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January 6, 2025

Town Council
Town of Roanoke, Indiana
141 W Third Street
P.O. box 328
Roanoke, IN 46783

Re: Roanoke (Indiana) Municipal Sewage Works – Rate Analysis

Dear Council Members:

The attached schedules (listed below) present unaudited and limited information for the purpose of discussion and consideration in the preliminary planning stage of the proposed Sewage Works Project by appropriate officers and officials of the Town of Roanoke. The use of these schedules should be restricted to this purpose as the information is subject to future revision and further reports.

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6	Estimated Annual Revenue Requirements and Annual Operating Receipts – Regionalization

We would appreciate your questions or comments on this information and would provide additional information upon request.

Very truly yours,

BAKER TILLY ADVISORY GROUP, LP

Jeffrey P. Rowe, Principal

ROANOKE (INDIANA) MUNICIPAL SEWAGE WORKS

SUMMARY OF ESTIMATED RATE IMPACT

	<u>Change in Average Monthly Residential Bill</u>	<u>Approximate Across-the-Board Increase</u>	<u>Average Monthly Residential Bill (4,000 Gallons)</u>
Current Operations			\$67.74
<u>20-Year Loan</u>			
2 Tanks SBR (page 4)	\$91.62	135%	159.36
Lagoon Alternative (page 4)	78.53	116%	146.27
<u>35-Year Loan</u>			
2 Tanks SBR (page 5)	69.49	103%	137.23
Lagoon Alternative (page 5)	60.28	89%	128.02
Regionalization (page 6)	47.29	70%	115.03
Regionalization with SRF Grant (page 6)	36.48	54%	104.22

(Subject to the attached letter dated January 6, 2025)
(Preliminary - Subject to Change)
(Internal Use Only)

ROANOKE (INDIANA) MUNICIPAL SEWAGE WORKS

SCHEDULE OF ESTIMATED PROJECT COSTS AND FUNDING
(Per Consulting Engineers)

	<u>2 Tanks SBR</u>	<u>Lagoon Alternative</u>	<u>Regionalization</u>	<u>Regionalization with SRF Grant</u>
<u>ESTIMATED PROJECT COSTS</u>				
Construction Costs:				
New Screening Structure	\$896,300	\$896,300	\$ -	\$ -
Reuse Existing Lagoon	-	4,624,100	-	-
Force Main	-	-	7,002,400	7,002,400
New SBRs	5,635,600	-	-	-
New UV System	514,800	514,800	-	-
Post Aeration System	200,000	200,000	-	-
RAS/WAS Pump Station	278,600	-	-	-
Aerobic Sludge Holding Tanks Improvements	785,000	-	-	-
Chemical Storage and Electrical Building	805,000	500,000	-	-
Site Electrical and Instrumentation and SCADA	400,000	400,000	80,000	80,000
Backup Generator(s)	125,000	125,000	200,000	200,000
Site Work	300,700	200,800	200,600	200,600
Sub-totals	\$9,941,000	7,461,000	7,483,000	7,483,000
Mobilization-Demobilization (5%)	498,000	374,000	375,000	375,000
Contingency (10%)	995,000	747,000	749,000	749,000
Total Construction Costs	<u>11,434,000</u>	<u>8,582,000</u>	<u>8,607,000</u>	<u>8,607,000</u>
Non-Construction Costs:				
Engineering (1)	\$469,200	\$157,200	\$159,200	\$159,200
Construction Administration (18-month)	425,000	425,000	425,000	425,000
Resident Inspection (18-month)	552,000	552,000	552,000	552,000
BAN Payoff (2)	5,441,040	5,441,040	5,441,040	5,441,040
Financial, legal and rounding	150,800	150,800	150,800	150,800
Total Non-Construction Costs	<u>7,038,040</u>	<u>6,726,040</u>	<u>6,728,040</u>	<u>6,728,040</u>
Total Project Costs	<u><u>\$18,472,040</u></u>	<u><u>\$15,308,040</u></u>	<u><u>\$15,335,040</u></u>	<u><u>\$15,335,040</u></u>
 <u>ESTIMATED PROJECT FUNDING</u>				
Proposed Sewage Works Revenue Bonds of 2025	\$18,069,000	\$14,905,000	\$14,932,000	\$12,932,000
Proposed SRF Grant	-	-	-	2,000,000
Cash on hand (accrued interest on BANs)	403,040	403,040	403,040	403,040
Total Project Funding	<u><u>\$18,472,040</u></u>	<u><u>\$15,308,040</u></u>	<u><u>\$15,335,040</u></u>	<u><u>\$15,335,040</u></u>

(1) Amounts shown net of \$783,800 in engineering costs that are assumed to be paid for using the 2023 BAN proceeds. The remaining engineering costs will be paid for using the proposed Bonds. See below for the calculation.

Total engineering costs built into 2023 BANs	\$1,358,000
Less: estimated engineering costs for BAN projects*	<u>(574,200)</u>
Remaining allowance for engineering costs	<u><u>\$783,800</u></u>
Construction Costs included in 2023 BAN	\$3,281,000
Times: 17.5% allowance used for engineering in BAN	<u>17.5%</u>
Engineering costs related to BAN projects	<u><u>\$574,200</u></u> *

(2) Assumes BANs are paid off on the maturity date, which is June 1, 2025.

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ROANOKE (INDIANA) MUNICIPAL SEWAGE WORKS

20-Year Loan

**ESTIMATED ANNUAL REVENUE REQUIREMENTS
AND ANNUAL OPERATING RECEIPTS**
(Amounts rounded to the nearest \$100)

	Project Alternatives - Without READI 2.0	
	2 Tanks SBR	Lagoon Alternative
Revenue Requirements:		
Operation and maintenance disbursements (1)	\$430,000	\$430,000
Changes in operation and maintenance disbursements post-project (2)	102,100	204,000
Proposed 2025 SRF Bonds (3)	1,258,200	1,038,100
Debt service reserve (funded over five years)	251,600	207,600
Allowance for replacements, improvements and coverage (4)	57,000	47,000
Total Annual Revenue Requirements	2,098,900	1,926,700
Less interest income (2023 rate study)	(1,400)	(1,400)
Net Annual Revenue Requirements	<u>2,097,500</u>	<u>\$1,925,300</u>
Annual Receipts:		
Sewage Collections (5)	<u>\$891,600</u>	<u>\$891,600</u>
Additional Receipts Required	<u>1,205,900</u>	<u>\$1,033,700</u>
Approximate Across-the-Board Increase in Present Rates and Charges	<u>135%</u>	<u>116%</u>
Change in Average Monthly Residential Bill (Current Bill \$67.74)	<u>\$91.62</u>	<u>\$78.53</u>
Approximate Average Residential Monthly Bill (4,000 gallons)	<u>\$159.36</u>	<u>\$146.27</u>
Bond Coverage	<u>125%</u>	<u>125%</u>

- (1) Based on operating disbursements for the twelve months ended June 30, 2024, plus 3% inflation for three years to reflect estimated O&M post project. This analysis does not include the hiring of a full-time Deputy Clerk-Treasurer, which would add an additional \$25,000 to the operating disbursements, assuming that the Sewage Works would pay 50% of the total salaries and benefits of \$50,000.
- (2) Annual purchased power, chemicals, and sludge removal costs have been adjusted based on estimates provided by consulting engineers.
- (3) Assumes the bonds are issued at par amounts reflected on page 3, amortized over 21 years at current SRF pool interest rates (approximately 3.83%).
- (4) To provide an allowance for 125% debt service coverage.
- (5) Based on sewage collections for the twelve months ended June 30, 2024. The 75% rate adjustment was effective with August 2023 collections, so an additional 75% was added to July 2023.

Note: If the Town were awarded a READI 2.0 Grant equal to 20% of the project costs, the average monthly bill would be reduced by approximately 34%, or \$22.76, on the 2 Tanks SBR project and approximately 28%, or \$18.88, on the Lagoon alternative.

(Subject to the attached letter dated January 6, 2025)
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ROANOKE (INDIANA) MUNICIPAL SEWAGE WORKS

35-Year Loan

**ESTIMATED ANNUAL REVENUE REQUIREMENTS
AND ANNUAL OPERATING RECEIPTS**
(Amounts rounded to the nearest \$100)

	<u>Project Alternatives - Without READI 2.0</u>	
	<u>2 Tanks SBR</u>	<u>Lagoon Alternative</u>
<u>Revenue Requirements:</u>		
Operation and maintenance disbursements (1)	\$430,000	\$430,000
Changes in operation and maintenance disbursements post-project (2)	102,100	204,000
Proposed 2025 SRF Bonds (3)	1,023,800	844,600
Debt service reserve (funded over five years)	204,800	168,900
Allowance for replacements, improvements and coverage (4)	47,000	39,000
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Total Annual Revenue Requirements	1,807,700	1,686,500
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Less interest income (2023 rate study)	(1,400)	(1,400)
	<hr/>	<hr/>
Net Annual Revenue Requirements	<u>\$1,806,300</u>	<u>\$1,685,100</u>
<u>Annual Receipts:</u>		
Sewage Collections (5)	<u>\$891,600</u>	<u>\$891,600</u>
Additional Receipts Required	<u>\$914,700</u>	<u>\$793,500</u>
Approximate Across-the-Board Increase in Present Rates and Charges	<u>103%</u>	<u>89%</u>
Change in Average Monthly Residential Bill (Current Bill \$67.74)	<u>\$69.49</u>	<u>\$60.28</u>
Approximate Average Residential Monthly Bill (4,000 gallons)	<u>\$137.23</u>	<u>\$128.02</u>
Bond Coverage	<u>125%</u>	<u>125%</u>

- (1) Based on operating disbursements for the twelve months ended June 30, 2024, plus 3% inflation for three years to reflect estimated O&M post project. This analysis does not include the hiring of a full-time Deputy Clerk-Treasurer, which would add an additional \$25,000 to the operating disbursements, assuming that the Sewage Works would pay 50% of the total salaries and benefits of \$50,000.
- (2) Annual purchased power, chemicals, and sludge removal costs have been adjusted based on estimates provided by consulting engineers.
- (3) Assumes the bonds are issued at par amounts reflected on page 3, amortized over 35 years at current SRF pool interest rates (approximately 4.40%).
- (4) To provide an allowance for 125% debt service coverage.
- (5) Based on sewage collections for the twelve months ended June 30, 2024. The 75% rate adjustment was effective with August 2023 collections, so an additional 75% was added to July 2023.

Note: If the Town were awarded a READI 2.0 Grant equal to 20% of the project costs, the average monthly bill would be reduced by approximately 28%, or \$19.26, on the 2 Tanks SBR project and approximately 24%, or \$15.96, on the Lagoon alternative.

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ROANOKE (INDIANA) MUNICIPAL SEWAGE WORKS

35-Year Loan

**ESTIMATED ANNUAL REVENUE REQUIREMENTS
AND ANNUAL OPERATING RECEIPTS**
(Amounts rounded to the nearest \$100)

	Project Alternatives - Without READI 2.0	
	Regionalization	Regionalization with SRF Grant
Revenue Requirements:		
Operation and maintenance disbursements (1)	\$430,000	\$430,000
Changes in operation and maintenance disbursements post-project (2)	(125,300)	(125,300)
Purchased treatment (3)	156,000	156,000
Proposed 2025 SRF Bonds (4)	846,400	732,900
Debt service reserve (funded over five years)	169,300	146,600
Allowance for replacements, improvements and coverage (5)	39,000	33,000
Total Annual Revenue Requirements	1,515,400	1,373,200
Less interest income (2023 rate study)	(1,400)	(1,400)
Net Annual Revenue Requirements	\$1,514,000	\$1,371,800
Annual Receipts:		
Sewage Collections (6)	\$891,600	\$891,600
Additional Receipts Required	\$622,400	\$480,200
Approximate Across-the-Board Increase in Present Rates and Charges	70%	54%
Change in Average Monthly Residential Bill (Current Bill \$67.74)	\$47.29	\$36.48
Approximate Average Residential Monthly Bill (4,000 gallons)	\$115.03	\$104.22
Bond Coverage	125%	125%

(1) Based on operating disbursements for the twelve months ended June 30, 2024, plus 3% inflation for three years to reflect estimated O&M post project. This analysis does not include the hiring of a full-time Deputy Clerk-Treasurer, which would add an additional \$25,000 to the operating disbursements, assuming that the Sewage Works would pay 50% of the total salaries and benefits of \$50,000.

(2) Per discussion with utility management, operation and maintenance disbursements were adjusted based on assumptions of lower costs associated with the closure of the wastewater treatment plant.

(3) Assumes a purchased treatment rate paid to Fort Wayne of \$13,000 per month based on similar current contract rates with other customers. Note, this rate would need to be provided and confirmed by the City of Fort Wayne. For every \$1,000 per month reduction in purchased treatment costs, the estimated across-the-board increase would be reduced by approximately 1%.

(4) Assumes the bonds are issued at par amounts reflected on page 3, amortized over 35 years at current SRF pool interest rates (approximately 4.40%).

(5) To provide an allowance for 125% debt service coverage.

(6) Based on sewage collections for the twelve months ended June 30, 2024. The 75% rate adjustment was effective with August 2023 collections, so an additional 75% was added to July 2023.

Note: If the Town were awarded a READI 2.0 Grant equal to 20% of the project costs, the average monthly bill would be reduced by approximately 24%, or \$16.04, on the Regionalization project and approximately 24%, or \$15.98, on the Regionalization with SRF Grant.

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