

CLAYTON COUNTY WATER AUTHORITY
1600 Battle Creek Road
Morrow, Georgia 30260

Regular Board Meeting, July 8, 2004

Chairman, Pete McQueen, called the meeting to order at 1:30 p.m.

Present at the meeting were: Chairman, Pete McQueen, Vice Chairman, Lloyd Joiner, Secretary/Treasurer, Marie Barber, Board Members, Allan R. Smith, and John Westervelt. General Manager, M. Wade Brannan, Department Managers, Guy Pihera, Herbert Etheridge, Mike Thomas, Teresa Adams, and Jim Poff, Customer Accounts Director, Morris Kelly, Project Manager, Mike Buffington, Contract & Procurement Administrator, Karen Riser, Human Resources Director, Ed Durham, Administrative Secretary, Dianne Hammock, Executive Secretary, Janet Matthews. Also present were: Steve Fincher of Fincher & Hecht, L.L.C., Rick Hirsekorn of CH2M Hill, Farrar Wood of Jim Wood & Associates Public Relations and Michael Walden, Diane Davidson, and Randy Davidson of Davidson Hydrant Technologies, Incorporated. CCWA employees: Tim Hampton and his wife, Joanna, Lenny Clupper, Clifton Scarbary, Jimmy Powell, Erin Brooks, Billy Vondenbosch, Joey Martin, and Tony Ferrari.

Those that were not in attendance were Board members Alan Horton, who was out of town, and Wes Greene. Finance Director, Emory McHugh and IS Supervisor, Rodney Crowell were on vacation and Deputy Manager, Terry Hicks could not be there due to a family emergency.

Chairman McQueen, on behalf of the Board of Directors, welcomed everyone to the meeting, especially any visitors in the audience and also any employees.

Chairman McQueen called on Mike Buffington, Project Engineer, to give the invocation.

Approval of Minutes: Chairman McQueen called for any omissions or additions to the Regular and Executive Session Board Meeting Minutes of June 3, 2004. Hearing none they were approved as received.

Employee Recognition: Chairman McQueen called on Herbert Etheridge, Manager of Maintenance & Construction, who stated that today he had three of his associates that have received their second state certification. Mr. Etheridge added that unlike the Water and Wastewater Plant Certifications, they do not have different classes, but they do have a Wastewater Collection Certification and Water Distribution Certification.

Mr. Etheridge stated that Erin Brooks, an equipment operator in the Wastewater Maintenance section, has been with the Authority since 1998. Mr.

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Brooks was at a Board meeting not long ago and had received his Wastewater Collection Certification and now he has just finished his Water Distribution Certification, having earned both certifications in the last year.

Mr. Etheridge next introduced Jimmy Powell, a crew leader in the Wastewater Maintenance section, who has been with the Authority since 1989. Mr. Powell received his Wastewater Collection Certification in 1998 and received his Water Distribution certification last month.

Mr. Etheridge introduced the junior member of their group, Joey Martin, who has been with the Authority since 2000. Mr. Martin is the crew leader currently over our Utility Locate section and had received his Water Distribution Certification in 2001 and now his Wastewater Collection Certification.

Mr. Etheridge stated that he would like to recognize these employees for their dedication in going back to obtain their second certification. Mr. Etheridge added that of all the people he talks to in the industry, the Water Authority has more people with both certifications than anywhere else. These employees join a group of about a dozen more that have both certifications.

Mr. Etheridge wanted to take a moment to thank the Board for their support in allowing these employees to have the opportunity to obtain these certifications and also what the Board had approved in the budget. Mr. Etheridge added that although these employees did not receive a five (5) percent increase for the second certification, they did receive the five (5%) percent for the first certification. This is a big incentive for these employees to get these certifications. Mr. Etheridge stated that Mr. Brooks and Mr. Powell would like to say a few words.

Mr. Brooks stated that first he would like to thank his foreman, Billy Vondenbosch, for all his support. Mr. Brooks stated that all those that have both certifications who have worked directly with him, including his parts manager and crew leader, have inspired him to work toward receiving both his certifications. Mr. Brooks also stated that all these people helped him to get to where he is today and he wanted to show appreciation for them.

Mr. Powell stated that he appreciated the Board in allowing those that obtain their certifications to receive a five (5%) percent incentive raise. This means a lot not only to us, but also to all those employees that are now trying to get their certifications. Mr. Powell added that to have a whole force that could possibly be 40 to 50% state certified in the field and also those at the treatment plants is quite an accomplishment. It is nice to be recognized.

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Chairman McQueen, on behalf of the Board, thanked Mr. Brooks, Mr. Powell, and Mr. Martin for all their hard work and stated that the Board appreciates their getting their second certification and thanked them also for their remarks. They received a round of applause from those in attendance.

Chairman McQueen called on Jim Poff, Manager of Water Reclamation, to introduce Lenny Clupper who started with the Authority in 1988 as a second shift operator at the Casey Plant. Shortly after that, Mr. Clupper moved to the Shoal Creek plant in Hampton, our 4.4 million gallon a day facility, where he is a first shift operator. Mr. Poff wanted to congratulate Mr. Clupper for passing his Class I Wastewater Operator Certification, the highest level an operator can attain. Mr. Poff added that the test is very difficult with a 45% pass rate, so Mr. Clupper had to work very hard to obtain this certification. Mr. Poff added that an employee has to work at least three (3) years before they can even try to obtain this certification.

Mr. Poff also wanted to share with the Board that Mr. Clupper is a computer wiz, so in his free time, he created a tri-fold brochure for the Authority that is handed out when people tour the Shoal Creek plant. Mr. Poff stated that Morehouse University will be touring the facility tomorrow and they will be given this brochure to take home with them. Mr. Poff congratulated Mr. Clupper and he received a round of applause.

Chairman McQueen thanked Mr. Clupper for all his hard work and expertise and asked him to give Mr. Poff all the help he can. There were chuckles from the Board.

Plant Award Recognition: Mr. Poff started with the Shoal Creek Plant since Mr. Clupper is such an intragal part of that facility. The Shoal Creek Plant received the Platinum Award which is given to facilities that received one hundred percent (100%) compliance with the permit for greater than five years. The Shoal Creek Plant has attained one hundred percent (100%) compliance with the permit for seven (7) years, which is the highest level that you can receive for the Platinum Award. Mr. Poff wanted to congratulate Mr. Clupper and the Shoal Creek staff for all their hard work in receiving the Platinum Award. The Board gave Mr. Clupper a round of applause.

Chairman McQueen asked Farrar Wood, of Jim Wood & Associates, if he had brought his camera today. Mr. Wood explained that he had already discussed with Mr. Poff that a photo shoot would be set up at the plant so that other staff members could participate also.

Mr. Poff stated that today is the day that the Authority is operating the new Casey Plant with the flow through the plant at one hundred percent (100%). Mr.

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Poff added that he could not get a representative from the Casey Plant to come to the Board meeting today because they are pretty busy, but wanted to recognize the Casey Plant for receiving the Gold Award, which is also one hundred percent (100%) compliance with the permit for one year.

Mr. Poff also wanted to recognize the Northeast Plant and Mr. Bruce Wilson, Supervisor, for winning the Gold Award. Mr. Wilson could not be here today because he is by himself at the plant. Mr. Poff wanted to recognize all three facilities for all their hard work in obtaining these three awards.

Financial and Statistical Report: Chairman McQueen stated that he was in a hurry because we have a long agenda today and he skipped the Statistical Report. Chairman McQueen added that Mr. McHugh is not here, but would Mr. Brannan like to comment on the statistical information.

Mr. Brannan commented that Mr. McHugh has been working with the auditors, as well as scheduled his vacation this week, prior to the Board changing the date of this month's Board meeting due to the 4th of July holiday. Mr. Brannan added that this is the first month in the budget year and there is very little financial data in this first month to report, so after discussing this, decided rather than do a partial report and not have all the information, that the Authority would have a report at the next Board meeting.

Employee Service Recognition: Chairman McQueen called on Ed Durham, Director of Human Resources, to introduce the Employee Service Recognition since Mr. Hicks was not able to be in attendance. Chairman McQueen stated that Mr. Hicks was not here today because his Mother had fallen at the church this morning and asked that we remember Terry's Mother in our prayers.

Mr. Durham stated that it is difficult to fill in for Mr. Hicks as he is the Authority's official historian and keeps all the family history of Clayton County Water Authority. Mr. Durham stated that the Authority does not recognize an employee until they have been with the Authority for fifteen years, which is not always the case with other companies as they may recognize an employee after one year or five years. Mr. Durham stated that he would like to recognize two of our people that have extended service with the Authority.

Mr. Durham introduced Tim Hampton, a Land Management technician, who has been with the Authority for twenty (20) years. As Dennis Hammock would say, "Mr. Hampton has been with us down on the farm for twenty (20) years." Mr. Hampton is on the second shift and although behind the scenes, sees that things operate without any problems. Mr. Durham stated that Mr. Hampton is always happy no matter when you see him, no matter what the circumstances. Mr. Durham

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added that Mr. Hampton has his wife, Joanna, with him today to share in the occasion. Mr. Durham congratulated Mr. Hampton for his dedication over the past twenty years. Mr. Hampton received a round of applause.

Mr. Durham next introduced Clifton Scarbary who is one of our members of the boomerang club, who earlier in his career, heard the call of greener pastures and tried that for a while and found out that is not the case and then came back to the Authority. Mr. Scarbary has been with us now for fifteen (15) years in a variety of jobs, such as maintenance utility worker, meter reader, and grounds maintenance. Mr. Durham added that Mr. Scarbary is a valuable part of our team and is currently an equipment operator and has helped us a lot with the backflow program. One other item, Mr. Scarbary was one of the first people to attend the GED program training here and in 2001 he received his GED and was shortly followed by his daughter. Mr. Durham congratulated Mr. Scarbary and the Board gave him a round of applause.

Chairman McQueen, on behalf of the Board, thanked Tim and Clifton for their combined thirty-five years of service and appreciate what they have done for the Water Authority and hope they have many more years.

Davidson Security Device Demonstration: Chairman McQueen called on Michael Walden, of Windsor Technologies, Incorporated, to come forward and present a demonstration of the Davidson Security Device.

Mr. Walden stated that about the largest threat to our water distribution system and the largest hole in this system is the fire hydrant. Mr. Walden wanted to discuss with the Board a solution to this threat which one of the Authority's vendors has invented and received a patent on. Mr. Tom Davidson is the vendor and two of his family members are in the audience. Mr. Walden introduced Mr. Davidson's son, Randy, and daughter, Diane Davidson, who runs the business.

Mr. Walden explained that for the past year and a half, he and Mr. Davidson have worked on this device, getting it tested, validation of the product, and now finally have a device that is totally effective in prevention of foreign matter from getting into the water supply through the hydrant system. Mr. Walden gave a slide presentation and also had a model of a fire hydrant with the security device attached to show the Board. Mr. Walden explained that this security device fits below the lowest point of the outlet, has a collar that attaches to the hydrant barrel, a quadrant seal, a piston, and a spring. This device is really just a common backflow preventer, simple and ingenious, but it works. Mr. Walden stated that flow opens the device and allows water to go out. Mr. Walden added that in some test documentation he has a recommendation from our fire chief, Alex Cohilas, as this device has been tested at our County fire academy along with a lot of other places.

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Chief Cohilas noted that this device really shortens the response time at a fire because they have so much trouble with kids throwing rocks and bottles into the hydrants. When the fire department gets to a fire, they have to flow the hydrant before they hook a hose to it, and that costs the fire department minutes. The device was tested at Louisiana State University because they have one of the nation's largest fire emergency campuses and found that this security device was highly effective up to hydrant failure. This device meets AWWA standards for backflow devices also. This device is easily retrofitted and is now available in new hydrants. Mr. Walden thanked the Board for their time.

Mr. Brannan commented that he had been talking with Tom Davidson, Michael, and Diane, about this device for quite some time and is impressed with the way they have improved it up to this time. Mr. Brannan added that he thinks that this is an excellent device and the Authority has used some of these devices on multiple occasions where we were trying to prohibit somebody from tampering with the distribution system and will continue to use these devices. Mr. Brannan added that he could not say enough about the integrity of Tom Davidson and his family as far as the contribution they have made to the Water Authority for over thirty years. Mr. Brannan stated that the weakest spot in the water system is the distribution system. What Mr. Davidson has developed closes a big gap as far as the Authority's ability to be able to protect our water system. Mr. Brannan added that he appreciated Mr. Walden, Randy, and Diane for coming before the Board today and hopefully this has been informative to the Board on what they have done.

Mr. Walden commented that he looks forward to doing the whole system for the Authority.

Chairman McQueen stated that the Board would take this information and with the engineers and Mr. Brannan would discuss this security device and get back with Mr. Walden and the Davidsons.

Mr. Walden thanked Chairman McQueen for the Board's time.

Hooper Solids Management Bid Recommendation: Chairman McQueen called on Guy Pihera, Manager of Water Production, who stated that the Board has in their packets, a recommendation from a bid that the Authority had put out for the transporting and disposing of water plant residuals at the Hooper Plant. Mr. Pihera added that only one bid was received and was considerably more than the Authority had expected. The staff recommends that the Authority reject this bid due to poor participation and re-open this to the bid process and hopefully will see more favorable results. Mr. Pihera stated that what the Authority is doing now is handling solids on site, but in the analysis of the cost for the Authority over the past few

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years, the Authority has found that the costs of transporting it off site are reasonable which could save some costs in our operation.

Bid Results and Recommendation
 Clayton County Water Authority
 RESIDUAL SOLIDS MANAGEMENT, TRANSPORTING AND DISPOSAL
 WM. J. HOOPER WATER PRODUCTION FACILITY
 TUESDAY, JUNE 15, 2004

Environmental Partners, Inc. Tyrone Division 120 Clover Lane Tyrone, GA 30290	\$158.00 Transportation/disposal min. load \$158.00 Transportation/disposal per net ton up to 12 tons. (Stipulated County pays for any disposal)
Mr. Steve McClendon Republic Services 175 Mauldin Drive Alpharetta, GA 30004	No Bid Received
Ms. Paula Adams Browning Ferris Industries 3045 Bankhead Hwy, NW Atlanta, GA 30318	No Bid Received
Mr. Wayne King Earth Products, LLC 402 Line Creek Drive Peachtree City, GA 30269	No Bid Received
Ms. Amanda Butler Waste Management 1189 Henrico Road Conley, GA 30288	No Bid Received
Robin Funk C&C Disposal P.O. Box 744 Fayetteville, GA 30214	No Bid Received
Joyce Quick United Waste Service 7100 Delta Circle Austell, GA 30168	No Bid Received

We recommend rejecting bids due to poor response. We propose re-advertising for bids in the near future.

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Upon Motion by John Westervelt and seconded by Lloyd Joiner it was unanimously

RESOLVED: to accept the recommendation of the staff to reject the bid for the Residual Solids Management, Transporting and Disposal, at the William J. Hooper Water Production Facility due to poor response and to re-bid this in the future.

Chairman McQueen asked Mr. Pihera if he would like to give the Water Report while he was up.

Mr. Pihera stated that last month our customers used water at a rate of 7.5% more than last June and the reservoirs are full.

Administrative Complex Emergency Power Update: Chairman McQueen called on Teresa Adams, Manager of General Services, who stated that at the March Board meeting this year the Board approved a Design Task Order for CH2M Hill, not to exceed seventy-five thousand dollars (\$75,000), for an alternate emergency backup power generator system for the Main Office complex.

Clayton County Water Authority
 Request for Authorization
 Purchase and Installation of Generators
 Main Office Complex
 July 2004

Building	Generator Size	Total Cost
Main Office Building	350 KW	\$223,898.00
Building A M&C and Garage	125 KW	\$ 92,702.00
Building B Warehouse and Meter Reading	80 KW	\$ 70,200.00
Building C Wastewater Maintenance	Existing Mobile Unit	N/A
	Total	\$386,800.00

Staff is requesting authorization to bid the purchase and installation of generators for the Main Office Complex.

Funding Source - R & E Funds of \$535,000.00

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Ms. Adams stated that to date CH2M Hill has invoiced the Authority twenty-four thousand two hundred thirty-four dollars (\$24,234). Ms. Adams explained that in the Main Office, the Authority has a lot of communication equipment, main centralized computer system, and considerable amount of operations, accounting, and customer service. The Authority receives a lot of contact from our customers so it is very important that we maintain communication, whether it is by a computer system or telephone system, and also to maintain a good work environment with proper heating and cooling.

Ms. Adams reviewed the size of the generators for each building and the estimated cost provided by CH2M Hill, which will include overhead and profit, as well as a ten percent contingency. The staff is requesting authorization to bid the Purchase and Installation of the Generators for the Main Office Complex. The Funding source is R&E funds and the total is estimated to be five hundred thirty-five thousand dollars (\$535,000), which includes the design.

Mr. Brannan stated that there was some discussion the last time this came up as to whether the Board wanted to proceed, but CH2M Hill was authorized to do the design work. The design work is complete and the estimated price for purchasing and installing the generators is about three hundred eighty-six thousand dollars (\$386,000).

Upon Motion by Marie Barber and seconded by Lloyd Joiner it was unanimously

RESOLVED: to authorize the staff to proceed with the bid for Purchasing and Installation of Generators for the Main Office Complex, with the funds coming from the R&E account.

Cab & Chassis Recommendation: Chairman McQueen called on Herbert Etheridge, Manager of Maintenance & Construction, who stated that in November 2003 the Board authorized the purchase of a cab and chassis for a dump truck from Atlanta Freightliner. Mr. Etheridge stated that he would like the Board to consider authorizing the purchase of a second unit from Atlanta Freightliner for the same bid price, with the only difference being that two months ago the EPA mandated a one thousand four hundred seventy-five dollar (\$1,475) Federal Emission Surcharge. The purchase of this second Cab & Chassis is included in this year's budget.

Mr. Etheridge stated that staff recommends purchasing one (1) new 2004 Freightliner M2 cab & chassis for forty-three thousand five hundred eighty-five dollars (\$43,585) plus an additional one thousand four hundred seventy-five dollars (\$1,475) for a total of forty-five thousand sixty dollars (\$45,060).

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Clayton County Water Authority
 Cab & Chassis
 Tab Sheet from October 2003

Vendor	Bid	Make/Model
Atlanta Freightliner – Fulton Industrial 1033 LaGrange Blvd. S.W. Atlanta, GA. 30336	No Bid	
Atlanta Freightliner Truck Sales & Service Attn: Al Seiler 5884 Frontage Rd. Forest Park, GA. 30297	\$43,585.00	2004 Freightliner M2
Peach State Truck Centers 100 Sterling Place McDonough, GA 30253	\$48,461.00	2004 Sterling Acterra
Bill Heard Chevrolet/International 6301 Veterans Parkway P.O. Box 8888 Columbus, GA 31908	\$46,314.79	2004 Chevrolet CC7500
Nalley Motor Trucks 2560 Moreland Avenue Atlanta, GA. 30315	No Bid	
Middle Georgia Freightliner 6391 Hawkinsville Rd. Macon, GA. 31206	No Bid	

This tab sheet outlines pricing for a Cab & Chassis that was bid by the CCWA in October 2003. The Board authorized this purchase from Atlanta Freightliner in November 2003. Atlanta Freightliner has agreed to provide an additional unit at the same price plus an additional \$1,475.00 for a recently mandated Federal Emission Surcharge. We have a letter on file from the manufacturer regarding this surcharge.

Recommendation: The CCWA staff recommends purchasing one (1) new Freightliner M2 from Atlanta Freightliner Truck Sales and Service for \$45,060.00.

Upon Motion by John Westervelt and seconded by Lloyd Joiner it was unanimously

RESOLVED: to approve the purchase of one (1) new 2004 Freightliner M2 cab & chassis in the amount of forty-three thousand five hundred eighty-five dollars (\$43,585) plus an additional one thousand four hundred seventy-five dollars

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(\$1,475) for a recently mandated Federal Emission Surcharge for a total cost of forty-five thousand sixty dollars (\$45,060).

Water Distribution Model Update/Recommendation: Chairman McQueen asked Mr. Etheridge to continue. Mr. Etheridge stated that in 1999 to 2000 the Authority and CH2M Hill developed a hydraulic water distribution model and has used it several times since then to evaluate flow conditions around the airport project, Lovejoy, and various fire flows. If someone is having problems or someone wants to put a large amount of usage in a certain spot, we would use this hydraulic model to determine if that is possible.

Clayton County Water Authority
Water Distribution System Model
June 2004

The first water distribution hydraulic model was developed in year 1999 and 2000. It was used to determine pipeline, pump station, and storage needed for CCWA's 20 year CIP, which was provided in the October 2000 "Hydraulic Model and System Improvements" report. One of the significant results from this model run was the identification of an unnecessary \$1.2 million water line extension.

Since then the model has been used several times to analyze CCWA's water system and provide recommendations about system changes or needed improvements. The following table lists some of the projects completed in the past three years.

- Atlanta Airport meter relocation (March 2001)
- Hooper WTP reduced operation during construction (April 2001)
- JW Smith WTP pump test (June 2001)
- Lovejoy fire flows and ABC PS (March 2002)
- DeKalb County connection (January 2003)
- Grant Road Development and Fresh Express fire pump (March 2003)
- Atlanta airport and tunnel fire flow (July 2003)
- Gold Leaf development fire flow (August 2003)

The current proposed water model is a complete system assessment, including pressures and flows and water quality. The main business drivers include:

- Determining the affect of recent major additions and changes made to the water distribution system as the result of development and improvements
- Evaluating the increase in Hooper WPP capacity and production
- Meeting new EPA regulations regarding disinfection byproducts
- Addressing the need for county-wide fire flow improvements

The water distribution system model will use the GIS data that has been completely revamped since the 1999/2000 model run, and includes a significant amount of new

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development that has occurred during the past five years. It will provide an analysis of the current system and will be used to evaluate how the recent improvements have affected it. It will also help determine how increased water quality and water quantity demands can be met. The proposed CH2M Hill task order is \$373,000 funded through the 2001 bond issue.

Mr. Etheridge stated that in the first year, the Authority digitized the water system maps, which means that paper water map books were converted to electronic maps, which is the backbone of our GIS system. Flows and pressures were measured in the field over an extended period of time and then a comparison of what the computer model said what the pressure should be was compared against what the actual system pressure was. This is called calibrating the hydraulic model. After the calibration, then the model is used to identify needed improvements and solve some operational problems. As a result of the preliminary model the Authority identified two 1990 Master Plan lines that did not need to be constructed. This saved the Authority approximately one million six hundred thousand dollars (\$1,600,000).

Mr. Etheridge outlined reasons to update the model which included the 2000 model being based on pre-1998 maps, major pipeline improvements have been made in the past three years, the Hooper WTP capacity and production has been increased, there is a closer look at water quality issues due to new EPD regulations regarding disinfection by-products, the updated model would better determine solutions for providing county-wide fire flow improvements at a more cost effective level, the 2000 model did not include the Riverdale system, and the population growth has proven to be greater than expected.

Mr. Etheridge stated that the total cost of this effort will be three hundred seventy-three thousand thirty-one dollars (\$373,031). This amount includes two hundred forty-nine thousand five hundred seventy dollars (\$249,570) for CH2M Hill's labor and one hundred twenty-three thousand four hundred sixty-one (\$123,461) for other expenses to include subcontractors to CH2M Hill and SCADA hardware/software upgrades. The 2001 Bond Program will fund this project. Mr. Etheridge stated that staff recommends approval of this proposal.

TASK ORDER BO-01-15

This attachment is to the AGREEMENT between CH2M HILL, INC., ("ENGINEER"), and CLAYTON COUNTY WATER AUTHORITY ("OWNER"), for a PROJECT generally described as *Distribution System Water Quality Modeling and CIP Development*.

ARTICLE 1 — SCOPE OF SERVICES

The purpose of this Task Order is to update the OWNER'S Water Distribution Analysis Model to include new updated pipeline inventory, and to increase its capability for water quality modeling. Water quality field work and model will be used to develop

recommendations to identify operation, maintenance, and facility improvements to address water quality problems, if any.

Updates to the OWNER'S SCADA system will be required and are included as part of this project. A capital improvement plan (CIP) with costs and schedule will be developed as part of Phase 1, including short and long-term finished water pumping, storage, and distribution facilities improvements. The level of effort and cost for optimization of the CIP using a "Genetic Algorithms" approach will be determined as part of Phase 1 work.

Phase 2 – Optimization of the CIP is planned, but not yet budgeted, because of the wide range of effort and costs that depend on results of the preliminary CIP and water quality modeling recommendations.

Phase 1 – Model Updates, CIP Development and Water Quality Modeling

- 1.1. ENGINEER and OWNER will update the OWNER'S hydraulic model facilities by adding new pipelines, pumping, and storage improvements that have been installed since last model updates. Committed improvements that will be in-service by year 2005 will be added to the model.
- 1.2. ENGINEER will use the Metropolitan North Georgia Water Planning District report and tables for Clayton County to determine updated population projections and future demands to year 2030.
- 1.3. ENGINEER and OWNER will update model demands using WTP production records, plus the cycle and route customer billing boundaries and route summaries. Procedures will be similar to Year 2000 work. ENGINEER and OWNER will develop a conceptual plan for linking customer billing records meter-by-meter to the hydraulic model.
- 1.4. ENGINEER will hire ICS consulting services to upgrade the SCADA system to share data with the hydraulic model and OWNER's GIS system.
- 1.5. ENGINEER and OWNER will use SCADA and do field work to collect pressure and flow measurements for re-calibrating the steady-state model and developing a working Extended Period Simulation (EPS) model. ENGINEER will hire Severn-Trent consulting services to assist with the field work and to provide flow and pressure measuring equipment.
- 1.6. ENGINEER will calibrate the Year 2004 steady-state model, and develop an existing system, year 2004 EPS model and compare results to SCADA.
- 1.7. ENGINEER and OWNER will define sites and approach for water quality modeling field work. Water age calculations from the EPS model and the existing OWNER's water quality monitoring records will be used to define sites for water quality monitoring field work. The EPS model will be used as a tool to estimate water age for completing the Initial Distribution System Evaluation, which will be a requirement of the upcoming Stage 2 Disinfectants/Disinfection Byproducts Rule.
- 1.8. ENGINEER will present water quality modeling plan to OWNER and, if desired, to other stakeholders. A workshop will be used to develop consensus and understanding among water quality stakeholders.
- 1.9. ENGINEER and OWNER will collaborate to do field work required for Water Quality Modeling.

- 1.10. ENGINEER will use the year 2004 models to identify the existing system deficiencies. ENGINEER will meet with OWNER to confirm model computations adequately represent OWNER's water distribution system.
- 1.11. ENGINEER will use steady state modeling to identify possible solutions for piping, pumping, and storage improvements for an updated CIP for years 2005, 2015, and 2030. Steady state computations will include Peak Hour Demands (PHD), Reservoir Refill (RR), and Maximum Day, plus fire flows (MDFF). Fire flows throughout the county will be considered with at least 100 locations evaluated. The working EPS model will be used for more average, typical conditions for winter and summer to better understand how tanks fill and drain in proportion to their size.
- 1.12. ENGINEER and OWNER will work with Optimatics, which provides "Genetics Algorithms Optimization" consulting services, to determine the feasibility, approach, level of effort and budget for optimizing the CIP for consideration in Phase 2. *If approved, Phase 2 work would be done concurrently with Task 1.15 and 1.16.*
- 1.13. ENGINEER will prepare a Draft Report for Task 1.1 through Task 1.12 including preliminary CIP costs and schedule for construction. The proposed Phase 2 CIP optimization approach and budget using Optimatics consulting services will be included here also.
- 1.14. ENGINEER will provide a Board Meeting Presentation upon completion of Task 1.1 through Task 1.12. The Board's concurrence for optimization work will be requested at that time.
- 1.15. Water Quality Model Calibration: ENGINEER will apply the working EPS model to do water quality calculations and compare with field measurements. System deficiencies will be identified and confirmed with the OWNER that the water quality model predictions reflect actual conditions.
- 1.16. ENGINEER will provide water quality analysis and recommendations to identify operation, maintenance, and facility improvements to solve water quality problems, if any.
- 1.17. ENGINEER will provide the final report for all work. This includes the Draft Report for Task 1.1 through Task 1.12, plus the water quality modeling results, and the optimization of the 2030 CIP. CIP costs and a prioritized schedule for construction will be provided.
- 1.18. ENGINEER will provide a second Board Meeting Presentation upon completion of Task 1.15 through Task 1.18 and Phase 2 optimization of the CIP. Results of the water quality modeling analysis and optimization of the CIP will be presented.

Phase 2 – Optimization (Optional Task)

Some parts of the preliminary CIP developed in Phase 1 will likely be optimized using Genetic Algorithms with help from Optimatics consulting services. This will depend on the findings of the feasibility report developed in Task 1.12. *If approved, Phase 2 work would be done concurrently with Task 1.15 and 1.16.*

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Possibly no optimization work will be deemed feasible or cost effective. However, we expect that fire flow analysis using steady-state analysis assumptions could be readily optimized with some obvious benefits. Capital cost savings are often 20%, or more, using optimization. For instance, if the preliminary CIP costs are \$5M, then we expect optimization algorithms to help us identify alternative solutions that will save at least \$1M. The amount of savings depends on the cost of CIP. In addition to the fire flow analysis, there will be many other opportunities for optimization of CIP projects that could be investigated.

ARTICLE 2 — COMPENSATION

Compensation for the Scope of Services described herein shall be in accordance with the terms specified in Attachment B. Compensation shall be cost-reimbursable per diem (time and expenses), with a maximum, not to exceed amount of \$373,000 without written approval from the OWNER.

ARTICLE 3 — SCHEDULE

ENGINEER will begin Phase 1 scope of work upon authorization by the OWNER. Project duration is expected to be approximately 17 months.

Task or Mile Stone	Start Date	Completion Date
SCADA Upgrades	Month 1	Month 2
Field Work – Measuring Flows and Pressures	Month 3 or 4	Month 5
Field Work - Water Quality	Month 2	Month 6
Workshop on Modeling Status		Month 7
Board presentation on Tasks 1.1 – 1.12		Month 9
Board review of optimization scope & budget		Month 9
Water Quality Modeling (Task 1.15- 1.16)	Month 10	Month 14
Optimization of CIP (Phase 2, optional task)	Month 10	Month 15
Final report and Project Complete		Month 17

ARTICLE 4 — INSURANCE

The insurance coverage required for this “Task Order” is shown on the attached insurance exhibit A.

This Task Order will become part of the referenced AGREEMENT when executed by both parties.

IN WITNESS WHEREOF, the parties execute below:

For OWNER, CLAYTON COUNTY WATER AUTHORITY

Dated this ____ day of _____, 2004

By: _____
 Name Title

For ENGINEER, CH2M HILL

Dated this _____ day of _____, 2004

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\$ 1,000,000 General Aggregate
 \$ 1,000,000 Products/Completed Operations Occurrence and Aggregate

In the alternative, the ENGINEER may substitute a claims made policy in the same amounts and for the same coverages, provided that it has full prior acts coverage and a five (5) year Extended Reporting Period included in the current policy.

(d) Professional liability insurance to include coverage for the Owner and all Subs, Engineers and Design Consultants, with a minimum limit of \$10,000,000 per claim and in the aggregate. The OWNER may increase the limit requirements where in the opinion of the OWNER such increase is desired. The policy shall contain an eight (8) year Extended Reporting Period or the Engineer will furnish the Owner evidence of continuing coverage for that same period of time after completion. The Retro-active date under the policy will predate any work for the Owner. Sixty (60) days prior written notice of cancellation or non-renewal shall be given to the OWNER in the event of termination or non-renewal.

The Owner may elect to obtain a PROJECT policy on a primary or excess basis. The Engineer will amend their PRACTICE policy to provide primary or excess coverage to increase the combined limits of coverage. Deductibles included in the policies will be the responsibility of the Engineer.

(e) An Umbrella policy, including Excess following form, will be provided with a minimum limit of \$25,000,000 Per Occurrence and Aggregate (Per Project) and will apply over underlying policies for Automobile Liability, Commercial General Liability and Employers Liability. The Umbrella policy limits may be combined with the underlying limits to obtain the total limits required.

(f) The ENGINEER will furnish a Certificate of Insurance to the Owner for coverages (a) Workers' Compensation/Employers Liability; (b) Automobile Liability; (c) Commercial General liability; (d) Professional Liability; and (e) Umbrella Liability. The certificates will include a copy of the endorsement on each policy, which requires written notice to the Owner in the event, or termination or non-renewal of at least sixty (60) days. The certificates for the Commercial General Liability will also include a copy of the endorsement naming the Owner as an Additional Insured, providing primary coverage for Operations and Products/Completed Operations.

Waiver of Subrogation – ENGINEER waives subrogation against Owner as to Workers' Compensation including Employment Practices Liability, Automobile and Commercial General Liability Policies.

(g) Each and every policy required by this contract shall be with a company that is rated by Best as A- or better. Further, the OWNER shall not be responsible for any deductibles established by such policies.

Upon Motion by Lloyd Joiner and seconded by Marie Barber it was unanimously

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RESOLVED: to approve the Water Distribution Model Update recommendation for a total cost of three hundred seventy-three thousand thirty-one dollars (\$373,031).

FY2003 Services During Construction Summary: Chairman McQueen called on Mike Buffington, Project Engineer, who gave an informational update on the Authority's FY2003 Services During Construction Task Order.

TASK ORDER SUMMARY
PROGRAM MANAGEMENT AND SERVICES
DURING CONSTRUCTION – FISCAL YEAR 2003
TASK ORDER NO. BO-01-11

This task order includes program management, and services during construction provided by CH2M Hill during Fiscal Year 2003 (May 1, 2003 through April 30, 2004). These services include general program management, and construction management and inspection for *Inman Road Constructed Wetlands, W. B. Casey WRF Expansion and Upgrade, Hooper Improvements Phase 2, Huie Constructed Wetlands Phase 1, and Jesters Creek Stream Restoration*.

Services provided included construction management and administration; document management; site coordination; preparation of as-built documents; project controls; field inspection; shop drawing and samples review and approval; monthly pay request approval; design clarifications; and contract closeout for each of the projects.

Project Managers:

- CH2M Hill, Engineers – Rick Hirsekorn, Program Manager
- CH2M Hill, Engineers – Dave Goddeyne, Construction Manager
- Clayton County Water Authority – Mike Buffington

Task Order Summary:

- Original Task Order Amount – \$ 3,950,000 (not to exceed amount)
- Final Task Order Amount – \$3,491,865,25.
- Under Original Task Order Amount – (\$458,134.75).

Funding:

Series 2001 Bond issue

Chairman McQueen stated that this was for informational purposes only and added that it is always good to come in under budget. Chairman McQueen asked if anyone had any questions of Mr. Buffington.

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Mr. Buffington added that he did have one other slide just to give the Board an update on our construction program. Since the Master Plan started in 2000 the Authority has completed construction of six capital improvement projects with a value of a little over thirty-two million dollars (\$32,000,000). We currently have six projects under construction with a combined value of almost ninety-four million dollars (\$94,000,000). The Authority also has five projects under design, either out for bid or ready to bid, with a value of a little over fifty million dollars (\$50,000,000). The total program's value is one hundred seventy-six million seven hundred thousand (\$176,700,00) and we continue on schedule and within budget.

Chairman McQueen commented that the Authority has completed a lot on construction, but still has a lot more to do. Chairman McQueen also commended our engineers and CH2M Hill for what they do in estimating these projects and bringing them in close or under their estimates.

Casey Start Up Report: Mr. Buffington stated that Mr. Poff mentioned the startup of the Casey Plant earlier today. Mr. Buffington stated that the Authority started construction on the W. B. Casey Plant Water Reclamation Facility September 16, 2002. Contract completion date is September 29, 2005, with a contract amount of fifty-five million one hundred ninety-one thousand dollars (\$55,191,000). Mr. Buffington, with a slide presentation, showed the layout of the new plant, just north of our existing Casey Plant. This is our largest project within our Master Plan Program and includes a new 24 MGD Water Reclamation Facility that will treat the combined flows from the Jackson and Casey basins.

W. B. CASEY WATER RECLAMATION FACILITY EXPANSION AND UPGRADE

The project includes a new 24 MGD plant, located on Flint River Road, to replace existing Casey plant (liquid portion) and Jackson plant; new Casey raw waste pump station; new Jackson raw waste pump station and force main; and new transfer pump station. Effluent will be pumped to Huie site for further treatment on constructed wetlands and conventional land treatment. Existing solids handling facility will remain in operation.

Construction of the new Casey plant, Jackson raw waste pump station and force main, and Jackson transfer pump station are complete with the exception of minor punch list work. Georgia EPD has conducted an operability inspection, and the new plant was placed in operation on Monday, June 28, 2004. After completion of start

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up testing and treatment optimization the existing plants will be taken out of service and demolished.

Project Managers:

CH2M Hill, Engineers – Jim Hawley, Design

- CH2M Hill, Engineers – Dave Goddeyne, Construction Manager
- CH2M Hill, Engineers – Kevin Osbey, Resident Engineer
- Clayton County Water Authority – Mike Buffington

Funding:

Construction funding is provided by the Series 2001 Bond Issue.

Mr. Buffington stated that when the new plant construction is complete, it would be about a year ahead of schedule. All work, including demolition at each of the two plants, will be completed by the end of this year. The Authority satisfactorily addressed all of the EPD comments that they had during their operability inspection on June 8th.

The Authority is required by EPD to have backup generators at all of our wastewater facilities and requires that we have backup power for the Jackson and Casey pump station prior to starting up this facility. The Authority has a separate contract with Southern Company to furnish and install the permanent generators at these two sites. Those permanent generators are not scheduled to be in operation until between September and November of this year. This is one of the down sides of finishing construction a year ahead of schedule. Mr. Buffington added that the new plant got here before the permanent generators.

Mr. Buffington explained that in order to continue starting up this facility, the Authority has rented temporary generators that will supply power (if needed) to the pump stations at Jackson and Casey. This allowed the Authority to start up the Casey Plant on June 28th with about half of the flow and as of today, July 8th, all of the flow is going through the new plant. Staff felt that it was important to start up the plant and to rent these temporary generators, which could cost as much as fifty to a hundred thousand dollars (\$50,000 to \$100,000) depending on how long it takes to get the permanent generators in place. The new plant is much more efficient, more cost effective, more reliable and produces a higher quality effluent. Mr. Buffington added that the startup has been good and has gone remarkably smooth for this large of a facility. The Authority will continue working with the Southern Company to get the generators as quickly as we can to minimize costs.

Mr. Buffington commented that the Authority has another generator at Jackson and a little over a month ago, the generator was damaged, we think by lightning. The Authority has had several engineers to look at it and they are not

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quite sure what happened to it. Damages are over one hundred thousand dollars (\$100,000). The Authority cannot pump the wastewater from the existing Jackson facility up to the new Casey Plant until that generator is repaired. The staff has been working with CH2M Hill and with the Authority insurance consultants to find out if this will be covered by insurance. The Authority's insurance adjustor and agent have determined that the generator will be covered by insurance with our deductible being twenty-five thousand dollars (\$25,000). Staff is meeting at the site tomorrow for all of the adjustors to take a final look at this damage and hopefully we can turn the contractor that will do that repair work loose which will take about four to six weeks.

Chairman McQueen asked if anyone had any questions of Mr. Buffington and stated that it was hard to believe that construction is a year ahead of schedule. Chairman McQueen added that this has never happened to him before and he guessed that this was all because of engineers. There were chuckles from the audience.

Rick Hirsekorn stated that it is because Chairman McQueen has such an outstanding team. Mr. Hirsekorn added that CH had promised Reverend Greene that they would come in at the bid price, but we apologize that we did not promise him that we would come in a year ahead of time. The CCWA folks on site made it easy for the contractor, their enthusiasm and energy and willingness to pitch in on everything, made it much easier for the contractor to do their job too. So everybody deserves a lot of credit.

Chairman McQueen asked about change orders on that job.

Mr. Buffington commented that the only change order to date that the Board approved was to install the DAF (Dissolved Air Flotation) replacement equipment. The Authority does have some adjustments to the contract, a number of credits, and some small additional items that staff will summarize and bring back to the Board probably within the next couple of months. Mr. Buffington added that the staff feels that these will be at or under budget.

Chairman McQueen asked about landscaping and how long it would take.

Mr. Buffington stated that landscaping was a separate contract that has been awarded and should be starting soon.

Mr. Poff commented that the landscapers would start on Monday and would take two to three weeks to complete the job.

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Mr. Buffington stated that staff had hoped that the improvements on the road would be complete, but that like everything else depends on the weather. The entrance into the plant is also part of the landscaping plan.

Chairman McQueen stated that at some point the Authority should have a grand opening for the plant and invite the county officials and the community to see the new facility. Chairman McQueen added that he would like for the landscaping to be done and have it looking as good as we can and let the weather cool down.

Mr. Buffington added that the Authority would like those improvements to Flint River Road to be complete and the main entrance to the plant landscaped.

Mr. Joiner commented that the new Casey Plant was impressive half way through the construction and added that it is hard to imagine how impressive it will be once completed.

Mr. Brannan stated that he had already put Chris Wood and his folks on notice to start planning for a grand opening.

Huie Wetlands Task Order Recommendation: Chairman McQueen called on Mike Thomas, Manager of Program Management & Engineering, who stated that he would like to talk about a task order that the Board had already approved on the Huie Phase II, III, and IV Wetlands design and some modifications that staff would like to make for the scope of services for that task order.

DESIGN TASK ORDER
 HUIE CONSTRUCTED WETLANDS
 PHASE II, III, IV

The new Casey WRF has a permitted capacity of 24 mgd of which 15 mgd would be discharged to wetlands and 9 mgd to spray irrigation at the Huie site. The Huie Constructed Wetlands are being constructed in phases in order to minimize the impact on treatment capacity when removing existing land application areas. The proposed phases and associated treatment capacities are listed below.

Phase	Capacity (mgd)	Status	Year in Operation
Phase One	3.6 mgd	Under construction, 90% complete	2004
Phase Two	3.0	Under design, 90% complete	2005
Phase Three	2.8	Under design, 60% complete	2007?
Phase Four	5.6	Under design, 60% complete	2007?
Total wetlands capacity	15		

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Based on our experience with operational costs for the wetlands versus the spray irrigation site and the condition of the existing spray irrigation site, we are evaluating the option of converting all land application areas to wetlands rather than maintaining 9 mgd of irrigation capacity. To maintain this 9 mgd of irrigation capacity will not only result in more significant operational costs but also a capital investment to rehabilitate this system which is in excess of 25 years old.

This design task order was amended to include the design of all three remaining wetland phases because of the economic efficiency of doing this work at one time. Design of the three remaining phases II, III and IV are all at least 60% complete. However, future uncertainty in potential capital improvements and operational changes to the remaining spray irrigation system has us concerned. We are proposing to modify the scope of this task order to freeze the design of phases 3 and 4 at the 60% level and use the remaining funds to develop a comprehensive master plan for the Huie site which will identify the most economical way to treat our wastewater on this property and provide a capital improvement plan. This master plan would identify the difference in costs to develop as much as 30 mgd of capacity in constructed wetlands or to hold wetlands treatment at 15 mgd and rehabilitate the remaining spray irrigation system. Having this knowledge now is important to know what kind of priority to put on maintenance and rehabilitation of the existing spray irrigation pump station and large valves and pipes in the system as well as the land itself.

The amended task order amount is \$797,600. The funding available by freezing the design of phases 3 and 4 at the 40% level is \$340,100. The cost to prepare the comprehensive Huie Master Plan would be \$339,700 for a reduction in the total task order budget of \$400.

The Master Plan scope of services will include:

Conceptual design of future wetland cells to produce a capacity of 30 mgd including “cut & fill” balances and estimated construction and operational costs

Conceptual design of spray irrigation system rehabilitation to provide a minimum of 9 mgd capacity including estimated construction and operational costs

Reservoir study of the Blalock Reservoir to determine effective hydraulic residence time and evaluate the impact of up to 30 mgd of reclaimed wastewater being discharged into this drinking water supply reservoir

Final report and recommendation for the long-term (20 years) future operation and development of the Huie site

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CCWA Staff Recommendation: Reallocate \$339,700 of this design task order to use for a detailed Huie site Master Plan and freeze design of Phases 3 & 4 of the wetlands until closer to the time of construction.

Project Managers:

CCWA	Mike Buffington
CH2M HILL	Jay Kirk

Funding Source: 2001 Bond Issue

Mr. Thomas explained that the Huie Wetlands eventually receives the water that is treated at the Casey Plant, so the Authority has one permit that handles both the Casey Plant and the Huie site. Our permit allows the Authority 24 mgd of treatment at the Casey Plant and then that can be disposed of at Huie, eventually 15 mgd by wetlands and 9 mgd by land application. The Authority has been making the transition from land application to wetlands because of land cost and the efficiency of wetlands. This is all that the Authority felt that we could accomplish in the next 5 to 10 years. Mr. Thomas added that staff expects that this will all be complete, at latest, in 2009. Mr. Thomas gave a slide presentation showing the Huie site. In order to reach that 15 mgd capacity, the Authority has identified a total of four phases.

Mr. Thomas stated that today he wanted to talk to the Board about the change to the Phase II, III and IV design task order. Mr. Thomas stated that staff would like to go ahead and complete the bid for Phase II, freeze Phase III and IV Wetland design at sixty percent (60%) level which means that all the facility features are identified, all the equipment would be identified that we would use, and have a conceptual layout of the cell, including "cut and fill" volume which will allow us to make a good cost estimate. Mr. Thomas stated that the amended task order would be to prepare a Master Plan to address a number of concerns that staff has each time they sit down and talk about the design and future phases and what is the best order to complete the phases III and IV, considering the cost and our financing. The land application site is about twenty-five years (25) old and that includes the pump station, all the lines, and the land. Mr. Thomas stated that that land has been receiving two inches of rain every week for about 25 years and you can tell. There are areas of pretty severe erosion that need a lot of attention and we will continue to work on this.

Mr. Thomas stated that staff recommends reallocating three hundred thirty-nine thousand seven hundred dollars (\$339,700) of this design task order to use for a detailed Huie site Master Plan and freeze design of Phases III & IV of the wetlands until closer to the time of construction.

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Upon Motion by John Westervelt and seconded by Lloyd Joiner it was unanimously

RESOLVED: to accept the recommendation of staff to reallocate three hundred thirty-nine thousand seven hundred dollars (\$339,700) of this design task order to use for a detailed Huie site Master Plan and freeze design of Phases III & IV of the wetlands until closer to the time of construction.

Small Meter Test Policy: Chairman McQueen called on Mr. Brannan who stated that the small meter test policy was discussed at the last Board meeting and the Board wanted management to provide some numbers in reference to small meter test and how many do we do. Mr. Brannan stated that in the last five months the Authority has done fifty-eight (58) of these tests. To do a small meter test cost the Authority about one hundred sixty-seven dollars (\$167) for labor and materials. When we do these small meter tests, normally they do not reveal anything wrong with the meter. When a customer receives a high bill and states that nothing is wrong in their house, they request that the Authority do a meter check. As a courtesy, we check the meter and if there is something wrong with the meter it usually is running slow. The Authority would then change out the meter and it would be replaced with a new meter, which would make the customer's water bill go up.

Mr. Brannan added that the Authority is bringing this to the Board so that when customers request a small meter check, unless there is something wrong with the meter that we will make that small meter test, but it will cost the customer the cost of the test. Mr. Brannan stated that this small meter test now cost the Authority one hundred sixty-seven dollars (\$167). With the profit margin on a nine thousand gallons (9,000) a month account, it takes about nineteen (19) months to get that money back, especially if we are losing any income off of that account for nineteen (19) to twenty-four (24) months.

Clayton County Water Authority
 Residential/Small Meter Test Cost

Our meter testing/repair crews are set up as a 3-person crew due to the complexity of testing large meters. To test a Residential/small commercial meter (1" and smaller) takes an average of 1.5 hours and the cost is as follows:

Salary/benefits/overhead (3 x 1.5 hours x \$34.92)	\$157.14
Equipment 1.5 hours @ \$3.69	\$ 5.54
Fuel	\$ 4.00
Total Cost	\$166.68

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Our annual audit identified our cost per 1,000 gallons to be \$2.419 and our retail rate is \$3.40, which equates to a “profit” of \$8.83 per month (water only account) on a residential/small account with a usage of 9,000 gallons. At this rate it takes the CCWA almost 19 months to recover the cost of these Residential/small meter tests. Our best estimate is that less than 1 of 1,000 meters will test fast (registering more than used). The vast majority of Residential/small meters are within AWWA standards or slow (under registering). In cases where a meter is found to be under registering, we may replace/repair the meter to bring it up to standards which will increase the bill to a customer that is already doubtful of the usage of water and further agitates them.

This effort to test Residential/small commercial meters also diverts one of our two testing crews off of large meter testing which could prove to be costly to the CCWA and seriously affect our Unaccounted for Water Loss. Between January 1 and May 31, 2004 we tested 58 residential meters and found none of these meters to be over registering. This effort reduced the number of larger meters that we have been able to test by a like amount.

Our recommendation is that the customer be advised of the infrequency of meters testing “fast” and that we will test the meter only if they agree to pay a \$165.00 fee for the test if the meter tests within AWWA Standards or slower. They will also be advised that meters that test slow may be replaced/repared to bring the meter within standards and the usage will increase in those situations.

Mr. Brannan stated that the staff’s recommendation is that the customer be advised of the infrequency of meters testing “fast” and that we will test the meter only if they agree to pay a \$165.00 fee for the test if the meter tests within AWWA Standards or slower. They will also be advised that meters that test slow may be replaced/repared to bring the meter within standards and the usage will increase in those situations.

Chairman McQueen stated that Mr. Brannan brought this before the Board for informational purposes and the Board can make a recommendation that the Authority charge one hundred sixty-five dollars or the Board can think about this and put this on the agenda for next month.

There was discussion from the Board on what to charge for the testing of small meters with Mr. Westervelt stating that he had no problem with charging them for a meter test.

Ms. Barber asked Mr. Westervelt if he wanted to charge the entire one hundred sixty-five dollars (\$165) or what amount.

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Mr. Westervelt stated that he was not sure what to charge, but he did feel that the Authority should charge for the small meter test.

Board member, Allan Smith, stated that since January the Authority has tested fifty-eight meters and not one of them was incorrect.

Mr. Brannan stated that very rarely does the Authority find that a meter is wrong, but historically they are usually wrong in the customer's favor.

Mr. Etheridge stated that he has a gentleman that started the same week that he did, and after 29 years and thousands of meter tests, he could count on one hand how many meters were wrong.

Chairman McQueen added that it is time to do something about the request for these small meter tests and the cost to the Authority.

Mr. Smith asked if the Authority could do some kind of memo that the employees could give to the customer to show some kind of justification for the amount of the charge.

Mr. Brannan stated that we could charge a hundred dollars (\$100) and the customer would probably go back and look again to see if anything is wrong in their home before they would be willing to pay the fee.

Ms. Barber added that one way to notify the customer would be to put something in the bill or just let the customer call and ask.

Ms. Barber recommended a hundred dollar fee (\$100) fee for the small meter testing.

Upon Motion by John Westervelt and seconded by Marie Barber it was unanimously

RESOLVED: to approve the new policy of charging one hundred dollars (\$100) for the testing of small meters where the customer has requested that the meter be checked and nothing is found to be wrong with the meter. This policy will go into effective immediately.

Rex Ridge Subdivision Lift Station Request: Mr. Brannan stated that First Capital Corporation is requesting approval for the installation of a sanitary sewer lift station to serve the proposed development known as Rex Ridge on Rex Road and Double Bridge Road. This development has a total of three hundred nineteen (319)

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lots and the developer is aware of the CCWA requirement for the fifty thousand dollar (\$50,000) maintenance fee and specifications required on the lift station and has agreed to the Authority's requirements.

M E M O R A N D U M

To: Wade Brannan

cc: CCWA Board of Directors

From: Keith Watkins

Date: June 29, 2004

Re: Rex Ridge Lift Station

First Capital Corporation is requesting approval for the installation of a sanitary sewer lift station to serve the proposed development known as Rex Ridge on Rex Road and Double Bridge Road. This development will consist of 319 residential lots north of Rex Road and will generate approximately .10 MGD. The lift station force main will discharge into a gravity sewer system that flows to the Northeast WRF. The existing plant has a capacity of 6.0 MGD and is currently treating 4.67 MGD.

The developer is aware of the CCWA requirement for the \$ 50,000 maintenance fee and specifications required on the lift station.

Mr. Brannan stated that he is bringing this before the Board for authorization to proceed.

Upon Motion by John Westervelt and seconded by Allan Smith it was unanimously

RESOLVED: to accept the staff's recommendation to authorize the installation of a sanitary sewer lift station to serve the proposed development known as Rex Ridge with the fifty thousand (\$50,000) maintenance fee to be paid by the developer and any other specifications required by the Authority on the lift station.

Upon Motion by Marie Barber and seconded by John Westervelt it was unanimously

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RESOLVED: that the Board adjourns into executive session for land, legal, or personnel. The Board reserved the right to return to the open session.

Chairman McQueen stated that before the Board goes into Executive Session that he wanted to thank everyone for what was done today and for all those that were here today.

Chairman McQueen called the regular Board meeting back into open session.

Following previous Board discussions regarding insurance coverage for existing retirees who were not covered, Mr. Fincher stated that he is proposing that we receive a motion "Whereby the Board declares that it has reconsidered its earlier decision regarding insurance for existing retirees, who are not covered, and has determined that it has no legal duty to offer enrollment. Although it has considered offering coverage, it has decided not to offer coverage due to the increase in cost."

Upon Motion by Allan Smith and seconded by John Westervelt it was unanimously

RESOLVED: that the Board declares that it has reconsidered its earlier decision regarding insurance for existing retirees, who are not covered, and has determined that it has no legal duty to offer enrollment. Although it has considered offering coverage, it had decided to not offer coverage due to the increase in cost.

Chairman McQueen stated that with the audit that the Authority has been going through and the changing over of the auditors, he wanted to appoint an audit committee to work with Mr. Brannan consisting of Alan Horton, Chairman, and Allan Smith and Ms. Barber to also work on that committee and represent the Board.

Mr. Brannan stated that one recommendation that came out of the Grant Thornton document was to have an audit committee. Mr. Brannan added that he and Mr. McHugh had discussed that when the auditors are preparing to do the audit for the Authority, we should sit down with the auditors before they do the audit to see if there are any issues that we want or need the auditors to look at for us as management or the Board. Mr. Brannan added that this would give us more communication and interface with the auditors before and during the time that they are performing the audit so that we understand what their final report would be.

Mr. Brannan stated that several months back he talked to the Board about Rivers Edge Golf Course and he has talked to legal counsel, Mr. Fincher, in

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reference to changing the contract. The original contract was created between the Water Authority and Rivers Edge Golf Course. The Water Authority at that time was somewhat involved in trying to encourage the development of a golf course in that area of the county. One of the main reasons that the Water Authority was taking that position was we needed somewhere to dispose of wastewater being treated at the Shoal Creek Plant. The Authority did not have wetlands then, we had a land application system. Mr. Brannan explained that this was an alternate mode of disposal.

As time has gone on, the golf course never has taken water like our permit is structured around. The permit states that the golf course would take up to one million gallons a day, which they never have. In the summertime, when we do not have plenty of water to get rid of, they needed it and in the wintertime when we have plenty of water to get rid of, they did not want it because of the low demand for watering the course. This was not a very dependable method of disposal for us, but it was a supply for them if they needed some water. The golf course has changed hands a couple of times.

The golf course did not take water for six (6) months during last year or the year before, so Mr. Brannan wrote them a letter stating that since they had not taken any water in six (6) months that the Authority felt like the contract had expired and a new relationship was needed with the Water Authority and the golf course. This letter somewhat disturbed the golf course management because we were changing the relationship with them. Mr. Brannan has talked to them since then and they have actually been paying the Authority nine cents (\$.09) per thousand gallons for the treated wastewater. Mr. Brannan added that the contract states that the Authority can charge them for one of two ways, either the cost to pump water out of the Flint River to go into the holding pond or one half of the normal fee that we put on that type of wastewater for any other customer that we have. The Authority does not have any other customer with the same situation as the golf course.

The Authority's cost currently to treat the water before it is pumped over to the golf course is forty-one (\$.41) cents per thousand gallons. The Authority uses some of that water at the plant as wash down water, which eliminates the use of potable water as wash down water, so there is a benefit for the Authority.

Mr. Brannan stated that the Authority should escalate the cost on the water that we charge over a gradual scale. This year the Authority should charge them twenty cents (\$.20) per thousand gallons and next year it would increase to thirty cents (\$.30) per thousand gallons and the third year you would be at full cost of forty-one cents (\$.41) per thousand gallons just for the water. This is just a proposed type schedule that the Authority is recommending. Mr. Brannan added that the Authority would look at this each year and if the cost goes down for us to

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produce it then we would not go as high as forty-one cents (\$.41) per thousand gallons.

Mr. Brannan explained to Mr. Westervelt that the water comes through the plant and when it leaves the plant we either have the option to send it to the wetlands or we can send it to the filtering system for further treatment before sending it to the holding pond for the golf course.

Mr. Smith asked when was the last time that we increased the costs for the golf course.

Mr. Brannan stated that he was not sure how that was handled.

Mr. Joiner asked what Joe Hamilton's position was. Mr. Hamilton is the owner of the golf course. Mr. Joiner asked if Mr. Hamilton was half way satisfied.

Mr. Brannan stated that Mr. Hamilton realizes our position. If you look at other golf courses in the area, they are not charged for water because they are trying to dispose of water. Our system is structured so that we are recycling. Our water goes to the wetlands, we catch it, pump it to the reservoir, so this is a resource for us.

Chairman McQueen thinks that it is fair and it is still a good option for the golf course.

Chairman McQueen stated that the Authority could include a "subject to availability" clause in any agreement the Authority makes with the golf course.

Upon Motion by John Westervelt and seconded by Marie Barber it was unanimously

RESOLVED: to approve the recommendation of staff to increase the charge for water to the River's Edge Golf Course from nine cents (\$.09) per thousand gallons to twenty (\$.20) cents per thousand gallons, which is one half our cost of forty-one (\$.41) cents per thousand to produce the water.

Mr. Brannan stated that the Authority had sold some vehicles at auction and would soon receive forty-three thousand dollars (\$43,000), minus the auction fee.

Mr. Brannan wanted to make the Board aware that since the Authority recycles water so efficiently in our system, there is a lot of discussion in our industry about endocrine disruptors. Our ability in years past was limited to monitoring and detecting how much of those chemicals were in the water supply

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and what kind of impact they may have on the community. Now there is a lot more ability to test for these chemicals, to see what kind of effect they have on the population. The Authority is participating in a study on endocrine disruptors, pharmaceuticals and hormone type chemicals, in water supplies similar to ours. There are nine (9) systems in the United States that are participating in this study. Participation varies anywhere from \$10,000 to \$60,000 but this is one way to ensure that the Authority is out front in evaluating what kind of impact a water system such as ours has on its customers. The cost of participation for the Authority is fifteen thousand dollars (\$15,000). If the Authority does not participate in this type of study, it makes the Authority look somewhat irresponsible. The Authority will not only get results from our system, but will also get results from other systems.

Mr. Brannan explained that after talking with Bell South in regard to the damage on Lee Street, he had negotiated a ten percent (10%) reduction on the sixty-eight thousand dollar (\$68,000) bill, but the Authority's insurance is now handling this. The Authority has done extensive re-education of our staff to be sure that they are more careful when they dig around or expose conduit. Our crew did minor damage to the conduit, but because of the damage, it caused Bell South to have to build a vault. Bell South billed the Authority for one vault and billed Tom Davidson for the other vault in the same area.

Mr. Brannan stated that the Authority received thirty-six thousand four hundred sixty-six dollars (\$36,466) back from the state for sales tax paid by the contractor during the Panhandle Road Wetlands construction.

Mr. Brannan commented that the Authority had bid out the banking services, but Mr. McHugh has been covered up with the audit and has not had time to evaluate the banking services. There are two institutions that have bid, Wachovia and SouthTrust, who are in negotiations for one to buy the other, and both have a bid on some of our work, so we have to sort through that to determine which bid to use.

Mr. Brannan stated that years ago at the Northeast Plant our crew damaged a transformer that contained PCBs, a hazardous material that was cleaned up and sealed in a certified drum and was removed from the site by M&J Solvents, a hazardous waste disposal vendor. M&J Solvents had not kept records like they should have, so when their location was cleaned up by EPD, anyone who had been invoiced by that company was required to pay a part of the clean up. The Authority was recently notified that the Authority will not have to put up any more money, but they will not let us out of the documentation.

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Mr. Brannan stated that Georgia Power called the other day and stated that their rates are going up. Although five percent (5%) does not sound like a lot, this will be a substantial increase for the Authority operationally as the Authority buys about \$3,200,000 dollars of electricity each year from them. Mr. Brannan has put staff on notice to incorporate this into their budget process. Mr. Brannan added that the Authority does everything we can to reduce power usage.

Mr. Joiner asked if there is still a procedure that your rate is set based on your peak usage.

Chairman McQueen and Mr. Brannan stated that was correct.

Mr. Brannan added that at Land Management and at the plants the Authority would do shutdowns during peak demand times along with other conservation measures.

Mr. Brannan reminded the Board that mandatory water restrictions go into effect August 1, 2004. Homes and businesses with odd-numbered addresses may water on Tuesdays, Thursdays, and Sundays, even-numbered and unnumbered addresses may water on Mondays, Wednesdays, and Saturdays. No one is allowed to use outdoor water on Fridays.

Mr. Brannan stated that the landscaping at the Freeman Road Plant has been bid out to several vendors and Andy's Nursery came in at five thousand six hundred dollars (\$5,600) to do some bed preparation and planting for fall and spring. The Authority's crew will do this preparation and planting and next year the cost will be around four thousand dollars (\$4,000), which will probably be just planting in the beds.

Mr. Brannan stated that at the Huie site, Phase II, the value of the timber needs to be determined so the timber can be cut. The Authority has talked to three consultants, who will assist in determining the value of the timber and helping to find someone to cut and remove the timber. One of the consultants is the one that did the work on Phase I, who charged the Authority seven percent (7%). Another proposal came from the Murdock Company, who is the timber consultant that does work for Henry County, at five percent (5%). Mr. Brannan stated that his recommendation is to use Murdock.

Upon Motion by Marie Barber and seconded by John Westervelt it was unanimously

RESOLVED: that the Board approves the use of Murdock Company as the timber consultant for the removal of timber on the Huie site, Phase II and to

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authorize the General Manager to sign any documents needed to complete this transaction.

Mr. Brannan stated that he had to make an adjustment this week on a water bill over at Atlanta Beach where they had used an excessive amount of water through a hydrant so he adjusted the sewer service charge since none of the water went into the sewer system. The adjustment for this sewer service in the amount of eleven thousand dollars (\$11,000) was not because the Authority was giving them anything, but because they did not use the sewer system. Mr. Brannan added that the adjustment was large enough that he wanted to make the Board aware of it.

Mr. Brannan mentioned to the Board about the trip in October, which runs from Saturday, October 2nd through Wednesday, October 6th. Mr. Brannan added that the Board will be leaving on Saturday, sometime in the middle of the day and come back in the middle of the day, either on Tuesday or Wednesday, depending on the guidance the Board gives us regarding their return.

Chairman McQueen stated that Delta has a special on tickets now and suggested that the Board leave no earlier than 10:00 a.m., both ways, and the return could be Tuesday or Wednesday, but the Board does meet that Thursday when we get back. Chairman McQueen asked the Board if they would want to leave on Saturday because that is when the conference starts and return on Tuesday. Ms. Matthews makes the reservations for the Board and any spouses that may be going if you will give her a credit card number. After some discussion, the Board decided to return on Tuesday, October 5th.

Mr. Brannan commented that some of the Board members have not had an opportunity to visit the Birmingham plants that manufacture waterline pipe. If the Board desires to do that, Mr. Brannan will get with U. S. Pipe and plan a trip in the fall.

Chairman McQueen suggested in November when the weather has cooled down.

Mr. Brannan commented that those that would like to go would leave here and drive over to Birmingham, spend the night and return the next day. Mr. Westervelt and Mr. Smith stated that they would like to go. Chairman McQueen stated that he would go whenever Mr. Brannan can work out the details.

Mr. Brannan stated that he would go ahead and line up an early November date.

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Upon Motion by Lloyd Joiner and seconded by John Westervelt it was unanimously

RESOLVED: that the regular session board meeting be adjourned.

There, being no further business to come before the open meeting the meeting was adjourned.

Pete McQueen, Chairman

Walter Marie Barber, Secretary/Treasurer