TFG THE FOSTER GROUP

P.O. BOX 26282 LEAWOOD, KS 66225 TEL: (913) 345-1410 FAX: (913) 345-1640 THE FOSTER GROUP, LLC

BART FOSTER, PRESIDENT

CELL: (913) 530-6240

BFOSTER@FOSTERGROUPLLC.COM

MEMORANDUM

Proposed FY 2019 Water and Sewer Service Charges

January 22, 2018

To: Sue McCormick

From: Bart Foster

Submitted herewith for your review are PRELIMINARY schedules of proposed water and sewer wholesale service charges for each Customer for FY 2019. The schedules also indicate the PRELIMINARY total annual revenue requirement for the City of Detroit Retail Customer Class, and the retail industrial specific charges for the Sewage Disposal System. We note that several elements for the total annual revenue requirement for the Detroit Class are still in development, including the "pass through" amounts for the local retail system and the impact of bad debt expense estimates on the overall revenue requirement.

As we have recently discussed, we have included schedules presenting two alternative Scenarios regarding possible proposed service charges for the Water System. The Scenarios are designed to support the possibility that GLWA may consider phasing in the results of the recent Units of Service ("UoS") Study for non-master metered water Customers. Our inclusion of two potential versions of water service charges is designed to support ongoing discussion regarding this possibility, while notifying Customers of the range of possible impact on their individual charges.

These proposed charges culminate a rigorous review of FY 2019 financial, operating, and customer use information. Our preliminary analyses and work products prepared to support these recommendations is exhaustively disclosed at GLWA.org, and we encourage interested stakeholders to review that material. We are preparing additional material to support formal presentation of these PRELIMINARY proposed service charges to the Board of Directors at their meeting this Wednesday, January 24, and to Customers at the "Charges Rollout" meeting this Thursday, January 25. We are also preparing a comprehensive memorandum report setting forth specific calculations regarding cost of service allocation and service charges. That report should be available by the end of the month.

We are prepared to discuss this matter at your convenience.

Preliminary Proposed FY 2019 Wholesale Water Schedule of Charges * and Total Wholesale Revenue Requirement for the Detroit Customer Class

		Scenario 1 Proposed Service Charges		Scenario 2 Proposed Service Charges		
Line		<u>Fixed Mo</u> <u>Commodity</u> <u>Fixed Mo</u>		Commodity		
No.	Customer	\$/mo	\$/Mcf	\$/mo	\$/Mcf	
1	Allen Park	114,600	6.93	116 200	7.04	
		The state of the s		116,300		
2	Almont Village	11,400	10.22	11,500	10.29	
3	Ash Township	39,000	7.67	39,500	7.76	
4	Belleville	14,700	9.54	14,900	9.67	
5	Berlin Township	37,700	10.62	38,200	10.76	
6	Brownstown Township	180,300	10.36	183,300	10.53	
7	Bruce Twp	9,200	53.90	9,400	55.15	
8	Canton Township	500,200	11.24	506,100	11.37	
9	Center Line	22,300	5.67	22,700	5.76	
10	Chesterfield Township	200,200	9.66	203,100	9.81	
11	Clinton Township	406,100	7.97	412,300	8.09	
12	Commerce Township	184,700	14.29	187,200	14.48	
13	Dearborn	608,100	6.78	552,700	6.16	
14	Dearborn Heights	177,300	6.89	180,000	6.99	
15	Eastpointe	75,700	5.34	76,900	5.42	
16	Ecorse	73,100	4.06	73,800	4.10	
17	Farmington	50,700	8.39	51,200	8.49	
18	Farmington Hills	461,000	9.74	466,500	9.85	
19	Ferndale	49,200	5.75	49,900	5.83	
20	Flat Rock	63,600	7.48	64,300	7.56	
21	Flint	562,600	8.27	558,000	8.20	
22	Fraser	59,100	7.61	60,100	7.74	
23	Garden City	84,500	7.59	85,700	7.71	
24	Gibraltar	24,600	11.17	25,000	11.34	
25	Grosse Ile Township	66,200	12.81	67,300	13.04	
26	Grosse Pt. Park	71,700	9.54	73,100	9.73	
27	Grosse Pt. Shores	31,200	12.34	31,800	12.59	
28	Grosse Pt. Woods	74,600	9.35	75,900	9.50	
29	Hamtramck	33,800	4.65	34,300	4.72	
30	Harper Woods	44,300	6.22	45,000	6.32	
31	Harrison Township	74,600	6.56	75,500	6.63	
32	Hazel Park	35,500	5.47	36,000	5.56	
33				69,800	3.69	
33 34	Highland Park	76,500	4.05			
	Huron Township	73,900	9.51	74,900	9.64	
35	Imlay City	57,500	11.96	57,800	12.00	
36	Imlay Twp	700	40.71	700	41.43	
37	Inkster	94,600	8.21	95,900	8.33	
38	Keego Harbor	15,300	11.88	15,500	12.04	
39	Lapeer	72,500	10.50	72,500	10.51	
40	Lenox Township	15,000	7.77	15,100	7.84	
41	Lincoln Park	113,400	6.28	115,200	6.38	
42	Livonia	700,700	11.17	712,300	11.36	
43	Macomb Township	555,100	13.65	565,200	13.90	
44	Madison Heights	102,200	6.03	103,700	6.11	
45	Mayfield Twp	2,200	31.85	2,200	32.22	
46	Melvindale	34,000	6.16	34,500	6.26	
47	New Haven, Village of	18,600	8.89	18,800	9.02	
48	NOCWA	1,179,500	10.32	1,193,600	10.44	
	τ F G					

Preliminary Proposed FY 2019 Wholesale Water Schedule of Charges * and Total Wholesale Revenue Requirement for the Detroit Customer Class

		Scenario 1 Proposed Service Charges		Scenario 2 Proposed Service Charges	
Line	,	Fixed Mo	Commodity	Fixed Mo	Commodity
No.	Customer	\$/mo	\$/Mcf	\$/mo	\$/Mcf
49	Northville	38,500	9.56	38,900	9.66
50	Northville Township	280,600	16.11	285,200	16.38
51	Novi	457,900	12.43	463,100	12.57
52	Oak Park	68,000	5.61	68,800	5.68
53	Oakland Co. Drain Comm.	3,300	3.17	3,300	3.18
54	Plymouth	52,500	9.91	53,200	10.04
55	Plymouth Township	222,100	10.29	224,500	10.40
56	Redford Township	156,400	7.19	158,700	7.30
57	River Rouge	34,800	6.11	35,400	6.20
58	Riverview	42,700	7.89	43,400	8.01
59	Rockwood	15,500	12.04	15,700	12.23
60	Romeo	12,700	17.88	12,900	18.18
61	Romulus	192,200	7.72	194,500	7.82
62	Roseville	129,000	5.43	130,900	5.51
63	Royal Oak Township	11,400	7.55	11,600	7.68
64	SOCWA	1,171,500	7.26	1,186,300	7.35
65	Shelby Township	692,400	13.88	705,600	14.15
66	South Rockwood	5,400	8.43	5,400	8.53
67	Southgate	111,900	7.37	113,600	7.48
68	St. Clair County-Burtchville Twp	15,500	16.36	15,700	16.57
69	St. Clair County-Greenwood	21,400	13.36	21,500	13.45
70	St. Clair Shores	147,900	5.83	150,000	5.92
71	Sterling Heights	735,300	9.69	748,600	9.86
72	Sumpter Township	33,500	9.41	33,900	9.52
73	Sylvan Lake	11,800	14.06	12,000	14.27
74	Taylor	227,700	6.45	230,700	6.54
75	Trenton	109,800	9.93	111,600	10.09
76	Troy	675,600	11.43	687,300	11.63
77	Utica	27,900	8.92	28,300	9.06
78	Van Buren Township	164,400	10.45	166,400	10.58
79	Walled Lake	46,300	11.95	46,900	12.10
80	Warren	517,000	6.44	525,000	6.54
81	Washington Township	110,300	11.79	111,800	11.94
82	Wayne	144,000	12.56	146,200	12.76
83	West Bloomfield Township	528,500	15.97	537,800	16.25
84	Westland	310,400	7.77	314,600	7.87
85	Wixom	124,300	13.17	125,800	13.33
86	Woodhaven	80,700	10.61	82,000	10.79
87	Ypsilanti Comm Util Auth	514,100	8.21	517,200	8.26
. II <i>71</i> 1	1 1 211 66 6 11	•		•	

^{*} Wholesale charges will be effective July 1, 2018

Allocated Detroit Annual Wholesale Revenue Req't (b)	\$43,985,400	\$41,026,100
less: Ownership Benefit per Lease	(\$20,700,000)	<u>(\$20,700,000)</u>
Net Detroit Annual Wholesale Revenue Req't (b)	\$23,285,400	\$20,326,100

⁽a) Net fixed monthly charge will include \$572,800 credit for KWA debt service

⁽b) Reflects wholesale costs only - effective July 1, 2018

Preliminary Proposed FY 2019 Sewage Disposal System Schedule of Wholesale Monthly Charges * and Total Revenue Requirement for the Detroit Customer Class

		Fixed
		Monthly
		Charge
		\$/mo
	Suburban Wholesale	
1	OMID	6,524,000
2	Rouge Valley	4,523,700
3	Oakland GWK	3,784,000
4	Evergreen Farmington	2,909,300
5	NE Wayne Co	2,075,900
6	Dearborn	1,630,200
7	Grosse Pointe Farms	229,500
8	Grosse Pointe Park	151,600
9	Melvindale	128,100
10	Farmington	96,200
11	Ceenter Line	86,400
12	Allen Park	71,300
13	Highland Park	472,600
14	Hamtramck	333,600
15	Grosse Pointe	74,800
16	Harper Woods	18,400
17	Redford Township	21,900
18	Wayne County #3	4,100
	* Wholesale charges will be effective July 1, 2018	
		Annual
		Revenue
		Requirement
		\$
	Allocated Detroit Annual Revenue Requirement	
19	Wholesale Revenue Requirements (a)	183,007,600
20	<u>Indirect Retail</u> Revenue Requirements (b)	TBD
21	<u>Direct Retail</u> Revenue Requirements (c)	TBD
22	Total	TBD

Preliminary Proposed FY 2019 Sewage Disposal System Service Charge Schedule Industrial Specific Retail Sewer Charges

Industrial Waste Control Charges		Pollutant Surcharges		
Meter Size - inches	Charge	Pollutant	Charge	
	\$/mo		\$/lb	
5/8	3.59	BIOCHEMICAL OXYGEN DEMAND (I	3OD)	
3/4	5.39	for concentrations > 275 mg/l	0.488	
1	8.98	5		
1-1/2	19.75			
2	28.72	TOTAL SUSPENDED SOLIDS (TSS)		
3	52.06	for concentrations > 350 mg/l	0.495	
4	71.80	<u> </u>		
6	107.70			
8	179.50	PHOSPHORUS (P)		
10	251.30	for concentrations > 12 mg/l	7.300	
12	287.20			
14	359.00			
16	430.80	FATS, OIL AND GREASE (FOG)		
18	502.60	for concentrations > 100 mg/l	0.470	
20	574.40			
24	646.20			
30	718.00	SEPTAGE DISPOSAL FEE		
36	789.80	Per 500 gallons of disposal	47.00	
48	861.60			