CITY OF LAWRENCE

ACCOUNTING REPORT ON RATE STUDY

MUNICIPAL SEWAGE WORKS

July 1, 2022



Indianapolis, Indiana

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ACCOUNTANTS' RATE STUDY REPORT

July 1, 2022

Utility Service Board City of Lawrence 9001 East 59th Street Lawrence, IN 46216

RE: Lawrence (Indiana) Municipal Sewage Works Utility (the "Utility") Financial and Rate Analysis

In connection with the proposed increase in the Utility's schedule of Sewer rates and charges, we have, at your request, compiled this special purpose rate study report.

This special purpose rate study report has been prepared for the purpose of requesting approval of a new schedule of sewer rates and charges and should not be used for any other purpose.

Further, the pro forma financial information in this report which has not been compiled, reviewed or audited by us, is based upon unaudited financial information for the twelve months ended June 30, 2021, which was compiled by us and assumptions provided by management and their consulting engineers or obtained from other sources. This pro forma financial information is prepared for the purpose of showing the estimated financial effects on the utility's revenue and revenue requirements of an increase in rates and charges for service and other changes that may be reasonably fixed, known or measured. The actual results achieved may vary from the pro forma information and the variations may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

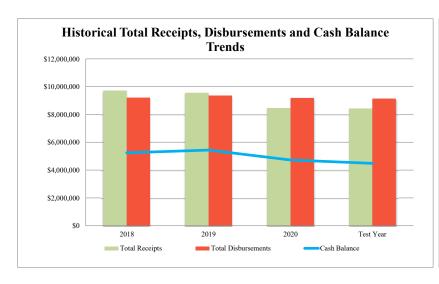
Baker Tilly Municipal Advisors, LLC

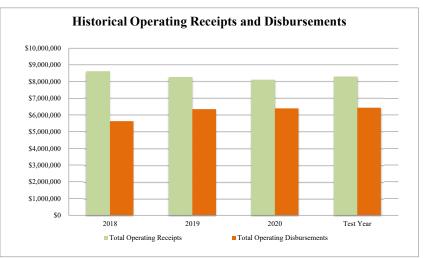
LAWRENCE (INDIANA) MUNICIPAL SEWAGE WORKS <u>EXECUTIVE SUMMARY</u>

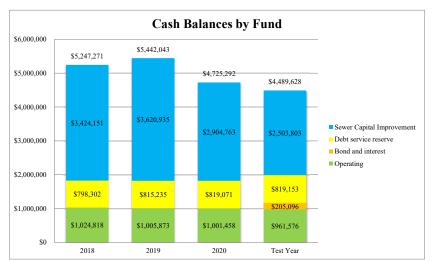
KEY PERFORMANCE INDICATORS

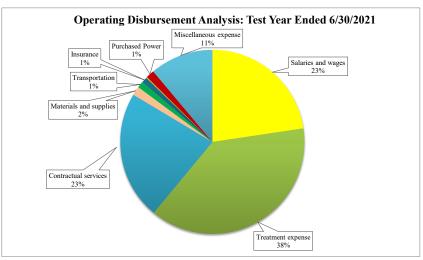
		~ 1 1 **		Twelve Months	
		Calendar Year		Ended	
	2018	2019	2020	6/30/2021	Trend
				(Test Year)	
Cash and Investment Balances:					
Restricted	\$798,302	\$815,235	\$819,071	\$1,024,249	
Unrestricted	4,448,969	4,626,808	3,906,221	3,465,379	
Totals	\$5,247,271	\$5,442,043	\$4,725,292	\$4,489,628	~
Receipts and Disbursements:					
Operating Receipts	\$8,613,109	\$8,269,350	\$8,107,436	\$8,293,004	\
Operating Disbursements	5,624,974	6,348,512	6,390,628	6,431,027	
Net Operating Receipts	\$2,988,135	\$1,920,838	\$1,716,808	\$1,861,977	-
Total Receipts (Disbursements)	\$504,951	\$194,775	(\$716,751)	(\$709,299)	<u></u>
Cash Analysis:					
Days Cash on Hand	289	266	223	197	
Debt Service Coverage:					
Standard	411%	361%	388%	379% (1)
With PILOT	151%	-2%	7%	-6% (,

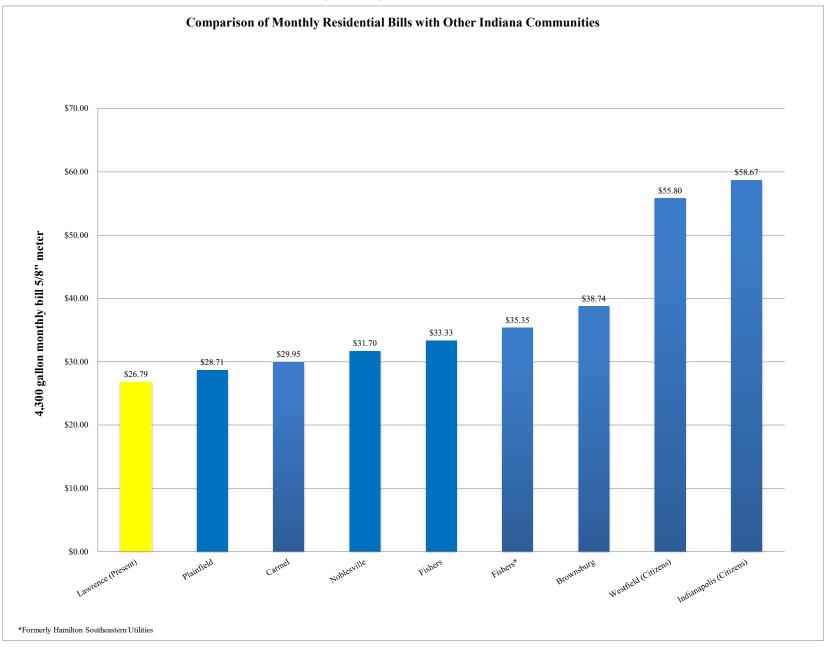
⁽¹⁾ Normalized to include a full year of debt service payments.











LAWRENCE (INDIANA) MUNICIPAL SEWAGE WORKS <u>SUPPLEMENTAL DATA</u>

COMPARISON OF FUND BALANCES WITH MINIMUM BALANCES REQUIRED

Cash and Investments:	Balances 6/30/2021	Minimum Balance Required (1)	Variance
Operating fund (2)	\$961,576	\$1,245,071	(\$283,495)
Sinking fund:	205.006	102.071	12.025
Bond and interest account (3) Debt service reserve account (4)	205,096 819,153	193,071 779,003	12,025 40,150
Sewer Capital Improvement (5)	2,503,803	688,741	1,815,062
Totals	\$4,489,628	\$2,905,886	\$1,583,742
(1) Required Reserves: Balances required per Bond Ordinance No 23, 2015			
(2) Operating and Maintenance Fund: The balance maintained in the operation and maint to pay the expenses of operation, repair, and maintenance of the utility for the next succe			
Pro forma operation and maintenance expenses Times factor for 2 months			\$7,470,424 16.67%
Minimum Balance Required			\$1,245,071
(3) <u>Bond and Interest Account:</u> A balance must be maintained equal to the sum of the more of next succeeding principal payment and the amount of (1/6) of the next succeeding interest.		amount of (1/12)	
2009 A Bonds	Amount	Factor	Total
Principal due 1/1/22	\$176,142	x 6/12	\$88,071
Interest due 7/1/21	7,478	x 0/6	-
2009 B Bonds	Amount	Factor	Total
Principal due 1/1/22	\$ -	x 6/12	\$ -
Interest due 7/1/21	53,856		-
2009 C Bonds	Amount	Factor	Total
Principal due 1/1/22	\$35,000	x 6/12	\$17,500
Interest due 7/1/21	5,333	x 0/6	-
<u>2015 Bonds</u>	Amount	Factor	Total
Principal due 1/1/22	\$175,000	x 6/12	\$87,500
Interest due 7/1/21	21,420	x 0/6	<u> </u>

(Continued on next page)

Minimum Balance Required

\$193,071

(Cont'd)

COMPARISON OF FUND BALANCES WITH MINIMUM BALANCES REQUIRED

(4) <u>Debt Service Reserve Account</u> : Equal to the maximum principal and interest payment on the outstanding bonds.	
Required Reserve	\$779,003
(5) <u>Sewer Capital Improvement</u> : No minimum balance required. However, as a general rule an amount equal to one year's depreciation expense is typically maintained in this fund to provide a funding source for ongoing capital improvements.	
Minimum balance suggested	\$688,741

PRO FORMA ANNUAL CASH OPERATING DISBURSEMENTS

	Test Year	Adjustments	2022 Budget
Annual Operating Disbursements:			
Salaries and wages	\$1,455,886	\$211,834	\$1,667,720
Treatment expense	2,463,451	1,271,549	3,735,000
Contractual services	1,451,480	(771,480)	680,000
Materials and supplies	102,567	156,838	259,405
Transportation	69,404	28,296	97,700
Insurance	66,756	37,514	104,270
Equipment	10,119	7,381	17,500
Purchased power	94,352	8,148	102,500
Miscellaneous expense	717,012	89,317	806,329
Totals	\$6,431,027	\$1,039,397	\$7,470,424

SCHEDULE OF AMORTIZATION OF \$1,643,565 PRINCIPAL AMOUNT OF OUTSTANDING SEWAGE WORKS REVENUE BONDS, SERIES 2009A

Principal payable annually January 1st Interest payable semi-annually January 1st and July 1st Interest rate as shown.

Payment	Principal	Interest		Debt Service		Bond Year
Date	Balance	Rate	Principal	Interest	Total	Total
	(In Dollars)	(%)	(In Do	ollars)
01/01/22	\$1,643,565	0.91	\$176,142	\$7,478.22	\$183,620.22	\$183,620.22
07/01/22	1,467,423	0.91	. ,	6,676.77	6,676.77	,
01/01/23	1,467,423	0.91	177,727	6,676.77	184,403.77	191,080.54
07/01/23	1,289,696	0.91		5,868.12	5,868.12	,
01/01/24	1,289,696	0.91	179,327	5,868.12	185,195.12	191,063.24
07/01/24	1,110,369	0.91		5,052.18	5,052.18	
01/01/25	1,110,369	0.91	180,942	5,052.18	185,994.18	191,046.36
07/01/25	929,427	0.91		4,228.89	4,228.89	
01/01/26	929,427	0.91	182,569	4,228.89	186,797.89	191,026.78
07/01/26	746,858	0.91		3,398.20	3,398.20	
01/01/27	746,858	0.91	184,213	3,398.20	187,611.20	191,009.40
07/01/27	562,645	0.91		2,560.03	2,560.03	
01/01/28	562,645	0.91	185,871	2,560.03	188,431.03	190,991.06
07/01/28	376,774	0.91		1,714.32	1,714.32	
01/01/29	376,774	0.91	187,543	1,714.32	189,257.32	190,971.64
07/01/29	189,231	0.91		861.00	861.00	
01/01/30	189,231	0.91	189,231	861.00	190,092.00	190,953.00
		•				
Totals		<u>.</u>	\$1,643,565	\$68,197.24	\$1,711,762.24	\$1,711,762.24

SCHEDULE OF AMORTIZATION OF \$1,881,237 PRINCIPAL AMOUNT OF OUTSTANDING AMENDED SEWAGE WORKS REVENUE BONDS, SERIES 2009B

Principal payable annually January 1st Interest payable semi-annually January 1st and July 1st Interest rate as shown.

Payment	Principal	Interest		Debt Service		Bond Year
Date	Balance	Rate	Principal	Interest	Total	Total
	(In Dollars)	(%)	(In Do	ollars)
01/01/22	\$1,881,237			\$53,855.71	\$53,855.71	\$53,855.71
07/01/22	1,881,237			53,855.71	53,855.71	
01/01/23	1,881,237	5.41	\$81,237	53,855.71	135,092.71	188,948.42
07/01/23	1,800,000	5.41		51,658.25	51,658.25	
01/01/24	1,800,000	5.46	215,000	51,658.25	266,658.25	318,316.50
07/01/24	1,585,000	5.46		45,788.75	45,788.75	
01/01/25	1,585,000	5.56	230,000	45,788.75	275,788.75	321,577.50
07/01/25	1,355,000	5.56		39,394.75	39,394.75	
01/01/26	1,355,000	5.66	240,000	39,394.75	279,394.75	318,789.50
07/01/26	1,115,000	5.66		32,602.75	32,602.75	
01/01/27	1,115,000	5.77	255,000	32,602.75	287,602.75	320,205.50
07/01/27	860,000	5.77		25,246.00	25,246.00	
01/01/28	860,000	5.83	270,000	25,246.00	295,246.00	320,492.00
07/01/28	590,000	5.83		17,375.50	17,375.50	
01/01/29	590,000	5.89	285,000	17,375.50	302,375.50	319,751.00
07/01/29	305,000	5.89		8,982.25	8,982.25	
01/01/30	305,000	5.89	305,000	8,982.25	313,982.25	322,964.50
Totals			\$1,881,237	\$603,663.63	\$2,484,900.63	\$2,484,900.63

SCHEDULE OF AMORTIZATION OF \$150,000 PRINCIPAL AMOUNT OF OUTSTANDING AMENDED SEWAGE WORKS REVENUE BONDS, SERIES 2009C (Taxable)

Principal payable annually January 1st Interest payable semi-annually January 1st and July 1st Interest rate as shown.

Payment	Principal	Interest		Debt Service		Bond Year
Date	Balance	Rate	Principal	Interest	Total	Total
	(In Dollars)	(%)	(In Do	llars)
01/01/22	\$150,000	0.91	\$35,000	\$5,333.00	\$40,333.00	\$40,333.00
07/01/22	115,000	0.91		4,088.00	4,088.00	
01/01/23	115,000	0.91	35,000	4,088.00	39,088.00	43,176.00
07/01/23	80,000	0.91		2,844.00	2,844.00	
01/01/24	80,000	0.91	40,000	2,844.00	42,844.00	45,688.00
07/01/24	40,000	0.91		1,422.00	1,422.00	
01/01/25	40,000	0.91	40,000	1,422.00	41,422.00	42,844.00
Totals			\$150,000	\$22,041.00	\$172,041.00	\$172,041.00

SCHEDULE OF AMORTIZATION OF \$1,360,000 PRINCIPAL AMOUNT OF OUTSTANDING SEWAGE WORKS REFUNDING REVENUE BONDS, SERIES 2015

Principal payable annually January 1st Interest payable semi-annually January 1st and July 1st Interest rate as shown.

Payment	Principal	Interest		Debt Service		Bond Year
Date	Balance	Rate	Principal	Interest	Total	Total
	(In Dollars)	(%)	(In Do	llars)
01/01/22	\$1,360,000	3.15	\$175,000	\$21,420.00	\$196,420.00	\$196,420.00
07/01/22	1,185,000	3.15		18,663.75	18,663.75	
01/01/23	1,185,000	3.15	180,000	18,663.75	198,663.75	217,327.50
07/01/23	1,005,000	3.15		15,828.75	15,828.75	
01/01/24	1,005,000	3.15	190,000	15,828.75	205,828.75	221,657.50
07/01/24	815,000	3.15		12,836.25	12,836.25	
01/01/25	815,000	3.15	195,000	12,836.25	207,836.25	220,672.50
07/01/25	620,000	3.15		9,765.00	9,765.00	
01/01/26	620,000	3.15	200,000	9,765.00	209,765.00	219,530.00
07/01/26	420,000	3.15		6,615.00	6,615.00	
01/01/27	420,000	3.15	205,000	6,615.00	211,615.00	218,230.00
07/01/27	215,000	3.15		3,386.25	3,386.25	
01/01/28	215,000	3.15	215,000	3,386.25	218,386.25	221,772.50
Totals			\$1,360,000	\$155,610.00	\$1,515,610.00	\$1,515,610.00

SCHEDULE OF OUTSTANDING COMBINED BOND AMORTIZATION

Payment						Bond
Date	2009A	2009B	2009C	2015	Total	Year Total
01/01/22	\$183,620.22	\$53,855.71	\$40,333.00	\$196,420.00	\$474,228.93	\$474,228.93
07/01/22	6,676.77	53,855.71	4,088.00	18,663.75	83,284.23	
01/01/23	184,403.77	135,092.71	39,088.00	198,663.75	557,248.23	640,532.46
07/01/23	5,868.12	51,658.25	2,844.00	15,828.75	76,199.12	
01/01/24	185,195.12	266,658.25	42,844.00	205,828.75	700,526.12	776,725.24
07/01/24	5,052.18	45,788.75	1,422.00	12,836.25	65,099.18	
01/01/25	185,994.18	275,788.75	41,422.00	207,836.25	711,041.18	776,140.36
07/01/25	4,228.89	39,394.75		9,765.00	53,388.64	
01/01/26	186,797.89	279,394.75		209,765.00	675,957.64	729,346.28
07/01/26	3,398.20	32,602.75		6,615.00	42,615.95	
01/01/27	187,611.20	287,602.75		211,615.00	686,828.95	729,444.90
07/01/27	2,560.03	25,246.00		3,386.25	31,192.28	
01/01/28	188,431.03	295,246.00		218,386.25	702,063.28	733,255.56
07/01/28	1,714.32	17,375.50			19,089.82	
01/01/29	189,257.32	302,375.50			491,632.82	510,722.64
07/01/29	861.00	8,982.25			9,843.25	,
01/01/30	190,092.00	313,982.25			504,074.25	513,917.50
Totals	\$1,711,762.24	\$2,484,900.63	\$172,041.00	\$1,515,610.00	\$5,884,313.87	\$5,884,313.87

Average annual debt service for the five bond years ending July 1, 2028

\$748,982.47

PRO FORMA ANNUAL REVENUE REQUIREMENTS AND ANNUAL OPERATING RECEIPTS

See Explanation of References, page 14 (Amounts rounded to the nearest \$100)

		Pha	se	
	I	II	III	IV
	2022	2023	2024	2025
Revenue Requirements:				
Operation and maintenance disbursements:				
Purchased treatment (1)	\$3,735,000	\$4,433,000	\$4,935,400	\$5,437,800
All other disbursements (2)	3,735,400	3,847,500	3,962,900	4,081,800
Payment in lieu of property taxes (3)	2,036,000	2,036,000	2,036,000	2,036,000
Debt service:				
Outstanding 2009A Revenue Bonds (pg. 8)	191,100	191,100	191,000	191,000
Outstanding 2009B Revenue Bonds (pg. 9)	188,900	318,300	321,600	318,800
Outstanding 2009C Revenue Bonds (pg. 10)	43,200	45,700	44,300	-
Outstanding 2015 Revenue Bonds (pg. 11)	217,300	221,700	220,700	219,500
Proposed Bonds (4)	-	931,000	926,500	974,800
Debt service reserve (5)	-	186,200	185,300	195,000
Replacements and improvements (6)	800,000	1,200,000	1,600,000	2,000,000
Total Annual Revenue Requirements	10,946,900	13,410,500	14,423,700	15,454,700
Less penalties (7)	(227,300)	(227,300)	(227,300)	(227,300)
Less test year miscellaneous receipts (8)	(103,400)	(103,400)	(103,400)	(103,400)
Less tap fees (9)	(218,600)	(218,600)	(218,600)	(218,600)
Less minimum user receipts (Low Vol 1) (10)	(401,700)	(401,700)	(401,700)	(401,700)
Less minimum user receipts (Low Vol 2) (11)	(574,800)	(574,800)	(574,800)	(574,800)
Net Annual Revenue Requirements	\$9,417,300	\$11,880,900	\$12,894,100	\$13,925,100
Annual Receipts:				
Metered/Unmetered sales (12)	\$7,144,300	\$7,144,300	\$7,144,300	\$7,144,300
Additional sales due to increase in rates	-	2,273,000	4,736,600	5,749,800
Total Available Receipts	\$7,144,300	\$9,417,300	\$11,880,900	\$12,894,100
Additional Receipts Required	\$2,273,000	\$2,463,600	\$1,013,200	\$1,031,000
Approximate Across-The-Board Increase				
In Present Rates and Charges	32%	26%	9%	8%
Change in Average Monthly Residential Bill (Current Bill \$27.05)	\$8.60	\$9.33	\$3.83	\$3.91
Approximate Average Residential Monthly Bill (4,300 gallons)	\$35.65	\$44.98	\$48.81	\$52.72

(Continued on next page)

(Cont'd)

PRO FORMA ANNUAL REVENUE REQUIREMENTS AND ANNUAL OPERATING RECEIPTS

(Explanation of References)

(1) To provide for an allowance for the increase in the treatment rate from Citizens. The rates are as follows:

Effective January 1, 2020	\$1.1712 per 1,000 gallons
Effective January 1, 2021	\$1.4148 per 1,000 gallons
Effective January 1, 2022	\$1.7070 per 1,000 gallons
Effective January 1, 2023	\$2.0260 per 1,000 gallons
Effective January 1, 2024	\$2.2556 per 1,000 gallons
Effective January 1, 2025	\$2.4852 per 1,000 gallons

- (2) Based on management's 2022 Budget for all other operation and maintenance expenses less the treatment expense. The subsequent years assume a 3% annual inflationary factor.
- (3) Based on the payment in lieu of taxes payment included in Management's 2022 Budget.
- (4) To provide an allowance for the debt service on the proposed bonds. Assumes a \$20,000,000 bond issue amortized over 20 years at an assumed interest rate of 3.5%. Assumes the debt service structure is wrapped around the outstanding debt service.
- (5) To provide an allowance to fund the debt service reserve account over a five year period.
- (6) To provide an allowance for replacements and improvements based on management's estimates.
- (7) Assumes a two year average from calendar years 2018 and 2019. Due to Covid-19 penalties in 2020 and the test year period were down.
- (8) Assumed at test year amounts.
- (9) Assumes a three year average from calendar years 2018, 2019, 2020.
- (10) Based on test year receipts from customers using 1,200 gallons or less (Low Vol 1). It is assumed that the minimum charge for this tier will not change.
- (11) Normalized based on the proposed minimum per utility management for customers using 1,201 to 2,000 gallons (Low Vol 2).
- (12) Based on test year receipts from those customers using greater than 2,000 gallons per month.

SCHEDULE OF PRESENT AND PROPOSED RATES AND CHARGES

			Present Rates						
			Present	Current Tracker**	Including Tracker	Proposed - Phases			
			Rates*			I	II	III	IV
Monthly Mete	ered Rate per 1,000 gallons								
First	4,300 gallons		\$6.19	\$0.10	\$6.29	\$8.29	\$10.46	\$11.35	\$12.26
Next	15,700 gallons		5.43	0.10	5.53	7.29	9.20	9.98	10.78
Next	20,000 gallons		5.31	0.10	5.41	7.13	9.00	9.77	10.55
Next	60,000 gallons		5.11	0.10	5.21	6.87	8.67	9.41	10.16
Next	100,000 gallons		4.96	0.10	5.06	6.67	8.41	9.13	9.86
Over	200,000 gallons		4.78	0.10	4.88	6.43	8.11	8.80	9.50
		Gallons							
	<u>-</u>	Allowed							
Minimum Monthly Charge - Metered Customers (Low Vol 1) 1,200					27.05	27.05	27.05	27.05	
Minimum Monthly Charge - Metered Customers (Low Vol 2) 1,201 - 2,000					30.98	30.98	30.98	30.98	
Minimum Monthly Charge - Metered Customers 2,001 - 4,300		26.60		27.05	35.65	44.98	48.81	52.72	
Minimum Monthly Charge - Non-Metered Customer		35.54		36.13	47.62	60.09	65.20	70.43	

^{*} Rates and charges were adopted September 8, 2009.

^{**} Per Resolution No. 6, 2016, a rate tracking factor of \$0.10 per 1,000 gallons is applicable