

**MINUTES OF THE BOARD OF PUBLIC WORKS
Tuesday September 26, 2023**

The Regular Meeting of the Board of Public Works held on September 26, 2023 at 7:30 a.m. in the City Council Chambers located at 405 Jefferson Street, Washington, Missouri. The following were present/absent:

MEMBERS:

Chairman	John Vietmeier	Present
Vice Chairman	Brad Mitchell	Present
Secretary	Mike Radetic	Present
Member	Steve Richardson	Present
Ex-officio Member	Steve Strubberg	Present
Ex-officio Member	Vacant	

OTHERS:

Council Representative	Mike Coulter	Present
Council Representative	Chad Briggs	Absent
Mayor	James Hagedorn	Present
City Administrator	Darren Lamb	Present
Public Works Superintendent	Kevin Quaethem	Present
Water/Wastewater Admin. Asst.	Sarah Skeen	Present
Interim City Engineer	Charles Stankovic	Present
Assistant City Engineer	Andrea Lueken	Absent
Waste Water Foreman	Kerry Duke	Present
Water Foreman	Dylan Voss	Present

Originals and/or copies of agenda items of the meeting, including recorded votes are available on record in the office of the Public Works Department for one year. Video/DVD and audio tapes are kept only until the minutes have been approved for the meeting. DVD copies of this meeting are distributed to Board Members if requested.

Minutes

A motion made by Mr. Mitchell and seconded by Mr. Richardson to approve the minutes from the regular meeting held August 21, 2023 meeting. The motion passed without dissent.

Priority Items

None

Wastewater

Pay request from Insituform for \$73,996.10. They are completely done. We are playing catch up on payments now so there will probably be a final payment yet to come through, but I am not sure exactly where they are at on that so we will probably have one more yet. They did a good job, as usual. It took them a little bit, they had to wait on materials just like everybody else that is in the industry doing anything. You hurry up and wait, it seems like a lot of time, but it is complete.

A motion made by Mr. Mitchell and seconded by Mr. Richardson to approve payment to Insituform in the amount of \$73,996.10. The motion passed without dissent.

We are currently working on the '24 budget year of slip lining so we will have that packet put together here in the next couple of months ready to roll out for bid.

Brookview sewer line creek crossing out of Brookview subdivision collapsed. We are finally to the point that we are ready to start working on it. Cochran did all the design on it for us. Brian is here if you have any questions about that. We went out for bid; we got two bids. Two local contractors, Sieve Construction and KJU. KJU came in with the low bid, so I am asking for your approval to proceed and get that started so we can get that situation taken care.

A motion made by Mr. Radetic and seconded by Mr. Richardson to approve the bid from KJU. The motion passed without dissent.

The funds for something like that, obviously that is not a budgeted item, where does that come from? That will come out of any extra that we might have had through the year, savings that we were able to acquire by not spending as much money, or it will have to come out of reserves to do this. This is one of those situations, when we start talking about sewer rates, the things that we don't know are going to happen that we have to have funds in reserve to be about to do these kinds of emergency repairs. Unfortunately, that is where that might have to come out of, I am not sure yet exactly. We are always a little behind on the budget numbers, a month or a month and a half. As of this budget, it looks like we are okay. Either way, it has to be done so you know we just got to fund it.

Sewer rate presentation needs to be moved to the end.

Before we get started, I know you guys gave a recommendation at your last monthly meeting. I since talked to Kevin, and we also talked with Mark Piontek and the discussion we had about building up reserves for what we will be needing as an expansion of the existing treatment plant as well as building up reserves just to get your wastewater fund so that it is self-sustaining, it doesn't need to rely on the capital improvement sales tax for improvements for your system. Keep that up to date and put in a CPI escalator every year just like we have for water fees as well. As we discussed this, a question that Mark brought up to me, that if you want to have something available in there for the expansion of the treatment plant, why would you put that completely on the backs of the existing users that are currently paying off the system today? He said you probably need to go ahead and address your connection fees as well. If you truly have new users coming in and they are the reason why you have to get the plant expanded, why wouldn't you address that at the same time. I talked to Kevin, we took a look at that, we wanted to take a look at rates that other

entities around us have, essentially what we found is that we are about 50% of what the others are charging for their connection fees and that is just right outside of the city limits. That is the Water District number one and Water District number three. In essence, as we all know we kept the basic rate the same, we went from \$3.02 up to \$7.00 per 1000 gallons. I had hoped that we would be able to drop that a little bit lower than what we did but we were still able to drop it down to \$6.88. What we were trying to do is, and you will see in the slides, we had about \$259,000 revenue over expenditures, and we dropped that down to \$200,000 with the rest of it being made up in connection fees as we move towards the future. That is a little bit of a subtle change, I am glad you guys have had a chance to go ahead and review this again. I know it is short notice because tomorrow night is our hearing in front of the council. We will not have an ordinance at that time, it will just be a hearing to give the general public if they have any questions. I just wanted to give you that update as to why we are coming back, why there is a little bit of a subtle change, and it is probably best that we address those connection fees at the same time.

Here are our current rates and current revenues as they are today. If we stayed at this point and didn't do anything, we would end up at the end of the '24 budget year in expenditures over revenue we would be in the hole by 1.6, 1.7 million dollars in operations. That is encompassing the wastewater department being self-sufficient. Enterprise funds should be self-sufficient. Then we put in what you proposed when we went through it last month and that is where we came up with our dollar amount and that would be without the connection fees. We would have revenue over expenditures of almost \$260,000 and that is putting all the load of everything of growth and everything on the users and nothing on the incomers. So, what we did was, like Darren said, we got together and we looked at if we raised connection fees what is the lowest we can go with our user rates, to try to make it as user friendly as possible. We did come up with a \$6.88, which is the lowest we could go and still keep at least \$200,000 revenue. That revenue over expenditure covers things like what you guys just approved for the creek crossing that went out. You know that is kind of what we don't have planned. We don't budget unknown things so you rely on that a little bit to be able to offset some of that cost and we have got several creek crossings in town that could happen at any given time. We just don't know; we watch them as close as we can but you just don't know. That is what staff is proposing. Then I went ahead and put some stuff in here to let the general public, because this is a public meeting, to let the general public see some of the things that we are doing. What you see on the right is a slip lined line. This is a slip lined video, so you see where they cut out the slip lining as they went through the manhole to improve the structure of the sewer lines. I also brought in some pictures and a video to put some out there to let people know, that truck sitting right there in the middle of the screen, that vac truck we bought a little over five years ago, that truck cost just a hair under \$400,000. If we had to replace that truck today, you are looking at over \$900,000, almost a million dollars to replace that truck. So those are the costs we are looking at going down the road, we have to have funds to be able to do that. Walnut Street lift station is our most important lift station in the system. That takes everything from the northwest side of town and pumps it to the treatment plant. If we had to completely rebuild that lift station from ground up, you are probably looking at least a million dollars to do that. Those are the things that we have to look at. What if this would happen, what is it going to cost just to rebuild that station. In 2010, I think we rebuilt that and put in new pumps and that was almost \$400,000 to just put in new pumps and controls. (Video playing) This is just one station, this is leading up into the maintenance side of what the crews, this is what they deal with almost on a daily basis. What he's pulling out of that is ground up hand wipes. They do not break down, that is a grinder pump and it will grind them up but then plugs itself up, which then causes undue stress to the windings to the electrical side of the motor and then eventually that motor will have to be replaced.

That one right there, would cost about \$116,000 to replace that pump and motor, that is a unit for that station. We don't talk about, and we don't show a lot of what we do in the industry. It has pretty much been out of sight out of mind. I think that it is time to bring it into sight and mind. That bucket there is hand wipes you can see they are ground up hand wipes that plugged up the inlet of that pump, that is what is left over from what it tried to grind up and get out of it. That is what we are seeing on a daily basis out in the system. We have got 12 lift stations and everyone of them are having this problem, so it is time we get it out there. On the left, what looks like a black blob in the center of that sewer line, there is a blockage of hand wipes. That is one of our lined lines, after we slip line we spray line all the manholes. That is one that has been sprayed. It is an orange color when it is nice but it gets sewage, so it changes but the structure of that is still has great integrity.

Is there any way to trace some of these things back? I know when we had a problem down in Rabbit Trail, we had a pretty good idea where they were coming from. Not really because we usually gather it downstream. It is usually at a point where there is something that causes one to catch on then one makes two, then three, and then it builds up like this and by the time we know about it, because we don't have the manpower to go look at every manhole every day to see what it looks like. It is usually due to a backup, so we respond, find this situation, we clean it, and to track it back is nearly impossible. On the right side, that is one of our lift stations, as you can see that is the build up around it, and we have to go in with our vac truck, and thankfully we have it, and we have to clean it out. This particular lift station, that is a once-a-week experience, we have to go out and clean that. It is the nature of the industry. That is manpower, that is time, use of the truck. Everything builds up. This is some of the costs from last year, last couple of years, and then some of the proposed projects that we have coming up. It is just some of the numbers, trying to let people see, it is expensive to run a wastewater department, whether it is the treatment plant itself or the collection side. They are both very expensive to operate. Just some pictures to let you see the vac truck and vac trailer for valve exercising machine, we use that for hydro excavation just like we use our trucks. Some very important pieces of equipment and to replace them is costly. Then we go into the connection fees. Here is where we started looking at our connection fees and what we currently have in place. What the area is generating, and what the local areas that are generating. There is such an array of connection fee concepts out there. It is almost like we need to figure out and do the rate as what the City of Washington needs and not what everyone else is doing. We just tried to use them as numbers to see where we stood. As you can see we are quite a bit lower than what our current local areas that our builders are building in. The biggest thing we've got, you see there, is that we set a maximum there. If you look at the Shoe Factory over there, that 85-unit dwelling, you can see that we set a \$3600 maximum fee for all of that. You look at what the other cost of what it would be if you were to build the same unit out into the water district number one, number three, or even O'Fallon. O'Fallon has a pretty decent model that we are looking at but I mean, you can see the difference in how much you are generating on those fees. On the right you have got the single-family home that you know, about half of the cost of what you are seeing is just right around us. You see the number up there, that's how much you received in connection fees over this past year. Plus, with the amount of building that is going up, this is a lot of money we are talking about. In the next slide, if we would have charged the fees that we are looking at going to, and this would be our new rate structure, it models the O'Fallon structure, which makes the most sense and it was the easiest one to take over and follow. We reduced the rates by 20 percent from what O'Fallon is doing only because you know we are Washington. If you look at that, if we had been charging these rates for all that development on the last screen, these would have been our potential connection fees of \$190,000 had we had this in place. I hate looking backwards, but you have to sometimes. That is what it would have been so

moving forward, that is kind of the potential we could be looking at possibly on a yearly event. That is the proposed sewer rate. That user connection fee increase is what would be used to cover the expansion of our plant. Right now, two new VLRs and a new clarifier, that is what that would be covering. Right now, that would cost \$1.2 million of today's dollars. Staff doesn't think that we need to expand until '29, '30, looking at the numbers that we've got currently we are at 2.4 million gallons a day on average for the last month and this month. With the current growth on the books right now, it is going to take, if you do the calculations with the daily usage and the people, by the time that is done. We have been looking at probably 2 ½ to 3 percent growth based on what we have experienced in the last five years. If you take it on the high side of 3 percent and you look at what Kevin has currently at 2.2 million gallons per day, you would be somewhere around 2.6, 2.7 by the time you get to 2029. 2029 is significant because that is when you pay off the note or the bonds on the existing plant that you have down on Southpoint. So, you are going to have another million dollars a year in revenue. At that point, to go ahead and start building up or putting into reserves for when the plant needs to be expanded. The good news is that if we continue at 3 percent, you may have five years beyond 2029 before you have to look at where you are at 75% capacity of what there is today. So, you do have some time to go ahead and address it. I think we need to look at 2029 when that bond is paid off, where are we at and what do we need to readdress at that time but that is what we are seeing right now and that is what we are projecting. I also talked with Cochran a little bit about that expansion that is 12.2 million in today's dollars, what do we need to go ahead and do the expansion, at that point you know you are looking at \$15 million. This plant is going to be about 20 years old by 2029, what you haven't budgeted for is what is going to start breaking. I budget that every year in the operational side of it, which is part of the user rate side. Replacing the VFDs, replacing pumps, replacing all that compressor stuff. We are already currently do that as we go. So, we are not just sitting back and waiting and then 20 years we are going to have to do everything. That is not the way a plant operates, a plant doesn't say okay, I am going run for 20 years and I am going to break down. I have three VFDs sitting right now for my disc aerators that need to be replaced this year so yeah that is how we operate that plant, both sides actually. Basically we have two plants, we have our main vertical loop plant, which we all know as the treatment plant, but we also have a sludge processing plant, the old plant, that processes all of the byproducts that we have to take out of the system so that in itself is another plant which we have a belt press in there that needs to be rebuilt this year, and we are sitting at about \$220,000 for that, which is a vital piece of equipment in the sludge processing side of it. So, everything runs together, lift stations they start it, I have \$100,000 in the budget for a lift station that needs to be rebuilt. We are trying to rebuild one every year. It is going to be a continuous cycle. It is never going to stop.

So how long is it going to be before we start implementing the new fees to be charged? We are looking at implementing that January 1st along with the new codes. We are not going to have an ordinance for the council, but we hope to have it for the first meeting or the second meeting in October but yes, we would like to go ahead and start for the first of the year. This gives anybody that out there any of the builders, when you are talking about increasing those connection fees, give them time to go ahead and plan out what their going to. Have to go ahead and charge, after the first of the year. After the first of the year, because we all know cost is going to get passed on and this is something we want to be aware of with regards to it because that is apart of your development costs and we don't want to price yourselves out either.

I remember from last meeting that our base rate is pretty much lower than comparable communities, have we discussed when we are going to bring it to the voters to raise that?

I think that we will look at that in '29 when we address that. The base rate is driven by "you will have to pay this rate" regardless, doesn't matter. User rates can be adjusted by the user if you want

to pay less for your sewer, you use less water. When you raise a base rate, there is no adjustment to that. That is saying you will pay this with what we have planned for right now, I am very comfortable thinking that we can maintain and grow with what we are proposing now to get to '29 and stay in the black and operate the way we are supposed to operate. With the CPI escalator along with that to help offset that increase in cost that we have every year for the materials and operations. That is what we have to address when we need to do the expansion because something going to have to happen. We are not going to have all of the revenue; we know that we are going to have to go out for a bond. We are going to have to borrow money, that money will have to be paid back. At that point, we are going to have to look at rates again to say, what do we need to do, and I think at that point is where we would look at the base rate to say "okay we raised user rates, now lets look at the base rate and see what we can do there. We can do it at any time, it is something that has to go to the vote of the people, which isn't a problem. It is all about operations and growth and we have to do it. I think that is something we can look at down the road and we are going to be reviewing this. I am going to be looking it every year for sure, as long as I am here. I am going to be looking at it at least every three years. I am going to get with Darren and as long as we are here, and review this and make sure we are going down the right path. We don't want to sit here and just wait until '29 and say okay now what are we going to do. We should be looking at that and try to evaluate where we are at, at that point in time. You are going to want to look at that base rate again when you get the bonds paid off the existing one that you got in '29 or when you are ready to go out for an expansion. I think that the goal is, we have said it all along, we want to make this a self-sustaining fund, but you don't want to go like what happened to the city in 2009, where you go ahead and go out for a bond for the entire amount to go ahead and build a plant because you don't have anything in reserve. That is not what we want to do. I would just say that that base rate, I would like to think we would certainly do a little more looking forward. I think you start talking '29 you are just kicking the can and we don't want to do that.

Back to your first slide on there, we were projected 2024 to be 1.6 million deficit, someone from the general public would ask, well where will you end in '23 and how did you all of a sudden get to 1.6 million in the hole? How we are getting to that point is us encompassing all the costs in the Wastewater Department being self-funded, self-sufficient. For '23 we are going to be just barely breaking even. We went from receiving to not receiving the half cent sales tax for slip lining and not receiving funds from the stormwater fund and continuing on that course of slip lining what we have always slip lined and maintaining the standard we are at right now and the increase in cost of operations, like I said that one pump I was talking about, last year that would have been \$5,000, if I had to order it for '24, it is \$16,000. I would have left whatever that 202 that you have at 259 and still increased your fees because again you are just kicking the can down the road with a smaller band-aid. It is a minimal decrease from \$7.00 to \$6.88, but it is really up for you guys, I will take your recommendation. We can't address this without addressing the connection fees. I think that was a great catch in doing that, I am just not so sure that that wasn't...we were at 259 we are a little better because we found the connection fee. That one project that we just did that we gave the bid to KJ, that sewer line project, \$96,000, one or two of those and you are back in the hole. I think we are moving in the right direction, I just don't think we should so focused on kicking the can. We have kicked the can for a lot of years and that is why we are having this discussion now. I was pretty much at the end of the presentation; we will go to the end to make sure you didn't miss anything. There was a summary there.

How much does this impact on a normal household a year versus a business up in the industrial park? The businesses are going to notice a higher hit than the residential. We had that on the handout. I don't have that with me. The average increase was like \$14, that is the increase, added to your current bill. If you were paying \$20 that would be added to that.

You guys did ask me a couple of questions in last month's meeting so I want to get them to you. **One was, do you have a number of users that will be less than 1,000 gallons?** Under 1,000 gallons would be 470 users. That is pretty much your low usage ones. 1,000 to 3,000 gallons, there are 2,386. 3,000 to 5,000 gallons, there would be 1,778 users. Over 5,000 gallons, there would be 1,451 users. Our midrange users are the ones that are the highest of the changes. That is a total of 6,085 accounts that use sewer. We have some that use water and not sewer, like irrigation and stuff but that is on the water side.

Another one was, do we know a number, based on normal usage, when we would get to the point that we have to expand? We talked about that, I took our current flow to the treatment plant is 2.4 million last month, if we take what we have that is in the books today that is planned to be built for users and we do the calculations, by the time in two or three years projection, we would be at 2.6 million gallons per day. We are not jumping fast, but what this doesn't take in is the growth that is happening on the south side of the city out in the district, because we are taking in their sewer when we put that trunk line in back in 2008, 2007. When we did that all the way out to Country Club. We are picking up all those users now too so as that grows with users we will be taking in that volume and we really don't know what that is. There is a lot of development out there and there is a lot going on out there so we don't know what those real numbers are. It is a challenge to find some of that, and we don't know what the industry is going to do. If we get a big user that comes into town. There is a way for them to offset the cost of an expansion, but that is the numbers we don't know that would be adding volume to it. There are some numbers that are unknowns out there but what we do know is that we would be at 2.6 by the time what we currently have in the books today to be built that is either ready to be built or in the planning stages.

What is the capacity of the plant? Four million gallons daily, when we hit three we have to be in the expansion design at three so I'd say 2.8 we really need to start looking at it. That is currently what we have in the books to be right now it is at 2.6 at that point of time.

The meeting is coming up tomorrow night, Wednesday night at 6:00pm.

Water

Pay request from Caldwell Tank for \$731,842.68. All materials are out there, they are working diligently. They are on the 5th ring; they are going to step up production if they could. Still shooting to have it built and the structure sound by November. It will be primed at that point in time. The project will be put on hold until April when they will come back and start getting prepared to paint it. A projected finish date, sometime in June, June 15th, and we will be online in June of next year. The reason for that, just so that everyone knows there is a certain window that you cannot paint in. That is the window we will be finishing the construction on, so you don't want to take a chance and try painting it and then everything falls apart and then you got to repaint it which becomes a whole other nightmare. So, it is best you just let it sit and then you come back when the season warrants it being painted. Darren asked me, and I think it is a great idea to look at changing the logo, so I am working with Cochran on that. Instead of having Washington, putting the city logo on the tank. If we do that, there will be an additional cost that is going to change the cost a little bit, but we don't know until we get it figured out. I am also going to look at the other three tanks and we need to make them all the same if we are going to do it, it all needs to be the same. We may be looking at a yearly change, depending on what the cost is. If we can absorb it in a couple years, it'd be great. I won't know until we get the cost, but we are going to work on that and see what it looks like. I kind of like the idea. I think it is kind of neat to have, rather than just a block Washington, that is kind of old school. You drive around all over the country and you look at all

these tanks that have really neat stuff on it and we got block Washington. At least they know where we are though. Anyway, just to let you know that we are working on that on the tank too. A motion made by Mr. Mitchell and seconded by Mr. Radetic to approve payment to Caldwell Tank in the amount of \$731,842.68. The motion passed without dissent.

Anytime there is a street project, we evaluate how many times we have had a water main break or issues on the street, and we discussed it in a staff meeting and we determined if that line needs to be replaced before we go through and do the overlay. Second Street is one of our notorious water main break lines. Just in the last couple months we have had two of them in front of the entrance to the Bank of Franklin County and we had one up the street, a couple down the street so we have had enough water main breaks on that to warrant it being a replacement line. That is some of our old infrastructure. That is some of the things that we should be doing out of our water fund, replacing the aging infrastructure so that is what we are doing. We are going to be replacing a 6-inch cast iron line that is in our 100-year group. We are replacing it with a PVC line. All our fire hydrants on that line are fed by what they call a 4-inch feed shoe, so the bottom of the fire hydrant has a valve and shoe system that is 4 inches instead of 6 inches which restricts fire flow. We are going to upgrade all of those to 6 inches. They will all be brand new fire hydrants which will increase fire flow and the quality of water. We won't have the old lines that could leach off iron oxide from the interior, so it is an improvement for the downtown area. We will also be doing the same thing on Main Street in '26. We will be working on Front Street in '24. That is one of our oldest lines in town. It is our highest-pressure line in town. We have about 120 psi on that line. We have had several breaks on that line down there too so when you go do an overlay on streets and you run a vibrator roller down through there to pack that in nice and tight, you are looking at somewhere over 100 tons of weight that is being compacted down which will cause it to break after we get the street done. We are going to replace that, and on the sewer side we are also going to extend our force main from Stafford Street from west end that ties into Stafford Street and then runs gravity all through there. We are actually going to put in a force main along Front Street while all this is going on and dump it into Walnut Street so we can get all of that load from the West End of town off of that gravity line going down on Front Street. So, we are going to use HDPE on that and fuse it together, roll it in the ditch, and run.

How long down 2nd Street? Just the downtown area? From Jefferson Street to Cedar Street. We will continue to do that, anytime there is an older line in an older part of town. We will continue to improve the infrastructure.

How long do you project that to take? We are going to have to work fast, because we are running with Unnerstall. As they do down a block, we are going down a block. We just keep on going through. We are starting on Jefferson Street; we will get our materials today. We will start first thing tomorrow. We will make a live tap on Jefferson Street so we will have to have that intersection shut down. While we do that, we will get that back up and running, we are going to run to the first block, we are going to charge that line, we are going to disinfect it, we are going to put it in service, we are going to come back and make the connections and we are just going to keep on going to try to keep that impact at the same place as we go through. We should probably get that block done in a week, that is the goal. The live tap at the intersection, that is going to take us the longest because that is a Meramec River concrete, getting through it is a nightmare. It will take two weeks to get the curb and gutter and concrete work done, maybe get the asphalt done this fall, most likely spring.

We are required by DNR and EPA to have in our ordinances a lead and copper rule. There is a certain format that they want to have so we put together the ordinance. It hasn't gone to our council or our attorney to be looked at. He will review it and then we will bring it back for approval. We have to have certain verbiage, which is in this ordinance, for the clean drinking water act for the lead and copper rule revisions that are coming down. This is just the starting point, I just wanted to let you guys see that we are moving forward. It will go next to Piontek to review and it will come back to you guys electronically, so we can get it to a council as quick as we can. We are catching up on this.

Other

None

Old Business

None

Next Scheduled Meeting Date

The next scheduled meeting date is Tuesday October 17, 2023.

Adjourn

There being no further business the meeting adjourned on a motion by Mr. Richardson and seconded by Mr. Mitchell. All in favor aye, those oppose, none. We are adjourned.

Prepared by: Sarah Skeen
Sarah Skeen
Water/Wastewater
Administrative Assistant

Adopted and Approved by the Board of Public Works:

Date: 10/17/2023 Signature: MFWA DDS
Secretary