

**Kentucky Infrastructure Authority  
Projects for  
July 2019 Capital Projects Meeting**

- **Fund A Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
A18-007	Regional Water Resource Agency (Increase)	\$ 2,607,745	Daviess
A19-001	City of Elkton (Construction)	\$ 3,434,451	Todd
A19-003	City of Hopkinsville (Construction Phase 1)	\$ 7,500,000	Christian
A19-009	City of Georgetown	\$ 13,542,784	Scott
A19-012	City of Tompkinsville	\$ 861,148	Monroe
A19-013	City of Vanceburg	\$ 1,131,000	Lewis
A19-024	Regional Water Resource Agency	\$ 7,015,000	Daviess

- **Fund F Loan**

<u>Loan #</u>	<u>Borrower</u>	<u>Loan Amount</u>	<u>County</u>
F19-004	City of Edmonton	\$ 4,500,000	Metcalfe
F19-020	City of Cynthiana (Director Increase)	\$ 1,050,022	Harrison
F19-035	City of Elkton	\$ 170,000	Todd
F19-044	City of Mortons Gap	\$ 835,000	Hopkins

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	June 18, 2019	
<b>FUND A, FEDERALLY ASSISTED WASTEWATER</b>		KIA Loan Number	A18-007 (Increase)	
<b>REVOLVING LOAN FUND</b>		WRIS Number	SX21059054	
BORROWER	REGIONAL WATER RESOURCE AGENCY DAVISS COUNTY			
BRIEF DESCRIPTION				
<p>This is a loan increase in the amount of \$560,745 to the original loan amount of \$2,047,000. The reason for the increase is due to bids coming in higher than originally estimated. The increase will bring the new loan total to \$2,607,745. The project was also retroactively awarded \$250,000 principal forgiveness from the 2017 cap grant for removing a package treatment plant.</p> <p>Original Project Description: The project will extend RWRA's service to 122 households and a church in the Cedar Hills neighborhood. The package treatment plant currently serving these customers is failing and will be eliminated. The sewer extension will require gravity sewers, a pump station, and a force main. The existing collection system within the Cedar Hills neighborhood will also be rehabilitated.</p>				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$2,607,745	RD Fee %	Actual %	
				Administrative Expenses \$35,000
				Legal Expenses 20,000
				Land, Easements 220,000
		7.0%	7.8%	Eng - Design / Const 168,290
				Construction 1,967,686
				Contingency 196,769
TOTAL	\$2,607,745	TOTAL		\$2,607,745
REPAYMENT	Rate	1.75%	Est. Annual Payment \$144,944	
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bryant Engineering Inc.		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	April 2019		
	Construction Start	July 2019		
	Construction Stop	August 2020		
DEBT PER CUSTOMER	Existing	\$1,127		
	Proposed	\$1,290		
OTHER DEBT	See Attached			
RESIDENTIAL RATES	Current	Users	Avg. Bill	
		30,599	\$39.59 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	7,167,420	3,177,474	3,989,946	2.3
Audited 2017	8,201,258	2,768,067	5,433,191	3.0
Audited 2018	9,308,775	3,467,063	5,841,712	2.7
Projected 2019	8,151,333	3,585,127	4,566,206	2.3
Projected 2020	8,336,058	3,625,941	4,710,117	2.3
Projected 2021	8,498,116	4,624,167	3,873,949	1.8
Projected 2022	8,638,748	4,692,028	3,946,720	1.8
Projected 2023	8,306,378	5,133,687	3,172,691	1.6

Reviewer: Ashley Adams  
Date: June 18, 2019  
Loan Number: A18-007 (Increase)

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
REGIONAL WATER RESOURCE AGENCY, DAVIESS COUNTY  
PROJECT REVIEW  
SX21059054**

**I. PROJECT DESCRIPTION**

The Regional Water Resource Agency (RWRA) is requesting an increase to loan A18-007 in the amount of \$560,745 for the Cedar Hills Subdivision Sewer Extension project due to bids coming in higher than estimated. The loan was originally approved for \$2,047,000 in June 2018 and the increase will bring the new loan total to \$2,607,745.

This project involves the extension of sewer service to the Cedar Hills neighborhood in eastern Daviess County via gravity sewers extending from the existing Countryside Pump Station. The sewer extension will require a combination of gravity sewers varying in size up to 15', a pump station, and a force main. This project will eliminate one failing package plant that presently serves 122 households and one church. As proposed, these 122 homes and a church will be connected into the RWRA sewer system. Without the current operation and ultimate replacement, approximately 125 homes will be left without viable sewer service and will subsequently become uninhabitable.

In addition, this project also involves the rehabilitation of the existing collection system within the Cedar Hills neighborhood. The level of decline of the package plant and collection system has accelerated in recent years, necessitating the development of an alternative to the existing package plant and substantial rehabilitation efforts (manhole rehabilitation, manholes adjusted to grade, main repairs, lateral repairs and pipe lining.)

**II. PROJECT BUDGET**

	<b>Total</b>
Administrative Expenses	\$ 35,000
Legal Expenses	20,000
Land, Easements	220,000
Engineering Fees - Design	168,290
Construction	1,967,686
Contingency	196,769
<b>Total</b>	<b>\$ 2,607,745</b>

### III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 2,607,745	100%
<b>Total</b>	<b>\$ 2,607,745</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 2,607,745
Less: Principal Forgiveness	250,000
Amortized Loan Amount	<u>\$ 2,357,745</u>
Interest Rate	1.75%
Loan Term (Years)	<u>20</u>
Estimated Annual Debt Service	\$ 140,228
Administrative Fee (0.20%)	<u>4,715</u>
<b>Total Estimated Annual Debt Service</b>	<b>\$ 144,944</b>

### V. PROJECT SCHEDULE

Bid Opening	April 2019
Construction Start	July 2019
Construction Stop	August 2020

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

	<u>Current</u>	<u>Additional</u>	<u>Total</u>
Residential	27,718	122	27,840
Commercial	2,881	1	2,882
<b>Total</b>	<b>30,599</b>	<b>123</b>	<b>30,722</b>

**B) Rates**

	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	07/01/18	07/01/17
Minimum	\$ 15.15	\$ 14.05
Each additional 1,000 gallons	4.39	4.39
Environmental Improvement Charge	6.35	5.15
Capacity Fee	0.53	0.53
<b>Cost for 4,000 gallons</b>	<b>\$ 39.59</b>	<b>\$ 37.29</b>
Increase %	6.2%	8.2%
Affordability Index (Rate/MHI)	1.0%	0.9%

RWRA has rate adjustments planned through 2021. All rate increases have been included in this analysis.

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 31,643 with a Median Household Income (MHI) of \$47,132. The median household income for the Commonwealth is \$44,811. The project originally qualified for a 1.75% interest rate based on MHI in the FY 2018 funding cycle and it will stay the same for the increased loan amount.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	54,450		85,949		June 2005	6.3%
1990	53,549	-1.7%	87,189	1.4%	June 2010	9.2%
2000	54,067	1.0%	91,545	5.0%	June 2015	4.9%
2010	57,265	5.9%	96,656	5.6%	June 2018	4.6%
Current	58,685	2.5%	98,724	2.1%		
Cumulative %		7.8%		14.9%		

**VIII. 2017 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness not to exceed \$250,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower. The project received principal forgiveness due to the removal of a package treatment plant and was retroactively awarded this additional subsidization in SFY 2019.

## **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

### **HISTORY**

Revenues increased approximately 17% from \$19.6 million in 2016 to \$23 million from in 2018 mostly due to rate increases. Operating expenses increased approximately 11% from \$12.6 million to \$13.9 million during the same time period. Cash flow available for debt service was \$7.1 million, \$8.2 million, and \$9.3 million in 2016, 2017, and 2018 respectively, while the debt coverage ratio was 12.3, 3.0, and 2.7.

The 2018 balance sheet reflects a current ratio of 4.2, debt to equity ratio of 0.9, and 32.5 days sales in accounts receivable.

### **PROJECTIONS**

Projections are based on the following assumptions:

- 1) Revenues will increase according to the rate plan established by RWRA through 2021.
- 2) Operating expenses will increase 2% annually for inflation.
- 3) Debt service for both loans A19-024 and the increase to A18-007 have been factored into this analysis.
- 4) Debt service coverage is 1.8 in 2021 when principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

### **REPLACEMENT RESERVE**

The current replacement reserve account of \$2,500,000 is adequate to cover reserves for all KIA loans. No additional reserves will be required as a result of this loan.

**X. DEBT OBLIGATIONS**

	<b>Outstanding</b>	<b>Maturity</b>
2016 Series A Revenue Bonds	\$ 2,130,000	2027
KIA A99-04	7,150,490	2023
KIA A06-02	3,608,592	2027
KIA A07-08	783,753	2028
KIA A10-13	5,066,067	2032
KIA A12-14	317,861	2033
KIA A12-15	2,177,320	2033
KIA A13-017	840,523	2035
KIA A13-028	873,183	2035
KIA A14-008	316,123	2035
KIA A15-002 (i/a/o \$8,007,500)	2,990,992	2038
KIA A15-027 (i/a/o \$1,425,000)	912,877	2037
KIA A15-099 (i/a/o \$3,566,001)	2,968,061	2038
KIA A18-026 (i/a/o \$5,619,274)	581,221	2038
KIA B17-014 (i/a/o \$500,000)	142,471	2038
KIA B17-015 (i/a/o \$485,000)	397,276	2038
City of Owensboro JSA Improvements	646,813	2035
<b>Total</b>	<b>\$ 31,913,523</b>	

**XI. CONTACTS**

<b>Legal Applicant</b>	
Entity Name	Regional Water Resource Agency
Authorized Official	Joseph G. Schepers, Executive Director
County	Daviess
Email	schepersjg@rwra.org
Phone	(270) 687-8440
Address	1722 Pleasant Valley Road Owensboro, KY 42303

<b>Applicant Contact</b>	
Name	Sean O'Bryan, Assoc. Dir. of Engineering
Organization	Regional Water Resource Agency
Email	obryansm@rwra.org
Phone	(270) 927-9211
Address	2101 Grimes Avenue Owensboro, KY 42303

<b>Project Administrator</b>	
Name	Joanna Shake
Organization	Associate Director
Email	jdshake@gradd.com
Phone	270-926-4433
Address	300 GRADD Way Owensboro, KY 42301

<b>Consulting Engineer</b>	
PE Name	David Weaver
Firm Name	Bryant Engineering Inc.
Email	david.weaver@bryant-eng.com
Phone	270-685-2811
Address	1535 Frederica Street Owensboro, KY 42301

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.



**REGIONAL WATER RESOURCE AGENCY  
FINANCIAL SUMMARY (June YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	10,735,081	15,074,573	21,114,865	21,617,513	22,132,924	22,562,451	22,997,186	23,312,918
Other Assets	75,927,345	78,631,149	84,868,131	86,402,864	94,151,515	96,461,180	97,805,924	98,454,042
Total	<u>86,662,426</u>	<u>93,705,722</u>	<u>105,982,996</u>	<u>108,020,377</u>	<u>116,284,439</u>	<u>119,023,631</u>	<u>120,803,110</u>	<u>121,766,960</u>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	4,120,209	4,649,222	5,032,924	5,087,242	5,152,479	5,213,618	5,280,761	5,370,761
Long Term Liabilities	34,208,359	38,052,671	44,313,636	39,830,422	44,594,804	44,887,898	44,119,750	43,291,601
Total Liabilities	<u>38,328,568</u>	<u>42,701,893</u>	<u>49,346,560</u>	<u>44,917,664</u>	<u>49,747,283</u>	<u>50,101,516</u>	<u>49,400,511</u>	<u>48,662,362</u>
Net Assets	<u>48,333,858</u>	<u>51,003,829</u>	<u>56,636,436</u>	<u>63,102,713</u>	<u>66,537,156</u>	<u>68,922,115</u>	<u>71,402,599</u>	<u>73,104,598</u>
<b>Cash Flow</b>								
Revenues	19,642,314	21,405,811	23,051,295	23,567,203	24,065,128	24,546,650	25,013,135	25,013,135
Operating Expenses	12,613,885	13,331,742	13,986,655	15,660,005	15,973,205	16,292,669	16,618,522	16,950,892
Other Income	138,991	127,189	244,135	244,135	244,135	244,135	244,135	244,135
Cash Flow Before Debt Service	<u>7,167,420</u>	<u>8,201,258</u>	<u>9,308,775</u>	<u>8,151,333</u>	<u>8,336,058</u>	<u>8,498,116</u>	<u>8,638,748</u>	<u>8,306,378</u>
<b>Debt Service</b>								
Existing Debt Service	3,177,474	2,768,067	3,467,063	3,585,127	3,625,941	4,551,695	4,547,084	4,547,421
Proposed KIA Loan A18-007 Increase	0	0	0	0	0	72,472	144,944	144,944
Proposed KIA Loan A19-024	0	0	0	0	0	0	0	441,322
Total Debt Service	<u>3,177,474</u>	<u>2,768,067</u>	<u>3,467,063</u>	<u>3,585,127</u>	<u>3,625,941</u>	<u>4,624,167</u>	<u>4,692,028</u>	<u>5,133,687</u>
Cash Flow After Debt Service	<u>3,989,946</u>	<u>5,433,191</u>	<u>5,841,712</u>	<u>4,566,206</u>	<u>4,710,117</u>	<u>3,873,949</u>	<u>3,946,720</u>	<u>3,172,691</u>
<b>Ratios</b>								
Current Ratio	2.6	3.2	4.2	4.2	4.3	4.3	4.4	4.3
Debt to Equity	0.8	0.8	0.9	0.7	0.7	0.7	0.7	0.7
Days Sales in Accounts Receivable	33.1	33.3	32.5	32.5	32.5	32.5	32.5	32.5
Months Operating Expenses in Unrestricted Cash	6.1	9.2	13.0	13.1	13.2	13.2	0.0	0.0
Debt Coverage Ratio	2.3	3.0	2.7	2.3	2.3	1.8	1.8	1.6

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	July 9, 2019	
<b>FUND A, FEDERALLY ASSISTED WASTEWATER</b>		KIA Loan Number	A19-001	
<b>REVOLVING LOAN FUND</b>		WRIS Number	SX21219014	
BORROWER	CITY OF ELKTON TODD COUNTY			
BRIEF DESCRIPTION				
This is the construction portion of a Planning and Design project funded by KIA Loan A18-015 to address excessive wet weather sanitary sewer flows in the City of Elkton's wastewater collection system including existing constructed overflows. Construction will include two contracts. Contract 1 will include sewer system rehabilitation and contract 2 will include repairs and upgrades at the wastewater treatment plant. Upon completion of Contract 1, flow monitoring will be conducted and if needed (and the budget allows), pump stations will be upgraded in the collection system.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$3,434,451	Administrative Expenses	RD Fee %	Actual %
KIA Loan A18-015 (P&D)	500,000	Planning		
		Eng - Design / Const	7.1%	7.1%
		Eng - Insp	3.9%	3.9%
		Eng - Other		
		Construction		
		Contingency		
TOTAL	\$3,934,451	TOTAL		
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$111,325
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	GRW Engineers, Inc.		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Aug-19		
	Construction Start	Sep-19		
	Construction Stop	Oct-21		
DEBT PER CUSTOMER	Existing	\$1,331		
	Proposed	\$4,548		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	887	\$44.29 (for 4,000 gallons)	
	Additional	0	\$44.29 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	218,318	79,243	139,075	2.8
Audited 2017	187,637	78,974	108,663	2.4
Audited 2018	183,938	78,710	105,228	2.3
Projected 2019	203,948	80,153	123,795	2.5
Projected 2020	185,759	79,808	105,951	2.3
Projected 2021	157,006	78,343	78,663	2.0
Projected 2022	233,082	134,445	98,638	1.7
Projected 2023	213,779	190,030	23,749	1.1

Reviewer: Ashley Adams  
Date: July 9, 2019  
Loan Number: A19-001

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF ELKTON, TODD COUNTY  
PROJECT REVIEW  
SX21219014**

**I. PROJECT DESCRIPTION**

The City of Elkton is requesting a Fund A loan in the amount of \$3,934,451 for the Wastewater System Rehabilitation and Improvements project. This loan total includes the existing Planning and Design loan for the project, A18-015, in the amount of \$500,000. The purpose of this project is to eliminate sanitary sewer overflows and improve efficiency in the wastewater treatment process for the City of Elkton. The City has significant issues with excessive wet weather sanitary sewer flows in its wastewater collection system including existing constructed overflows (located at two existing pumping stations). These overflows are active during significant rainfall events. The Kentucky Division of Water has issued a deadline of June, 2020 for the elimination of Elkton's two existing sanitary sewer overflows (SSO's). On several occasions during the recent past, it has been noted that wet weather flows at the Elkton Wastewater Treatment Plant were greater than 1,000,000± gallons per day compared to typical dry weather average daily flow of 100,000± per day. This resulting wet weather to dry weather flow peaking factor is over 10:1 and is very high. The planned system evaluation and rehabilitation will result in reduced overflow events, and the improvements to pump stations and treatment facilities will maximize the effectiveness of the process and improve efficiency throughout the treatment process. The planning portion of the project included field investigations, evaluation of pump stations and the wastewater treatment plant, preparation of an SSES report, and a Preliminary Engineering Report. The alternatives and recommendations included in these reports resulted in the design of two construction contracts.

**Contract 1 - Sewer System Rehabilitation**

Work to be included under the Wastewater Collection System Rehabilitation Contract includes the installation of cured-in-place pipe of the following amounts and sizes: approximately 403 LF of 6 inch pipe, 18,508 LF of 8 inch pipe, 918 LF of 10 inch pipe, and 268 LF of 15 inch pipe. The project also includes the replacement of 50 LF of 8 inch gravity sewer lines, 20 point line repairs, 58 service lateral connection replacements, installation of one 4 foot diameter manhole, and repairs to approximately 54 manholes, along with all related work. These repairs are located throughout the sewer system.

## **Contract 2 - Wastewater Treatment Plant Repairs and Upgrades**

Work to be included under Contract 2 will occur at the Wastewater Treatment Plant and address issues with flow meters, screening and grit removal equipment, aeration and mixing equipment, valves and gates, and return sludge pumping. This work includes replacement of some components, alterations and revisions to these processes, and site piping and influent structure modifications. The chemical feed processes for removing phosphorous and for pH adjustment will be improved. The sludge dewatering process will also be modified and upgraded.

Upon completion of Contract 1 - Sewer System Rehabilitation, the results (reduction of wet weather flows in the system) will be evaluated by flow monitoring. If needed, and if the budget is available, a third construction contract will be prepared to upgrade the pump stations in the collection system.

### **II. PROJECT BUDGET**

	<b>Total</b>
Administrative Expenses	\$ 15,000
Planning	276,572
Engineering Fees - Design	185,428
Engineering Fees - Construction	46,357
Engineering Fees - Inspection	127,434
Engineering Fees - Other	38,000
Construction	2,950,600
Contingency	295,060
<b>Total</b>	<b>\$ 3,934,451</b>

### **III. PROJECT FUNDING**

	<b>Amount</b>	<b>%</b>
Fund A Loan	\$ 3,434,451	87%
KIA Loan A18-015 (P&D)	500,000	13%
<b>Total</b>	<b>\$ 3,934,451</b>	<b>100%</b>

### **IV. KIA DEBT SERVICE**

Construction Loan + KIA Loan A18-015 (P&D)	\$ 3,934,451
Less: Principal Forgiveness	1,000,000
Amortized Loan Amount	\$ 2,934,451
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 105,456
Administrative Fee (0.20%)	5,869
<b>Total Estimated Annual Debt Service</b>	<b>\$ 111,325</b>

**V. PROJECT SCHEDULE**

Bid Opening	August 2019
Construction Start	September 2019
Construction Stop	October 2021

**VI. CUSTOMER COMPOSITION AND RATE STRUCTURE**

**A) Customers**

	<u>Current</u>
Residential	724
Commercial	157
Industrial	6
<b>Total</b>	<b>887</b>

**B) Rates**

<b>Water</b>	<b>Inside City</b>		<b>Outside City</b>	
	Current	Prior	Current	Prior
Date of Last Rate Increase	07/01/18	07/01/17	07/01/18	07/01/17
Minimum (2,000 gallons)	\$21.63	\$21.00	\$24.47	\$23.76
Next 8,000 Gallons (per 1,000)	11.33	11.00	12.80	12.80
Cost for 4,000 gallons	\$44.29	\$43.00	\$50.07	\$49.36
Increase %	3.0%		1.4%	
Affordability Index (Rate/MHI)	2.1%		2.3%	

<b>Sewer</b>	<b>Inside City</b>	
	Current	Prior
Date of Last Rate Increase	07/01/18	07/01/17
Minimum (2,000 gallons)	\$30.38	\$28.93
Over 2,000 gallons (per 1,000)	7.35	7.00
Cost for 4,000 gallons	\$45.08	\$42.93
Increase %	5.0%	
Affordability Index (Rate/MHI)	2.1%	

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 2,170 with a Median Household Income (MHI) of \$32,632. The median household income for the Commonwealth is \$44,811. The project will qualify for a 0.5% interest rate and principal forgiveness based on MHI.

Year	Population				County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	1,815		11,874		June 2005	6.5%
1990	1,789	-1.4%	10,940	-7.9%	June 2010	9.7%
2000	1,984	10.9%	11,971	9.4%	June 2015	4.9%
2010	2,062	3.9%	12,460	4.1%	June 2018	4.4%
Current	2,166	5.0%	12,465	0.0%		
Cumulative %		19.3%		5.0%		

### VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project qualifies for Green Project Reserve (GPR) funding for \$3,934,451. The breakdown of the GPR to the respective “green” categories is listed below:
  - a. Green Infrastructure - \$0
  - b. Water Efficiency -\$0
  - c. Energy Efficiency - \$3,924,451
  - d. Environmentally Innovative - \$10,000
  
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,000,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

### IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

#### HISTORY

Combined water and sewer revenues have increased 5% from \$1 million in 2016 to \$1.1 million in 2018. Revenue increases can be mostly attributed to rate increases in both water and sewer. Combined operating expenses have increased 11% from \$800 thousand in 2016 to \$891 thousand in 2019. The debt coverage ratio was 2.8, 2.4, and 2.3 from 2016 to 2018, respectively.

The 2018 balance sheet reflects a current ratio of 1.5, a debt to equity ratio of 0.5, 52 days sales in accounts receivable, and 3.6 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Water revenues will increase approximately 3% and sewer revenues will increase approximately 5% in FY 2019 due to a previously approved rate increase.
- 2) The City will also increase rates to generate an additional \$95,000 (9% of total revenues, 20% of sewer revenues) prior to loan repayment estimated in 2022.
- 3) Expenses will increase 2% annually for inflation.
- 4) Debt service for both KIA Loans F19-035 and A19-001 have been factored into this analysis.
- 5) Debt service coverage is 2.0 in 2021 when F19-035 is estimated to go into repayment and 1.1 in 2023 when A19-001 full principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$196,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$9,800 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KIA Loan (B06-01)	\$ 498,267	2037
KIA Loan (B11-07)	91,964	2031
KIA Loan (B13-001)	286,297	2034
KIA Loan (F209-07)	51,877	2030
Revenue Bond Series 2007	311,500	2048
KIA Loan (A18-015 i/a/o \$500,000)	-	TBD
KIA Loan (F19-035 i/a/o \$170,000)	-	TBD
<b>Total</b>	<b>\$ 1,242,905</b>	

## XI. CONTACTS

### **Legal Applicant**

Entity Name	City of Elkton
Authorized Official	Arthur Green (Mayor)
County	Todd
Email	agreen@elktonky.com
Phone	270-265-9877
Address	PO Box 578 Elkton, KY 42220

### **Applicant Contact**

Name	Terry Frogue
Organization	City of Elkton
Email	elkcityof@bellsouth.net
Phone	270-265-5703
Address	PO Box 578 Elkton, KY 42220

### **Project Administrator**

Name	Laura Gilkerson
Organization	GRW Engineers, Inc.
Email	lgilkerson@grwinc.com
Phone	859-229-2667
Address	801 Corporate Dr. Lexington, KY 40503

### **Consulting Engineer**

PE Name	Josh Flanery
Firm Name	GRW Engineers, Inc.
Email	jflanery@grwinc.com
Phone	502-489-8484
Address	9710 Bunsen Parkway Louisville, KY 40299



## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions and the following special conditions:

- The City of Elkton shall pass an ordinance to increase rates enough to generate a minimum of \$95,000 in additional annual revenues (approximately 9% of total water and sewer revenues or 20% of sewer revenues) by July 1, 2019.
- A conditional assistance agreement will be executed if the contracts are not bid and awarded at the same time.

**CITY OF ELKTON  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	392,511	478,172	493,004	622,162	728,113	806,776	919,014	942,763
Other Assets	6,676,336	6,466,175	6,547,929	6,087,177	8,025,033	9,690,278	9,380,223	9,070,168
<b>Total</b>	<b>7,068,847</b>	<b>6,944,347</b>	<b>7,040,933</b>	<b>6,709,339</b>	<b>8,753,146</b>	<b>10,497,054</b>	<b>10,299,237</b>	<b>10,012,931</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	268,920	286,913	327,831	329,507	331,195	333,489	335,289	337,690
Long Term Liabilities	1,747,821	1,879,877	2,025,110	1,480,388	2,980,261	4,394,241	4,332,522	4,269,803
<b>Total Liabilities</b>	<b>2,016,741</b>	<b>2,166,790</b>	<b>2,352,941</b>	<b>1,809,895</b>	<b>3,311,456</b>	<b>4,727,730</b>	<b>4,667,811</b>	<b>4,607,493</b>
<b>Net Assets</b>	<b>5,052,106</b>	<b>4,777,557</b>	<b>4,687,992</b>	<b>4,899,444</b>	<b>5,441,690</b>	<b>5,769,324</b>	<b>5,631,426</b>	<b>5,405,438</b>
<b>Cash Flow</b>								
Revenues	1,007,144	1,014,324	1,057,485	1,095,328	1,095,328	1,095,328	1,190,328	1,190,328
Operating Expenses	802,090	840,462	891,633	909,466	927,655	956,408	975,332	994,635
Other Income	13,264	13,775	18,086	18,086	18,086	18,086	18,086	18,086
<b>Cash Flow Before Debt Service</b>	<b>218,318</b>	<b>187,637</b>	<b>183,938</b>	<b>203,948</b>	<b>185,759</b>	<b>157,006</b>	<b>233,082</b>	<b>213,779</b>
<b>Debt Service</b>								
Existing Debt Service	79,243	78,974	78,710	80,153	79,808	75,076	75,515	75,438
Proposed KIA Loan F19-035	0	0	0	0	0	3,267	3,267	3,267
Proposed KIA Loan A19-001	0	0	0	0	0	0	55,663	111,325
<b>Total Debt Service</b>	<b>79,243</b>	<b>78,974</b>	<b>78,710</b>	<b>80,153</b>	<b>79,808</b>	<b>78,343</b>	<b>134,445</b>	<b>190,030</b>
<b>Cash Flow After Debt Service</b>	<b>139,075</b>	<b>108,663</b>	<b>105,228</b>	<b>123,795</b>	<b>105,951</b>	<b>78,663</b>	<b>98,638</b>	<b>23,749</b>
<b>Ratios</b>								
Current Ratio	1.5	1.7	1.5	1.9	2.2	2.4	2.7	2.8
Debt to Equity	0.4	0.4	0.5	0.4	0.6	0.8	0.8	0.9
Days Sales in Accounts Receivable	54.7	50.5	52.1	52.1	52.1	52.1	52.1	52.1
Months Operating Expenses in Unrestricted Cash	2.7	3.9	3.6	5.2	6.5	7.3	8.4	8.5
Debt Coverage Ratio	2.8	2.4	2.3	2.5	2.3	2.0	1.7	1.1

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	July 9, 2019	
<b>FUND A, FEDERALLY ASSISTED WASTEWATER</b>		KIA Loan Number	A19-003	
<b>REVOLVING LOAN FUND</b>		WRIS Number	SX21047028	
<b>BORROWER</b>	CITY OF HOPKINSVILLE F/B/O HOPKINSVILLE WATER ENVIRONMENT AUTHORITY CHRISTIAN COUNTY			
<b>BRIEF DESCRIPTION</b>				
This project will renovate and expand the Hammond-Wood Waste Water Treatment plant from 6 MGD capacity to 9 MGD capacity. The expansion and renovation is needed in order to serve the current and future needs of the City of Hopkinsville and City of Pembroke. This project will also ensure that the effluent meets the permit requirements and allow an increase in flow to the plant to handle surcharge in the collection system due to inflow and infiltration. This is the first construction funding increment of a multi-phased funded loan that will span approximately 3 funding cycles with KIA.				
<b>PROJECT FINANCING</b>		<b>PROJECT BUDGET</b>		
KIA Fund A Loan (2019)	\$7,500,000	RD Fee %	Actual %	
KIA P&D Loan (A16-005)	1,500,000	Administrative Expenses		\$15,000
KIA Fund A Loan (2021)	16,940,000	Legal Expenses		15,000
KIA Fund A Loan (2022)	16,940,000	Land, Easements		50,000
		Planning		92,000
		Eng - Design / Const	6.4%	3.9%
		Eng - Insp	3.9%	1.0%
		Eng - Other		108,000
		Construction		36,200,000
		Equipment		600,000
		Contingency		3,600,000
		Other		250,000
<b>TOTAL</b>	<b>\$42,880,000</b>	<b>TOTAL</b>		<b>\$42,880,000</b>
<b>REPAYMENT</b>	Rate	0.50%	Est. Annual Payment	\$491,437
	Term	20 Years	1st Payment	6 Mo. after first draw
<b>PROFESSIONAL SERVICES</b>	Engineer	J.R. Wauford & Company		
	Bond Counsel	Dinsmore & Shohl, LLP		
<b>PROJECT SCHEDULE</b>	Bid Opening	Aug-19		
	Construction Start	Nov-19		
	Construction Stop	Apr-22		
<b>DEBT PER CUSTOMER</b>	Existing	\$5,281		
	Proposed	\$7,129		
<b>OTHER DEBT</b>	See Attached			
<b>OTHER STATE-FUNDED PROJECTS LAST 5 YRS</b>	See Attached			
<b>RESIDENTIAL RATES</b>		<u>Users</u>	<u>Avg. Bill</u>	
	Current	12,788	\$25.24 (for 4,000 gallons)	
	Additional	0	\$25.24 (for 4,000 gallons)	
<b>REGIONAL COORDINATION</b>	This project is consistent with regional planning recommendations.			
<b>CASHFLOW</b>	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	6,541,853	5,139,327	1,402,526	1.3
Audited 2017	7,424,982	5,665,131	1,759,851	1.3
Audited 2018	8,086,209	6,297,734	1,788,475	1.3
Projected 2019	8,461,340	6,015,500	2,445,840	1.4
Projected 2020	9,764,596	5,995,943	3,768,653	1.6
Projected 2021	10,822,991	6,163,457	4,659,534	1.8
Projected 2022	10,633,961	6,274,401	4,359,560	1.7
Projected 2023	10,313,950	8,851,854	1,462,096	1.2

Reviewer: Ashley Adams  
Date: July 9, 2019  
Loan Number: A19-003

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF HOPKINSVILLE F/B/O HOPKINSVILLE WATER ENVIRONMENT  
AUTHORITY, CHRISTIAN COUNTY  
PROJECT REVIEW  
SX21047028**

**I. PROJECT DESCRIPTION**

The City of Hopkinsville, for the benefit of the Hopkinsville Water Environment Authority (HWEA), is requesting a Fund A loan in the amount of \$7,500,000 for the Expand Hammond-Wood Wastewater Treatment Plant and Interceptor project. Prior KIA Loan A16-005 (\$1,500,000), which funded the planning and design of this project, will be rolled into this increment of the loan for a total of \$9,000,000.

The purpose of this project is to improve water quality of local streams as well as improve the ability of the system to meet permit limits due to aging and failing infrastructure. This project will renovate and expand the Hammond-Wood Waste Water Treatment Plant (WWTP) from 6MGD to 9MGD capacity. The expansion and renovation of the plant is needed in order to serve the current and future needs of Hopkinsville and the City of Pembroke. Capacity will be reached in the foreseeable future, particularly considering the WWTP receives additional flows from the recent closing of the Northside WWTP in Hopkinsville and continued industrial expansion projects in the Hopkinsville area. The project will also ensure that the effluent meets the permit requirements, and allow an increase in flow to the plant to handle surcharge in the collection system due to inflow and infiltration.

This project will include a bid option for a new bio-solids drying process with solar drying equipment at the treatment plant. If the utility determines that this is a viable option financially, the project will be modified. The total project cost without solar drying is currently estimated to be \$42,880,000. The project with the solar drying cost estimate is \$51,680,000. If HWEA determines that they will go with the solar drying option, KIA will perform the next incremental funding analysis based on those numbers.

Hammond-Wood WWTP currently serves over 12,000 customers in Christian County including the cities of Hopkinsville and Pembroke. In addition, Hopkinsville Water Environment Authority also provides sewer service to the cities of Crofton and Oak Grove and drinking water to the cities of Hopkinsville, Pembroke, and Crofton. HWEA will be expanding to include gas operations in the near future. The Utility currently has a gas line construction project in progress to serve commercial customers along US 41A and Hopkinsville's Southpark Industrial Park. Lines in that area could be operational as early as July 2019.

## II. PROJECT BUDGET

	<b>2019 KIA Increment + P&amp;D Loan</b>	<b>Estimated Project Total</b>
Administrative Expenses	\$ 15,000	\$ 15,000
Legal Expenses	15,000	15,000
Land, Easements	50,000	50,000
Planning	92,000	92,000
Engineering Fees - Design	1,300,000	1,300,000
Engineering Fees - Construction	60,000	250,000
Engineering Fees - Inspection	30,000	400,000
Engineering Fees - Other	108,000	108,000
Construction	7,200,000	36,200,000
Equipment	30,000	600,000
Contingency	0	3,600,000
Other	100,000	250,000
<b>Total</b>	<b>\$ 9,000,000</b>	<b>\$ 42,880,000</b>

## III. PROJECT FUNDING

	<b>Amount</b>	<b>%</b>
KIA Fund A Loan (2019)	\$ 7,500,000	17%
KIA P&D Loan (A16-005)	1,500,000	3%
KIA Fund A Loan (2021)	16,940,000	40%
KIA Fund A Loan (2022)	16,940,000	40%
<b>Total</b>	<b>\$ 42,880,000</b>	<b>100%</b>

## IV. KIA DEBT SERVICE

	<b>2019 KIA Increment + P&amp;D Loan</b>	<b>Total Project (No Solar)</b>
Construction Loan	\$ 9,000,000	\$ 42,880,000
Less: Principal Forgiveness	0	0
Amortized Loan Amount	\$ 9,000,000	\$ 42,880,000
Interest Rate	0.50%	0.50%
Loan Term (Years)	20	20
Estimated Annual Debt Service	\$ 473,437	\$ 2,255,663
Administrative Fee (0.20%)	18,000	85,760
<b>Total Estimated Annual Debt Service</b>	<b>\$ 491,437</b>	<b>\$ 2,341,423</b>

**V. PROJECT SCHEDULE**

Bid Opening	September 2019
Construction Start	November 2019
Construction Stop	April 2022

**VI. CUSTOMER COMPOSITION AND RATE STRUCTURE**

**A) Customers**

	<b>Current</b>
Residential	10,829
Commercial	1,897
Industrial	62
<b>Total</b>	<b>12,788</b>

**B) Rates**

<b>Hopkinsville Sewer</b>	Future	Future	Current	Prior
Date of Last Rate Increase	07/01/20	07/01/19	07/01/18	07/01/17
Flat Rate (300 cu.ft. or less)	\$18.39	\$16.14	\$14.16	\$13.05
Flat rate, per 100 cu.ft.	6.13	5.38	4.72	4.35
Cost for 4,000 gallons	\$32.78	\$28.77	\$25.24	\$23.26
Increase %	13.9%	14.0%	8.5%	
Affordability Index (Rate/MHI)	1.1%	1.0%	0.8%	
 <b>Pembroke Sewer</b>				
Date of Last Rate Increase	07/01/20	07/01/19	07/01/18	07/01/14
Flat Rate (300 cu.ft. or less)	\$25.13	\$22.04	\$19.33	\$16.96
Flat rate, per 100 cu.ft.	7.39	6.48	5.68	4.98
Cost for 4,000 gallons	\$42.48	\$37.25	\$32.66	\$28.65
Increase %	14.0%	14.0%	14.0%	
Affordability Index (Rate/MHI)	1.4%	1.2%	1.1%	

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 34,674 with a Median Household Income (MHI) of \$35,846. The median household income for the Commonwealth is \$44,811. The project will qualify for a 0.50% interest rate based on MHI.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	27,318		66,878		June 2005	5.4%
1990	29,809	9.1%	68,941	3.1%	June 2010	14.4%
2000	30,089	0.9%	72,265	4.8%	June 2015	5.8%
2010	31,577	4.9%	73,955	2.3%	June 2018	4.9%
Current	32,442	2.7%	73,936	0.0%		
Cumulative %		18.8%		10.6%		

## VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018 and include both the water and sewer funds. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

### HISTORY

Combined revenues for water and sewer increased 11% from \$15.1 million in 2016 to \$16.8 million in 2018. Sewer revenues have increased around 4% from \$7.5 million in 2016 to \$7.8 million in 2018 and water revenues have increased 16% from \$7.6 million in 2016 to \$9 million in 2018. Water revenue growth can be attributed to rate increases during the observed time period for ongoing capital projects while the marginal sewer increase is due to normal growth. Combined expenses increased 4% from \$8.6 million to \$8.9 million from 2016 to 2018.

The 2018 balance sheet reflects a current ratio of 1.9, a debt to equity ratio of 1.9, 23.8 days sales in accounts receivable, and 11 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Sewer revenues will increase according to the approved rate increases by the utility through FY 2021 (14% annually). An additional sewer rate increase may occur in 2022 depending on whether the project will include solar drying or not. Water revenues will remain flat for growth and volume.
- 2) Expenses will increase 2% for inflation.
- 3) All debt service and replacement reserves for pending KIA loans A11-08, A16-005, F13-020, and F16-001 have been included in this analysis.
- 4) This analysis includes debt service projections for all loan increments for the total project cost if the utility does not include solar drying in the project (total cost estimated at \$42,880,000). KIA will reassess in the next funding cycle if the borrower goes with the solar drying bid option (total cost estimated at \$51,680,000).
- 5) Debt service coverage is 1.2 in 2023 when principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$376,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$18,800 yearly) each December 1 for 20 years and maintained for the life of the loan.



**X. DEBT OBLIGATIONS**

	<b>Outstanding</b>	<b>Maturity</b>
Series 1998 Bonds	\$ 270,000	2021
Series 2010B Bonds	2,338,000	2030
KIA Loan B95-02	1,621,375	2026
KIA Loan A94-01	50,446	2020
KIA Loan A99-03	141,755	2021
KIA Loan A03-05	1,875,314	2026
KIA Loan F02-04	794,511	2028
KIA Loan A04-05	1,175,758	2027
KIA Loan F06-02	2,302,368	2028
KIA Loan F08-06	6,552,281	2032
KIA Loan A09-19	6,219,310	2034
KIA Loan A11-07	380,191	2033
KIA Loan A11-08	10,199,642	2036
KIA Loan A11-09	6,501,325	2036
KIA Loan A16-005 (P&D i/a/o \$1.5m)	726,900	TBD
KIA Loan F13-020 (i/a/o \$4m)	1,675,596	TBD
KIA Loan F16-001 (i/a/o \$8m)	1,692,872	TBD
USACE (Water)	1,529,504	2027
USACE (Gas)	2,040,196	2027
City of Hopkinsville- Series 2013B	2,980,000	2034
City of Hopkinsville- Series 2014B	1,700,000	2038
City of Hopkinsville- Series 2014C	1,265,000	2029
City of Hopkinsville- Series 2015A	12,240,000	2026
<b>Total</b>	<b>\$ 66,272,344</b>	

**XI. CONTACTS**

<b>Legal Applicant</b>	
Entity Name	City of Hopkinsville f/b/o Hopkinsville Water Environment Authority
Authorized Official	Carter Hendricks (Mayor)
County	Christian
Email	chendricks@hopkinsvilleky.us
Phone	270-890-0200
Address	PO Box 628 Hopkinsville, KY 42241

**Applicant Contact**

Name	Derrick Watson
Organization	Hopkinsville Water Environment Authority
Email	dwatson@hwea-ky.com
Phone	270-887-4237
Address	PO Box 628 Hopkinsville, KY 42241

**Project Administrator**

Name	Mike Beck
Organization	Hopkinsville Water Environment Authority
Email	mbeck@hwea-ky.com
Phone	270-887-4242
Address	PO Box 628 Hopkinsville, KY 42241

**Consulting Engineer**

PE Name	James Gregory Davenport
Firm Name	J.R. Wauford & Company
Email	gregd@jrwauford.com
Phone	615-883-3242
Address	PO Box 140350 Nashville, TN 37214

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF HOPKINSVILLE F/B/O HOPKINSVILLE WATER ENVIRONMENT AUTHORITY  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	6,244,543	9,600,607	9,577,564	9,890,857	10,346,122	10,893,776	11,329,732	11,475,941
Other Assets	117,161,039	121,724,558	122,883,567	112,750,785	127,131,073	134,245,584	141,090,120	136,856,937
Total	<u>123,405,582</u>	<u>131,325,165</u>	<u>132,461,131</u>	<u>122,641,642</u>	<u>137,477,195</u>	<u>145,139,360</u>	<u>152,419,852</u>	<u>148,332,879</u>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	5,491,652	8,197,043	5,168,069	2,833,901	2,904,101	3,147,303	3,395,026	3,476,506
Long Term Liabilities	72,216,178	78,080,506	82,217,271	67,772,917	81,463,487	87,920,584	94,135,359	91,804,154
Total Liabilities	<u>77,707,830</u>	<u>86,277,549</u>	<u>87,385,340</u>	<u>70,606,818</u>	<u>84,367,588</u>	<u>91,067,888</u>	<u>97,530,385</u>	<u>95,280,660</u>
Net Assets	<u>45,697,752</u>	<u>45,047,616</u>	<u>45,075,791</u>	<u>52,034,824</u>	<u>53,109,608</u>	<u>54,071,473</u>	<u>54,889,466</u>	<u>53,052,219</u>
<b>Cash Flow</b>								
Revenues	15,082,280	15,634,463	16,797,209	17,851,978	19,054,537	20,308,256	20,308,256	20,308,256
Operating Expenses	8,595,848	8,269,878	8,906,374	9,493,638	9,392,941	9,588,265	9,777,295	10,097,306
Other Income	55,421	60,397	195,374	103,000	103,000	103,000	103,000	103,000
Cash Flow Before Debt Service	<u>6,541,853</u>	<u>7,424,982</u>	<u>8,086,209</u>	<u>8,461,340</u>	<u>9,764,596</u>	<u>10,822,991</u>	<u>10,633,961</u>	<u>10,313,950</u>
<b>Debt Service</b>								
Existing Debt Service	5,139,327	5,665,131	6,297,734	6,015,500	5,995,943	6,163,457	6,274,401	6,510,431
Proposed KIA Loan 2019	0	0	0	0	0	0	0	491,437
Proposed KIA Loan 2020	0	0	0	0	0	0	0	924,993
Proposed KIA Loan 2021	0	0	0	0	0	0	0	924,993
Total Debt Service	<u>5,139,327</u>	<u>5,665,131</u>	<u>6,297,734</u>	<u>6,015,500</u>	<u>5,995,943</u>	<u>6,163,457</u>	<u>6,274,401</u>	<u>8,851,854</u>
Cash Flow After Debt Service	<u>1,402,526</u>	<u>1,759,851</u>	<u>1,788,475</u>	<u>2,445,840</u>	<u>3,768,653</u>	<u>4,659,534</u>	<u>4,359,560</u>	<u>1,462,096</u>
<b>Ratios</b>								
Current Ratio	1.1	1.2	1.9	3.5	3.6	3.5	3.3	3.3
Debt to Equity	1.7	1.8	1.9	1.4	1.6	1.7	1.8	1.8
Days Sales in Accounts Receivable	25.7	23.4	23.8	23.8	23.8	23.8	23.8	23.8
Months Operating Expenses in Unrestricted Cash	6.8	12.1	11.0	11.1	11.4	11.8	12.1	12.0
Debt Coverage Ratio	1.3	1.3	1.3	1.4	1.6	1.8	1.7	1.2

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	June 18, 2019	
<b>FUND A, FEDERALLY ASSISTED WASTEWATER</b>		KIA Loan Number	A19-009	
<b>REVOLVING LOAN FUND</b>		WRIS Number	SX21209012	
BORROWER	CITY OF GEORGETOWN SCOTT COUNTY			
BRIEF DESCRIPTION				
This project will expand sanitary sewer service from the intersection of US-25 and Bypass US-62 to the intersection of US-25 and KY-1963 in Scott County. Approximately 10 properties will be provided sanitary sewer service along the project route, two of which are mobile home parks (Spindletop and Ponderosa), with a capacity of approximately 500 households that are currently served by two package treatment plants in severe disrepair. The project will install approximately 17,000 linear feet (LF) of gravity trunk sewers and appurtenances, one sanitary sewer pump station, and approximately 6,400 LF of force main. The mobile home park sewer collection system will undergo rehab and replacement estimated at approximately 17,000 LF of collector sewers and various manholes as determined necessary. Approximately 320 service laterals will be installed for existing residents in the mobile home parks. Both of the failing package treatment plants will be decommissioned as a result of the project.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$13,542,784	RD Fee %	Actual %	
HB 265 Non-Coal Grant	1,075,000	Administrative Expenses		\$50,000
319 Non-Point Source Grant	750,000	Legal Expenses		22,000
Scott County	250,000	Land, Easements		255,000
LFUCG	450,000	Planning		93,884
City of Georgetown	250,000	Eng - Design / Const	6.4%	8.8%
		Eng - Insp	3.0%	2.0%
		Eng - Other		229,400
		Construction		12,861,400
		Contingency		1,285,900
TOTAL	\$16,317,784	TOTAL		\$16,317,784
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$475,840
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Hazen and Sawyer		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Oct-19		
	Construction Start	Nov-19		
	Construction Stop	Jul-21		
DEBT PER CUSTOMER	Existing	\$709		
	Proposed	\$1,326		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		Users	Avg. Bill	
	Current	13,588	\$18.98 (for 4,000 gallons)	
	Additional	0	\$18.98 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	3,416,985	1,168,133	2,248,852	2.9
Audited 2017	3,323,822	1,184,580	2,139,242	2.8
Audited 2018	4,433,128	1,468,221	2,964,907	3.0
Projected 2019	3,746,467	1,170,891	2,575,576	3.2
Projected 2020	3,580,969	1,170,254	2,410,715	3.1
Projected 2021	3,412,161	1,173,711	2,238,450	2.9
Projected 2022	3,206,077	1,407,698	1,798,379	2.3
Projected 2023	3,030,450	1,645,618	1,384,832	1.8

Reviewer: Ashley Adams  
Date: June 18, 2019  
Loan Number: A19-009

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF GEORGETOWN, SCOTT COUNTY  
PROJECT REVIEW  
SX21209012**

**I. PROJECT DESCRIPTION**

The City of Georgetown is requesting a Fund A loan in the amount of \$13,542,784 for the Georgetown/Scott County South Sewer Extension project. The purpose of this project is to eliminate the untreated sanitary discharges from two package treatment plants and remove major point sources of pollution to the Cane Run Creek and Cane Run Watershed thus improving the public health of the region. It will provide adequate sanitary sewer service to approximately 500 mobile home units (around 320 are currently occupied) with the Ponderosa and Spindletop mobile home parks (MHPs) by replacing all leaking collector sewers within the two MHPs and extending a gravity interceptor (approximately 17,000 LF) to a new pump station where the flows will be conveyed into Georgetown Municipal Water and Sewer Service (GMWSS) collection system. Once the two MHPs are fully connected to the new gravity collection system and pump station, the two existing package treatment plants, Ponderosa and Spindletop, will be decommissioned and demolished. The mobile home park collection systems will also undergo rehab and replacement of approximately 17,000 LF of collector sewers and various manholes as determined necessary. The gravity interceptor route will also provide sanitary sewer service for an area previously unserved. Both of the mobile home parks will be served by master meters billed to the owners of the parks with associated treatment and project costs being passed on to residents as part of their lot rent.

Georgetown Municipal Water and Sewer Service currently serves approximately 13,588 residential, commercial, and industrial customers in the City of Georgetown and Scott County.

## II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 50,000
Legal Expenses	22,000
Land, Easements	255,000
Planning	93,884
Engineering Fees - Design	1,061,700
Engineering Fees - Construction	180,300
Engineering Fees - Inspection	278,200
Engineering Fees - Other	229,400
Construction	12,861,400
Contingency	1,285,900
<b>Total</b>	<b>\$ 16,317,784</b>

## III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 13,542,784	83%
HB 265 Non-Coal Grant	1,075,000	7%
319 Non-Point Source Grant	750,000	5%
Scott County	250,000	2%
LFUCG	450,000	3%
City of Georgetown	250,000	2%
<b>Total</b>	<b>\$ 16,317,784</b>	<b>100%</b>

## IV. KIA DEBT SERVICE

Construction Loan	\$ 13,542,784
Less: Principal Forgiveness	1,000,000
Amortized Loan Amount	\$ 12,542,784
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 450,755
Administrative Fee (0.20%)	25,086
<b>Total Estimated Annual Debt Service</b>	<b>\$ 475,840</b>

## V. PROJECT SCHEDULE

Bid Opening	October 2019
Construction Start	November 2019
Construction Stop	July 2021

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

### A) Customers

	<u>Current</u>
Residential	12,204
Commercial	1,373
Industrial	11
Total	<u>13,588</u>

### B) Rates

<b>Sewer</b>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	11/15/07	05/15/04
Minimum (incl. 2,000 Gallons)	\$ 7.82	\$ 7.11
All Over 2,000 Gallons	5.58	5.07
<b>Cost for 4,000 gallons<sup>1</sup></b>	<b>\$ 18.98</b>	<b>\$ 17.25</b>
Increase %	10.0%	
Affordability Index (Rate/MHI) <sup>2</sup>	0.4%	

<b>Water</b>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	11/15/07	05/15/04
Minimum (incl. 2,000 Gallons)	\$ 8.54	\$ 7.76
All Over 2,000 Gallons	4.80	4.36
<b>Cost for 4,000 gallons<sup>1</sup></b>	<b>\$ 18.14</b>	<b>\$ 16.48</b>
Increase %	10.1%	
Affordability Index (Rate/MHI) <sup>2</sup>	0.4%	

<sup>1</sup> Rates stated here do not necessarily reflect anticipated rates for the entire project area as both MHPs will be served by master meters billed to the Spindletop and Ponderosa MHP property owners and passed through to residents.

<sup>2</sup> Please note the Affordability Index calculated here is for the City of Georgetown's Median Household Income as identified in WRIS, not for this specific project area, which received Disadvantaged Community Status via an Income Survey approved by KIA Staff.

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 28,325 with a Median Household Income (MHI) of \$60,705. However, this project received Disadvantaged Community Status after completing an Income Survey of the project area. There were 199 surveys completed of which 180 identified a household income below \$35,849 or 80% of Kentucky’s median household income level (\$44,811). Because of this, the project will qualify for a 0.5% interest rate, a 30 year loan term, and \$1 million in principal forgiveness.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	10,972		21,813		June 2005	5.3%
1990	11,414	4.0%	23,867	9.4%	June 2010	8.5%
2000	18,080	58.4%	33,061	38.5%	June 2015	4.3%
2010	29,098	60.9%	47,173	42.7%	June 2018	4.0%
Current	31,708	9.0%	51,348	8.9%		
Cumulative %		189.0%		135.4%		

**VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,000,000, will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

**IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.



## HISTORY

Total water and sewer revenues have increased 13% from \$11 million in 2016 to \$12.5 million in 2018 largely due to Georgetown's continued population growth. Water revenues as of 2018 contribute approximately \$4.4 million to the total while sewer revenues contribute approximately \$4.5 million. Total operating expenses for both water and sewer increased approximately 6% from \$7.7 million in 2016 to \$8.2 million in 2018 mostly due to inflation. Cash flow before debt service was \$3.4 million in 2016, \$3.3 million in 2017, and \$4.4 million in 2018. The debt coverage ratio was 2.9, 2.8, and 3.0 from 2016-2018, respectively.

The 2018 balance sheet reflects a current ratio of 0.7, a debt to equity ratio of 0.2, 37.9 days sales in accounts receivable, and 0.8 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Both water and sewer revenues will remain flat.
- 2) The Utility is currently exploring a Capital Improvement Plan that could exceed \$80 million which will necessitate dramatic rate increases in the coming years.
- 3) Expenses will increase 2% annually for inflation.
- 4) Debt service coverage is 1.8 in 2023 when full principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$678,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$33,900 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KY Rural Water & Sewer Series 2007A	\$ 3,779,833	2027
Revenue Bond Series 2013A	3,835,000	2033
Revenue Bond Series 2013B	1,360,000	2023
KY Bank LOC	631,548	2020
<b>Total</b>	<b>\$ 9,606,381</b>	

## **XI. CONTACTS**

### **Legal Applicant**

Entity Name	City of Georgetown
Authorized Official	Tom Prather (Mayor)
County	Scott
Email	tom.prather@georgetownky.gov
Phone	502-863-9800
Address	100 N Court St Georgetown, KY 40324

### **Applicant Contact**

Name	Chase Azevedo
Organization	Georgetown Municipal Water & Sewer Service
Email	cazevedo@gmwss.com
Phone	502-863-7816
Address	100 W Main St. Georgetown, KY 40324

### **Project Administrator**

Name	Karyn Leverenz
Organization	Bluegrass Area Development District
Email	kleverenz@bgadd.org
Phone	859-269-8021
Address	699 Perimeter Dr. Lexington, KY 40517

### **Consulting Engineer**

PE Name	Kurt Zehnder
Firm Name	Hazen and Sawyer
Email	kzehnder@hazenandsawyer.com
Phone	859-219-1126
Address	230 Lexington Green Cir, Ste. 520 Lexington, KY 40503

## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF GEORGETOWN  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	1,908,486	2,073,425	1,940,782	2,143,872	2,384,943	2,608,788	2,788,626	2,927,109
Other Assets	91,893,834	91,942,715	95,845,628	91,823,576	98,491,484	105,004,353	102,427,140	99,468,935
<b>Total</b>	<b>93,802,320</b>	<b>94,016,140</b>	<b>97,786,410</b>	<b>93,967,448</b>	<b>100,876,427</b>	<b>107,613,141</b>	<b>105,215,766</b>	<b>102,396,044</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	1,968,568	2,235,029	2,051,394	2,030,477	2,057,610	2,090,910	2,119,627	2,150,927
Long Term Liabilities	15,926,650	18,146,530	19,114,682	12,934,471	18,313,780	23,661,089	22,709,589	21,728,089
<b>Total Liabilities</b>	<b>17,895,218</b>	<b>20,381,559</b>	<b>21,166,076</b>	<b>14,964,948</b>	<b>20,371,390</b>	<b>25,751,999</b>	<b>24,829,216</b>	<b>23,879,016</b>
<b>Net Assets</b>	<b>75,907,102</b>	<b>73,634,581</b>	<b>76,620,334</b>	<b>79,002,500</b>	<b>80,505,037</b>	<b>81,861,142</b>	<b>80,386,550</b>	<b>78,517,028</b>
<b>Cash Flow</b>								
Revenues	11,076,750	11,541,875	12,535,831	12,011,423	12,011,423	12,011,423	12,011,423	12,011,423
Operating Expenses	7,668,209	8,226,377	8,112,625	8,274,878	8,440,376	8,609,184	8,815,268	8,990,895
Other Income	8,444	8,324	9,922	9,922	9,922	9,922	9,922	9,922
<b>Cash Flow Before Debt Service</b>	<b>3,416,985</b>	<b>3,323,822</b>	<b>4,433,128</b>	<b>3,746,467</b>	<b>3,580,969</b>	<b>3,412,161</b>	<b>3,206,077</b>	<b>3,030,450</b>
<b>Debt Service</b>								
Existing Debt Service	1,168,133	1,184,580	1,468,221	1,170,891	1,170,254	1,173,711	1,169,778	1,169,778
Proposed KIA Loan	0	0	0	0	0	0	237,920	475,840
<b>Total Debt Service</b>	<b>1,168,133</b>	<b>1,184,580</b>	<b>1,468,221</b>	<b>1,170,891</b>	<b>1,170,254</b>	<b>1,173,711</b>	<b>1,407,698</b>	<b>1,645,618</b>
<b>Cash Flow After Debt Service</b>	<b>2,248,852</b>	<b>2,139,242</b>	<b>2,964,907</b>	<b>2,575,576</b>	<b>2,410,715</b>	<b>2,238,450</b>	<b>1,798,379</b>	<b>1,384,832</b>
<b>Ratios</b>								
Current Ratio	1.0	0.9	0.9	1.1	1.2	1.2	1.3	1.4
Debt to Equity	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3
Days Sales in Accounts Receivable	38.8	40.1	37.9	37.9	37.9	37.9	37.9	37.9
Months Operating Expenses in Unrestricted Cash	1.0	1.1	0.8	1.2	1.5	1.8	2.0	2.1
Debt Coverage Ratio	2.9	2.8	3.0	3.2	3.1	2.9	2.3	1.8

<b>EXECUTIVE SUMMARY</b>		Reviewer	Meili Sun	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	May 7, 2019	
<b>FUND A, FEDERALLY ASSISTED WASTEWATER</b>		KIA Loan Number	A19-012	
<b>REVOLVING LOAN FUND</b>		WRIS Number	SX21171020	
BORROWER	CITY OF TOMPKINSVILLE MONROE COUNTY			
BRIEF DESCRIPTION				
This project will convert the existing Tompkinsville Extended Aeration Plant 670,000 GPD AVD to a 1.7 MGD Sequential Batch Reactor (SBR) WWTP. It will also install a new Headwork's facility, replace the existing chlorine disinfection system with a new Ultraviolet (UV) system, rehabilitate approximately 8,750 LF of dilapidated sanitary sewer collection mains, construct approximately 11,600 LF of new HDPE force main to Joe Harrison Carter (JHC) Elementary, install a new lift station at JHC to replace and decommission the JHC Package Treatment Facility, install a new SCADA system which will be connected to the WWTP and all ten lift stations within the City's sewer system, and install VFDs on all lift stations to optimize use and reduce power consumption.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$861,148	Administrative Expenses	RD Fee %	Actual %
CDBG	1,000,000	Planning		
ARC	500,000	Eng - Design / Const	7.6%	7.6%
Monroe Board of Ed	10,000	Eng - Insp	6.1%	6.0%
		Construction		
		Contingency		
TOTAL	\$2,371,148	TOTAL		
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$16,335
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Precision Engineering, LLC		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Sep-19		
	Construction Start	Oct-19		
	Construction Stop	Jun-20		
DEBT PER CUSTOMER	Existing	\$1,237		
	Proposed	\$1,555		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	1,038	\$36.55	(for 4,000 gallons)
	Additional	13	\$36.55	(for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	313,873	71,900	241,973	4.4
Audited 2017	579,776	125,649	454,127	4.6
Audited 2018	494,588	153,681	340,907	3.2
Estimated 2019	328,321	537,960	(209,639)	0.6
Projected 2020	416,994	113,832	303,162	3.7
Projected 2021	389,137	120,615	268,523	3.2
Projected 2022	362,967	90,320	272,647	4.0
Projected 2023	336,273	72,653	263,620	4.6

Reviewer: Meili Sun  
Date: May 7, 2019  
Loan Number: A19-012

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF TOMPKINSVILLE, MONROE COUNTY  
REVISED PROJECT REVIEW  
SX21171020**

**I. PROJECT DESCRIPTION**

The project review has been revised after the KIA approval due to a delayed disclosure of wholesale revenue loss. The Monroe County Water District, the City of Tompkinsville's primary wholesale customer, ceased to purchase water from the City in May, 2018. The loss accounted for approximately 55% of the total usage. Updated financial information has been obtained from the City of Tompkinsville ("City") to reflect the impact of this event in the modified projections.

The City is requesting a Fund A loan in the amount of \$861,148. The purpose of the loan is to improve water quality through the elimination of sewer overflows during rain events.

The City has been experiencing overflows due to dilapidated sanitary sewer collectors and mains throughout the City. These damaged mains allow infiltration and inflow to enter the collection system during wet weather and thus cause health hazards to the public. The project will correct these issues by expanding the existing wastewater treatment plant ("WWTP") to a sequential batch reactor WWTP with a larger capacity. It will also rehabilitate the first 8,750 LF of old sewer main and install 11,600 LF of new force main with a lift station to eliminate the need for a local package treatment facility. The expansion and rehabilitation work is expected to reduce power consumption by 50%. The savings will provide the City with additional cash flow to fund future projects.

The City is serving approximately 1,000 retail customers within the Monroe County.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 30,000
Planning	30,000
Engineering Fees – Design	123,120
Engineering Fees – Construction	30,780
Engineering Fees – Inspection	123,000
Construction	1,918,000
Contingency	116,248
<b>Total</b>	<b>\$ 2,371,148</b>

### III. PROJECT FUNDING

	Amount	%
KIA Fund A Loan	\$ 861,148	36%
ARC Grant	500,000	21%
CDBG Grant	1,000,000	42%
Monroe County Board of Education	10,000	1%
<b>Total</b>	<b>\$ 2,371,148</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 861,148
Principal Forgiveness (50%)	430,574
Amortized Loan Amount	\$ 430,574
Interest Rate	0.50%
Loan Term (Year)	30
Estimated Annual Debt Service	\$ 15,474
Administrative Fee (0.20%)	861
<b>Annual Debt Service</b>	<b>\$ 16,335</b>

### V. PROJECT SCHEDULE

Bid Opening	September 2019
Construction Start	October 2019
Construction Stop	June 2020

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

	Current	Proposed	Total
Residential	842	8	850
Commercial	165	3	168
Industrial	31	2	33
Total	1,038	13	1,051

## B) Rates

	Water & Sewer Inside City		
	Current	Prior	Prior
Date of Last Rate Increase	02/01/19	08/01/17	01/16/16
First 2,000 Gallons			19.00
First 1,000 Gallons	22.00	19.00	
Next 5,000 Gallons			4.75
1,001 Gallons to 3,000 Gallons	4.90	4.90	
3,001 Gallons to 5,000 Gallons	4.75	4.75	
Cost for 4,000 gallons	\$36.55	\$33.55	\$28.50
Increase %	8.9%	17.7%	
Affordability Index (Rate/MHI)	1.5%	1.4%	1.1%

	Water & Sewer Outside City		
	Proposed	Current	Prior
Date of Last Rate Increase	02/01/19	08/01/17	01/16/16
First 2,000 Gallons			19.00
First 1,000 Gallons	25.00	19.00	
Next 5,000 Gallons			4.75
1,001 Gallons to 3,000 Gallons	7.90	4.90	
3,001 Gallons to 5,000 Gallons	7.75	4.75	
Cost for 4,000 gallons	\$48.55	\$33.55	\$28.50
Increase %	44.7%	17.7%	
Affordability Index (Rate/MHI)	2.0%	1.4%	1.1%

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 2,458 with a Median Household Income (MHI) of \$20,809. The median household income for the Commonwealth is \$44,811. The project qualifies for a 0.50% interest rate and \$430,574 in principal forgiveness due to its low MHI.



Year	Population				County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	4,366		12,353		June 2005	6.0%
1990	2,861	-34.5%	11,401	-7.7%	June 2010	10.7%
2000	2,660	-7.0%	11,756	3.1%	June 2015	4.4%
2010	2,402	-9.7%	10,963	-6.7%	June 2018	4.5%
Current	2,088	-13.1%	10,692	-2.5%		
Cumulative %		-52.2%		-13.4%		

### **VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$430,574, will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

### **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68 – Accounting and Financial Reporting for Pensions has been removed from the operating expenses. GASB 75 – Other Postemployment Benefits is not applicable to the City’s financial reporting. The wholesale loss from the Monroe County Water District will reduce both operating revenues and expenses. The net effect has been captured in the projections.

#### **HISTORY**

Combined water and sewer revenues went up 25.4% from \$1.46 million in 2016 to \$1.83 million in 2018 due to previously approved rate increases. Operating expenses increased 16.7% from \$1.16 million to \$1.35 million during the same period as a result of insurance costs associated with the new sludge facility and higher treatment costs in an exceptional wet year. The debt coverage ratio was 4.4, 4.6 and 3.2 for 2016, 2017, and 2018 respectively.

The balance sheet reflects a current ratio of 1.1, debt to equity ratio of 0.6, 13.7 days sales in accounts receivable, and 1.7 months of operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) The City will receive other funding assistances including \$1,000,000 from CDBG, \$500,000 from ARC, and \$10,000 from the Monroe Board of Education to subsidize the total project costs.
- 2) Water revenues will go up 8.1% and sewer revenues up 5.8% in 2020 based on the previously approved rate increases.
- 3) The project will add approximately 13 new customers to the system upon completion.
- 4) Expenses will increase 2% each year for inflation.
- 5) Debt service coverage is 3.2 in 2021 when debt service begins.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$44,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$2,200 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
GMAC Bonds Series 1986	\$ 54,000	2026
RD Revenues Bonds Series 1998	644,000	2038
South Central Bank Note	179,160	2021
South Central Bank Line of Credit	407,998	2019
<b>Total</b>	<b>\$ 1,285,158</b>	

## XI. CONTACTS

<b>Legal Applicant</b>	
Name	City of Tompkinsville
Address	206 N Magnolia St Tompkinsville, KY 42167
County	Monroe
Authorized Official	Scotty Turner, Mayor
Phone	(270) 487-6776
Email	scotty.turner@tompkinsvilleky.gov

<b>Project Contact - Applicant</b>	
Name	Sharon Walker, City Clerk
Organization	City of Tompkinsville
Address	206 Magnolia St Tompkinsville, KY 42167
Phone	(270) 487-6776
Email	sharon.walker@tompkinsvilleky.gov

<b>Project Administrator</b>	
Name	Katie Ford
Organization	BRADD
Address	177 Graham Ave Bowling Green, KY 42101
Phone	(270) 781-2381
Email	kford@bradd.org

<b>Consulting Engineer</b>	
Name	Stephen R Harris
Firm	Precision Engineering, LLC
Address	1194 Columbia Ave, PO Box 2 Tompkinsville, KY 42167
Phone	(270) 407-5784
Email	steve@precision-engr.com

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF TOMPKINSVILLE**  
**FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	458,485	336,466	403,636	393,820	398,120	398,120	398,120	398,120
Other Assets	5,178,163	5,449,555	6,106,567	5,657,085	8,062,626	8,012,228	7,965,129	7,910,809
<b>Total</b>	<b>5,636,648</b>	<b>5,786,021</b>	<b>6,510,203</b>	<b>6,050,905</b>	<b>8,460,746</b>	<b>8,410,348</b>	<b>8,363,249</b>	<b>8,308,929</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	300,332	275,153	359,589	357,122	373,467	338,939	323,538	325,338
Long Term Liabilities	1,193,446	1,597,292	1,968,455	1,853,713	2,188,606	2,128,153	2,083,800	2,038,448
<b>Total Liabilities</b>	<b>1,493,778</b>	<b>1,872,445</b>	<b>2,328,044</b>	<b>2,210,835</b>	<b>2,562,073</b>	<b>2,467,092</b>	<b>2,407,339</b>	<b>2,363,786</b>
<b>Net Assets</b>	<b>4,142,870</b>	<b>3,913,576</b>	<b>4,182,159</b>	<b>3,840,070</b>	<b>5,898,673</b>	<b>5,943,256</b>	<b>5,955,911</b>	<b>5,945,143</b>
<b>Cash Flow</b>								
Revenues	1,457,490	1,749,589	1,828,193	1,565,175	1,679,002	1,679,002	1,679,002	1,679,002
Operating Expenses	1,160,113	1,191,753	1,354,454	1,257,703	1,282,857	1,310,714	1,336,884	1,363,578
Other Income	16,496	21,940	20,849	20,849	20,849	20,849	20,849	20,849
<b>Cash Flow Before Debt Service</b>	<b>313,873</b>	<b>579,776</b>	<b>494,588</b>	<b>328,321</b>	<b>416,994</b>	<b>389,137</b>	<b>362,967</b>	<b>336,273</b>
<b>Debt Service</b>								
Existing Debt Service	71,900	125,649	153,681	537,960	113,832	112,447	73,985	56,318
Proposed KIA Loan	0	0	0	0	0	8,168	16,335	16,335
<b>Total Debt Service</b>	<b>71,900</b>	<b>125,649</b>	<b>153,681</b>	<b>537,960</b>	<b>113,832</b>	<b>120,615</b>	<b>90,320</b>	<b>72,653</b>
<b>Cash Flow After Debt Service</b>	<b>241,973</b>	<b>454,127</b>	<b>340,907</b>	<b>(209,639)</b>	<b>303,162</b>	<b>268,523</b>	<b>272,647</b>	<b>263,620</b>
<b>Ratios</b>								
Current Ratio	1.5	1.2	1.1	1.1	1.1	1.2	1.2	1.2
Debt to Equity	0.4	0.5	0.6	0.6	0.4	0.4	0.4	0.4
Days Sales in Accounts Receivable	17.5	16.8	13.7	13.7	13.7	13.7	13.7	13.7
Months Operating Expenses in Unrestricted Cash	2.4	1.1	1.7	1.8	1.8	1.7	1.7	1.7
Debt Coverage Ratio	4.4	4.6	3.2	0.6	3.7	3.2	4.0	4.6

<b>EXECUTIVE SUMMARY</b> <b>KENTUCKY INFRASTRUCTURE AUTHORITY</b> <b>FUND A, FEDERALLY ASSISTED WASTEWATER</b> <b>REVOLVING LOAN FUND</b>		Reviewer Date KIA Loan Number WRIS Number	Meili Sun June 18, 2019 A19-013 SX21135010	
BORROWER	CITY OF VANCEBURG LEWIS COUNTY			
BRIEF DESCRIPTION This project will replace four package plants with one 64,000 GPD plant. Two PTPs at Meadowbrook, one at Echo Hills, and one at the Industrial Site will be eliminated. The existing package treatment plants are aged and in danger of failing. Repairs would be more costly than construction of one larger PTP. An NOV was issued on July 26, 2017 to Echo Hills.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$1,131,000	Administrative Expenses	\$65,000	
CDBG	1,000,000	Legal Expenses	10,000	
ARC	900,000	Land, Easements	5,000	
		Planning	15,000	
		Eng - Design / Const	7.4% 7.0% 181,000	
		Eng - Insp	5.2% 5.0% 129,150	
		Eng - Other	28,000	
		Construction	2,423,000	
		Contingency	169,850	
		Other	5,000	
TOTAL	\$3,031,000	TOTAL	\$3,031,000	
REPAYMENT	Rate Term	0.50% 30 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$27,732	
PROFESSIONAL SERVICES	Engineer Bond Counsel	HMB Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Apr-20 Jul-20 Jan-22		
DEBT PER CUSTOMER	Existing Proposed	\$7,946 \$8,985		
OTHER DEBT	See Attached			
RESIDENTIAL RATES	Current Additional	<u>Users</u> 711 0	<u>Avg. Bill</u> \$33.86 (for 4,000 gallons) \$33.86 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	411,755	386,171	25,584	1.1
Audited 2017	398,817	432,385	(33,568)	0.9
Audited 2018	615,802	418,060	197,742	1.5
Projected 2019	592,091	411,913	180,178	1.4
Projected 2020	589,611	412,623	176,988	1.4
Projected 2021	609,010	404,730	204,280	1.5
Projected 2022	583,847	397,226	186,621	1.5
Projected 2023	582,471	425,060	157,411	1.4

Reviewer: Meili Sun  
Date: June 18, 2019  
Loan Number: A19-013

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
CITY OF VANCEBURG, LEWIS COUNTY  
PROJECT REVIEW  
SX21135010**

**I. PROJECT DESCRIPTION**

The City of Vanceburg (“City”) is requesting a Fund A loan in the amount of \$1,131,000 to fund the Meadowbrook and Black Oak Sewer Consolidation project. The purpose of this project is to address the Notice of Violation issued by the Division of Water and alleviate the threat of failing package treatment plants as well as eliminate health and sanitary hazards.

This project will replace four package plants with one 64,000 GPD cast activated sludge treatment plant. The new plant will be constructed at the Black Oak Industrial Park adjacent to the existing plant. Two of the package treatment plants to be eliminated are located at Meadowbrook, one at Echo Hills, and one at the Black Oak Industrial Park. The new plant will utilize the existing outfall of the current plant. The outfalls of Meadowbrook and Echo Hills will be eliminated. Both plants will be decommissioned and replaced with pump stations. The existing collection systems will be connected to the new plant via 4” and 6” forced main line.

In addition to serving approximately 2,600 retail customers within the City and surrounding areas, the City also provides wholesale water to the Garrison Quincy-O-Height Water District and the Fleming County Water Association. Both wholesale customers are regulated by the Kentucky Public Service Commission.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 65,000
Legal Expenses	10,000
Land, Easements	5,000
Planning	15,000
Engineering Fees – Design	145,000
Engineering Fees – Construction	36,000
Engineering Fees – Inspection	129,150
Engineering Fees – Other	28,000
Construction	2,423,000
Contingency	169,850
Other	5,000
<b>Total</b>	<b>\$ 3,031,000</b>

### III. PROJECT FUNDING

	Amount	%
KIA Fund Loan	\$ 1,131,000	37%
CDBG Grant	1,000,000	33%
ARC Grant	900,000	30%
<b>Total</b>	<b>\$ 3,031,000</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 1,131,000
Principal Forgiveness	400,000
Amortized Loan Amount	\$ 731,000
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 26,270
Administrative Fee (0.20%)	1,462
<b>Total Estimated Annual Debt Service</b>	<b>\$ 27,732</b>

### V. PROJECT SCHEDULE

Bid Opening	April 2020
Construction Start	July 2020
Construction Stop	January 2022

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

Customers	Sewer	Water
Residential	606	2,482
Commercial	86	119
Industrial/Institutional	19	10
<b>Total</b>	<b>711</b>	<b>2,611</b>

## B) Rates

	<b>Sewer</b>		
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	02/01/20	02/01/14	02/01/13
Surcharge	\$2.00	\$2.00	\$2.00
Minimum 1,500 Gallons	15.20	14.48	13.79
Next 98,500 Gallons	7.30	6.95	6.62
Cost for 4,000 gallons	\$35.45	\$33.86	\$32.34
Increase %	4.7%	4.7%	
Affordability Index (Rate/MHI)	2.2%	2.1%	2.0%

A monthly \$2.00 surcharge is billed to all sewer customers.

	<b>Water Inside City</b>		
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	02/01/20	02/01/17	02/01/14
Surcharge			
Minimum 1,500 Gallons	10.76	10.25	9.86
Next 98,500 Gallons	6.26	5.96	5.73
Cost for 4,000 gallons	\$26.41	\$25.15	\$24.19
Increase %	5.0%	4.0%	
Affordability Index (Rate/MHI)	1.6%	1.6%	1.5%

	<b>Water Outside City</b>		
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	02/01/20	02/01/17	02/01/17
Surcharge			
Minimum 1,500 Gallons	19.85	18.90	18.18
Next 98,500 Gallons	6.26	5.96	5.73
Cost for 4,000 gallons	\$35.50	\$33.80	\$32.51
Increase %	5.0%	4.0%	
Affordability Index (Rate/MHI)	2.2%	2.1%	2.0%



**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 1,745 with a Median Household Income (MHI) of \$19,272. The median household income for the Commonwealth was \$44,811. The project will qualify for a 30 year loan term at 0.50% interest rate with its low median household income and will receive \$400,000 principal forgiveness for eliminating four package treatment plants.

Year	Population		County	% Change	County Unemployment	
	City	% Change			Date	Rate
1980	1,939		14,545		June 2005	8.7%
1990	1,713	-11.7%	13,029	-10.4%	June 2010	13.8%
2000	1,731	1.1%	14,092	8.2%	June 2015	8.4%
2010	1,518	-12.3%	13,870	-1.6%	June 2018	7.9%
Current	1,442	-5.0%	13,646	-1.6%		
Cumulative %		-25.6%		-6.2%		

**VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 95% of the assistance amount, not to exceed \$400,000, will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

**IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The financial activities of water, sewer, and gas operations are consolidated into the Gas, Water and Sewer Fund under the City’s Enterprise Funds. The financial analysis is based on the combined reporting of the Gas, Water and Sewer Fund. The non-cash impact of GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit has been removed from the operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Revenues increased 16.1% from \$2.10 million in 2016 to \$2.44 million in 2018 because the City's largest gas customer nearly doubled its operations in the industrial park. Operating expenses went up 7.9% from \$1.69 million to \$1.82 million during the same period due to higher gas purchase cost incurred by the volume increase. The debt coverage ratio was 1.1, 0.9 and 1.5 for 2016, 2017, and 2018 respectively.

The 2018 Balance Sheet reflects 37.3 days sales in accounts receivable, 0.6 months of operating expenses in unrestricted cash, a current ratio of 0.4, and a debt to equity ratio of 1.0.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) The City has proposed to implement a CPI clause effective July, 2022. The automatic annual rate adjustment will balance the risk associated with revenue loss if Gas operations are to be removed from the Gas, Water and Sewer fund. The annual CPI rate adjustment will be subject to KIA administrative compliance monitoring.
- 2) Combined water and sewer revenues will go up 2.7% by 2021 from the proposed rate increase effective February 1, 2020. Beginning in 2023, retail water and sewer rates will increase approximately 2% annually based on the Consumer Price Index while wholesale water rate will remain the same.
- 3) The City will receive \$1 million CDBG grant and \$0.9 million ARC grant to support the entire project.
- 4) Expenses will increase 2% for inflation each year.
- 5) Debt service coverage is 1.4 in 2023 when full year principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$56,000 total) of the final amount borrowed prior to principal forgiveness to be funded annually (\$2,800 yearly) each December 1 for 20 years and maintained for the life of the loan.

**X. DEBT OBLIGATIONS**

	Outstanding	Maturity
2000 Water and Sewer Revenue Bonds	\$ 348,000	2039
2001 Water and Sewer Revenue Bonds	724,000	2040
2014 Water and Sewer Revenue Bonds	2,627,083	2040
BTADD Loan	35,109	2021
KIA Loan A11-06	1,114,314	2033
KIA Loan F13-032	532,637	2034
KIA Loan A14-002	301,446	2036
<b>Total</b>	<b>\$ 5,682,589</b>	

**XI. CONTACTS**

<b>Legal Applicant</b>	
Name	City of Vanceburg
Address	189 Second St, Ste A Vanceburg, KY 41179
County	Lewis
Authorized Official	Matt Ginn, Mayor
Phone	(606) 796-6003
Email	mayorvanceburgky@gmail.com

<b>Project Contact - Applicant</b>	
Name	Bill Stone
Organization	City of Vanceburg
Address	189 Second St, Ste A, PO Box 489 Vanceburg, KY 41179
Phone	(606) 796-2641
Email	epb_billtom_stone@hotmail.com

<b>Project Administrator</b>	
Name	Kristie Dodge
Organization	Buffalo Trace Area Development District
Address	201 Government St Maysville, KY 41056
Phone	(606) 564-6894
Email	kdodge@btadd.com

<b>Consulting Engineer</b>	
Name	Jeff Dwain Reynolds
Firm	HMB
Address	1410 Charlestown-New Albany Pike Jeffersonville, IN 47130
Phone	(502) 695-9800
Email	jdreynolds@hmbpe.com

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions and one special condition:

1. The City shall pass an ordinance by July 31, 2019 to adopt a CPI clause to automatically adjust water and sewer rates annually, effective July 1, 2022.

**CITY OF VANCEBURG  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	378,387	441,493	425,302	461,322	498,919	544,275	581,599	615,882
Other Assets	17,649,022	17,084,472	16,673,953	15,780,840	15,318,164	17,908,321	17,377,576	16,826,263
<b>Total</b>	<b>18,027,409</b>	<b>17,525,965</b>	<b>17,099,255</b>	<b>16,242,162</b>	<b>15,817,083</b>	<b>18,452,596</b>	<b>17,959,175</b>	<b>17,442,144</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	1,031,596	1,227,804	1,106,880	1,107,386	1,107,886	1,108,386	1,108,886	1,109,386
Long Term Liabilities	7,074,218	6,944,375	7,302,872	7,189,110	7,186,785	7,916,198	7,922,243	7,931,283
<b>Total Liabilities</b>	<b>8,105,814</b>	<b>8,172,179</b>	<b>8,409,752</b>	<b>8,296,496</b>	<b>8,294,671</b>	<b>9,024,584</b>	<b>9,031,129</b>	<b>9,040,669</b>
<b>Net Assets</b>	<b>9,921,595</b>	<b>9,353,786</b>	<b>8,689,503</b>	<b>7,945,666</b>	<b>7,522,412</b>	<b>9,428,012</b>	<b>8,928,046</b>	<b>8,401,475</b>
<b>Cash Flow</b>								
Revenues	2,097,166	2,225,188	2,435,633	2,435,633	2,457,339	2,501,407	2,501,407	2,528,497
Operating Expenses	1,688,638	1,829,072	1,822,858	1,846,569	1,870,755	1,895,424	1,920,587	1,949,053
Other Income	3,227	2,701	3,027	3,027	3,027	3,027	3,027	3,027
<b>Cash Flow Before Debt Service</b>	<b>411,755</b>	<b>398,817</b>	<b>615,802</b>	<b>592,091</b>	<b>589,611</b>	<b>609,010</b>	<b>583,847</b>	<b>582,471</b>
<b>Debt Service</b>								
Existing Debt Service	386,171	432,385	418,060	411,913	412,623	404,730	397,226	397,328
Proposed KIA Loan	0	0	0	0	0	0	0	27,732
<b>Total Debt Service</b>	<b>386,171</b>	<b>432,385</b>	<b>418,060</b>	<b>411,913</b>	<b>412,623</b>	<b>404,730</b>	<b>397,226</b>	<b>425,060</b>
<b>Cash Flow After Debt Service</b>	<b>25,584</b>	<b>(33,568)</b>	<b>197,742</b>	<b>180,178</b>	<b>176,988</b>	<b>204,280</b>	<b>186,621</b>	<b>157,411</b>
<b>Ratios</b>								
Current Ratio	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6
Debt to Equity	0.8	0.9	1.0	1.0	1.1	1.0	1.0	1.1
Days Sales in Accounts Receivable	33.6	44.3	37.3	37.3	37.3	37.3	37.3	37.3
Months Operating Expenses in Unrestricted Cash	0.6	0.6	0.6	0.8	1.0	1.2	1.5	1.6
Debt Coverage Ratio	1.1	0.9	1.5	1.4	1.4	1.5	1.5	1.4

<b>EXECUTIVE SUMMARY</b> <b>KENTUCKY INFRASTRUCTURE AUTHORITY</b> <b>FUND A, FEDERALLY ASSISTED WASTEWATER</b> <b>REVOLVING LOAN FUND</b>		Reviewer	Ashley Adams	
		Date	June 18, 2019	
		KIA Loan Number	A19-024	
		WRIS Number	SX21059056	
BORROWER	REGIONAL WATER RESOURCE AGENCY DAVISS COUNTY			
BRIEF DESCRIPTION				
The purpose of this project is to rehabilitate/replace a deteriorated portion of the tunnel sewer system in the combined sanitary sewer area. RWRA currently maintains over 5 miles of tunnel sewer that were all built in the 1930's. Some portions of the tunnel have suffered significant deterioration and need immediate attention. This project will rehabilitate/replace the portions of the tunnel system in the most need of attention.				
PROJECT FINANCING		PROJECT BUDGET		
Fund A Loan	\$7,015,000	RD Fee %	Actual %	
		Administrative Expenses		\$15,000
		Construction		6,365,000
		Contingency		635,000
TOTAL	\$7,015,000	TOTAL		\$7,015,000
REPAYMENT	Rate	2.00%	Est. Annual Payment	\$441,322
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bryant Engineering Inc.		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Jan-20		
	Construction Start	May-20		
	Construction Stop	Jan-23		
DEBT PER CUSTOMER	Existing	\$1,057		
	Proposed	\$1,254		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	30,410	\$39.59 (for 4,000 gallons)	
	Additional	0	\$39.59 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	7,167,420	3,177,474	3,989,946	2.3
Audited 2017	8,201,258	2,768,067	5,433,191	3.0
Audited 2018	9,308,775	3,467,063	5,841,712	2.7
Projected 2019	8,151,333	3,585,127	4,566,206	2.3
Projected 2020	8,336,058	3,625,941	4,710,117	2.3
Projected 2021	8,498,116	4,631,852	3,866,265	1.8
Projected 2022	8,638,748	4,707,397	3,931,351	1.8
Projected 2023	8,306,378	5,149,056	3,157,322	1.6

Reviewer: Ashley Adams  
Date: June 18, 2019  
Loan Number: A19-024

**KENTUCKY INFRASTRUCTURE AUTHORITY  
WASTEWATER REVOLVING LOAN FUND (FUND A)  
REGIONAL WATER RESOURCE AGENCY, DAVIESS COUNTY  
PROJECT REVIEW  
SX21059056**

**I. PROJECT DESCRIPTION**

The Regional Water Resource Agency (RWRA) is requesting a Fund A loan in the amount of \$7,015,000 for the Tunnel Replacement, Lining, and Repair Project.

The purpose of this project is to rehabilitate/replace a deteriorated portion of the tunnel sewer system in downtown Owensboro. RWRA currently maintains over five miles of tunnel sewers that were all built in the 1930's with line sizes ranging from 60-90 inches in diameter at depths from 30-60 feet. Some portions of the tunnel have suffered significant deterioration and need immediate attention. The tunnels are situated under major road infrastructure with substandard and unstable soil conditions. Failure of any of the tunnels in the project area could result in catastrophic damage to RWRA's main conveyance systems as well as pose serious property damage and public safety risks.

The first phase of this project will address a section of the Eastern tunnel in particular which has already undergone emergency grouting to correct potentially dangerous issues in order to stabilize the ground until permanent rehabilitation can take place. More than likely this 1,100 LF section of tunnel will either be lined or replaced with a new pipe (to be determined). If the line is fully replaced, the existing tunnel pipeline will be abandoned and a new one will be direct buried at a more shallow depth, offset from the tunnel. This section of the tunnel could affect service to 2,400 properties including both residential and industrial customers if failure occurs along with significant traffic impacts and risk to public safety. After the necessary rehabilitation/replacement of this section of tunnel has been determined, RWRA will then proceed with further tunnel repair of other sections deemed to be of greatest need with the remaining project budget.

## II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 15,000
Construction	6,365,000
Contingency	635,000
<b>Total</b>	<b>\$ 7,015,000</b>

## III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund A Loan	\$ 7,015,000	100%
<b>Total</b>	<b>\$ 7,015,000</b>	<b>100%</b>

## IV. KIA DEBT SERVICE

Construction Loan	\$ 7,015,000
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 7,015,000
Interest Rate	2.00%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 427,292
Administrative Fee (0.20%)	14,030
<b>Total Estimated Annual Debt Service</b>	<b>\$ 441,322</b>

## V. PROJECT SCHEDULE

Bid Opening	January 2020
Construction Start	May 2020
Construction Stop	January 2023

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

### A) Customers

<u>Customers</u>	<u>Current</u>
Residential	27,520
Commercial	2,803
Industrial	87
<b>Total</b>	<b>30,410</b>



## B) Rates

	<b>Current</b>	<b>Prior</b>
Date of Last Rate Increase	07/01/18	07/01/17
Minimum	\$ 15.15	\$ 14.05
Each additional 1,000 gallons	4.39	4.39
Environmental Improvement Charge	6.35	5.15
Capacity Fee	0.53	0.53
<b>Cost for 4,000 gallons</b>	<b>\$ 39.59</b>	<b>\$ 37.29</b>
Increase %	6.2%	8.2%
Affordability Index (Rate/MHI)	1.0%	0.9%

RWRA has rate adjustments planned through 2021. All rate increases have been included in this analysis.

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 40,774 with a Median Household Income (MHI) of \$39,390. The median household income for the Commonwealth is \$44,811. The project will qualify for the 2% non-standard interest rate based on MHI.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	54,450		85,949		June 2005	6.3%
1990	53,549	-1.7%	87,189	1.4%	June 2010	9.2%
2000	54,067	1.0%	91,545	5.0%	June 2015	4.9%
2010	57,265	5.9%	96,656	5.6%	June 2018	4.6%
Current	58,685	2.5%	98,724	2.1%		
Cumulative %		7.8%		14.9%		

## VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

## **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented

### **HISTORY**

Revenues increased approximately 17% from \$19.6 million in 2016 to \$23 million from in 2018 mostly due to rate increases. Operating expenses increased approximately 11% from \$12.6 million to \$13.9 million during the same time period. Cash flow available for debt service was \$7.1 million, \$8.2 million, and \$9.3 million in 2016, 2017, and 2018 respectively, while the debt coverage ratio was 12.3, 3.0, and 2.7.

The 2018 balance sheet reflects a current ratio of 4.2, debt to equity ratio of 0.9, and 32.5 days sales in accounts receivable.

### **PROJECTIONS**

Projections are based on the following assumptions:

- 1) Revenues will increase according to the rate plan established by RWRA through 2021.
- 2) Operating expenses will increase 2% annually for inflation.
- 3) Debt service for both loans A19-024 and the increase to A18-007 have been factored into this analysis.
- 4) Debt service coverage is 1.8 in 2021 when principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

### **REPLACEMENT RESERVE**

The current replacement reserve account of \$2,500,000 is adequate to cover reserves for all KIA loans. No additional reserves will be required as a result of this loan.

**X. DEBT OBLIGATIONS**

	<b>Outstanding</b>	<b>Maturity</b>
2016 Series A Revenue Bonds	\$ 2,130,000	2027
KIA A99-04	7,150,490	2023
KIA A06-02	3,608,592	2027
KIA A07-08	783,753	2028
KIA A10-13	5,066,067	2032
KIA A12-14	317,861	2033
KIA A12-15	2,177,320	2033
KIA A13-017	840,523	2035
KIA A13-028	873,183	2035
KIA A14-008	316,123	2035
KIA A15-002 (i/a/o \$8,007,500)	2,990,992	2038
KIA A15-027 (i/a/o \$1,425,000)	912,877	2037
KIA A15-099 (i/a/o \$3,566,001)	2,968,061	2038
KIA A18-026 (i/a/o \$5,619,274)	581,221	2038
KIA B17-014 (i/a/o \$500,000)	142,471	2038
KIA B17-015 (i/a/o \$485,000)	397,276	2038
City of Owensboro JSA Improvements	646,813	2035
<b>Total</b>	<b>\$ 31,913,523</b>	

**XI. CONTACTS**

<b>Legal Applicant</b>	
Entity Name	Regional Water Resource Agency
Authorized Official	Joseph G. Schepers, Executive Director
County	Daviess
Email	schepersjg@rwra.org
Phone	(270) 687-8440
Address	1722 Pleasant Valley Road Owensboro, KY 42303

<b>Applicant Contact</b>	
Name	Sean O'Bryan, Assoc. Dir. of Engineering
Organization	Regional Water Resource Agency
Email	obryansm@rwra.org
Phone	(270) 927-9211
Address	2101 Grimes Avenue Owensboro, KY 42303

<b>Project Administrator</b>	
Name	Joanna Shake
Organization	Associate Director
Email	jdshake@gradd.com
Phone	270-926-4433
Address	300 GRADD Way Owensboro, KY 42301

<b>Consulting Engineer</b>	
PE Name	David Weaver
Firm Name	Bryant Engineering Inc.
Email	david.weaver@bryant-eng.com
Phone	270-685-2811
Address	1535 Frederica Street Owensboro, KY 42301

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**REGIONAL WATER RESOURCE AGENCY  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	10,735,081	15,074,573	21,114,865	21,617,513	22,132,924	22,562,451	22,997,186	23,312,918
Other Assets	75,927,345	78,631,149	84,868,131	86,402,864	94,151,515	96,461,180	97,805,924	98,454,042
<b>Total</b>	<b>86,662,426</b>	<b>93,705,722</b>	<b>105,982,996</b>	<b>108,020,377</b>	<b>116,284,439</b>	<b>119,023,631</b>	<b>120,803,110</b>	<b>121,766,960</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	4,120,209	4,649,222	5,032,924	5,087,242	5,152,479	5,213,618	5,280,761	5,370,761
Long Term Liabilities	34,208,359	38,052,671	44,313,636	39,830,422	44,594,804	44,887,898	44,119,750	43,291,601
<b>Total Liabilities</b>	<b>38,328,568</b>	<b>42,701,893</b>	<b>49,346,560</b>	<b>44,917,664</b>	<b>49,747,283</b>	<b>50,101,516</b>	<b>49,400,511</b>	<b>48,662,362</b>
<b>Net Assets</b>	<b>48,333,858</b>	<b>51,003,829</b>	<b>56,636,436</b>	<b>63,102,713</b>	<b>66,537,156</b>	<b>68,922,115</b>	<b>71,402,599</b>	<b>73,104,598</b>
<b>Cash Flow</b>								
Revenues	19,642,314	21,405,811	23,051,295	23,567,203	24,065,128	24,546,650	25,013,135	25,013,135
Operating Expenses	12,613,885	13,331,742	13,986,655	15,660,005	15,973,205	16,292,669	16,618,522	16,950,892
Other Income	138,991	127,189	244,135	244,135	244,135	244,135	244,135	244,135
<b>Cash Flow Before Debt Service</b>	<b>7,167,420</b>	<b>8,201,258</b>	<b>9,308,775</b>	<b>8,151,333</b>	<b>8,336,058</b>	<b>8,498,116</b>	<b>8,638,748</b>	<b>8,306,378</b>
<b>Debt Service</b>								
Existing Debt Service	3,177,474	2,768,067	3,467,063	3,585,127	3,625,941	4,551,695	4,547,084	4,547,421
Proposed KIA Loan A19-024	0	0	0	0	0	0	0	441,322
Proposed KIA Loan A18-007 Increase						80,157	160,313	160,313
<b>Total Debt Service</b>	<b>3,177,474</b>	<b>2,768,067</b>	<b>3,467,063</b>	<b>3,585,127</b>	<b>3,625,941</b>	<b>4,631,852</b>	<b>4,707,397</b>	<b>5,149,056</b>
<b>Cash Flow After Debt Service</b>	<b>3,989,946</b>	<b>5,433,191</b>	<b>5,841,712</b>	<b>4,566,206</b>	<b>4,710,117</b>	<b>3,866,265</b>	<b>3,931,351</b>	<b>3,157,322</b>
<b>Ratios</b>								
Current Ratio	2.6	3.2	4.2	4.2	4.3	4.3	4.4	4.3
Debt to Equity	0.8	0.8	0.9	0.7	0.7	0.7	0.7	0.7
Days Sales in Accounts Receivable	33.1	33.3	32.5	32.5	32.5	32.5	32.5	32.5
Months Operating Expenses in Unrestricted Cash	6.1	9.2	13.0	13.1	13.2	13.2	13.3	13.2
Debt Coverage Ratio	2.3	3.0	2.7	2.3	2.3	1.8	1.8	1.6

<b>EXECUTIVE SUMMARY</b> <b>KENTUCKY INFRASTRUCTURE AUTHORITY</b> <b>FUND F, FEDERALLY ASSISTED DRINKING WATER</b> <b>REVOLVING LOAN FUND</b>		Reviewer Date KIA Loan Number WRIS Number	Meili Sun June 18, 2019 F19-004 WX21169039	
BORROWER	CITY OF EDMONTON METCALFE COUNTY			
BRIEF DESCRIPTION This project proposes to replace approximately 27,000 LF of existing 2", 4", 6", and 8" problematic and undersized waterlines in Edmonton's distribution system. It will extend approximately 15,200 LF of new 3" waterlines to create two loops to improve water quality and eliminate dead end waterlines. Additionally, one new water tank will be constructed, four existing water tanks will be rehabilitated or modified, and one existing water tank will be decommissioned. Two pump stations will be replaced with upgraded ones, one pump station will be modified, and one pump station will be eliminated. SCADA will be upgraded or modified on all new, rehabilitated, or modified tanks and pump stations.  The storage tank and pump station improvements will facilitate better turn over of storage tanks and reduce potential disinfection by-products. The replacement of the old cast iron water mains and connection of dead end lines will also improve water quality throughout the serviceable areas of the water system. The general scope of the proposed improvements complies with the requirements outlined in the Agreed Order Corrective Action Plan issued to the City.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$4,500,000	Administrative Expenses	\$15,000	
ARC	500,000	Legal Expenses	10,000	
		Eng - Design / Const	282,000	
		Eng - Insp	151,000	
		Eng - Other	26,000	
		Construction	4,106,000	
		Contingency	410,000	
TOTAL	\$5,000,000	TOTAL	\$5,000,000	
REPAYMENT	Rate Term	0.50% 30 Years	Est. Annual Payment 1st Payment 6 Mo. after first draw \$123,000	
PROFESSIONAL SERVICES	Engineer Bond Counsel	Monarch Engineering, Inc Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Mar-20 May-20 May-21		
DEBT PER CUSTOMER	Existing Proposed	\$789 \$1,761		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES	Current Additional	Users 3,184 0	Avg. Bill \$29.15 (for 4,000 gallons) \$29.15 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	488,642	320,573	168,069	1.5
Audited 2017	418,091	215,273	202,818	1.9
Audited 2018	316,666	208,784	107,882	1.5
Projected 2019	299,134	230,426	68,708	1.3
Projected 2020	445,862	229,259	216,603	1.9
Projected 2021	576,094	349,427	226,667	1.6
Projected 2022	557,489	340,599	216,890	1.6
Projected 2023	538,512	340,870	197,642	1.6

Reviewer: Meili Sun  
Date: June 18, 2019  
Loan Number: F19-004

**KENTUCKY INFRASTRUCTURE AUTHORITY  
DRINKING WATER STATE REVOLVING FUND (FUND F)  
CITY OF EDMONTON, METCALFE COUNTY  
PROJECT REVIEW  
WX21169039**

**I. PROJECT DESCRIPTION**

The City of Edmonton (“City”) is requesting a Fund F loan in the amount of \$4,500,000 for the Water Improvement project. The purpose of this project is to address the requirements of an Agreed Order Corrective Action Plan issued by the Division of Water and improve drinking water quality for the citizens in the serviceable area.

The project proposes to replace approximately 28,000 LF of existing 2", 4", 6", and 8" problematic and undersized waterlines in Edmonton's distribution system. It will extend approximately 15,100 LF of new 3" waterlines to create two loops to improve water quality and eliminate dead end waterlines. Additionally, one new water tank will be constructed, four existing water tanks will be rehabilitated or modified, and one existing water tank will be decommissioned. Two pump stations will be replaced with upgraded ones, one pump station will be modified, and one pump station will be eliminated. The Supervisory Control and Data Acquisition (SCADA) system will be upgraded or modified on all tanks and pump stations. The storage tank and pump station improvements will facilitate better turnover of storage tanks and reduce potential disinfection by-products. The replacement of the old cast iron water mains and connection of dead end lines will improve water quality throughout the serviceable area of the water system.

The City purchases 100% of its water supply from the City of Glasgow Water and Sewer Commission and the Columbia/Adair Utilities District which is a Kentucky Public Service Commission regulated utility. The City currently serves approximately 3,200 customers in the Metcalfe County.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 15,000
Legal Expenses	10,000
Engineering Fees – Design	282,000
Engineering Fees – Inspection	151,000
Engineering Fees – Other	26,000
Construction	4,106,000
Contingency	410,000
<b>Total</b>	<b>\$ 5,000,000</b>

### III. PROJECT FUNDING

	Amount	%
KIA Fund F Loan	\$ 4,500,000	90%
ARC Grant	500,000	10%
<b>Total</b>	<b>\$ 5,000,000</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 4,500,000
Principal Forgiveness	1,300,000
Amortized Loan Amount	\$ 3,200,000
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 115,000
Administrative Fee (0.25%)	8,000
<b>Annual Debt Service</b>	<b>\$ 123,000</b>

### V. PROJECT SCHEDULE

Bid Opening	March 2020
Construction Start	May 2020
Construction Stop	May 2021

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

<u>Customers</u>	<u>Current</u>
Residential	2,870
Commercial	163
Industrial	7
Institutional	144
<b>Total</b>	<b>3,184</b>



**B) Rates**

	<b>Water Inside City</b>			
	<u>Proposed</u>	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	07/01/20	07/01/19	07/01/09	07/01/08
First 2,000 Gallons	\$20.00	\$18.00	\$16.47	\$14.45
Next 8,000 Gallons	7.60	7.00	6.34	5.56
Nest 5,000 Gallons	4.25	4.00	4.54	3.98
Cost for 4,000 gallons	\$35.20	\$32.00	\$29.15	\$25.57
Increase %	10.0%	9.8%	14.0%	
Affordability Index (Rate/MHI)	1.4%	1.2%	1.1%	1.0%

	<b>Water Outside City</b>			
	<u>Proposed</u>	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	07/01/20	07/01/19	07/01/09	07/01/08
First 2,000 Gallons	\$28.00	\$25.75	\$23.42	\$20.54
Next 8,000 Gallons	9.25	8.50	7.71	6.76
Nest 5,000 Gallons	6.25	5.75	5.22	4.58
Cost for 4,000 gallons	\$46.50	\$42.75	\$38.84	\$34.06
Increase %	8.8%	10.1%	14.0%	
Affordability Index (Rate/MHI)	1.8%	1.7%	1.5%	1.3%

	<b>Sewer</b>		
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	07/01/19	01/01/13	09/01/02
First 2,000 Gallons	\$17.00	\$15.35	\$8.75
Next 8,000 Gallons	6.00	5.40	3.09
Nest 5,000 Gallons	3.60	4.30	2.46
Cost for 4,000 gallons	\$29.00	\$26.15	\$14.93
Increase %	10.9%	75.2%	
Affordability Index (Rate/MHI)	1.1%	1.0%	0.6%

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 7,196 with a Median Household Income (MHI) of \$30,926. The median household income for the Commonwealth was \$44,811. The project will qualify for a 30 year loan term at 0.50% interest rate and 50% principal forgiveness not to exceed 1.3 million for being a disadvantaged community.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	1,401		9,484		June 2005	5.7%
1990	1,477	5.4%	8,963	-5.5%	June 2010	13.3%
2000	1,586	7.4%	10,037	12.0%	June 2015	5.1%
2010	1,595	0.6%	10,099	0.6%	June 2018	4.8%
Current	1,653	3.6%	9,983	-1.1%		
Cumulative %		18.0%		5.3%		

### **VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a “green” requirement.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,300,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

### **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The financial activities of Water, Sewer, and Gas operations are reported under the City’s Enterprise Funds. For the purpose of this analysis, the Gas operations have been extracted from the Enterprise Funds. The non-cash impact of GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit has been removed from the operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

#### **HISTORY**

Combined water and sewer revenues decreased 1.4% from \$1.72 million in 2016 to \$1.70 million in 2018. Due to an error by the City’s auditor, the June 2018 rate revenues were not captured in the audit. The total operating revenues have been increased by \$130,236 to provide a more accurate projection. Expenses went up 11.9% from \$1.25 million to \$1.40 million during the same period. In 2018, the City classified the annual installment of approximately \$30,000 for replacing radio read meters under Materials & Supplies Expenses. During the same year, the City incorporated large amount of flushing in the routine maintenance to improve water quality, causing water purchase cost and utility cost to increase significantly. The debt coverage ratio was 1.5, 1.9 and 1.5 for 2016, 2017, and 2018 respectively.

The 2018 Balance Sheet reflects 35.6 days sales in accounts receivable, 17.5 months of operating expenses in unrestricted cash, a current ratio of 2.6, and a debt to equity ratio of 0.5.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Water revenues will grow 20% by 2021 based on the proposed rate increases.
- 2) Sewer rates will go up 10% effective July 1, 2019.
- 3) Expenses will go up 2% each year for inflation.
- 4) Debt service coverage is 1.6 in 2021 when full year principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$226,000 total) of the final amount borrowed prior to principal forgiveness to be funded annually (\$11,300 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
1980 Bond Issue	\$ 10,000	2031
1982 Bond Issue – Series A	27,000	2031
1984 Bond Issue	218,943	2031
1990 Bond Issue	206,000	2031
1993 Bond Issue	203,000	2033
1995 Bond Issue	297,000	2035
1996 Bond Issue	143,400	2035
2000 Bond Issue	84,800	2039
2002 Bond Issue	653,000	2042
2013 Bond Issue	557,700	2053
KIA Loan B14-008	109,823	2024
<b>Total</b>	<b>\$ 2,510,666</b>	

## **XI. CONTACTS**

<b>Legal Applicant</b>	
Name	City of Edmonton
Address	207 East St, PO Box 374 Edmonton, KY 42129
County	Metcalfe
Authorized Official	Doug Smith, Mayor
Phone	(270) 432-2811
Email	mayorsmith@cityofedmontonky.com

<b>Project Contact - Applicant</b>	
Name	Dawn Devore
Organization	City of Edmonton
Address	207 East St, PO Box 374 Edmonton, KY
Phone	(270) 432-2811
Email	dawn@cityofedmontonky.com

<b>Project Administrator</b>	
Name	Melissa Melton
Organization	Rural Community Assistance Partnership
Address	101 Burch Court Frankfort, KY 40601
Phone	(502) 839-3548
Email	mam@capky.org

<b>Consulting Engineer</b>	
Name	James Lee Mudd, Jr
Firm	Monarch Engineering, Inc
Address	556 Carlton Dr Lawrenceburg, KY 40342
Phone	(502) 839-1310
Email	lmudd@monarchengineering.net

## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF EDMONTON  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	2,604,733	2,742,273	2,609,872	2,623,592	2,681,712	2,741,446	2,784,824	2,824,352
Other Assets	11,436,619	11,330,016	11,165,269	10,575,781	10,369,753	15,058,076	14,738,577	14,403,680
<b>Total</b>	<b>14,041,352</b>	<b>14,072,289</b>	<b>13,775,141</b>	<b>13,199,373</b>	<b>13,051,465</b>	<b>17,799,522</b>	<b>17,523,401</b>	<b>17,228,032</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	959,667	961,573	991,924	974,787	1,082,754	1,084,154	1,085,554	1,086,954
Long Term Liabilities	3,519,122	3,451,399	3,673,267	3,611,005	3,506,870	6,596,837	6,495,704	6,391,272
<b>Total Liabilities</b>	<b>4,478,789</b>	<b>4,412,972</b>	<b>4,665,191</b>	<b>4,585,792</b>	<b>4,589,624</b>	<b>7,680,990</b>	<b>7,581,258</b>	<b>7,478,226</b>
<b>Net Assets</b>	<b>9,562,563</b>	<b>9,659,317</b>	<b>9,109,950</b>	<b>8,613,581</b>	<b>8,461,841</b>	<b>10,118,531</b>	<b>9,942,143</b>	<b>9,749,807</b>
<b>Cash Flow</b>								
Revenues	1,724,685	1,727,220	1,699,062	1,699,062	1,863,672	2,023,444	2,023,444	2,023,444
Operating Expenses	1,248,330	1,322,941	1,397,994	1,415,526	1,433,408	1,462,948	1,481,553	1,500,530
Other Income	12,287	13,812	15,598	15,598	15,598	15,598	15,598	15,598
<b>Cash Flow Before Debt Service</b>	<b>488,642</b>	<b>418,091</b>	<b>316,666</b>	<b>299,134</b>	<b>445,862</b>	<b>576,094</b>	<b>557,489</b>	<b>538,512</b>
<b>Debt Service</b>								
Existing Debt Service	320,573	215,273	208,784	230,426	229,259	226,427	217,599	217,870
Proposed KIA Loan	0	0	0	0	0	123,000	123,000	123,000
<b>Total Debt Service</b>	<b>320,573</b>	<b>215,273</b>	<b>208,784</b>	<b>230,426</b>	<b>229,259</b>	<b>349,427</b>	<b>340,599</b>	<b>340,870</b>
<b>Cash Flow After Debt Service</b>	<b>168,069</b>	<b>202,818</b>	<b>107,882</b>	<b>68,708</b>	<b>216,603</b>	<b>226,667</b>	<b>216,890</b>	<b>197,642</b>
<b>Ratios</b>								
Current Ratio	2.7	2.9	2.6	2.7	2.5	2.5	2.6	2.6
Debt to Equity	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8
Days Sales in Accounts Receivable	33.1	33.3	32.9	32.9	32.9	32.9	32.9	32.9
Months Operating Expenses in Unrestricted Cash	19.1	19.4	17.5	17.4	17.5	17.7	17.8	17.9
Debt Coverage Ratio	1.5	1.9	1.5	1.3	1.9	1.6	1.6	1.6

<b>EXECUTIVE SUMMARY</b>		Reviewer	Meili Sun	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	July 9, 2019	
<b>FUND F, FEDERALLY ASSISTED DRINKING WATER</b>		KIA Loan Number	F19-020 (Increase)	
<b>REVOLVING LOAN FUND</b>		WRIS Number	WX21097026	
BORROWER	CITY OF CYNTHIANA HARRISON COUNTY			
BRIEF DESCRIPTION				
This request is for an increase of \$95,457 to the original loan previously approved on November 13, 2018. The reason for the increase is because bids had come in higher than budgeted. There will be no additional work or change of scope. The new total project cost is \$1,050,022.				
The City of Cynthiana plans to construct a booster pump station adjacent to the existing one million gallon standpipe located near Harrison County High School. The proposed project will be designed to increase pressure to residential and institutional customers by a minimum of 25 PSI during static conditions. It will also include a large pump that will provide fire flows for the Harrison Memorial Hospital (HMH) and surrounding areas.				
PROJECT FINANCING		PROJECT BUDGET		RD Fee %    Actual %
Fund F Loan	\$1,050,022	Legal Expenses		5,000
		Planning		7,500
		Eng - Design / Const	9.0%    7.8%	70,760
		Eng - Insp	5.8%    5.1%	46,205
		Eng - Other		11,500
		Construction		842,505
		Contingency		66,552
TOTAL	\$1,050,022	TOTAL		\$1,050,022
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$57,860
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	HDR, Inc		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	May-19		
	Construction Start	Jul-19		
	Construction Stop	Feb-20		
DEBT PER CUSTOMER	Existing	\$3,244		
	Proposed	\$3,339		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	2,475	\$16.05 (for 4,000 gallons)	
	Additional	0	\$16.05 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASH FLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	599,956	361,242	238,714	1.7
Audited 2017	772,322	494,028	278,294	1.6
Audited 2018	783,768	549,265	234,503	1.4
Projected 2019	778,343	574,925	203,418	1.4
Projected 2020	900,841	575,404	325,437	1.6
Projected 2021	853,206	633,853	219,353	1.3
Projected 2022	807,271	646,964	160,307	1.2
Projected 2023	760,417	625,418	134,999	1.2

Reviewer: Meili Sun  
Date: July 9, 2019  
Loan Number: F19-020 (Increase)

**KENTUCKY INFRASTRUCTURE AUTHORITY  
DRINKING WATER STATE REVOLVING FUND (FUND F)  
CITY OF CYNTHIANA, HARRISON COUNTY  
PROJECT REVIEW  
WX21097026**

**I. PROJECT DESCRIPTION**

This request is for an increase of \$95,457 to the loan previously approved on November 13, 2018. The reason for the increase is because the bids came in higher than originally budgeted. There will be no additional work or change of scope. The new total project cost is \$1,050,022.

This project will construct a new booster pump station adjacent to the existing one million gallon standpipe located near Harrison County High School. A new pressure zone will be created to serve the east side of the City. Water from the existing standpipe will be used to feed only the new pressure zone, which will improve the turnover of the tank and will reduce water age. The proposed project will be designed to increase pressure to residential and institutional customers by a minimum of 25 PSI during static conditions. In the event that the pump station is temporarily out of service, a valve will be opened and the existing tank will be used to supply water to the area by using the tank head. The pump station will also include a large pump that will provide fire flows for the Harrison Memorial Hospital and adjacent areas.

The utility currently serves 2,503 retail customers and supply wholesale water to the Harrison County Water Association which is a PSC regulated entity. The wholesale revenues account for approximately 35% of the total water and sewer revenues.

**II. PROJECT BUDGET**

	<u>Total</u>
Legal Expenses	\$ 5,000
Planning	7,500
Engineering Fees - Design/Const	70,760
Engineering Fees - Inspection	46,205
Engineering Fees - Other	11,500
Construction	842,505
Contingency	66,552
<b>Total</b>	<b>\$ 1,050,022</b>

### III. PROJECT FUNDING

	Amount	%
KIA Fund F Loan	\$ 1,050,022	100%
	<b>\$ 1,050,022</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 1,050,022
Principal Forgiveness	0
Amortized Loan Amount	1,050,022
Interest Rate	0.50%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 55,235
Administrative Fee (0.25%)	2,625
<b>Total Estimated Annual Debt Service</b>	<b>\$ 57,860</b>

### V. PROJECT SCHEDULE

Bid Opening	May, 2019
Construction Start	July, 2019
Construction Stop	February, 2020

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

Customers	Current
Residential	2,249
Commercial	217
Industrial/Institutional	37
<b>Total</b>	<b>2,503</b>

#### B) Rates

<b>Water</b>	Proposed	Current	Prior
Date of Last Rate Increase	07/01/19	01/01/16	01/01/15
Minimum 2,000 Gallons	\$ 10.75	\$ 9.05	\$ 9.05
2,001 to 10,000 Gallons	4.45	3.50	3.50
Over 10,000 Gallons	3.15	2.85	2.63
Cost for 4,000 gallons	<b>\$ 19.65</b>	<b>\$ 16.05</b>	<b>\$ 16.05</b>
Increase %	22.4%	0.0%	
Affordability Index (Rate/MHI)	0.8%	0.6%	0.6%



<b>Sewer</b>	Current	Prior
Date of Last Rate Increase	09/05/17	01/06/11
2,001 to 10,000 Gallons	\$ 18.56	\$ 16.50
Over 10,000 Gallons	5.79	5.15
Cost for 4,000 gallons	<b>\$ 30.14</b>	<b>\$ 26.80</b>
Increase %	12.5%	
Affordability Index (Rate/MHI)	1.2%	1.1%

<b>Wholesale Water</b>	Current	Prior
Date of Last Rate Increase	01/01/16	01/01/15
Per 1,000 Gallons	<b>\$ 2.85</b>	<b>\$ 2.63</b>
Increase %	8.4%	

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 6,641 with a Median Household Income (MHI) of \$30,502. The median household income for the Commonwealth is \$44,811. The project qualifies for a 0.5% interest rate as its MHI is below 80% of the State MHI.

Year	Population		County	% Change	County Unemployment	
	City	% Change			Date	Rate
1980	5,881		15,166		June 2005	6.4%
1990	6,497	10.5%	16,248	7.1%	June 2010	10.7%
2000	6,258	-3.7%	17,983	10.7%	June 2015	4.7%
2010	6,402	2.3%	18,846	4.8%	June 2018	4.8%
Current	6,376	-0.4%	18,629	-1.2%		
Cumulative %		8.4%		22.8%		

## VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a "green" requirement.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit has been removed from the operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Combined water and sewer revenues increased 2.3% from \$2.88 million in 2016 to \$2.95 million in 2018 due to previously approved sewer rate increase. Operating expenses decreased 5.0% from \$2.28 million to \$2.16 million during the same period. In 2016, the City used more chemicals to treat water as a result of leaks and dry seasons. The repair and maintenance costs were higher than normal due to a few non-routine jobs performed in the distribution system. The debt coverage ratio was 1.7, 1.6, and 1.4 in 2016 through 2018 respectively.

The balance sheet reflects a current ratio of 0.7, a debt to equity ratio of 0.8, 50.8 days sales in accounts receivable, and 0.1 month operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Retail water revenues will grow 22.0% in 2020 based on the rate ordinance passed in January, 2019.
- 2) Expenses will increase 2% annually for general inflation.
- 3) Debt service coverage ratio is 1.3 in 2021 when full year principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5% (\$52,000 total) of the final amount borrowed to be funded annually (\$2,600 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	Outstanding	Maturity
2000 Series Revenue Bonds	\$ 208,300	2040
2005 Series Revenue Bonds	770,000	2033
KIA Loan A05-06	2,839,847	2027
2015 Series Revenue Bonds	3,538,000	2055
KIA Loan F16-041	565,903	2038
Capital Lease – Fleet	106,252	2023
<b>Total</b>	<b>\$ 8,028,302</b>	

## **XI. CONTACTS**

<b>Legal Applicant</b>	
Name	City of Cynthiana
Address	PO Box 67 Cynthiana, KY 41030
County	Harrison
Authorized Official	James D Smith, Mayor
Phone	(859) 234-7150
Email	jassmithsog@gmail.com

<b>Project Contact - Applicant</b>	
Name	Gary Royalty
Representing	City of Cynthiana
Address	PO Box 67 Cynthiana, KY 41031
Phone	(859) 234-7153
Email	cityofcynthiana@bellsouth.net

<b>Project Administrator</b>	
Name	HDR, Inc.
Address	2517 Sir Barton Way Lexington, KY 40509
Contact	Bob Sturdivant
Phone	(859) 629-4826
Email	bob.sturdivant@hdrinc.com

<b>Consulting Engineer</b>	
Name	Richard Smith
Firm	HDR, Inc.
Address	2517 Sir Barton Way Lexington, KY 40509
Phone	(859) 223-3755
Email	rich.smith@hdrinc.com

## **XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF CYNTHIANA  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	922,834	385,198	418,876	465,907	554,194	598,065	630,126	657,126
Other Assets	23,017,204	22,720,210	23,359,882	21,914,220	22,313,668	21,554,576	20,748,247	19,921,672
<b>Total</b>	<b>23,940,038</b>	<b>23,105,408</b>	<b>23,778,758</b>	<b>22,380,127</b>	<b>22,867,862</b>	<b>22,152,640</b>	<b>21,378,373</b>	<b>20,578,797</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	924,587	625,414	639,739	648,742	710,510	732,427	720,666	695,175
Long Term Liabilities	9,060,800	8,848,894	10,268,171	9,269,297	9,848,083	9,356,030	8,876,838	8,424,337
<b>Total Liabilities</b>	<b>9,985,387</b>	<b>9,474,308</b>	<b>10,907,910</b>	<b>9,918,039</b>	<b>10,558,593</b>	<b>10,088,457</b>	<b>9,597,504</b>	<b>9,119,512</b>
<b>Net Assets</b>	<b>13,954,651</b>	<b>13,631,100</b>	<b>12,870,848</b>	<b>12,462,088</b>	<b>12,309,269</b>	<b>12,064,184</b>	<b>11,780,869</b>	<b>11,459,286</b>
<b>Cash Flow</b>								
Revenues	2,878,165	2,927,905	2,946,547	2,984,408	3,151,058	3,151,058	3,151,058	3,151,058
Operating Expenses	2,279,067	2,328,821	2,164,291	2,207,577	2,251,729	2,299,364	2,345,299	2,392,153
Other Income	858	173,238	1,512	1,512	1,512	1,512	1,512	1,512
<b>Cash Flow Before Debt Service</b>	<b>599,956</b>	<b>772,322</b>	<b>783,768</b>	<b>778,343</b>	<b>900,841</b>	<b>853,206</b>	<b>807,271</b>	<b>760,417</b>
<b>Debt Service</b>								
Existing Debt Service	361,242	494,028	549,265	574,925	575,404	575,993	589,104	567,558
Proposed KIA Loan	0	0	0	0	0	57,860	57,860	57,860
<b>Total Debt Service</b>	<b>361,242</b>	<b>494,028</b>	<b>549,265</b>	<b>574,925</b>	<b>575,404</b>	<b>633,853</b>	<b>646,964</b>	<b>625,418</b>
<b>Cash Flow After Debt Service</b>	<b>238,714</b>	<b>278,294</b>	<b>234,503</b>	<b>203,418</b>	<b>325,437</b>	<b>219,353</b>	<b>160,307</b>	<b>134,999</b>
<b>Ratios</b>								
Current Ratio	1.0	0.6	0.7	0.7	0.8	0.8	0.9	0.9
Debt to Equity	0.7	0.7	0.8	0.8	0.9	0.8	0.8	0.8
Days Sales in Accounts Receivable	52.7	46.3	50.8	50.8	50.8	50.8	50.8	50.8
Months Operating Expenses in Unrestricted Cash	0.6	0.1	0.1	0.3	0.6	0.8	1.0	1.1
Debt Coverage Ratio	1.7	1.6	1.4	1.4	1.6	1.3	1.2	1.2

<b>EXECUTIVE SUMMARY</b>		Reviewer	Ashley Adams	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	July 9, 2019	
<b>FUND F, FEDERALLY ASSISTED DRINKING WATER</b>		KIA Loan Number	F19-035	
<b>REVOLVING LOAN FUND</b>		WRIS Number	WX21219033	
BORROWER	CITY OF ELKTON TODD COUNTY			
BRIEF DESCRIPTION				
This project will replace two existing 4 inch galvanized lines that are undersized along Popular Street and West Main Street along with a 6 inch main on North Williams Lane. In addition to line upgrades, a new hydrant will be installed at the corner of Weathers Lane and West Main Street capping off the line and taking out of service an existing line. These lines have been identified as problem areas in the system and the project will help address pressure and flows for water service in the project area.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$170,000	RD Fee %	Actual %	
		Administrative Expenses		\$8,500
		Legal Expenses		1,500
		Planning		10,000
		Eng - Design / Const	13.6%	12.4%
		Eng - Insp	12.5%	11.5%
		Construction		106,650
		Contingency		14,450
TOTAL	\$170,000	TOTAL		\$170,000
REPAYMENT	Rate	0.50%	Est. Annual Payment \$3,267	
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	McGhee Engineering Inc		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Aug-19		
	Construction Start	Oct-19		
	Construction Stop	Jan-20		
DEBT PER CUSTOMER	Existing	\$1,308		
	Proposed	\$2,972		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	902	\$44.29 (for 4,000 gallons)	
	Additional	0	\$44.29 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	218,318	79,243	139,075	2.8
Audited 2017	187,637	78,974	108,663	2.4
Audited 2018	183,938	78,710	105,228	2.3
Projected 2019	203,948	80,153	123,795	2.5
Projected 2020	185,759	79,808	105,951	2.3
Projected 2021	157,006	78,343	78,663	2.0
Projected 2022	233,082	134,445	98,638	1.7
Projected 2023	213,779	190,030	23,749	1.1

Reviewer: Ashley Adams  
 Date: July 9, 2019  
 Loan Number: F19-035

**KENTUCKY INFRASTRUCTURE AUTHORITY  
 DRINKING WATER STATE REVOLVING FUND (FUND F)  
 CITY OF ELKTON, TODD COUNTY  
 PROJECT REVIEW  
 WX21219033**

**I. PROJECT DESCRIPTION**

The City of Elkton is requesting a Fund F loan in the amount of \$170,000 for the Water System Rehabilitation and Upgrade project. The purpose of the project is to improve pressures and flows for water service as well as address ongoing severe line breaks in the project area. This project will replace two existing 4 inch galvanized lines that are undersized along Popular Street and West Main Street along with a line on North Williams Lane that will be replaced with six inch main. In addition to the line upgrades, a new fire hydrant will be installed at the corner of Weathers Lane and West Main Street, capping off the line and taking out of service an existing 4 inch line that currently dead ends at the Court Square.

The City of Elkton serves approximately 900 customers in Todd County.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 8,500
Legal Expenses	1,500
Planning	10,000
Engineering Fees - Design	10,500
Engineering Fees - Construction	4,500
Engineering Fees - Inspection	13,900
Construction	106,650
Contingency	14,450
<b>Total</b>	<b>\$ 170,000</b>

**III. PROJECT FUNDING**

	<u>Amount</u>	<u>%</u>
Fund F Loan	\$ 170,000	100%
<b>Total</b>	<b>\$ 170,000</b>	<b>100%</b>

#### IV. KIA DEBT SERVICE

Construction Loan	\$	170,000
Less: Principal Forgiveness		85,000
Amortized Loan Amount	\$	85,000
Interest Rate		0.50%
Loan Term (Years)		30
Estimated Annual Debt Service	\$	3,055
Administrative Fee (0.25%)		213
<b>Total Estimated Annual Debt Service</b>	<b>\$</b>	<b>3,267</b>

#### V. PROJECT SCHEDULE

Bid Opening	August 2019
Construction Start	October 2019
Construction Stop	January 2019

#### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

##### A) Customers

	<u>Current</u>
Residential	728
Commercial	168
Industrial	6
<b>Total</b>	<b>902</b>

##### B) Rates

<b>Water</b>	<b>Inside City</b>		<b>Outside City</b>	
	<b>Current</b>	<b>Prior</b>	<b>Current</b>	<b>Prior</b>
Date of Last Rate Increase	07/01/18	07/01/17	07/01/18	07/01/17
Minimum (2,000 gallons)	\$21.63	\$21.00	\$24.47	\$23.76
Next 8,000 Gallons (per 1,000)	11.33	11.00	12.80	12.80
Cost for 4,000 gallons	\$44.29	\$43.00	\$50.07	\$49.36
Increase %	3.0%		1.4%	
Affordability Index (Rate/MHI)	2.1%		2.3%	

Sewer	Inside City	
	Current	Prior
Date of Last Rate Increase	07/01/18	07/01/17
Minimum (2,000 gallons)	\$30.38	\$28.93
Over 2,000 gallons (per 1,000)	7.35	7.00
Cost for 4,000 gallons	\$45.08	\$42.93
Increase %	5.0%	
Affordability Index (Rate/MHI)	2.1%	

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 2,155 with a Median Household Income (MHI) of \$32,622. The median household income for the Commonwealth is \$44,811. The project will qualify for a 0.5% interest rate and principal forgiveness based on MHI.

Year	Population		County	% Change	County Unemployment	
	City	% Change			Date	Rate
1980	1,815		11,874		June 2005	6.5%
1990	1,789	-1.4%	10,940	-7.9%	June 2010	9.7%
2000	1,984	10.9%	11,971	9.4%	June 2015	4.9%
2010	2,062	3.9%	12,460	4.1%	June 2018	4.4%
Current	2,166	5.0%	12,465	0.0%		
Cumulative %		19.3%		5.0%		

**VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a “green” requirement.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$85,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.



## **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

### **HISTORY**

Combined water and sewer revenues have increased 5% from \$1 million in 2016 to \$1.1 million in 2018. Revenue increases can be mostly attributed to rate increases in both water and sewer. Combined operating expenses have increased 11% from \$800 thousand in 2016 to \$891 thousand in 2019. The debt coverage ratio was 2.8, 2.4, and 2.3 from 2016 to 2018, respectively.

The 2018 balance sheet reflects a current ratio of 1.5, a debt to equity ratio of 0.5, 52 days sales in accounts receivable, and 3.6 months operating expenses in unrestricted cash.

### **PROJECTIONS**

Projections are based on the following assumptions:

- 1) Water revenues will increase approximately 3% and sewer revenues will increase approximately 5% in FY 2019 due to a previously approved rate increase.
- 2) The City will also increase rates based on a loan condition for KIA Loan A19-001 to generate an additional \$95,000 (9% of total revenues, 20% of sewer revenues) prior to loan repayment estimated in 2022.
- 3) Expenses will increase 2% annually for inflation.
- 4) Debt service for both KIA Loans F19-035 and A19-001 have been factored into this analysis.
- 5) Debt service coverage is 2.0 in 2021 when F19-035 is estimated to go into repayment and 1.1 in 2023 when A19-001 full principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

### **REPLACEMENT RESERVE**

The replacement reserve will be 5% (\$8,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$400 yearly) each December 1 for 20 years and maintained for the life of the loan.

**X. DEBT OBLIGATIONS**

	<b>Outstanding</b>	<b>Maturity</b>
KIA Loan (B06-01)	\$ 498,267	2037
KIA Loan (B11-07)	91,964	2031
KIA Loan (B13-001)	286,297	2034
KIA Loan (F209-07)	51,877	2030
Revenue Bond Series 2007	311,500	2048
KIA Loan (A18-015 i/a/o \$500,000)	-	TBD
KIA Loan (A19-001 i/a/o \$3,934,451)	-	TBD
<b>Total</b>	<b>\$ 1,242,905</b>	

**XI. CONTACTS**

<b>Legal Applicant</b>	
Entity Name	City of Elkton
Authorized Official	Arthur Green (Mayor)
County	Todd
Email	agreen@elktonky.com
Phone	270-265-9877
Address	PO Box 578 Elkton, KY 42220

<b>Applicant Contact</b>	
Name	Terry Frogue
Organization	City of Elkton
Email	elkcityof@bellsouth.net
Phone	270-265-5703
Address	PO Box 578 Elkton, KY 42220

<b>Project Administrator</b>	
Name	Kyle Cunningham
Organization	Pennyrile ADD
Email	kyle.cunningham@ky.gov
Phone	270-886-9484
Address	300 Hammond Dr Hopkinsville, KY 42240

<b>Consulting Engineer</b>	
PE Name	Chris Wilcutt
Firm Name	McGhee Engineering Inc.
Email	chris.wilcutt@mcgheeengineering.com
Phone	270-843-9985
Address	PO Box 267 Guthrie, KY 42234

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF ELKTON  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited 2016</u>	<u>Audited 2017</u>	<u>Audited 2018</u>	<u>Projected 2019</u>	<u>Projected 2020</u>	<u>Projected 2021</u>	<u>Projected 2022</u>	<u>Projected 2023</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	392,511	478,172	493,004	622,162	728,113	806,776	919,014	942,763
Other Assets	6,676,336	6,466,175	6,547,929	6,087,177	8,025,033	9,690,278	9,380,222	9,070,167
<b>Total</b>	<b>7,068,847</b>	<b>6,944,347</b>	<b>7,040,933</b>	<b>6,709,339</b>	<b>8,753,146</b>	<b>10,497,054</b>	<b>10,299,236</b>	<b>10,012,930</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	268,920	286,913	327,831	329,507	331,195	333,489	335,289	337,690
Long Term Liabilities	1,747,821	1,879,877	2,025,110	1,480,388	2,980,261	4,394,241	4,332,522	4,269,803
<b>Total Liabilities</b>	<b>2,016,741</b>	<b>2,166,790</b>	<b>2,352,941</b>	<b>1,809,895</b>	<b>3,311,456</b>	<b>4,727,730</b>	<b>4,667,811</b>	<b>4,607,493</b>
<b>Net Assets</b>	<b>5,052,106</b>	<b>4,777,557</b>	<b>4,687,992</b>	<b>4,899,444</b>	<b>5,441,690</b>	<b>5,769,324</b>	<b>5,631,425</b>	<b>5,405,437</b>
<b>Cash Flow</b>								
Revenues	1,007,144	1,014,324	1,057,485	1,095,328	1,095,328	1,095,328	1,190,328	1,190,328
Operating Expenses	802,090	840,462	891,633	909,466	927,655	956,408	975,332	994,635
Other Income	13,264	13,775	18,086	18,086	18,086	18,086	18,086	18,086
<b>Cash Flow Before Debt Service</b>	<b>218,318</b>	<b>187,637</b>	<b>183,938</b>	<b>203,948</b>	<b>185,759</b>	<b>157,006</b>	<b>233,082</b>	<b>213,779</b>
<b>Debt Service</b>								
Existing Debt Service	79,243	78,974	78,710	80,153	79,808	75,076	75,515	75,438
Proposed KIA Loan F19-035	0	0	0	0	0	3,267	3,267	3,267
Proposed KIA Loan A19-001	0	0	0	0	0	0	55,663	111,325
<b>Total Debt Service</b>	<b>79,243</b>	<b>78,974</b>	<b>78,710</b>	<b>80,153</b>	<b>79,808</b>	<b>78,343</b>	<b>134,445</b>	<b>190,030</b>
<b>Cash Flow After Debt Service</b>	<b>139,075</b>	<b>108,663</b>	<b>105,228</b>	<b>123,795</b>	<b>105,951</b>	<b>78,663</b>	<b>98,638</b>	<b>23,749</b>
<b>Ratios</b>								
Current Ratio	1.5	1.7	1.5	1.9	2.2	2.4	2.7	2.8
Debt to Equity	0.4	0.4	0.5	0.4	0.6	0.8	0.8	0.9
Days Sales in Accounts Receivable	54.7	50.5	52.1	52.1	52.1	52.1	52.1	52.1
Months Operating Expenses in Unrestricted Cash	2.7	3.9	3.6	5.2	6.5	7.3	8.4	8.5
Debt Coverage Ratio	2.8	2.4	2.3	2.5	2.3	2.0	1.7	1.1

<b>EXECUTIVE SUMMARY</b>		Reviewer	Meili Sun	
<b>KENTUCKY INFRASTRUCTURE AUTHORITY</b>		Date	July 9, 2019	
<b>FUND F, FEDERALLY ASSISTED DRINKING WATER</b>		KIA Loan Number	F19-044	
<b>REVOLVING LOAN FUND</b>		WRIS Number	WX21107050	
BORROWER	CITY OF MORTONS GAP HOPKINS COUNTY			
BRIEF DESCRIPTION				
This project involves replacing existing plastic fittings with ductile iron, adding valves to allow isolation of lines for maintenance, adding/replacing fire hydrants, replacing all meters with new radion read meters, replacing all service tubing from the main to the meter, and creating a new Supervisory Control and Data Acquisition system (SCADA) for the tank and master meter. The SCADA will allow the utility to remotely monitor (via radio or cellar) tank levels, master meter flows, pump on/off, etc.				
PROJECT FINANCING		PROJECT BUDGET		
Fund F Loan	\$835,000	RD Fee %	Actual %	
CDBG	835,000			
				Administrative Expenses \$50,000
				Legal Expenses 18,000
				Planning 20,000
		Eng - Design / Const 8.4%	7.6%	107,000
		Eng - Insp 5.2%	4.8%	67,000
		Construction		1,250,000
		Contingency		158,000
TOTAL	\$1,670,000	TOTAL		\$1,670,000
REPAYMENT	Rate	0.50%	Est. Annual Payment	\$16,048
	Term	30 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	McGhee Engineering, Inc		
	Bond Counsel	Dinsmore & Shohl, LLP		
PROJECT SCHEDULE	Bid Opening	Dec-19		
	Construction Start	Jan-20		
	Construction Stop	Oct-20		
DEBT PER CUSTOMER	Existing	\$340		
	Proposed	\$1,130		
OTHER DEBT	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	460	\$40.96	(for 4,000 gallons)
	Additional	0	\$40.96	(for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2015	9,957	23,618	(13,661)	0.4
Audited 2016	6,571	23,019	(16,448)	0.3
Audited 2017	(5,827)	23,416	(29,243)	-0.2
Projected 2018	(85)	23,690	(23,775)	0.0
Projected 2019	12,831	23,268	(10,437)	0.6
Projected 2020	25,654	23,268	2,386	1.1
Projected 2021	30,547	15,678	14,869	1.9
Projected 2022	29,085	23,702	5,383	1.2

Reviewer: Meili Sun  
Date: July 9, 2019  
Loan Number: A19-044

**KENTUCKY INFRASTRUCTURE AUTHORITY  
DRINKING WATER STATE REVOLVING FUND (FUND F)  
CITY OF MORTONS GAP, HOPKINS COUNTY  
PROJECT REVIEW  
WX21107050**

**I. PROJECT DESCRIPTION**

The City of Mortons Gap (“City”) is requesting a Fund F loan in the amount of \$835,000 to fund the Water System Improvements project. The purpose of the improvements is to reduce water losses by minimizing response time and efforts in the event of a severe line break. The City has been experiencing significant water losses for a few years, creating a financial hardship on the City.

This project will replace existing plastic fittings with ductile iron, add valves to allow isolation of lines for maintenance, add or replace fire hydrants, install new radio read meters, replace all service tubing from the main to the meter, and create a new Supervisory Control and Data Acquisition system (SCADA) for the tank and master meter. The SCADA will allow the utility to remotely monitor (via radio or cellar) tank levels, master meter flows, pump on/off, etc.

The City purchases 100% of its water supply from the South Hopkins Water District, which is regulated by the Kentucky Public Service Commission, to serve approximately 450 customers in the city and surrounding areas.

**II. PROJECT BUDGET**

	<u>Total</u>
Administrative Expenses	\$ 50,000
Legal Expenses	18,000
Planning	20,000
Engineering Fees – Design	75,000
Engineering Fees – Construction	32,000
Engineering Fees – Other	67,000
Construction	1,250,000
Contingency	158,000
<b>Total</b>	<b>\$ 1,670,000</b>

### III. PROJECT FUNDING

	Amount	%
KIA Fund F Loan	\$ 835,000	50%
CDBG Grant	835,000	50%
<b>Total</b>	<b>\$ 1,670,000</b>	<b>100%</b>

### IV. KIA DEBT SERVICE

Construction Loan	\$ 835,000
Principal Forgiveness	417,500
Amortized Loan Amount	\$ 417,500
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 15,004
Administrative Fee (0.25%)	1,044
<b>Annual Debt Service</b>	<b>\$ 16,048</b>

### V. PROJECT SCHEDULE

Bid Opening	December 2019
Construction Start	January 2020
Construction Stop	October 2020

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

Customers	Current
Residential	446
Commercial	13
Industrial	1
<b>Total</b>	<b>460</b>

**B) Rates**

	<b>Water Inside City (70%)</b>			
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>	<u>Prior</u>
Date of Last Rate Increase	03/01/20	02/07/19	02/07/18	06/08/16
Water Works Improvement Fees	2.50	2.50	2.50	2.00
First 2,000 Gallons	\$22.60	\$21.50	\$20.25	\$18.00
Next 3,000 Gallons	8.93	8.48	7.98	7.10
Next 5,000 Gallons	8.57	8.14	7.66	6.80
Cost for 4,000 gallons	\$42.96	\$40.96	\$38.71	\$34.20
Increase %	4.9%	5.8%	13.2%	
Affordability Index (Rate/MHI)	1.8%	1.7%	1.6%	1.4%

	<b>Water Outside City (30%)</b>			
	<u>Proposed</u>	<u>Current</u>	<u>Prior</u>	<u>Prior</u>
Date of Last Rate Increase	03/01/20	02/07/19	02/07/18	06/08/16
Water Works Improvement Fees	2.50	2.50	2.50	2.00
First 2,000 Gallons	\$34.25	\$32.50	\$31.15	\$28.80
Next 3,000 Gallons	8.93	8.48	7.98	7.10
Next 5,000 Gallons	8.57	8.14	7.66	6.80
Cost for 4,000 gallons	\$54.61	\$51.96	\$49.61	\$45.00
Increase %	5.1%	4.7%	10.2%	
Affordability Index (Rate/MHI)	2.3%	2.2%	2.1%	1.9%

**VII. DEMOGRAPHICS**

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility’s service area population was 862 with a Median Household Income (MHI) of \$28,974. The median household income for the Commonwealth was \$44,811. With a lower than 80% of state MHI, this project will qualify for the 0.50% low interest rate and a 30 year loan term.

Year	Population		County		County Unemployment	
	City	% Change	County	% Change	Date	Rate
1980	1,201		46,174		June 2005	6.0%
1990	987	-17.8%	46,126	-0.1%	June 2010	9.7%
2000	952	-3.5%	46,519	0.9%	June 2015	6.1%
2010	863	-9.3%	46,920	0.9%	June 2018	4.9%
Current	1,070	24.0%	46,359	-1.2%		
Cumulative %		-10.9%		0.4%		



## **VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES**

- 1) Green Project Reserve - The Drinking Water capitalization grant does not contain a “green” requirement.
- 2) Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$417,500 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

## **IX. FINANCIAL ANALYSIS**

Financial information was obtained from the audited financial statements for the years ended June 30, 2015 through June 30, 2017. The City’s 2018 audit is not available due to a recent change in the state statute that requires cities of less than 2,000 population to conduct an audit every odd-numbered fiscal year. The water and sewer replacement reserve accounts are currently underfunded after USDA approved a withdrawal of the funds for repair work in 2009. An agreement has been reached between the City and USDA to replenish the accounts in installments. The non-cash impact of GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit is not applicable as the City does not report Pensions and OPEB liabilities.

### **HISTORY**

Water revenues decreased 6.0% from \$227,309 in 2016 to \$213,661 in 2017 due to customer loss caused by the condemnation of 23 trailers in the serviceable area. Operating expenses went up less than 1.0% from \$217,358 to \$219,492 during the same period. The debt coverage ratio (DCR) was 0.4 and 0.3 in 2015 and 2016 respectively. The DCR was (0.2) in 2017 due to a combination of high water purchase cost and decreased water revenues.

The 2017 Balance Sheet reflects 42.9 days sales in accounts receivable, 1.1 months of operating expenses in unrestricted cash, a current ratio of 0.9, and a debt to equity ratio of 1.0.

### **PROJECTIONS**

Projections are based on the following assumptions:

- 1) Water revenues will grow 10.6% in fiscal year 2019 and 6.8% in 2020 from the previously approved rate increases and 3.8% in 2021 from the proposed increase.
- 2) The City will continue to replenish the replacement reserve accounts as required by USDA and KIA, subject to KIA annual administrative compliance monitoring.

- 3) Upon completion of the project, the volume of water purchase will decrease due to reduction of water losses. However, the savings on water purchase cannot be determined at this time for inclusion in the projection because of the uncertainties associated with the timing, volume, and wholesale rate charged by the South Hopkins Water District.
- 4) The City will receive an \$835,000 CDBG grant to subsidize the total project cost of \$1.7 million.
- 5) Expenses will go up 2% each year for inflation.
- 6) Debt service coverage is 1.2 in 2022 when full year principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

#### REPLACEMENT RESERVE

The replacement reserve will be 5% (\$42,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$2,100 yearly) each December 1 for 20 years and maintained for the life of the loan.

#### X. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
Water Revenue Bond 1980	\$ 43,000	2020
Water Revenue Bond 2002	113,500	2042
<b>Total</b>	<b>\$ 156,500</b>	

#### XI. CONTACTS

<b>Legal Applicant</b>	
Name	City of Mortons Gap
Address	102 S Main St, Box 367 Mortons Gap, KY 42440
County	Hopkins
Authorized Official	Chris Phelps
Phone	(270) 258-5362
Email	mortons_gap_mayor@yahoo.com

<b>Project Contact - Applicant</b>	
Name	James Vandiver
Organization	City of Mortons Gap
Address	102 S Main St, PO Box 367 Mortons Gap, KY 42440
Phone	(270) 258-5362
Email	cityofmortonsgap@bellsouth.net

<b>Project Administrator</b>	
Name	Angela Crawford
Organization	Pennyrile ADD
Address	300 Hammond Dr Hopkinsville, KY 42240
Contact	
Phone	(270) 886-9484
Email	angela.crawford@ky.gov

<b>Consulting Engineer</b>	
Name	Chris Wilcutt
Firm	McGhee Engineering, Inc
Address	202 S Ewing St, PO Box 267 Guthrie, KY 42234
Phone	(270) 483-9985 Ext 102
Email	chris.wilcutt@mcgheeengineering.com

**XII. RECOMMENDATIONS**

KIA staff recommends approval of the loan with the standard conditions.

**CITY OF MORTONS GAP  
FINANCIAL SUMMARY (JUNE YEAR END)**

	<u>Audited</u> <u>2015</u>	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>
<b>Balance Sheet</b>								
<b>Assets</b>								
Current Assets	54,144	48,898	45,403	22,295	13,558	17,644	33,513	38,896
Other Assets	466,310	445,874	406,998	385,531	364,064	342,597	1,951,600	1,890,603
<b>Total</b>	<b>520,454</b>	<b>494,772</b>	<b>452,401</b>	<b>407,826</b>	<b>377,622</b>	<b>360,241</b>	<b>1,985,113</b>	<b>1,929,499</b>
<b>Liabilities &amp; Equity</b>								
Current Liabilities	30,682	41,126	51,688	52,334	53,479	38,857	39,288	46,683
Long Term Liabilities	200,322	186,113	169,184	152,201	134,373	131,467	545,930	535,798
<b>Total Liabilities</b>	<b>231,004</b>	<b>227,239</b>	<b>220,872</b>	<b>204,535</b>	<b>187,852</b>	<b>170,324</b>	<b>585,218</b>	<b>582,481</b>
<b>Net Assets</b>	<b>289,450</b>	<b>267,533</b>	<b>231,529</b>	<b>203,291</b>	<b>189,770</b>	<b>189,917</b>	<b>1,399,895</b>	<b>1,347,018</b>
<b>Cash Flow</b>								
Revenues	227,309	221,454	213,661	219,523	233,817	248,046	256,473	256,473
Operating Expenses	217,358	214,889	219,492	219,612	220,990	222,396	225,930	227,392
Other Income	6	6	4	4	4	4	4	4
<b>Cash Flow Before Debt Service</b>	<b>9,957</b>	<b>6,571</b>	<b>(5,827)</b>	<b>(85)</b>	<b>12,831</b>	<b>25,654</b>	<b>30,547</b>	<b>29,085</b>
<b>Debt Service</b>								
Existing Debt Service	23,618	23,019	23,416	23,690	23,268	23,268	7,654	7,654
Proposed KIA Loan	0	0	0	0	0	0	8,024	16,048
<b>Total Debt Service</b>	<b>23,618</b>	<b>23,019</b>	<b>23,416</b>	<b>23,690</b>	<b>23,268</b>	<b>23,268</b>	<b>15,678</b>	<b>23,702</b>
<b>Cash Flow After Debt Service</b>	<b>(13,661)</b>	<b>(16,448)</b>	<b>(29,243)</b>	<b>(23,775)</b>	<b>(10,437)</b>	<b>2,386</b>	<b>14,869</b>	<b>5,383</b>
<b>Ratios</b>								
Current Ratio	1.8	1.2	0.9	0.4	0.3	0.5	0.9	0.8
Debt to Equity	0.8	0.8	1.0	1.0	1.0	0.9	0.4	0.4
Days Sales in Accounts Receivable	52.9	48.6	42.9	42.9	42.9	43.0	43.0	43.0
Months Operating Expenses in Unrestricted Cash	1.2	1.1	1.1	(0.2)	(0.8)	(0.6)	0.2	0.5
Debt Coverage Ratio	0.4	0.3	(0.2)	(0.0)	0.6	1.1	1.9	1.2