



JOINT CAPITAL & CONSTRUCTION AND BUDGET AND FINANCE MEETING

Monday August 6, 2018 at 5:30 p.m.
Memorandum

Members Present: Committee Chair Steve Pittman, members Marilyn Anderson and Eric Hand, B&F Committee Chair Jane Merrill, members Michael McDonald and Carl Mills, board member Michael Shaver. Others in attendance were Legal Counsel Anne Poindexter, Utility Director Andrew Williams, Controller Cindy Sheeks, Engineering Manager Wes Merkle, District Engineer Ryan Hartman, Consultant Buzz Krohn and Administrative Assistant Maggie Crediford.

Mr. Pittman called the meeting to order at 5:38 p.m.

PUBLIC COMMENT

There were no public comments.

WWTP OXIDATION DITCH GEAR REDUCER REPLACEMENTS

Mr. Merkle stated that the oxidation ditch still has some original gear reducers installed in 1991. This is the last of the equipment that needs replacement. Equipment has been continuously in motion for the nearly three decades. Mr. Watkins has a request for quotes out to contractors and expects the numbers later this week. Quotes are anticipated to come in under the \$60,000 budgeted for this project. Recommendations will be made at the Board Meeting next week regarding the quotes.

VEHICLE REPLACEMENTS

Mr. Merkle stated that staff has two 2008 Ford Escapes which are experiencing continuous maintenance issues. Staff members who drive them daily are concerned about safety and reliability. Staff had budgeted one vehicle to be replaced in 2018 and one in 2019. Mr. Merkle asked that the new vehicle slated for replacement in 2019 be moved up and replaced alongside the 2018 replacement. Hopefully a better deal can be made by replacing two at the same time. Ms. Anderson said that she is comfortable with moving the 2019 replacement to 2018. Mr. Pittman agreed.

#1902 WWTP EXPANSION

Mr. Merkle explained that this discussion is a continuation from the July 27, 2018 joint B&F and C&C meeting. He introduced a table summarizing options discussed at the last meeting. The goal being to breakdown the information and present it to the committees in a one-page format. The summary shows three different time frames for different construction items. Staff worked with consultant Buzz Krohn on the information presented to discuss the budget impacts. The table shows Capital replacements, improvements and

outlays. The information is reflecting total Capital spending year over year, not just what is expected for plant expansion. Mr. Krohn looked at each option and factored in the amount of money that would need to be borrowed if the Utility was faced with a recession.

Mr. Merkle directed the Committees to the first handout that showed a comparison for Sewer Development Charges for Trico and surrounding utilities, so the Committees can understand what other local agencies charge. Mr. Krohn explained that he took TriCo's \$4,075 acreage charge (interceptor fee), assumed 2 EDU's per acre to compare where TriCo is to neighboring communities in relation to construction costs. TriCo's fees come in at \$3,946.50, putting it in the upper midpoint of the range assuming two EDU's per acre. If higher density developments go in the acreage fee would be spread out over more EDU's.

Mr. Pittman stated that according to the chart, TriCo is very competitive in relation to monthly user fees and is near the higher end in relation to connection and availability fees. He asked if those numbers should be viewed in terms that we are offering a great value to current customers and that developers are paying their share as well. Mr. Krohn agreed that would be the conclusion he would draw from the information in the chart provided. He stated that he believes TriCo's fees are reasonable and have been consistent for a number of years. Mr. Hand asked if the fees shown on the chart from the other utilities are also derived from an EDU basis? Mr. Krohn said that some of them are derived from EDU's and those were calculated assuming 2 EDU's per acre as well. He said a lot of them represent the fee charged per EDU and that not all the utilities assess acreage fees. Mr. Krohn stated that this information was presented based on a question from the last meeting inquiring if Connection and Availability fees should be increased to reduce the risk incurred by the current rate payers as it relates to the proposed plant expansion. Mr. Krohn said there is room for upward mobility with these fees but that TriCo has been appropriately aggressive in assessing the fees to date. Mr. Pittman stated that he is happy with TriCo's fees in comparison to surrounding utilities. Mr. Williams stated that TriCo can say to current customers that they are not carrying the cost for new development.

Mr. Pitman asked if there were questions regarding the map that was distributed showing the available land in the territory. Mr. Shaver stated that he would like to know the acreage in each of the categories on the map. Mr. Shaver asked if #14 shown on the map comes out of Austin Oaks. Mr. Mills said that #14 is at Austin Oaks. Mr. Shaver asked if that area is in TriCo's CTA. Mrs. Poindexter confirmed that it is. Mr. Pittman pointed out that the furthest most northwest portion of the service area is an area where people want sewer service, but no one has figured out how to get sewers to that area. TriCo has taken a non-aggressive position to someone trying to get sewers into an area without condemning for easements. Mr. Merkle stated there are roughly 4,800 undeveloped and unsewered acres which is about 72% of the service area. Mr. Shaver asked what the total acreage in the CTA is. Mr. Merkle stated that he did not have an exact number off the top of his head, but it is around 17,000 acres. Mr. Mills asked who is doing the development off of 131st Street south of Austin Oaks. Mr. Hartman stated it is Pulte. Mr. Mills asked how many houses are in that development. Mr. Hartman said that there will be about 30 homes. Mr.

Mills stated when you look at that area on the map it appears to be a large undeveloped area, however it is being developed into estate homes. He asked realistically when looking at undeveloped areas especially the ones closer into Clay Township, how many of those will be subdivisions down the road or are they all large estates that probably won't be broken up? Mr. Pittman stated that to get that number you would need to look at parcels individually. Some of these parcels you look at and think they will never be developed; then the demand changes and land is selling at a premium. Suddenly, things that didn't seem developable become developable. Mr. Mills stated that the City of Carmel wants to carry 126th Street from Shelborne Road to US 421. There would be an area in there where there would be some possibility for development but would be 10-15 houses at the most. Mr. Mills stated that he would like to get a handle on what is in the service area that is viable for development. North of 146th Street is a different situation. Mr. Pittman stated that the piece next to University High School that he is developing currently would have been an easy piece of property to overlook. There are bits and pieces like that, that will be available that you didn't realize are there. Mr. Shaver asked how many acres Mr. Pittman is developing next to University High School. Mr. Pittman stated it is 36 acres and will have 44 homes if it gets zoned.

Mr. Shaver stated that he thinks if a parcel is less than 10 acres it is hard to put a subdivision in. Mr. Pittman stated if utilities are not available that could be true. Mr. Shaver questioned areas on the map that show up as undeveloped and not sewered. He would like to know how many of those will contribute to future demand on the plant's capacity. Mr. Shaver asked where the Simon Property is on the map and if Staff really thinks they will subdivide that property? Mrs. Poindexter stated that the property will be subdivided. Mr. Pittman stated that due to Deed Restrictions on the property it could be developed at one home per acre. Mrs. Poindexter confirmed that one home per acre is correct. Mr. Hand stated that as estate properties change hands the opportunity for development becomes greater. Mr. Merkle stated that happened when the Sunrise Golf Course was developed and went from one EDU to nearly 400 EDUs. Mr. Merkle stated that the assumption is that between 60% and 65% of the remaining available land will be developed. Staff relies on their consultants' professional judgment to guide them with what the best practice is moving forward. Mr. Pittman agreed that he can see most of the available parcels being developed at some point, however it is hard to quantify a time frame for the development.

Mr. Pittman stated that the goal is to make a recommendation to the Board of Trustees. He asked Mr. Merkle if the goal is to make a recommendation by the September Board Meeting. Mr. Merkle stated that he would like to see the scope of the work set for the project so that Staff can issue a RFP for engineering firms for the design work.

Mr. Shaver stated that he was confused by two handouts and asked for clarification on them. Mr. Merkle stated that the packet attachment had a table showing a breakdown of each option that included scope, timing, project costs, borrowing needs and potential savings. The handout provided supporting calculations for the four options that shift timing of VLR construction. This includes projected flow distribution to both plants, with variable treatment costs at TriCo's plant and costs to treat at Carmel. It shows with each scenario

from left to right what the flow split would be year after year with steady growth and what the breakdown is as far as costs. Mr. Krohn explained that he took the four primary options that were discussed at the last meeting with regard to expanding TriCo's plant and factored in incremental operating costs from the variable treatment charges that favor Option 1. The potential interest expense was added into the various options. Option 1 had the highest potential amount of interest expense. The delta between the Capital Costs of building now vs. delaying construction was also taken into account. A 4% a year inflation factor was used on Capital Costs. The further out to the right you look on the chart those costs become more significant versus building it upfront. It is worthy to consider the impact on operations and disruption time for construction as another factor.

Mr. Shaver questioned the operating costs. He asked how much the cost of operating goes up when you add in the three additional Vertical Loop Reactors. Mr. Krohn stated that the feedback he received when he asked that question is that the newer VLR's would be a function of the flows that would determine the cost. If the flows were not materially different the costs would not be materially different. Mr. Krohn asked if all the VLR's would come online at once or if they would be phased in? Mr. Merkle stated that it would be a question for Plant Staff. If the plant is running capacities that are shown in the equation, all three VLR's would be brought online at once. Mr. Shaver stated that would increase the variable costs. Mr. Krohn reiterated that the variable costs are flow dependent. Mr. Shaver stated that it looks like it will cost \$648 a million gallons to treat sewage at TriCo's Wastewater Treatment Plant versus costing \$1,429 to send a million gallons to Carmel's plant. The difference between those two is the difference of \$23.5 million dollars in the Capital Costs. At zero interest it would take 40 years to spend the cost of expanding TriCo's plant by sending additional flow to Carmel.

Mr. Shaver questioned the logic of spending \$23.5 million dollars to save a half million dollars a year. Mr. Merkle stated that the purpose of the chart is to show the differences between the Options. The numbers are being used to show that if flow is shifted one direction or the other what is the actual impact on the overall budget. It does not reflect the total costs to treat sewage at TriCo's plant. Without going too far into the weeds the chart is trying to show what the cost comparisons are for sending a million gallons to Carmel versus sending a million gallons to TriCo's plant. Staff looked at the Operating Budget and broke down how each line item would be affected if flow was raised from 3 million gallons to 4 million gallons and if the increases are proportional to flows, lump sum increases or something in between. The point was to show the difference between options for plant expansion and this information should not be used to compare our costs with Carmel. Mr. Krohn stated he then factored in the interest costs. System Development Charges are there for the purpose of building the plant, so he used more of a depreciation factor in the numbers. If it is decided that some of the Capital Costs can be deferred or avoided that would be a different scenario. He asked Mr. Shaver if his thinking is that the construction is not needed. Mr. Shaver stated that he is not saying that it doesn't need built, he is saying that 90% of capacity is a legitimate time to start planning for an increase assuming there are additional customers to be served. However, if you look at the 2.06 million gallons currently being pumped to Carmel and add an additional million, the differential in Carmel treatment cost is a half a million dollars. He believes it would be

more cost effective to spend the extra half a million a year to send extra flow to Carmel versus spending \$23 million to expand TriCo's plant. If you leave the money in the bank and don't spend it, it will be generating interest payments over the years that it would not be if it was spent to expand the plant. If TriCo never gets close to sending 3 million gallons to Carmel until around 2030, why would you not use the capacity you already purchased.

Mrs. Anderson asked if the capacity at Carmel falls under the same 90% of capacity standard that the TriCo plant does. Mr. Mills asked if the terms of the agreement between TriCo and Carmel allows TriCo to use 100% of the purchased capacity. Mr. Mills stated that if TriCo can use 100% of the available capacity at Carmel it does change the situation. Mr. Williams stated that the agreement states that TriCo has 3.08 million gallons of available capacity at Carmel. Mrs. Poindexter clarified that when calculating their 90% Carmel has to take into account that TriCo owns 3.08 million gallons of capacity. Mr. Mills stated that he will not be comfortable bringing the construction numbers forward until the capacity usage issue at Carmel is addressed. Mr. Shaver reiterated his position that it is less expensive to send the maximum amount of purchased flow to Carmel than it is to expand TriCo's Wastewater Treatment Plant. Mr. Pittman asked if TriCo's plant is currently running at 85% of capacity. Mr. Merkle stated that it has been running at around 85% of capacity since the last plant expansion. Mr. Shaver stated that in 2017 there were 180 days that minimum flows were not sent to Carmel. There were 123 rain days where the flow to Carmel was above 2 million gallons. Ms. Merrill asked Mr. Shaver what point he is trying to make. Mr. Shaver stated that the plant does not need to be expanded.

Mr. Pittman asked how many gallons of wastewater 500 EDU's generates. Mr. Shaver stated that if you look at the year 2022 the amount sent to Carmel is exactly at the minimum flow emphasizing that capacity is being paid for right now that is not being utilized. Ms. Anderson asked about balancing flows between plants. Mr. Merkle stated that it is not as easy as flipping a switch, sewer flows are difficult to accurately predict from one point in time to the next. When considering plant capacities you have to look at the annual average, not specific dry weather days. Mr. Merkle noted that the flow numbers in the charts were provided by himself and the dollar numbers were calculated by Mr. Krohn. When the last plant expansion came online as much flow was shifted to our plant as could be, roughly 85%, because it was more cost effective than sending as much flow to Carmel as possible. Flows at our plant have been holding steady at about 2.6 million gallons with the balance going to Carmel. As additional customers are added, the extra flow is being adjusted continuously to deal with changes in weather and operational needs.

Mr. Krohn stated that the lead time between planning, design and having a plant online is about 4 years. Ms. Anderson asked Mrs. Poindexter how TriCo would get 100% of their purchased capacity at Carmel when Carmel gets 90% overall. Mrs. Poindexter stated that it is because Carmel sold it to TriCo, Carmel should have already subtracted that from their available capacity numbers.

Mr. Williams stated that after the last meeting the spreadsheet were created based on questions that arose at that meeting tying together the questions of "How quickly do we

go?” What are the costs?” Mr. Williams pointed out that under each option it shows if the improvements were made what the capacity of the plant would be. In Option 1 after the first expansion it would be up to 4.56 of daily flow with a peak of 19.2. There would be nothing to do in the next phase because it was done in the first phase. The third phase would increase the wet weather flow. The same applies to Option 2. There are many moving factors in this; construction, how much growth happens, how quickly and how dense, if there is a recession, if there isn't a recession. The chart shows seven different options that can be tied back to how much we send back to Carmel and our own plant. In Option 2 almost all the new flow is being sent to Carmel for the next interim. It is not just the numbers to Carmel that need to be reviewed it is also the costs and how the plan is laid out and financed.

Mr. Pittman stated that if it takes four years to complete an expansion, what happens if the growth explodes and the expansion doesn't happen. There is a risk associated with that as well. Mr. Shaver stated that growth can only happen within our service area, you can't predict which parcels will develop. Mr. Shaver stated that Carmel will have issues as well because they don't have anywhere to grow either. He stated that zoning will be the controlling development factor.

Ms. Merrill asked how much of the land on the west side of Michigan Road would develop to create additional customers. Mr. Mills stated if you are looking at that it adds a different set of parameters. Ms. Merrill agreed and said that if the property owners or the Town of Zionsville come and asked TriCo to serve the area and we are 4 years out on the plant expansion, would we even be able to say yes. Mr. Shaver stated TriCo spends \$615,000 dollars a year to send flow to its own plant. If it is sent to Carmel it costs \$1.1 Million dollars a year. Mr. Merkle stated that if you postpone expanding the plant until 2023 the cost to send more flow to Carmel is substantially greater and that increase must be considered beyond the current year. Mr. Krohn stated that the conversation needs to focus on the cost of deferring the investment for a few years, which is the comparison of options presented, and we are not eliminating the need for plant expansion all together. If we know the expansion is going to have to happen in the next five years, it makes sense that it would be cheaper to build it now than to build it later. It would save operating costs in the interim.

Mr. Pittman asked what would happen if the extra capacity is added at the plant and there is an economic downturn? Can TriCo weather an economic downturn financially? Mr. Krohn stated that he ran the numbers for a three-year turndown like the economic situation back in 2008 when development in the area was cut in half. That is shown in Option 1 with a three-year slow down which would reduce TriCo's cash balances by about \$1 million dollars. Mr. Krohn pointed out that in this scenario there would still be cash reserves and there would not be a need for a rate increase either. It is unique that this proposal is not dependent on a rate increase to be completed.

Mr. Mills asked Staff to provide the committees with realistic numbers of what TriCo can systematically and realistically be sent to Carmel's plant, because TriCo is paying for capacity it is not using. He believes that Grit Removal would be a project that should be

done now to make the plant as efficient as it can be. Mr. Mills said he would like to take a systematic approach short term and look at what pieces of the proposal need to be done immediately and start looking toward the future but not necessarily committing long term at this point because the other unknown factor is coming up in two years when the Carmel Contract is up for renegotiation.

Mr. Pittman asked Mr. Merkle to explain the process of switching the flow from our plant and directing it to Carmel's plant. Mr. Merkle stated flows that enter the system from day to day are rarely consistent even given similar weather conditions. Ms. Anderson asked Mr. Merkle to explain the lag time between measurements and readings. Mr. Merkle stated Lift Station 2 at 106th and Spring Mill serves about the central third of the service area and it can send flow over to Basin 1 which goes to Carmel or it can send flow to TriCo's plant. Most days it sends flow both directions and if it is bad wet weather it is sending everything to TriCo's plant. Throughout the day, flows coming from different locations are not the same. There is a lag time of about an hour and a half from when flow leaves Lift Station 2 and when it reaches Lift Station 1 before going on to Carmel's plant. A lot can change in that time. Staff and consultants have tried many times in the past to program Lift Station 2 to stop sending flow into Basin 1 and hit the minimum flow number at Carmel, however there are too many variables and these efforts did not affect hitting the minimum flow to Carmel. The programming created operational challenges due to complexity and affected reliability. Currently a set amount of flow is set going to Michigan Road and everything else goes to Carmel. It is adjusted periodically as the year goes on to try to hit the minimum flow to Carmel and meet operational needs at our plant. It is a continuously moving target. Not only that, but Staff needs to contend with growth coming into the entire system and make adjustments at Lift Station 2 accordingly. Mr. Williams added that the difficulty of balancing flow at Lift Station 2 is not during wet weather, but rather during dry weather. There are large pumps and the three large force mains, two 12 inch pipes and a 20 inch pipe, to get flow to the TriCo plant. These pumps can only be run so low without harming the pump or causing solids to settle out in the force main. Currently, during dry weather we are send the minimum flow we can to our plant without shut the pumps off completely. But during dry weather, there in not enough flow to reach the minimum flow to Carmel on a daily basis.

Mr. McDonald asked if there is somewhere in the system to store flow during dry weather to balance out the flows between plants. Mr. Williams stated that during stretches of dry weather there is a challenge getting enough to Carmel and our own plant. Mr. Shaver stated that if flows need to be revised to Carmel, Staff may need to revise the controls at Lift Station 2.

Mr. Mills asked how I&I improvements in Basin 1 affected flow going to Carmel. Mr. Williams stated that it knocked out some of the peak flows as well as the base flows. For instance, after improvements were made in Jordan Woods, daily flows from that area were nearly cut in half. Mr. Mills stated that when reevaluating the agreement with Carmel, TriCo needs to research how to push more flow to Carmel vs. incurring the costs of making improvements.

Ms. Merrill stated her understanding is that the Committees are not ready to make a decision on plant improvements. The Committees need to revisit this topic on a yearly basis. Mr. Pittman asked if property owners could pre-purchase capacity at TriCo's plant knowing that capacity is getting tight by paying EDU Fees to reserve EDU's, so they will be assured to have capacity when their property is developed. Mr. Merkle stated that could be done through an agreement with a property owner and the Board of Trustees and would that help cover the costs of expansion. Mr. Hand questioned how issues that would affect new customers needing to connect to the system if no capacity was available because it was pre-purchased by a developer. Mr. Williams cautioned that if capacity is not available when needed a sewer ban can be issued which would halt development all together.

Mr. Merkle asked if a master plan update is needed to address concerns with regards to how many EDU's are we going to see and when? Consultants previously looked at developable land in our service area, the zoning in place at the time along with building trends, they put together a report giving direction on what needs to be planned for. Revisiting the Master Plan will take several months and could have a large price tag.

Ms. Anderson suggested revisiting this topic at the next meeting. Mr. Merkle stated that Staff had hoped to have direction from the Committees in September to set a scope for the plant expansion project, and it sounds like more information is needed for discussions to continue and allow the Committees to make an informed decision. Mr. Mills stated that he would like to narrow down what absolutely needs to be done in 2020 and discuss those items in the short term.

Mr. Williams suggested that Staff take the feedback and questions from Committee members, review and answer those questions at the next meeting. The Committee Members stated that they do not have any objections to conducting more joint meetings to discuss the issues involved with plant expansion.

Mr. Hand mentioned that Zionsville is planning on servicing the additional 600 acres recently approved in their territory but will be looking to TriCo for help if they find that they are unable to service the entire property. Mr. Shaver stated that he isn't interested in building capacity to help Zionsville out only if they need it.

The Budget and Finance Committee dismissed at 7:35 p.m. and Ms. Merrill, Mr. McDonald, Mr. Mills, and Mr. Shaver left the meeting. The Capital and Construction Committee continued discussing their agenda items.

CAPITAL PROJECT UPDATES

#1702 96th/Keystone Sewer & Force Main Relocation and #1707 Neighborhood Sewer Projects - Mr. Merkle stated that the work is complete on both projects is complete, except for remaining work for 96th/Keystone will be done by Carmel's contractor that includes relocating the force main under the proposed bridge, which may be a year away.

#1801 Lift Station 4 Elimination - Mr. Merkle stated that he and Mr. Pittman met with Mrs. Book today to discuss easements across her property, and the conversation was positive. Requests for bids will be going out this month and because cost estimates are under the public bid requirement staff will request bids from local contractors that Staff knows does that type of work in the area.

Jackson's Grant Section 6 Oversized Sewers - Mr. Merkle stated that work is underway. They are running into some unanticipated ground water they are needing to deal with.

#1901 Lift Station 14 Parallel Force Main and #1906 Eagle Creek Outfall - Mr. Merkle stated that those two projects are in design. On Lift Station 14 Parallel Force Main staff has begun the easement acquisition process.

Private Lift Station Servicing three properties at 96th/Keystone - Mr. Merkle stated that the Haver Way Lift Station was connected to the system today.

The meeting adjourned at 7:42 p.m.

Respectfully Submitted,



Wes Merkle
Engineering Manager