# Kentucky Infrastructure Authority Projects for February 2019 Capital Projects Meeting

• Fund A Loan

	<u>Loan #</u> A19-011	<u>Borrower</u> City of Lancaster	<u>Loa</u> \$	an Amount 324,000	<u>County</u> Garrard
•	Fund F Loan				
	Loan #	Borrower	Loa	an Amount	<u>County</u>
	F17-006	City of Irvine F/B/O Irvine Municipal Utilities (Increase)	\$	1,200,000	Estill
	F19-005	City of Burnside	\$	2,227,000	Pulaski
	F19-018	Green-Taylor Water District	\$	564,600	Green
	F19-020	City of Cynthiana	\$	954,565	Harrison
	F19-059	City of Hardinsburg	\$	760,280	Breckinridge

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND A, FEDERALLY ASSISTED WASTEWATER **REVOLVING LOAN FUND**

Reviewer Date **KIA Loan Number** WRIS Number

Meili Sun January 8, 2019 A19-011 SX21079019

BORROWER

CITY OF LANCASTER GARRARD COUNTY

#### **BRIEF DESCRIPTION**

This is the Planning and Design portion of the Sanitary Sewer Improvements project which will include 2 contracts. Contract 1 will remove the existing boat clarifiers located in the oxidation ditch which severely limit the organic capacity of the plant. This contract will also construct a new RAS/WAS station as well as rehabilitate the Gas Chlorine Dechlorination system and the sludge dewatering press. Contract 2 will line and/or replace approximately 29,000 feet of gravity sewer and 149 manholes in various portions of the system identified as high I and I areas. Trenchless technologies will be used to reduce costs. This contract will also rehabilitate the HIII Court wastewater pumping station which has the highest volume in town.

	PROJECT BUDGET	RD Fee %	Actual %	
\$324,000	Planning			20,000
	Eng - Design / Const			304,000
\$324,000	TOTAL			\$324,000
Rate	3.00%	Est. Annual Payme	nt	\$70,913
Term	5 Years	1st Payment	6 Mo. after f	irst draw
Engineer	Summit Engineering,	Inc.		
Bond Counsel	Dinsmore & Shohl, Ll	_P		
Bid Opening	Dec-19			
P&D Start	Feb-19			
P&D Completion	Nov-19			
Existing	\$2,658			
Proposed	\$4,683			
	See Attached			
	<u>Users</u>	<u>Avg. Bill</u>		
Current	1,643	\$37.74	(for 4,000 ga	allons)
Additional	0	\$37.74	(for 4,000 ga	allons)
	\$324,000 Rate Term Engineer Bond Counsel Bid Opening P&D Start P&D Completion Existing Proposed Current	\$324,000Planning Eng - Design / Const TOTAL\$324,000TOTALRate3.00% 5 YearsEngineerSummit Engineering, Dinsmore & Shohl, LLBid OpeningDec-19 Feb-19P&D StartFeb-19 \$2,658 \$4,683Existing\$2,658 \$4,683Proposed\$4,683CurrentUsers 1,643	\$324,000   Planning Eng - Design / Const     \$324,000   TOTAL     Rate   3.00%   Est. Annual Payme 1st Payment     Engineer   Summit Engineering, Inc.     Bond Counsel   Dinsmore & Shohl, LLP     Bid Opening   Dec-19     P&D Start   Feb-19     P&D Completion   Nov-19     Existing   \$2,658     Proposed   \$4,683     Current   Users   Avg. Bill \$37.74	\$324,000   Planning Eng - Design / Const     \$324,000   TOTAL     Rate   3.00%   Est. Annual Payment     Term   5 Years   1st Payment     Sound Counsel   Dinsmore & Shohl, LLP     Bid Opening   Dec-19     P&D Start   Feb-19     P&D Completion   Nov-19     Existing   \$2,658     Proposed   \$4,683     Current   1,643   Avg. Bill

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	431,570	366,484	65,086	1.2
Audited 2016	351,970	292,252	59,718	1.2
Audited 2017	507,930	266,522	241,408	1.9
Projected 2018	377,128	265,499	111,629	1.4
Projected 2019	550,823	271,386	279,438	2.0
Projected 2020	588,920	348,899	240,021	1.7
Projected 2021	641,047	592,359	48,688	1.1
Projected 2022	696,686	650,540	46,146	1.1

Reviewer: Meili Sun Date: January 8, 2019 Loan Number: A19-011 P&D

#### KENTUCKY INFRASTRUCTURE AUTHORITY WASTEWATER REVOLVING LOAN FUND (FUND A) CITY OF LANCASTER, GARRARD COUNTY PROJECT REVIEW SX21079019

## I. PROJECT DESCRIPTION

This is the Planning and Design portion of the Sanitary Sewer Improvements project which will include two contracts. Contract 1 will remove the existing boat clarifiers located in the oxidation ditch which severely limit the organic capacity of the plant. This contract will also construct a new RAS/WAS station as well as rehabilitate the Gas Chlorine Dechlorination system and the sludge dewatering press. Contract 2 will line and/or replace approximately 29,000 feet of gravity sewer and 149 manholes in various portions of the system identified as high I&I areas. Trenchless technologies will be used to reduce costs. This contract will also rehabilitate the Hill Court wastewater pumping station which has the highest volume in town.

Lancaster Water Works is a regional facility currently serving approximately 1,600 retail customers and supplying wholesale water to the Crab Orchard Water Works and the Garrard County Water Association which is a PSC regulated system.

### II. PROJECT BUDGET

III.

	Total	
Planning	\$ 20,000	
Engineering Fees – Design	304,000	
Total	\$ 324,000	
PROJECT FUNDING		
	Amount	%
KIA Fund A Loan	\$ 324,000	100%

## IV. KIA DEBT SERVICE

Planning & Design Loan	\$ 324,000
Interest Rate	3.00%
Loan Term (Year)	5_
Estimated Annual Debt Service	\$ 70,265
Administrative Fee (0.20%)	648
Annual Debt Service	\$ 70,913

## V. PROJECT SCHEDULE

P&D Start	February 2019
P&D Completion	November 2019
Estimated Bid Date	December 2019
Construction Start	March 2020
Construction Completion	February 2021

# VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## Customers

Customers	
Residential	1,449
Commercial	156
Industrial	38
Total	1,643

## B) Rates

Water Proposed		Current		
Date of Last Rate Increase	10/01/19		07/02/18	
Minimum 1,000 Gallons	\$	14.10	\$	13.90
Next 3,000 Gallons	_	7.88		7.01
Cost for 4,000 gallons	\$	37.74	\$	34.93
Increase %		8.04%		
Affordability Index (Rate/MHI)		1.5%		1.4%

Sewer Current		Prior	
Date of Last Rate Increase	10/01/19	07/02/18	
Per 1,000 Gallons	\$ 8.30	\$ 7.52	
Cost for 4,000 gallons	\$ 33.20	\$ 30.08	
Increase %	10.37%		
Affordability Index (Rate/MHI)	1.3%	1.2%	

Wholesale Water					
Date	1/10/18	7/10/18	7/10/19	07/10/20	07/10/21
Per 1,000 Gallons	\$2.10	\$2.15	\$2.20	\$ 2.25	\$ 2.49
Increase %		2.4%	2.3%	2.3%	10.7%

### VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 3,992 with a Median Household Income (MHI) of \$30,793. The median household income for the Commonwealth is \$44,811. The project will qualify for a planning and design loan at 3.00% interest rate.

	Coun Unemplo					
Year	City	% Change	County	% Change	Date	Rate
1980	3,365		10,853		June 2005	5.4%
1990	3,421	1.7%	11,579	6.7%	June 2010	14.4%
2000	3,734	9.1%	14,792	27.7%	June 2015	5.8%
2010	3,442	-7.8%	16,912	14.3%	June 2018	5.1%
Current	3,831	11.3%	17,051	0.8%		
Cumulative %		13.8%		57.1%		

### VIII. 2018 CAPITALIZATION GRANT EQUIVALENCIES

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

### IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements combining both water and sewer operations for the years ended June 30, 2015 through June 30, 2017. An accounting error applying \$117,082 grant income to water revenues has been deducted from operating revenues. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has also been removed from fiscal year 2015, 2016, and 2017 operating expenses.

### HISTORY

Combined water and sewer revenues went up 10.6% from \$1.85 million in 2015 to \$2.05 million in 2017 due to rate and volume increases. Operating expenses increased 8.4% from \$1.43 million in 2015 to \$1.55 million in 2017 due to higher contractual expenses and general inflation. The debt coverage ratio was 1.2, 1.2, and 1.9 for 2015, 2016, and 2017 respectively.

The balance sheet reflects a current ratio of 5.7, debt to equity ratio of 0.8, 57.2 days sales in accounts receivable, and 2.4 months of operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Total revenues reflect all previously approved rate increases. Retail water revenues will increase approximately 15% and sewer revenues increase 10.40% by October 1, 2019.
- 2) Wholesale rates will go up annually based on the rate schedule in the water purchase agreements. Wholesale volume to the Garrard County Water District will exceed the minimum purchase requirement of 325 million gallons when the New Water Treatment Plant project is completed in 2021. In 2018, the Garrard County Water District purchased approximately 253 million gallons.
- 3) Expenses will increase 2% annually for general inflation.
- 4) After 2019, the City will continue to automatically adjust retail water and sewer rates based on the Social Security Consumer Price Index (CPI-W).
- 5) Debt service coverage is 1.7 in 2020 when annual repayments begin.
- 6) Should the City decide to pursue a construction loan from KIA after the planning and Design phase is completed, additional \$120,000 revenues will be required to support a total loan amount of \$4.2 million.

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

## REPLACEMENT RESERVE

Replacement reserve is not required for a planning and design loan.

## X. DEBT OBLIGATIONS

	Outstanding	Maturity
Water and Sewer Revenue Bonds Series 1988	\$ 638,000	2028
Water and Sewer Revenue Bonds Series 2000	467,500	2040
Water and Sewer Revenue Bonds Series 2005A	218,100	2045
Water and Sewer Revenue Bonds Series 2005B	147,300	2045
Water and Sewer Revenue Bonds Series 2009	897,000	2048
Water and Sewer Revenue Bonds Series 2010	1,505,500	2050
KIA Loan B08-002	288,900	2028
KIA Loan B16-013	204,890	TBD
RD Bonds i/a/o \$4.5 million		TBD
KIA Loan F18-017 i/a/o \$4.0 million		TBD
Total	\$4,367,190	

# XI. <u>CONTACTS</u>

Legal Applicant	
Name	City of Lancaster
Address	308 W Maple Ave, Suite 1
	Lancaster, KY 40444
County	Garrard
Authorized Official	Chris Davis, Mayor
Phone	(859) 792-2241
Email	cdavis@cityoflancasterky.com

Project Contact - Applicant	
Name	Debbie Carrier, City Clerk
Organization	City of Lancaster
Address	308 W Maple Ave, Suite 1
	Lancaster, KY 40444
Phone	(859) 792-2241
Email	dcarrier@cityoflancasterky.com

Project Administrator	
Name	Bob Casher
Organization	BGADD
Address	699 Perimeter Dr., Ste 100
Contact	Lexington, KY 40517
Phone	(859) 269-8021
Email	bcasher@bgadd.org

Consulting Engineer	
Name	Kevin Michael Howard
Firm	Summit Engineering, Inc
Address	131 Summit Drive
	Pikeville, KY 41501
Phone	(859) 264-9860
Email	khoward@summit-engr.com

# XII. <u>RECOMMENDATIONS</u>

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

# CITY OF LANCASTER

FINANCIAL SUMMARY (JUNE YEAR END)								
	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Balance Sheet								
Assets								
Current Assets	1,469,534	1,479,526	1,838,847	1,845,538	1,933,625	1,992,630	2,030,367	2,053,596
Other Assets	10,459,985	10,258,586	10,183,626	9,686,817	9,478,507	15,062,664	19,988,478	19,412,258
Total	11,929,519	11,738,112	12,022,473	11,532,355	11,412,132	17,055,293	22,018,845	21,465,855
Liabilities & Equity								
Current Liabilities	207,234	323,961	320,621	328,770	337,918	351,288	365,859	589,430
Long Term Liabilities	4,910,312	4,886,005	5,037,302	4,886,399	4,740,266	8,334,563	11,918,189	11,532,145
Total Liabilities	5,117,546	5,209,966	5,357,923	5,215,169	5,078,184	8,685,851	12,284,048	12,121,574
Net Assets	6,811,973	6,528,146	6,664,550	6,317,186	6,333,948	8,369,442	9,734,797	9,344,280
Cash Flow								
Revenues	1,852,941	1,821,842	2,049,621	1,949,734	2,155,474	2,225,735	2,404,393	2,493,495
Operating Expenses	1,425,693	1,474,044	1,545,746	1,576,661	1,608,706	1,640,870	1,767,401	1,800,864
Other Income	4,322	4,172	4,055	4,055	4,055	4,055	4,055	4,055
Cash Flow Before Debt Service	431,570	351,970	507,930	377,128	550,823	588,920	641,047	696,686
Debt Service								
Existing Debt Service	366,484	292,252	266,522	265,499	271,386	277,986	521,446	579,627
Proposed KIA Loan	0	0	0	0	0	70,913	70,913	70,913
Total Debt Service	366,484	292,252	266,522	265,499	271,386	348,899	592,359	650,540
Cash Flow After Debt Service	65,086	59,718	241,408	111,629	279,438	240,021	48,688	46,146
Ratios								
Current Ratio	7.1	4.6	5.7	5.6	5.7	5.7	5.5	3.5
Debt to Equity	0.8	4.0 0.8	0.8	0.8	0.8	1.0	1.3	1.3
Days Sales in Accounts Receivable	34.8	30.9	57.2	57.2	57.2	57.2	57.2	57.2
Months Operating Expenses in Unrestricted Cash	1.4	1.4	2.4	2.5	2.9	3.2	3.2	3.2
Debt Coverage Ratio	1.2	1.2	1.9	1.4	2.0	1.7	1.1	1.1

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND

Reviewer Date KIA Loan Number WRIS Number Ashley Adams January 8, 2019 F17-006 (Increase) WX21065005

BORROWER

CITY OF IRVINE ESTILL COUNTY

#### **BRIEF DESCRIPTION**

This is a loan increase in the amount of \$1,200,000 to a loan previously approved by the KIA Board for \$5,732,000; the new loan total will be \$6,932,000. The loan will also change from a 20 year term to a 30 year term. The reason for the increase is due to bids coming in higher than estimated in the original project budget.

Original Project Description: This project will include an array of plant modernization efforts to address water treatment issues by reducing disinfection byproducts and adding capacity to meet redundancy needs. The project also includes installation of approximately 20,100 LF of 12" PVC water main and replacement of a 200,000 gallon water storage tank with a 500,000 gallon tank.

PROJECT FINANCING		PROJECT BUDGET	RD Fee %	Actual %	
Fund F Loan	\$6,932,000	Planning Eng - Design / Const Eng - Insp Eng - Other Construction Contingency	6.6% 4.5%		30,000 338,000 284,000 75,000 5,750,000 455,000
TOTAL	\$6,932,000	TOTAL		-	\$6,932,000
REPAYMENT	Rate Term	0.25% 30 Years	Est. Annual Payme 1st Payment	ent 6 Mo. after f	\$216,483 first draw
PROFESSIONAL SERVICES	Engineer Bond Counsel	GRW Engineers, Inc Dinsmore & Shohl, LL	P		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Jun-18 Oct-18 Oct-19			
DEBT PER CUSTOMER	Existing Proposed	\$2,592 \$5,659			
OTHER DEBT		See Attached			
OTHER STATE-FUNDED PRO	JECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES	Current Additional	<u>Users</u> 1,985 0	<u>Avg. Bill</u> \$27.80 \$27.80	(for 4,000 g (for 4,000 g	
REGIONAL COORDINATION	This project is consist	ent with regional plannir	ng recommendation	S.	
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After D		Coverage Ratio
Audited 2015	462,070	471,222		(9,152)	1.0
Audited 2016 Audited 2017	404,528 414,319	416,387 419,371		(11,859) (5,052)	1.0 1.0
Projected 2018	414,319	419,371 417,902		(5,052) 74,187	1.2
Projected 2019	687,292	359,672		327,620	1.9
Projected 2020	731,999	468,599		263,401	1.6
Projected 2021	702,457	476,477		225,980	1.5
Projected 2022	689,729	444,937		244,792	1.6

Reviewer: Ashley Adams Date: January 8, 2019 Loan Number: F17-006 (Increase)

## KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE REVOLVING FUND (FUND F) CITY OF IRVINE F/B/O IRVINE MUNICIPAL UTILITIES, ESTILL COUNTY PROJECT REVIEW WX21065005

## I. PROJECT DESCRIPTION

The City of Irvine for the benefit of Irvine Municipal Utilities is requesting a Fund F loan increase in the amount of \$1,200,000 to a loan previously approved by the KIA Board for \$5,732,000. The new loan total will be \$6,932,000 for the Water Plant Modernization project and the loan term will be extended from 20 years to 30 years. The increase is due to bids coming in higher than estimated in the original project budget.

**Original Project Description:** The Water Treatment Plant (WTP) will undergo an array of improvements including expansion of the existing filter buildings, upgrade of two existing filters, construction of a third new filter, as well as improvements to the existing raw water and treated water pumping facilities, chemical feed/storage facilities, and flocculation and sedimentation basins. In addition, the project will install approximately 20,100 LF of 12" PVC main, and add a 500,000 gallon water storage tank which will replace an existing 200,000 gallon tank. These improvements will address water quality issues at the WTP and in the distribution system by reducing disinfection byproducts, add needed capacity to meet current regulations and aid in maintenance and redundancy needs, eliminate existing water transmission hydraulic bottlenecks, and facilitate water storage tank turnover.

Irvine Municipal Utilities serves approximately 4,500 customers. They also provide Estill County Water District No. 1 with approximately 255 million gallons of water annually at a rate of \$2.94/1,000 gallons (approximately 50% of total water revenue).

### II. PROJECT BUDGET

	Total
Planning	\$ 30,000
Engineering Fees - Design	270,400
Engineering Fees - Construction	67,600
Engineering Fees - Inspection	284,000
Engineering Fees - Other	75,000
Construction	5,750,000
Contingency	455,000
Total	\$ 6,932,000

## III. PROJECT FUNDING

	 Amount	%	
Fund F Loan	\$ 6,932,000	100%	
Total	\$ 6,932,000	100%	

# IV. KIA DEBT SERVICE

Construction Loan	\$ 6,932,000
Less: Principal Forgiveness	1,100,000
Amortized Loan Amount	\$ 5,832,000
Interest Rate	0.25%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 201,903
Administrative Fee (0.25%)	14,580
Total Estimated Annual Debt Service	\$ 216,483

## V. PROJECT SCHEDULE

Bid Opening	June 2018
Construction Start	October 2018
Construction Stop	October 2019

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## A) Customers

	Current
Residential	1,820
Commercial	163
Industrial	2
Total	1,985

## B) Rates

Rates					
Water	Inside	e City	Outside City		
	Current	Prior	Current	Prior	
Date of Last Rate Increase	07/01/18	03/01/17	07/01/18	03/01/17	
Minimum (2,000 gallons)	15.90	\$10.71	17.90	\$14.08	
All over 2,000 (per 1,000)	5.95	5.24	7.75	7.43	
Cost for 4,000 gallons Increase % Affordability Index (Rate/MHI)	\$27.80 31.2% 1.2%	\$21.19 2.1% 0.9%	\$33.40 15.4% 1.5%	\$28.95 2.1% 1.3%	

Sewer	Inside	e City	Outside City		
	Current	Prior	Current	Prior	
Date of Last Rate Increase	07/01/18	03/01/17	07/01/18	03/01/17	
Minimum (2,000 gallons)	\$15.58	\$15.45	\$21.57	\$21.38	
All over 2,000 (per 1,000)	8.86	8.78	9.02	8.94	
Cost for 4,000 gallons	\$33.30	\$33.01	\$39.61	\$39.27	
Increase %	0.9%	2.1%	0.9%	2.1%	
Affordability Index (Rate/MHI)	1.5%	1.5%	1.8%	1.8%	

The City's Rate Ordinance contains a clause that allows them to evaluate and affect rate increases based on the Consumer Price Index (CPI-U) up to 3% annually.

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 4,642 with a Median Household Income (MHI) of \$26,909. Median household income for the Commonwealth is \$44,811. The project will retain its original interest rate of 0.25% which was based on its Disadvantaged Community status.

	P	opulation %		%	Coun Unemplo	,
Year	City	Change	County	Change	Date	Rate
1980	2,889		14,495		June 2005	6.7%
1990	2,836	-1.8%	14,614	0.8%	June 2010	12.7%
2000	2,843	0.2%	15,307	4.7%	June 2015	6.1%
2010	2,715	-4.5%	14,672	-4.1%	June 2018	6.1%
Current	2,257	-16.9%	14,406	-1.8%		
Cumulative %		-21.9%		-0.6%		

## VIII. 2016 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 in the amount of 50%, not to exceed \$1,100,000.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for Irvine Municipal Utilities combined water and sewer fund, for the years ended June 30, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016, and 2017 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Consolidated water and sewer revenues increased 8% from \$2 million in 2015 to \$2.2 million in 2017 while operating expenses increased 15% from \$1.6 million to \$1.8 million during the same time period. Increases in water revenue were due largely to the City's CPI clause. Sewer revenue increases can be attributed to CPI rate increases as well as the acquisition of Estill County Sewer District No. 1 in 2014 and the realization of that revenue stream in Fiscal 2016. Operating expense increases can also be attributed to normal inflation as well as the acquisition.

The balance sheet reflects a current ratio of 0.8, debt to equity ratio of 0.6, 41.9 days sales in accounts receivable, and 2.9 months operating expenses in unrestricted cash.

### PROJECTIONS

Projections are based on the following assumptions:

- 1) Water revenues will increase approximately \$250,000 by 2019 due to previously approved rate increases for the original loan and CPI adjustments.
- 2) Sewer revenues will experience an increase in 2020 as service for approximately 200 customers is completed through the Wisemantown Sewer Project. The anticipated debt (RD) for this project will be offset by the additional customer revenue and is included in this analysis.
- 3) Indirect operating expenses will normalize in 2018/2019 upon completion of the Wisemantown Sewer project.
- 4) Overall expenses will increase 2% annually for inflation but will be offset by the City's CPI clause.
- 5) Debt service coverage is 1.5 in 2021 when 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 annual replacement cost is \$17,300. This amount should be added to the replacement account each December 1 until the balance reaches \$346,000 and maintained for the life of the loan.

# X. DEBT OBLIGATIONS

	0	utstanding	Maturity
KIA Loan (A95-08)	\$	88,556	2018
KRWFC Bond 2013C		355,000	2021
RD Bond 2010		4,672,000	2049
Citizens Guaranty Bank		298,575	2018
RD Bond (Wisemantown Project i/a/o \$900,000)		-	TBD
Line of Credit		85,519	2018
Total	\$	5,499,650	

# XI. <u>CONTACTS</u>

Legal Applicant	
Name	City of Irvine
Address	101 Chestnut Street
	Irvine, KY 40336
County	Estill
Authorized Official	M.J. Noland, Mayor
Phone	606-723-2554
Email	mayornoland@irvineonline.net

Project Contact - Applicant	
Name	Billy Williams
Representing	Irvine Municipal Utilities
Address	238 Broadway St
	Irvine, KY 40336
Phone	606-723-2197
Email	irvinewater@irvineonline.net

Consulting Engineer/ Project Administrator	
Name	Bob Smallwood, Vice President
Firm	GRW Engineers, Inc
Address	801 Corporate Drive
	Lexington, KY 40503
Phone	859-223-3999 x250
Email	bsmallwood@grwinc.com

# XII. <u>RECOMMENDATIONS</u>

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

#### CITY OF IRVINE

FINANCIAL SUMMARY (JUNE YEAR END)

FINANCIAL SUMMARY (JUNE YEAR END)								
	Audited <u>2015</u>	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet								
Assets								
Current Assets	446,230	415,356	689,908	707,399	799,323	861,203	909,199	960,958
Other Assets	18,438,043	18,416,304	17,812,900	16,973,333	20,145,974	27,084,540	26,553,869	26,020,947
Total	18,884,273	18,831,660	18,502,808	17,680,733	20,945,298	27,945,743	27,463,068	26,981,905
Liabilities & Equity								
Current Liabilities	488,512	851,399	897,616	748,568	659,660	347,222	353,403	359,730
Long Term Liabilities	6,249,841	6,218,226	6,089,887	5,521,791	8,311,791	12,019,291	11,908,291	11,794,791
Total Liabilities	6,738,353	7,069,625	6,987,503	6,270,359	8,971,451	12,366,513	12,261,694	12,154,521
Net Assets	12,145,920	11,762,035	11,515,305	11,410,374	11,973,846	15,579,231	15,201,374	14,827,384
Cash Flow								
Revenues	2,043,769	2,132,591	2,215,971	2,239,523	2,469,755	2,550,191	2,574,393	2,598,838
Operating Expenses	1,582,144	1,728,420	1,815,131	1,751,434	1,786,463	1,822,192	1,875,936	1,913,109
Other Income	445	357	13,479	4,000	4,000	4,000	4,000	4,000
Cash Flow Before Debt Service	462,070	404,528	414,319	492,089	687,292	731,999	702,457	689,729
Debt Service								
Existing Debt Service	471,222	416,387	419,371	417,902	359,672	360,357	259,994	228,454
Proposed KIA Loan	0	0	0	0	0	108,242	216,483	216,483
Total Debt Service	471,222	416,387	419,371	417,902	359,672	468,599	476,477	444,937
Cash Flow After Debt Service	(9,152)	(11,859)	(5,052)	74,187	327,620	263,401	225,980	244,792
Ratios								
Current Ratio	0.9	0.5	0.8	0.9	1.2	2.5	2.6	2.7
Debt to Equity	0.6	0.6	0.6	0.5	0.7	0.8	0.8	0.8
Days Sales in Accounts Receivable	44.4	47.3	41.9	41.9	41.9	41.9	41.9	41.9
Months Operating Expenses in Unrestricted Cash	1.5	1.0	2.9	3.1	3.5	3.7	4.0	4.2
Debt Coverage Ratio	1.0	1.0	1.0	1.2	1.9	1.6	1.5	1.6

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND

Reviewer Date KIA Loan Number WRIS Number Meili Sun January 8, 2019 F19-005 WX21199128

BORROWER

CITY OF BURNSIDE PULASKI COUNTY

#### BRIEF DESCRIPTION

The proposed project will replace approximately 28,375 LF of waterline, along with valves and fire hydrants in residential and commercial areas within the Burnside Water System.

PROJECT FINANCING		PROJECT BUDGET	RD Fee %	Actual %	
Fund F Loan	\$2,227,000	Administrative Expense Legal Expenses Planning Eng - Design / Const Eng - Insp Eng - Other Construction Contingency	ses 7.8% 4.7%	7.3% 4.5%	\$65,000 10,000 15,000 139,125 84,875 6,500 1,768,080 138,420
TOTAL	\$2,227,000	TOTAL		-	\$2,227,000
REPAYMENT	Rate Term	0.50% 30 Years	Est. Annual Paymer 1st Payment	nt 6 Mo. after	\$42,800 first draw
PROFESSIONAL SERVICES	Engineer Bond Counsel	HMB, Inc Dinsmore & Shohl, LL	P		
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Oct-19 Jan-20 Nov-20			
DEBT PER CUSTOMER	Existing Proposed	\$2,889 \$4,461			
OTHER DEBT		See Attached			
OTHER STATE-FUNDED PROJ	ECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES	Current Additional	<u>Users</u> 597 0		(for 4,000 g (for 4,000 g	
REGIONAL COORDINATION	This project is consist	ent with regional plannir	ng recommendations	5.	
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After De		Coverage Ratio
Audited 2015 Audited 2016 Audited 2017 Projected 2018	64,487 (4,894) 91,775 95,729	82,400 72,296 65,635 92,634		(17,913) (77,190) 26,140 3,095	0.8 -0.1 1.4 1.0
Projected 2019 Projected 2020 Projected 2021	105,087 148,186 147,369	92,249 92,984 111,818 132,405		12,838 55,202 35,551	1.1 1.6 1.3

Reviewer: Meili Sun Date: January 8, 2019 Loan Number: F19-005

### KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE REVOLVING FUND (FUND F) CITY OF BURNSIDE, PULASKI COUNTY PROJECT REVIEW WX21199128

#### I. PROJECT DESCRIPTION

The City of Burnside is requesting a Fund F loan in the amount of \$2,227,000 for the Burnside Combined Waterline Improvements project. This project will replace approximately 28,375 LF of waterline with valves and fire hydrants in residential and commercial areas in the Burnside Water System. The replacement lines will be 6" PVC. The completion of the project will restore proper fire protection by upsizing lines and replacing fire hydrants. It will also improve domestic service and reduce water loss to Burnside's customers by eliminating leaks as well as provide a direct connection between the WTP and old Burnside.

The City of Burnside produces more than 80% and purchases around 15% of its water supply from the Southeastern Water Association to serve approximately 570 customers within the system. In a Town Hall meeting held on December 10, 2018 to address the need for the project and the KIA assistance, the City received full support from its residents to move forward with the project.

### II. PROJECT BUDGET

	Total	
Administrative Expenses	\$	65,000
Legal Expenses		10,000
Planning		15,000
Engineering Fees – Design		97,390
Engineering Fees – Construction		41,735
Engineering Fees – Inspection		84,875
Engineering Fees – Other		6,500
Construction	1	,768,080
Contingency		138,420
Total	\$ 2	,227,000

#### III. PROJECT FUNDING

	Amount	%
KIA Fund F Loan	\$ 2,227,000	100%
Total	\$ 2,227,000	100%

# IV. KIA DEBT SERVICE

Construction Loan	\$ 2,227,000
Principal Forgiveness (50%)	1,113,500
Amortized Loan Amount	\$ 1,113,500
Interest Rate	0.50%
Loan Term (Years)	30
Estimated Annual Debt Service	\$ 40,016
Administrative Fee (0.25%)	2,784
Total Estimated Annual Debt Service	\$ 42,800

# V. PROJECT SCHEDULE

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

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## A) Customers

Customers	Current
Residential	538
Commercial/Institutional	44
Other	15
Total	597

## B) Rates

	Water				
	Proposed	Current	Prior		
Date of Last Rate Increase	07/01/19	07/01/18	07/01/17		
First 1,000 Gallons	\$21.14	\$19.22	\$18.67		
1,000 Gallons and Above	11.52	10.47	10.17		
3,000 Gallons and Above	8.04	7.31	7.10		
Cost for 4,000 gallons	\$52.22	\$47.47	\$46.11		
Increase %	10.0%	2.9%			
Affordability Index (Rate/MHI)	1.8%	1.6%	1.5%		

		Sewer	
	Proposed	Current	Prior
Date of Last Rate Increase	07/01/19	07/01/18	07/01/17
First 1,000 Gallons	\$19.51	\$17.74	\$17.23
1,000 Gallons and Above	10.04	9.13	8.87
3,000 Gallons and Above			
Cost for 4,000 gallons	\$49.64	\$45.13	\$43.84
Increase %	10.0%	2.9%	
Affordability Index (Rate/MHI)	1.7%	1.5%	1.5%

The City adopted a CPI clause in the 2014 rate ordinance to automatically adjust both water and sewer rates each year based on the Consumer Price Index.

### VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 1,388 with a Median Household Income (MHI) of \$35,706. The median household income for the Commonwealth is \$44,811. The project will qualify for a 0.5% interest rate with a below 80% of the State MHI.

	F	Population			Coun Unemplo	
Year	City	% Change	County	% Change	Date	Rate
1980	775		45,803		June 2005	5.4%
1990	695	-10.3%	49,489	8.0%	June 2010	14.4%
2000	637	-8.3%	56,217	13.6%	June 2015	5.8%
2010	611	-4.1%	63,063	12.2%	June 2018	5.1%
Current	1,270	107.9%	63,772	1.1%		
Cumulative %		63.9%		39.2%		

### 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 \$1,113,500 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 non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016 and 2017 operating expenses.

### HISTORY

Combined water and sewer revenues increased 9.0% from \$545,221 in 2015 to \$594,558 in 2017 due to annual CPI increases while operating expenses increased 2.5% during the same period. The debt coverage ratio was 0.8 in 2015 and 1.4 in 2017. The ratio fell below zero in 2016 due to significantly higher maintenance and treatment costs for renovation of the water treatment plant and serious water leaks.

The balance sheet reflects a current ratio of 0.5, a debt to equity ratio of 0.4, 39.7 days sales in accounts receivable, and 0.3 month operating expenses in unrestricted cash.

#### PROJECTIONS

Projections are based on the following assumptions:

- 1) Combined water and sewer revenues will increase 10% or \$55,000 in fiscal year 2020 after the City implements necessary rate increases effective July 1, 2019.
- 2) The City will deposit \$5,000 additionally into the Reserve and Sinking Fund accounts starting 2020 for 4 years to replenish the minimum fund balances. This will be subject to annual KIA administrative compliance monitoring.
- 3) The City will continue to adjust rates based on the Consumer Price Index in 2020 and going forward.
- 4) Expenses will increase 2% annually for general inflation.
- 5) Debt coverage ratio 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% (\$112,000 total) of the final amount borrowed prior to principal forgiveness to be funded annually (\$5,600 yearly) each December 1 for 20 years and maintained for the life of the loan. As of June 30, 2017, the Reserve and Sinking Fund balances were under funded by approximately \$20,000. The City will set aside additional cash to fund the balances appropriately.

## X. DEBT OBLIGATIONS

2005 Sewer Revenue Bonds	Outstanding 501,500	2047
	,	-•
KRWFC Series 2013D	636,700	2035
2015A Waterworks Bonds	446,800	2055
2015B Waterworks Bonds	140,000	2055
Total	\$ 1,725,000	

# XI. <u>CONTACTS</u>

Legal Applicant	
Name	City of Burnside
Address	7929 S Hwy 27, PO Box 8
	Burnside, KY 42519
County	Pulaski
Authorized Official	Robert Lawson, Mayor
Phone	(606) 561-4113
Email	mayor@burnsidecitygovernment.com

Project Contact - Applicant	
Name	Crissa Morris
Organization	City of Burnside
Address	7929 S Hwy 27, PO Box 8
	Burnside, KY 42519
Phone	(606) 561-4113
Email	clerk@burnsidecitygovernment.com

Project Administrator	
Name	Chari Bennett
Organization	Lake Cumberland Area Development District
Address	2384 Lakeway Dr, PO Box 1570
	Russell Springs, KY 42642
Phone	(270) 866-4200
Email	chari@lcadd.org

Consulting Engineer	
Name	Joseph Forrest Grider
Firm	HMB, Inc
Address	3 HMB Circle
	Frankfort, KY 40601
Phone	(502) 695-9800
Email	jgrider@hmbpe.com

## XII. <u>RECOMMENDATIONS</u>

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

1. The City shall raise additional revenues in the amount of \$55,000 or 10% by July 1, 2019 with an ordinance passed for the necessary rate increases prior to March 1, 2019.

#### CITY OF BURNSIDE

FINANCIAL SUMMARY (JUNE YEAR END)

FINANCIAL SUMMART (JUNE TEAR END)	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
	2015	2016	2017	2018	2019	2020	2021	2022
Balance Sheet								
Assets								
Current Assets	147,303	119,782	174,224	178,429	192,967	254,169	291,020	312,570
Other Assets	9,038,779	8,828,921	8,565,742	8,211,713	7,922,500	8,751,787	9,531,399	9,197,511
Total	9,186,082	8,948,703	8,739,966	8,390,142	8,115,467	9,005,956	9,822,419	9,510,081
Liabilities & Equity								
Current Liabilities	260,139	333,837	376,864	378,225	382,325	383,725	388,525	422,025
Long Term Liabilities	1,753,700	1,956,111	1,973,240	1,930,740	1,885,540	2,397,090	2,905,340	2,824,840
Total Liabilities	2,013,839	2,289,948	2,350,104	2,308,965	2,267,865	2,780,815	3,293,865	3,246,865
Net Assets	7,172,243	6,658,755	6,389,862	6,081,177	5,847,602	6,225,141	6,528,554	6,263,216
Cash Flow								
Revenues	545,221	587,978	594,558	604,999	620,974	675,822	687,889	700,197
Operating Expenses	480,734	592,872	502,783	509,270	515,887	527,636	540,520	547,542
Other Income	0	0	0	0	0	0	0	0
Cash Flow Before Debt Service	64,487	(4,894)	91,775	95,729	105,087	148,186	147,369	152,655
Debt Service								
Existing Debt Service	82,400	72,296	65,635	92,634	92,249	92,984	90,418	89,605
Proposed KIA Loan	0	0	0	0	0	0	21,400	42,800
Total Debt Service	82,400	72,296	65,635	92,634	92,249	92,984	111,818	132,405
Cash Flow After Debt Service	(17,913)	(77,190)	26,140	3,095	12,838	55,202	35,551	20,250
Ratios								
Current Ratio	0.6	0.4	0.5	0.5	0.5	0.7	0.7	0.7
Debt to Equity	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Days Sales in Accounts Receivable	34.9	14.3	39.7	39.6	39.6	39.6	39.6	39.6
Months Operating Expenses in Unrestricted Cash	0.5	0.3	0.3	0.3	0.6	1.9	2.7	3.1
Debt Coverage Ratio	0.8	(0.1)	1.4	1.0	1.1	1.6	1.3	1.2

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND

Reviewer Date KIA Loan Number WRIS Number Ashley Adams January 8, 2019 F19-018 WX21087022

BORROWER

GREEN-TAYLOR WATER DISTRICT GREEN COUNTY

#### BRIEF DESCRIPTION

This project will improve water quality and reduce disinfection byproducts in the District's water supply by installing mixing stations in four of the District's elevated storage tanks, rehabilitating four pump stations and retrofitting them with Variable Frequency Drives, and establishing an interconnect with Adair County Water district.

PROFESSIONAL SERVICES   Engineer Bond Counsel   Cann-Tech, LLC     PROJECT SCHEDULE   Bid Opening Construction Start   Feb-19 Mar-19 Construction Stop	5,000 5,000 \$% 45,660
Planning     Eng - Design / Const   10.4%   9.6     Eng - Insp   7.5%   7.1     Construction   Construction   Construction     REPAYMENT   Rate   2.00%   Est. Annual Payment     Term   20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer   Cann-Tech, LLC     Bond Counsel   Dinsmore & Shohl, LLP     PROJECT SCHEDULE   Bid Opening   Feb-19     Construction Start   Mar-19     Construction Stop   Sep-19	5,000 45,660 1% 33,740 432,000 43,200 \$564,600 \$35,802
Eng - Insp   7.5%   7.1     Construction   Construction     Contingency   TOTAL     REPAYMENT   Rate   2.00%   Est. Annual Payment     Term   20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer   Cann-Tech, LLC     Bond Counsel   Dinsmore & Shohl, LLP     PROJECT SCHEDULE   Bid Opening   Feb-19     Construction Start   Mar-19     Construction Stop   Sep-19	% 33,740 432,000 43,200 \$564,600 \$35,802
TOTAL   \$564,600   TOTAL     REPAYMENT   Rate   2.00%   Est. Annual Payment     Term   20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer   Cann-Tech, LLC   Dinsmore & Shohl, LLP     PROJECT SCHEDULE   Bid Opening   Feb-19   Variation   Variation     Construction Start   Mar-19   Sep-19   Variation   Variation	432,000 43,200 \$564,600 \$35,802
TOTAL   \$564,600   Contingency     REPAYMENT   Rate   2.00%   Est. Annual Payment     Term   20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer   Cann-Tech, LLC   1st Payment   6 Mo. af     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19   1st Payment   1st Payment   1st Payment     PROJECT SCHEDULE   Bid Opening   Feb-19	43,200 \$564,600 \$35,802
TOTAL   \$564,600   TOTAL     REPAYMENT   Rate   2.00%   Est. Annual Payment     Term   20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer   Cann-Tech, LLC   1     Bond Counsel   Dinsmore & Shohl, LLP   PROJECT SCHEDULE   Bid Opening   Feb-19     Construction Start   Mar-19   Construction Stop   Sep-19	\$564,600 \$35,802
REPAYMENT   Rate Term   2.00%   Est. Annual Payment     20 Years   1st Payment   6 Mo. af     PROFESSIONAL SERVICES   Engineer Bond Counsel   Cann-Tech, LLC Dinsmore & Shohl, LLP     PROJECT SCHEDULE   Bid Opening Construction Start   Feb-19 Mar-19 Construction Stop	\$35,802
Term 20 Years 1st Payment 6 Mo. af   PROFESSIONAL SERVICES Engineer Bond Counsel Cann-Tech, LLC Dinsmore & Shohl, LLP   PROJECT SCHEDULE Bid Opening Construction Start Construction Stop Feb-19 Mar-19 Sep-19	
PROFESSIONAL SERVICES Engineer Bond Counsel Cann-Tech, LLC Dinsmore & Shohl, LLP   PROJECT SCHEDULE Bid Opening Construction Start Construction Stop Feb-19 Mar-19 Sep-19	ter first draw
Bond Counsel     Dinsmore & Shohl, LLP       PROJECT SCHEDULE     Bid Opening Construction Start     Feb-19 Mar-19 Construction Stop       Construction Stop     Sep-19	
Construction Start Mar-19 Construction Stop Sep-19	
Construction Start Mar-19 Construction Stop Sep-19	
DEBT PER CUSTOMER Existing \$683	
Proposed \$1,097	
OTHER DEBT See Attached	
OTHER STATE-FUNDED PROJECTS LAST 5 YRS See Attached	
RESIDENTIAL RATES Users Avg. Bill	
Current 5,013 \$40.73 (for 4,00	)0 gallons)
Additional 0 \$40.73 (for 4,00	0 gallons)
REGIONAL COORDINATION This project is consistent with regional planning recommendations.	
Cash Flow Before	
CASHFLOW Debt Service Debt Service Cash Flow After Debt Servi	
Audited 2015     370,054     348,498     21,55       Audited 2015     157,012     157,012     157,012	
Audited 2016     457,813     352,823     104,99       Audited 2017     520,505     265,625     163,04	
Audited 2017529,596365,685163,91Projected 2018577,091371,351205,74	
Projected 2019 662,444 333,990 328,45	
Projected 2019 002,444 353,390 326,43 Projected 2020 616,772 493,524 123,24	
Projected 2021 576,613 481,923 94,69	
Projected 2022 535,651 482,423 53,22	

Reviewer: Ashley Adams Date: January 8, 2019 Loan Number: F19-018

### KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE REVOLVING FUND (FUND F) GREEN-TAYLOR WATER DISTRICT, GREEN COUNTY PROJECT REVIEW WX21087022

### I. PROJECT DESCRIPTION

The Green-Taylor Water District is requesting a Fund F loan in the amount of \$564,600 for the Distribution Upgrades project. The primary goal of this project is to improve water service and quality to the entire system served by Green-Taylor Water District. The District is currently struggling to keep their disinfectant byproducts within regulated standards due to elevated levels received from one of their current suppliers among other issues.

This project will add mixing stations to the Mell Ridge, Pierce, Sandy Y, and Summersville tanks in order to help remedy issues with stagnant water, high levels of disinfection byproducts, and inconsistent contact time resulting in varying levels of disinfectant throughout the distribution system. There will also be rehabilitation of four pump stations including Donansburg, Exie, Mac-Pittman, and Pikeview pump stations. Rehab of the stations will include the installation of new Variable Frequency Drive (VFD) controls to help improve energy efficiency.

In addition to the above-mentioned system improvements, the District will construct an interconnect with the Adair County Water District which will allow for another source of water on the Southern side of Green County along Highway 1913.

Green-Taylor Water District is a PSC regulated regional provider currently serving nearly 5,000 residents and businesses mainly in Green and Taylor counties. The District purchases approximately 350 MG of water annually from three providers including Campbellsville Municipal Water & Sewer System, Green River Valley Water District, and the Greensburg Water Department.

### II. PROJECT BUDGET

	Total
Legal Expenses	5,000
Planning	5,000
Engineering Fees - Design	36,530
Engineering Fees - Construction	9,130
Engineering Fees - Inspection	33,740
Construction	432,000
Contingency	43,200
Total	\$ 564,600

## III. PROJECT FUNDING

<u></u>		
	Amount	%
Fund F Loan	\$ 564,600	100%
Total	\$ 564,600	100%
IV. KIA DEBT SERVICE		
Construction Loan	\$ 564,600	
Less: Principal Forgiveness	0	
Amortized Loan Amount	\$ 564,600	
Interest Rate	2%	
Loan Term (Years)	20	
Estimated Annual Debt Service	\$ 34,390	
Administrative Fee (0.25%)	1,412	
Total Estimated Annual Debt Service	\$ 35,802	

# V. PROJECT SCHEDULE

Bid Opening	February 2019
<b>Construction Start</b>	March 2019
<b>Construction Stop</b>	September 2019

# VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## A) Customers

	Current
Residential	4,941
Commercial	72
Total	5,013

## B) Rates

Date of Last Rate Increase	<b>Current</b> 08/17/18	<b>Prior</b> 12/01/10	<b>Prior</b> 08/01/08
Minimum (2,000 Gallons)	\$22.21	\$20.40	\$16.80
Next 3,000 Gallons	9.26	8.50	6.95
Next 5,000 Gallons	7.40	6.80	5.50
Over 10,000 Gallons	4.71	4.33	3.40
Cost for 4,000 gallons	\$40.73	\$37.40	\$30.70
Increase %	9%	22%	
Affordability Index (Rate/MHI)	1.3%	1.2%	

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 11,334 with a Median Household Income (MHI) of \$37,272. The median household income for the Commonwealth is \$44,811. The project will qualify for a 2% interest rate based on their regional provider status and work being done to assuage an Agreed Order.

	F	Population			Coun Unemplo	•
Year	City	% Change	County	% Change	Date	Rate
1980	2,377		11,043		June 2005	6.2%
1990	1,990	-16.3%	10,371	-6.1%	June 2010	12.0%
2000	2,396	20.4%	11,518	11.1%	June 2015	7.2%
2010	2,163	-9.7%	11,258	-2.3%	June 2018	4.9%
Current	2,243	3.7%	11,123	-1.2%		
Cumulative %		-5.6%		0.7%		

## 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 December 31, 2015 through December 31, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015, 2016, and 2017 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

#### HISTORY

Revenues increased 3.3% from \$2.3 million in 2015 to \$2.4 million in 2017. Operating expenses decreased 4.1% from \$1.9 million to \$1.8 million during the same time period. The debt coverage ratio was 1.1 in 2015, 1.3 in 2016, and 1.4 in 2017.

The 2017 balance sheet reflects a current ratio of 5.1, a debt to equity ratio of 0.6, 69.1 days sales in accounts receivable, and 4.1 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase 9% in 2019 as a result of a rate increase approved by PSC on August 17, 2018.
- 2) Operating expenses will increase 2% for inflation.
- 3) Debt service for both this loan and a previously approved KIA Loan (F18-005) has been considered in this analysis.
- 4) Debt service coverage is 1.3 in 2020 when 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% (\$28,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$1,400 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	C	Outstanding	Maturity
1979 Revenue Bond	\$	75,000	2019
1994 Revenue Bond		312,000	2034
1995 Revenue Bond		473,000	2035
2001 Revenue Bond		205,000	2041
2004 Series A Revenue Bond		568,000	2044
2004 Series B Revenue Bond		248,000	2044
2004 Refinance Bonds		1,487,000	2027
Bank Loan (Capital Purchases)		53,619	2021
KIA Loan F18-005 (i/a/o \$1,842,071)		-	TBD
Total	\$	3,421,619	

## XI. <u>CONTACTS</u>

Legal Applicant	
Entity Name	Green-Taylor Water District
Authorized Official	Bill Netherlands (Chairman)
County	Green
Email	josh.pedigo.greentaylorwater@hotmail.com
Phone	270-932-4947
Address	PO Box 168
	Greensburg, KY 42743

Applicant Contact	
Name	Josh Pedigo
Organization	Green-Taylor Water District
Email	josh.pedigo.greentaylorwater@hotmail.com
Phone	270-932-4947
Address	250 Industrial Park Rd
	Greensburg, KY 42743

# **Project Administrator**

Name	Adam Scott
Organizati	on Cann-Tech, LLC
Email	ascott@kih.net
Phone	502-859-0907
Address	1100 Glensboro Rd
	Lawrenceburg, KY 40342

Consulting Engin	neer
PE Name	Matt Baker
Firm Name	Cann-Tech, LLC
Email	mbaker@kih.net
Phone	502-859-0907
Address	1100 Glensboro Rd
	Lawrenceburg, KY 40342

# XII. <u>RECOMMENDATIONS</u>

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

#### GREEN-TAYLOR WATER DISTRICT

FINANCIAL SUMMARY (DECEMBER YEAR END)

FINANCIAL SUMMARY (DECEMBER YEAR END	)							
	Audited 2015	Audited 2016	Audited 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Balance Sheet	2013	2010	2017	2010	2013	2020	2021	2022
Assets								
Current Assets	1,062,218	1,343,863	1,224,494	1,269,681	1,358,872	1,383,521	1,402,459	1,455,687
Other Assets	11,858,101	11,782,360	12,223,681	14,033,044	13,955,776	13,714,344	13,450,065	13,110,034
Total	12,920,319	13,126,223	13,448,175	15,302,725	15,314,648	15,097,865	14,852,524	14,565,721
Liabilities & Equity								
Current Liabilities	227,206	252,075	242,302	244,195	246,540	248,993	251,411	239,705
Long Term Liabilities	4,664,472	4,631,262	4,585,113	6,255,737	6,025,002	5,822,414	5,609,008	5,620,508
Total Liabilities	4,891,678	4,883,337	4,827,415	6,499,932	6,271,542	6,071,407	5,860,419	5,860,213
Net Assets	8,028,641	8,242,886	8,620,760	8,802,793	9,043,106	9,026,458	8,992,105	8,705,508
Cash Flow								
Revenues	2,313,573	2,349,976	2,389,718	2,475,056	2,599,009	2,599,009	2,599,009	2,599,009
Operating Expenses	1,973,527	1,928,351	1,892,138	1,929,981	1,968,581	2,014,253	2,054,412	2,095,374
Other Income	30,008	36,188	32,016	32,016	32,016	32,016	32,016	32,016
Cash Flow Before Debt Service	370,054	457,813	529,596	577,091	662,444	616,772	576,613	535,651
Debt Service								
Existing Debt Service	348,498	352,823	365,685	371,351	333,990	457,722	446,121	446,621
Proposed KIA Loan	0	0	0	0	0	35,802	35,802	35,802
Total Debt Service	348,498	352,823	365,685	371,351	333,990	493,524	481,923	482,423
Cash Flow After Debt Service	21,556	104,990	163,911	205,740	328,454	123,248	94,690	53,228
Ratios								
Current Ratio	4.7	5.3	5.1	5.2	5.5	5.6	5.6	6.1
Debt to Equity	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
Days Sales in Accounts Receivable	57.7	70.5	69.1	69.1	69.1	69.1	69.1	69.1
Months Operating Expenses in Unrestricted Cash	3.6	4.9	4.1	4.3	4.6	4.7	4.7	4.9
Debt Coverage Ratio	1.1	1.3	1.4	1.6	2.0	1.2	1.2	1.1

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND

Reviewer Date KIA Loan Number WRIS Number Meili Sun November 13, 2018 F19-020 WX21097026

BORROWER

CITY OF CYNTHIANA HARRISON COUNTY

#### **BRIEF DESCRIPTION**

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.

\$954,565	PROJECT BUDGET Legal Expenses Planning	RD Fee %	Actual %	5,000
\$954,565	• .			
	Eng - Design / Const Eng - Insp Eng - Other Construction Contingency	9.2% 6.0%		7,500 69,260 46,205 11,500 741,000 74,100
\$954,565	TOTAL			\$954,565
ate erm	0.50% 20 Years	•		\$52,600 irst draw
ngineer ond Counsel	HDR, Inc Dinsmore & Shohl, LL	P		
id Opening onstruction Start onstruction Stop	Mar-19 Apr-19 Sep-19			
xisting roposed	\$3,116 \$3,240			
	See Attached			
urrent dditional	<u>Users</u> 2,475 0			
nis project is consiste	ent with regional planni	ng recommendations	S.	
Cash Flow Before Debt Service	Debt Service	Cash Flow After De	ebt Service	Coverage Ratio
499,977 599,956 772,322 623,919 642,920	384,763 361,242 494,028 518,679 550,246		115,214 238,714 278,294 105,240 92,674	1.3 1.7 1.6 1.2 1.2
763,262 712,635	577,025 603,914		186,237 108,721	1.3 1.2
	ate primagineer ond Counsel d Opening onstruction Start onstruction Stop d oposed urrent ditional dis project is consister Cash Flow Before Debt Service 499,977 599,956 772,322 623,919	Eng - Other Construction Contingency\$954,565TOTALate0.50% 9777ate0.50% 20 Yearsate0.50% 9777ate0.50% 20 Yearsate0.50% 977ate0.50% 20 Yearsate0.50% 977ate0.50% 9776ate0 <td>Eng - Other Construction Contingency     \$954,565   TOTAL     ate   0.50%   Est. Annual Payment     ate   0.50%   Est. Annual Payment     agineer   HDR, Inc   Dinsmore &amp; Shohl, LLP     ad Opening   Mar-19   Dinsmore &amp; Shohl, LLP     ad Opening   Mar-19   Dinstruction Start     Apr-19   Sep-19   See Attached     See Attached   See Attached   Avg. Bill     urrent   2,475   \$16.05     additional   0   \$16.05     additional</td> <td>Eng - Other     Construction     Contingency     \$954,565     TOTAL     ate   0.50%     Est. Annual Payment     ate   0.50%     errm   20 Years     1st Payment   6 Mo. after fit     ate   0.50%     errm   20 Years     nd Counsel   Dinsmore &amp; Shohl, LLP     d Opening   Mar-19     onstruction Start   Apr-19     opsed   \$3,240     See Attached     urrent   2,475   \$16.05 (for 4,000 ga     atditional   0   \$16.05 (for 4,000 ga     is project is consistent with regional planning recommendations.   Cash Flow After Debt Service     Debt Service   Debt Service   Cash Flow After Debt Service     499,977   384,763   115,214     599,956   361,242   238,714     772,322</td>	Eng - Other Construction Contingency     \$954,565   TOTAL     ate   0.50%   Est. Annual Payment     ate   0.50%   Est. Annual Payment     agineer   HDR, Inc   Dinsmore & Shohl, LLP     ad Opening   Mar-19   Dinsmore & Shohl, LLP     ad Opening   Mar-19   Dinstruction Start     Apr-19   Sep-19   See Attached     See Attached   See Attached   Avg. Bill     urrent   2,475   \$16.05     additional   0   \$16.05     additional	Eng - Other     Construction     Contingency     \$954,565     TOTAL     ate   0.50%     Est. Annual Payment     ate   0.50%     errm   20 Years     1st Payment   6 Mo. after fit     ate   0.50%     errm   20 Years     nd Counsel   Dinsmore & Shohl, LLP     d Opening   Mar-19     onstruction Start   Apr-19     opsed   \$3,240     See Attached     urrent   2,475   \$16.05 (for 4,000 ga     atditional   0   \$16.05 (for 4,000 ga     is project is consistent with regional planning recommendations.   Cash Flow After Debt Service     Debt Service   Debt Service   Cash Flow After Debt Service     499,977   384,763   115,214     599,956   361,242   238,714     772,322

Reviewer: Meili Sun Date: November 13, 2018 Loan Number: F19-020

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

### I. PROJECT DESCRIPTION

The City of Cynthiana is requesting a Fund F loan in the amount of \$954.565 for the New Booster Pump Station project. 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 revenues.

#### II. PROJECT BUDGET

	To	tal
Legal Expenses	\$	5,000
Planning		7,500
Engineering Fees - Design/Const		69,260
Engineering Fees - Inspection		46,205
Engineering Fees - Other		11,500
Construction		741,000
Contingency		74,100
Total	\$	954,565

#### III. PROJECT FUNDING

	 Amount	%
KIA Fund F Loan	\$ 954,565	100%
	\$ 954,565	100%

## IV. KIA DEBT SERVICE

Construction Loan	\$	954,565
Principal Forgiveness		0
Amortized Loan Amount		954,565
Interest Rate		0.50%
Loan Term (Years)		20
Estimated Annual Debt Service	\$	50,214
Administrative Fee (0.25%) 2,38		2,386
Total Estimated Annual Debt Service	\$	52,600

## V. PROJECT SCHEDULE

Bid Opening	March, 2019
Construction Start	April, 2019
Construction Stop	September, 2019

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## A) Customers

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

## B) Rates

Water	Current	Prior
Date of Last Rate Increase	01/01/16	01/01/15
Minimum 2,000 Gallons	\$ 9.05	\$ 9.05
2,001 to 10,000 Gallons	3.50	3.50
Over 10,000 Gallons	2.85	2.63
Cost for 4,000 gallons	\$ 16.05	\$ 16.05
Increase %	0.0%	
Affordability Index (Rate/MHI)	0.6%	0.6%
Sewer	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	\$ 30.14	\$ 26.80
Increase %	12.5%	
Affordability Index (Rate/MHI)	1.2%	1.1%

Wholesale Water	Current	Prior
Date of Last Rate Increase	01/01/16	01/01/15
Per 1,000 Gallons	\$ 2.85	\$ 2.63
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.

	F	Population			Cour Unemplo	
Year	City	% Change	County	% 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%		
	1980 1990 2000 2010 Current	Year     City       1980     5,881       1990     6,497       2000     6,258       2010     6,402       Current     6,376	1980   5,881     1990   6,497   10.5%     2000   6,258   -3.7%     2010   6,402   2.3%     Current   6,376   -0.4%	YearCity% ChangeCounty19805,88115,16619906,49710.5%16,24820006,258-3.7%17,98320106,4022.3%18,846Current6,376-0.4%18,629	YearCity% ChangeCounty% Change19805,88115,16619906,49710.5%16,2487.1%20006,258-3.7%17,98310.7%20106,4022.3%18,8464.8%Current6,376-0.4%18,629-1.2%	Population     Unemplo       Year     City     % Change     County     % Change     Date       1980     5,881     15,166     June 2005       1990     6,497     10.5%     16,248     7.1%     June 2010       2000     6,258     -3.7%     17,983     10.7%     June 2015       2010     6,402     2.3%     18,846     4.8%     June 2018       Current     6,376     -0.4%     18,629     -1.2%     The second se

### VIII. 2019 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, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015, 2016, and 2017 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 2.7% from \$2.85 million in 2015 to \$2.93 million in 2017 due to previously approved sewer and wholesale water rate increases. Other Operating Revenues including \$147,528 from KYTC garage reimbursement and \$23,889 from miscellaneous revenues were reclassified to Other Non-Operating Income. Operating expenses remained flat during the same period. The debt coverage ratio was 1.3, 1.7, and 1.6 in 2015 through 2017 respectively.

The balance sheet reflects a current ratio of 0.6, a debt to equity ratio of 0.7, 46.3 days sales in accounts receivable, and 0.1 month operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will grow approximately \$170,000 or 7.0% by 2020 after the City implements necessary rate increases to meet the special condition assigned to this loan.
- 2) Expenses will increase 2% annually for general inflation.
- 3) Debt service coverage ratio is 1.2 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% (\$48,000 total) of the final amount borrowed to be funded annually (\$2,400 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	C	Outstanding	Maturity
2000 Series Revenue Bonds	\$	213,600	2040
2005 Series Revenue Bonds		785,000	2033
KIA Loan A05-06		3,123,422	2027
2015 Series Revenue Bonds		3,590,000	2055
KIA Loan F16-041 i.a.o. \$565,903		0	TBD
	\$	7,712,022	

## XI. <u>CONTACTS</u>

Legal Applicant	
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

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

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

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

## XII. <u>RECOMMENDATIONS</u>

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

1. The City shall raise additional revenues in the amount of \$170,000 or 7% by July 1, 2019 with an ordinance passed for the necessary rate increases prior to January 31, 2019.

#### CITY OF CYNTHIANA

FINANCIAL SUMMARY (JUNE YEAR END)

FINANCIAL SUMMARY (JUNE YEAR END)								
	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Balance Sheet								
Assets								
Current Assets	824,875	922,834	385,198	415,047	442,282	501,029	522,773	534,476
Other Assets	19,318,306	23,017,204	22,720,210	21,588,546	21,516,787	21,697,240	20,862,315	19,987,224
Total	20,143,181	23,940,038	23,105,408	22,003,593	21,959,069	22,198,269	21,385,088	20,521,700
Liabilities & Equity								
Current Liabilities	680,007	924,587	625,414	632,279	640,051	648,151	655,580	665,962
Long Term Liabilities	6,563,368	9,060,800	8,848,894	8,414,591	8,561,905	9,067,081	8,612,563	8,150,063
Total Liabilities	7,243,375	9,985,387	9,474,308	9,046,870	9,201,956	9,715,232	9,268,143	8,816,025
Net Assets	12,899,806	13,954,651	13,631,100	12,956,723	12,757,113	12,483,037	12,116,945	11,705,675
Cash Flow								
Revenues	2,849,025	2,878,165	2,927,905	2,997,495	3,065,890	3,235,890	3,235,890	3,235,890
Operating Expenses	2,351,423	2,279,067	2,328,821	2,375,397	2,424,791	2,474,449	2,525,076	2,575,492
Other Income	2,375	858	173,238	1,821	1,821	1,821	1,821	1,821
Cash Flow Before Debt Service	499,977	599,956	772,322	623,919	642,920	763,262	712,635	662,219
Debt Service								
Existing Debt Service	384,763	361,242	494,028	518,679	550,246	550,725	551,314	551,106
Proposed KIA Loan	0	0	0	0	0	26,300	52,600	52,600
Total Debt Service	384,763	361,242	494,028	518,679	550,246	577,025	603,914	603,706
Cash Flow After Debt Service	115,214	238,714	278,294	105,240	92,674	186,237	108,721	58,513
Ratios								
Current Ratio	1.2	1.0	0.6	0.7	0.7	0.8	0.8	0.8
Debt to Equity	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Days Sales in Accounts Receivable	50.6	52.7	46.3	46.3	46.3	46.3	46.3	46.3
Months Operating Expenses in Unrestricted Cash	1.4	0.6	0.1	0.2	0.3	0.4	0.5	0.6
Debt Coverage Ratio	1.3	1.7	1.6	1.2	1.2	1.3	1.2	1.1

#### EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND F, FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND

Reviewer Date KIA Loan Number WRIS Number Meili Sun January 8, 2019 F19-059 WX21027053

BORROWER

CITY OF HARDINSBURG BRECKINRIDGE COUNTY

#### BRIEF DESCRIPTION

The proposed project will replace an existing water booster pump station at Harned in the Hardinsburg Water System and will extend approximately 13,000 LF of 4" waterlines on Morton Brown Road and Brown's Hideaway Road to add about 60 unserved households to the system. The booster station is near the end of its useful life and often operates at maximum capacity during peak demand. The existing pumps will be replaced with newer and more efficient models.

PROJECT FINANCING		PROJECT BUDGET	RD Fee %	Actual %	
Fund F Loan	\$760,280	Administrative Expens Eng - Design / Const Eng - Insp Construction Contingency	ses 9.6% 6.6%		\$17,395 57,510 40,400 586,375 58,600
TOTAL	\$760,280	TOTAL		-	\$760,280
REPAYMENT	Rate Term	2.00% 20 Years	Est. Annual Payme 1st Payment	ent 6 Mo. after f	\$48,210 irst draw
PROFESSIONAL SERVICES	Engineer Bond Counsel	Kentucky Engineering Dinsmore & Shohl, LL			
PROJECT SCHEDULE	Bid Opening Construction Start Construction Stop	Mar-19 May-19 Dec-19			
DEBT PER CUSTOMER	Existing Proposed	\$3,458 \$2,944			
OTHER DEBT		See Attached			
RESIDENTIAL RATES	Current Additional	<u>Users</u> 5,903 60	<u>Avg. Bill</u> \$35.24 \$35.24	(for 4,000 ga (for 4,000 ga	
REGIONAL COORDINATION	This project is consiste	ent with regional plannir	ng recommendation	S.	
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After D		Coverage Ratio
Audited 2015 Audited 2016 Audited 2017 Projected 2018 Projected 2019 Breiseted 2020	1,503,880 1,529,365 1,579,204 1,605,754 1,664,359	1,388,494 1,493,067 1,679,623 1,440,106 1,439,825		115,386 36,298 (100,419) 165,648 224,534	1.1 1.0 0.9 1.1 1.2
Projected 2020 Projected 2021 Projected 2022	1,717,984 1,744,902 1,774,296	1,435,633 1,490,677 1,490,261		282,351 254,225 284,035	1.2 1.2 1.2

Reviewer: Meili Sun Date: January 8, 2019 Loan Number: F19-059

### KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE REVOLVING FUND (FUND F) CITY OF HARDINSBURG, BRECKINRIDGE COUNTY PROJECT REVIEW WX21027053

### I. PROJECT DESCRIPTION

The City of Hardinsburg is requesting a Fund F loan in the amount of \$760,280 for the Harned Pump Station Replacement project. The proposed project will replace an existing water booster pump station at Harned in the Hardinsburg Water System and will extend approximately 13,000 FL of 4" waterlines on Morton Brown Road and Brown's Hideaway Road to add about 60 unserved households to the System. The existing pumps will be replaced with newer and more efficient models.

The City of Hardinsburg supplies water to municipal customers within the City limits as well as Breckinridge County residents and wholesale finished water to the Cities of Cloverport and Irvington.

## II. PROJECT BUDGET

III.

	Т	otal	
Administrative Expenses	\$	17,395	
Engineering Fees – Design		46,000	
Engineering Fees – Construction		11,510	
Engineering Fees – Inspection		40,400	
Construction		586,375	
Contingency		58,600	
Total	\$	760,280	
PROJECT FUNDING			
		Amount	%
KIA Fund F Loan	\$	760,280	100%

## IV. KIA DEBT SERVICE

Construction Loan	\$ 760,280
Interest Rate	2.00%
Loan Term (Years)	20
Estimated Annual Debt Service	\$ 46,310
Administrative Fee (0.25%)	 1,901
Total Estimated Annual Debt Service	\$ 48,211

### V. PROJECT SCHEDULE

Bid Opening	March 2019
Construction Start	May 2019
Construction Stop	December 2019

### VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

#### A) Customers

Customers	Current	Proposed	Total
Residential	5,491	60	5,551
Commercial	398		398
Institutional	7		7
Industrial	7		7
Total	5,903	60	5,963

### **B)** Rates

	Current	Prior	Prior
Date of Last Rate Increase	07/01/18	07/01/17	07/01/16
Minimum 2,000 Gallons	\$17.04	\$16.56	\$16.22
Additional 1,000 Gallons	9.10	8.84	8.66
Cost for 4,000 gallons	\$35.24	\$34.24	\$33.54
Increase %	2.9%	2.1%	
Affordability Index (Rate/MHI)	0.95%	0.93%	0.91%

The City adopted a CPI clause in the 2014 rate ordinance to automatically adjust water rates annually based on the Consumer Price Index.

### VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2012-2016, the Utility's service area population was 12,469 with a Median Household Income (MHI) of \$44,301. The median household income for the Commonwealth is \$44,811. The project will qualify for a 2.00% interest rate as its Median Household Income is below 100% but above 80% of the State average.

	F	Population			Coun Unemploy	•
Year	City	% Change	County	% Change	Date	Rate
1980	2,211		16,861		June 2005	6.6%
1990	1,906	-13.8%	16,312	-3.3%	June 2010	12.4%
2000	2,345	23.0%	18,648	14.3%	June 2015	5.8%
2010	2,343	-0.1%	20,059	7.6%	June 2018	5.4%
Current	2,212	-5.6%	20,000	-0.3%		
Cumulative %		0.0%		18.6%		

## 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, 2015 through June 30, 2017. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2015, 2016, and 2017 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Water revenues increased 3.7% from \$3.14 million in 2015 to \$3.25 million in 2017 due to annual CPI increases while operating expenses increased 3.4% from \$1.70 million to \$1.76 million during the same period. The debt coverage ratio was 1.1, 1.0 in 2015 and 2016. In 2017, the ratio dropped to 0.9 because the City paid off an existing KIA loan (C89-023).

The balance sheet reflects a current ratio of 0.7, a debt to equity ratio of 1.5, 41.6 days sales in accounts receivable, and 3.8 months operating expenses in unrestricted cash.

### PROJECTIONS

Projections are based on the following assumptions:

- 1) Water revenues will grow 2% to 3% each year based on the Consumer Price Index.
- 2) The line extension will add 60 new customers to the system when the project is completed in 2020.
- 3) Expenses will increase 2% annually for general inflation.

4) The debt coverage ratio is 1.2 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% (\$38,000 total) of the final amount borrowed to be funded annually (\$1,900 yearly) each December 1 for 20 years and maintained for the life of the loan.

## X. DEBT OBLIGATIONS

	(	Dutstanding	Maturity
2015 Refunding*	\$	2,020,000	2033
2006A RD Loan		4,147,000	2045
2006B RD Loan		2,303,000	2045
2009 RD Loan		1,216,700	2048
2011 RD Loan		1,846,500	2051
KIA Loan B98-03*		14,581	2019
KIA Loan F00-03		155,084	2022
KIA Loan F05-03		2,419,817	2027
KIA Loan F07-10		1,344,396	2030
KIA Loan F11-01		2,125,523	2034
KIA Loan F09-03		2,685,404	2033
KIA Loan F14-014		552,997	2035
Total	\$	20,831,722	

\* Includes portion of debt that is allocated to Wastewater Treatment Fund.

## XI. CONTACTS

Legal Applicant	
Name	City of Hardinsburg
Address	220 South Main Street, PO BOX 149
	Hardinsburg, KY 40143
County	Breckinridge
Authorized Official	Wayne Macy, Mayor
Phone	(270) 756-2213
Email	rwmacy@yahoo.com

Project Contact - Applicant	
Name	David Wakefield
Organization	City of Hardinsburg
Address	220 South Main Street, PO Box 149
	Hardinsburg, KY 40143
Phone	(270) 756-9091
Email	David.wakefield@veoliawaterna.com

Project Administrator	
Name	Holly Nicholas
Organization	Kentucky Engineering Group, PLLC
Address	PO Box 1034
	Versailles, KY 40383
Phone	(859) 333-9742
Email	hnicholas@kyengr.com

Consulting Engineer					
Name	James C Thompson				
Firm	Kentucky Engineering Group, PLLC				
Address	161 North Locust Street				
	Versailles, KY 40383				
Phone	(859) 251-4127				
Email	jthompson@kyengr.com				

## XII. <u>RECOMMENDATIONS</u>

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

#### CITY OF HARDINSBURG

FINANCIAL SUMMARY (JUNE YEAR END)

FINANCIAL SUMMARY (JUNE YEAR END)								
	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected
Delawar Olawa	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Balance Sheet								
Assets								
Current Assets	703,551	817,712	934,446	974,575	1,030,281	1,097,051	1,155,396	1,219,903
Other Assets	36,048,008	35,836,705	34,608,175	33,532,564	32,569,569	31,633,821	31,437,751	30,505,250
Total	36,751,559	36,654,417	35,542,621	34,507,139	33,599,850	32,730,872	32,593,148	31,725,153
Liabilities & Equity								
Current Liabilities	1,206,288	1,712,758	1,426,716	1,450,970	1,468,154	1,493,844	1,515,856	1,476,146
Long Term Liabilities	21,988,832	21,000,502	20,145,873	19,158,748	18,186,934	17,190,331	16,932,996	15,956,091
Total Liabilities	23,195,120	22,713,260	21,572,589	20,609,718	19,655,089	18,684,175	18,448,852	17,432,237
Net Assets	13,556,439	13,941,157	13,970,032	13,897,421	13,944,762	14,046,697	14,144,296	14,292,916
Cash Flow								
Revenues	3,135,240	3,155,381	3,251,530	3,313,342	3,407,914	3,498,226	3,564,464	3,632,027
Operating Expenses Other Income	1,704,756 73,396	1,702,786	1,763,102	1,798,364	1,834,331 90,776	1,871,018	1,910,338	1,948,507 90,776
· · · · · · · ·	,	76,770	90,776	90,776		90,776	90,776	
Cash Flow Before Debt Service	1,503,880	1,529,365	1,579,204	1,605,754	1,664,359	1,717,984	1,744,902	1,774,296
Debt Service								
Existing Debt Service	1,388,494	1,493,067	1,679,623	1,440,106	1,439,825	1,435,633	1,442,467	1,442,051
Proposed KIA Loan	0	0	0	0	0	0	48,210	48,210
Total Debt Service	1,388,494	1,493,067	1,679,623	1,440,106	1,439,825	1,435,633	1,490,677	1,490,261
Cash Flow After Debt Service	115,386	36,298	(100,419)	165,648	224,534	282,351	254,225	284,035
Ratios								
Current Ratio	0.6	0.5	0.7	0.7	0.7	0.7	0.8	0.8
Debt to Equity	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2
Days Sales in Accounts Receivable	32.1	30.7	41.6	41.6	41.6	41.6	41.6	41.6
Months Operating Expenses in Unrestricted Cash	2.9	3.9	3.8	4.0	4.2	4.5	4.7	4.9
Debt Coverage Ratio	1.1	1.0	0.9	1.1	1.2	1.2	1.2	1.2