

WATER COMMITTEE
DECEMBER 9, 2009
MINUTES

MEMBERS PRESENT:

Pete Frisina, Chairman
James K “Chip” Conner, Vice Chairman
Jack Krakeel
Tony Parrott
Brian Cardoza

ABSENT:

NON-VOTING MEMBERS:
GUESTS:

David Jaeger
Commissioner Jack Smith
Francisco Martinez and guest

The meeting was called to order by Chairman Pete Frisina at 8:00 A.M.

I. APPROVAL OF MINUTES FROM THE MEETING ON NOVEMBER 18, 2009.

Vice Chairman Chip Conner made the motion and Tony Parrott seconded, to approve the minutes from the meeting on November 18, 2009. There was no opposition.

II. FRANCISO MARTINEZ TO DISCUSS PURCHASE OF COUNTY PROPERTY AT PORTER ROAD TANK SITE.

Mr. Martinez explained that he is coming on behalf of the City of Refuge, a multi lingual church based in Fayetteville, Georgia. The purpose of his coming to this meeting is to see which would be the possibility for the Water System to sell part of the property owned on Porter Road and Highway 85. This is the property they are trying to buy, in order for them to go ahead and do the project on this property which is good enough. Planning & Zoning said in Fayette County they are requiring them to have 400 linear feet in the front; they only have 376 now. The size of the property they are requiring them to have is 5 acres at least; they have 5.16, but the code requires for them to have 400 linear feet in the front on Highway 85; they only have 376 linear feet. They told them that they should come show the Water Committee what they have and see if the Water System would be able to sell part of the property on the right side of the property. He stated that is the purpose he came here.

Mr. Parrott explained that this is a future tank site that we have at the corner of Porter Road and Highway 85; there is also a radio tower on the site. The tank site is closer to the northeast property line in the corner. We will be closer to the property

line than we would normally be simply because of the land on the site and the 500 foot tower. Mr. Jaeger said the tank will be located near the high point of the site, towards the north end. He needs to look at the topo to see how much distance we have from the high point to the property line and if it were 25 feet less than that, how close would it be. Mr. Parrott said the tower with the guide wires skews what we can do with the site; we have to work around it. We are not near as flexible with this tank site as we could have been early on without the tower sitting on it.

Mr. Jaeger agreed to review the boundary survey and the topo survey to see what we could do. He will make a report at the next Water Committee meeting.

III. LAKE MCINTOSH UPDATE.

David Jaeger reported that the fencing work at the mitigation sites is still ongoing; they are working on the Helmer Road site. The Board has awarded a change order to add the Danielly – Wagner site. The mitigation work is being done on the Johnson tract; they have moved on site and started some work.

Mr. Jaeger went on to say that the work on the access road to the dam has begun; Peachtree City council approved their share of the funding. The contractor has cleared the alignment and began some rough grading work Monday of this week.

IV. LAKE MCINTOSH BID OPENING.

Mr. Jaeger reported that the bid opening was held last week. He distributed bid tabulations to the committee for review. There were five pre-qualified general contractors who were invited to bid. Of those five, four of them accepted the invitation, acquired the bid package, and submitted their bids.

He said that Brad Cole was the low bid; base bid was \$7,932,434.82. The additive alternate item for a two hundred foot long maintenance access bridge over the spillway to the far side of the dam was another \$300,820.30. The combined total is \$8,233,255.12.

Mr. Parrott distributed photos from a brochure for the bridge. Mr. Jaeger explained the pre-engineered weathering steel bridge is the Connector version shown on the brochure. It is made by Continental, which is part of Contec Bridge Solutions; we used them before for a cart path project on Peachtree Parkway at Lake Kedron. He said that he is familiar with their products; it would have a concrete deck and allow access to both sides of the spillway year round, by spanning over the spillway. Without the bridge, there would be times that the far side of the spillway would have access only by boat, when water is going over the spillway. This was done as an alternate bid item just to see how it came out and to make sure it fit within the budget constraints. He said that he feels like we have such a competitive bid, we are well within our budget; it would be advantageous for the

county to accept the alternate as well and guarantee access to both sides of the spillway throughout the year.

Mr. Jaeger said that Reynolds was second place, adding base bid and alternate bid, it was \$24,000.00 above. It was about as tight and competitive as we could ask for. The bottom three bids are within 3 ½% of each other. He stated that he is very satisfied with the bid results. Brad Cole is a highly regarded dam contractor. We have not worked with him in Fayette County, but the geotechnical firm we are using has worked with him on multiple projects.

Jack Krakeel asked if Brad Cole Construction was one of the contractors that paired up with another firm. Mr. Jaeger stated they did not have any restrictions on their pre-qualifications.

Mr. Krakeel asked about the purpose of the bridge over the spillway. Mr. Jaeger explained that it gives the County access to both sides for maintenance which is required by our Safe Dams permit. It also provides Emergency Services access to the far side if necessary. The nature of this spillway is that any time the lake is full water will be going over it. Access to either end would be prevented, and there would be a requirement to go by boat to the far side if necessary. At times when the lake is down, you could access the far side around the downstream end of the spillway. This would provide access year round; light vehicular access. It was intended to allow the County to move the slope mower equipment from one side to the other so that they could maintain the grass on both sides. The County does not own beyond the property line so they do not have access from the Coweta County side to the reservoir.

Mr. Parrott explained at Lake Horton we can come in from both Antioch and Grant Road to do maintenance on both sides. At Lake Kedron, one of the biggest problems we have had is that we can't get across to the other side. Years ago, we used to come in through the subdivision on the other side, before they built houses over there. We can no longer come through there. This creates a problem maintaining to Safe Dams standards. Right now we are letting water off from Lake Kedron to get the water down so that we can get across the spillway to do some maintenance.

Commissioner Smith asked how often we have to do it. Mr. Parrott stated it depends on how much rain we have had; about every four months.

Mr. Jaeger stated his original estimate for this project was 10,000,000.00. We are well within the budget. A couple of days after the bid opening, the low bidder told him that three years ago, it would have been a \$10,000,000.00 job. The market right now is very competitive. He went on to say that his recommendation, since we are comfortably within our budget, that it would be to the advantage of the Water System to include the alternate. With Brad Cole being a pre-qualified bidder he recommends awarding it to Brad Cole with the alternate for \$8,233,255.12.

Commissioner Smith asked if we don't do the bridge how do we get to the other side. Mr. Jaeger replied at times, when the lake is full, you would have to go to the other side by boat. When the lake is below full pool, you could go downstream of the spillway. Further discussion pertained to getting the mower to the other side. When the lake is full we could not get the mower on the other side to cut the grass. Mr. Parrott explained that in the beginning we would have to irrigate to get the grass started. Safe Dams is touchy about growing grass. The biggest deficiency that we have had in our Safe Dams report for their annual inspection at either site has always been the grass.

Mr. Krakeel asked about clearing and grubbing the entire lake bed. Mr. Jaeger said yes. What remains after what is timbered; they are allowed to burn the material if it is a burn season. Other than that, they would have to haul it off. A lot of it will be mulched to provide erosion and sediment control during the construction, ultimately that will have to be burned or hauled away.

Commissioner Smith asked about the construction time period. Mr. Jaeger stated that we gave the contractor a two year construction period, so that they would have two summer seasons. Internally, within the design team, he said that they feel they would need less time than that, but they wanted to guarantee that they had two dry seasons, so they gave them two years. He said we will be getting a construction schedule from the contractor once we award the contract and begin the contract execution period. Penalties are built into the contract.

Mr. Krakeel asked about the bid package being individual items or a total. Mr. Jaeger explained that the total bid includes various individual items; the bulk of the dam is a lump sum price. The items that are unknown, as far as their quantities are bid on a unit price basis, such as under cut of materials in the sub grade preparation of those areas. All of that is included in the bottom line base bid and would be included in the contract.

Mr. Krakeel asked if the excavation of unsuitable materials is less than what they anticipated or more than what they anticipated, that unit price goes up. Mr. Jaeger commented that the unit price is applied to any actual number of cubic yards. Mr. Parrott said the soil testing in the estimate is good. Mr. Jaeger said they based the estimated quantities on the soil borings, geotechnical consultants estimated that and then he added a 20% factor to their upper end estimate. He is anticipating coming in under this number as an actual asbuilt quantity.

Commissioner Smith mentioned that the unit pricing on excavation of materials from Brad Cole is way up. He said surface cleaning of rock caught his attention; \$20.00 versus \$2.00. Mr. Jaeger said that often bidders will move their money around in their bid to try to anticipate where they think it be most advantageous to them. If one contractor feels that they are likely to encounter more cleaning than another, his price may be higher than another bidders. Those types of work items

are at the direction of the geotechnical engineer who is on site during all of that process. It is not up to the contractor to determine what needs to be cleaned and prepped. The engineer will be telling him what extent it needs to be prepped, and verifying measurements. The contractor will only do work that is authorized and directed by the geotechnical engineer.

Commissioner Smith asked about the connector bridge vehicle traffic. Mr. Jaeger said that he and Mr. Parrott were at a dam site in Henry County; they had a pickup truck with a small trailer crossing over the bridge that is similar to this on their dam. Mr. Parrott said it was a ranger and they were pulling landscaping equipment. He added that you cannot hook up an irrigation system and maintain pressure on it for Safe Dams; you have to have some type of pump set up so that it is taken loose. We will have to do something like that for the irrigation to grow grass. There will be no public access to the dam site; the bridge is just for our use. This site is fenced off separate from the recreation area.

Commissioner Smith asked if there is any clearing or grading or any base work for the potential park. Mr. Jaeger said this will be a separate bid package. There is the potential that the contractor would be using some of that area for a borrow source for material to build the dam. There is some potential that there will be some work done there, but not with the intent of creating a base site for the park.

Mr. Krakeel asked if he does borrow work from that particular area, does that create a problem for us when we get ready to build that area. Mr. Jaeger replied no, we would make sure that they would not over-excavate beyond what would be the minimum elevation for the park. He stated that it is his feeling that the park would be the type of project that smaller contractors would like to build and we should bid that separately. It would not end up under this contract with general contractors mark up on it. Probably more contractors would be interested in the park than were qualified to bid this one.

Mr. Krakeel asked if this includes the concrete ramp; Mr. Jaeger said yes. Mr. Parrott said the modifications to the raw water pump station would be separated, too; that is not generally what this type of contractor would do. We are going to put in bigger pumps, and that will be under a separate contractor. This project also includes the spillway and the discharge. Mr. Jaeger said anything having to do specifically with the dam is included in this project.

Mr. Krakeel made the motion to approve Brad Cole Construction with the alternate. Vice Chairman Chip Conner seconded and there was no opposition.

This item will be on the Board of Commissioners agenda tomorrow night.

V. TOTAL ORGANIC CARBON UPDATE.

Mr. Jaeger said at the last meeting we talked about different processes that they had narrowed it down to; he had recommended that we look at the County's ability to dose powder activated carbon with the existing process at the plant so we didn't have to expend a lot of money for a new process. It seems the carbon is what is really giving us the benefit in one of these technologies. His understanding is that the State of Georgia will not allow us to add PAC in the process as it currently stands.

Mr. Parrott said that John Otto was opposed to the idea of us test running it, even to see what it would do. He wanted to come down and test run a polymer, enhanced coagulation. He was supposed to set up a time last week to do this, but his time did not allow it. In order to change any process that is approved, we have to get their permission to do any changes. We tested the sodium permanganate, but we had to get approval before. They had to come and say where we could run it. Mr. Parrott said he has a call in to Mr. Otto to schedule it. He works for the Environmental Protection Division of the Drinking Water Program.

Vice Chairman Conner asked about the cost of polymer. Is it more expensive? Mr. Jaeger stated we did not test the polymer coagulation technologies. What we have found was that we are dealing with a dissolved organic which is most treatable by a carbon contact situation, which is GAC. Polymer, he thinks, will help with settling clarification, which we really don't have a lot of problems with now; so we did not pursue that. He said that it sounds like the State wants to try it.

Mr. Jaeger said since the last meeting, he has gotten written proposals from two of the companies to do pilot studies at the South Fayette Plant site. These are two weeks programs; they bring in their tractor trailer laboratory, bypass some of the water flow through their system and then give you test results over a two week period.

Mr. Jaeger said Kruger, which is the manufacturer of ActiFlow Carb technology has quoted \$18,650.00; two weeks at \$8,250.00 per week, plus \$2,150.00 in transportation costs. If we wanted to extend it, it is the same amount per week after that.

Oreca, which is the representative (parent company) for the MIEX system, quoted \$14,800.00 for a two week pilot. That is estimating an equipment transport cost of \$1,800.00. That number may have a little fluctuation in it based on the actual equipment transport cost. Mr. Jaeger said he discussed with both manufacturers the ability to get a rebate on the cost if the County were to proceed and purchase one of these technologies; they are both agreeable to that. If we run the pilot and it works out good, we like and we move forward, bid it and buy it, then these costs will be recovered later on. Obviously, if you choose one, you are not going to get the other.

MIEX is the Magnetic Ion Exchange process. The resin this relies on is what comes from Australia.

Chairman Frisina asked if there is one pilot Mr. Jaeger would rather do before the other. Mr. Jaeger stated that one of the two companies asked that they be piloted side by side, so they can be compared testing the same water under the same conditions. He said we don't have to do that, but that is what they recommend. Mr. Jaeger said the soonest we would be able to do either of these pilots would be the first part of next year, February or March, as far as their availability.

Mr. Parrott said what the State wants us to do is add an additional chemical into the process. We do the floc by using alum and lime, so we would use alum, lime and this polymer. There are so many different polymers, and there are so many different nuances in between the one that would work in one place and would not work in another. He said that Mr. Otto has dealt with this in other places and he feels that this might be an opportunity to use something that would not cost as much that would get us in compliance. Again, we are not dealing with suspended matter, but this is what he wants to do. He said that he does not want to set up the pilots until after the polymer test because we need their support, because whatever we recommend we have to have the States approval. He stated that he is confident that he will have an answer from Mr. Otto by the time the committee meets again.

Mr. Jaeger commented they have not ruled out the option of GAC in the filters, but they do not feel they need to do a pilot for it, since we already ran it in the Crosstown Water Plant. We have results on that already. This would help us with the future changes. Mr. Jaeger said once you reduce your total organic carbons, you have less ability to interact with the chlorine disinfection byproduct. If you tackle one, you are helping the other one, too.

LAKE LEVELS

Mr. Parrott stated the lakes are full. We are trying to get the water down at the spillway at Lake Kedron so we can paint over some graffiti, and we have too much flow.

Mr. Krakeel asked Mr. Parrott if there is a plan to do anything with the roadway crossing Lake Horton on Brooks Woolsey Road; the trees on the side of the road between the raw waterline and the road bed. Mr. Parrott said he would add this to the project list that Mr. Bergen is working on for clearing our easements outside or road right of ways. Highway 74 is the biggest project right now.

CANCELLATION OF NEXT MEETING.

Mr. Krakeel made a motion to cancel the meeting that is scheduled for December 23, 2009. Vice Chairman Conner seconded and there was no opposition. The next meeting will be January 13, 2010.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:45 A.M.

Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 13th day of January, 2010.

Lisa Quick