

**Minutes Of
Finance Committee Meeting
Of The Water Works Board
Of The City Of Birmingham
January 21, 2016**

A Finance Committee Meeting of The Water Works Board of the City of Birmingham was held on Thursday, January 21, 2016, at 9:00 a.m., in the principal office of the Board, 3600 First Avenue North, Birmingham, Alabama, 35222, to discuss finance issues.

The following Committee members were present: Ronald A. Mims, Kevin B. McKie and George Munchus. Also present was Sherry Lewis, who does not serve on the Committee.

Inasmuch as all Committee members were present, a quorum was in attendance.

The meeting was also attended by: Mac Underwood, General Manager; T. M. "Sonny" Jones, Assistant General Manager of Engineering and Maintenance; Darryl R. Jones, Assistant General Manager of Operations and Technical Services; Michael Johnson, Assistant General Manager of Finance and Administration; Grace Amison, Executive Assistant to the Board of Directors; Tammy Wilson, Executive Assistant to T. M. "Sonny" Jones and Darryl R. Jones; Ben Sorrell, Chief Engineer; Doug Stockham, Manager of System Development; Geoff Goodwin, Manager of Non-Revenue Water; Jeff Cochran, Engineer; Mike Petway, Sam Ford, Ryan Wilson and Paige Goldman, Fuston, Petway & French, LLP; Patrick Flannelly, Shane Dressback and Dustin Harris, ARCADIS; Jesse Lewis and Dorian Kendrick, The Lewis Group; Kirk Mills and Theo Johnson, Volkert & Associates, Inc.; Chandra Abesingha, CE & Associates, Inc.; Randall Minor and Frank McPhillips, Maynard Cooper Gale; Yvonne Green Davis, Yvonne Green Davis, P. C.

Chairman Mims called the meeting to order at 9:04 a.m.

There was no discussion under old business.

Following, Assistant General Manager Sonny Jones requested that the Committee hear a presentation on the Pipeline Repair and Replacement model from ARCADIS, as set forth in agenda item 2. Birmingham Water Works Board (BWVB) System Development Manager, Doug Stockham and ARCADIS worked together on the model, Sonny Jones stated. Patrick Flannelly, with ARCADIS, presented the information. Mr. Flannelly compared the Repair and Replacement (R & R) model to the real estate website, Zillow which provides all of the information needed if you are in the market to purchase a house. Mr. Flannelly stated the R & R model is a tool which takes Geographical Information Systems (GIS) data, puts it on a map and then runs queries. There are 4000 miles of pipe in the BWVB Distribution System, 348 miles of which are galvanized pipe. Galvanized pipe (used in the 1920's and 1950's) is generally older,

leaky and would cost up to \$222 million to replace, Mr. Flannelly stated. The pipe on average in the system is 47 years old, which is not that bad according to Mr. Flannelly. The galvanized pipe was never a good choice long-term and is beyond its useful life though Mr. Flannelly stated. Director Munchus asked if the use of such poor material was deliberate when the galvanized pipe was being used. Mr. Flannelly responded that this is just what was being used at the time and all that they knew. The integrity of the pipe, as measured by The American Water Works Association (AWWA), is the leak rate per 100 miles per year. The BWWB is at 42 leaks per 100 miles per year and the median is 30 leaks per 100 miles per year among all water systems. The Summary System Data – January 2016 revealed that BWWB’s leak rate has increased 25% over 5 years. The life span is somewhere around 80 years for ductile pipe. The immediate priority, in the red zone, is about 62 acute leaks with the cost to replace around \$19 million. This would take about 5 years to get in all of these projects, according to Mr. Flannelly, which in his opinion is too long. The National Infrastructure Report Card reveals that BWWB has old infrastructure with a grade of D and some years D-, which are poor grades. The R & R Goals for the current budget replacement is 11 miles per year at a cost of \$120.00 - \$150.00 per foot totaling \$8,460,000.00, half of which are water quality issues. The proposed future replacement schedule is a 125 year replacement schedule or replacement of 32 miles per year. Mr. Flannelly explained that the BWWB pipe replacement program was under funded for 3 to 4 years early on. According to Mr. Flannelly, Optimized R & R planning can yield benefits such as: 1) predicting and managing service levels around leaks, breaks and non-revenue water, 2) optimizing the level of R & R funding, 3) better decision making on what to replace and when and 4) sustaining the bond rating. Mr. Flannelly added that if the BWWB invested \$12 million per year, it would allow BWWB to keep up with the leaks. The R & R model allows us to look ahead and ultimately the bond rating agencies do care about this Mr. Flannelly stated. Director Munchus asked for an explanation of the difference in water quality issues and leaks. Assistant General Manager Darryl Jones responded that unlined cast iron pipes or old galvanized pipes (bare steel), which BWWB flushes periodically, can cause water quality issues while Assistant General Manager Sonny Jones explained that old pipe has build-up and then other pipe has been clamped to stop leaks. Mr. Flannelly stated that a 50% increase, placing the focus on leaky mains seems like something that would stabilize in the short term and allow BWWB to hit the red projects in 2½ years. Director Lewis stated if the leaks happen to increase this could change. Mr. Flannelly agreed completely. Director McKie asked if the numbers included an assumption of increase in the number of leaks. Mr. Flannelly affirmed that was built in. GIS is so powerful and it is utilized much more than SAP is for this information, according to Mr. Flannelly. SAP gives us the data that is used to make the decisions. Assistant General Manager Sonny Jones stated this information validates the map he uses to illustrate leaks and main replacement projects. Director Munchus stated he expected the HUBE Program to increase to more than 30% with this model. General Manager Mac Underwood explained BWWB needs more minority vendors to perform the work in order to increase the percentage of minority participation. Assistant General Manager Sonny Jones stated the challenge is for Doug Stockham to have the projects designed and on the shelf, ready to go. Director Lewis stated she believed the Carson Loop project may need to be revisited as far as timing and priority. Assistant General Manager Sonny Jones interjected that the Carson Loop

project is integral to our strategy though. Mr. Flannelly said to keep in mind that with the model and with the current budget, we are still looking at an increase in leaks. Assistant General Manager Sonny Jones stated leaking galvanized steel pipe is the problem and he wanted to have this model presented to prove it. Assistant General Manager Darryl Jones added unlined cast iron pipe is where the water quality issues are.

Next, General Manager Mac Underwood requested that the Committee recommend to the full Board approval of the Gadsden Street main replacement project bid from B & H Contracting, Inc. at an estimated cost to the Board of \$756,166.75, as set forth in agenda item 3. Assistant General Manager Sonny Jones announced that this bid has 30% HUBE participation on the project. General Manager Mac Underwood stated this information is actually in Diligent in the back-up material included in System Development Manager, Doug Stockham's spreadsheet. Director Munchus stated he is a 50% HUBE participation guy. Director McKie asked if the names of the minority vendors could be included in the bid package in the future. Director Lewis asked for a report after the project is finished. Director Munchus asked if the Gadsden Street project is one of the 62 projects highlighted in the red zone. Assistant General Manager Sonny Jones responded no, but it is a leaky main. Assistant General Manager Darryl Jones added that this particular pipe was put in the ground in the 1920's and it is unlined pipe and that creates water quality issues. Mr. Stockham stated both projects on the agenda today have water quality issues. Mr. Stockham gave a short presentation on the Gadsden Street project explaining the reasons necessary for this project stating it would improve water quality and service reliability to the customers. The Committee agreed to move the Gadsden Street pipe replacement project to the full Board.

Following, Mr. Stockham requested that the Committee recommend to the full Board approval of the 10th Avenue North main replacement project bid from Jones Utility & Contracting Company, Inc. at an estimated cost to the Board of \$897,980.30, as set forth in agenda item 4. Mr. Stockham gave a short presentation on the 10th Avenue project explaining the reasons necessary for this project. This project is not included in the 62 projects in the red zone. It is necessary due to water quality issues according to Mr. Stockham. Director Munchus asked if ALDOT is coming through this area. Assistant General Manager Darryl Jones responded no, although they modified BWWB's project. The Committee agreed to move the 10th Avenue pipe replacement project to the full Board.

Next, General Manager Mac Underwood requested that the Committee recommend to the full Board rebidding two tracts of timber and putting up three more tracts for bid at Lake Purdy, as set forth in agenda item 5. Assistant General Manager Sonny Jones recognized BWWB Chief Engineer, Ben Sorrell who stated that during the process of the logging company getting the contract; BWWB had to stop to comply with the Alabama Fish and Wildlife requirement to perform a Bat Survey. That survey was performed and meanwhile the market bottomed out on timber and it has to be rebid. Assistant General Manager Sonny Jones added the thrust of this is not money, but that BWWB partners with Alabama A & M's Forestry School. Some discussion occurred concerning the pine beetle infestation. Assistant General Manager Sonny Jones stated

Daryl Lawson (Alabama A & M) and his students keep an eye on this issue. The Committee agreed to move the timber tract bids at Lake Purdy to the full Board.

Following, General Manager Mac Underwood requested that the Committee recommend awarding a bid to B & H Utility for estimated quantities of Standard Thermal Pavement Bond Sealing at an estimated cost to the Board of \$74,295.00, as set forth in agenda item 6. Mr. Sorrell explained that the company, Pavement Restorations of Alabama (PRI), provides this service after pavement patches are made. A handout (a copy is on file with the Committee Meeting book) was distributed to the Board Directors and Executive Staff. Assistant General Manager Sonny Jones explained that PRI provides the ideal solution for repairing, restoring and managing paved infrastructures with infrared technology. Director Munchus asked if this is a local company. Mr. Sorrell responded in the affirmative. Assistant General Manager Sonny Jones stated that this bid has 94% HUBE participation. Non-Revenue Water Manager, Geoff Goodwin added that this process extends the life of the pavement and it is seamless. Assistant General Manager Sonny Jones stated the state of Alabama uses this process on its highways. Other neighboring municipalities using the technology are Fultondale, Gardendale, Hoover, Irondale, Tarrant and Homewood. Director Lewis asked if she could see an address where this process has been demonstrated. Some addresses where this technology has been demonstrated are 28th Avenue in Homewood, 2nd Avenue and 26th Street North and the back gate entrance of the main BWWB building. Mr. Goodwin added that it is almost a 100% recyclable process. The Committee agreed to move the Standard Thermal Pavement Bond Sealing item to the full Board.

Next, Sonny Jones recognized BWWB Engineer, Jeff Cochran, who requested the Committee to recommend renewing a two-year quarterly service contract with Aqua Metrology Systems for the AMS THM-100 Analyzer at Shades Mountain Filter Plant at a cost to the Board of \$32,900.00, as set forth in agenda item 7. Assistant General Manager Sonny Jones stated Mr. Cochran runs the BWWB mobile lab among other things. The unit measures trihalomethanes (THM's) Mr. Cochran stated. Our goal is for the water to leave the plant with the smallest THM's as possible, Mr. Cochran stated. Mr. Cochran explained that Aqua Metrology Systems is a sole source provider and that the Shades Mountain operators use the THM-100 analyzer to optimize plant performance to meet disinfection by-product requirements as required by the Environmental Protection Agency (EPA). The Committee agreed to move the renewing of a two-year quarterly service contract with Aqua Metrology Systems for the AMS THM-100 Analyzer to the full Board.

Following, General Manager Mac Underwood requested that the Committee recommend for approval the installation of a tram on lot 44A, screening in the porch on lot 6 and repairs and improvements on lot 10 at Inland Lake, all at no cost to the Board, as set forth in items 8, 9 and 10. General Manager Mac Underwood gave a history of what the Board has done in the past at Inland Lake regarding lots. BWWB has the right of first refusal on all properties for sale. In the past, the BWWB bought many of the lots and structures and demolished them. It was also explained that the structures are remote and most have access only by boat. Additionally, they have buried septic tanks. With

Inland Lake being the first or second cleanest water source in the state, the BWWB has always endeavored to maintain the integrity of the lake General Manager Mac Underwood stated. Some discussion occurred regarding structures purchased in the past which have not been demolished yet. Assistant General Manager Darryl Jones suggested Staff bring the issue to the Board or a Committee at a later date. The Committee agreed to move owner's requests on lots 44A, 6 and 10 at Inland Lake to the full Board.

Next, General Manager Mac Underwood requested that the Committee consider as bond counsel on any bond issues and items two firms: Maynard Cooper Gale, P. C. and Yvonne Green Davis, P.C., as set forth in item 11A and 11B. Director Munchus asked if Staff had heard from any other firms. General Manager Mac Underwood responded one other firm was talked to; however they were not interest in bond counsel work. The firm was Sirote & Permutt, P. C. and General Manager Mac Underwood stated that he spoke with Mason Davis who indicated that they are interested in other legal work associated with disclosure counsel in the future for the Board. Randall Minor, Shareholder at Maynard Cooper Gale was introduced. A booklet (a copy is on file with the Committee Meeting book) with an overview of the firm was distributed among Board Directors and Executive Staff. Mr. Minor stated he had 10 years of experience mostly in the private finance area. Some of Maynard Cooper Gale P. C.'s clients include the State of Alabama, the City of Birmingham and Alabama A & M. Frank McPhillips, Shareholder was introduced. Mr. McPhillips has broad experience as bond counsel and disclosure counsel in a wide variety of transactions for the State of Alabama and numerous local government entities.

Following, Yvonne Green Davis, President/CEO at Yvonne Green Davis, P.C. was introduced. A booklet (a copy is on file with the Committee Meeting book) with an overview of the firm was distributed among Board Directors and Executive Staff. Ms. Davis stated she has 20 years of experience in law and 10 years in public service. Some discussion occurred concerning the need to hire more than one firm. Director McKie stated it was his opinion that one firm in this role would be enough as this work is temporary and the Board can always add another firm if it is needed in the future. The Committee did not make a formal recommendation to the full Board, but instead referred the issue to the full Board for a final determination. The Committee agreed to move Maynard Cooper Gale, P. C. as bond counsel on any bond issues and items to the full Board.

As there was no further business to be brought before the Committee, a motion was duly made and seconded, and the meeting was adjourned at 10:51 a.m.

_____/s/
Ronald A. Mims
Chairman/President

/s/

Kevin B. McKie, Esq.
First Vice-Chairman/First Vice President

/s/

George Munchus, Ph.D.
Secretary-Treasurer

/s/

Mac Underwood
General Manager