facility. If it goes to a compost facility, it will then be a class A product. To treat them onsite will add around \$6 million to the cost. Mr. Phillips said they will warrant the system for 20 years but it will likely be running 50 years from now. These are very small pumps; they eliminated over 90% of the electrical consumption because they use small pumps that can be replaced easily and cheaply. The electric bill on similar plants is around \$600 per year.

Discussion ensued as to the original estimate, which Mr. Holmes pointed out has been reduced around 55%. He asked if that was based upon value engineering, and if Mr. Kemp agrees that all the City's needs would be met through the proposal now being made. Mr. Kemp said he is told by BCR that it will and he takes that at face value. They were at \$1.5 million for the BCR system; he had estimated the value to clean the digester tanks at \$150,000 each; the value of belt press was \$280,000. This is not comparing apples to apples; they are looking at this in the context of what they are now proposing to install. Mr. Phillips said they will remove the domes and piping, which the City will likely scrap out. They will clean out the digesters. The demo of the digesters was part of the proposal, but that won't happen now. Mr. McCann said the City hasn't yet agreed to do this work; they can do a lot of the pipe work, but not 100%. Mr. Christopher said his people will be there to provide aid. Mr. Homes said a "turn-key" system means they walk in and turn on the switches and it operates. Mr. Christopher said that is what they are proposing for \$1.5 million. They will gain efficiency and reliability. Mr. McCann said cleaning the digesters isn't relevant to the BCR system's operation. Mr. Phillips said they will put in a treatment and dewatering system that is turn-key. They will then take the material off-site after it comes out of that process. They guarantee this system for 20 years. For this to work under this pricing, the other items that need to be done have to be a collaborative effort. They have to work together to find ways to minimize the cost on the entire project. The demolition isn't included in the \$1.5 million bid. They will work with the City to bring that to fruition. The maintenance will cost roughly \$7,000 per year, which is minimal compared to what the City is now spending. The service agreement cost is built-in. Mr. Christopher said they were told the only way this would work is to stay under the current operating expense, which is around \$200,000 annually. The pricing and service stays under that number. The City will not have to increase rates. This includes around \$135,000 they are currently not spending for the disposal fees that are being incorporated. Commissioner Norwood said he'd like Mr. McCann to look for beneficiary reuse of solids. Mr. McCann said that is part of the original compost system agreement.

Mr. Kemp said one of the things they looked at in this study was factors that affect the liquid treatment side, and the current options. They need to have this discussion with BCR. He wants to be sure they aren't losing flexibility for Mr. McCann in the future, so he recommends they look at this as part of the decision making process. This system is cost effective, but they didn't look at all the other design elements that affect the plant as a whole. The liquid is the water side that goes through the aeration system and chlorine contact. They don't want to lose flexibility in treatment of redundancy in the plant. Removing the primary clarifier is a buffer zone; if they get a storm situation which brings in a lot of water, the clarifier addresses that. They looked at salvaging the tanks to provide contingency in an emergency situation. This doesn't affect what BCR proposes to do. Mr. Phillips said in virtually all cases, when you take primary clarifiers and tanks off line, they can be repurposed for other uses like storage of reuse water. There are many uses for them. The only reason they can reuse them is because through deployment of this system, you don't need them anymore. Mr. Christopher said BCR would never recommend demolition of existing tanks because there are too many other uses for them. They can take them to visit other systems that kept their tanks.

Commissioner Norwood asked at what point the hydraulic load affects the efficiency of the plant; Mr. Phillips said you get at least a 2x efficiency capacity to handle biosolids. The water that returns to the front of the plant after dewatering has several properties that are not there today. The biosolids that are now recycling to the front of the plant "goes away." Because they aren't re-treating material, they aren't putting them in holding tanks. They are taking the biosolids off-site in trucks. The BOD loadings will go down. As to metals and nutrient efficiencies before and after installation, Mr. McCann said he asked at those plants he visited how their operation was after the installation of BCR systems, and they all stated they were better. Commissioner Norwood said he wants to make sure that when they fix one thing, they don't cause issues elsewhere. He

asked what happens when they get a 100 year rainstorm and they have to treat all that water, and what goes to the holding tank isn't the "solids" that it was designed for. He wants to know how long it will take to "upset" the plant. Mr. McCann said he can pump wastes to the thickener in that case. Mr. Holmes said at some point someone will have to tell the commission that this system will or won't work or will only work with certain components. Mr. McCann said from the plants he has visited, the system will work. Mr. McCann confirmed that the BCR system and improvements included in this proposal will give him the redundancy he needs. Mr. McCann said redundancy is his personal preference. No system will run smoothly after a 100-year rain event.

As to the application, Mr. Phillips said the \$75,000 seed money has to be requested from DEP by June 28th. If this is not done, they have to reapply. If they want this done, they just have to tell DEP that they want to draw that money. If they miss this deadline they will have to wait until November 10. And reapply for it. They have a current application in place. They will aid the City in this process. It is not complicated. The application has already been submitted; they just have to submit the draw process by June 28th. The rest of the application will be submitted at the November meeting. The City is now required to have 100% design to submit the complete application. This can be done by June 28th. BCR has been working pro-bono for over two years. From their perspective, they need to do this now and not wait for the next cycle. If they wait until Nov. 10, they start all over with planning, construction and design and will push those dollars into next year. You can combine planning and design, but not construction and design. Mr. McCann said the redundancy is not to protect against the BCR system, but to protect against weather abnormalities. Mr. Phillips said that is just smart.

Mayor Hill said in Ayers' initial report Alternative C shows a cost of \$3.1 million to do the entire project. Now they are saying they can materially get a similar scope at less than half the cost. Mr. Kemp said the estimate was a conservative estimate not based on engineering. They have looked at alternative sludge dewatering equipment. They originally had to consider the aerobic and anaerobic systems. This was originally looked as a design-build project. When they did the construction part he added a 25% contingency; when you don't have all the engineering design done, you have to provide conservative estimates. An engineering report is more fine-tuned. The number he had plugged in for the BCR system was around \$1.8 million. They are handling all the construction and design internally so those costs came down. Mr. Phillips said for \$1.5 million he guarantees a completely successful operation which provides Mr. McCann the flexibility he needs to operate the plant the way he wants to operate it. They won't receive a change order from him.

There was consensus to add these approvals as an emergency item to the June 25th agenda.

3. DISCUSSION AND COMMENTS - Mayor Hill opened the floor for public comments.

Allegra Kitchens, 1027 S. 12th Street, said they held a workshop on this and directed a public workshop held on this. She understands they have submitted an application and taken other steps towards bringing this to fruition. She asked how they can hire a company and pay them more than \$25,000 without an RFP going out. Mr. Holmes said this is a proprietary process; BCR is the only firm that offers this alternative; this is the most cost effective proposal and BCR is a single-source provider. If BCR is the only one that can bid the system, BCR is the only submitter.

4. ADJOURN - There being no further items to discuss, the meeting was adjourned at 6:05 p.m. upon a motion by Commissioner Norwood.

ANY PERSON WISHING TO APPEAL ANY DECISION MADE BY THE CITY COMMISSION WITH RESPECT TO ANY MATTER CONSIDERED AT SUCH MEETING WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE MAY NEED TO INSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. FS 286.105