



AGENDA FOR A REGULAR BOARD OF DIRECTORS' MEETING
SCHEDULED WEDNESDAY, DECEMBER 18, 2019
at 11:30 a.m. – BWWB – Boardroom
REVISED

CALL TO ORDER AND INVOCATION

1. Request Board **to approve** minutes of October 9, 2019 Regular Board of Directors' Meeting.
2. Request Board **to adopt** a resolution approving a revised formal policy for corporate minutes.
3. Request Board **to approve** payments of the following invoices:
 - 3.1 NeSmith, Lowe & NeSmith, LLC
For professional services rendered during November 2019 \$ 500.00
 - 3.2 Ellis, Head, Owens & Justice
For professional services rendered for the period of November 6, 2018 through June 27, 2019 \$ 12,738.90
 - 3.3 Parnell Thompson, LLC
For professional services rendered during November 2019 \$ 93,588.75
4. Request Board **to take bids** on the following, as recommended by the Engineering & Maintenance Committee:
 - 4.1 For Line Locating Services within the service area of the Birmingham Water Works at an estimated out-of-pocket cost to the Board of \$2,524,400.00.
 - 4.2 For the FY2020 Pipeline Replacement Projects at an estimated amount of \$17,633,705.00. [NOTE: A list of the pipeline projects is attached to the agenda.]
 - 4.3 For continuing utilization of a cloud-based vehicle tracking system which utilizes GPS modules installed in company vehicles to monitor, track and report on vehicle usage activity at an estimated out-of-pocket cost to the Board \$66,432.00.
5. Request Board **to award bids** on the following:
 - 5.1 C-Spire, **the lowest responsible and responsive bidder**, for providing continuing vendor maintenance for hardware and software being utilized by Birmingham Water Works Board for voice-related network communications; and **to authorize** the General Manager and the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$50,596.33. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 5.2 Metro Mechanical, **the lowest responsible and responsive bidder**, for the HVAC Maintenance Agreement for services needed at the Main Campus, in addition, to quarterly service for SCADA Cabinets and Informational Technology Cabinets at all plants sites; and **to authorize** the General Manager and the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$54,254.00, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 3

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.3 MAC Uniforms, **the lowest responsible and responsive bidder**, for estimated annual quantities of Uniforms for Board's field employees; and **to authorize** the General Manager and/or the Assistant General Manager to execute the agreement, at estimated out-of-pocket to the Board of \$61,496.25, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.4 Layer 3 Communications, **the lowest responsible and responsive bidder**, for the purchase of new hardware manufactured by Juniper Networks for core networking functions; and **to authorize** the General Manager and the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$79,859.84. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%. The only bidder to respond.]

NO OF BIDS: 1

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.5 ThermoFisher Scientific™ Dionex™, **the lowest responsible and responsive bidder**, one (1) ThermoFisher Scientific™ Dionex™ ICS-6000 HPIC™ System instrument; and **to authorize** the General Manager and the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$109,503.11, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 1

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.6 Consolidated Pipe, **the lowest responsible and responsive bidder**, for estimated quantities of Meter Boxes and Lids 13" x 24" to replenish stock in the Warehouse to be used throughout the distribution system; and **to authorize** the General Manager and/or the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$172,877.50, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 1

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.7 Dunn Construction, **the lowest responsible and responsive bidder**, for Asphalt HOT Mix; and **to authorize** the General Manager and/or the Assistant General Manager to execute a one (1) year agreement, at an estimated out-of-pocket cost to the Board of \$1,263,916.50, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

5.8 Empire Pipe, **the lowest responsible and responsive bidder**, for estimated quantities of FM Static Flow Meters 2" to replenish stock in the Warehouse to be used throughout the distribution system; and **to authorize** the General Manager and/or the Assistant General Manager to execute the agreement, at an estimated out-of-pocket cost to the Board of \$1,392,600.00, as recommended by the Engineering and Maintenance Committee. [NOTE: Historically Underutilized Business (HUB)'s subcontractor participation is 0%.]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

6. Request Board **to award annual chemical bids** to the following:

- 6.1 GEO Specialty Chemicals, **the lowest responsible and responsive bidder**, for Polyaluminum Chloride BI18-05-16(H), at an estimated out-of-pocket cost to the Board of \$8,250.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 6.2 Harcros Chemicals, **the lowest responsible and responsive bidder**, for Orthophosphoric Acid BI19-05-16(H), at an estimated out-of-pocket cost to the Board of \$21,222.50; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 4

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 6.3 Cabot Norit Americas, Inc., **the lowest responsible and responsive bidder**, for Powdered Activated Carbon BI19-05-16(K), at an estimated out-of-pocket cost to the Board of \$43,500.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 5

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 6.4 Allied Universal Corp, **the lowest responsible and responsive bidder**, for Liquid Chlorine BI19-05-16(F), at an estimated out-of-pocket cost to the Board of \$159,465.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 3

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 6.5 Univar USA, Inc., **the lowest responsible and responsive bidder**, for Hydrofluosilicic Acid (Fluoride) BI18-05-16(C), at an estimated out-of-pocket cost to the Board of \$170,050.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

- 6.6 Mississippi Lime, **the lowest responsible and responsive bidder**, for Bulk Hydrated Lime - BI18-05-16(A), at an estimated out-of-pocket cost to the Board of \$388,270.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 3

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

6.7 Allied Universal Corp, **the lowest responsible and responsive bidder**, for Liquid Sodium Hypochlorite BI19-05-16(G), at an estimated out-of-pocket cost to the Board of \$479,400.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 4

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

6.8 Polytec, Inc., **the lowest responsible and responsive bidder**, for Liquid Calcium Hydroxide (Lime) BI19-05-16(E), at an estimated out-of-pocket cost to the Board of \$495,000.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

6.9 GEO Specialty Chemicals, **the lowest responsible and responsive bidder**, for Dry Pounds of Liquid Aluminum Sulfate BI19-05-16(D), at an estimated out-of-pocket cost to the Board of \$815,850.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 4

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

6.10 Kemira Water Solutions, **the lowest responsible and responsive bidder**, for Ferric Sulfate - 19-05-16 (B), at an estimated out-of-pocket cost to the Board for \$2,772,000.00; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract per Bid Specifications and Conditions, as recommended by the Engineering & Maintenance Committee. [NOTE: The Historically Underutilized Business (HUB)'s subcontractor participation is 0% (Direct Manufacturer).]

NO OF BIDS: 2

MINORITY VENDOR BID: No ✓ or Yes

NEW VENDOR: No ✓ or Yes

7. Request Board **to exercise its bid option** to extend a final 12-month contract; and **to authorize** the General Manager and/or the Assistant General Manager to execute a contract with Wade, Sand & Gravel, **the lowest responsible and responsive bidder**, for estimated quantities of Crushed Limestone-Backfill Materials (Annual), per bid awarded on July 13, 2017, at an estimated out-of-pocket cost to the Board of \$562,218.00, as recommended by the Engineering & Maintenance Committee.

8. Request Board **to approve** a scope of services agreement with CE Associates for the design and inspection of a water main replacement project located at 77th Way South; 78th Street South; 80th Street South; 8th Avenue South; 8th Court South; 8th Terrace South; 77th Street South; Sparta Avenue; and Vanderbilt Road located in the Eastlake Community of the City of Birmingham, Alabama; and **to authorize** the General Manager and/or the Assistant General Manager to execute said agreement, at an estimated out-of-pocket cost to the Board for \$140,775.00, as recommended by the Engineering & Maintenance Committee.

9. Request Board **to approve** a resolution to amend the Retirement Plan for Employees of the Water Works Board of the City of Birmingham ("Plan") to provide a one-time payment to Plan Participants and the Spouses of deceased Participants who are receiving monthly Retirement Income or Disability Income with a benefit commencement date on or before December 1, 2019, in a total amount not to exceed \$310,000.00.

10. Request Board **to hear** a presentation from Cahaba River Society, Cahaba Riverkeeper, and Southern Environmental Law Center regarding protection of the Lake Purdy and Cahaba watershed lands owned by the Board.
11. New Business.

**Addendum to Regular Board of Directors' Agenda for December 18, 2019
Agenda Items 4.2.1 through 4.2.21**

FY 2020 Main Replacement Program (Planned Projects)

System Development Department

Competitive Bid

Titusville: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.1	17th Court South / Center Way South	6	17th Ct. S. / Center Way S. / 18th Ct. S. / 1st St. S.	MSA	Wester Filter Plant	1041 (through 2018)	P.02595	Final Review	\$570,000.00	17th Ct. S. (bet. Center St. S. & 1st St. S.)
	Type & Length of Existing Pipe (To Be Replaced): 2,070' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1930]									
North Birmingham: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.2	30th Avenue North / 31st Avenue North / 34th Avenue North	4	30th Ave. N. / 31st Ave. N. / 34th Ave. N.	MSA	Shades Mtn. Filter Plant (normal conditions) / Putnam Filter Plant (special conditions)	583 (through 2018)	P.03462	In Design	\$924,000.00	(1) 34th Ave. N. (bet. 27th St. N. & 28th St. N.) / (2) 30th Ave. N. & 31st Ave. N. (bet. 28th St. N. & 28th Pl. N.)
	Type & Length of Existing Pipe (To Be Replaced): 3,320' of 2" galvanized steel pipe and 1,190' of 4" unlined cast iron pipe [Acquired in 1927 from North Birmingham Water Works Plant]									
Graymont / East Thomas: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.3	4th Court West & Surrounding Area	6	4th Ct. W. / 4th Ave. W. / 3rd St. W. / 4th St. W. / 5th St. W. / 5th Pl. W.	MSA	Wester Filter Plant	798 (through 2018)	P.02820	1st Review	\$915,200.00	None
	Type & Length of Existing Pipe (To Be Replaced): 4,050' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1927]									
West End: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.4	19th Place SW & Surrounding Area	7	19th Pl. SW / 19th St. SW	MSA	Wester Filter Plant	618 (through 2018)	P.01638	1st Review	\$492,800.00	None
	Type & Length of Existing Pipe (To Be Replaced): 2,240' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed in 1926]									
Powderly: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.5	28th Street SW / 29th Street SW	7	28th St. SW / 29th St. SW	MSA	Wester Filter Plant	377 (through 2018)	P.01838	Final Review	\$767,800.00	29th St. SW (bet. Garrison Ave. SW & Steiner Ave. SW)
	Type & Length of Existing Pipe (To Be Replaced): 2,990' of 2" galvanized steel pipe [Installed before 1927] and 520' of 2" cast iron cement lined (CICL) pipe [Installed in 1956]									
Crestwood: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.6	Monarch Avenue / Baker Drive	2	Monarch Ave. / Baker Dr. / Park St.	RMH	Shades Mtn. Filter Plant	553 (through 2018)	P.02665	In Design	\$682,000.00	None
	Type & Length of Existing Pipe (To Be Replaced): 3,140' of 2" cast iron cement lined (CICL) pipe [Installed in 1949]									
West End: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.7	19th Street SW / 18th Way SW	7	18th St. SW. / 18th Way SW	MSA	Wester Filter Plant	550 (through 2018)	P.02685	1st Review	\$237,600.00	None
	Type & Length of Existing Pipe (To Be Replaced): 1,120' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1921]									
Eastlake: City of Birmingham [CONSULTANT PROJECT]										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.8	Eastlake Community Phase 1	2	77th Way S. / 78th St. S. / 77th St. S. / 77th Ct. S. / 8th Ave. S. / 8th Ct. S. / 8th Ter. S. / 80th St. S. / Belmont Ave. / Vanderbilt	EHS	Putnam Filter Plant	894 (through 2018) [average of 2 individual areas]	P.03392	In Design	\$1,008,000.00	None
	Type & Length of Existing Pipe (To Be Replaced): 7,200' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1928] and 960' of 2" cast iron cement lined (CICL) pipe [Installed between 1941 and 1951]									

Addendum to Regular Board of Directors' Agenda for December 18, 2019

Agenda Items 4.2.1 through 4.2.21

Woodlawn / Collegeville: City of Birmingham [CONSULTANT PROJECT]

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.9	Various Sites #4 (3 Independent Areas)	4 & 6	33rd Pl. N. / Pearl Ave. N. / 2nd Ave. S. / 3rd Ave. S. / 3rd Ct. S. / 64th Pl. S. / 16th Pl. SW	PSA / MSA	Putnam Filter Plant / Shades Mtn. Filter Plant	1076 (through 2018) [average of 3 individual areas]	P.03391	In Design	\$959,100.00	None
Type & Length of Existing Pipe (To Be Replaced): 3,420' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1928] and 750' of 2" cast iron cement lined (CICL) pipe [Installed in 1929]										

Central Park: City of Birmingham

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.10	Court R Ensley / 48th Street Ensley	7 & 8	Court R Ens.	MSA	Wester Filter Plant	475 (through 2018)	P.02120	1st Review	\$609,400.00	None
Type & Length of Existing Pipe (To Be Replaced): 2,170' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1926] and 600' of 6" or 8" cast iron cement lined (CICL) pipe [Installed in 1928]										

Woodlawn: City of Birmingham

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.11	Woodlawn Community Phase 3	4	52nd St. N. / 52nd Pl. N. / 53rd St. N. / 55th St. N. / Georgia Rd. / 57th St. N. / 59th St. N. / 2nd Ave. N. / 1st Ct. N.	PSA	Putnam Filter Plant	302 (through 2018)	P.03153	In Design	\$1,645,600.00	None
Type & Length of Existing Pipe (To Be Replaced): 6,340' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1921] and 950' of 6" unlined cast iron pipe [Installed in 1926]										

West End: City of Birmingham

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.12	West End Community Phase 1 (Phase A & Phase B)	7	Fulton Ave. SW / St. Charles Ct. SW / 18th Pl. SW / Princeton Ct. SW / Princeton Ave. SW / Lee Terrace SW / 20th St. SW / Lee Ct. SW / 22nd St. SW	MSA	Wester Filter Plant	462 (through 2018) [average of 2 individual areas]	P.00629	1st Review	\$2,392,000.00	None
Type & Length of Existing Pipe (To Be Replaced): 4,090' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1935] and 6,390' of 2" cast iron cement lined (CICL) pipe [Installed between 1928 and 1941]										

Ensley: City of Birmingham

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.13	33rd Street Ensley / 34th Street Ensley / Avenue Q Ensley	8	33rd St. Ens. / 34th St. Ens. / Ave. Q Ens.	MSA	Wester Filter Plant	307 (through 2018)	P.03226	In Design	\$643,705.00	33rd St. Ens. (bet. Ave. Q Ens. & Ave. S Ens.) / 34th St. Ens. (bet. Ave. Q Ens. & Ave. R Ens.)
Type & Length of Existing Pipe (To Be Replaced): 820' of 2" galvanized steel pipe [Installed in 1927] and 1,440' of 2" cast iron cement lined (CICL) pipe [Installed between 1948 and 1951]										

Collegeville / North Birmingham / Elyton: City of Birmingham [CONSULTANT PROJECT]

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.14	Various Sites #3 (3 Independent Areas)	4 & 6 & 9	McMillon Ave. SW / 22nd Ave. N. / 25th St. N. / 33rd Ct. N. / 33rd Ave. N. / 30th Pl. N. / 30th Way N.	MSA	Shades Mtn. Filter Plant (normal conditions) / Putnam Filter Plant (special conditions)	Area #1 [635] / Area #2 [894] / Area #3 [1481] (through 2018)	P.03108	In Design	\$1,144,000.00	None
Type & Length of Existing Pipe (To Be Replaced): 3,380' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1928] and 2,070' of 2" cast iron cement lined (CICL) pipe [Installed between 1930 and 1940]										

City of Tarrant

No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.15	Tarrant Community Phase 1	Tarrant	Jackson Blvd. / Bell Ave. / 40th Pl. N. / East Lake Blvd. / Sloan Ave. / Virginia St.	PSA	Putnam Filter Plant	1101 (through 2018) [average of 2 individual projects]	None	Under Evaluation	\$1,368,500.00	None
Type & Length of Existing Pipe (To Be Replaced): 6,020' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1929]										

**Addendum to Regular Board of Directors' Agenda for December 18, 2019
Agenda Items 4.2.1 through 4.2.21**

Bush Hills: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):			Estimated Cost:	Paving Upgrade
4.2.16	4th Terrace West & Surrounding Area	8	4th Terr. W. / 4th Ct. W.	MSA	Wester Filter Plant	514 (through 2018)	None	Under Evaluation	\$963,600.00	None
Type & Length of Existing Pipe (To Be Replaced):			4,200' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1927]							

FY 2020 Main Replacement Program - Bid Projects (Estimated Total Cost) \$15,323,305.00

City of Homewood										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.17	Melrose Place / Hanover Road	N/A	Melrose Place / Hanover Road / Manhattan Street	HIS	Shades Mtn Filter Plant	831 (through 2018)	P.02615	Final Review	\$473,800.00	City of Homewood not paving roadway in 2020
Type & Length of Existing Pipe (To Be Replaced):			2,130' of 2" galvanized steel pipe / 2" unlined cast iron pipe [Installed before 1930]							

North Birmingham: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.18	33rd Avenue North / 34th Avenue North	9	33rd Ave. N. / 34th Ave. N. / 25th St. N.	MSA	Wester Filter Plant	166 (through 2018)	P.03289	Final Review	\$635,800.00	34th St. N. (bet. 24th St. N. & 26th St. N.)
Type & Length of Existing Pipe (To Be Replaced):			1,990' of 2" galvanized steel pipe / 2" unlined cast iron pipe and 1,410' of 4" unlined cast iron pipe [Acquired in 1927 from North Birmingham Water Works Plant]							

West End: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.19	Steiner Avenue SW / 12th Street SW	6	Steiner Avenue SW	MSA	Wester Filter Plant	221 (through 2018)	P.02684	Final Review	\$140,800.00	None
Type & Length of Existing Pipe (To Be Replaced):			520' of 2" galvanized steel pipe [Installed in 1925]							

Eastlake: City of Birmingham										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.20	Sparta Avenue South / 74th Street South	2	Sparta Ave. S. / 74th St. S.	EHS	Putnam Filter Plant	505 (through 2018)	P.02975	1st Review	\$360,800.00	None
Type & Length of Existing Pipe (To Be Replaced):			1,680' of 2" galvanized steel pipe [Installed in 1927]							

City of Mountain Brook										
No.	Project Name:	City Council District:	Project Roadways:	Pressure Gradient:	Filter Plant:	Break Rate (Leakage Rate):	Project No.	Status	Estimated Cost:	Paving Upgrade
4.2.21	Fairway Drive	N/A	East Fairway Drive / Greenway Road	MSA	Shades Mtn. Filter Plant	890 (through 2018)	None	Under Evaluation	\$699,200.00	City of Mtn. Brook not paving roadway in 2020
Type & Length of Existing Pipe (To Be Replaced):			240' of 2" galvanized steel pipe [Installed in 1928] and 2,680' of 2" cast iron cement lined (CICL) pipe [Installed between 1935 and 1941]							

FY 2020 Main Replacement Program - In House Projects (Estimated Total Cost) \$2,310,400.00