

**MEETING OF THE BOARD OF COUNTY COMMISSIONERS
SITTING AS THE GOVERNING BODY OF SEWER DISTRICT**

REGULAR MEETING

NOVEMBER 25, 1998

The Regular Meeting of the Board of County Commissioners of Sedgwick County, Kansas, Sitting as the governing body of the Sewer District, was called to order at 10:23 a.m., Wednesday, November 25, 1998, in the County Commission Meeting Room in the Courthouse in Wichita, Kansas, Chairman Mark F. Schroeder; with the following present: Chairman Pro Tem Paul W. Hancock; Commissioner Betsy Gwin; Commissioner Thomas G. Winters; Commissioner Melody C. Miller; Mr. William P. Buchanan, County Manager; Mr. Rich Euson, County Counselor; Mr. David C. Spears, Director, Bureau of Public Works; Mr. Jim Weber, P.E., Director, Sewer Operations and Maintenance; Mr. Darren Muci, Director, Purchasing Department; Mr. Fred Ervin, Director, Public Relations; and Ms. Lisa Davis, Deputy County Clerk.

ROLL CALL

The Clerk reported, after calling roll, that all Commissioners were present.

CONSIDERATION OF MINUTES: **Regular Meeting, November 4, 1998**

The Clerk reported that all Commissioners were present at the Regular Meeting of November 4, 1998.

Chairman Schroeder said, "Commissioners, you've received the Minutes of the meeting, what's the will of the Board?"

MOTION

Commissioner Hancock moved to adopt the Minutes of the meeting of November 4, 1998.

Commissioner Gwin seconded the Motion.

There was no discussion on the Motion, the vote was called.

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VOTE

Commissioner Betsy Gwin	Aye
Commissioner Paul W. Hancock	Aye
Commissioner Thomas G. Winters	Aye
Commissioner Melody C. Miller	Aye
Chairman Mark F. Schroeder	Aye

Chairman Schroeder said, "Thank you. Next item."

NEW BUSINESS

A. BUREAU OF PUBLIC WORKS.

- 1. AGREEMENT WITH SAVOY, RUGGLES AND BOHM, P.A. FOR DESIGN AND STAKING SERVICES FOR THE ESTATES AT SHADYBROOK; SANITARY SEWER IMPROVEMENTS. DISTRICT #1.**

Mr. Jim Weber, P.E., Director, Sewer Operations and Maintenance, said, "In Item A-1, we are requesting approval of an agreement with Savoy, Ruggles and Bohm for design and construction staking services for the Estates at Shadybrook sanitary sewer project. The cost for this sewer project will not exceed \$2,700. All costs of the project are to be paid by the benefited properties through special assessments. We request your approval of the recommended action."

MOTION

Commissioner Hancock moved to approve the Agreement and authorize the Chairman to sign.

Commissioner Winters seconded the Motion.

There was no discussion on the Motion, the vote was called.

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VOTE

Commissioner Betsy Gwin	Aye
Commissioner Paul W. Hancock	Aye
Commissioner Thomas G. Winters	Aye
Commissioner Melody C. Miller	Aye
Chairman Mark F. Schroeder	Aye

Chairman Schroeder said, "Thank you. Next item."

**2. PRESENTATION REGARDING PROPOSED CAPITAL IMPROVEMENTS
AT THE FOUR MILE CREEK WASTEWATER TREATMENT FACILITY.**

SLIDE PRESENTATION

Mr. Weber said, "Before the meeting, I was sitting up and the County Counselor was a little concerned about what might show up in the presentation and I want to assure you that there are no road-kill Jayhawks in this presentation or anything else for that matter. We want to get along."

"The purpose of the presentation is to update the Board of County Commissioners and the citizens of Sedgwick County on the current status of our Four Mile Creek Wastewater Treatment Facility and discuss the future of sewer service in eastern Sedgwick County."

"This is a map depicting the boundaries of the Four Mile Creek Sewer District. The area is roughly bounded by the Butler County line on the east, 17th Street on the north, Greenwich Road and Webb Road on the west and this would be Pawnee on the south. The plant is located at Harry and the Butler County line, right there on the green crosshatching."

"I think it is important to note that the district is a self supporting entity. If we ran a sewer system for a separate city in Sedgwick County, we'd be serving a population of approximately 12,000 people. The sewer district covers approximately 8,300 acres in east Sedgwick County and inside of east Wichita. The Sewer District, by the end of this year, will serve more than 3,800 residential living unit equivalents. Those are basically households or commercial entity converted to an equal number of households. That is really the definition of a residential living unit equivalent. The Sewer District, once again, is self supporting and is not subsidized by Sedgwick County."

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“In order to plan for the future, it is important to understand the past. Planning for the Four Mile Creek System began in the early 1970's. It was originally planned as a joint effort with Butler County and both the City of Andover and the City of Wichita participated in early study work. The original planning began when federal grant money was easy to obtain and could have paid for as much as 75% of the project cost.

“After quite a bit of wrangling in the 70's and 80's, the County came up for a plan with a phased construction. Phase I of the facilities was completed in 1989. That was the sewer plant as you'll see it today with the Spring Creek interceptor which runs out along Harry Street and the Crestview interceptor which runs north up into the Crestview area. Those were done first, to take out some existing smaller plants and lagoon systems that were failing.

“During '89 and '90, the County developed a market driven approach to special assessments, which I'll talk about in more detail a little later. In 1991, we made the assessments for Phase I and managed to do that without getting sued. In 1995, we went on with Phase II construction and finished it. That was the completion of the Minneha interceptor and the up-sizing the line in Timber Lakes, the Four Mile Creek interceptor project. We again levied the assessments using the exact same formula we used in 1991, and successfully did that without getting sued.

“In 1997, it was time to start looking forward, again, so we began a facility study. The purpose of the facility study really was to review the biological, chemical and hydraulic performance of the existing facilities, to analyze current needs and future needs out in the Four Mile Creek District, and to help us develop a long term Capital Improvement Plan, so we'd be ready for future growth.

“We won't really talk much about the biological and chemical aspects of the study because everything is fine there and those items don't really drive the capacity issue as much as the hydraulics do. So, we had them look at dry weather flows. In 1995 the average daily flow was about .8 million gallons per day, 800,000 gallons a day. The study contractor projected 2008 average daily flow of 1.5, 2020 of 2.2. One of the things we wanted them to do was look at, if all the in-fill occurred in the basin what would be the ultimate capacity that we would need to have out there, and they projected that would happen around 2036 and looking at about 2.7 million gallons per day.

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“When you’re in the sewer business, really, the one that kills you is the wet weather flow because it is a fact that when it rains you do take on extra ground water. The sewer system is not a totally tight system so you have leakage coming in around pipes. You have leakage coming in around manholes. You have people who cross connect their sump pumps into the sewer system, roof drains, all kinds of weird things happen out there. When they looked at our data, historically you would normally look at wet weather flows that could be as high as four times dry weather flows. Our current facility was designed for peak wet weather flow of 3 million gallons per day. So, at our current, or 1996 levels of .8 million gallons per day, we’d be looking at needing capacity for 3.2 to run the facility safely, right now.

“When we started looking at this presentation, I really didn’t think we would have quite the opportunity to talk about wet and dry weather flows that we had on Halloween of this year. Here, on this chart, we’ve gone ahead and plotted some flow data in this period in late October. There was a pretty dry period. Average flows in the plant were about .81 million gallons per day. That would be less than our normal flow because it was a really dry period. The rain started moving in on Halloween, got about 1.7 on the 31st. But we got hit with 3.7 on the first. Now fortunately because of the rainfall pattern and the way things hit, we did not have a problem handling the 3.7, but we were right there. If we had a more intense spike in the deal, where the instantaneous flow might have been higher, we could have potentially had a little bit of a problem. I don’t want you to be concerned because we have ways of handling that, but this plant ran normally right through this period.”

Chairman Schroeder said, “Jim, what happens when that occurs.”

Mr. Weber said, “If that occurs, there is, if you’re familiar with the facility, the old Timber Lakes lagoons, which are located just to the west of the facility are still there. We have changed those. Basically, they have fresh water in them now, but they have storage capacity for extraneous flows and the pumping station at Timber Lakes, if we started to over tax the system at Four Mile Creek, those pump stations automatically come in and start kicking water up into the lagoons to store the excess. That did not occur during this particular event. Our people were there and ready for it, if it became necessary.

“What you would normally see is this dropping off pattern. We had totally saturated soil conditions out there, so as the ground water tables pulled back down and the sump pumps stopped running and all those things happened, this eventually will pull back down to this level or maybe a little bit higher because it will be wetter out there. This 3.7 then, that would have given us peaking factor from here to here of 4.6, which is really higher than we want to design for. This would be what I call a rare event. It does give a good illustration of what we’re talking about. Any more questions on that?”

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“Back to the facility study that was done by professional engineering consultants. They felt that, currently, we need to have a peak flow capacity right now of 3.2. The plant was designed for 3.0. We’ve run a 3.7 through it. We’re okay right now. In 2008, they’re recommending that we need to be able to handle 6 million, 2020 at 8.8, and 3026, ultimate design, looking at 10.8 million gallons.

“Really led into the next part of what we asked them, to do in the study, was talk about what the Capital Improvement Program should look like at Four Mile Creek. They recommended, and we have programed this into the CIP, or a project of this type in, they recommend that we go right now go forward with a project that would include the construction of a new final clarifier, upgrading our existing aeration system, we convert our existing clarifier to aerobic sludge digestion, improve some of the equipment in the head works building, construct a new WASS, Waste Activated Sludge System pump station. That is some material that we need to be able to move around the plant. That really ties with the things above it. We’d like to convert our disinfection system. We’re currently using chlorine and sulphur dioxide, like to convert that to ultra violet disinfection system and really get the chemicals out of the plant. We have never had a problem but any time you get any kind of an alarm, you end up calling the haz mat team. They shut down the whole world. This would eliminate that problem. Need to replace pump station number three up on 13th Street. They estimated the cost of doing those things would be about \$3,200,000.

“Then they suggested a second phase and, obviously, these dates are suggested things. We’ll have to watch what happens with growth, but 2007, the pump station in the plant was built so that we could drop in a fourth pump and a second force main, which would let us up the capacity in that pump station without building a new pumping station. So, the second phase would involve doing that. Construct a second new final clarifier, start building redundancy into the system as well as picking up the capacity in the plant. The amount of waste water we’d be handling would be up, we’d have to add some UV disinfection, big white tubes basically, and replace our grit removal system. They’re looking at about \$1,000,000 for that project.

“The third step, and this is really the last major step, 2017. Looking at constructing a second aeration basin. This thing is sort of like a chain. You take out the weak link, improve that situation and the weak link moves to a new place. So, by the time the aeration basin is where we’re low in capacity we add another one of those. A third clarifier, gets the capacity up. Gets us more redundancy and totally replace the jet aeration system in the aeration basin. Looking at a cost of about \$2,500,000 for that.

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“Phase four, really this one could go without a number. We’re saying as needed. We have known for some time that we have a potential market out there for using our treated water or gray water for irrigation for example on golf courses or parks or whatever might occur out there. To do that, we’d have to put on a pump station and work on a distribution system but we need to upgrade the disinfection to a higher level, because it would be water going into a public area we have to be more sure that it is disinfected. That, they suggested, would cost about \$850,000. That is the kind of project that we could do any time appropriate customers showed up and we wanted to get into that business. We wanted to identify it in the plan.

“Our recommendation is to begin Phase One right now. What I’d like to do is talk a little bit about the special assessments. The success of the Four Mile Creek District has really been the result of forward thinking financial planning. During 1989 and 1990, the County worked with a group of citizens from the Sewer District to develop a method of assessment that would work in the real world. The Board of County Commissioners did take an active role in that process and spent countless hours with the citizens and the County staff and our outside consultants to develop a market driven approach to special assessments.

“Specials out there are based on the usage of the property. Costs to a user increase with changes in usage. If they change use on the property you pay more. This has resulted in a reasonable holding cost. If you didn’t want to develop the property, you could afford to stay there. It has provided funding for expansion of our facilities.

“The assessment method really boiled down to, we took about 10% of the cost and assessed it to every piece of land in the district on a per acre basis. Everybody paid something because they are benefited by having the possibility of getting to a sewer later. We took about 87% and assessed it to the platted lots and tracts which were under five acres and we did that on an equal shares basis. This is mostly residential stuff. It strictly says that the usage from one household to the next is not significantly different, so their cost should be about the same. The five acre limit was chosen because at five acres you can start to use your private lagoon systems. We set that there, so not to force someone into the sewer if they were already set. We took the remainder, about 3%, and we added that to the monthly sewer bills to the users and that added up to about \$1.50 per month. Any lot that gets added later or new usage to be added later would pay an impact fee equal to the platted lot assessment.

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“The impact fee on Phase I worked out to \$1,800 per residential living unit equivalent, so that would be a single household would be \$1,800. If you had an apartment complex with 100 units, that would be 100 times \$1,800. It really clocks with dwelling units, that kind of a conversion. When we made that same calculation on Phase 2, we had a fee of \$560.79 and Joe Norton would not let me round that off because he insisted on having it follow the exact same formula. All impact fees are split between the bond and interest fund and the plant expansion fund. The folks that were working, especially the citizens out there, that were working on the assessment process, felt that it was important, essentially, the entire investment was covered by special assessments made in 1991 and 1995. That facility would be used by other people in the future, so they wanted to design it so there was a way to bring money back to the original people. By making this split, they’re taking 26% of that and putting in a bond and interest fund where it will be used to pay off the bond early. So if we have a lot of growth, it will pay off earlier. If it is flat, they don’t pay off so early. The remainder of it goes into a plant expansion fund.

“Once again, our Phase I cost was \$3,200,000. The question is, can we do it? So we took a look at that. On this chart we’re showing the annual revenue from impact fees to our Fund 5006. You can see that it has steadily increased over time. This 1997 year, this red blob up there, we have not used that to make future estimations. That was a remaining grant payment on the plant. We did have some grant money for the plant and it took until 1997 to get all that money out of the feds and it went into this fund. It is in the funds, that’s why we showed it there, but if you look at the growth line it really runs right through there on the impact fees. We’re projecting that in 1998, that we’ll collect around \$500,000 in impact fees and for the out years we went ahead and tried to be conservative. We estimated they would be \$400,000 per year in the future.

“In this chart, we’ve taken the revenue data from the previous slide and shown how it has accumulated in the fund. We’ve also superimposed in this pink line an estimation of how the expenditures would be made on the Phase I of the plant expansion. Currently, we have about \$1,860,000 in the fund.

“I don’t like that one that much. I think this one works a little bit better. I think it is more useful to combine the revenue and the expenditures into a single graph, here depicting the fund balance over time. In this chart, we see that the construction can be completed with the cash on hand and projected receipts without borrowing. Now that isn’t entirely true. I’ve got a little bit of a negative right here that’s about \$50,000 in 2001, depending upon how the dollars come out, that may or may not happen. But if that did in fact occur, we’d anticipate a short term temporary note borrowing that would carry us over until it starts to pick up again in the following year.

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“Based on the facility study and information that we have available to us, we have concluded that the financial planning done in 1989 and 1990 has positioned us for the future. The market driven approach to special assessments works and growth in the Four Mile Creek basin will continue without further direct assessment or an increase in impact fees.

“This brings us to the present. Based on the data, we know it is now time to proceed with plant expansion. We’d like to return to you soon and ask that you begin to implement Phase I. With regard to implementation, we want to note that the project has been included in the CIP. It may not be described precisely in the manner that we’ve shown it to you today, but we’ve been programming this for some time. The project will be funded with cash. No special assessments are required. The governing body may proceed with the project without further notices or public hearings by using standard purchasing procedures. If you have any questions, after all of that, I’d be happy to try to answer them.”

Chairman Schroeder said, “Thank you, Jim. I appreciate the presentation. I will talk to you later about that last bullet point, about the hearings. I think, if you’re going to do something like that, we need to do that.”

Mr. Weber said, “You may certainly opt to do that. I’m pointing out that I don’t believe you need to.”

Chairman Schroeder said, “We need to let those people know what is going on out there so there is no misunderstanding of misinformation about fees, et cetera. I think it is a good project and obviously that area is growing, which Commissioner Gwin and I are very familiar with. It will continue to grow. It is a natural growth pattern for the City of Wichita and for the unincorporated area. It obviously has a valuable use to this community and we need to make sure that we stay on top of these kinds of facilities, such as the Four Mile Creek system. I appreciate the presentation and the work you put into this and look forward to seeing this project go on. Commissioner Winters.”

Commissioner Winters said, “Thank you. I was going to share that opinion. I think that, from the date of that we’ve been shown by Jim, it appears that it is time to do something with this facility. I would think we ought to decide how we’re going to take input from the public and then get on with making a decision. I would agree with you, in figuring out how to do that. Thank you.”

Chairman Schroeder said, “Other questions or comments? If not, what’s the will of the Board?”

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MOTION

Commissioner Gwin moved to receive and file.

Commissioner Hancock seconded the Motion.

There was no discussion on the Motion, the vote was called.

VOTE

Commissioner Betsy Gwin	Aye
Commissioner Paul W. Hancock	Aye
Commissioner Thomas G. Winters	Aye
Commissioner Melody C. Miller	Aye
Chairman Mark F. Schroeder	Aye

Chairman Schroeder said, "Thank you. Next item please."

CONSENT AGENDA

B. CONSENT AGENDA.

1. Right-of-Way Instruments.

One Easement for Sanitary Sewer for the Belle Terre South Addition. District #1.

One Easement for Sanitary Sewer for the Balthrop 2nd Addition. District #1.

2. Budget Adjustment Requests.

<u>Number</u>	<u>Department</u>	<u>Type of Adjustment</u>
980625	Various - Sewers	Supplemental Appropriation
980626	Estates at Shadybrook - Sewer	Supplemental Appropriation
980627	Balthrop 2nd - Sewer	Supplemental Appropriation

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Mr. William P. Buchanan, County Manager, said, "You have the Consent Agenda before you and I recommend you approve it."

MOTION

Commissioner Hancock moved to approve the Consent Agenda as presented.

Commissioner Gwin seconded the Motion.

There was no discussion on the Motion, the vote was called.

VOTE

Commissioner Betsy Gwin	Aye
Commissioner Paul W. Hancock	Aye
Commissioner Thomas G. Winters	Aye
Commissioner Melody C. Miller	Aye
Chairman Mark F. Schroeder	Aye

Chairman Schroeder said, "Thank you. Any other business to come before this Board? If not, we stand adjourned."

C. OTHER

D. ADJOURNMENT

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There being no other business to come before the Board, the Meeting was adjourned at 10:45 a.m.

**BOARD OF COUNTY COMMISSIONERS OF
SEDGWICK COUNTY, KANSAS**

MARK F. SCHROEDER, Chairman
Fifth District

PAUL W. HANCOCK, Chairman Pro Tem
Second District

BETSY GWIN, Commissioner
First District

THOMAS G. WINTERS, Commissioner
Third District

MELODY C. MILLER, Commissioner
Fourth District

ATTEST:

James Alford, County Clerk

APPROVED:

_____, 1998