

**Minutes Of  
Engineering And Maintenance Committee Meeting  
Of The Water Works Board  
Of The City Of Birmingham  
February 6, 2018**

An Engineering and Maintenance Committee Meeting of The Water Works Board of the City of Birmingham was held Tuesday, February 6, 2018, at 5:00 p.m., in the principal office of the Board, 3600 First Avenue North, Birmingham, Alabama, 35222, to discuss engineering and maintenance issues.

The following Committee members were present: Brett A. King, Brenda J. Dickerson, Ronald A. Mims and Sherry W. Lewis. Other Board Members present were: Tommy Joe Alexander, Deborah Clark and William “Butch” Burbage, Jr. who do not serve on the Committee.

The meeting was also attended by: T. M. “Sonny” Jones, Assistant General Manager of Engineering and Maintenance; Darryl R. Jones, Assistant General Manager of Operations and Technical Services; Grace Amison, Executive Assistant to the Board of Directors; Tammy Wilson, Executive Assistant to T. M. “Sonny” Jones and Darryl R. Jones; Patrick Flannelly, ARCADIS; Mark Parnell and Mary Thompson, Parnell Thompson, LLC; Kelvin Howard, KWH, LLC; Jesse Lewis and Dorian Kendrick, Agency 54; Birmingham City Police officer; Derrick Murphy, Allworld Project Management; Dana Nail, Attorney General’s Office; Ernest McGlothan and Ronald R. Thomas, Steel City Services, LLC; John Dansby, Distribution Manager; George Anderson, IT Manager; Terrell Jones, Security Superintendent; Rick Jackson, Public Relations Specialist; Doug Stockham, System Development Manager and Ben Sorrell, Chief Engineer.

Chair of the Committee, Director Brett King called the meeting to order at 5:12 p.m. IT Manager, George Anderson opened the meeting with prayer.

Following, agenda item 1 was a request for the Committee to approve minutes of the October 5, 2017 and October 10, 2017 Engineering and Maintenance Committee Meetings. Director Mims made a motion to approve the minutes and it was seconded by Director Dickerson. The minutes of October 5, 2017 and October 10, 2017 were unanimously approved.

Next, agenda item 2 was a request for the Committee to review and discuss HomeServe’s proposed rate increase and marketing letter. A handout was provided to the Committee (a copy of which is on file with the Committee meeting book) on the proposed April price increase on renewals along with a draft of HomeServe’s marketing letter. Rick Jackson, Public Relations Specialist addressed the Committee. Mr. Jackson stated HomeServe proposes to raise their monthly insurance fee by \$1.00 beginning in April 2018, specifically for renewals. HomeServe would also like to expand the products they offer to include irrigation systems branching off the customer’s main line so that

irrigation systems would be included when the home's service line is insured. Director Lewis stated there has already been an increase imposed in the past. Mr. Jackson confirmed HomeServe's last increase was in 2016. Director Lewis further stated she had not heard anything about the in-kind service HomeServe pledged to perform for BWWB customers who cannot afford to have their leaky service lines replaced. Director Lewis also asked if customers were pleased with their service. Assistant General Manager Sonny Jones explained the process and protocol to replace service lines for lower income customers and stated in-kind work had been performed in the past for BWWB customers. Director Lewis stated she would like to know how many customers HomeServe is servicing from year to year also. Director Dickerson asked why the increased rate would apply to existing customers and not to new customers. AGM, Sonny Jones stated he would ask Mr. Twardowski to come before the Committee to answer questions and concerns. Mr. Jackson stated HomeServe was using the lower cost as an incentive to sign on new customers. Director Lewis asked Mr. Jackson to ask HomeServe what their incentive is to keep existing customers. Director Mims asked if there would ever be a time where all customers would be on the same rate scale. Mr. Jackson stated yes, in the next year. Director Mims stated he was not in favor because he believed HomeServe was ripping poor people off. Mr. Jackson stated HomeServe has been increasing engagement with minority contractors as requested by Director Munchus, adding they have five and they are willing to consider others. Mr. Jackson stated HomeServe would like to present their new marketing plan to Board members. Director King asked from a legal perspective if HomeServe had to get Board approval to impose an increase. Attorney Parnell stated it should be in the contract, adding it was a 5-year agreement which was executed February 2014. Director Lewis responded that it was in the contract that HomeServe obtain Board approval prior to imposing an increase. It will automatically roll over for another 5 years unless it is discontinued with a 60-day notice. The Committee agreed to table the HomeServe item until more information is obtained, possibly in a Communications or Engineering and Maintenance Committee Meeting in the future.

Following, agenda item 3 was a request for the Committee to recommend to the full Board a land swap with Alex Jones. Chief Engineer, Ben Sorrell addressed the Committee. Mr. Alex Jones with Fleming Branch, LLC has requested this exchange of property to provide a non-exclusive easement for him to use to access an approximate 40-acre site that he owns. In exchange for the Board granting a 1.27-acre non-exclusive easement in the form of a road, Mr. Jones has offered to exchange 9.27 acres of land that he owns contiguous to existing Board property. Mr. Sorrell stated the property is on Sicard Hollow Road, in the Cahaba Beach Road area. Mr. Sorrell provided a display map to pinpoint the exact location. Director Lewis stated she had a problem because it would put Mr. Jones in position to control the road. Director Lewis stated she did not think the Birmingham Water Works had anything to gain in the swap. Attorney Parnell explained that the Fleming Branch property, which totals about 40 acres, is in a conservation easement which Mr. Jones owns near the Cahaba Pump Station. Director Lewis asked for an appraisal of the value of the acreage the BWWB would be receiving. Director King stated the BWWB would gain 9 acres. Director Burbage asked about the topography of the acreage. Mr. Sorrell stated it is very mountainous. Director King

stated if Mr. Jones builds his own road through such mountainous topography it could disturb the area much more so than using the existing road he is asking for. Attorney Parnell stated Mr. Jones could go the route of privately condemning to get a right of way and that the Board is involved in a suit right now of this nature. Director King asked ARCADIS if they had an opinion. Patrick Flannelly stated for the land in this area, it has been the Board's posture to protect anything in and around the area. Granting an easement should not negatively impact the degradation of this property Mr. Flannelly stated. Director King stated Mr. Jones is offering to give us control of the 9 acres, in exchange for the red strip on the map where the road is proposed to go out. Director King stated he sees these requests all the time which is an ingress egress agreement and it is a no brainer. We are only giving up the right to exclusively use the red strip of property in exchange for 9 acres Director King stated. Attorney Parnell stated the concerns to protect the BWWB can be addressed in the agreement that would be drafted for the parties to sign. Director Mims made a motion to move the item to the full Board February 22, 2018 and it was seconded by Director Dickerson. Director Lewis opposed. Director Clark asked to have the information requested regarding an appraisal prior to the vote at the Board Meeting.

Next, agenda item 4 was a request for the Committee to recommend to the full Board to approve a resolution authorizing the General Manager to approve allowing licensees to make repairs at Inland Lake that are at no cost to the Board. AGM Sonny Jones stated the licensees at Inland Lake come to the Board from time to time to make needed repairs and Staff presents a resolution that requires Board approval. Director King stated he was in favor of not wasting the Board's valuable time on these issues in the future, and he recommended moving the item to the full Board. Director Mims made a motion to move the item to the full Board and it was seconded by Director Dickerson. The Committee agreed to move the item to the full Board February 8, 2018. Director Lewis abstained.

Following, agenda item 5 was a request for the Committee to recommend to the full Board to approve a resolution authorizing the General Manager to execute certain right of way and easement agreements. AGM Sonny Jones stated from time to time we have easement requests that are relatively low-cost or no-cost from people or organizations such as Alabama Power and Staff would like for the GM to be able to execute these items up to his signatory amount. Director Mims recommended not moving the item to the full Board and it was seconded by Director Dickerson. Director King voted in favor of moving it to the full Board. Director Lewis abstained. The motion failed to move the item to the full Board.

Next, agenda item 6 was a request for the Committee to recommend to the full Board to approve repairs on Lot 20 at Inland Lake. AGM Sonny Jones stated this was discussed in item 4 which would have gone to the full Board for approval at the next meeting. The item was tabled by Staff pending item 4 passage from the Board.

Following, agenda item 7 was a request for the Committee to hear a presentation on the Repair and Replace Model (R & R Model) for water main replacements. Patrick

Flannelly provided a handout (a copy is on file with the Committee meeting book) of the presentation. Mr. Flannelly stated this was a collaboration between ARCADIS and System Development. AGM Jones stated BWWB has been using this model for 2 years. It was originally presented in January 2016 and the Distribution System piping was about 4,000 miles in length at that time. At the beginning of 2017 there were 4,035 miles due to main extensions and new developments. The challenge is eliminating the 316 miles of galvanized steel pipe, but the cost to do so would be \$292 million. Most utilities are facing the same issues Mr. Flannelly stated. Overall the age of BWWB pipe is 46 years old, but that number hides the galvanized steel pipe. In 2015, we determined where the leakiest pipe was and began replacing it. On average leaks are going up by about 2% per year. BWWB has to keep going back to 2" galvanized steel pipe to make repairs following an earlier repair. The Repair and Replacement investment goal is to balance pipe main replacement investment based on the projected system leak rate and other capital needs while maintaining control of rate increases. The recommended short-term main replacement investment rate is \$13,800,000.00 (2018 through 2021). Also, to be considered is increasing the main replacement investment rate toward \$20,000,000.00 (beginning 2022). We believe about \$13.8 million per year should be the goal for 2018 Mr. Flannelly stated. Director King asked why the galvanized steel pipe corrodes faster. Mr. Flannelly stated the material was not a good choice for long-term use. For the next 4 years, the suggested investment rate that comes out of the R & R Model is \$13.8 million per year even though it does not improve leaks. In 2022, we would start spending more money on leaks. Mr. Flannelly talked about the eight highest leak zones and they were displayed on a graph. The West side of town is the worst bad actor at 210 leaks per year. The areas of worst need are set up to be addressed first. In house teams can design about 13 miles per year. Three projects are ready to come to the Board. Photos were shown of multiple patches on various streets in the system. This time of the year a GIS specialist pulls the leak data from the previous year. System Development analyzes these and takes them to the design team. Manager Doug Stockham stated they want to replace the worst pipe which are those with the largest number of leaks. Some more photos were shown of high break rate streets. AGM Sonny Jones added it is not always galvanized steel pipe, but some is cast iron un-lined pipe that has high leak rates. There are maps for all 101 projects Mr. Flannelly stated. Director Lewis asked what the non-revenue water percentage is currently. Mr. Flannelly stated the percentage is about 35% and the leakage is somewhere between 19% to 25%. Some discussion occurred regarding the number of paving cuts allowed. AGM Sonny Jones stated water quality plays a part and it is not only leaks that drive replacement. AGM Sonny Jones stated BWWB works and coordinates with other utilities regarding paving cuts. Director King commented that the presentation was a good one and very informative.

Next, was a request for the Committee to hear a presentation on Pipe Crews. The equipment required would be a small track hoe, back hoe, tri-axel dump truck, tandem dump truck, crew cab truck, pick-up truck, 2 trailers, an air compressor, hydraulic unit and miscellaneous equipment at a cost of \$574,000.00. Based on a 7-year life span that would be approximately \$82,000.00 annually. The labor cost of the in-house crews is 100% capital and it does not get applied to the O & M budget. There is a Field Supervisor, 2 Utility 2's, 2 Utility 1's and 2 DMW's at a cost of \$510,000.00 per year at

the mid-point salary range. Director Dickerson asked if the crews would work overtime. AGM Sonny Jones stated it varies. It is around 45 hours per week though in order to achieve maximum efficiency in the field. The production and projected cost per linear foot per year is based on 16,000 linear foot per year of pipe installed. Yearly costs are \$881,283.00 and the projected cost per foot installed is \$55.08 per linear foot. The estimated yearly savings based on 16,000 linear feet is \$318,560.00 per crew. Other benefits include it being quicker to install and the experience gained because construction pipe crews are the only place where an employee can get experience in 100% of needed skills to operate a distribution system. AGM Sonny Jones stated that we have the in-house expertise to run these crews. John Dansby, Manager with 22 years, Keith Witt, Assistant Manager and Superintendent of Construction with 29 years, Jeff Jenkins, Assistant Superintendent of Construction with 30 years and Larry Calhoun, District Supervisor of Construction with 25 years. AGM Sonny Jones stated he did not believe there would be a problem finding people to fill these 12 positions. Director Lewis asked if there were any internal people that may want to move to these jobs. John Dansby responded there would be some internal people who would want to move. Director Lewis asked AGM Jones when he wanted this to be implemented. AGM Sonny Jones stated as soon as it can be approved. Director Lewis asked how many total crews would be desired. AGM Sonny Jones stated ideally 3 crews. Director Mims asked how much of the on-call work could be performed by the construction crews. AGM Sonny Jones responded maybe 10% to 15%. Director Mims made a motion to move the item to the full Board and it was seconded by Director Dickerson. The Committee unanimously agreed to add an in-house pipe crew to the February 22, 2018 Board meeting agenda.

As there was no further business to be brought before the Committee the meeting was adjourned at 6:45 p.m.

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/S/  
Mac Underwood  
General Manager

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/S/  
Brett A. King, Esq.  
Director

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Sherry W. Lewis  
Director

/S/

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Ronald A. Mims  
Assistant Secretary-Treasurer

/S/

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Brenda J. Dickerson, Ph.D.  
Second Vice-Chairwoman/Second Vice President