

2018 MEMORANDUM OF UNDERSTANDING

THIS 2018 MEMORANDUM OF UNDERSTANDING ("2018 MOU") entered into on June 27th, 2018, by and between the DETROIT WATER AND SEWERAGE DEPARTMENT ("DWSD"), a department of the City of Detroit (the "City"), and the GREAT LAKES WATER AUTHORITY ("GLWA"), a municipal authority and public body corporate organized and existing under and pursuant to the provisions of Act No. 233, Public Acts of Michigan, 1955, as amended ("Act 233").

WITNESSETH:

WHEREAS, the City owns a Water Supply System (the "Water System") and a Sewage Disposal System (the "Sewer System"); and

WHEREAS, the City and GLWA have entered into and subsequently amended the schedules to (i) a Regional Water Supply System Lease, dated June 12, 2015 (as Schedules have been amended, the "Water Lease"), which provides for the lease by the City to GLWA of the regional assets of the Water System (the "Regional Water System") for an initial term of forty (40) years, and (ii) a Regional Sewage Disposal System Lease, dated June 12, 2015 (as Schedules have been amended, the "Sewer Lease" and together with the Water Lease, the "Leases"), which provides for the lease by the City to GLWA of the regional assets of the Sewer System (the "Regional Sewer System" and together with the Regional Water System, the "Regional Systems") for an initial term of forty (40) years; and

WHEREAS, pursuant to the Leases, GLWA is operating the Regional Systems, and the City, acting through DWSD, continues to operate the remaining assets of the Water System (the "Local Water System") and the Sewer System (the "Local Sewer System" and together with the Local Water System, the "Local Systems") that provide service directly to retail customers of the City (the "Detroit Local Water Facilities" and the "Detroit Local Sewer Facilities," respectively, and collectively, the "Detroit Local Facilities"); and

WHEREAS, the City and GLWA have also entered into a Water and Sewer Services Agreement, dated June 12, 2015 (the "WSSA"), relating to the provision of water service to those individual customers located within and outside the City that receive water service directly from the Detroit Local Water Facilities (the "Retail Water Customers") and sewer service to those individual customers located within and outside the City that receive sewer service directly from the Detroit Local Sewer Facilities (the "Retail Sewer Customers" and together with the Retail Water Customers, the "Retail Customers"); and

WHEREAS, GLWA approved and adopted Master Bond Ordinance No. 2015-01 on October 7, 2015, which it subsequently amended on December 9, 2015, January 27, 2016 and August 10, 2016 (as amended, the "Master Water Bond Ordinance"), which authorized (i) together with the Water Lease, the assumption by GLWA of bonds previously issued by the City to finance or refinance improvements to the Water System (the "DWSD Water Bonds") that are secured by the Net Revenues of the Water System and (ii) the issuance of additional bonds by

GLWA to finance or refinance improvements to the Water System that are secured on a parity basis with the DWSD Water Bonds; and

WHEREAS, GLWA approved and adopted Master Bond Ordinance No. 2015-02 on October 7, 2015, which it subsequently amended on December 9, 2015, January 27, 2016 and August 10, 2016 (as amended, the "Master Sewer Bond Ordinance" and together with the Master Water Bond Ordinance, the "Master Bond Ordinances"), which authorized (i) together with the Sewer Lease, the assumption by GLWA of bonds previously issued by the City to finance or refinance improvements to the Sewer System (the "DWSD Sewer Bonds" and together with the DWSD Water Bonds, the "DWSD Bonds") that are secured by the Net Revenues of the Sewer System and (ii) the issuance of additional bonds by GLWA to finance or refinance improvements to the Sewer System that are secured on a parity basis with the DWSD Sewer Bonds; and

WHEREAS, the Leases, the WSSA and the Master Bond Ordinances all became effective on January 1, 2016 (the "Effective Date"); and

WHEREAS, in April, 2018, DWSD and GLWA approved and executed a Term Sheet intended to be for discussion purposes only (the "Term Sheet"), the intent of which was to provide clarification of specific sections of the Leases, the WSSA and the Master Bond Ordinances, to make adjustments contemplated by the Leases and the WSSA, and to address the liquidation of certain liabilities set forth in the Leases; and

WHEREAS, while the Term Sheet was intended to be for discussion purposes only and not intended to impose any legal obligation on any party, it set forth the principal terms to be included in this 2018 MOU, which is to be binding on DWSD and GLWA; and

WHEREAS, as contemplated in the Term Sheet, the parties desire to enter into this 2018 MOU to provide for clarification of specific sections of the Leases, the WSSA and the Master Bond Ordinances, to make adjustments contemplated by or pursuant to the Leases, the WSSA and the Master Bond Ordinances, and to address the liquidation of certain liabilities set forth in the Leases, all as hereinafter set forth.

In consideration for the mutual agreements described herein, DWSD and GLWA agree to the following clarifications and adjustments contemplated by or pursuant to the Leases, the WSSA and the Master Bond Ordinances as described below:

1. **Definitions.** Except as otherwise provided in this 2018 MOU, including the preambles hereto, all terms which are defined in the Leases shall all have the same meanings, respectively, in this 2018 MOU as such terms are given in the Leases.
2. **Adjustments to the Cash Held for the Benefit of DWSD (Book Entry).** The following book entry credits and charges, reflecting a net amount of \$74,201,200, are to the Cash Held for the Benefit of DWSD as established on GLWA's General Ledger Account, effective July 1, 2017 (**See Schedule 1 – Net Book Entry Credits FY 2018**):
 - a. **Consideration for Assumption of Pre-Effective Date Liabilities:** GLWA shall credit a net amount of \$69,434,300.

- i. **Litigation Liabilities:** GLWA shall credit \$78,434,300 for the assumption by DWSD of the Pre-Effective Date Liabilities, as outlined in Section 15, reduced by \$9,000,000 for the reimbursement of certain litigation liabilities previously paid by GLWA, for a net deposit of \$69,434,300.

b. **Budget Stabilization Requirement:**

- i. The Budget Stabilization Requirement is reduced to \$7,500,000 effective July 1, 2017. To reflect this adjustment, GLWA shall apply \$3,433,000 as of July 1, 2017 as a credit.
 - ii. The revised Budget Stabilization Requirement is approximately two (2%) percent of DWSD's Fiscal Year 2019 budgeted revenues. The amount of \$7,500,000 will remain in effect for the life of the Leases, unless further adjusted pursuant to the WSSA. If GLWA draws on the Budget Stabilization Fund pursuant to the terms of the WSSA, then DWSD shall restore the Budget Stabilization Fund as provided in the WSSA.
- c. **Final Year of Prior Sewer Lookback Adjustment Agreement:** GLWA shall credit \$1,333,900, reflecting the portion of the final annual \$20,000,000 sewer lookback adjustment charged during Fiscal Year 2016, which was attributable to a deposit to DWSD's Sewer System Improvement and Extension ("I&E") Account of the Sewer System I&E Fund.

3. **Non-cash Related Book Entries.** The following non-cash related book entries shall be effective July 1, 2017:

- a. **Lease Pre-payment:** The initial term of the Leases began on the Effective Date and ends on December 31, 2055. GLWA's last monthly payment shall be June 1, 2055 and GLWA's \$25,000,000 Lease payment on January 1, 2016 shall be applied to the period of July 1, 2055 through December 31, 2055.
- b. **Obligation Payable by DWSD to GLWA for Direct Allocable Share of pre-Effective Date Bonded Indebtedness for the Local Systems:**
 - i. DWSD's agreed upon allocable share of pre-Effective Date bonded indebtedness at June 30, 2017 related to the Local Systems is \$437,280,200 for the Local Water System and \$358,090,600 for the Local Sewer System. This allocation was determined based on an agreed upon share of debt service in Fiscal Year 2016: \$455,000,000 for the Local Water System and \$370,000,000 for the Local Sewer System and the amounts included in the revenue requirements allocated to the Retail Customers related to the debt service for Fiscal Year 2016 and Fiscal Year 2017.
 - ii. **Amortization Schedule:** The amortization schedule of DWSD's obligations payable related to pre-Effective Date bonded indebtedness for the Local Systems shall be as shown on **Schedule 3**. This amortization schedule establishes fixed payment terms for these obligations. The agreed upon interest rate shall be 4.76% for the Local Water System and 4.33% for the Local Sewer System. This amortization schedule shall not be altered to reflect

any refunding of pre-Effective Date bonded indebtedness after calendar year 2017.

- iii. Debt service on bonds issued Post-Effective Date, other than bonds issued after calendar year 2017 to refund pre-Effective Date bonded indebtedness, shall be allocated based on the use of the proceeds.
- iv. **Fiscal Year 2018 Revenue Requirement:** Consistent with implementation of the amortization schedule, GLWA shall reduce the DWSD Fiscal Year 2018 Revenue Requirement by \$2,177,500. **(See Schedule 3)**

4. DWSD Retail Customers.

a. Pre-Effective Date Receivables:

- i. As of July 1, 2017, GLWA shall transfer to DWSD all of GLWA's interests in remaining pre-Effective Date retail accounts receivable and DWSD assumes all liability associated with repayment of delinquent tax advances. **(See Schedule 2)** Net balances of \$8,816,149 shall be written off from GLWA's books as of July 1, 2017.
- ii. In addition, GLWA shall transfer the aggregate amount of \$16,293,664 related to the cumulative Wayne County Revolving Fund Loan balance as of June 30, 2017, collected after July 1, 2017, to (i) DWSD's Sewer System Operation and Maintenance ("O&M") Account in the Sewer System O&M Fund in the amount of \$15,044,972 and the related obligations and (ii) DWSD's Water System O&M Account in the Water System O&M Fund in the amount of \$1,248,692 and the related obligations. **(See Schedule 2)**
- iii. Other collection activity related to these retail accounts receivable, since July 1, 2017, shall be deposited to the Receiving Fund held under the related Master Bond Ordinance, distributed in accordance with terms of the related Master Bond Ordinance and credited to the Cash Held for the Benefit of DWSD Account.
- iv. DWSD and GLWA shall provide notice to the City and the County of Wayne, as attached hereto **(Schedule 6)** that DWSD shall manage all aspects of delinquent account collections and related obligations effective immediately.

- b. **Landlord/Tenant Deposits and Affordability Accounts:** GLWA shall transfer to DWSD all of GLWA's interests, if any, in the balances in the Landlord/Tenant Deposits and Affordability Accounts held in a fiduciary capacity and the related obligations. **(See Schedule 2)**

5. Cash Transfer to DWSD I&E Account. Proceeds of DWSD Bonds held in the Construction Fund for such DWSD Bonds and available on the Effective Date ("Construction Bond proceeds") are allocated consistent with the DWSD agreed upon allocable share of bond debt service related to the Local Systems. In recognition, GLWA shall transfer \$15,174,200 from GLWA's Sewer System I&E Account to DWSD's Sewer System I&E Account. **(See Schedule 5)**

6. Cash Transfer to DWSD O&M Account.

- a. **Due to/Due from Other City Liabilities:** GLWA shall transfer \$18,622,473 to DWSD, in full satisfaction of GLWA's remaining short and long-term worker's compensation, unemployment, compensated absences employment and other liabilities included in Schedule 4. Upon execution of this 2018 MOU, DWSD will notify the City Office of the Chief Financial Officer that DWSD has become solely responsible for these liabilities. **(See Schedule 4).** Net balances of \$18,622,473 shall be written off from GLWA's books as of July 1, 2017. DWSD shall record a like amount as of July 1, 2017.

7. Extraordinary Repair & Replacement ("ER&R") Reserve Fund Contributions and Clarifications.

- a. Except for the required restoration of DWSD withdrawals, GLWA shall fund future deposits to the ER&R Reserve Fund from Regional System Revenues as needed to satisfy the ER&R Maximum Requirement, as defined in the related Master Bond Ordinance and based on the sum of the Regional Systems' and Local Systems' Fiscal Year O&M Budgets.
- b. This provision does not require any cash or non-cash adjustments between the parties.
- c. The ER&R Reserve Fund shall be available to both GLWA and DWSD as provided in the Master Bond Ordinances. To the extent there may be an investment loss if funds are drawn by DWSD, DWSD's Chief Financial Officer shall be advised before any loss is incurred. The entity that uses the funds shall fund investment losses incurred, if any.
- d. DWSD draws not repaid as contemplated by the Master Bond Ordinances shall be repaid in full, in installments, over a period up to the next three fiscal years, plus a surcharge calculated as provided below, as part of the revenue requirement allocated to and payable by DWSD. The surcharge on the portion of the draw which remains unpaid at June 30 of the Fiscal Year in which the draw was made shall be based on the three-year U.S. Treasury Note Rate, as published in the Wall Street Journal, plus 150 basis points. A sample calculation of the surcharge factor is shown below:

March 1, 2018 U.S. 3 Year Treasury Note Rate:	2.404%
Plus 150 basis points:	1.500%
Surcharge Factor:	3.904%

- i. Until DWSD's ER&R Reserve Fund withdrawal is repaid, and unless DWSD has other resources available for that purpose or otherwise agreed to by GLWA, DWSD shall apply any available funds in the related DWSD I&E Account for that purpose.

- ii. GLWA Board approval shall be required for repayment terms in excess of three (3) years.
- iii. The quarterly Reconciliation Committee meetings shall include a review of the progress in DWSD repaying any ER&R Reserve Fund withdrawal.

8. Sewer Bad Debt Lookback.

- a. The final sewer bad debt lookback adjustment, as calculated as of June 30, 2017, shall reduce DWSD's Fiscal Year 2019 revenue requirement by \$6,527,200. This adjustment is different than the Prior Sewer Lookback Adjustment Agreement that is reflected in Section 2(c).
- b. The parties agree that the Budget Stabilization Fund sufficiently accomplishes the intent of mitigating collection risk, obviating the need for any further sewer bad debt lookback.

9. Reconciliation Committee. The Reconciliation Committee (defined by the WSSA as a DWSD Board Member and GLWA Board Member or their designees) with GLWA's Chief Executive Officer, DWSD's Director, and their respective Chief Financial Officers and General Counsels shall meet at a minimum quarterly (January, April, July, and October). GLWA's designated Board Member liaison shall not be a Mayoral appointee and shall not be selected by the Mayoral appointees to the GLWA Board. The purpose of the quarterly meetings is to expand the level of communication between the two entities related to financial, operational, legal, capital planning, and other matters and opportunities for improved management and coordination of both entities and foster a positive partnership in the water services sector. The results of those meetings shall be reported back to the respective Boards by the Board liaison.

10. Financial Reporting on the Local System. Beginning June 1, 2018, DWSD shall transmit to GLWA:

- a. Quarterly Budget to Actual Report for Revenues and Expenses for O&M, I&E, and Construction Bond activities.
- b. Quarterly cash flow forecast for the subsequent two-year time period for O&M, I&E, and Construction Bond activities.
- c. Quarterly reconciliation of the Cash Held by GLWA, as recorded by DWSD, with the Cash Held for the Benefit of DWSD, as provided by GLWA.
- d. Monthly cash receipts presented on a year-over-year basis with variance analysis.
- e. Monthly accounts receivable roll-forward by system, which provides beginning balance, revenues, expenses, write-offs, other adjustments, and reconciling items.
- f. Daily cash receipt reconciliation.
- g. Any other reports as requested by the Reconciliation Committee.

11. Standard Operating Procedures ("SOPs"). DWSD and GLWA shall jointly develop SOPs for working through and documenting operational interactions. To the extent that SOPs cannot be agreed upon by the DWSD and GLWA team members after review with

the GLWA Chief Executive Officer and the DWSD Director, the issue may be brought forward to the Reconciliation Committee.

12. Budget Shortfall.

- a. If DWSD experiences a cumulative negative variance of more than two percent (2%) of the total budget for either Local System (a "Budget Shortfall") from its budget adopted pursuant to Section 5.3 of the WSSA based on DWSD's quarterly reports to GLWA, DWSD, as the agent of GLWA, shall, within thirty (30) days thereafter, schedule a meeting of the Reconciliation Committee to discuss the magnitude and reasons for the shortfall and possible approaches to address the shortfall. Within sixty (60) days after the Reconciliation Committee meets, DWSD, as agent, shall develop a plan to cure the Budget Shortfall and the time period within which the shortfall will be cured, taking into account the reasons for and magnitude of the shortfall. If Revenues, including, but not limited to, adjustments to Local O&M expenditures and the use of subsequent positive receipts, are not available to cure the Budget Shortfall within the same Fiscal Year, DWSD shall reallocate available funds in the related DWSD I&E Account or reallocate any unencumbered Lease Payment to eligible debt service to satisfy the Budget Shortfall.
- b. Budget Shortfalls not cured by the end of the Fiscal Year following the year in which they arise shall be repaid in full, in installments, over a period not to exceed the next three fiscal years, plus a surcharge calculated as provided below, as part of the Revenue Requirement payable by DWSD. The surcharge factor on the portion of the Budget Shortfall which remains unpaid at June 30 of the Fiscal Year following the fiscal year in which the Budget Shortfall arises shall be based on the three-year U.S. Treasury Note Rate, as published in the Wall Street Journal, plus 150 basis points. A sample calculation of the surcharge factor is shown below:

March 1, 2018 U.S. 3 Year Treasury Note Rate:	2.404%
Plus 150 basis points:	1.500%
Surcharge Factor:	3.904%

- i. Until the Budget Shortfall is repaid, and unless DWSD has other resources available for that purpose or otherwise agreed to by GLWA, DWSD shall apply any available funds in the related DWSD I&E Account for that purpose.
- ii. GLWA Board approval shall be required for repayment terms in excess of three (3) years.
- iii. The quarterly Reconciliation Committee meetings shall include a review of the progress in eliminating the Budget Shortfall.

13. 2018 MOU Implementation. Any write-offs recognized in GLWA's Financial Statements related to implementing this 2018 MOU shall not directly affect current or future revenue requirements for customer specific cost pools.

14. Water and Sewer Charges to GLWA. GLWA desires a meeting to begin the discussion on the clarification of water supply and sewage disposal services provided by DWSD to the Regional System within thirty (30) days after the execution of this 2018 MOU. If this issue is not resolved within ninety (90) days after the meeting, the matter will be brought to the Reconciliation Committee for potential resolution prior to invoking Article 7 - Dispute Resolution of the WSSA.

15. Pre-Effective Date Liabilities.

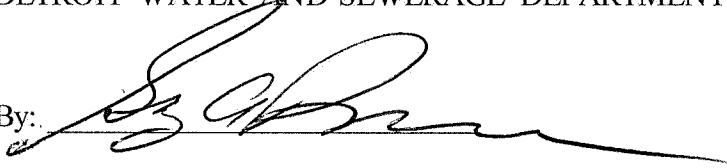
- a. DWSD assumes liability for third party litigation, arbitrations and claims arising out of events and/or actions occurring on or before January 1, 2016 and involving the following types of matters (collectively, the "Pre-Effective Date Liabilities"):
 - i. Local System ratemaking, collections and enforcement.
 - ii. Sewer back-ups in the City of Detroit, unless there is admissible evidence of the failure of Leased Sewer Facility or Facilities.
 - iii. Personal injury matters, including:
 - 1. Trip and falls within the City of Detroit;
 - 2. Automobile accidents within the City of Detroit; and
 - 3. Building defects, except for defects occurring in Leased Water and Sewer Facilities.
 - iv. Contract matters related to the Local Systems, including:
 - 1. Construction Services, including Design-Build;
 - 2. Professional and/or Consultant Services;
 - 3. Engineering Services;
 - 4. Personal Services;
 - 5. Legal Services;
 - 6. Financial Services; and
 - 7. Expert Witness Services.
 - v. Environmental matters related to the Local Systems.
 - vi. City of Detroit Bankruptcy matters, excluding BC Notes and pension liabilities as described in Section 4.3 of the Leases.
 - vii. Freedom of Information Act and Open Meetings Act matters related to the Local System for which DWSD maintains the records.
 - viii. In addition to the matters addressed in Section 6 of this 2018 MOU, employment matters for DWSD employees that were not actually offered employment by GLWA, including:
 - 1. Labor/Union and
 - 2. Discrimination and harassment.
 - ix. Any other Pre-Effective Date Liabilities relating to the Local Systems only.

- b. For all Pre-Effective Date Liabilities, DWSD agrees to:
 - i. Lead in the defense of the Pre-Effective Date Liabilities.
 - ii. Assume all financial or legal exposure for the Pre-Effective Date Liabilities, including any and all unpaid amounts to fund ratemaking litigation settlements.
- c. GLWA agrees that the arbitration demands approved by GLWA's Board related to Pre-Effective Date Liabilities involving third parties shall be withdrawn.
- d. GLWA agrees to cooperate in DWSD's defense of any Pre-Effective Date Liabilities.
- e. GLWA shall have no further liability as to the liabilities transferred to and assumed by DWSD under the 2018 MOU, specifically those assigned under Sections 2a., Section 4 (Schedule 2), Section 6 (Schedule 4) and Sections 15 a. and b.

[Signature Page Follows on Next Page]

IN WITNESS WHEREOF, the DETROIT WATER AND SEWERAGE DEPARTMENT and the GREAT LAKES WATER AUTHORITY have executed this 2018 MOU by their duly authorized officers as of the day and year first above written.

DETROIT WATER AND SEWERAGE DEPARTMENT

By: 

Its: Director

GREAT LAKES WATER AUTHORITY

By: 

Its: Chief Executive Officer

Schedule 1 - Schedule of Adjustments

Settlement Activity	
Net Book Entry Credits FY 2018	
Budget Stabilization Fund Formula Adjustment (Section 2(b))	\$3,433,000
Sewer Lookback Adjustment (Section 2(c))	\$1,333,900
Consideration for Assumption of Pre-Effective Date Liabilities already paid by GLWA (net of \$9 million charge for certain litigation liabilities; Sections 2(a) & 2(d))	\$69,434,300
Total Net Book Entry Credits for Cash Held for the Benefit of DWSD	\$74,201,200
Cash Transfers FY 2018	
Wayne County Revolving Fund Proceeds (per Schedule 2)	\$16,293,664
Construction Bond Cash Allocation (paid from GLWA I&E Funds; per Schedule 5)	\$15,174,200
Due To/Due From Other City Liabilities (per Schedule 4)	\$18,622,472.92
Total Cash Transfers	\$50,090,336.92

Schedule 2 – Accounts Receivable and County Revolving Loan Fund

Net Accounts Receivable (AR) Balances, Written-off by GLWA as of June 30, 2017; Balances and Subsequent Activity Transferred to DWSD

Water System

AR - City of Detroit Customers	\$ 12,758,181
AR - City of Detroit Customers - Allowance for Doubtful Accounts	(12,018,547)
AR - City of Detroit General Fund Tax Collections	1,088,215
AR - City of Detroit Other Fund Tax Collections	130,823
AR - City of Detroit Tax Roll Lien – Net	429,704
Cash - Affordability Program	977,278
DWSD Landlord-Tenant Deposits	(1,977,648)
Deferred Contributions Affordability	(1,042,265)
Wayne County Revolving Loan Fund	(1,040,446)
Subtotal - Net Accounts Receivable Water System, June 30, 2017	(694,704)

Sewer System

AR - City of Detroit Customers Allowance for Doubtful Accounts	32,123,672
Allowance for Doubtful AR-DWSD-12.31.15	(30,675,123)
AR - City of Detroit General Fund Tax Collections	13,511,863
AR - City of Detroit Other Fund Tax Collections	2,120,549
AR - City of Detroit Tax Roll Lien – Net	5,392,405
Wayne County Revolving Loan Fund	(12,962,512)
Subtotal - Net Accounts Receivable Sewer System, June 30, 2017	9,510,854

Net Accounts Receivable (AR) Balances as of June 30, 2017 transferred to DWSD

\$ 8,816,149

Note: Subsequent to July 1, 2017, \$16,293,664 was received from Wayne County as a Revolving Fund loan. That same amount of cash will be transferred to the related Detroit Local System Operations and Maintenance Account to be accounted for as any other liability. All other activity is accounted for consistently with other Local System receipts.

**Schedule 3 - Obligation Payable by DWSD to GLWA
(for direct allocable share of pre-Effective Date bonded indebtedness)**

See attached Amortization Schedules.

Amortization Schedule for Obligation Payable

Local System Obligation Payable @ 7/1/15		455,000,000	370,000,000
Weighted Average Interest Rate on the Effective Date		5.15%	4.71%
Weighted Avg Interest Rate on the Pre-Bifurcation Bonds *		5.01% * After considering effects of 2016 Refunding	4.58%
Interest Rate offset to reflect Potential Future Refunding Savings		0.25%	0.25%
Interest Rate Starting in FY 2018		4.76%	4.33%
Initial Year Budget Local System D/S - Full Year		31,219,800	22,567,400
Balance @ 6/30/18		425,333,500	346,828,300
Remaining Term		20	20
Annual Payment		33,438,800	26,271,500

FY	Preliminary Amortization - Water			Preliminary Amortization - Sewer		
	Principal	Interest Rate	Total	Principal	Interest Rate	Total
2016	7,787,300	5.15%	31,219,800	5,140,400	4.71%	22,567,400
2017	9,932,500	4.76%	31,219,800	6,769,000	4.33%	22,567,400
2018	11,946,700	4.76%	32,761,200	11,263,300	4.33%	26,767,600
2019	13,192,900	4.76%	33,438,800	11,253,800	4.33%	26,271,500
2020	13,820,900	4.76%	33,438,800	11,741,100	4.33%	26,271,500
2021	14,478,800	4.76%	33,438,800	12,249,500	4.33%	26,271,500
2022	15,168,000	4.76%	33,438,800	12,779,900	4.33%	26,271,500
2023	15,890,000	4.76%	33,438,800	13,333,300	4.33%	26,271,500
2024	16,646,300	4.76%	33,438,800	13,910,600	4.33%	26,271,500
2025	17,438,700	4.76%	33,438,800	14,512,900	4.33%	26,271,500
2026	18,268,800	4.76%	33,438,800	15,141,400	4.33%	26,271,500
2027	19,138,400	4.76%	33,438,800	15,797,000	4.33%	26,271,500
2028	20,049,400	4.76%	33,438,800	16,481,000	4.33%	26,271,500
2029	21,003,700	4.76%	33,438,800	17,194,600	4.33%	26,271,500
2030	22,003,500	4.76%	33,438,800	17,939,100	4.33%	26,271,500
2031	23,050,900	4.76%	33,438,800	18,715,900	4.33%	26,271,500
2032	24,148,100	4.76%	33,438,800	19,526,300	4.33%	26,271,500
2033	25,297,500	4.76%	33,438,800	20,371,800	4.33%	26,271,500
2034	26,501,700	4.76%	33,438,800	21,253,900	4.33%	26,271,500
2035	27,763,200	4.76%	33,438,800	22,174,200	4.33%	26,271,500
2036	29,084,700	4.76%	33,438,800	23,134,300	4.33%	26,271,500
2037	30,469,100	4.76%	33,438,800	24,136,000	4.33%	26,271,500
2038	31,918,900	4.76%	33,438,800	25,181,700	4.33%	26,271,500
Totals	455,000,000		763,976,200	370,000,000		597,333,000

Obligation Payable Calculations and Comparisons

Original Amortization Schedule for Revenue Reqt. Allocations				Agreed Upon Amortization Schedule				Variance			
	Principal	Interest	Total	Balance	Principal	Interest	Total	Balance	Principal	Interest	Total
Water				478,378,600				455,000,000			
6/30/15	3,378,600	12,231,300	15,609,900	475,000,000	3,893,700	11,716,300	15,610,000	451,106,300	515,100	(515,000)	100
12/31/15	3,378,600	12,231,300	15,609,900	471,621,400	3,893,700	11,716,200	15,609,900	447,212,700	515,000	(515,100)	(100)
6/30/16	7,591,600	23,638,200	31,219,800	464,029,800	9,932,500	21,287,300	31,219,800	437,280,200	2,340,900	(2,340,900)	0
6/30/2017 (a)	11,065,900	23,247,900	34,313,800	452,963,900	11,946,700	20,814,500	32,761,200	425,335,500	880,800	(2,433,400)	(1,552,600)
6/30/2018 (b)	25,414,700	71,338,700	96,753,400		29,666,500	65,534,300	95,200,800		4,251,800	(5,804,400)	(1,552,600)
Subtotal --> FY 18	11,749,800	22,693,500	34,443,300	441,214,100	13,192,900	20,245,900	33,438,800	412,140,600	1,443,100	(2,447,600)	(1,004,500)
6/30/19	37,164,500	94,032,200	131,196,700		42,859,400	85,780,200	128,639,600		5,694,900	(8,252,000)	(2,557,100)
Subtotal --> FY 19 Plan											
Sewer				377,452,400				370,000,000			
6/30/15	2,452,400	8,831,300	11,283,700	375,000,000	2,570,300	8,713,500	11,283,700	367,429,800	117,800	(117,800)	0
12/31/15	2,452,400	8,831,300	11,283,700	372,547,600	2,570,300	8,713,500	11,283,700	364,859,600	117,800	(117,800)	0
6/30/16	5,504,700	17,062,700	22,567,400	367,042,900	6,769,000	15,798,400	22,567,400	358,090,600	1,264,300	(1,264,300)	0
6/30/2017 (a)	10,581,900	16,810,600	27,392,500	356,461,000	11,262,300	15,503,300	26,767,600	346,828,300	680,400	(1,305,300)	(624,900)
6/30/2018 (b)	20,991,400	51,535,900	72,527,300		23,171,700	48,730,700	71,902,400		2,180,300	(2,805,200)	(624,900)
Subtotal --> FY 18	10,458,200	16,325,900	26,784,100	346,002,800	11,253,800	15,017,700	26,271,500	335,574,500	795,600	(1,308,200)	(512,600)
6/30/19	31,449,600	67,861,800	99,311,400		34,435,300	63,748,400	98,173,900		2,975,900	(4,113,400)	(1,137,500)
Subtotal --> FY 19 Plan											
(a) Principal Balance @ 6/30/17											
Water				464,029,800				437,280,200			
Sewer				367,042,900				358,090,600			
Total				831,072,700				795,370,800			
(b) Total Debt Service During FY 2018											
Water				34,313,800				32,761,200			
Sewer				27,392,500				26,767,600			
Total				61,706,300				59,528,800			

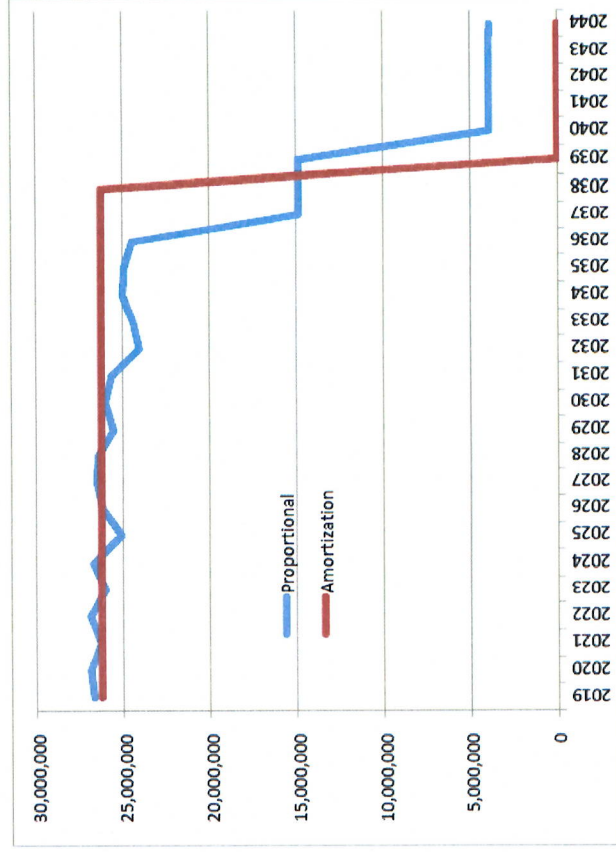
Local Water System "Debt Service" Comparison - Amortization Schedule

	Proportional	Amortization	Variance
2019	32,291,100	33,438,800	1,147,700
2020	33,587,700	33,438,800	(148,900)
2021	34,432,700	33,438,800	(993,900)
2022	33,655,100	33,438,800	(216,300)
2023	34,501,400	33,438,800	(1,062,600)
2024	34,516,500	33,438,800	(1,077,700)
2025	34,513,400	33,438,800	(1,074,600)
2026	34,513,700	33,438,800	(1,074,900)
2027	34,260,900	33,438,800	(822,100)
2028	34,175,100	33,438,800	(736,300)
2029	34,158,200	33,438,800	(719,400)
2030	34,151,100	33,438,800	(712,300)
2031	34,153,300	33,438,800	(714,500)
2032	34,150,800	33,438,800	(712,000)
2033	34,151,400	33,438,800	(712,600)
2034	34,152,500	33,438,800	(713,700)
2035	27,480,200	33,438,800	5,958,600
2036	31,720,300	33,438,800	1,718,500
2037	14,130,200	33,438,800	19,308,600
2038	15,011,000	33,438,200	18,427,200
2039	15,011,500	0	(15,011,500)
2040	15,012,400	0	(15,012,400)
2041	14,747,400	0	(14,747,400)
	678,477,900	668,775,400	(9,702,500)



Local Sewer System "Debt Service" Comparison - Amortization Schedule

	Proportional	Amortization	Variance
2019	26,691,400	26,271,500	(419,900)
2020	26,875,300	26,271,500	(603,800)
2021	26,297,400	26,271,500	(25,900)
2022	26,883,200	26,271,500	(611,700)
2023	26,008,500	26,271,500	263,000
2024	26,711,600	26,271,500	(440,100)
2025	25,102,000	26,271,500	1,169,500
2026	26,190,800	26,271,500	80,700
2027	26,336,900	26,271,500	(265,400)
2028	26,459,500	26,271,500	(188,000)
2029	25,557,100	26,271,500	714,400
2030	26,008,400	26,271,500	263,100
2031	25,650,000	26,271,500	621,500
2032	24,054,100	26,271,500	2,217,400
2033	24,382,100	26,271,500	1,889,400
2034	25,023,400	26,271,500	1,248,100
2035	24,935,900	26,271,500	1,335,600
2036	24,473,400	26,271,500	1,798,100
2037	14,892,100	26,271,500	11,379,400
2038	14,891,700	26,272,100	11,380,400
2039	14,891,800	0	(14,891,800)
2040	3,918,400	0	(3,918,400)
2041	3,917,900	0	(3,917,900)
2042	3,917,700	0	(3,917,700)
2043	3,918,000	0	(3,918,000)
2044	3,893,900	0	(3,893,900)
	448,218,400	446,616,100	(1,602,300)



Schedule 4 - Due to/Due from Other City Liabilities

(Due to)/Due From Amount	Water	Sewer	Total
Due to General and Other Funds City of Detroit			
Benefits			
Risk Management - Workers Comp (non-insured cash pymts for pre-12.31.2015 claims paid after 1.1.2016)	\$ (101,859)	\$ (1,121,706)	\$ (1,223,565)
Construction Code Fund	(1,825,206)	(885,927)	(2,711,132)
Disability Plan	(50,994)	-	(50,994)
General Fund Life-to-date Agreed Upon Balance as of June 30, 2015	(120,677)	-	(120,677)
Interagency Billings for HAZMAT	(12,084,105)	(2,105,556)	(14,189,661)
Central Services Administrative Charges Six months through 12.31.2015	-	(349,236)	(349,236)
Payroll Services March 2015 through Dec 2015	(1,222,169)	(1,222,169)	(2,444,338)
Payroll Services for March through December 2015	-	(52,815)	(52,815)
General Fund - Unemployment Reimbursements	(52,815)	-	(52,815)
Offset: City General Fund Unemployment Transfer	(711,744)	-	(711,744)
Offset: General Fund - Reimbursement for Centralized Expenses	96,863	-	96,863
Offset: Delinquent Tax - County Settlement as of June 30, 2015 (No)	1,364	-	1,364
Offset: DWSD Payment to City General Fund through June 30, 2015	4,034,710	-	4,034,710
Due to Other Funds City of Detroit (Construction Code Fund)	8,088,816	-	8,088,816
Current Workers Compensation	-	(47,539)	(47,539)
Current Death Benefits (Legacy)	(294,557)	(390,165)	(684,722)
Long-term Death Benefits Liability (Legacy)	(32,101)	(15,124)	(47,225)
Long-Term Workers Compensation	(237,462)	(216,828)	(454,290)
Total - Due to City of Detroit Funds as of June 30, 2017	\$ (7,824,471)	\$ (10,798,002)	\$ (18,622,473)

Note 1: These entries in Schedule 4 are not reflected in Schedule 2.

Schedule 5: Cash Transfer to DWSD I&E Account

	Net Position of Construction Fund at 12.31.2015	Comment
Water		
Cash	\$ 17,471,801	Page 16 of 12.31.2015 DWSD Audit (carried forward to GLWA)
Other Assets/Liabilities	(19,600,783)	
Net Position at December 31, 2015	\$ (2,128,982)	Agreed to 1/1/16 Trial Balance (GLWA)
<i>No allocation of cumulative negative net position (funded from post-effective date sources).</i>		
Sewer		
Cash	\$ 134,810,437	Page 16 of 12.31.2015 DWSD Audit (carried forward to GLWA)
Other Assets/Liabilities	(47,629)	
Net Position at December 31, 2015	\$ 134,762,808	Agreed to 1/1/16 Trial Balance (GLWA)
Local Asset Debt Allocation - %	11.26%	
Allocation of Sewer Construction Funds	\$ 15,174,200	Allocable to Local I&E Account

Schedule 6 – Wayne County Delinquent Tax Revolving Fund

Treasurer

Charter County of Wayne, Michigan

Mayor

City of Detroit, Michigan

Gentlemen,

Pursuant to a 2018 Memorandum of Understanding (the “2018 MOU”) entered into by the Detroit Water and Sewerage Department (“DWSD”) and the Great Lakes Water Authority (“GLWA”) on June __, 2018, GLWA has transferred to DWSD, as of July 1, 2017, all of GLWA’s interests in the remaining accounts receivable existing on or before December 31, 2015 from retail sewer and water customers in the City of Detroit (“Retail Customers”) for sewer and water services provided to Retail Customers by DWSD, and DWSD has assumed all liability associated with the repayment of advances from the Delinquent Tax Revolving Fund (the “Revolving Fund”) maintained by the Charter County of Wayne (the “County”) related to all accounts receivable from Retail Customers. In addition, pursuant to the 2018 MOU, GLWA has transferred to DWSD the aggregate amount of \$16,293,664 related to the cumulative Wayne County Revolving Fund Loan balance as of June 30, 2017 received by GLWA from the City of Detroit for amounts collected in respect of accounts receivable from Retail Customers after July 1, 2017.

As provided in the 2018 MOU, you are hereby notified that, effective immediately, DWSD shall be responsible for managing all aspects of collecting delinquent accounts receivable from Retail Customers and related obligations, including without limitation the obligation to repay to the County any amounts advanced from the Revolving Fund in connection with such delinquent accounts receivable. GLWA and DWSD shall continue to receive the annual Summary of City of Detroit Delinquent Water Levy (B02) report as of July 1st each year. The City of Detroit will continue to deposit proceeds in respect of accounts receivable from Retail Customers to the Receiving Account pursuant to the Master Bond Ordinance.

DETROIT WATER AND SEWERAGE DEPARTMENT

By: _____
Its: Director

GREAT LAKES WATER AUTHORITY

By: _____
Its: Chief Executive Officer

Dated: