## COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:
APPLICATION OF NORTHERN KENTUCKY )
WATER DISTRICT FOR APPROVAL OF ) CASE NO. 2018-00316
THE ISSUANCE OF A CERTIFICATE OF CONVENIENCE AND NECESSITY AND APPROVAL OF FINANCING FOR WATER MAIN REPLACEMENT

# APPLICATION FOR APPROVAL OF CONSTRUCTION AND FINANCING AND MOTION FOR DEVIATION 

Northern Kentucky Water District (NKWD), by counsel, petitions for an order approving the construction of a water main replacement and improvement as described below pursuant to KRS 278.020. Approval of the financing pursuant to KRS 278.300 is also requested.

## MOTION

NKWD requests a deviation pursuant to 807 KAR 5:001(22) from the requirement that the financial exhibit submitted in compliance with 807 KAR 5:001(12(1)(a) cover the period no less than 90 days from the filing of the application. The financial statements provided are for the period ended June 30, 2018. There have been no material changes to the financial condition of NKWD. The current statements have not been prepared. Updated information will have no impact on the review of the proposal. For this reason, NKWD seeks a deviation for acceptance of the financial information provided.

## I. General Information:

In support of the application, the following information is provided:

1. NKWD's office address is 2835 Crescent Springs Rd., Erlanger, KY 41018-0640. Its principal officers are listed in its current Annual Report, which is filed with the Commission as are its prior years Reports and is incorporated by reference.

Its contact officer is:

Lindsey Rechtin, Vice President of Finance and Support Services 2835 Crescent Springs Rd.
Erlanger, KY 41018-0640
(859) 426-2758 Phone
(859) 442-0665 fax

Irechtin@nkywater.org
2. NKWD is a non-profit water district organized under Chapter 74 and has no separate articles of incorporation. 807 KAR 5:001 (14)(2):
3. A description of NKWD's water system and its property stated at original cost by accounts is contained in its Annual Report, which is incorporated by reference. 807 KAR 5:001(18)(b). No material changes have occurred since the end of the latest 12 month period. 807 KAR 5:001(12).
4. NKWD serves retail customers in Kenton, Boone and Campbell Counties and sells water at wholesale to non-affiliated water distribution systems in Kenton, Boone, Pendleton and Campbell Counties.

## II. Proposed Construction:

5. NKWD proposes to construct new facilities as described in Exhibit A. 807 KAR 5:001 (15(2)(a)(c)(d). A petition for confidentiality for the Plans and Specifications has been submitted with the Application. An existing 36 inch concrete water main will be replaced with 2,600 feet of 24 " ductile iron main in Kenton County. No additional customers will be added as a result of this project.
6. A summary of the project costs is provided below:

- Engineering

○

○
Contractor's Bid

Misc. \& Contingencies
Total Project Cost
\$ 85,430.74
\$ 980,040.00
\$ 134,529.26
\$ 1,200,000.00

NKWD was awarded a $\$ 4,000,000$ loan by the Kentucky Infrastructure Authority (KIA). The KIA financing information and approval are included in Exhibit D. This is one of two projects funded by this $\$ 4,000,000$ loan. NKWD is seeking approval of the total $\$ 4,000,000$ in this application, but a certificate of convenience and necessity only for the 36 " main replacement project at this time. The second project funded by this loan will be submitted for approval when it is bid, which is expected to be early next year. It involves upgrades to the existing SCADA system to improve safety and security. 807 KAR 5:001(15(2)(e).
7. The construction is in the public interest and is required to allow NKWD to continue to provide adequate service to its customers and to reduce a significant source of on-going leaks from the existing main. The District maintains a cross-country, 36 -inch prestressed concrete cylinder pressure pipe (PCCP) that runs between Rogers Road in the City of Edgewood and Centre View Boulevard in the City of Crestview Hills, Kentucky. This water main serves as a transmission main from the Dudley Pump Station to the 1080 pressure zone, which feeds a good portion of the Cities of Edgewood, Erlanger, Elsmere, Florence, and Independence and abutting areas. This water main transverses steep terrain with a creek crossing at the bottom of the hill, which makes it very challenging to access to make repairs. A previous owner also placed fill dirt on top of the water main, which further complicates repairs.

NKWD has experienced numerous leaks on this section of water main from joint leaks to circumferential cracks and longitudinal breaks in the pipe wall. This section of concrete water main installed in the early 1980s is currently shut down due to a leak in an extremely deep area. The main can be taken out of service, since NKWD installed a redundant 36 -inch water main along Horsebranch Road in 2011 to provide a back-up to this critical transmission water main. The project, its cost, need and other details are contained in the Project Description and Exhibit A.
8. NKWD has received approval from the DOW for the Plans and Specifications
and funding for this improvement. Easements and rights of way have been acquired, see Exhibit B.
9. This service will not compete with any other utility in the area.
10. The proposed construction project identified in Exhibit $A$ is scheduled to begin construction in January 2019 or upon PSC approval and the expected in service date is in May 2019. Board approval of the final bids for the project is included in Exhibit C. The bids were opened September 6, 2018 and are subject to acceptance for 90 days. Bid tabs are included in Exhibit C. Bids will expire December 4, 2018.
11. No new franchises are required. A copy of the DOW letter approving the Plans and Specifications for the proposed improvements is attached as Exhibit B. 807 KAR 5:0015(2)(b).
12. Construction descriptions are in Exhibit A and Bid Documents. Facts relied on to justify the public need are included in the project descriptions in Exhibit A.
13. Maps of the area showing location of the proposed facilities are in Exhibit $A$.
14. The construction costs will be funded by as described above.
15. Estimated operating costs for operation and maintenance, depreciation and debt service after construction are shown in Exhibit D. 807 KAR 5:001(15)(2)(f).
16. A description of the facilities and operation of the system are in Exhibit A.
17. A full description of the route, location of the project, description of construction and related information is in Exhibit A.
18. The total estimated cost of construction at completion is referenced in Exhibits $A, B$ and $D$.
19. CWIP at end of test year is listed in the Annual Report incorporated by reference.
20. Plant retirements are listed in Exhibit B and the Annual Report. No salvage values are included as booked.
21. The use of the funds and need for the facilities is justified based on the
engineering report included as Exhibit A
22. No rate adjustment is being proposed.
23. Depreciation cost, cost of operation after installation and debt service are in Exhibit D.

The financing is based on the need to finance two construction projects. The construction projects, identified in Exhibit A, are scheduled to be constructed in 2018-19. 807 KAR 5:001 (15(2)(a)(c)(d).
8. The following information is provided pursuant to 807 KAR 5:001(12):
a. Financial operations for twelve-month period not less than 90 days prior See Exhibit E.
b. No stock is authorized; No stock is issued.
c. There are no stock preferences.
d. Mortgages are listed in Exhibit E.
e. Bonds are listed in Exhibit E.
f. Notes are listed in Exhibit E.
g. Other indebtedness is listed in Exhibit E.
h. No dividends have been paid.
i. Current balance sheet and income statement are attached as Exhibits F.
20. The following information is provided as required by 807 KAR 5:001 (12):
a. A general description of the property is contained in the Annual Report.

The 2017 Report and audited financial information is the latest available from the District.
b. No stock is to be issued; No bonds are to be issued in this case;
c. There is no refunding or refinancing;
d. The proceeds of the KIA financing are to construct the property described in Exhibits A and D.
e. The par value, expenses, use of proceeds, interest rates and other information is not applicable because no bonds are being issued at this time.
21. The following exhibits are provided pursuant to 807 KAR 5:001 (18)(2):
a. There are no trust deeds. All notes, indebtedness and mortgages are included in Exhibit E.
b. No property is to be acquired. 807 KAR 5:001(18)(2)(c).
22. Plant additions will be classified according to USoA "Water Utility Plant Accounts": 331, 334, 335, See Exhibit D.
23. The Kentucky Debt Officer has been notified of the KIA loan. See Exhibit B. 807 KAR 5:001(18)(g).

For these reasons, the District requests issuance of an order granting authority to construct and finance the facilities and for any other authorization that may be necessary.

SUBMITTED BY:


Alex Mattingly
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Erlanger, KY 41018
Phone - 859-578-5455 (Direct)
Fax-859-426-2770
amattingly@nkywater.org
Attorneys for Northern
Kentucky Water District

\begin{tabular}{|c|c|c|}
\hline Section 14(2) \& If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state whether it is authorized to transact business in Kentucky. If a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state whether it is authorized to transact business in Kentucky. \& n/a

$n / a$ <br>
\hline Section 14(4) \& If the applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, if any, shall be annexed to the application, or a written statement attesting that its partnership agreement and all amendments have been filed with the commission in a prior proceeding and referencing the case number of the prior proceeding. \& n/a <br>

\hline \multirow[t]{6}{*}{Section 15(2)} \& | (a) The facts relied upon to show that the proposed construction or extension is or will be required by public convenience or necessity. |
| :--- |
| (b) Copies of franchises or permits, if any, from the proper public authority for the proposed construction or extension, if not previously filed with the commission. | \& | Application |
| :---: |
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| Exhibit B | <br>

\hline \& (c) A full description of the proposed location, route, or routes of the proposed construction or extension, including a description of the manner in which same will be constructed, and the names of all public utilities, corporations, or persons with whom the proposed construction or extension is likely to compete. \& Ex A <br>
\hline \& (d)(1) Three (3) copies (one (1) in portable document format on electronic storage medium and two (2) in paper medium) of maps to suitable scale showing the location or route of the proposed construction or extension, as well as the location to scale of like facilities owned by others located anywhere within the map area with adequate identification as to the ownership of the other facilities. \& Ex A <br>
\hline \& (d)(2) Plans and specifications and drawings of the proposed plant, equipment, and facilities. \& Ex A <br>
\hline \& (e) The manner in detail in which the applicant proposes to finance the proposed construction or extension. \& Ex D <br>
\hline \& (f) An estimated annual cost of operation after the proposed facilities are placed into service. \& Ex D <br>

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$$ \& Engineering plans, specifications, drawings, plats and reports for the proposed construction or extension prepared by a registered engineer, must be signed, sealed, and dated by an engineer registered in Kentucky. \& Ex A <br>

\hline Section 14(2) \& 4(2) If applicant is a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is \& <br>
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\end{tabular}

incorporated, and, if it is not a Kentucky corporation, state whether it is authorized to transact business in Kentucky.

Section $14(3) \quad$ If applicant is a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state whether it is authorized to transact business in Kentucky.

Section 14(4) If applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, or a written statement that its partnership agreement and all amendments have been filed with the Commission in a prior proceeding and a reference to the case number of that proceeding.

KRS 278.300(2) Application made under oath, and signed on behalf of the utility by its president, or by a vice president, auditor, comptroller or other executive officer having knowledge of the matters set forth and duly designated by the utility.

807 KAR 5:001:
Section 18(1) (a) The information required by Section 14 of this administrative regulation
(b) Description of applicant's property and the field of its operation
(b) Statement of original cost of applicant's property and the cost to the applicant, if different.
(c) If stock issuance:
--Description of amount and kinds of stock to be issued.
--If preferred stock, a description of the preferences.
If Bonds or Notes or Other Indebtedness is proposed:
--Description of the amount(s).
--Full description of all terms.
--Interest rates(s).
--Whether the debt is to be secured and if so a description of how it is to be secured.
(d) Statement of how proceeds are to be used. Show amounts for each type of use (e.g., property, debt refunding, etc.).
(e) If proceeds will be used to acquire, construct, improve, or extend property, provide a detailed description and all contracts.
(f) If proceeds are to refund outstanding obligations, provide:
--Statement of the nature and description of obligation
--Par value

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| n/a |
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| n/a |
| Ex B |
| Ex A |
| n/a |
| Application |
| Application |
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--Amount for which actually sold
--Expenses and application of proceeds
--Date of obligations
--Total amount
--Time held
--Interest rate
--Payee
(g) If the applicant is a water district, a copy of the applicant's written notification to the state local debt officer regarding the proposed issuance.

Section 18(2) (a) Financial Exhibit (see below)
(b) Copies of all trust deeds or mortgages. If previously filed, state case number.
(c) If Property to be acquired:
--Maps and plans of property.
--Detailed estimates by USOA account number.

Section 12(1) (b) For a utility that had less than $\$ 5,000,000$ in gross annual revenue in the immediate past calendar year, comply with paragraph (a) of this subsection or cover operations for the twelve (12) month period contained in the utility's most recent annual report on file with the commission, and contain a statement that: 1. Material changes have not occurred since the end of that twelve (12) month period or 2. Identifies all material changes that have occurred since the end of that twelve (12) month period.
(a) For a utility that had $\$ 5,000,000$ or more in gross annual revenue in the immediate past calendar year, information required by Section 12(2) shall cover operations for a twelve (12) month period, the period ending not more than ninety $(90)$ days prior to the date the application is filed

Section 12(2) (a) Amount and types of stock authorized.
(b) Amount and types of stock issued and outstanding.
(c) Detail of preference terms of preferred stock.
(d) Brief description of mortgage:
--Date of Execution
--Name of Mortgagor
--Name of Mortgagee or Trustee
--Amount of Indebtedness Secured
--Sinking Fund Provisions
(e) Bonds
--Amount Authorized
--Amount Issued
--Name of Utility Who Issued
--Description of Each Class Issued
--Date of Issue
--Date of Maturity
--How Secured
--Interest Paid in Last Fiscal Year
(f) Notes Outstanding:
--Date of Issue
--Amount
--Maturity Date
--Rate of Interest
--In Whose Favor
--Interest Paid in Last Fiscal Year
(g) Other Indebtedness:
--Description of Each Class
--How Secured
--Description of Any Assumption of Indebtedness by Outside Party (i.e., any transfer)
--Interest Paid in Last Fiscal Year
(h) Rate and amount of dividends paid during the five (5) previous fiscal years and the amount of capital stock on which dividends were paid each year.
(i) Detailed income statement and balance sheet.

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# NORTHERN KENTUCKY WATER DISTRICT 

Case No. 2018-00316
Project

## 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

184-0776

# Proposed 24-inch Cross-Country Water Main Replacement Project Edgewood/ Crestview Hills, Kenton County, Kentucky 184-0776 

## Project Description

The District maintains a cross-country, 36 -inch pre-stressed concrete cylinder pressure pipe (PCCP) that runs between Rogers Road in Edgewood and Centre View Boulevard in Crestview Hills, Kentucky. This water main serves as a transmission main from the Dudley Pump Station to the 1080 pressure zone, which feeds a good portion of the Edgewood, Erlanger, Elsmere, Florence, and Independence areas. This water main transverses steep terrain with a creek crossing at the bottom of the hill, which makes it very challenging to access to make repairs. A previous owner also placed fill dirt on top of the water main, which further complicates repairs.

The District has experienced numerous leaks on this section of water main, from joint leaks to circumferential cracks and longitudinal breaks in the pipe wall. This section of concrete water main, installed in the early 1980s, is currently shut down due to a leak in an extremely deep area. The main can be taken out of service, since the District installed a redundant 36 -inch water main along Horsebranch Road in 2011 to provide a back-up to this critical transmission water main.

This project involves the construction of approximately 2,650 linear feet of 24 " ductile iron cross-country water main together with the appurtenances and related work from Rogers Road to Centre View Boulevard in the Cities of Edgewood and Crestview Hills, Kenton County, Kentucky. This project will replace the existing 36 -inch concrete water main which has experienced numerous water main breaks.

Bids for this project were opened on September 6, 2018 and are subject to acceptance for 90 days. Therefore, the bids will expire on December 4, 2018.

# NORTHERN KENTUCKY WATER DISTRICT <br> 24" Cross-Country Water Main Replacement Project Edgewood/Crestview Hills, Kenton County, Kentucky <br> 184-0776 

## TABLE OF CONTENTS

## Project Description

## EXHIBIT

A
ENGINEERING REPORTS AND INFORMATION
(1) Project map
(2) Engineer's opinion of probable total construction cost;
(3) System Hydraulic Model
(4) Plans prepared by Viox \& Viox titled "24-Inch Cross-Country Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.
(5) Specifications prepared by Viox \& Viox titled ""24-Inch CrossCountry Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.

B
Certified statement from an authorized utility Official confirming:
(1) Affidavit
(2) Franchises
(3) Plan review and permit status
(4) Easements and Right-Of-Way status
(5) Construction dates and proposed date in service
(6) Plant retirements
(7) State Debt Officer notification

C BID INFORMATION
Bid tabulation, Engineer's recommendation of award, Board Meeting Minutes.

D
PROJECT FINANCE INFORMATION
Customers added and revenue effect, Debt issuance and source of debt, Additional costs and operating and maintenance, USoA plant account, Depreciation cost and debt service after construction.

E
SCHEDULE OF MORTGAGES, BONDS, NOTES, AND OTHER INDEBTEDNESS

F
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## NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

## ENGINEERING REPORTS AND INFORMATION

Project Map<br>Engineer’s Opinion of Probable Total Construction Cost<br>System Hydraulic Model

Plans prepared by Viox \& Viox, Inc., titled "24-Inch Cross-Country Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.

Specifications prepared by Viox \& Viox titled "24-Inch Cross-Country Water Main
Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003,
Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.
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NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

Project Map



24-inch Cross-Country Water Main Replacement Project
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NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

Engineer’s Opinion
Of Probable
Construction Cost

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

REPLACEMENT
Edgewood, Kenton County, KY 6/26/2018

| No. | DESCRIPTION | UNIT | EST. QTY | $\begin{aligned} & \text { UNIT } \\ & \text { COST } \end{aligned}$ | TOTAL COST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 6.02A 8" Pressure Class 250 Ductile Iron Pipe BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap (Detail 103, 103a, 104, 104a, 110) | LF | 10 | \$125.00 | \$1,250.00 |
| 3 | 6.02A 24" Pressure Class 250 Ductile Iron Pipe BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap \{DEEP \& UNDERCUTTING\} | LF | 2646 | \$500.00 | \$1,323,000.00 |
| 4 | 6.04 36"Steel Casing Pipe By Bore \& Jack \{0.532" Min. Wall Thickness KDOT Spec's\} | LF | 36 | \$900.00 | \$32,400.00 |
| 5 | 7.01 Connect To Ex. 36" Main | EA | 2 | \$10,000.00 | \$20,000.00 |
| 6 | 8.01 Install Fire Hydrant \{HIGH PRESSURE\} | EA | 2 | \$4,750.00 | \$9,500.00 |
| 7 | 9.01 8" Resilient Seated Gate Valve | EA | 1 | \$2,800.00 | \$2,800.00 |
| 8 | 9.01 24" Resilient Seated Gate Valves | EA | 2 | \$20,000.00 | \$40,000.00 |
| 9 | 11.04 8" Pipe Plug \& Block | EA | 1 | \$100.00 | \$100.00 |
| 10 | 11.05 Air Relief Valve-2" \{Materials Supplied By NKWD $\}$ | EA | 1 | \$2,200.00 | \$2,200.00 |
| 11 | 11.0624 "x24x"6" Anchoring Tees \& Blocks | EA | 2 | \$2,800.00 | \$5,600.00 |
| 12 | 11.06 24"x24x"8" Anchoring Tees \& Blocks | EA | 1 | \$3,500.00 | \$3,500.00 |
| 13 | 11.09 36"-24" Reducer | EA | 2 | \$7,000.00 | \$14,000.00 |
| 14 | 11.11 Test Tap | EA | 1 | \$1,000.00 | \$1,000.00 |
| 15 | 11.16 Corrosion Test Stations | EA | 4 | \$1,800.00 | \$7,200.00 |
| 16 | 11.17 Magnesium Anodes | EA | 31 | \$2,000.00 | \$62,000.00 |
| 17 | 12.12 Concrete Sidewalk Restoration | SY | 50 | \$100.00 | \$5,000.00 |
| 18 | 24" Water Main Disinfection and Dechlorination | EA | 1 | \$5,000.00 | \$5,000.00 |
| 19 | Ductile Iron to Concrete Adapters | EA | 2 | \$10,000.00 | \$20,000.00 |
| 20 | Remove and Dispose of Ex. $36^{\prime \prime}$ concrete Pipe | LF | 250 | \$300.00 | \$75,000.00 |
| 21 | Restrained Bends \& Blocks | EA | 17 | \$5,250.00 | \$89,250.00 |
| 22 | Clearing | LS | 1 | \$65,000.00 | \$65,000.00 |
| 23 | 12.14 Best Management Practice \{SWPPP\} | LS | 1 | \$75,000.00 | \$75,000.00 |
|  |  |  |  |  |  |
|  | TOTAL ESTIMATED CONTRACTOR |  |  |  | \$1,858,800.00 |
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NORTHERN KENTUCKY WATER DISTRICT

## Project

## 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

184-0776
System Hydraulic Model

## Northern Kentucky WaterDistrict

November 16, 2017
Division of Water
Drinking Water Branch
300 Sower Blvd, 3rd Floor
Frankfort, KY 40601

Re: 24 Inch Cross-Country Water Main Replacement, Edgewood / Crestview Hills, Kenton County, Kentucky (Phase 2 of WX21117003, F16-027, SAl\#KY20160226-0173)

To Whom It May Concern:
This is to indicate that the above referenced project was initiated by the Northern Kentucky Water District. The project has been reviewed by the District and the necessary water for domestic use is available and will be supplied under normal conditions, and the District shall accept maintenance of this project.

The District cannot approve this project under Agreed Order No. DWO 06008 since the project is funded through an SRF Loan.

If there are questions, please do not hesitate to contact me at 859-426-2713.


Kyle Ryan
Engineering Manager, Design \& Construction
cc: file
Enclosed: Form DW-1
Hydraulic Calculations
U.S.G.S. $71 / 2$ minute topographic map

Categorical Exclusion Determination
SRF Plans \& Specifications Checklist
3 Sets of full size plans
3 copies of the specifications CD containing PDFs of plans and specifications


See the instructions for more information about selected portions of this checklist.
Questions on completing this checklist? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at http://www.water.ky.gov/dw for more information.

## I. Construction Project Information

Project Name: 24 Inch Cross-Country Water Main Replacement - Phase 2 of WX21117003, F16-027
Project County: Kenton Estimated Project Cost: \$ 1,737,050
Project Latitude/Longitude (DMS): $39^{\circ} 01^{\prime} 16^{\prime \prime} \mathrm{N} / 84^{\circ} 32^{\prime} 56^{\prime \prime} \mathrm{W}$
11 Digit Hydrologic Unit Code (HUC): 00
Is this a federally funded project:
D DWSRF
$\square$ SPAP
$\square$ Other: No
If yes, has an Environmental Information Document been reviewed and approved? Yes, a Categorical Exclusion Determination (CED) was issued May 23, 2017 (See attached).
If the project has been submitted to the State Clearinghouse for review, provide the SAI number: \#KY20160226-0173
Identify all other funding sources: NKWD
Does the project contain any of the following:
$\square$ Booster Pump Stations
$\square$ Water Storage Tanks
区 Waterlines

| Waterline Material | Waterline Size | Linear Feet |
| :---: | :---: | :---: |
| Ductile Iron | $24^{\prime \prime}$ | 2,640 |
| Ductile Iron | $8^{\prime \prime}$ | 10 |
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Provide a brief description of the work to be performed for waterlines less than 10,000 linear feet. All other distribution projects should be accompanied by a DETAILED project description. This project will include the design and installation of:

Approximately 2,640 feet of $24^{\prime \prime}$ ductile iron water main to replace the existing aging infrastructure.

Identify how the sanitary wastewater produced as a result of this project will be handled:
X Sanitary Sewer
WWTP: Sanitation District No. 1Septic Tank
$\square$ Other: $\qquad$

## II. Utility Information

Utility Name: Northern Kentucky Water District PWSID: 0590220
Street Address: 2835 Crescent Springs Road County: Kenton
City, State, Zip: Erlanger, KY, 41018
Phone: 859-578-9898 Fax: 859-578-7893 $\qquad$ Email: kryan@nkywater.org
If another utility will serve any portion of the proposed project, provide the name and PWSID No.
Utility Name: $\qquad$ PWSID No. $\qquad$
If the utility serving the project purchases water from another utility, provide the name and PWSID No. and purchase contract amount.
Utility Name: $\qquad$ PWSID No. $\qquad$ Purchase Contract Amount: $\qquad$
Utility Name: $\qquad$ PWSID No. $\qquad$ Purchase Contract Amount: $\qquad$
Utility Name: $\qquad$ PWSID No. $\qquad$ Purchase Contract Amount: $\qquad$
Is the system currently under any type of waterline or sewer sanctions? No
$\square$ If yes, submit an exception request and attach supporting documentation to justify its approval.

## III. Design Considerations

## A. Plans and Specifications

Plans and specifications shall comply with 401 KAR 8:100 and "Recommended Standards for Water Works" (Ten
States' Standards). All plans must contain a P.E. seal, signature and date of signature with at least one set having an original seal and signature.
Plans and specifications submittals shall meet one of the following options:
$\boxtimes$ At least two printed sets of detailed plans (no larger than 24"X 36") and a PDF copy of the plans and specifications on CD/DVD. The PDF copy shall contain a PE seal, signature and date. The plans on the CD/DVD shall be in a folder named "Engineering Plans" and the specifications manual shall be in a folder named "Specifications". (preferred)
$\square$ At least 2 printed sets of detailed plans (one shall be no larger than 24 " $\mathrm{X} \mathbf{3 6 "}$ and the other set shall be 11" $\mathrm{X17} \mathrm{\prime}$ ) and one printed copy of the specifications manual.
B. Design Engineer

Name: William R. Viox $\qquad$ Firm: Viox \& Viox, Inc.
Street Address: 466 Erlanger Road
City, State, Zip: Erlanger, Kentucky 41018
Phone \#: 859-727-3293
Fax \#: 859-727-8452
Email: BViox@VioxInc.com

## Design Capacities

Identify the number of new connections and the projected average daily demand: No new connections
Identify the number of existing residents, and their projected water demand, that may be served as a result of this project:
0 existing Customers/ 0 GPM
Identify the number of connections in the service area: 81,000

## Other Information to be Submitted with the Project

$\boxtimes$ 1. Provide a copy of the U.S.G.S. $71 / 2$ minute topographic map with the location(s) of the proposed project.2. If the project includes a new or upgraded pump station(s), provide the pump sizing calculations and the proposed pump's characteristics curve along with the efficiency, horsepower and NPSHR data. Also, identify each pump station's locations coordinates (DMS).
3. If the project proposes the addition of storage tanks, provide engineering calculations which demonstrates a complete fill and drain cycle every 72 hours. Also, identify each storage tank's location coordinates (DMS).
4. Provide engineering calculations or an electronic model demonstrating the availability of 30 psig in the waterline under peak demand conditions.
$\boxtimes$ 5. Provide engineering calculations or an electronic model that demonstrates if the proposed waterlines are capable of a $2.5 \mathrm{ft} / \mathrm{sec}$ flow velocity and show associated residual system pressures.

இ 6. Provide a signed letter of acceptance from the utility, which states that the utility has reviewed and approved the plans and specifications and agrees to serve the proposed project upon completion. If another utility will own, operate and maintain any portion of this project provide an acceptance letter from that utility as well.
7. If the utility is a purchaser and the project demand is over 10,000 gallons per day or the utility has exceeded $85 \%$ of its purchase contract, provide a valid acceptance letter from the seller.
8. If the project will provide water service to existing residences, provide the names and addresses of all existing residences to be served by the project, if known.
9. If the project is funded by a State Revolving Fund Loan (SRF) provide a completed SRF Plans and Specifications Checklist along with 1 complete printed copy of the project specifications.

## IV. Environmental Benefits

Identify the environmental benefit(s) of the project by checking all that apply.
$\square$ Construction of new waterlines serving existing residences previously without public water.
】 Modifies/upgrades existing waterlines:
$\square$ Inadequately sized waterlines.
区 Leaks, breaks, restrictive flow.
$\square$ Replaces lead, copper or asbestos cement waterlines.
$\square$ Other: $\qquad$Provides fire protection.Replaces tanks/pumps due to age/condition.Installation of high efficiency/energy saving pumps.Other. Provide a brief description in the space below. $\qquad$

## v. Fees

Check or money order must be made payable to "Kentucky State Treasure" for the total amount. Fees do not apply to projects FUNDED by a municipality, water district, or other publicly owned utility.

Project Category: $\qquad$ Total Amount: \$ $\qquad$

# Northern Kentucky WaterDistrict 

## FIRE FLOW CERTIFICATION

24 Inch Cross-Country<br>Water Main Replacement<br>City of Edgewood / Crestview Hills<br>Kenton County, KY<br>November 15, 2017

I certify that the proposed improvements meet the $807 \mathrm{KAR} 5: 066$, Section 10 b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using InfoWater, the program available from Innovyze. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.


# Northern Kentucky WaterDistrict 

# HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION 

24 Inch Cross-Country<br>Water Main Replacement<br>City of Edgewood / Crestview Hills<br>Kenton County, KY<br>November 15, 2017

I certify that the proposed improvements are capable of meeting the American Water Works Association Standard C651-14 standard for flushing velocity in the main meeting 3.0 feet per second while maintaining at least 20 psi pressure in accordance with $401 \mathrm{KAR} 8: 100$.

The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is $4,200 \mathrm{gpm}$. At least 30 psi can be maintained under the peak domestic demand. The peak domestic demand using the D.R. Taylor formula for 0 customers is 0 gpm .

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using InfoWater, the program available from Innovyze. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120 , which is suitable for ductile iron or PVC. The water level in the Devon and Industrial Tanks were one-half full.


## Maximum Hour Run for Potential Customers

Maximum Hour Run, 0 affected Customers $=0$ GPM

| ID | Demand, gpm | Elevation, ft | Grade, ft | Pressure, psi |
| :---: | :---: | :---: | :---: | :---: |
| 5922 | 0.0 | 826 | 1118.1 | 126.6 |
| J 200 | 0.0 | 604 | 1117.3 | 222.4 |
| V10450 | 0.0 | 830 | 1115.9 | 123.9 |

## Flushing Velocities Under Maximum Hour

*side street mains closed to get 3.0 fps
Flushing velocity 3.0 fps for new 24" pipe (under max hour)

| ID | Demand, gpm | Elevation, ft | Grade, $\mathbf{f t}$ | Pressure, psi |
| :---: | :---: | :---: | :---: | :---: |
| 5922 | 0.0 | 826 | 1091 | 115 |
| J 200 | 0.0 | 604 | 1090 | 211 |
| V10450 | 4200.0 | 830 | 1088 | 112 |

Pipe Information for flushing velocity at 3.0 fps for new 24" pipe

| Pipe ID | Length, ft | Diam, inch | Flow, gpm | Velocity, fps | Roughness |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5634 | 979 | 24 | 4200 | 3.0 | 120 |
| P337 | 1692 | 24 | 4200 | 3.0 | 120 |

## Maximum Available Flow Under Maximum Hour

## Maximum Hour Run, Maximum Available Flow

| ID | Demand, gpm | Elevation, ft | Grade, ft | Pressure, psi |
| :---: | :---: | :---: | :---: | :---: |
| 5922 | 0.0 | 826 | 1092 | 115 |
| J 200 | 0.0 | 604 | 1090 | 211 |
| V10450 | 4200.0 | 830 | 1088 | 112 |


| Pipe ID From Node  <br> 5634 5922 To Node <br> P337 J200  <br> V10450   |  |
| :--- | :--- | :--- |




# Energy and Environment Cabinet <br> Department for Environmental Protection <br> DIVISION OF WATER <br> WATER INFRASTRUCTURE BRANCH <br> 300 SOWER BOULEVARD <br> FRANKFORT KENTUCKY 40601 

May 24, 2017

Ms. Lindsey Rechtin, Acting VP of Finance \& Support Services/CFO
Northem KY Water District
PO Box 18640
Erlanger, KY 41018

## RE: Categorical Exclusion Determination for Campbell and Kenton Co Water Main Replacement and SCADA Improvements <br> Northern KY Water District <br> Campbell County, Kentucky <br> AI ID: 2485; PLN20170001

Dear Ms. Rechtin:
The Department for Environmental Protection, Division of Water (DOW) has reviewed the environmental document titled Campbell and Kenton County Water Main Replacement and SCADA Improvements dated May 15, 2017. This document has been determined to meet the requirements of the Kentucky State Environmental Review Process.

Approval of this document is hereby given based on the attached Categorical Exclusion Determination (CED) issued on May 23, 2017. This Categorical Exclusion may be revoked at any time adverse information is made available.

The applicant is not required to publish the CED but must make the determination document available for review to the public upon request.

If you have any questions regarding this Categorical Exclusion or the environmental review process, please contact us at 502-782-7026 or by e-mail to russell.neal@ky.gov.

Sincerely,


Russell Neal, Supervisor Wastewater Municipal Planning Water Infrastructure Branch

RN/d
Attachments

Cc: Mr. Richard Harrison, NKWD
Mr. Jeff Burt, NKADD

# Energy and Environment Cabinet Department for Environmental Protection 

Aaron B. Keatley Commissioner

300 Sower Boulevard
Frankfort, Kentucky 40601

CATEGORICAL EXCLUSION DETERMINATION (CED)<br>NKWD - Kenton and Campbell County Water Main Project<br>Northern KY Water District<br>Campbell County, Kentucky<br>AI ID: 2485; PLN20170001

The Department for Environmental Protection, Division of Water (DOW) has conducted a review of the above proposed project in accordance with the procedures contained in the State Revolving Fund Operating Agreement between the Environmental Protection Agency Region IV and the Commonwealth of Kentucky and determined this project is eligible for a categorical exclusion.

The Northern Kentucky Water District (NKWD) has applied for a loan through the 2016 Drinking Water State Revolving Fund to finance the water main replacements and SCADA improvements. The major components of the proposed project include:

- Blessem Lane-Replacing approximately 4,100 L.F. of 12" water main witha new-12" water main on Blossem Lane between Alewandria Pike and Valley View Drive in Southgate.
- Concrete Water Main - Replacing approximately 2,250 L.F. of $36^{\prime \prime}$ transmission main with a new 24" water main that will run cross country in Kenton County and will run under Horsebranch Road.
- Ann Street Replaeement of appreximately 2,160 L.F. of $4^{\prime \prime}$ water main-with new $8^{\prime \prime}$ water main on_Ann Street between gith and $12^{\text {th }}$ Streets in Newpert.
- SCADA Improvements - Includes replacing equipment for security and remote operation of the distribution system including SCADA sottware, programmable logic controllers, radio equipment, pressure sensors, flow monitors, and water quality analyzers.

The proposed project will provide improved water quality and system reliability to the customers of NKWD by replacing aging water lines.

The proposed project cost is estimated to be $\$ 5,985,000$ and will be funded, in part, by a low interest loan from the DWSRF (F16-027).

| State Revolving Fund | $\$ 4,000,000$ |
| :--- | :--- |
| Capital O\&M, Bonds | $\$ 1,985,000$ |
|  | Total |

The project involves the functional replacement of water lines and is eligible for a categorical exclusion under the criteria specified in the Operating Agreement. The applicant solicited government agency review through the Kentucky State Clearinghouse and from other applicable federal agencies. Correspondence dated March 8, 2017, from the Kentucky State Clearinghouse (SAIHKY20160226-0173) indicated no serious local or environmental issues are anticipated. Further cross-cutter review demonstrates the environmental impacts from this project will be minimal.

- The Kentucky Heritage Council (KHC) was solicited for comments in a letter dated February 17, 2017, regarding potential impacts to cultural resources. In a response letter dated April 20, 2017, the KHC
stated "We therefore recommend that the proposed water mains and SCADA improvements should result in No Adverse Effect to Historic Properties".
- The United States Fish and Wildlife Service (USFWS) was solicited for comments on May 5, 2017, regarding potential impacts to threatened or endangered species. The USFWS replied in correspondence stamped May 8, 2017, stating "Significant impacts to federally-listed species are not likely to result from this project as currently proposed. Project re-coordination is needed if the project changes or if new species or critical habitats are listed that could be impacted by the project.
- The Kentucky Department of Fish and Wildlife Resources (KDFWR) was also solicited for comments through the Clearinghouse process regarding potential impacts to threatened or endangered species. In the Clearinghouse response letter dated October 14, 2015, the KDFWR commented that stream erosion control measures should be in place prior to construction.
- The US Army Corps of Engineers (USACE) was solicited for comments in a letter dated February 10, 2016, regarding potential impacts to "waters of the U.S.". In a response letter dated March 17, 2016, the USACE commented that "if the project would necessitate the discharge of dredged or fill material into any "waters of the U.S.", then you should submit a Department of the Army (DA) permit application for review by this office". According to the environmental information submitted the proposed project will occur within previously disturbed areas.
- The Natural Resources Conservation Service (NRCS) was solicited for comments in a letter dated February 10, 2016, regarding potential impacts to Prime Farmland or Farmland of Statewide Importance. In a response letter dated February 19, 2016, the NRCS stated "These areas are considered as converted lands and not impacting farmland. This office has no additional concerns at this time".

Based upon the above eligibility findings, the subject categorical action is not expected to have significant environmental impact on the quality of the human environment. Therefore, the Kentucky Department for Environmental Protection, Division of Water has determined the proposed project is eligible for a categorical exclusion and is exempt from further substantive environmental review. The applicant must make a copy of the Categorical Exclusion Determination available to the public upon request.

Comments concerning this decision may be addressed to Russell Neal, Supervisor, Wastewater Municipal Planning, Water Infrastructure Branch, Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601, or by e-mail to russell.neal@ky.gov.

Sincerely,


For
Peter T. Goodmann, Director
Division of Water



# KENTUCKY FEDERALLY ASSISTED DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

Loan Recipient: Northern Kentucky Water District

Loan No.: F16-027, WX21117003
Contract ID: 24 Inch Cross-Country Water Main Replacement
(Phase 2 of WX21117003)
Name: Kyle Ryan

Design Firm: Viox \& Viox, Inc.

The information provided is accurate for the above referenced contract to the best of my knowledge and belief.

Design Engineer: William R. Viox, PE

Signature:


Date:


Please submit three copies of the plans and specifications with the other required construction permit forms and documents to the Division of Water. All plans and specifications must be prepared, sealed, signed and dated by a Professional Engineer licensed to practice in the state of Kentucky.

Questions marked with (DOW) are to be completed by the Division of Water (DOW) Review Engineer.

I have reviewed the information provided by the design engineer, verified the accuracy, and completed the (DOW) questions.
(DOW) Review Engineer: $\qquad$
$\qquad$ Date: $\qquad$

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

$\qquad$
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$\qquad$
$\qquad$

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016
Does the eligible portion include:
These questions are for ALL projects

| Yes | No | N/A |  |
| :---: | :---: | :---: | :---: |
|  |  | x | Demolition: Is it limited to that required for new construction? |
|  |  | x | Replacement of existing utilities: Is no "betterment" proposed? |
|  |  | X | Paving: Is it limited to the trench width and cutbacks? |
|  |  | x | Standby generators: Has justification been provided? |

These questions are for CW Projects only
$\square$

$\square$ | Yes |
| :--- |
| $\square$ |
| $\square$ | | Collector sewers: Is more than $50 \%$ of the expected flow from a community |
| :--- |
| Property service lines: Are they limited to the "Tee or Wye" and the service line |
| needed to reach the property line and owned by the utility? |

The following items are considered ineligible for SRF projects. Are any of these included in the specifications?

These questions are for ALL projects

| Yes | No | N/A |  |
| :---: | :---: | :---: | :---: |
|  | x |  | Bonus payments? |
|  | x |  | Immediately available hand tools? |
|  | x |  | Mowers, snow blowers, trimmers? |
|  | x |  | Replacement of facilities previously funded by EPA or SRF, which are still within the useful life unless EPA or SRF has approved abandonment? |
|  | x |  | Redundant facilities (unless required by state or federal reliability requirements)? |
|  | x |  | Routine maintenance items (oil, grease, filters, etc.)? |
|  | x |  | Utility vehicles/golf carts? |

List all SRF loan ineligible items in the project:
None

## KENTUCKY FEDERALLY ASSISTED

 DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLISTRevised July 2016

## General

## These questions are for ALL projects



1a. Are permits to construct required from other Federal or State Agencies? If yes, indicate which Agencies.
National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI) Construction General Permit (CGP)


1b. Have the required permits been issued? Provide the DOW with copies.
1c. Have the required permits been applied for?
2. If the project includes work that will cumulatively disturb more than 200 linear feet of a blue line stream as shown on a USGS 7.5-min. topographic map, has an application for 401 Certification been submitted to the DOW Water Quality Section?
3. If the project involves construction within a floodplain, including stream crossings, has an application for the appropriate permits been submitted to the DOW Floodplain Management Section?
4. If the loan recipient has requested to buy equipment and be exempt from sales tax, are the specifications written to accommodate this?
5. Have all required easements been obtained? NOTE: Clear Site Certificate is required before construction starts.
6. If this project is a result of a DOW enforcement action, have all mandated construction related activities been addressed in the scope of work for this project? Notify the Division of Enforcement.

These questions are for DW Projects only

| Yes | No | $\mathrm{N} / \mathrm{A}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | x | 7. | Are electric motors and components above the 100-year flood elevation? |
|  |  | $\mathbf{x}$ | 8. | Are buildings protected from the 100-year flood and usable at the 25-year flood level? |
|  | x |  | 9. | Does this project eliminate any existing water treatment plants? |
| $\square$ |  | $\mathbf{x}$ | 10a. | If this proposed project includes a sludge lagoon system has the DOW Groundwater Section been contacted regarding the need for a Groundwater Protection Plan (GWPP)? |
|  | x |  | 10 b | GWPP required? Provide copies of correspondence. |

## KENTUCKY FEDERALLY ASSISTED

# DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

These questions are for CW Projects only

$\square$ | 11.Noes this design meet the 401 KAR 5:005, Section 13 reliability <br> requirements? |
| :--- |
| $\square$ |
| $\square$ | | Has the design engineer provided demonstration of how the design meets |
| :--- |
| the reliability requirements? This shall include calculations, which indicate |
| that the permit limits can be met with the largest unit of each process out of |
| service during times of anticipated cleaning and repair. |

These questions are for the DOW Review Engineer to answer

14. Does the DOW review engineer concur with the description of SRF ineligible items?
15. Are the plans and specifications sealed, signed, and dated by a professional engineer?
16a. Has the DOW written or issued an Environmental Statement (Environmental Impact Statement (EIS), Categorical Exclusion Document (CED), or a Finding of No Significant Impact (FONSI))?
16b. Is the scope of the SRF project identified in the plans and specifications consistent with the Environmental Statement?
17. Has a site certificate been received?

NOTE: Clear Site Certificate is required before construction starts.
18. Does the WWTP discharge to a blue line stream or are easements provided to a blue line stream?
19. Is the discharge from the WWTP within five miles upstream of a water plant intake?

KENTUCKY FEDERALLY ASSISTED
DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST

Revised July 2016

## Clearinghouse Comments

These questions are for $A L L$ projects

| Yes | No | N/A |  | The Recipient has: |
| :---: | :---: | :---: | :---: | :---: |
|  |  | x | 1 a. | Obtained Kentucky Department of Transportation encroachment permits? |
|  |  | x | 1 b . | Has applied for Kentucky Department of Transportation encroachment permits? |
| x |  |  | 2. | Has assigned a place in the Contract Documents for Wage Determinations for federal and state wage rates? |
|  |  |  |  | NOTE: The Kentucky Labor Cabinet must be contacted for Wage Determinations when the Advertising Date is known. Davis-Bacon Wage Determinations may have to be added by Addendum if they change while the project is advertised. |
|  |  | x | 3. | If state labor laws apply, do specifications indicate overtime pay is required for work in excess of an 8 -hour day? |
|  |  | x | 4. | If sludge is to be disposed of in a landfill, has the landfill operator provided a letter of intent? |
|  |  | x | 5. | If sludge is to be land-farmed, has Division of Waste Management approved the proposed site? (Note: Submit copy of approval letter.) |

This question is for CW Projects only

8. If land farming is proposed, does WWTP include a process to significantly reduce pathogens (PSRP)?

## Proposal

These questions are for ALL projects


1. Have SRF eligible and ineligible items been separated?
2. Time of completion $\qquad$ days.
3. If the contract allows for substitution of equipment, is the method for determining the low bidder clearly indicated?
4. Has a base bid and any alternatives been specified?
5. Are there any special conditions on evaluating lump sum contract?

Please specify: $\qquad$

## Environmental Considerations

These questions are for CW Projects only
\(\left.\begin{array}{llll}\frac{Yes}{\square} \& \frac{No}{\square} \& \frac{N}{\square} / A \& 1. <br>
If the project includes a proposed WWTP, is it located within 200 feet of any <br>

present or future residence?\end{array}\right]\)| $\square$ | $\square$ | $\square$ |
| :--- | :--- | :--- |
| $\square$ | $\square$ | 2. |
| $\square$ | Have provisions been made to prevent by-passing during construction? <br> If a construction permit is not necessary, has a reason been provided for not <br> needing one? |  |

These questions is for the DOW Review Engineer to answer

4. If bypass is proposed, have we coordinated with the DOW Regional Office or EPA Facilities Performance Branch, whichever is applicable?

5. If the project includes an increase in WWTP capacity, modifications due to a change in effluent limits, or relocation of the discharge point have both a construction permit application and a KPDES permit application been submitted?
NOTE: KPDES permit must be submitted before a construction permit and Authorization to Bid is issued

6. Is the reason for not needing a construction permit justified by 401 KAR 5:005?

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

SPECIFICATIONS AND CONTRACT DOCUMENTS



#### Abstract

1. Have the specifications been prepared in accordance with Section 204 (a) (6) of P.L. 92-500? (Listing of one brand name followed by or equal).


2. Are bid schedules written to not lead bidders and suppliers to believe that there is only one brand permitted for bidding the project?

NOTE: (DOW) column on the left is for DOW Review Engineer verification. Design Engineer must list the sections and page numbers for all items. Not completing these items is a reason for this project to receive a Notice of Deficiency.

INVITATION TO BID OR ADVERTISEMENT

| (DOW) | Section | Page |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 00020 | 1 | 1. | Time and place of Bid Opening |
|  | 00020 | 1 | 2. | Where plans and specs may be obtained |
|  | 00020 | 1 | 3. | Work to be performed |
|  | 00020 | 2 | 4. | A statement bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, and the Contract Work Hours Standard Act |
|  | 00020 | 2 | 5. | A statement that bidders must comply with the President's Executive Order No. 11246 as amended, which prohibits discrimination in employment regarding race, creed, color, sex or national origin |
|  | 00020 | 2 | 6. | This project will be in compliance with Executive Order 11246 (Equal Employment Opportunity) as amended |
| I | 00020 | 2 | 7. | A statement that the Contractor/Subcontractor will comply with 41 CFR 60-4, in regard to affirmative action, to insure equal opportunity to females and minorities and will apply the time tables and goals set forth in 41 CFR 60-4 |
| L | 00020 | 2 | 8. | A statement that the bidder will make positive efforts to use small, minority, women owned and disadvantaged businesses |
|  | 00020 | 2 | 9. | A statement that this procurement will be subject to DOW Procurement Guidance including the Davis-Bacon Act |
| $\square$ | 00020 | 2 | 10. | A statement that the contract is being funded in part with a SRF loan |
| $\square$ | 00020 | 3 | 11. | A statement that the award will be made to the lowest, responsive, responsible bidder |

KENTUCKY FEDERALLY ASSISTED
DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST

Revised July 2016

## INSTRUCTIONS TO BIDDERS, GENERAL AND SPECIAL CONDITIONS

| (DOW) Section | Page |  | Bid Bond Requirements (5\% for Contracts over \$100,000) |
| :--- | :--- | :--- | :--- | :--- |

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016
(DOW) Section Page
$\square \quad 00020 \quad 2$
16. Compliance with Title VI of the Civil Rights Act of 1964, the AntiKickback Act and the contract Work Hours Standards Act

17. Provisions for timely periodic payments and for limiting retainage (40 CFR 31.36)
18. Provision to obtain a Section 404 permit from the Corps of Engineers, if applicable
19. A statement in regard to minimizing siltation and soil erosion during construction

This question is for CW Projects only
$\qquad$ 20. A statement that no wastewater by-passing will occur during construction unless a schedule has been approved by the State and/or by EPA/NEPA permit if required

## American Iron and Steel Requirement (AIS)

These questions are for ALL projects


## KENTUCKY FEDERALLY ASSISTED

## DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST

Revised July 2016

| $\frac{\text { Yes }}{\mathrm{x}}$ | $\frac{\text { No }}{\square}$ | $\frac{N / A}{\square}$ | 2. | Will the Iron and Steel components for the items above or for construction, alteration, maintenance or repair of a Public Water System or Treatment Works be manufactured in the United States? The term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. |
| :---: | :---: | :---: | :---: | :---: |
|  | x | $\square$ | 3. | Are any waivers of the American Iron and Steel being requested? (Only EPA can issue waivers to authorize the use of a non-domestic item. If you answered item 1 yes and item 2 no; your project is NOT eligible for SRF funding. Please contact Greg Goode or Mark Rasche at the DOW at (502) 564-3410. |
| x |  | $\square$ | 4. | Contracts must contain the following clause requiring compliance with the AIS requirements provided at the top of page 11. ${ }^{+}$ Please indicate page number containing the AIS clause Section 00810 Page |


#### Abstract

tThe Contractor acknowledges to and for the benefit of the City of ___ ("Purchaser") and the $\qquad$ (the "State") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State. *Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are: Access Hatches; Ballast Screen; Benches (Iron or Steel); Bollards; Cast Bases; Cast Iron Hinged Hatches, Square and Rectangular; Cast Iron Riser Rings; Catch Basin Inlet; Cleanout/Monument Boxes; Construction Covers and Frames; Curb and Corner Guards; Curb Openings; Detectable Warning Plates; Downspout Shoes (Boot, Inlet); Drainage


# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016


#### Abstract

Grates, Frames and Curb Inlets; Inlets; Junction Boxes; Lampposts; Manhole Covers, Rings and Frames, Risers; Meter Boxes; Service Boxes; Steel Hinged Hatches, Square and Rectangular; Steel Riser Rings; Trash receptacles; Tree Grates; Tree Guards; Trench Grates; Valve Boxes, Covers and Risers. **Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes. ***Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens. NOTE: Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.


## Fiscal Sustainability \& Cost and Effectiveness (CWSRF Only)

Loan recipients with CWSRF projects with a SRF application submitted on or after October 1, 2014 (Fiscal Sustainability) and/or October 1, 2015 (Cost Effectiveness) are required to develop a Fiscal Sustainability Plan and/or perform a Cost and Effectiveness Analysis for the proposed project. Guidance for these requirements can be found at: https://www.epa.gov/cwsrf/water-resources-reform-and-development-act-wrrda-guidance-clean-water-state-revolving-fund. To demonstrate compliance, the loan recipient is required to submit certification to the DOW that these requirements have been met which can be found at http://kia.ky.gov/loan/forms.htm.

Yes \begin{tabular}{l}
No <br>
$\square$

$\quad$

N/A <br>
$\square$

$\quad$

Was the CWSRF loan application submitted after October 1, 2015 (DOW is <br>
using the KIA Board date as the submittal date)? If No, when?
\end{tabular}

$\square$ 1. Has a Fiscal Sustainability Plan Self Certification been attached as required?
$\square \quad \square$
SUPPLEMENTAL GENERAL CONDITIONS

Have the Supplemental General Conditions (Feb 2016) been included in the specifications?
Yes
If not, has the required wording/information from the referenced attachments been included?

## KENTUCKY FEDERALLY ASSISTED

DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST

Revised July 2016

These questions are for the DOW Review Engineer to answer
Yes No N/A


1. Have the technical specifications been written to assure the maximum competition?
a. No unjustified experience clause (over five years, excessive construction for a time period)
b. Use of brand name or equal in specifications.
c. If manufacturers are listed on the bid schedule, at least three manufacturers should be listed (may ask for manufacturer if manufacturer names are not listed on bid schedule).

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

DOW Review Engineer, forward Pages 13, 14, 15, and 16 and give to SRF \& SPAP Section Project Administrator

Note: The consultant must complete this section for each contract. If not applicable, complete where appropriate and explain.

AREAS OF WORK - DISADVANTAGED BUSINESS ENTERPRISE

Loan Recipient:

> Northern Kentucky Water District

Loan No.: F16-027, WX21117003
Project Name:
24 Inch Cross-Country Water Main Replacement (Phase 2 of WX21117003)
Utility: Northern Kentucky Water District
Contact Person: Kyle Ryan
Address: 2835 Crescent Springs Road, Erlanger, Kentucky 41018
Phone No: 859-426-2713
Consultant: Viox \& Viox, Inc.
Contact Person: William R. Viox, PE
Address: 466 Erlanger Road, Erlanger, KY 41018
Phone No.: 859-727-3293
Contract No./Type: Water Lines Estimated Bid Date: February 2018

This contract will include the following work:

## General Construction

|  | Check if Included |  |
| :--- | :---: | :--- |
|  | Estimated Cost |  |
| Backhoe | $\square$ | $\$$ |
| Concrete Construction | $\square$ | $\$$ |
| Concrete Finishers | $\square$ | $\$$ |
| Demolition | $\square$ | $\$$ |
| Excavating | $\square$ | $\$$ |

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

|  | Check if Included | Estimated Cost |
| :---: | :---: | :---: |
| General Construction | $\square$ | \$ |
| Material Haulers | $\square$ | \$ |
| Seeding | x | \$ \$75,000 |
| Sodding | $\square$ | \$ |
| Surveyors | $\square$ | \$ |
| Pipe Layers | $\square$ | \$ |
| Building Construction |  |  |
|  | Check if Included | Estimated Cost |
| Drywall | $\square$ | \$ |
| Electrical Contractors | $\square$ | \$ |
| Flooring | $\square$ | \$ |
| HVAC | $\square$ | \$ |
| Insulation | $\square$ | \$ |
| Landscaping | $\square$ | \$ |
| Masonry | $\square$ | \$ |
| Painting Contractors | $\square$ | \$ |
| Plaster | $\square$ | \$ |
| Plumbing | $\square$ | \$ |
| Roofing | $\square$ | \$ |
| Sandblasting | $\square$ | \$ |
| Sprinkler System Installation | $\square$ | \$ |
| Wiring | $\square$ | \$ |
| Roadway Construction |  |  |
|  | Check if Included | Estimated Cost |
| Asphalt Removal | $\square$ | \$ |
| Guardrail Work | $\square$ | \$ |
| Roadway and Right-of-Way Work | $\square$ | \$ |

# KENTUCKY FEDERALLY ASSISTED <br> DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

## Water Line Construction



# KENTUCKY FEDERALLY ASSISTED DRINKING WATER AND CLEAN WATER STATE REVOLVING FUND PLANS AND SPECIFICATIONS REVIEW CHECKLIST 

Revised July 2016

|  | Check if Included | Estimated Cost |
| :--- | :---: | :--- |
| Sheet Metal Manufacturer | $\square$ | $\$$ |
| Steel Fabrication | $\square$ | $\$$ |
| Steel Supplier | $\square$ | $\$$ |
| Trucking | $\square$ | $\$$ |
| Water Treatment Chemicals | $\square$ | $\$$ |
| $\quad$ and Equipment | $\square$ |  |
| Window Replacements | $\square$ | $\$$ |

Given the nature of the scope of work of this contract, is a DBE participation of 3 and 5 percent achievable?

```
\(\square\) Yes
x No
```

DOW will send this checklist to the following agencies:

KPAP
Community Development Office
Cabinet for Economic Development
Capital Plaza Tower
Frankfort, Kentucky 40601
Office for Civil Rights \& Small Business Development
Department of Transportation
200 Mero Street
Frankfort, Kentucky. 40622
For Projects West of Elizabethtown:
Minority Economic Development Initiative
Hopkinsville-Christian Countr Economic Development Council
2800 Fort Campbell Boulevard
Hopkinsville, Kentucky 42240
Attn: Director

# NORTHERN KENTUCKY WATER DISTRICT Project 

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

Plans titled "24-Inch Cross-Country Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.

## And

Specifications titled "24-Inch Cross-Country Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.

## See separate attached documents

$\qquad$

## NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main <br> Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

CERTIFIED STATEMENTS

Affidavit
Franchises
Plan Review and Permit Status
Easements and Right-of-Way Status
Construction Dates and Proposed Date In Service
Plant Retirements
State Debt Officer Notification

## NORTHERN KENTUCKY WATER DISTRICT

## Project

## 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

184-0776
Affidavit

## AFFIDAVIT <br> 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

Affiant, Lindsey Rechtin, being the first duly sworn, deposes and says that she is the Vice President of Finance and Support Services of the Northern Kentucky Water District, which she is the Applicant in the proceeding styled above; that she has read the foregoing " 24 -inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky." Application and knows the contents thereof, and that the same is true of her own knowledge, except as to matters which are therein stated on information or belief, and that is to those matters she believes them to be true.


Vice President - Finance \& Support Services Northern Kentucky Water District

Subscribed and sworn to before me in said County to be her act and deed by Lindsey Rechtin, Vice President of Finance \& Support Services of the Northern

Kentucky Water District, this
DTOT day of SEPTEMBEX 2018.


Kenton County, Kentucky
My commission expires


## NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

## Franchises

Plan Review and Permit Status

Easements and Right-of-Way Status
Construction Dates and Proposed Date In Service

Plant Retirements

## Northern Kentucky ${ }^{\text {Water }}$ Distret

Franchises required - None
Plan Review and Permit Status - The District has reviewed and approved the Plans and Specifications prepared by Viox \& Viox titled "24-Inch Cross-Country Water Main Replacement \{Rogers Road to Center View Blvd.\} Phase 2 of WX21117003, Edgewood/Crestview Hills, Kentucky" dated August 2018, sealed by a P.E.

See attached permit letters for:

- Kentucky Division of Water on February 12, 2018
- City of Crestview Hills Right-of-way Encroachment Permit on Sept. 8, 2018
- Sanitation District \#1 Grading Permit on June 22, 2018.
- Fish \& Wildlife

Easements and Right-of-Way Status -Easements are needed for this project and all have been secured

$$
\begin{aligned}
& \text { PIDN - 029-40-10-005.00 } \\
& \text { PIDN - 043-00-00-051.00 } \\
& \text { PIDN - 029-40-00-003.00 } \\
& \text { PIDN - 029-10-00-001.37 } \\
& \text { PIDN - 029-40-00-001.10 } \\
& \text { PIDN - 029-40-00-001.40 }
\end{aligned}
$$

Start date of construction - January 2019
Proposed date in service - May 2019
Plant retirements - There are no retirements as a result of this project.

# NORTHERN KENTUCKY WATER DISTRICT <br> Project 

## 24-inch Cross-Country Water Main

 Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky184-0776

## PLAN REVIEW AND PERMIT STATUS

Approval Letter from Kentucky Division of Water
City of Crestview Hills Right of Way Encroachment Permit
SD1 Grading Permit
Fish \& Wildlife

Charles G. Snavely

# Energy and Environment Cabinet <br> Department for Environmental Protection 

Aaron B. Keatley
Commissioner

300 Sower Boulevard
Frankfort, Kentucky 40601
February 12, 2018
Mr. Kyle Ryan, Northern KY Water District 2835 Crescent Springs Rd Erlanger, KY 41018

RE: $\quad 24$ " Cross Country WM Replacement Ph. 2<br>Campbell County, KY<br>Northern KY Water District<br>AI \#: 2485, APE20170013<br>PWSID \#: 0590220-17-013

Dear Mr. Ryan:
We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 2,640 LF of 24-inch and 10 LF of 8 -inch DI water line replacement. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

Based on DOW records, this project is being funded by a State Revolving Fund (SRF) loan. Therefore, this approval is for the technical aspects of the project only. Currently, an environmental review related to this project is pending. Therefore, you are NOT authorized to advertise for bids at this time. Should you choose to proceed with the bidding and award a contract prior to DOW approval, this will be at your own risk and payment from the SRF program is not guaranteed.

If you have any questions concerning this project, please contact Mr. Abbas Pourghasemi at 502-782-7041.

Sincerely,


Terry Humphries, P.E.
Supervisor, Engineering Section
Water Infrastructure Branch
Division of Water

TH:AP
Enclosures
C: Viox \& Voix Inc
Campbell County Health Department
Division of Plumbing

# Distribution-Water Line Extension 

Northern KY Water District
Facility Requirements

Activity ID No.:APE20170013

Page 1 of 4

## PORT0000000277 (24" Cross Country Water Main Replacement Phase 2) 2,640 LF of 24-inch and 10 LFof 8-inch DI water line replacement:

## Narrative Requirements:

| Condition No. | Condition |
| :---: | :---: |
| T-1 | Construction of this project shall not result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through 8:600. [401 KAR 8:100 Section 5] |
| T-2 | The public water system shall not implement a change to the approved plans without the prior written approval of the cabinet. [401 KAR 8:100 Section 4(3)] |
| T-3 | A proposed change to the approved plans affecting sanitary features of design shall be submitted to the cabinet for approval in accordance with Section 2 of this administrative regulation. [401 KAR 8:100 Section 4(2)] |
| T-4 | During construction, a set of approved plans and specifications shall be available at the job site. Construction shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 3(1)] |
| T-5 | Unless construction begins within two (2) years from the date of approval of the final plans and specifications, the approval shall expire. [401 KAR 8:100 Section 3(3)] |
| T-6 | Upon completion of construction, a professional engineer shall certify in writing that the project has been completed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 4(1)] |
| T-7 | The system shall be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow. [Recommended Standards for Water Works 8.2.1, Drinking Water General Design Criteria IV.1.a] |
| T-8 | Water lines should be hydraulically capable of a flow velocity of $2.5 \mathrm{ft} / \mathrm{s}$ while maintaining a pressure of at least 20 psi. [Drinking Water General Design Criteria IV.1.b] |
| T-9 | The normal working pressure in the distribution system at the service connection shall not be less than 30 psi under peak demand flow conditions. Peak demand is defined as the maximum customer water usage rate, expressed in gallons per minute ( gpm ), in the pressure zone of interest during a 24 hour (diurnal) time period. [Drinking Water General Design Criteria IV.1.d] |
| T-10 | When static pressure exceeds 150 psi, pressure reducing devices shall be provided on mains or as part of the meter setting on individual service lines in the distribution system. [Drinking Water General Design Criteria IV.1.c] |
| T-11 | The minimum size of water main in the distribution system where fire protection is not to be provided should be a minimum of three (3) inch diameter. Any departure from minimum requirements shall be justified by hydraulic analysis and future water use, and can be considered only in special circumstances. [Recommended Standards for Water Works 8.2.2, Drinking Water General Design Criteria IV.2.b] |

# Distribution-Water Line Extension 

Northern KY Water District
Facility Requirements

Activity ID No.:APE20170013

## PORT0000000277 (24" Cross Country Water Main Replacement Phase 2) 2,640 LF of 24-inch and 10 LFof 8-inch DI water line replacement:

## Narrative Requirements:

\(\left.$$
\begin{array}{ll}\begin{array}{l}\text { Condition } \\
\text { No. }\end{array} & \text { Condition } \\
\hline \text { T-12 } & \begin{array}{l}\text { Water mains not designed to carry fire-flows shall not have fire hydrants connected to them. [Recommended Standards for Water Works 8.4.1.b] }\end{array} \\
\text { T-13 } & \begin{array}{l}\text { Flushing devices should be sized to provide flows which will give a velocity of at least } 2.5 \text { feet per second in the water main being flushed. [Recommended Standards } \\
\text { for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b] }\end{array}
$$ <br>

T-14 No flushing device shall be directly connected to any sewer. [Recommended Standards for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b]\end{array} \quad $$
\begin{array}{l}\text { Pipe shall be constructed to a depth providing a minimum cover of 30 inches to top of pipe. [Drinking Water General Design Criteria IV.3.a] }\end{array}
$$\right]\)| T-15 |
| :--- |

## Distribution-Water Line Extension

Northern KY Water District
Facility Requirements

Activity ID No.:APE20170013

## PORT0000000277 (24" Cross Country Water Main Replacement Phase 2) 2,640 LF of 24-inch and 10 LFof 8-inch DI water line replacement:

## Narrative Requirements:

| Condition No. | Condition |
| :---: | :---: |
| T-24 | Manufacturer approved transition joints shall be used between dissimilar piping materials. [Recommended Standards for Water Works 8.1] |
| T-25 | The minimum size of water main which provides for fire protection and serving fire hydrants shall be six?inch diameter. [Recommended Standards for Water Works 8.2 , Drinking Water General Design Criteria IV.2.a] |
| T-26 | Pipes and pipe fittings containing more than $8 \%$ lead shall not be used. All products shall comply with ANSI/NSF standards. [Recommended Standards for Water Works 8.1] |
| T-27 | Gaskets containing lead shall not be used. Repairs to lead?joint pipe shall be made using alternative methods. [Recommended Standards for Water Works 8.1] |
| T-28 | Pipe materials shall be selected to protect against both internal and external pipe corrosion. [Recommended Standards for Water Works 8.1] |
| T-29 | Dead end mains shall be equipped with a means to provide adequate flushing. [Recommended Standards for Water Works 8.2] |
| T-30 | The hydrant lead shall be a minimum of six inches in diameter. Auxiliary valves shall be installed on all hydrant leads. [Recommended Standards for Water Works 8.4.3] |
| T-31 | A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards during repairs. [Recommended Standards for Water Works 8.3] |
| T-32 | Wherever possible, chambers, pits or manholes containing valves, blow?offs, meters, or other such appurtenances to a distribution system, shall not be located in areas subject to flooding or in areas of high groundwater. Such chambers or pits should drain to the ground surface, or to absorption pits underground. The chambers, pits and manholes shall not connect directly to any storm drain or sanitary sewer. Blow?offs shall not connect directly to any storm drain or sanitary sewer. [Recommended Standards for Water Works 8.6] |
| T-33 | At high points in water mains where air can accumulate provisions shall be made to remove the air by means of air relief valves. [Recommended Standards for Water Works 8.5.1] |
| T-34 | Automatic air relief valves shall not be used in situations where flooding of the manhole or chamber may occur. [Recommended Standards for Water Works 8.5.1] |
| T-35 | The open end of an air relief pipe from automatic valves shall be extended to at least one foot above grade and provided with a screened, downward?facing elbow. [Recommended Standards for Water Works 8.5.2.c] |

# Distribution-Water Line Extension 

Northern KY Water District
Facility Requirements

Activity ID No.:APE20170013

PORT0000000277 (24" Cross Country Water Main Replacement Phase 2) 2,640 LF of 24-inch and 10 LFof 8-inch DI water line replacement: Narrative Requirements:

| Condition <br> No. | Condition |
| :--- | :--- |
| T-36 | Discharge piping from air relief valves shall not connect directly to any storm drain, storm sewer, or sanitary sewer. [Recommended Standards for Water Works 8.5 .2 .d] |
| T-37 | Water pipe shall be constructed with a lateral separation of 10 feet or more from any gravity sanitary or combined sewer measured edge to edge where practical. If not <br> practical a variance may be requested to allow the water pipe to be installed closer to the gravity sanitary or combined sewer provided the water pipe is laid in a separate <br> trench or undisturbed shelf located on one side of the sewer with the bottom of the pipe at least 18 inches above the top of the gravity sanitary or combined sewer pipe. <br> [Drinking Water General Design Criteria IV.3.b] <br> Water lines crossing sanitary, combined or storm sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the |
| T-38 | outside of the sanitary, combined or storm sewer with preference to the water main located above the sanitary, combined or storm sewer. [Drinking Water General <br> Design Criteria IV.3.c] |
| T-3t crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. [Recommended Standards for Water Works 8.8.3.b] |  |

## CITY OF CRESTVIEW HILLS

 RIGHT OF WAY ENCROACHMENT PERMITEFFECTIVE DATE: $9 / 8 / 18$
LOCATION: Horsebranch Road


NATURE OF ENCROACHMENT: Installation of water main with sidewalk replacement and installation of casing pipe under Horsebranch Rd.

TYPE OF INDEMNITY:
$\qquad$ BOND $\qquad$ CASH

X SELF INSURED $\qquad$
NAME AND ADDRESS OF SELF-INSURED REPRESENTATIVE/INSURANCE AGENCY (Please provide C.O.L. Insurance for Contractors)

APPLICANT INFORMATION:

NAME: Steve Broering, Northern Kentucky Water District
ADDRESS: 2835 Crescent Springs Road
CITY: Erlanger STATE: KY ZIP CODE: 41018
TELEPHONE: 859-426-2728
CELL: $\qquad$
EMAIL ADDRESS: $\qquad$


Authorized Representative: $\qquad$
Title: Public LUrk Director


# CITY OF CRESTVIEW HILLS 

A Kentucky Chamber of Commerce Hall of Fame City

PAUL W. MEIER, MAYOR

September 6, 2018

Mr. Steve Broering
Engineering Technician
Northern Kentucky Water District
2835 Crescent Springs Road
P.O. Box 18640

Erlanger, KY 41018

## Re: Cross Country Water Main Project, Crestview Hills Encroachment Permit

Dear Mr. Broering:
The City of Crestview Hills is in receipt of an Encroachment Permit Application from the Northern Kentucky Water District (NKWD) for a major project known as the Cross Country Water Main Replacement project. The project area will extend from Rogers Road in Edgewood under Horsebranch Road to Centre View Boulevard in Crestview Hills.

The Encroachment Permit Application is hereby approved subject to the conditions and restoration requirements outlined in this letter. This Encroachment Permit applies only to the use of public right-of-ways in the City of Crestview Hills. NKWD shall obtain all other necessary easements, permits, approvals, and licenses required to perform the work. The conditions of approval are as follows:

- All public streets in the vicinity of the project shall be maintained free of mud, dirt, and debris on a daily basis throughout the duration of the project.
- Appropriate work zone traffic control measures shall be followed for the work as outlined in the FHWA Manual on Uniform Traffic Control Devices.
- The City of Crestview Hills shall be notified at least two (2) business days prior to the commencement of work within the City limits.
- Any damage or disturbance to the public right-of-way, including but not limited to, streets, curbs, sidewalks, or grass areas, or any City owned infrastructure shall be repaired/replaced at the conclusion of the project. A meeting at the conclusion of the project shall occur between a NKWD representative and the City's Public Works Director to assess the damage, if any, determine the appropriate corrective action, and establish a timeline for the work to occur.
- No street cuts are permitted to occur to Horsebranch Road. All road crossing shall occur by boring under the street in accordance with the plans submitted with the Encroachment Permit Application.
- At the conclusion of the project, all work areas shall be returned to as good or better condition than it was prior to the start of the project.

If you have any questions please contact me at 859-341-7373.
Sincerely,


Rick Lunnemann
Public Works Director

June 22, 2018

Mr. Barry Miller
Northern Kentucky Water District
PO Box 18640, 2835 Crescent Springs Road
Erlanger, KY 41018

## RE: NKWD-Edgewood Cross-Country 24" Water Main Replacement Grading Permit - GRP-17-12-007

Dear Mr. Miller:

Your application for a Grading Permit for the NKWD-Edgewood Cross-Country 24" Water Main Replacement Project has been reviewed and approved by SD1 under Permit number GRP-17-12-007.

In no event shall SD1's issuance of this permit be construed as relieving you from obtaining all other applicable local, state or federal permits and/or licenses prior to performing any land disturbing activities. It is your responsibility to ensure all land disturbing construction and associated activities pertaining to this permit shall be accomplished pursuant to the approved plans. Any hydrologic issue(s), flooding, property damage, etc. that may result from the approved plans or failure to construct the approved plans is not the responsibility of SD1.

The person named on the permit (permittee) has agreed to comply with all applicable SD1 Rules and Regulations. This permit must be retained by the permittee and made available for review upon request.

Upon completion of this project a Notice of Termination must be submitted to SD1. All erosion protection and sediment control best management practices (e.g., silt fence, sediment basins, etc.) installed on the site must be removed and permanent vegetation established before SD1 will approve any Notice of Termination.

Please contact SD1's Environmental Compliance Coordinator, Jason Burlage, at 859-5786892 at least 72 hours prior to beginning any land disturbing activities to schedule an on-site pre-construction meeting.

Mr. Barry Miller
Page Two
June 22, 2018

This permit shall remain valid for two years from the date of this approval letter. Once work begins, appropriate and timely progress towards completion of work must occur. If the site becomes inactive for one year, this permit becomes void.

If you have any questions or comments regarding this notice, please contact me at 859-5786881 or by email at wplunkett@sd1.org.

Sincerely,
William li Shunkett
William A. Plunkett, P. E.
Engineer II
Integrated Watershed Management, Development Services
cc: Planning and Development Services of Kenton County (via email only) Viox \& Viox, Inc. (via email only)

# United States Department of the Interior 

## FISH AND WILDLIFE SERVICE

Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

March 8, 2018

Ms. Jenna Canafax
Northern Kentucky Water District
P.O. Box 18640

Erlanger, Kentucky 41018
Re: FWS 2018-B-0054; Northern Kentucky Water District; Phase 2- Concrete Water Main Replacement; Kenton County, Kentucky

Dear Ms. Canafax:
The U.S. Fish and Wildlife Service (Service) has reviewed your February 9, 2017 correspondence regarding the above-referenced project and the biological assessment (BA) prepared by Lee Otte, senior biologist at Otte Enterprises. The Service offers the following comments in accordance with the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

## Project Description

The Northern Kentucky Water District is proposing to replace a water main located in the valley through which Horse Branch Creek flows and Horsebranch Road is located. The new water main will require a right-of-way (ROW) that will be approximately 2,250 feet long and 20 feet wide; about 1,750 linear feet of the ROW will be located within an already existing ROW and the remaining 500 linear feet will cross forested habitat, which will result in the loss of approximately 0.23 -acre of forested habitat.

## Indiana Bat (Myotis sodalis)

## Northern Long-eared Bat (Myotis septentrionalis)

The proposed project is located in "potential" habitat for the Indiana bat and the northern longeared bat. These bat species winter in caves, rock shelters, and abandoned underground mines. During the summer they roosts in trees, which usually have, cracks, crevices, broken tops, broken limbs, or sloughing bark, and forage in and around forested habitat.

The BA prepared by Lee Otte states that no cave or cave-like habitat is present within the project area. The proposed project would result in the loss of 0.23 -acre of forested habitat, which consist of a mixture of older trees (e.g., black and honey locust, wild cherry, ash, and box elder) and younger trees (e.g., sugar maple, hackberry, oak species); the photographs included in the BA indicates that most of the trees that will be removed are relatively young and lack the characteristics of a suitable roost tree. Lee Otte noted that several dead ash trees, killed by the
emerald ash borer beetle, are present within the forested section of the ROW that could have provided roosting habitat, but these have been dead for several years and all ash trees have either fallen to the ground or lost all their bark. The BA also states that several suitable roosting trees, including two shagbark hickories, will remain in the forested habitat adjacent to the ROW. At a larger scale, the 0.23 -acre area that will be removed represent a small portion $(\sim 0.07 \%)$ of the approximately 300 acres of forest habitat present within the valley, and its loss would not result in significant forest fragmentation that can affect the capacity for these species to forage or find suitable roost trees.

Based on the information available, the Service believes that direct effect from the removal of forest habitat will be avoided. In addition, the Service believes that indirect effects from the loss a 0.23 acre of foraging habitat will be insignificant given the presence of large forest blocks near the project area. Therefore, the Service believes that the proposed project is not likely to result in significant adverse impacts to the Indiana bat and the northern long-eared bat.

## Running Buffalo Clover (Trifolium stoloniferum)

Running buffalo clover is known to occur in habitats like stream banks and low mesic (moderately moist) forests. It can also be found in disturbed areas that are grazed or mechanically maintained including old pastures, moderately grazed fields, road rights-of-way, power line rights-of-way, lawns, and cemeteries.

The BA indicated that the forested section of the ROW does not provide the semi-open environment and disturbance regime required by running buffalo clover. In addition, while the open ROW habitat does experience some periodic disturbance through bush-hogging to keep woody vegetation under control, the vegetation on the ground is relatively dense and consists of grasses and open-area weedy herbaceous species. The Service agrees with Lee Ute's assessment for this species and does not have additional comments or concerns regarding the running buffalo clover.

The comments provided on this letter are based on the current information available to us. The Service's comments or concerns might change, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated before the project is completed

Thank you again for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Santiago Martin at (502) 695-0468 extension 116 or santiago_martin@fws.gov.

Sincerely,


# NORTHERN KENTUCKY WATER DISTRICT <br> <br> Project 

 <br> <br> Project}

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

State Debt Officer Notification

September 25, 2018

Commissioner and State Local Debt Officer
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601

Re: $\quad$ Northern Kentucky Water District, PSC Case No. 2018-00316 Notice of Intent to Issue Securities

Dear Commissioner:

Pursuant to the regulations of the Kentucky Public Service Commission, specifically 807 KAR 5:001: Section 18(1)(g), please be advised that the Northern Kentucky Water District (the "District") hereby notifies the State Local Debt Officer that the District intends on issuing securities in the form of a state revolving loan from the Kentucky Infrastructure Authority (the "KIA") for the purpose of funding the 24 -inch Cross-Country Water Main Replacement Project with an estimated budget of $\$ 1,200,000$, and other projects estimating $\$ 2,800,000$, with an estimated total budget of $\$ 4,000,000$.

We will file the appropriate documents with your office in accordance with the requirements of KRS 65.117 once the securities are issued.

Very truly yours,
The Northern Kentucky Water District

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## NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

## BID INFORMATION

Bid Tabulation

Engineer's Recommendation of Award

# NORTHERN KENTUCKY WATER DISTRICT <br> <br> Project 

 <br> <br> Project}

# 24-inch Cross-Country Water Main Replacement Project, 

 Edgewood/Crestview Hills, Kenton County, Kentucky184-0776

Bid Tabulation

|  | BID TABULATIONS <br> NORTHERN KENTUCKY WATER DISTRICT EDGEWOOD 24" CROSS COUNTRY WMR |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | Measure | Estimated Quantity | Unit Cost <br> Total | Total Cost | Unit Cost Total | Total Cost | Unit Cost Total | Total Cost | Unit Cost Total | Total Cost |
| 1 | 6.02A 8" Class 50 Ductile Iron Pipe -BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap (Detail 103, 103a, 104, 104a, 110) | LF | 10 | \$160.00 | \$1,600.00 | \$175.00 | \$1,750.00 | \$97.00 | \$970.00 | \$150.00 | \$1,500.00 |
| 2 | 6.02A 24" Class 50 Ductile Iron Pipe -BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap \{DEEP \& UNDERCUTTING\} | LF | 2646 | \$240.00 | \$635,040.00 | \$325.00 | \$859,950.00 | \$316.00 | \$836,136.00 | \$342.50 | \$906,255.00 |
| 3 | 6.04 36" Steel Casing Pipe By Bore \& Jack \{0.532" Min. Wall Thickness KDOT Spec's\} | LF | 36 | \$1,100.00 | \$39,600.00 | \$800.00 | \$28,800.00 | \$1,515.00 | \$54,540.00 | \$950.00 | \$34,200.00 |
| 4 | 7.01 Connect To Ex. 36" Main (Includes ductile iron to concrete adapters) | EA | 2 | \$33,000.00 | \$66,000.00 | \$15,000.00 | \$30,000.00 | \$18,700.00 | \$37,400.00 | \$15,000.00 | \$30,000.00 |
| 5 | 8.01 Install Fire Hydrant \{HIGH PRESSURE\} | EA | 3 | \$6,000.00 | \$18,000.00 | \$4,245.00 | \$12,735.00 | \$6,980.00 | \$20,940.00 | \$5,500.00 | \$16,500.00 |
| 6 | 9.01 8" Resilient Seated Gate Valve | EA | 1 | \$3,000.00 | \$3,000.00 | \$1,165.00 | \$1,165.00 | \$1,430.00 | \$1,430.00 | \$1,600.00 | \$1,600.00 |
| 7 | 9.03 24" Ductile Iron Resilient Wedge Gate Valve with Beveled Gearing (Lay Down Gate Valve) | EA | 2 | \$34,000.00 | \$68,000.00 | \$17,525.00 | \$35,050.00 | \$24,100.00 | \$48,200.00 | \$22,000.00 | \$44,000.00 |
| 8 | 11.04 8" Pipe Plug \& Block $^{\text {c }}$ | EA | 1 | \$1,000.00 | \$1,000.00 | \$2,200.00 | \$2,200.00 | \$500.00 | \$500.00 | \$400.00 | \$400.00 |
| 9 | $11.0624^{\prime \prime} \times 24^{\prime \prime} \times 6^{\prime \prime}$ Anchoring Tees \& Blocks | EA | 3 | \$12,000.00 | \$36,000.00 | \$3,150.00 | \$9,450.00 | \$4,540.00 | \$13,620.00 | \$3,500.00 | \$10,500.00 |
| 10 | 11.06 24" $\times 24^{\prime \prime} \times 8^{\prime \prime}$ Anchoring Tees \& Blocks | EA | 1 | \$12,000.00 | \$12,000.00 | \$3,985.00 | \$3,985.00 | \$4,700.00 | \$4,700.00 | \$3,900.00 | \$3,900.00 |
| 11 | 11.09 36" - 24" Reducer | EA | 2 | \$10,000.00 | \$20,000.00 | \$5,800.00 | \$11,600.00 | \$8,445.00 | \$16,890.00 | \$8,500.00 | \$17,000.00 |
| 12 | 11.11 Test Tap | EA | 1 | \$500.00 | \$500.00 | \$450.00 | \$450.00 | \$5,000.00 | \$5,000.00 | \$2,000.00 | \$2,000.00 |
| 13 | 11.16 Corrosion Test Stations | EA | 4 | \$1,500.00 | \$6,000.00 | \$1,000.00 | \$4,000.00 | \$2,400.00 | \$9,600.00 | \$1,100.00 | \$4,400.00 |
| 14 | 11.17 Magnesium Anodes | EA | 31 | \$500.00 | \$15,500.00 | \$675.00 | \$20,925.00 | \$415.00 | \$12,865.00 | \$650.00 | \$20,150.00 |
| 15 | 12.12 Concrete Sidewalk Restoration | SY | 50 | \$60.00 | \$3,000.00 | \$75.00 | \$3,750.00 | \$90.00 | \$4,500.00 | \$75.00 | \$3,750.00 |
| 16 | 12.13 Gravel Drive | SY | 1900 | \$12.00 | \$22,800.00 | \$20.00 | \$38,000.00 | \$9.00 | \$17,100.00 | \$8.00 | \$15,200.00 |
| 17 | 12.14 Best Management Practice \{SWPPP\} | LS | 1 | \$17,000.00 | \$17,000.00 | \$19,500.00 | \$19,500.00 | \$13,065.00 | \$13,065.00 | \$7,500.00 | \$7,500.00 |
| 18 | 12.15 Clearing | LS | 1 | \$15,000.00 | \$15,000.00 | \$12,000.00 | \$12,000.00 | \$30,000.00 | \$30,000.00 | \$75,000.00 | \$75,000.00 |
|  | TOTAL CONTRACTOR BID |  |  |  | \$980,040.00 |  | \$1,095,310.00 |  | \$1,127,456.00 |  | \$1,193,855.00 |


|  | BID TABULATIONS <br> NORTHERN KENTUCKY WATER DISTRICT EDGEWOOD 24" CROSS COUNTRY WMR |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | HOWELL CONTRACTORS, INC. |  | LARRY SMITH, INC. |  | BP PIPELINE LLLC. |  |
|  | Description | Unit of Measure | Estimated Quantity | Unit Cost Total | Total Cost | Unit Cost Total | Total Cost | Unit Cost Total | Total Cost |
| 1 | 6.02A 8" Class 50 Ductile Iron Pipe -BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap (Detail 103, 103a, 104, 104a, 110) | LF | 10 | \$100.00 | \$1,000.00 | \$150.00 | \$1,500.00 | \$400.00 | \$4,000.00 |
| 2 | 6.02A 24" Class 50 Ductile Iron Pipe -BOLTLESS INTERNAL RESTRAINED JOINTw/Polywrap \{DEEP \& UNDERCUTTING\} | LF | 2646 | \$350.00 | \$926,100.00 | \$400.00 | \$1,058,400.00 | \$450.00 | \$1,190,700.00 |
| 3 | 6.04 36" Steel Casing Pipe By Bore \& Jack \{0.532" Min. Wall Thickness KDOT Spec's | LF | 36 | \$1,350.00 | \$48,600.00 | \$2,000.00 | \$72,000.00 | \$1,300.00 | \$46,800.00 |
| 4 | 7.01 Connect To Ex. 36" Main (Includes ductile iron to concrete adapters) | EA | 2 | \$15,500.00 | \$31,000.00 | \$30,000.00 | \$60,000.00 | \$18,000.00 | \$36,000.00 |
| 5 | 8.01 Install Fire Hydrant \{HIGH PRESSURE\} | EA | 3 | \$4,500.00 | \$13,500.00 | \$6,000.00 | \$18,000.00 | \$6,000.00 | \$18,000.00 |
| 6 | 9.01 8" Resilient Seated Gate Valve $^{\prime \prime}$ | EA | 1 | \$1,000.00 | \$1,000.00 | \$1,500.00 | \$1,500.00 | \$1,800.00 | \$1,800.00 |
| 7 | 9.03 24" Ductile Iron Resilient Wedge Gate Valve with Beveled Gearing (Lay Down Gate Valve) | EA | 2 | \$18,500.00 | \$37,000.00 | \$23,500.00 | \$47,000.00 | \$22,000.00 | \$44,000.00 |
| 8 | $11.048^{\prime \prime}$ Pipe Plug \& Block | EA | 1 | \$200.00 | \$200.00 | \$200.00 | \$200.00 | \$6,000.00 | \$6,000.00 |
| 9 | $11.0624^{\prime \prime} \times 24^{\prime \prime} \times 6^{\prime \prime}$ Anchoring Tees \& Blocks | EA | 3 | \$4,150.00 | \$12,450.00 | \$7,500.00 | \$22,500.00 | \$3,000.00 | \$9,000.00 |
| 10 | $11.0624^{\prime \prime} \times 24^{\prime \prime} \times 8^{\prime \prime}$ Anchoring Tees \& Blocks | EA | 1 | \$4,250.00 | \$4,250.00 | \$7,250.00 | \$7,250.00 | \$3,500.00 | \$3,500.00 |
| 11 | 11.09 36" - 24" Reducer | EA | 2 | \$4,500.00 | \$9,000.00 | \$10,000.00 | \$20,000.00 | \$6,000.00 | \$12,000.00 |
| 12 | 11.11 Test Tap | EA | 1 | \$500.00 | \$500.00 | \$1,000.00 | \$1,000.00 | \$6,000.00 | \$6,000.00 |
| 13 | 11.16 Corrosion Test Stations | EA | 4 | \$1,500.00 | \$6,000.00 | \$500.00 | \$2,000.00 | \$1,000.00 | \$4,000.00 |
| 14 | 11.17 Magnesium Anodes | EA | 31 | \$1,750.00 | \$54,250.00 | \$250.00 | \$7,750.00 | \$1,000.00 | \$31,000.00 |
| 15 | 12.12 Concrete Sidewalk Restoration | SY | 50 | \$90.00 | \$4,500.00 | \$45.00 | \$2,250.00 | \$300.00 | \$15,000.00 |
| 16 | 12.13 Gravel Drive | SY | 1900 | \$5.00 | \$9,500.00 | \$10.00 | \$19,000.00 | \$30.00 | \$57,000.00 |
| 17 | 12.14 Best Management Practice \{SWPPP\} | LS | 1 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$10,000.00 | \$200,000.00 | \$200,000.00 |
| 18 | 12.15 Clearing | LS | 1 | \$45,000.00 | \$45,000.00 | \$33,000.00 | \$33,000.00 | \$100,000.00 | \$100,000.00 |
|  | TOTAL CONTRACTOR BID |  |  |  | \$1,213,850.00 |  | \$1,383,350.00 |  | \$1,784,800.00 |

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NORTHERN KENTUCKY WATER DISTRICT

## Project

## 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

184-0776
Engineer’s Recommendation of Award

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

September 6, 2018
Northern Kentucky Water District
P.O. Box 18640

2835 Crescent Springs Road
Erlanger, KY 41018
ATTN: John Scheben
Distribution \& Special Projects Manager
RE: Edgewood 24" Cross Country Water Main Replacement

Dear Mr. Scheben,
We have reviewed the bids received September 6, 2018, for the Edgewood 24" Cross Country Water Main Replacement, Edgewood, Kenton County, KY. The breakdown of the bids has been provided to your staff and to the contractors.

The low bidder was Garney Companies, Inc. with a bid of $\$ 980,040.00$, well under our estimate of $\$ 1,858,800.00$ and $\$ 115,270.00$ less than the second lowest bid received. All seven bidders were under our estimate dated 6/26/2018.

Garney Companies, Inc. has not been a contractor for the NKWD in the past. NKWD has reviewed their financials and have contacted some references. NKWD staff is satisfied with the information received; therefore, it is our recommendation the contract should be awarded to them for $\$ 980,040.00$.

Hopefully, this recommendation is sufficient for your Commission to make their decision.

Yours truly,


NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776
Board Meeting Minutes

# Northern Kentucky Water District Board of Commissioners <br> Regular Meeting <br> September 20, 2018 

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on September 20, 2018 at the District's facility located at 2835 Crescent Springs Road in Erlanger, Kentucky. All Commissioners were present, except for Commissioners Fred Macke and David Spaulding. Also present were Ron Lovan, Lindsey Rechtin, Amy Kramer, Alex Mattingly, Kim Clemons, Jeff Schuchter, Stacey Kampsen and John Scheben.

Commissioner Clyde Cunningham called the meeting to order at 12:07 p.m., and Stacey Kampsen led the pledge of allegiance.

The Commissioners reviewed correspondence received and articles published since the last regular Board meeting on August 18, 2018.

On motion of Commissioner Joseph Koester, seconded by Commissioner Patricia Sommerkamp, the Commissioners unanimously approved the minutes for the regular Board meeting held on August 18, 2018.

The Board was provided a copy of the District's check registers, which included the check number, check date, payee, check amount and description of the reason for each payment, detailing the District's expenditures for the period August 1, 2018 through August 31, 2018. On motion of Commissioner Douglas Wagner, seconded by Commissioner Koester, and after discussion, the Commissioners unanimously approved the expenditures of the District for the month of August 2018.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, the Board unanimously accepted the bid of and awarded a contract to Wessel Lawncare \& Landscaping LLC for a one year period, with the option to renew for two additional one year periods, for snow and ice removal services at District facilities with a $\$ 2,459.00$ per visit cost to all 19 District sites, and authorized staff to execute the appropriate documents.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, the Board unanimously accepted the bid of and awarded a contract to Garney Companies, Inc. for the 24-Inch Cross-Country Water Main Replacement Project with a project budget of $\$ 1,200,000$, and authorized staff to execute the appropriate documents.

On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, the Board unanimously accepted the bid of and awarded a contract to JNT Excavating LLC for the for the Cochran Avenue Water Main Replacement with a total project budget of $\$ 355,000$, and authorized staff to execute the appropriate documents.

On motion of Commissioner Wagner, seconded by Commissioner Koester, the Board unanimously formally acknowledged the necessity of emergency work, and applicable certificates of emergency, to stabilize the Advanced Treatment Building roof totaling $\$ 188,079.80$, and the contracts and payments paid to O’Rourke Wrecking Company and SAFWAY applicable to this work.

On motion of Commissioner Sommerkamp, seconded by Commissioner Koester, the Board unanimously authorized staff to file a rate case application to the Public Service Commission for an adjustment of rates to produce total additional annual revenues not to exceed $\$ 6,300,000$ and an estimated percentage increase not to exceed $12 \%$ to be phased in over a twoyear period.

The Commissioners reviewed the District's financial reports and Department reports. Lindsey Rechtin updated the Board on the upcoming District budget and the status of unclaimed funds held by the District. As part of her report, Amy Kramer reviewed with the Commissioners the status of on-going projects within the 2018 5-Year Capital Budget, including highlighting three change orders and expenses incurred to date. Kim Clemons updated the Board on the District health fair to be held on September 27.

On a motion of Commissioner Sommerkamp, seconded by Commissioner Koester, the Board unanimously agreed to go into executive/closed session under the provisions of KRS $61.810(1)(\mathrm{c})$ to discuss two items of pending or proposed litigation against or on behalf of the District and to protect the District's legal interests and strategy in connection with such litigation. The executive/closed session commenced at 1:35 p.m. and ended at 1:56 p.m. No action was taken by the Board.

Other matters of a general nature were discussed.
The meeting adjourned at 1:57 p.m.
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# NORTHERN KENTUCKY WATER DISTRICT 

## Project

# 24-inch Cross-Country Water Main <br> Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

## PROJECT FINANCE INFORMATION

Customers Added and Revenue Effect

Debt Issuance and Source of Debt
Additional Costs for Operating and Maintenance
USoA Plant Account

Depreciation Cost and Debt Service After Construction
Conditional Letter of Commitment
Application for SRF Loan Fund

## 

## Exhibit D

Customers Added and Revenue Effect: There are no new customers anticipated.

Debt Issuance and Source of Debt: The project will be funded by a future BAN, PSC Reference No. 246 "2019 Water Main Replacement Program", as part of the 2018 Five-Year Capital Budget with a total budget of \$6,700,000 and SRF Loan 2016 with a total budget of $\$ 4,000,000$. The funding breakdown will be $\$ 200,000$ from " 2019 Water Main Replacement Program" and $\$ 1,000,000$ from SRF Loan 2016. The total project budget for this project is $\$ 1,200,000$ which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

| o | Engineering | $\$ 85,430.74$ |
| :--- | :--- | :---: |
| o | Contractor's Bid | $\$ 980,040.00$ |
| o | Misc. \& Contingencies | $\$ \quad 134,529.26$ |
|  | $\quad$ Total Project Cost | $\$ 1,200,000.00$ |

USoA Accounts: The anticipated amounts for the project cost of $\$ 1,200,000.00$ will fall under the following Uniform System of Accounts Codes:

Code 331 "Transmission \& Distribution Mains"
Code 334 "Meter \& Meter Installation "
Code 335 "Hydrants"
\$ 1,178,900
\$ 0
\$ 21,100

Additional Costs and O\&M: No additional operating and maintenance costs are anticipated from the project.

Depreciation and Debt Service: Annual depreciation and debt service after construction are as follows:

Depreciation: \$18,862.40/year over 62.5 years for Code 331 "Transmission \& Distribution Mains"
\$422.00/year over 50 years for Code 335 "Hydrants"
Debt Service: \$118,951.21 over 20 years (1.75\% loan plus . $25 \%$ service fee)

# KENTUCKY INFRASTRUCTURE AUTHORITY 

Matthew G. Bevin<br>Governor

Capital Center Complex<br>1024 Capital Center Drive, Suite 340<br>Frankfort, Kentucky 40601<br>(502) 573-0260<br>(502) 573-0157 (fax)<br>kia.ky.gov

March 10, 2016

Northern Kentucky Water District
Attn: Lindsey Rechtin, V.P. of Finance
2835 Crescent Springs Road
Erlanger, KY 41018

## KENTUCKY INFRASTRUCTURE AUTHORITY FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND CONDITIONAL COMMITMENT LETTER (F16-027)

Dear Ms. Rechtin:
The Kentucky Infrastructure Authority ("the Authority") commends your efforts to improve public service facilities in your community. On March 3, 2016, the Authority approved your loan for the Campbell and Kenton County Water Main Replacement and SCADA Improvements project, subject to the conditions stated below. The total cost of the project shall not exceed $\$ 5,385,000$ of which the Authority loan shall provide $\$ 4,000,000$ of the funding. Other anticipated funding for the project is reflected in Attachment A. The final loan amount will be equal to the Authority's portion of estimated project cost applied to the actual project cost. Attachment A incorporated herein by reference fully describes the project.

An Assistance Agreement will be executed between the Authority and the Northern Kentucky Water District upon satisfactory performance of the conditions set forth in this letter. You must meet the conditions set forth in this letter and enter into an Assistance Agreement by March 10, 2017 (twelve months from the date of this letter). A one-time extension of up to six months may be granted for applicants that experience extenuating circumstances. Funds will be available for disbursement only after execution of the Assistance Agreement.

The Assistance Agreement and this commitment shall be subject, but not limited to, the following terms:

1. The Authority project loan shall not exceed $\$ 4,000,000$.
2. The loan project does not qualify for principal forgiveness.

Ms. Rechtin
March 10, 2016
Page 2
3. The loan shall bear interest at the rate of 1.75 percent per annum commencing with the first draw of funds.
4. Interest shall be payable on the amount of actual funds received. The first payment shall be due on June 1, or December 1, immediately succeeding the date of the initial draw of funds, provided that if such June 1, or December 1, shall be less than three months since the date of the initial draw of funds, then the first interest payment date shall be the June 1, or December 1, which is at least six months from the date of the initial draw of funds. Interest payments will be due each six months thereafter until the loan is repaid.
5. Full principal payments will commence on the appropriate June 1, or December 1, within twelve months from initiation of operation. Full payments will be due each six months thereafter until the loan is repaid.
6. The loan shall be repaid over a period not to exceed 20 years from the date of initiation of operation for the project.
7. A loan servicing fee of $0.25 \%$ of the outstanding loan balance shall be payable to the Authority as a part of each interest payment.
8. Loan funds will only be disbursed after execution of the Assistance Agreement as project costs are incurred.
9. The Authority loan funds must be expended within six months of the official date of initiation of operation.
10. Fund "F" loan funds may be considered to be federal funds. OMB Circular A-133, "Audits of States, Local Governments and Non-Profit Organizations, requires that all recipients and subrecipients expending $\$ 750,000$ or more in a year in federal awards must have a single or program-specific audit conducted for that year in accordance with the Circular. If the federal amount expended plus all other federal funds expended exceeds the threshold, you are required to arrange for an A-133 audit to be performed by an independent, licensed CPA, or in special cases, the Auditor of Public Accounts of the Commonwealth of Kentucky. Please note that the guidance for single audit requirements has changed for fiscal or calendar year 2016 audits. Please consult with your independent auditor as soon as possible to understand how the changes will affect you.
11. The Authority requires an annual financial audit be provided for the life of the loan.
12. The final Assistance Agreement must be approved by ordinance or resolution, as applicable, of the city council or appropriate governing board.

Ms. Rechtin
March 10, 2016
Page 3

The following is a list of the standard conditions to be satisfied prior to execution of the Assistance Agreement or incorporated in the Assistance Agreement. Any required documentation must be submitted to the party designated.

1. The Authority to Award (bid) package must be submitted to the Division of Water for approval within 14 days of bid opening.
2. The Assistance Agreement must be executed within six (6) months from bid opening.
3. Documentation of final funding commitments from all parties other than the Authority as reflected in the credit analysis shall be provided prior to preparation of the Assistance Agreement and disbursement of the loan monies. Rejections of any anticipated project funding shall be immediately reported and may cause this loan to be subject to further consideration.
4. The loan must undergo review by the Capital Projects and Bond Oversight Committee of the Kentucky Legislature prior to the State's execution of the Assistance Agreement. The committee meets monthly on the third Tuesday. Any special conditions listed in Attachment A must be satisfied before the project is presented before the Committee.
5. Any required adjustment in utility service rates shall be adopted by ordinance, municipal order or resolution by the appropriate governing body of the Borrower, Public hearings as required by law shall be held prior to the adoption of the service rate ordinance, order, or resolution. Any required approvals by the Kentucky Public Service Commission shall be obtained.
6. The Borrower must complete and return the attached "Authorization for Electronic Deposit of Vendor Payment" form to the Authority.
7. Documentation of Clearinghouse Endorsement and Clearinghouse Comments.
8. Prior to project bid, an environmental review shall be conducted by the Division of Water for all construction projects receiving DWSRF funds.
9. Technical plans and specifications and a complete DWSRF specifications checklist shall be approved by the Division of Water prior to project bid.
10. All easements or purchases of land shall be completed prior to commencement of construction. Clear Site Certification of all land or easement acquisitions shall be provided to the Division of Water. DOW representatives shall be notified for attendance of the pre-construction conference.

Ms. Rechtin
March 10, 2016
Page 4
11. Project changes or additions deviating from the original scope of work described in the Project Profile may require a new or amended environmental review and change order review before they can be included in the DWSRF loan project.
12. Applicant must provide certification from their legal counsel stating that they have prepared construction specifications in accordance with all applicable state or federal wage rate laws, and that the procurement procedures, including those for construction, land, equipment and professional services that are a part of the project, are in compliance with applicable federal, state and local procurement laws.
13. Implement the Kentucky Uniform System of Accounting (KUS○A), or an alternative approved by the Authority and assure that rates and charges for services are based upon the cost of providing such service.
14. The Borrower shall comply with all Davis Bacon related monitoring and reporting and require all contractors to pay wages pursuant to applicable prevailing wage rates (federal or state) for all work relating to the subject Project.
15. The project shall comply with the reporting requirements of the Transparency Act, and shall complete the attached Transparency Act Reporting Information Form and provide to the Authority no later than 30 days after the KIA Board approval date of your loan.
16. If the project has a "Green Reserve" component, the Borrower must submit a Business Case, if required.
17. Based on the final "as-bid" project budget, the Borrower must provide satisfactory proof, based on then existing conditions, that the revenue projections in the attached descriptions are still obtainable and that the projections of operating expenses have not materially changed. The "as bid" project budget shall be reviewed and approved by the consulting engineer.
18. The project shall comply with American Iron and Steel requirements of The Consolidated Appropriations Act of 2014 (H.R. 3547), which became effective January 17, 2014, unless engineering plans and specifications were approved by the Division of Water prior to the effective date.

Any special conditions stated in Attachment A must be resolved.

Ms. Rechtin
March 10, 2016
Page 5

Please inform the Authority of any changes in your financing plan as soon as possible. We wish you every success for this project which will benefit both your community and the Commonwealth as a whole.


Attachments
cc: Amy Kramer, Northern Kentucky Water District
State Local Debt Office, DLG

Please sign and return a copy of this letter indicating your acceptance of this commitment and its terms. Also attach the completed "Authorization for Electronic Deposit of Vendor Payment" Form.


## AUTHORIZATION FOR ELECTRONIC DEPOSIT <br> OF BORROWER PAYMENT <br> KENTUCKY INFRASTRUCTURE AUTHORITY

## Borrower Information:

Name:_ Northern Kentucky Water District
Address: 2835 Crescent Springs Road
City: Erlanger State: KY Zip: 41018
Federal I.D. \# $\qquad$
Contact Name: Lindsey
 Telephone:
Email: $\qquad$

Financial Institution Information:
Bank Name: Park National Bank
Branch: Florence
 Phone No: (859) 283-3556
city: Florence State: KY zip: 41042
Transit / ABA No.: $\qquad$ 101305
Account Name: $\qquad$
Account Number: $\qquad$ 0461

I, the undersigned, authorize payments directly to the account indicated above and to correct any errors which may occur from the transactions. I also authorize the Financial Institution to post these transactions to that account.


Please return completed form to:

Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601
phone: 502-573-0260
fax: 502-573-0157

## COMMONWEALTH OF KENTUCKY

## DRINKING WATER STATE REVOLVING FUND

# Campbell and Kenton County Water Main Replacement and SCADA Improvements Project 

## WX21117003



August 11, 2015

Mr. John E. Covington, III
Executive Director
Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Re: Application for DWSRF Loan F16-027, Campbell and Kenton County Water Main Replacement and SCADA Improvements, WX21117003

Dear Mr. Covington:
Please find attached the application for the DWSRF Loan F16-027, Campbell and Kenton County Water Main Replacement and SCADA Improvements Project, WX21117003.

Should you have any questions or need additional information, please feel free to contact me at this office at (859) 426-2734 or akramer@nkywater.org. We appreciate your consideration in supporting this project.

Sincerely,


Amy K. Kramer, P.E.
Acting Vice President, Engineering, Production \& Distribution
akk

Steven L. Beshear
Governor

## KENTUCKY INFRASTRUCTURE AUTHORITY

John E. Covington III Executive Director

Jul 03, 2015
Jack Bragg,
Northern Kentucky Water District
PO Box 18640
Erlanger, KY 41018
Re: DWSRF 2016 FY Loan Invitation (KIA\# F16-027)
Dear,
The Kentucky Infrastructure Authority (KIA) and the Kentucky Division of Water (DOW) would like to announce that funds are now available for the 2016 funding cycle for the Safe Drinking Water State Revolving Fund and we would like to invite you to submit an application for funding in the amount of $\mathbf{\$ 4 , 0 0 0 , 0 0 0}$. The Campbell and Kenton County Water Main Replacement and SCADA Impr (KIA Loan Number F16-027) is eligible for funding based on information provided in the Water Resource Information System (WRIS) Project Profile submitted during the open Call for Projects which ran from October 2014 through December 2014. The following projects are included in this invitation:

## WX21117003 <br> Campbell and Kenton County Water Main Replacement and SCADA Impr

If you are still seeking DWSRF funding for your project, please submit a complete loan application package, including all supporting documentation required for financial assistance to KIA by the close of business on Aug 17, 2015. The loan application should reference the following assigned loan number:

## KIA Loan Number F16-027

Please notify KIA by Aug 03, 2015 whether you intend to submit an application for funding.

Should an above stated deadline fall during a weekend or holiday observance period then it will be extended to the next business day the Kentucky Infrastructure Authority is open for business. Please contact KIA if you believe a deadline should be extended due to these circumstances.

This letter is an invitation to apply for funding but does not commit funds to your project. If you do not submit a loan application by this deadline, your project will be bypassed for the 2016 funding cycle. If bypassed, the project may be considered for funding in the next funding cycle if your project is submitted during the 2017 Call for Projects which will begin in October 2015.

Upon submittal of a complete loan application, the documents will be reviewed and an

Page 2
Jack Bragg
July 03, 2015
introductory meeting will be scheduled with DOW, KIA and applicant representatives of the project to review loan requirements. To be considered for funding, the project description contained in the loan application must match the Project Profile contained in the WRIS. A credit analysis will be prepared and your loan request will be presented to the KIA Board for review and conditional approval. Upon Board approval, you will receive a Conditional Commitment Letter committing funding to your project for a period of twelve (12) months. The Conditional Commitment Letter is expressly contingent on KIA's actual receipt of funds in an amount sufficient to enable KIA to fully fund the loan.

All DWSRF program requirements must be met within the terms of the Conditional Commitment Letter before a loan assistance agreement can be executed. A fully executed loan assistance agreement is required before any funds are released.
Due to limited funds available, projects will be funded based on their "readiness to proceed". If it appears that the project will not start construction prior to December 31, 2017, please notify KIA immediately to determine whether or not an application will be considered. If your project has already been completed, obtained funding from another source, or you are not interested in DWSRF funding please notify Jami Johnson at jami.johnson@ky.gov indicating the reason for declining the invitation on or before Aug 03, 2015.

If you have questions regarding the application for financing, please do not hesitate to contact Jami Johnson at 502-573-0260. If you have questions regarding the technical or environmental requirements of your project, please contact Jori Becker at 502-564-3410.

Sincerely,


John E. Covington, III
Executive Director
Kentucky Infrastructure Authority
CC: Jeff Burt (NKADD Water Management Coordinator)
Richard Harrison (Project Administrator)
Cindy McDonald (DOW)
Jami Johnson (KIA)

# NORTHERN KENTUCKY WATER DISTRICT <br> Kenton and Campbell County Water Main Replacement and <br> SCADA Improvements Project <br> WX 21117003 

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## ITEM

TITLE
APPLICATION
EPA FORM 4700-4 CIVIL RIGHTS COMPLIANCE Complaints Procedure, EEO \& Lawful Employment Practices, Harassment Policy

AUTHORIZING RESOLUTION
ASSURANCES
DEBARMENT CERTIFICATION
ENGINEERING PROCUREMENT AND CONTRACTS
Not Applicable - engineering fees not being paid with SRF funds
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AUDIT REPORTS AND FINANCIAL STATEMENTS 2012, 2013, 2014 Reports

PROJECT MAPS
CLEARINGHOUSE
WHOLESALE AGREEMENTS

1 APPLICATION


## COMMONWEALTH OF KENTUCKY

# DRINKING WATER STATE REVOLVING FUND APPLICATION FOR FINANCIAL ASSISTANCE 

FUND F


An Equal Opportunity Employer M/F/D

## Part I -General Project Summary

1. PROJECT NAME: Campbell \& Kenton County Water Main Replacement and SCADA Improvements
2. WRIS NUMBER: WX21117003 $\qquad$
3. AMOUNT REQUESTED: Fund F (DWSRF): $\$ 4,000,000$
4. LEGAL APPLICANT

Organization: Northern Kentucky Water District
Street/P.O. Box: 2835 Crescent Springs Road, P.O. Box 18640
City \& Zip Code: Erlanger, KY 41018-0640
County: Kenton
Name: Jack Bragg
Title: Vice President, Finance \& Support Services
Telephone: (859) 426-2758
Email Address: ibragg@nkywater.org
5. PROJECT ADMINISTRATOR (Consulting Engineer, Area Development District, etc.)

Name: Amy Kramer
Title: Acting Vice President, Engineering, Production \& Distribution
Firm: Northern Kentucky Water District
Street/P.O. Box: 2835 Crescent Springs Road, P.O. Box 18640
City \& Zip Code: Erlanger, KY 41018-0640
Telephone: (859) 426-27234
Email Address: akramer@nkywater.org
6. CONSULTING ENGINEER (complete if different from No. 4 above)

Name of Firm: NA
Contact Person: $\qquad$
Street/P.O. Box: $\qquad$
City \& Zip Code: $\qquad$
Telephone: $\qquad$
Email Address: $\qquad$

To the best of my knowledge and belief, data contained in this application are true and correct; the document has been duly authorized by the legal applicant.

Jack Bragg, V.P. Finance \& Support Services Typed Name and Title

$8181 / 5$

## 7. PROJECT DESCRIPTION

A. Describe the project and identify what is being constructed. Briefly explain the need for the project. Refer to Environmental Information Document (EID) if necessary (attach maps).
This project includes 3 water main replacement projects on 4 streets, replacement of a 36 " crosscountry transmission main with a $24^{\prime \prime}$ main, and SCADA improvements involving approximately 40 sites. The project will bid in phases: Gontract - - Buttermilk-Pike-Water-Mein-Replacement -includes replacement-of $5^{\prime \prime}$ main-with- $8^{\prime \prime}$ main-on-2-streets-in-Kenton-County-as-fothows. 2.775 ft -along-Butermilk Pike from Gollins Redto-Rogers-Rd;-and-Rogers-Road-from Buttermilk-Pike to VillaMarie tane-Contract 2-36" Concrete Water Main Replacement for 2,250 ft of $36^{\prime \prime}$ transmission main with new $24^{\prime \prime}$ cross-county main in Kenton County; Gontraet 3 - Ann Streetand Putnam Street

 Improvements in Campbell and Kenton Counties which will replace equipment for security and remote operation of the distribution system including programmable logic controllers, radio equipment, and sensors and water quality analyzers for approximately 40 sites with tanks, pump stations, or meter and regulator vaults.
B. Is this project consistent with the EID approved by DOW? NA
$\qquad$
$\qquad$
C. Discuss the environmental benefits that will result from this project. NA
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
8. PROJECT SCHEDULE (Indicate Actual or Target dates)
A. Environmental Information Document submitted to DOW Target January 30, 2016
B. Plans/Specs submitted to DOW

Target January 1 - July 1, 2016
C. Bid advertisement

Target Feb 1 - August 1, 2016
D. Bid opening

Target March 1-September 1, 2016
E. Construction start

Target April 1 - October 1, 2015
F. Construction completion

Target August 2016 - Dec 2017
9. Does the Public Service Commission (PSC) have jurisdiction over this project?

Q YeNo (Yes for Contracts 2 and 4)

If yes, describe their role and estimated schedule of review:
Submit Contract 2-36" Concrete Water Main Replacement to PSC by April 1, 2016. Bids expire 90 days after opening or approximately July 1, 2016 when Certificate of Convenience and Necessity would be expected. Submit Contract 4 -SCADA Improvements in Campbell and Kenton Counties to PSC by August 1, 2016 with Certificate of Convenience and Necessity expected around 90 days after bid opening or around November 1, 2016.
10. Is the system under sanction from any enforcement agency?
$\square$ Yes $\boxtimes$ No
If yes, describe below, listing amounts and dates of any fines paid to date:
$\qquad$
$\qquad$
$\qquad$

If under enforcement, is the project schedule in accordance with the court order?
$\square$ Yes $\square$ No
11. Will the applicant utilize its own workforce to perform any services on the proposed project (Force Account)? $\square$ Yes $\boxtimes$ No

If yes, you must receive prior approval from DOW.
12. If new service is proposed, will the users have access to a public sewer system? $\square$ Yes $\square$ No

If not, how will sewer service be handled?
Not Applicable
$\qquad$
$\qquad$
13. DEMOGRAPHICS
A. Current Population of Service Area: $\mathbf{2 5 5 , 0 0 0}$
B. Projected Population of Service Area: 5 Year 260,000 20 Year 266,000
C. Number of Households in Service Area remaining unserved:1,482
D. Median Household Income of Applicant's Jurisdiction $\$ \underline{54,288}$

## Part II - Financial Analysis

1. List all sources of water. If water is received from another system, describe the contractual relationship (e.g.; usage, price per gallon) and attach a copy of the agreement.

Sources are the Ohio River and Licking River. No water is purchased from another system.
$\qquad$
$\qquad$
$\qquad$
2. Is the applicant's water being treated by another system?Yes $\boxtimes$ No
If yes, describe the contractual relationship (e.g.; usage, price per gallon) and attach a copy of the agreement.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
3. Does the applicant treat another system's water?
$\square$ Yes $\boxtimes$ No
If yes, describe the contractual relationship (e.g.; usage, price per gallon) and attach a copy of the agreement.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
4. Does the applicant supply water to any other system/community?
$\triangle$ Yes
If yes, complete the following and attach a copy of the agreement:

| Community | \# of Customers | $\frac{\text { Revenue Derived }}{}$ |
| :--- | :---: | :---: |
| Pendleton County WD | 2,241 | $\$ 281,998$ |
| City of Walton | 1,500 | $\$ 567,699$ |
| Bullock Pen WD | 6,638 | $\$ 588,014$ |

5. A. Number of entities currently served (Please answer with exact number):
$\qquad$ Industrial
B. Number of entities to be added to customer base as a result of proposed project (qualify if numbers are approximate).
No. of Residential Area:
0 $\qquad$
$\qquad$

No. of Commercial
Area:
0 $\qquad$
$\qquad$

No. of Industrial Area:
0 $\qquad$
C. Attach evidence of new customers' willingness to connect, such as signup sheets, letters of interest or news articles. NA
D. If legal action is required to force connection, under what legal authority will it be accomplished? NA
6. RATE STRUCTURE (attach 2 copies each of current and proposed water and wastewater rate ordinances)
A. Date of last rate adjustment/amount of adjustment for an average residential customer.

| Water: | $\$ 0.15$ | $11,000 \mathrm{gal}$ |
| :--- | :--- | :--- |
| Wastewater: $\$$ | $11,000 \mathrm{gal}$ | Date: January 1, 2014 |

Note: If billing is based on cubic feet please convert to gallons.
B. Current monthly charge for 4,000 gallons.

Water: $\quad \$ 36.93 \quad / 4.000 \mathrm{gal}$
Wastewater: \$ $\quad 14,000 \mathrm{gal}$
C. Have any public meetings been held on the proposed project for rate increases? $\square$ Yes $\boxtimes$ No If yes, attach a copy of the minutes.
D. Do any users provide more than $5 \%$ of the service revenue for the system?

If yes, list below:
Name
\% Service Revenue
NA
$\qquad$
$\qquad$
$\qquad$
$\qquad$
7. List any proposed new businesses or housing developments in your service area including projected start date, anticipated usage and revenue impact.
NA
$\qquad$
$\qquad$
$\qquad$
8. Who performs service billings and collection services? If not the applicant, explain and provide a copy of any agreements.
Northern Kentucky Water District self-performs
$\qquad$
$\qquad$
9. How many present or proposed customers have unmetered service? None for domestic

How will their services be billed?
$\qquad$
$\qquad$
$\qquad$
10. Are revenues and expenses for the system accounted for separately?

If no, explain accounting procedures used: $\qquad$
$\qquad$

SEPARATION OF ACCOUNTS IS REQUIRED FOR LOAN APPROVAL
11. A. Is the applicant required to have an annual audit performed?

区 Yes No

If not, explain below:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
B. What is the date of the last audit completed? December 31, 2014
C. Provide two copies of each of the last three annual audit reports and/or the audited financial statements.
12. How does the applicant anticipate paying the increased debt service, operation and maintenance expenses required for this loan (e.g.; existing revenues, increased customers, higher rates or other special assistance)?
Existing revenues or higher rates
$\qquad$
$\qquad$
$\qquad$
$\qquad$
13. Please calculate additional operation and maintenance expenses needed for first year of operation.
O \& M
as of last audit
$\$ 26,689,942$ (excl. deprec)

## first year of operation

\$27,161,761
Difference
$\$ 471,819$
14. Describe any operating expense changes that will occur as a result of this project.

None
$\qquad$
$\qquad$
$\qquad$
15. Provide the following information for any state or federal funds for water and wastewater construction projects received during the past five years.

| Date Awarded | Project | Funding Source | Amount | Type of Assistance |
| :---: | :---: | :---: | :---: | :---: |
| 6/1/2010 | WX21117208 Adv Treatment | DWSRF | \$8,000,000 | Loan |
| 3/1/2011 | WX21117208 Adv Treatment | DWSRF | \$8,000,000 | Loan |
| 3/1/2012 | WX21117208 Adv Treatment | DWSRF | \$8,000,000 | Loan |
| 5/2/2013 | WX21037003 Water Main | DWSRF | \$4,000,000 | Loan |
| 1/1/2009 | Automated Meter Reading | DWSRF-B | \$6,000,000 | Loan |
| 7/1/2013 | WX21117211 Sub M | RD | \$1,733,000 | Loan |
| 7/2/2013 | WX21117211 Sub M | RD | \$600,000 | Grant |
| 2/28/2013 | WX21117211 Sub M | CDBG | \$1,000,000 | Grant |
| 2/13/2009 | WX21117207 | HB608 | \$500,000 | Grant |
| 1/22/2014 | WX21037004 | DWSRF | \$4,000,000 | Loan |
| 11/6/2014 | WX21037006 | DWSRF | \$4,000,000 | Loan |
| 2/5/2015 | WX21117002 | DWSRF-B | \$1,500,000 | Loan |

16. Please calculate the amount of funds to be set aside annually for replacement costs. This amount should be based on the design life of the system.
Total project cost $=\$ 5,425,000$
Design Life $=62.5$ years mains, 10 years SCADA, Annual Depreciation Amount $=\$ 338,800$
17. LONG-TERM DEBT - Provide the following information on all outstanding debt secured by the Enterprise Fund (water and wastewater and any other utility in the fund).



| OTHER |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Auditor/ Issuer | Date of Issue | Orig Loan/ <br> Bond Size | Principal Balance Outstanding | Interest <br> Rate | Annual <br> Principal <br> Payment | Annual Interest Payment | Date of Final Maturity |


| Cost Classification |  | DWSRF KIA Loan | Funding Source 1 | Funding Source 2 | Funding Source 3 | Funding <br> Source 4 | Funding Source 5 | Local Funds | Unfunded Costs | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Administrative Expenses |  | \$5,000 |  |  |  |  |  |  | \$5,000 |
| 2 | Legal Expenses |  | \$4,000 |  |  |  |  |  |  | \$4,000 |
| 3 | Land, Appraisals, Easements |  | \$0 |  |  |  |  |  |  | \$0 |
| 4 | Relocation Expenses \& Payments |  |  |  |  |  |  |  |  | \$0 |
| 5 | Planning |  |  |  |  |  |  |  |  | \$0 |
| 6 | Engineering Fees - Design |  | \$430,000 |  |  |  |  |  |  | \$430,000 |
| 7 | Engineering Fees - Construction |  | \$25,000 |  |  |  |  |  |  | \$25,000 |
| 8 | Engineering Fees - Inspection |  | \$36,000 |  |  |  |  |  |  | \$36,000 |
| 9 | Engineering Fees - Other |  |  |  |  |  |  |  |  | \$0 |
| 10 | Construction | \$4,000,000 | \$525,000 |  |  |  |  |  |  | \$4,525,000 |
| 11 | Equipment |  | 0 |  |  |  |  |  |  | \$0 |
| 12 | Miscellaneous |  | 0 |  |  |  |  |  |  | \$0 |
| 13 | Contingencies (10\%) |  | \$400,000 |  |  |  |  |  |  | \$400,000 |
|  | Total | \$4,000,000 | \$1,425,000 |  |  |  |  |  |  | \$5,425,000 |


| Funding Sources |  | Amount | Date <br> Committed |
| :---: | :--- | :---: | :---: |
| 1 | Northern Kentucky Water District | $\$ 1,425,000$ |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
|  | Total | $\$ 1,425,000$ |  |


| Local Funding Sources |  | Amount | Date <br> Committed |
| :---: | :--- | :--- | :--- |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
|  | Total |  |  |

Total Funding $\$ 5,425,000$

August 11, 2015

Mr. John Covington
Executive Director
Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Re: Letter of Commitment for DWSRF Loan - Campbell and Kenton County Water Main Replacement and SCADA Improvements Project, WX21117003

Dear Mr. Covington:
Please accept this letter as the Northern Kentucky Water District commitment to provide local funds to complete the "Campbell and Kenton County Water Main Replacement and SCADA Improvements Project - WX21117003". The Northern Kentucky Water District is applying for a $\$ 4,000,000$ State Revolving Fund loan and will provide the additional funding needed, which is estimated at this time to be $\$ 1,425,000$ in future bonds funds as part of the overall project funding package.

Should you have any questions or need additional information, please feel free to contact this office at (859) 578-9898. We appreciate your consideration in supporting this project.

Sincerely,


Amy K. Kramer, P.E.
Acting Vice President, Engineering, Production \& Distribution
akk

2 EPA FORM 4700-4 CIVIL RIGHTS COMPLIANCE


## For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.


## For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7 ; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

| A. Signature of Authorized EPA Official <br> See $* *$ note 0 neverseside | B. Title of Authorized EPA Official | C. Date |
| :--- | :--- | :--- |

EPA Form 4700-4 (Rev. 04/2009). Previous editions are obsolete.

## General

Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment).

Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities.

Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities.

The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission.

Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education progran or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution.

40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972.

40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973.

The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

## Items

"Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25 .
"Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25.
"Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed.
"Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability.

Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission.

If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable."

In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification.

* Questions VII - XI are for informational use only and will not affect an applicant's grant status. However, applicants should answer all questions on this form. ( 40 C.F.R. Parts 5 and 7).
** Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements \& Continuation/Supplemental Awards form.

Approval indicates, in the reviewer's opinion, questions I - VI of Form 4700-4 comply with the preaward administrative requirements for EPA assistance.

## "Burden Disclosure Statement"

EPA estimates public reporting burden for the preparation of this form to average 30 minutes per response. This estimate includes the time for reviewing instructions, gathering and maintaining the data needed and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to U.S. EPA, Attn: Collection Strategies Division (MC 2822T), Office of Information Collection, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

The information on this form is required to enable the U.S.
Environmental Protection Agency to determine whether applicants and prospective recipients are developing projects, programs and activities on a nondiscriminatory basis as required by the above statutes and regulations.

## 107 INTERRNAL COMPLAINTS

The District wants you to discuss your work concerns with management. Your supervisor is available to address issues in the workplace. If you are unable to resolve these concerns with your supervisor, or if you are uncomfortable approaching your supervisor, please contact Human Resources or the District Pṛesident/CEO. For discrimination and harassment concerns, report these issues under the District's Equal Employment Opportunity and Lawful Employment Practices policy and the District's Anti-Harassment policy, respectively.

## 402 ANTI-HARASSMENT

The District-recognizes an employee's right to a work place free of unlawful harassment. Harassment on the basis of one's age ( 40 or over), HIV/ADSS, race, color, religion, national origin, disability, sex, pregnancy, sexual orientation, genetic information, or other legally protected classification is against the law. Harassment in retaliation for opposing or complaining about discrimination or participating in discrimination legal proceedings, or for exercising any legally protected right related to employment, is also against the law. Disciplinary action, up to and including termination of employment, will be taken against employees who violate this policy. The District probibits wide ranges of inappropriate comments and conduct that would not necessarily be unlawful and would not in and of themselves be unlawful harassment.

Slurs, jokes, or other verbal or physical conduct based on age ( 40 or over), HIV/AIDS, race, color, religion, national origin, disability, sex; pregnancy, sexual orientation, gender identity, genetic information, or other legally protected classification are prohibited. Such incidents may contribute to a hostile or offensive working environment, and may in some rare cases constitute unlawful harassment. Sexual harassment may also occur when submission to or rejection of such conduct is used as a basis for employment decisions. The District will not tolerate or condone such conduct, nor does it tolerate or condone sexual pressures that utilize job status as a factor in any employment-related decision. The District also will not permit harassment (e.g., slurs, jokes, verbal or physical conduct) in retaliation for opposing or complaining about discrimination, participating in discrimination legal proceedings, or for exercising any legally protected employment right.

Any employee who believes that he or she has been subjected to inappropriate conduct or comments, or who believes that prohibited harassment has occurred; or who has witnessed such misconduct in the workplace, whether committed by an employee or otherwise, must immediately repoit the incident to the Human Resources Department or to the President/CEO. All reports will be promptly and thoroughly investigated and will be treated confidentially to the extent consistent with a thorough investigation. The District will not authorize or permit any form of retaliation against any employee who has made a good faith report under this policy.

# RESOLUTION OF THE NORTHERN KENTUCKY WATER DISTRICT 

Campbell and Kenton County Water Main Replacement and SCADA Improvements WX21117003


#### Abstract

A Resolution Authorizing The Northern Kentucky Water District To File A Loan Application And Appointing Its Vice-President As Its Official Project Representative With Regard To The Drinking Water State Revolving Fund Project


WHEREAS, the Northern Kentucky Water District (the "District") proposes to provide upgraded drinking water service for industrial, institutional, commercial, and residential growth within its service area, and

WHEREAS, the District endorses said proposed service, and,
WHEREAS, under the terms of the Safe Drinking Water Act Amendments of 1996 (Public Law 104-182) and amendments to KRS 224A, the State is authorized to render financial assistance to eligible project applicants by way of capitalization grants from the U. S. Environmental Protection Agency and State match funds comprising the Federally Assisted Drinking Water Revolving Fund (State Revolving Loan Program), This program was established to aid in the construction of drinking water treatment facilities improvements and certain related facilities with consideration for approval to be based on applications submitted through the Kentucky Energy and Environment Cabinet and the Kentucky Infrastructure Authority, and,

WHEREAS, the improvements proposed for construction by the District within its service area are considered eligible for such loan assistance.

NOW THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Northern Kentucky Water District that any current Vice-President of the District and his or her Successors-in-Title are hereby authorized to execute and submit an application through the Kentucky Energy and Environment Cabinet and the Kentucky Infrastructure Authority with such assurances and required supporting data as is necessary to obtain loan assistance from the Federally Assisted Drinking Water Revolving Fund (State Revolving Loan Program) for the proposed water treatment facilities improvements, and are further hereby authorized as the District's Official Project Representative to carry out all necessary negotiations for, and administer, the loan assistance the applicant may obtain from the Federally Assisted Drinking Water Revolving Fund (State Revolving Loan Program).

Adopted this $16^{\text {th }}$ day of July, 2015 at a regular meeting of the Board of Commissioners of the Northern Kentucky Water District at 2835 Crescent Springs Road, Erlanger, Kentucky.



#### Abstract

ASSURANCES

As the duly authorized representative of the applicant, I certify that the applicant agrees to comply with the laws, regulations, policies and conditions relating to the Federally Assisted Drinking Water Revolving Fund for this project. I also certify that the applicant:


1. Has the legal authority to apply for Federal/State assistance, and the institutional, financial, managerial and technical capability to ensure proper planning, management and completion of the project described in this application.
2. Will give the U.S. Environmental Protection Agency (EPA), the Comptroller General of the United States, and the State, and any other authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to:(a) Title VI of the Civil Rights Act of 1964 (PL 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681-1683 and 16851686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), which prohibits discrimination on the basis of disabilities; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (e) KRS Chapter 344 Civil Rights Act; (f) 1990 Americans with Disabilities Act; (g) Uniform Federal Accessibility Standards (U.F.A.S.) 40 CFR 7.70 (as applicable); (h) any other nondiscrimination provisions in the specific statute(s) under which application for assistance is being made, and (I) the requirements of any other nondiscrimination statute(s) which may apply to the application.
6. Will comply, or has already complied, with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) as amended by the Surface Transportation and Uniform Relocation Assistance of 1987 set forth in 49 CFR Part 24 which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participating in purchases.
7. Will comply with the provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
8. Will comply, as applicable, with the provisions of the Copeland Act (40 U.S.C. 276c and 18 U.S.C. 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333); regarding labor standards for federally assisted construction sub-agreements.
9. Will comply with all provisions of 40 CFR 32.510 that ensures all prime construction contractors shall certify that subcontracts have not and will not be awarded to any firm that is currently on the List of Parties Excluded from Federal Procurement or Non-procurement Program.
10. Has adopted or will adopt the attached Procurement Guidance on all purchases including consultants and contractors.
11. Will cause to be performed the required financial and compliance audits and submit to the Kentucky Infrastructure Authority.
12. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the completed work conforms with the approved plans and specifications and will furnish progress reports and such other information as required.
13. Will operate and maintain the publicly-owned treatment works in accordance with the minimum standards as required by the cognizant Federal, State and local agencies for the operation and maintenance of such facilities; and in accordance with the standards of the Safe Drinking Water Act.
14. Will provide service to any community or area so designated in the approved County Water Supply Plan developed pursuant to 401 KAR 4:220 or identified by a capacity development strategy developed pursuant to PL 104-182, the Safe Drinking Water Act as amended in 1996, without regard to any condition other than user charges developed on an equitable cost basis as acceptable by the Kentucky Infrastructure Authority and the Division of Water.

Campbell and Kenton County Water Main Replacement and SCADA Improvements


Northern Kentecky Wieter District Applicant Organization


Date Submitted

# United States Environmental Protection Agency Washington, D.C. 20460 

## CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The prospective participant certifies to the best of its knowledge and belief that it and its principals:
(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
(b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
(c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to $\$ 10,000$ or imprisonment for up to 5 years, or both.

Northern Kentucky Water District
Loan Recipient

Amy Kramer, Acting Vice President of Engineering, Production \& Distribution Typed Name \& Title of Authorized Representative


Signature of Allthorized Representative


I am unable to certify to the above statements. My explanation is attached.

6 ENGINEERING PROCUREMENT AND CONTRACTS

The Northern Kentucky Water District does not intend to utilize SRF monies to pay for engineering services for Loan F16-027.

| Energy and Environment Cabinet |
| :---: |
| Department for Environmental Protection |
| Division of Water |
| 200 Fair Oaks Lane, ${ }^{\text {th }}$ Floor |
| Frankfort, Kentucky 40601 |
| ENGINEERING PROCUREMENT SYSTEM CERTIFICATION |


| PROJECT NAME | PROJECT NUMBER |
| :--- | :--- |
| APPLICANT'S ADDRESS/PHONE NO. |  |

## SECTION I - INSTRUCTIONS

The applicant must complete and submit a copy of this form with each application for State Revolving Fund (SRF) Assistance. If the applicant has certified its procurement system to DOW within the past two (2) years and the system has not been substantially revised, complete Section M.A, then sign and date the form.

## SECTION II - CERTIFICATION

A. I affirm that the applicant has within the past two (2) years certified to DOW that its procurement system complies with the Kentucky Model Procurement Code 45A or KRS 424.260 and that the system meets the requirements in Kentucky Model Procurement Code 45A or KRS 424.260. The date of the applicant's latest certification is $\qquad$ .
B. Based upon my evaluation of the applicant's procurement system, I, as authorized representative of the applicant: (check one of the following:)

1. CERTIFY that the applicant's procurement system will meet the requirements of Kentucky state law by following either the Model Procurement Code 45A or KRS 424.260 before undertaking any procurement action with SRF assistance.

2. DO NOT CERTIFY THE APPLICANT'S PROCUREMENT SYSTEM. The applicant agrees to follow the requirements of the Kentucky Model Procurement Code 45A or KRS 424.260 and allow DOW pre-award review of proposed procurement actions that will use the SRF.

If your community has followed a different Kentucky procurement law, please discuss it with your project adminstrator at the Division of Water.

| TYPED NAME AND TITLE | SIGNATURE | DATE |
| :--- | :--- | :--- |

## 7. WATER RATES

## SECTION II - RETAIL WATER RATES

## Northern Kentucky Water District Service Area

1. Monthly Service Rate

| First | 1,500 cubic feet | $\$ 4.25$ per 100 cubic feet |
| :--- | ---: | ---: |
| Next | 163,500 cubic feet | $\$ 3.53$ per 100 cubic feet |
| Over | 165,000 cubic feet | $\$ 2.72$ per 100 cubic feet |

Customers in Subdistrict A*shall be assessed a monthly surcharge in the amount of
$\$ 8.17$
Customers in Subdistrict B *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $C^{*}$ shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $D$ *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict E*shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $\mathrm{F}^{*}$ shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $G$ *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $H$ *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict I *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $K^{*}$ shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $\mathbf{M}$ *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict $\mathbf{R}$ *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict RF *shall be assessed a monthly surcharge in the amount of
Customers in Subdistrict RL *shall be assessed a monthly surcharge in the amount of
*Subdistrict charges are reviewed annually.
*Detailed street listing within each Subdistrict can be found under Appendix A.
*Service connections on extensions or laterals from a subdistrict street will be assessed the appropriate Subdistrict charge.
2. Quarterly Rates

| First 4,500 cubic feet <br> Next 490,500 cubic feet <br> Over 495,000 cubic feet | $\$ 4.25$ per 100 cubic feet $\$ 3.53$ per 100 cubic feet $\$ 2.72$ oer 100 cubic feet |
| :---: | :---: |
|  | KENTUCKY <br> PUBLIC SERVICE COMMISSION |
|  | JEFF R. DEROUEN EXECUTIVE DIRECTOR |
| DATE OF ISSUE 7-29-2014 | TARIFF BRANCH |
|  | Suat findut |
| , | EFFECTIVE |
| TITLE Vice-President-Finance | 6/16/2014 |
| By Authority of Order of the Public Service Commission in Case No. 20 |  |

## SECTION II - RETAIL WATER RATES - Cont'd

3. Fixed Service Charge

| Meter Size | Monthly Service Charge | Quarterly Charge |
| :--- | :---: | :---: |
|  |  |  |
| $5 / 8^{\prime \prime}$ | $\$ 14.20$ | $\$ 28.40$ |
| $3^{\prime \prime}$ | $\$ 14.60$ | $\$ 29.90$ |
| $1^{\prime \prime}$ | $\$ 16.00$ | $\$ 34.30$ |
| $11^{\prime \prime}$ | $\$ 18.00$ | $\$ 40.50$ |
| $2^{\prime \prime}$ | $\$ 22.70$ | $\$ 56.90$ |
| $3^{\prime \prime}$ | $\$ 54.90$ | $\$ 177.00$ |
| $4^{\prime \prime}$ | $\$ 68.80$ | $\$ 221.80$ |
| $6^{\prime \prime}$ | $\$ 101.90$ | $\$ 327.80$ |
| $8^{\prime \prime}$ | $\$ 137.60$ | $\$ 447.90$ |
| $10^{\prime \prime}$ and Larger | $\$ 183.00$ | $\$ 584.80$ |

## SECTION III - WHOLESALE WATER SALES

Bullock Pen Water District
City of Walton
Pendleton County
$\$ 3.26$ per 1,000 gallons (or) $\$ 2.44$ per 100 cubic feet $\$ 3.26$ per 1,000 gallons (or) $\$ 2.44$ per 100 cubic feet $\$ 3.26$ per 1,000 gallons (or) $\$ 2.44$ per 100 cubic feet

## SECTION IV - MISCELLANEOUS SERVICE FEES

Returned Check Charge
Water Hauling Station
Service Charge
Overtime Charge
$\$ 20.00$
$\$ 5.68$ per 1,000 gallons
$\$ 25.00$ (See Definitions in Section I-A)
$\$ 60.00$ (To be applied to Customer account for Request for water turned On or Off outside the normally business hours.)

| KENTUCKY |  |
| ---: | ---: |
| PUBLIC SERVICE COMMISSION |  |
| JEFF R. DEROUEN |  |
| EXECUTIVE DRECTOR |  |
| TATE OF ISSUE | TARIFFBRANCH |
| DATE EFFECTIVE |  |
| ISSUED BY |  |
| TITLE Yice-President. Finance |  |

8. AUDIT REPORTS AND FINANCIAL STATEMENTS
9. PROJECT MAPS



## Contract 4 - Scada Improvements Campbell and Kenton County

10. CLEARINGHOUSE

The Northern Kentucky Water District anticipates submitting project SRF16-0027 (WX21117003) to the Kentucky State Clearinghouse by December 31, 2015.
11. WHOLESALE AGREEMENTS
$\therefore$ steven. Besmear Governor

Robert. wancerserretay Enuisomajerkal air Public

Timptiyt Lediome
Combustion
Deidatneík minulic Protection
Frankfort Kentucky 40602-0615
Caroline Pa it Clark
Comrisissioner
Telephone: (502) 5643940
F Ex (502) $564-3460$
pse.ky.goy

April 10, 2008
Thomas Nienaber
Berger, Cox Nienaber
401 Madison Avenue
Covington, KY 41011

RE: Filing No. TFS2008-00007
Water Supply Agreement between Bullock Pen Water District and Northern Kentucky Water District.

Dear Thomas Nienaber:
The above referenced filing has been received and reviewed. An accepted copy is enclosed for your files. You may also use the following link to access documents related to this filing.
http://psc.ky.gov/trf/TRFListFilings.aspx?ID=TFS2008-00007

Sincerely,


Dennis Brent Kiflley
Tariff Review Branch Manager

## WATER SUPPLY AGREEMENT

This Water Supply Agreement (hereinafter "Agreement") dated as of the
 Peceinter, 2007 , is made and entered by and between the Nortliern Kentucky Water District, 2835 Crescent Springs Road, P.O. Box 18640, Erlanger, Kentucky 41018 (hereinafter "NKWD") and the Bullock Pen Water District, One Farrell Drive, Crittenden, Kentucky 41030 (hereinafter "BPWD"). NKWD and BPWD will be collectively referred to herein as the "Parties."

## WITNESSETH:

WHEREAS, BPWD desires a reliable source of water for its present and future needs, and NKWD desires to continue to provide BPWD with a reliable source of water for its present and furture needs; and ${ }^{\text {: }}$

WHEREAS, BPWD desires to expand its provision of water service to certain residents in southern Kenton County and NKWD is willing to allow such expansion in certain locations and pursuant to certain terms; and

WHEREAS, NKWD and BPWD desire to establish certain terms for the possible sale of BPWD's current and future water lines and appurtenances located in southern Kenton County and the possible sale of BPWD's assets; and

WHEREAS, NKWD and BPWD desire to work together to promote and encourage responsible growth and development in Kenton County and Grant County; and

WHEREAS, NKWD and BPWD desire to have NKWD be BPWD's water supplier of choice for certain designated areas:

NOW, THEREFORE, in consideration of the premises and the mutual covenants and ' agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, NKWD and BPWD hereby agree as follows:

## ARTICLEI <br> EFFECTIVE DATE, TERM AND TERMINATION OF PRIOR AGREEMENT

A. This Agreement will take effect on the date that this Agreement and the rates and service set forth herein are approved by the Public Service Commission of the Commonwealth of Kentucky (hereinafter "PSC") or the date that the PSC declares that its approval of this Agreement and the rates and service set forth herein is npt required, whichever occurs first (hereinafter the "Effective Date"); provided that such approval dildell or made on or before May 1, 2008.
B. Once it takes effect on the Effective Date, this AgFeftent 2/1/2008 force and effect until December l, 2040.

OF KENTUCKY
EFFECTIVE

SECTION 9 (1)

ownership of the master meter and meter pit at the additional Point of Delivery will automatically transfer to NKWD without any further action by BPWD or NKKWD.
B. The master meter and the-meter-pit-located-at the existing Point of Delivery-were installed by BPWD and subsequently transferred to NKWD. NKWD will own, operate and maintain the master meters and meter pits at each Point of Delivery. NKWD will make annual tests and inspections of the meters and the meter pits and perform such other tests and inspections as NKWD may deem necessary. No correction will be made in the billing to BPWD unless a test or inspection shows that the metering is more than two percent ( $2 \%$ ) slow or fast. If any test or inspection shows that the metering is inaccurate by more than two percent ( $2 \%$ ) slow or fast, correction will be made to the billing to BPWD for the period during which NKWD and BPWD agree that the inaccuracy existed. If no such agreement is reached, it will be assumed that the error developed progressively from the date of the last meter test or inspection and an appropriate adjustment to billings will be made.
C. NKWD will use its best reasonable efforts to provide a delivery pressure of thirty (30) psi at each Point of Delivery, subject to the force majeure events described in Article VII of this Agreement. In the event that NKWD is unable to provide a delivery pressure of thirty ( 30 ) psi at each Point of Delivery and such failure to provide a delivery pressure of thinty (30) psi continues for a period in excess of twenty-four (24) consecutive hours or seventy-two (72) cumulative hours in any calendar month, BPWD may provide written notice to NKWD of such:failure and BPWD's obligation to purchase a minimum volume or flow rate of water of three hundred thousand $(300,000)$ gallons per day, averaged on a monthly basis, will be suspended for the period of time commencing when BPWD provides such written notice to NKWD and continuing until NKWD is again able to provide a delivery pressure of thity (30) psi at each Point of Delivery. BPWD may purchase water from other suppliers of water during any such suspension period.

## ARTICLETV WATER RATES AND SURCHARGES

A. BPWD shall pay NKWD's water rates and charges for wholesale customers as such rates and charges may be adjusted from time to time. NKWD may, from time to time, increase its water rates and charges, but no rate or charge increase will take effect unless and until it has been reviewed and approved by the PSC.
B. Within three (3) days of the Board of Commissioners of NKWD taking official action to approve the filing of an application with the PSC for an increase in NKWD's rates or charges, NKWD shall notify BPWD of such action. NKWD will provide BPWD with a copy of its application with the PSC for an increase in its rates or pharges witbin three (3) days uf its filing of the application with the PSC.

## PUBLIC SERVICE COMMISSION OF KENTUCKY

C. BPWD shall pay NKWD for the actual quantity of wateEff¢cratk NKWD unless BPWD's actual consumption for any morth does not excededztife hundred thousand ( 300,000 ) gallons per day, averaged on a monthly basis, ir which id Th Th ${ }^{2}$

to NKWD for the minimum volume or flow rate it is required to purchase under this Agreement which is three hundred thousand $(300,000)$ gallons per day, averaged on a monthly basis.
D...In addition to paying to NKWD the water rates and charges described in this Article IV, BPWD shall pay to NKWD each month an amount equal to ten (10) surcharges for NKWD's Subdistrict $C$ expansion project until the expiration of the forty (40) year surcharge term for each Point of Delivery. The Parties understand and agree that the amount of each surcharge may vary over time but will not exceed thirty dollars ( $\$ 30.00$ ) per month. The Parties further understand and agree that BPWD's obligation to pay surcharges may vary over time but will not exceed three hundred dollars ( $\$ 300.00$ ) per month for each Point of Delivery. NKWD will recalculate the amount of each surcharge ammually. In the event that the surcharge for NKWD's Subdistrict $C$ expansion project is eliminated due to prepayment, BPWD's obligation to pay the surcharges described in this Section IV.D will be terminated.

## ARTICLE $V$ BLLLING AND PAYMENT

Once each month, NKWD shall submit to BPWD an invoice for the amount due to NKWD under the terms of this Agreement for the prior month. All invoices shall be due and payable by BPWD to NKWD within twenty-one (21) days of receipt. A ten percent (10\%) penalty shall be added to each invoice that is not paid within twenty-one (21) days of its receipt by BPWD.

## ARTICLE VI AUDITS

NKWD shall cause its accounts to be audited by a firm of certified public accountants on an annual basis. A copy of the certified public accountants' audit report will be supplied to BPWD upon BPWD's written request. BPWD may cause the accuracy of any cost charged to it to be verified, at BPWD's own expense, by an examination of the accounts and records kept by NKWD, and NKWD shall make its accounts and records available to BPWD at reasonable times and locations for such purposes.

## ARTICLE VII FORCE MAJEURE

Except for the payments required of BPWD under Articles IV and $V$ above, either Party may suspend its performance under this Agreement if such Party's performance is prevented or delayed by a cause or causes beyond the reasonable control of such Party which could not have been avoided by the exercise of reasonable diligence by suqu Paty: Sach wauses may intiude,
 disturbances, breakage or damage to machinery or pipelines or partial orpatike faipurefof water
 acquiring knowledge of the cause requiring the suspension, notify the other fthegog witing of
 suspension. Performance shall be suspended only during the time that it is preventec (1) delayed

by the type of cause or causes described in this Article VII, and the Party whose performance is prevented or delayed shall endeavor to remove or overcome the cause or causes with all reasonable dispatch. Should NKWD suspend its performance in supplying water to BPWD, BPWD's obligations to pay for the water'rates and surcharges specified in Article-FV of this Agreement shall be suspended for the duration of NKWD's suspended performance. In the event of a system-wide shortage of water in NKWD's system, BPWD's supply of water under this Agreement will be reduced in the same ratio or proportion that the supply to NKWD's retail customers is reduced.

## ARTICLE VIII <br> RESPONSIBMITY AND INDENINTEICATION

NKWD and BPWD•shall be solely responsible for the construction, operation and maintenance of their respective water systems. NKWD and BPWD, to the extent permitted by law, expressly agree to defend, indemnify and hold harmless the other against all claims, demands, costs or expenses asserted by third parties and proximately caused by their negligence or willful misconduct in connection with the construction, operation or maintenance of their respective water systems.

## ARTICLE IX RESALE OF WATER

BPWD may resell any water it purchases from NKWD to any third party, subject to the written approval of NKWD, which approval will not be unreasonably withheld.

## ARTICLE X WATER LINE PROJECTS IN SOUTGERN KENTON COUNTY

A. Subject to the terms and conditions of this Agreement, NKWD grants to BPWD the right and authority to install water lines and appurtenances and to serve customers within the Special Area depicted on attached Exhibit A, which is incorporated herein.

The grant of right and authority contained in this Article $X$ is not intended to be an extension of BPWD's territory pursuant to KRS 74.115.
B. Projects for the installation of water lines and appurtenances within the Special Area may be designated and developed by BPWD at its discretion, considering standard engineering practices, customer potential and other factors. All projects and the location, proposed rates, surcharges and design of all projects shall be subject to the approval of NKWD, which approval will not be unreasonably witheld. The qoustrution of water appurtenances in the Special Area by BPWD shall meet the ninipoun fanstactipae standards and specifications adopted by NKWD and in effect at the time of construction. OF KENTUCKY
C. NKWD and BPWD shall cooperate in obtainipg all necessary apppeqpinis from all
 construction of water lines and appurtenances in the Special Area by BPWD. SECTION Y(1)

D. Nothing in this Agreement shall restrict or prohibit NKWD from extending its existing water lines and appurtenances to serve customers within the Special Area if BPWD has not already installed water lines and appurtenances and is serving such customers.
E. Nothing in this Agreement shall obligate or otherwise require BPWD to install or extend new water lines in the Special Area.

ARTICLE XI

## POSSIBLE PURCEASE OF EXISTING BPWD WATER LINES AND APPURTENANCES

A. BPWD currently owns and operates the water lines and appurtenances and related easements located. in southern Kenton County as depicted on attached Exhibit C, which is incorporated herein (hereinafter the "Existing Lines")
B. Should BPWD at any time decide to sell all or any part of the Existing Lines NKWD may purchase all or any part of the Existing Lines upon such terms and conditions as may be mutually agreed upon by BPWD and NKWD. Upon any such purchase, all affected customers shall become customers of NKWD without any additional payment to BPWD for such customers.
C. In the event that, at any time during the term of this Agreement or any renewal or extension thereof, BPWD entertains an offer or proposal from or to any person or entity to acquire or purchase all or any part of the Existing Lines, then BPWD shall notify NKWD of the offer or proposal in writing, setting forth all of the terms of such offer or proposal, including the price.
D. The sale of all or any part of the Existing Lines from BPWD to NKWD or to any other person or entity shall be subject to the approval of all governmental agencies possessing authority and jurisdiction to approve or disapprove of such sale at the time of sale.
E. Should BPWD sell all or any part of the Existing Lines to a person or entity other than NKWD, BPWD shall, prior to the sale of all or any part of the Existing Lines, ensure that its contract for sale of the Existing Lines to such other person or entity requires such other person or entity to purchase all water supplied to and through the Existing Lines from NKWD until at least December 1, 2040.

## ARTICLE XII <br> POSSIBLE PURCHASE OF NEW BPWD WATER LINES AND APPURTENANCES

A. All water lines and appurtenances and relate easerante greatizid eporatolicyion BPWD in southern Kenton County, including those installed or acqured dherptafffectivy Date,
 depicted on attached Exhibit C, shall be known hereinafter as the "New Lines. ${ }^{2} / 1 / 2008$
B. Should BPWD at any time decide to sell all or any part of the New Lines, NKWD shall have the right to purchase such New Lines from BPWD, provided that NKWD either: (1) also purchases the Existing Lines from BPWD on such terms and conditions negotiated with BPWF;-or"(2)-is able-to serve-the New Iines from NKWP's-system-without-purchasing-the Existing Lines. The purchase price for all or any part of the New Lines shall be equal to the initial, actual costs paid by BPWD for the water lines and appurtenances and related easements and any subsequent, actual costs paid by BPWD for improvements to them, based on a one hundred (100) year depreciation of the actual and unreimbursed construction costs of BPWD. The actual costs will not include any contributions toward the cost of installation from grants, service installations paid for through.new service/tap fees, Fiscal Court contributions or any other sources of contribution toward the costs of the New. Lines. Upon any such purchase, all affected customers shall become customers of NKWD without any additional payment to BPWD for such customers.
C. In the event that, at any time during the term of this Agreement or any renewal or extension thereof, BPWD entertains an offer or proposal from or to any person or entity to acquire or purchase all or any part of the New lines, then BPWD shall notify NKWD of the offer or proposal in writing, setting forth all of the terms of such offer or proposal, including the price.
$\therefore$ D. The sale of all or any part of the New Lines from BPWD to NKWD or to any other person or entity shall be subject to the approval of all governmental agencies possessing authority and jurisdiction to approve or disapprove of such sale at the time of sale.
E. Should BPWD sell all or any part of the New Lines to a person or entity other than NKWD, BPWD shall, prior to the sale of all or any part of the New Lines, ensure that its contract for sale of the New Lines to such other person or entity requires such other person or entity to purchase all water supplied to and through the New Lines from NKWD until at least December 1, 2040.

## ARTICLE XOL MERGER OR SALE OF BPWD ASSETS

A. In the event that, at any time during the term of this Agreement or any renewal or extension thereof, BPWD entertains an offer or proposal from or to any person or entity to merge with BPWD or to acquire all or substantially all of BPWD's assets, then BPWD shall notify NKWD in writing of the offer or proposal, setting forth all of the terms of such offer or proposal, including the price
B. Should BPWD merge with a person or entitp uther inam ivin wen BPMD shall ensure that the contract for merger requires all of thptempe agicippritions rifythision
 this Agreement, to be binding on the person or entity resulting from such mer EEEECTIVE 2/1/2008
C. Any sale of all or substantially all of the asset of BPRBD right to purchase the New Lines under Section XII.B of this Agreement, but Should BPWD sell
all or substantially all of its assets to a person or entity other than NKWD, then BPWD shall ensure that its contract for sale requires such person or entity to purchase all water supplied to or through the New Lines and the Existing Lines (to the extent the New Lines and the Existing Lines-have-not-been-purchased-by NKKWD.-to-be-purchased-from-NK-WD-until-at-least-December 1, 2040. Should BPWD sell all or substantially all of its assets to a person or entity other than NKWD, then BPWD and its purchaser shall be relieved of any and all terms and conditions of this Agreement except for those requirements set forth in this Section XIII.C.

ARTICLE XIV
COOPERATION BETWEEN NKWD AND BPWD
NKWD and BPWD agree to work together cooperatively to ensure that the purposes of this Agreement are achieved for the benefit of their respective customers and their respective water systems. Such cooperation may consist of the exchange of laboratory services, meter testing services, emergency field services, equipment purchase opportunities, billing assistance, treatment plant assistance, water quality compliance services and other services and assistance, all on such terms and conditions as may be mutually agreed upon by the Parties. The Parties will also work together to explore the possibility of other points of delivery in order to provide more efficient water service between NKWD and BPWD.

## ARTICLE XV

## NOTICES

Any notices allowed or required under this Agreement shall be in writing and shall be hand-delivered or mailed by certified mail, return receipt requested. Notice shall be effective upon receipt. Notices shall be given to the Parties at the following addresses or such other addresses as may be designated by the Parties in writing:

To NKWD:
Presidenbt/CEO
Northern Kentucky Water District.
2835 Crescent Springs Road
P.O. Box 18640

Erlanger, Kentucky 41019

To BPWD:
General Manager
Bullock Pen Water District
One Farrell Drive
Crittenden, Kentucky 41030

## ARTICLE XVI <br> ENTIRE AGREEMENT

This Agreement constitutes the entire understanding nad agreement between ine Paaries
 subject matter of this Agreement. There are no understandings, represen any kind, express or implied, not expressly set forth in this Agreement. No Frybeqfedwon of this Agreement shall be effective unless in writing and signed by
9.


## ARTICLE XYII <br> WATYERS

The failure of any Party at any time to enforce any provision of this Agreement, to exercise its rights under any provision, or to require a certain performance of any provision, shall in no way be construed as a waiver of such provision, nor in any way affect the validity of this Agreement or the right of a Party thereafter to enforce each and every provision.

## ARTICLE XYIII <br> BINDING NATURE; CONSENT REOUTRED FOR ASSIGNMIENT

This Agreement shall be binding on the Parties and on their successors and assigns. This - Agreement shall not be assigned by either Party without the written consent of the other Party.

## ARTICLE XIX <br> AUTHORITY TO EXECUTE AGREEMENT

NKWD possesses full authority to enter this Agreement as indicated by the lawful resolution of NKWD attached hereto as Exhibit D. BPWD possesses full authority to enter this Agreement as indicated by the lawful resolution of BPWD attached hereto as Exhibit E.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed in two originals, one for each Party.


Exhibit A - Special Area in Kenton County
Exhibit B - - Areas in Boone, Grant and Pendleton Counties
Exhibit C-- Existing Lines in southern Kenton County
Exhibit D - Authorizing Resolution of NKWD
Exhibit E - - Authorizing Resolution of BPWD

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
2/1/2008
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)


Executive Director




## WATER SUPPLY AGREEMENT

This Water Supply Agreement ("Agreement"), dated as of the 14 fld day of September_, 1999 is made and entered by and between the Pendleton County Water District, R.R. 5, Box 232, Falmouth, Kentucky ("Pendleton") and the Northern Kentucky Water Service District, 100 Aqua Drive, Cold Spring, Kentucky ("Northern"). Pendieton and Norithern shall be collectively referred to herein as the "Parties."

## WITNESSETH:

WHEREAS, Pendleton entered a Water Purchase Conitract with the Campbell County Kentucky Water District ("Campbell") dated July 24, 1972, in which Pendleton agreed to purchase water furnished by Campbell pursuant to certain terms and conditions for a period of twenty years; and

WHEREAS, Pendleton and Campbell agreed to extend the length of the Water Purchase
Contract for an additional twenty-five years by a Modification dated May 23, 1977; and
WHEREAS, Pendleton and Campbell agreed to further extend the length of the Water
Purchase Contract to the year 2041 by a Modification dated November 30, 1995; and
WHEREAS, Northern is the successor to Campbell as the result of the merger of Campbell with Kenton County Water District No. 1 on or about January 1, 1997; and

WHEREAS, Pendleton and Northern are duly organized water districts pursuant to Cliapter 74 of the Kentucky Revised Statutes and other applicable law; and

WHEREAS, Pendleton and Northern desire to terminate the Water Purchase Contract dated July 24, 1972, as amended by the Modification dated May 23, 1977 and the Modification dated November:30, 1995, and to set forth a new agreement for the continuing purchase and sale of water by and between Pendleton and Northern;

NOW THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which=are-expressly:acknowledged; the Parties hereby agree as follows:-

## ARTICLEI

## NATURE OF AGREEMENT

This Agreement is a water supply agreement in which Northem agrees to supply water to Peñdleton and Pendleton agrees to purchàse water from Northern pursuant to the terms and conditions set forth herein.

ARTICLE II

## EFFECTIVE DATE AND TERM

This Agreement shall take effect when the rates and service set forth herein are approved by the Public Service Commission of the Commonwealth of Kentucky ("PSC") or when the PSC determines that it lacks jurisdiction over the rates and service set forth herein, whichever occurs first; provided that such approval or determination by the PSC is given or made on or before January 1, 2000. Once it takes effect, this Agreement shall continue in full force and effect until January 31, 2042.

## ARTICLE III

## CONSTRUCTION

Northern shall construct and install a 12 " minimum diameter water main extending along Kentucky Route 17 from Pinér, Kentucky to the Kenton County/Peṇdleton County line (the "Northern Water Main"). Such water main shall be installed at Northern's expense or with funding acquired by Northem and
shall be fully completed and operational no later than two hundred and seventy (270) days after the execution of this Agreement.

Simultaneous with the construction and installation of the Northern Water Main, Pendleton shall, at no cost to Northern, construct and install a water main to receive water from the Northern Water Main at the Kenton County/Pendleton County line (the "Pendleton Water Main"). Within one hundred and eighty (180) days of the Northern Water Main being fully completed and operational, but no sooner than January 1, 2001, Pendleton, at no cost to Northern, shall install a master meter and meter pit at the point where the Northern Water Main terminates at the Kenton County/Pendleton County line and shall'complete a connection between the Northern Water Main and the Pendleton Water Main. Pendleton shall install the master meter and construct the meter pit in accordance with Northern's specifications and Rates, Rules and Regulations.

After the master meter and the meter pit are installed and constructed, they shall become the property of Northern as soon as they are accepted by Northern. The ownership of the master meter and the meter pit shall be transferred from Pendleton to Northern at no cost or charge to Northern. Northern shall allow Pendleton reasonable access to the meter pit for the purpose of monitoring water flow and for the purpose of installing and maintaining telemetry equipment and valving.

ARTICLEIV

## POINTS OF DELIVERY

Northern shall provide water to Pendleton at the following two points of delivery: 1) the discharge șide of the master meter to be installed at or near a point. where Kentucky Route 17 meets the Kenton County/Pendleton County line (the "Kentucky 17 Point of Delivery"); and 2) the discharge side of
the existing master meter located at the intersection of U.S. Route 27 and Old U.S. Route 27 at Grants Lick, Kentucky (the "U.S. 27 Point of Delivery").

## ARTICLE V

## VOLUME OF WATER

As soon as the construction set forth in Article III above is completed, Northern shall supply tọ Pendleton, and Pendleton shall accept and receive from Northern, a minimum volume of ninety thousand $(90,000)$ gallons per day of water, averaged on a monthly basis, at the Kentucky 17 Point of Delivery. Northern shall not be required to supply to Pendleton a volume of more than four hundred (400) gailons per minute of water at the Kentucky 17 Point of Delivery.

As soon as this Agreement becomes effective as set forth in Article II, Northern shall supply to Pendleton, and Pendleton shall accept and receive from Northern, a minimum volume of sixty thousand $(60,000)$ gallons per day of water, averaged on a monthly basis, at the U.S. 27 Point of Delivery. Northern shall not be required to supply to Pendleton a volume of more than three hundred (300) gallons per minute of water at the U.S. 27 Point of Delivery.

By a written addendum duly executed by the Parties and referencing this Agreement, the Parties may agree to increase the minimum and maximum volumes of water to be sold and purchased at either or both the Kentucky 17 Point of Delivery and the U.S. 27 Point of Delivery. In no event shall Northern be required to supply water at either point of delivery in excess of the maximum volumes set forth in this Article or in any duly executed addendum.

## ARTICLE VI

## PRESSURE AND QUALITY OF WATER

Northern does not guarantee any specific water pressure at either the Kentucky 17 Point of Delivery or the U.S. 27 Point of Delivery but it intends to provide, absent unusual or unforeseen circumstances, a minimum hydraulic gradient of 1036 under Northern's maximum day demand conditions at the Kentucky 17 Point of Delivery at a maximum flow of 400 gallons per minute and a minimum hydraulic gradient of 930 under Northern's maximum day demand conditions at the U.S. 27 Point of Delivery at a maximum flow of 300 gallons perminute. Northern covenants to use reasonable care and diligence in the operation and maintenance of its water system to prevent and avoid abnormal interruptions and fluctuations of supply and pressure. Pendleton covenants to use reasonable care and diligence in the maintenance of its system to prevent and avoid abnormal interruptions and fluctuations in its acceptance of water under this Agreement.

All water supplied by Northern under this Agreement shall be potable, treated water meeting all applicable quality and purity standards of all appropriate state and federal regulatory agencies. The water shall be of the same quality as that furnished to Northern's retail customers.

## ARTICLE VII

## WATER RATES

The initial water rates to be paid to Northern for water supplied under this Agreement shall be $\$ 1.44$ per one thousand ( 1000 ) gallons for water supplied at the Kentucky 17 Point of Delivery and $\$ 1.93$ per one thousand (1000) gallons for water supplied at the U.S. 27 Point of Delivery:

Pendleton shall pay Northern for the minimum volumes set forth in Aricie $V$ above or in any duly executed addendum if Pendleton's actual consumption does not reach such minimum volumes. With respect:to:the-Kentucky-17. Point of:Belivery; Pendleton's obligation to pay for the minimumi volume shall commence one hundred and eighty (180) days after the Northern Water Main is fully completed and operational, bui no sooner than January $\uparrow, 2001$, regardiless of wheiher Pendieton nas compieied the installation and construction of the master meter, the meter pit and the Pendleton Water Main. With respect to the U.S. 27 Point of Delivery, Pendleton's obligation to pay for the minimum volume shall commence on the effective date described in Article II above.

The Parties understand and agree that the rate of $\$ 1.93$ per one thousand (1000) gallons is the rate currently in effect for the sale and purchase of water at the U.S. 27 Point of Delivery and that by entering this Agreement Northern is agreeing to provide Pendleton a lower initial rate for water to be supplied at the Kenitucky 17 Point of Delivery. The Parties further understand and agree that Northern intends to make application to the PSC for an adjustment in its retail and wholesale rates within three (3) years of the execution of this Agreement and that the rates for the Kentucky 17 Point of Deivery and the U.S. 27 Point of Delivery should be adjusted at that time.

The Parties further understand and agree that Northern may, irom time to time, increase the water rates it charges Pendleton under this Agreement but that, as long as the PSC has jurisdiction over the rates Northerri charges Pendleton, no rate increase shall take effect unless and until it has been reviewed and approved by the PSC.

## ARTICLE VIII

## PAYMENT OF SURCHARGES

In addition to paying to Northern the water rates described in Article VII above, Pendleton shall pay to Northern an amount equal to ten (10) surcharges for Northern's Subdistrict C expansion project until the expiration of the forty (40) year surcharge term. The Parties understand and agree that the amount of each surcharge may vary over time but shall not exceed $\$ 30.00$ per month. The Parties further understand and agree that Pendleton's obligation under this Article may vary over time but shall not exceed $\$ 300.00$ per month.

Pendleton's obligation under this Article shiall commence thirty (30) days after the Northern Water Main is fully completed and operational, regardless of whether Pendleton has completed the installation and construction of the master meter, meter pit and the Pendleton Water Main.

## ARTICLEIX

## FLOW MEASUREMENT

Northern shall own, operate and maintain the water meters at the Kentucky 17 Point of Delivery and the U.S. 27 Point of Delivery. Northern shall make annual tests and inspections of the meters and such other tests and inspections as Northern may deem necessary. No correction shall be made in the billing to Pendleton unless a test or inspection shows that the metering is more than two percent ( $2 \%$ ) slow ör fast. If any test or inspection shows that the metering is inaccurate by more than two percent ( $2 \%$ ) slow or fast, correction shall be made in the billing to Pendleion for the period during which Northern and Pendleton agree that the inaccuracy existed. If no such agreement is reached, it shall be assumed that
the error developed progressively from the date of the last meter test and an appropriate-adjustment to billings shall be made.

## ARTICLE X

## BILLING AND PAYMENT

Once each month, Northern shall submit to Pendleton an invoice for the amount due to Northern under the terms of this Agreement for the prior month. All such invoices shall be due and payable by Pendleton to Northern within twenty-one (21) days of receipt. A $10 \%$ penalty shall be added to each invoice that is not paid within twenty-one (21) days of its receipt by Pendleton.

## ARTICLEXI

## AUDITS

Northern shall cause its accounts to be audited by a firm of certified public accountants on an annual basis. A copy of the ceitified. public accountants' audit report shall be supplied to Pendleton upon Pendleton's request. Pendleton may cause the accuracy of any cost charged to it to be verified, at Pendleton's own experise, by an examination of the accounts and records kept by Northern, and Northern shall make its accounts and records available to Pendleton at reasonable fimes and locations for such purposes.

## ARTICLE XII

## FORCE MAJEURE

Except for the payments required of Pendletọn under Articles VII and VIII above, either Party may suspend its performance under this Agreement if such Party's performance is prevented or
delayed by a cause or causes beyond the reasonable control of such party which could not have been avoided by the exercise of reasonable diligence by such Pariy. Such causes may include, but shall not be limited to, acts of God, acts of war, not, fire, explosion, lockouts or other labordisturbances, breäkage or damage to machinery or pipelines, or partial or entire failure of water system. The performance of Norihern may also be suspended if circumstances cause Northern's system-wide demand to exceed Northern's production and distribution capability. The Party asserting a right to suspend performance must, within a reasonable time of acquiring knowledge of the cause requiring the suspension, notify the other Party in writing of the cause of suspension, the performance suspended, and the anticipated duration of the suspension. Performance shall be suspended only during the time that it is prevented or delayed by the type of cause or causes described in this Article, and the Party whose performance is prevented or delayed shall endeavor to remove or overcome the cause or causes with all reasonable dispatch.

In the event of a system-wide shortage of water in Northern's system, Pendleton's supply of water under this Agreement shall be reduced in the same ratio or proportion that the supply to. Northern's retail customers is reduced. Northern will endeavor to include a provision similar to the one immediately above in the other wholesale water supply agreements it is currently negotiating.

ARTICLE XIII

## RESPONSIBILITY AND INDEMNIFICATION

Northern and Pendleton shall be solely responsible for the construction, operation and maintenance of their respective water systems. Northern and Pendleton, to the extent permitted by law, expressly agree to defend, indemnify and save harmless the other against all claims, demands, cosis, or
expenses asserted by third parties and proximately caused by their negligence or wilful misconduct in connection with the construction, operation and maintenance of their respective water systems.

ARTICLE XIV

## APPROVAL OF AGREEMENT

The Parties understand and agree that the rates and service set forth in this Agreement must be submitted to and approved by the PSC.

## ARTICLE XV

## TERMINATION OF PRIOR CONTRACT

Northern and Pendleton agree that the Water Purchase Contract between Pendleton and Campbell dated July 24, 1972, as amended by the Modification dated May 23, 1977 and the Modification dated November 30, 1995, shall be terminated and cease to be in effect when this Agreement becomes effective as set forth in Article II above.

## ARTICLE XVI

## NOTICES

Any notices allowed or required under this. Agreement shall be in writing and shall be hand-delivered or mailed by certified mail, return receipt requested. Notice shall be effective upon receipt. Notices shall be given to the Parties at the following addresses or such other addresses as may be designated by the Parties:

As to Northern:

General Manager
Northem Kentucky Water Service District
100.Aqua Drive
P.O. Box 220

Cold Spring, KY . 41076
As to Pendieton:

General Manager
Pendletoṇ County Water District
R. 5, Box 14
P.O. Box 232

Falmouth, KY 41040

## ARTICLE XVII

## ENTIRE AGREEMENT

This Agreement constitutes the entire understanding and agreement between the Parties and supersedes all other understandings and agreements between the Parties with respect to the subject matter of this Agreement. There are no understandings, representations, or warranties of any kind, express or implied, not expressly set forth in this Agreement. No modification of this Agreement shall be effective unless in writing and signed by both Parties.

## ARTICLE XVIII.

## WAIVERS

The failure of any Party at any time to enforce any provision of this Agreement, to exercise its rights under any provision, or to require a certain performance of any provision, shall in no way be construed as a waiver of such provision, nor in any way affect the validity of this Agreement or the right of the Party thereafter to enforce each and every provision.

ARTICLE XIX
ASSIGNMENT

This Agreement shall not be assigned by either Party without the written consent of the
other Party.
IN WITNESS WHEREOF, the Parties hereto, acting under the authority of their respective
governing bodies, have caused this Agreement to be duly executed in duplicate, each of which shall constitute an original.

PENDLEETON COUNTY WATER DISTRICT By:


Printed Name: Louis $M_{c}$ Clanahan
Title: $\qquad$ Treasurer


Title: $\qquad$
.waler.supply agr

This Amendment to Water Supply Agreement ("Agreement'), dated as of the 19ih_day of Dec ,2002is made and entered by and between the Pendleton County Water District, R.R. 5, Box 232, Falmouth, Kentucky ("Pendleton") and the Northern Kentucky Water District, $100^{\circ}$ Aqua Drive, Cöld Spring, Kentucky ("Northern").

## WITNESSETH:

WHEREAS, Pendleton and Northern entered a Water Supply Agreement dated September 14, 1999 ("Water Supply Agreement") in which Pendleton and Northern agreed, among other things, that Pendleton would purchase water furnished by Northern and Northem would sell water to Pendleton; and

WHEREAS, the expiration date of the Water Supply Agreement was established as January. 31, 2042; and

WHEREAS, Pendleton and Northern desire to amend the Water Supply Agreement to extend the expiration date to January 31, 2047;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, Pendleton and Northem hereby agree as follows:

1. The last sentence of Article II of the Water Supply Agreement is amended by deleting the word' and figures "January 31, 2042" and substituting therefore the word and figures "January 31, 2047."
2. All rights, duties and responsibilities of Pendleton and Northern as set forth in the Water Supply Agreement remain the same.

IN WITNESS WHEREOF, Pendleton and Northern, acting under the authority of the respective goverming bodies, have caused this Amendment to be duly executed in duplicate, each of which will constitute an original.

## PENDLETON COUNTY WATER DISTRICT



NORTHERN KENTUCKY WATERDISTRICT


## AGREEMENT FOR CONDITIONAL CONSENT FOR SERYICE

This_Agreement for Conditional Consent for Service (hereinafter "Agreement") is made and entered into this $/ 5{ }^{t}$ day of Jdrwary, 2005 by and between the East Pendleton County Water.District, a public water district oxganized and operating under Chapter 74 of the Kentucky Revised Statutes (hereinafter "East Pendleton") and the Northern Kentucky Water District, a public water district organized and operating under Chapter 74 of the Kentucky Revised Statutes (hereinafter "Northern"). East Pendleton and Northern shall be referred to collectively herein as the "Parties".

WITNESSETH:
WHEREAS, East Pendleton desires to install a water main extension and appurtenances along approximately 0.7 miles of Baynum Hill Road in southern Campbell County as roughly depicted on the attached Exhibit A which is incorporated herein by reference (hereinafter, the "Tmprovement"); and

WHEREAS, the Improvement will be located within Northern's service area; and
WHEREAS, East Pendleton has requested Northern's consent for East Pendleton to install the Improvement and to serve a portion of Northem's service area and Northern is willing to provide its conditional consent pursuant to certain terms and conditions:

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Parties hereby agree as follows:

1. Northern consents to East Pendleton's installation of the Improvement within Northern's service area.
2. East Pendleton, at its expense, shall install and maintain the Improvement in accordance with all applicable, federal and state regulatory requirements and East Pendleton's rates, rules and regulations and water main specifications.
3. Northern consents and agrees to allow East Pendleton to serve the customers in Northern's service area who are located adjacent to the Improvement; provided, however, that Northern may terminate its consent with respect to any such customer whenever Northern determines, in its sole discretion, that it is able to serve such customer.
4. At such time that Northern provides notice to East Pendleton that it can serve all or any portion of the customers described in the immediately preceding paragraph and at all times thereafter, Northern shall have the option to purchase from

East Pendleton all of East Pendleton's right, title and interest in and to the Improvement at a purchase price equal to the actual cost paid for the Improvement by East Pendleton, based on a one hundred (100) year depreciation of the actual and unreimbursed construction costs of East Pendleton. Upon the exercise of such purchase option, all affected customers shall become customers of Northern.
5. This Agreement constitutes a conditional and temporary consent by Northern for service within its service area by East Pendleton for Baynum Hill Road only and does not constitute a permanent extension into an adjoining county as contemplated by section 74.115 of the Kentucky Revised Statutes.
6. The terms of this Agreement shall remain in effect for a period of forty (40) years.
7. This agreement may not be assigned by either Party without the written consent of the other Party.

IN WITNESS WHEREOF, the Patties, acting under the authority of the respective governing bodies, have caused this Agreement to be duly executed in duplicate, each of which shall constitute an original.

## EAST PENDLETON WATER DISTRICT

Signature $\qquad$
Printed Name: $\qquad$
Title: $\qquad$

NORTHERN KENTUCKY WATER DISTRICT


SHCHPlWater Districtlagrecment for Service-East Pendicton

Baynum Hill - East Pendleton Co. Water Extension Request

## WATER SUPPLY AGREEMENT

This Water Supply Agreement (hereinafter "Agreement") is made and entered
 between the City of Walton, Kentucky, a municipal corporation and a Kentucky city of the Fifth Class having a mailing address of 40 North Main Street, P.O. Box 95, Walton, Kentucky 41094-0095 (hereinafter the "City") and the Northera Kentucky Water District, a water district organized and operating under Chapter 74 of the Kentucky Revised Statutes and having a mailing address of 2835 Crescent Springs Road, Erlanger, Kentucky 41018 (hereinafter the "District"). Together the City and the District will be referred to herein as the "Parties".

WHEREAS, in 1979 the City constructed a twelve-inch water main along Kentucky Route 16 from the Boone-Kenton County boundary to the terminus of the :District's then-existing eight-inch water line at Kentucky Route 16 and Wilson Road, and the City transferred said line to the District for the purpose of purchasing water from the District; and

WHEREEAS, the District has owned, operated and maintained the twelve-inch water main along Kentucky Route 16 and has been the sole and exclusive supplier of water to the City since 1979; and

WHERREAS, the District desires to continue to be the City's sole and exclusive supplier of water for an additional 40 years; and

WHREREAS, the City desires to serve certain portions of the District's service area in Kenton County which the City has annexed, and the District does not object to such service provided that certain terms and conditions are satisfied; and

WHEREAS, the Parties desire to memorialize in writing their agreement regarding these and related matters;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Parties hereby agree as follows:

1. Quality and Quantity. During the term of this Agreement and any renewal or extension thereof, the District will furnish to the City at the points of delivery hereinafter specified, potable, treated water meeting all applicable quality and purity standards of all appropriate state and federal regulatory agencies in such quantity as may be required by the City not to exceed one million five hundred thousand $(1,500,000)$ gallons per day. The District shall not be obligated to provide water to the City in excess of one million five hundred thousand $(1,500,000)$ gallons per day. Should the City's demand exceed one million five hundred thousand $(1,500,000)$ gallons per day, the District will have the option to provide the excess before the City may purchase the excess from any other supplier of water. If the District is unable or unwilling to provide the excess and the City is required to purchase the excess from another supplier of water, the District shall remain the provider of at least one million five hundred thousand $(1,500,000)$ gallons per day to the City for every day on which the City purchases excess from another supplier of water.
2. Points of Delivery and Pressure. The District will provide water to the City at the following two points of delivery: a.) the discharge side of the master meter located at or near a point where Kentucky Route-16 meets the Boone County/Kenton County line (the "Kentucky Route 16 Point of Delivery"); and b.) the discharge side of a master meter to be installed, at the City's expense, at or near a point where U.S. Route 25 meets the Boone County/Kenton County line (the "U.S. Route 25 Point of Delivery"). The delivery of water at the U.S. Route 25 Point of Delivery will not commence until a meter pit is constructed and a master meter is installed. The City, at its expense, will construct the meter pit in accordance with the District's specifications and will pay the District for the cost of the master meter which will be installed by the District. After installation, the master meter will be owned and maintained by the District.

The Parties, in writing, may agree to one or more additional points of delivery.

Subject to the force majeure events described in Section 11 of this Agreement, the District will use its best reasonable efforts to furnish water at the two points of delivery at a reasonably constant pressure of approximately 35 psi . If a greater pressure than that normally available at the two points of delivery is required by the City, the cost of providing such greater pressure shall be the responsibility of the City.
3. Term of Agreement. This Agreement will take effect on the Effective Date and will continue for a term of forty (40) years thereafter. The Parties acknowledge that this Agreement will require submission to the Kentucky Public Service Commission (hereinafter the "PSC") for approval. If the PSC disapproves this Agreement or makes any material modifications to the language herein, then either Party, in its sole discretion, may terminate this Agreement by giving written notice to the other Party via certified mail, return receipt requested, within sixty (60) days of receipt of notice from the PSC of such disapproval or material language modification. Prior to giving any such notice of termination, the Party desiring termination shall meet with the other Party and negotiate in good faith in the interest of resolving any issues and restoring or maintaining this Agreement. The termination of this Agreement shall be effective on the earlier of (i) receipt of the written notice of termination by the Party to whom it is addressed, or (ii) three days after the written notice of termination is deposited in the U.S. mail, postage prepaid. This Agreement may be renewed or extended as may be agreed upon by the City and the District in writing.
4. Metering Equipment and Flow Measurement. The District will own, operate and maintain the master meter located at the Kentucky Route 16 Point of Delivery and, upon its installation, the master meter located at the U.S. Route 25 Point of Delivery. The District will make annual tests and
inspections of the two meters and such other tests and inspections as the District may deem necessary. No correction will be made in the billing to the City unless a test or inspection shows that the meetering is more than two percent (2\%) slow or fast. If any test or inspection shows that the metering is inaccurate by more than two percent (2\%) slow or fast, correction will be made to the billing to the City for the period during which the District and the City agree that the inaccuracy existed. If no such agreement is reached, it will be assumed that the error developed progressively from the date of the last meter test and an appropriate adjustment to billings will be made.
5. Records and Audits. The District will cause its accounts to be audited by a firm of certified public accountants on an annual basiṣ. A copy of the certified public accountants' audit report will be supplied to the City upon the City's written request. The District will make its accounts and records available to the City for examination at reasonable times and locations.
6. Billing Procedure. No later than the $5^{\text {th }}$ day of each month, the District will furnish the City with an itemized statement of the amount of water furnished to the City during the preceding month and the amount owed to the District for all water rates, charges and surcharges due for the preceding month.
7. Water Rates, Charges, Surcharges and Payment Date. The City shall pay the District's water rates and charges for wholesale customers as such ratès and charges may be adjusted from time to time. The District may, from time to time, increase its water rates and charges, but no rate or charge increase will take effect unless and until it has been reviewed and approved by the PSC.

In addition to paying to the District the water rates and charges stated above, the City shall pay to the District each month an amount equal to ten (10) surcharges for the District's Subdistrict C project until the expiration of the subdistrict's forty (40) year surcharge term. The Parties understand and agree that the amount of each surcharge may vary over time but will not exceed $\$ 30.00$ per month. The Parties further understand and agree that the City's obligation under this paragraph may vary over time but will not exceed $\$ 300.00$ per month. The District will recalculate the amount of each surcharge and the City's obligation under this paragraph annually. The City's obligation to pay an amount equal to ten (10) surcharges each month shall commence thirty (30) days after the master meter is installed at the U.S. Route 25 Point of Delivery, regardless of when the City actually begins receiving water at the U.S. Route 25 Point of Delivery.

No later than the $20^{\text {th }}$ day of each month, the City shall pay to the District the full amount owed for all water rates, charges and surcharges for the preceding month.
8. Transfer of Portion of Service Area. The City has annexed three areas within the District's service area in Kenton County. Each of these three areas is depicted and identified by the letter "A" on attached Exhibit $A$, which is incorporated herein by reference and made a part of this Agreement. Together, these three areas will be referred to herein as the "Annexed Areas". The City also has plans to annex the area identified by the letter "B" on attached Exhibit A. This area of proposed annexation will be referred to herein as "Area B". The District hereby grants to the City the right and authority to serve all customers located within the Annexed Areas and Area B, if and when Area B is annexed by the City. All water lines and appurtenances installed by the City within the Annexed Areas and Area B will be installed in accordance with specifications approved by the Kentucky Division of Water and the City. The minimum water main size will be eight (8) inches, and all water mains will be either ductile iron pipe, class 50 or greater, or PVC C900 DR14. The installation of all such water lines and appurtenances will be at no cost to the District.
9. Remedy for Sale of System or Breach. The City and the District recognize the value of this Agreement to the District as the sole and
exclusive supplier of water to the City and also the value to the City of the right and authority to serve the Annexed Areas and Area B, if and when süch area is annexed. Should the City, at any time during the tem of this Agreement or any renewal or extension thereof, either a) merge, sell, transfer or alienate all or any portion of its water distribution system with or to a party other than the District or b) commence purchasing water from any supplier of water other than the District (except in the case if and when the City's demand exceeds one million five hundred thousand $(1,500,000)$ gallons per day and the District is unable to provide the excess), the right and the authority of the City to serve the Annexed Areas and Area B, if such area has been annexed by the City, shall immediately cease and be terminated and all customers located within the Annexed Areas and Area B shall be transferred to the District as retail customers of the District at no charge or cost to the District. At such time, all of the City's right, title and interest in the water lines and appurtenances located within the Annexed Areas and Area B, if applicable, shall be immediately and automatically transferred to and vested in the District at no charge or cost to the District. In addition, the City shall pay all costs and expenses of any and all engineering and construction of water lines and appurtenances necessary for the District to become the direct supplier of water to the customers located within the Annexed Areas and Area B, if applicable. The remedy set forth in this Section 9 is provided in recognition of the damages to the District should the City sell, transfer or alienate its water distribution system or commence purchasing water from
any other supplier. This remedy is not provided as a penalty. In addition to this remedy, the District will have available any and all remedies available in law and equity.
10. Responsibility and Indemnification. The City and the District each shall be solely responsible for the construction, operation and maintenance of its own water system. The City and the District, to the extent permitted by law, expressly agree to defend, indemnify and hold harmless the other against any and all claims, demands, costs or expenses asserted by third parties and proximately caused by their negligence or willful misconduct in connection with the construction, operation or maintenance of their respective water systems.
11. Force Majeure. Except for the payments required of the City for water rates, charges and surcharges, either Party may suspend its performance under this Agreement if such Party's performance is prevented or delayed by a cause or causes beyond the reasonable control of such Party which could not have been avoided by the exercise of reasonable diligence by such Party. Such causes may include, but shall not be limited to, act of God, act of war, niot, fire, flood, power failure, earthquake, explosion, lockout or other labor disturbance, water line break, breakage or damage to machinery or pipelines, and partial or entire failure of water system. The Party asserting a right to suspend performance must, within a reasonable time of acquiring knowledge of the cause requiring the
suspension, notify the other Party in writing of the cause of suspension, the performance suspended, and the anticipated duration of the suspension. Performance will be suspended only during the time that it is prevented or delayed by the type of cause or causes described in this paragraph, and the Party whose performance is prevented or delayed will endeavor to remove or overcome the cause or causes with all reasonable dispatch. In the event of a system-wide shortage of water in the District's system, the City's supply of water under this Agreement will be reduced in the same ratio or proportion that the supply to the District's other customers is reduced.

## 12. Right of First Refusal in Event of Merger or Sale of the City's System.

 In the event that, at any time during the term of this Agreement or any renewal or extension thereof, the City entertains an offer for any person or entity to merge with, acquire or purchase all or any part of the City's water distribution system, and if the City desires to accept such offer, the City shall notify the District in writing setting forth all of the terms of such offer, including the price, if any, and advising the Distriet of the City's intention to accept the same. The District shall have sixty (60) days from receipt of such written notice to notify the City in writing that the District intends to merge with, acquire or purchase the City's water distribution system or any part thereof on such terms as are set forth in such written notice and at a purchase price as hereinafter described, if applicable. The purchase price for the District, if applicable, shall be either a) the price setforth in such written notice if the part of the City's water distribution system proposed to be merged, acquired or purchased does not include any of the Annexed Areas or Area $B$ or $b$ ) the price set forth in such written notice minus the amount of such price as is reasonably negotiated by the City and the District in good faith as representing or corresponding to all parts of the Annexed Areas and Area B included in the proposed merger, acquisition or purchase, if the part of the City's water distribution system proposed to be merged, acquired or purchased includes all or any parts of the Annexed Areas and Area B (the purchase price calculated under this sentence shall be hereinafter referred to as the "District Price"). If the District timely notifies the City of its intention to merge with, acquire, or purchase as described herein, the District shall consummate the merger, acquisition, or purchase within one hundred eighty (180) days from the date it first received written notice of the offer from the City. If the District does not give written notice of its intention to merge, acquire or purchase as set forth in this Section 12, or does not consummate the transaction within the one hundred eighty (180) day time period, then the City, subject to the limitations set forth in Section 9 of this Agreement, may proceed with the merger, acquisition or purchase of the relevant part of the City's water distribution system with or by such other person or entity at the price, if any, and on the terms set forth in the offer from or proposed to such other person or entity, and this Right of First Refusal shall remain in effect and be binding upon the City with respect to any other part of the City's water distribution system not yet offered for
merger, acquisition or purchase with or by the District. In no event, however, shall the City merge, transfer or sell all or any portion of the City's water distribution system with or to such other person or entity or to any other person or entity at a price, if applicable, or on terms less favorable to the City than those described in the written notice provided to the District without again notifying the District of such revised price, if applicable, and terms and giving the District the same time periods for notice of the District's intention to exercise its option and consummation of the merger, acquisition, or purchase as previously set forth in this Section 12 on such revised terms and at the new District Price, if applicable. This Right of First Refusal shall remain in full force and effect during the entirety of the term of this Agreement and any and all renewals and extensions thereof. In calculating and applying the one hundred eighty (180) day time limit set forth in this Section 12 for the District to consummate the merger, acquisition or purchase, each day that this Agreement is in the possession of the PSC for review and approval shall be deducted from the days that have actually elapsed since the District first received written notice of the offer from the City.
13. Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Parties and supercedes all other understandings and agreements between the Parties with respect to the subject matter of this Agreement. There are no understandings, representations or warranties of any kind, expressed or implied, not
expressly set forth in this Agreement. No modification or amendment of this Agreement shall be effective unless in writing and executed on behalf of both Parties.
14. Termination of Prior Agreement. The Agreement between Kenton County Water District No. 1 (predecessor to the District) and the City of Walton, Kentucky dated as of the $21^{\text {st }}$ day of August 1979 and relating to the supply of water and other matters will automatically be terminated on the Effective Date; provided, however, that such agreement will immediately and automatically be revived and considered to be in full force and effect if either party terminates this Agreement pursuant to Section 3 herein.

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15. Assigament. This Agreement shall be binding on all successors and assigns of the Parties but shall not be assigned by either Party without the written consent of the other Party.
16. Waivers. The failure of any Paity at any time to enforce ainy provision of this Agreement, to exercise its rights under any provision, or to require a certain performance of any provision shall in no way be construed a waiver of such provision nor in any way affect the validity of this Agreement or the right of the Party thereafter to enforce each and every provision.
17. Authority to Execute Agreement. The City possesses full authority to enter this Agreement as indicated by the lawful resolution/order of the City attached hereto as Exhibit B. The District possesses füll authority to . enter this Agreement as indicated by the lawful resolution of the District attached hereto as Exhibit C.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed in two originals, one for each Party.


NORTHERN KENTUCKY WATER DISTRICT


Attested:


Exhibit A-Diagram of Annexed Areas and Area B
Exhibit B-Resolution/Order of the City of Walton
Exhibit C-Resolution of the Northern Kentucky Water District.


THE NORTHERN KENTUCKY WATER DISTRICT

A RESOLUTION REGARDING TEE EXECUTION OF A WATER SUPPLY AGREEMENT WITE TEE CITY OF WALTON, KENTUCKY

BE IT RESOLVED by the Board of Commissioners of the Northern Kentucky Water District (the "District") that the proposed Water Supply Agreement with the City of Walton, Kentucky is approved.

BE IT FURTHER RESOLVED that the District execute and enter the Water Supply Agreement.

BE IT FURTHER RESOLVED that the Chair of the Board of Commissioners is authorized, empowered and directed to execute the Water Supply Agreement by and on behalf of the District.

AGREED, DETERMINED and RESOLVED this $23^{\text {rd }}$ day of June, 2006 at a regular meeting of the Board of Commissioners of the District at the District's Central Facility at 2835 Crescent Springs Road in Erlanger, Kentucky.


A MUNICDPAL ORDER AUTEORIZING AND DIRECTING TEE MAYOR TO ENTER INTO A CONTRACT WITH THE NORTEERN KENTUCKY WAAER DISTRICT FOR THE PURCHASE OF WATER FROM TEE NORTEERN KENTUCKY WATER DISTRICT AND FOR TEE CITY TO PROWDE WATER SERYICE TO AREAS WITHON THE CITY LMMTS SITUATED IN KENTON COUNTY.

The City Council of the City of Walton, Kentucky hereby orders as follows:

## SECTION ONE

The Mayor of the City of Walton, Kentucky is hereby authorized and directed to enter into a contract with the Northen Kentucky Water District for the purchase of water from the Northem Kentucky Water District and for the City to provide water service to specified areas within the City limits situated in Kenton County. A copy of the contract is attached to this Municipal Order.

## SECTION TWO

The Mayor is hereby authorized and directed to take any and all actions and to execute any and all documents on behalf of the City necessary, appropriate, or convenient to give effect to this Municipal Order.

ADOPTED AND PASSED by City Council of the City of Walton, assembled on the 12th day of June, 2006.


## Attest:


$\qquad$

# NORTHERN KENTUCKY WATER DISTRICT <br> Project 

> 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky

184-0776
SCHEDULE OF MORTGAGES, BONDS, NOTES, AND OTHER INDEBTEDNESS


| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2018 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$0 | \$43,525 | \$43,525 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$537,106 | \$537,106 |  |
|  | 2012 | \$0 | \$1,036,875 | \$1,036,875 |  |
|  | 2013A | \$0 | \$513,013 | \$513,013 |  |
|  | 2013B | \$0 | \$359,600 | \$359,600 |  |
|  | 2014A | \$0 | \$23,829 | \$23,829 |  |
|  | 2014B | \$0 | \$171,569 | \$171,569 |  |
|  | 2016A | \$0 | \$816,325 | \$816,325 |  |
|  | 2018 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$0 | \$3,501,842 | \$3,501,842 | \$3,501,842 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$95,691 | \$18,615 | \$114,306 |  |
|  | KIA F-09-02 | \$542,297 | \$212,217 | \$754,514 |  |
|  | KIA F-13-012 | \$0 | \$45,230 | \$45,230 |  |
|  | KIA F-14-015 | \$0 | \$32,871 | \$32,871 |  |
|  | KIA F-15-011 | \$74,194 | \$35,351 | \$109,545 |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |
|  | KIA B-15-003 | \$32,482 | \$6,449 | \$38,931 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$744,664 | \$350,733 | \$1,095,397 | \$1,095,397 |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  |
|  |  |  |  |  | \$4,597,239 |
|  |  |  |  |  |  |
| 2019 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$49,000 | \$85,825 | \$134,825 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,015,000 | \$1,058,987 | \$2,073,987 |  |
|  | 2012 | \$3,650,000 | \$1,982,500 | \$5,632,500 |  |
|  | 2013A | \$720,000 | \$1,008,026 | \$1,728,026 |  |
|  | 2013B | \$1,230,000 | \$688,450 | \$1,918,450 |  |
|  | 2014A | \$0 | \$47,658 | \$47,658 |  |
|  | 2014B | \$1,980,000 | \$293,638 | \$2,273,638 |  |
|  | 2016A | \$2,005,000 | \$1,582,525 | \$3,587,525 |  |
|  | 2018 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$10,649,000 | \$6,747,609 | \$17,396,609 | \$17,396,609 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$192,819 | \$35,431 | \$228,250 |  |
|  | KIA F-09-02 | \$1,100,917 | \$406,071 | \$1,506,988 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$138,583 | \$65,053 | \$203,636 |  |
|  | KIA F-15-011 | \$160,707 | \$73,119 | \$233,825 |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |
|  | KIA B-15-003 | \$65,330 | \$12,470 | \$77,800 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$1,658,356 | \$682,603 | \$2,340,959 | \$2,340,959 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$19,737,568 |
|  |  |  |  |  |  |




| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2024 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$62,000 | \$72,050 | \$134,050 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,235,000 | \$840,062 | \$2,075,062 |  |
|  | 2012 | \$4,970,000 | \$875,750 | \$5,845,750 |  |
|  | 2013A | \$925,000 | \$803,651 | \$1,728,651 |  |
|  | 2013B | \$1,570,000 | \$347,300 | \$1,917,300 |  |
|  | 2014A | \$29,500 | \$44,227 | \$73,727 |  |
|  | 2014B | \$495,000 | \$101,663 | \$596,663 |  |
|  | 2016A | \$2,715,000 | \$972,525 | \$3,687,525 |  |
|  | 2018 | \$605,000 | \$638,760 | \$1,243,760 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$12,606,500 | \$4,695,988 | \$17,302,488 | \$17,302,488 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$202,680 | \$23,106 | \$225,786 |  |
|  | KIA F-09-02 | \$1,216,098 | \$276,493 | \$1,492,591 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$187,908 | \$62,930 | \$250,838 |  |
|  | KIA F-15-011 | \$186,547 | \$60,083 | \$246,630 |  |
|  | KIA F-16-027 | \$176,145 | \$70,580 | \$246,725 |  |
|  | KIA B-15-003 | \$67,822 | \$9,314 | \$77,135 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$2,037,199 | \$592,965 | \$2,630,165 | \$2,630,165 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$19,932,653 |
|  |  |  |  |  |  |
| 2025 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$65,000 | \$68,875 | \$133,875 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,285,000 | \$789,662 | \$2,074,662 |  |
|  | 2012 | \$5,220,000 | \$621,000 | \$5,841,000 |  |
|  | 2013A | \$970,000 | \$756,276 | \$1,726,276 |  |
|  | 2013B | \$1,635,000 | \$283,200 | \$1,918,200 |  |
|  | 2014A | \$30,500 | \$43,402 | \$73,902 |  |
|  | 2014B | \$515,000 | \$83,938 | \$598,938 |  |
|  | 2016A | \$2,865,000 | \$833,025 | \$3,698,025 |  |
|  | 2018 | \$625,000 | \$620,613 | \$1,245,613 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$13,210,500 | \$4,099,991 | \$17,310,491 | \$17,310,491 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$204,711 | \$20,566 | \$225,277 |  |
|  | KIA F-09-02 | \$1,240,541 | \$248,994 | \$1,489,535 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$191,211 | \$59,155 | \$250,366 |  |
|  | KIA F-15-011 | \$189,826 | \$56,336 | \$246,161 |  |
|  | KIA F-16-027 | \$179,241 | \$67,041 | \$246,283 |  |
|  | KIA B-15-003 | \$68,331 | \$8,668 | \$76,999 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$2,073,861 | \$551,221 | \$2,625,081 | \$2,625,081 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$19,935,572 |
|  |  |  |  |  |  |




| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2030 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$83,000 | \$50,475 | \$133,475 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,590,000 | \$486,975 | \$2,076,975 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,205,000 | \$523,526 | \$1,728,526 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$34,500 | \$38,947 | \$73,447 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$3,545,000 | \$162,975 | \$3,707,975 |  |
|  | 2018 | \$740,000 | \$507,588 | \$1,247,588 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$7,197,500 | \$1,770,486 | \$8,967,986 | \$8,967,986 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$215,181 | \$7,480 | \$222,661 |  |
|  | KIA F-09-02 | \$1,370,329 | \$102,982 | \$1,473,311 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$208,616 | \$39,264 | \$247,879 |  |
|  | KIA F-15-011 | \$207,105 | \$36,588 | \$243,693 |  |
|  | KIA F-16-027 | \$195,557 | \$48,395 | \$243,952 |  |
|  | KIA B-15-003 | \$70,937 | \$5,367 | \$76,304 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$2,267,725 | \$330,536 | \$2,598,261 | \$2,598,261 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$11,566,247 |
|  |  |  |  |  |  |
| 2031 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$87,000 | \$46,225 | \$133,225 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,660,000 | \$413,850 | \$2,073,850 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,255,000 | \$473,541 | \$1,728,541 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$35,500 | \$37,984 | \$73,484 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$3,660,000 | \$54,900 | \$3,714,900 |  |
|  | 2018 | \$765,000 | \$481,059 | \$1,246,059 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$7,462,500 | \$1,507,559 | \$8,970,059 | \$8,970,059 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$217,338 | \$4,783 | \$222,121 |  |
|  | KIA F-09-02 | \$1,397,873 | \$71,996 | \$1,469,869 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$212,283 | \$35,073 | \$247,356 |  |
|  | KIA F-15-011 | \$210,745 | \$32,428 | \$243,173 |  |
|  | KIA F-16-027 | \$198,994 | \$44,467 | \$243,461 |  |
|  | KIA B-15-003 | \$71,470 | \$4,692 | \$76,162 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$2,308,703 | \$283,898 | \$2,592,601 | \$2,592,601 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$11,562,660 |
|  |  |  |  |  |  |



| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2034 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$102,000 | \$32,100 | \$134,100 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$1,925,000 | \$149,375 | \$2,074,375 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,430,000 | \$296,669 | \$1,726,669 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$38,500 | \$34,932 | \$73,432 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$855,000 | \$391,467 | \$1,246,467 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$4,350,500 | \$904,543 | \$5,255,043 | \$5,255,043 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$223,674 | \$22,054 | \$245,728 |  |
|  | KIA F-15-011 | \$222,054 | \$19,503 | \$241,557 |  |
|  | KIA F-16-027 | \$209,673 | \$32,263 | \$241,935 |  |
|  | KIA B-15-003 | \$73,094 | \$2,636 | \$75,729 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$728,494 | \$166,916 | \$895,410 | \$895,410 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$6,150,453 |
|  |  |  |  |  |  |
| 2035 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$107,000 | \$26,875 | \$133,875 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$2,025,000 | \$50,625 | \$2,075,625 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,490,000 | \$235,550 | \$1,725,550 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$39,500 | \$33,859 | \$73,359 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$890,000 | \$358,090 | \$1,248,090 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$4,551,500 | \$704,999 | \$5,256,499 | \$5,256,499 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$227,606 | \$17,561 | \$245,167 |  |
|  | KIA F-15-011 | \$225,957 | \$15,043 | \$241,000 |  |
|  | KIA F-16-027 | \$213,358 | \$28,051 | \$241,409 |  |
|  | KIA B-15-003 | \$73,643 | \$1,940 | \$75,583 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$740,563 | \$153,055 | \$893,618 | \$893,618 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$6,150,117 |
|  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2036 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$112,000 | \$21,400 | \$133,400 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,555,000 | \$172,747 | \$1,727,747 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$41,000 | \$32,752 | \$73,752 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$925,000 | \$322,920 | \$1,247,920 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$2,633,000 | \$549,819 | \$3,182,819 | \$3,182,819 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$231,606 | \$12,989 | \$244,595 |  |
|  | KIA F-15-011 | \$229,929 | \$10,504 | \$240,432 |  |
|  | KIA F-16-027 | \$217,108 | \$23,765 | \$240,873 |  |
|  | KIA B-15-003 | \$74,196 | \$1,239 | \$75,435 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$752,839 | \$138,957 | \$891,796 | \$891,796 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$4,074,615 |
|  |  |  |  |  |  |
| 2037 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$118,000 | \$15,650 | \$133,650 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,620,000 | \$106,251 | \$1,726,251 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$42,000 | \$31,611 | \$73,611 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$960,000 | \$286,162 | \$1,246,162 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$2,740,000 | \$439,674 | \$3,179,674 | \$3,179,674 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$235,677 | \$8,337 | \$244,014 |  |
|  | KIA F-15-011 | \$233,970 | \$5,885 | \$239,855 |  |
|  | KIA F-16-027 | \$220,924 | \$19,404 | \$240,328 |  |
|  | KIA B-15-003 | \$74,753 | \$533 | \$75,287 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$765,324 | \$124,619 | \$889,943 | \$889,943 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$4,069,617 |
|  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2038 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$124,000 | \$9,600 | \$133,600 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$1,690,000 | \$35,913 | \$1,725,913 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$43,000 | \$30,443 | \$73,443 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$1,000,000 | \$247,942 | \$1,247,942 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$2,857,000 | \$323,898 | \$3,180,898 | \$3,180,898 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$90,460 | \$90,460 |  |
|  | KIA F-14-015 | \$239,819 | \$3,602 | \$243,422 |  |
|  | KIA F-15-011 | \$118,523 | \$1,185 | \$119,708 |  |
|  | KIA F-16-027 | \$224,807 | \$14,966 | \$239,773 |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$583,149 | \$110,214 | \$693,363 | \$693,363 |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  |
|  |  |  |  |  | \$3,874,261 |
|  |  |  |  |  |  |
| 2039 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$130,000 | \$3,250 | \$133,250 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$0 | \$0 | \$0 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$44,000 | \$29,247 | \$73,247 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$1,040,000 | \$207,902 | \$1,247,902 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$1,214,000 | \$240,399 | \$1,454,399 | \$1,454,399 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |
|  | KIA F-16-027 | \$228,758 | \$10,450 | \$239,209 |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$228,758 | \$10,450 | \$239,209 | \$239,209 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$1,693,608 |
|  |  |  |  |  |  |



| Northern Kentucky Water District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total | Service |
| 2042 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$0 | \$0 | \$0 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$48,000 | \$25,452 | \$73,452 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$1,170,000 | \$74,615 | \$1,244,615 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$1,218,000 | \$100,067 | \$1,318,067 | \$1,318,067 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 | \$0 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$1,318,067 |
|  |  |  |  |  |  |
| 2043 Total |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |
|  | 2006 | \$0 | \$0 | \$0 |  |
|  | 2009 | \$0 | \$0 | \$0 |  |
|  | 2011 | \$0 | \$0 | \$0 |  |
|  | 2012 | \$0 | \$0 | \$0 |  |
|  | 2013A | \$0 | \$0 | \$0 |  |
|  | 2013B | \$0 | \$0 | \$0 |  |
|  | 2014A | \$49,500 | \$24,111 | \$73,611 |  |
|  | 2014B | \$0 | \$0 | \$0 |  |
|  | 2016A | \$0 | \$0 | \$0 |  |
|  | 2018 | \$1,220,000 | \$25,315 | \$1,245,315 |  |
|  |  |  |  |  |  |
| Total Senior Debt |  | \$1,269,500 | \$49,426 | \$1,318,926 | \$1,318,926 |
|  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |
|  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 | \$0 |
|  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  | \$1,318,926 |
|  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2044 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$50,500 | \$22,736 | \$73,236 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$50,500 | \$22,736 | \$73,236 |  | \$73,236 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,236 |
| 2045 Total |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$52,000 | \$21,327 | \$73,327 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$52,000 | \$21,327 | \$73,327 |  | \$73,327 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,327 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2046 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$53,500 | \$19,876 | \$73,376 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$53,500 | \$19,876 | \$73,376 |  | \$73,376 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,376 |
| 2047 Total |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$55,000 | \$18,384 | \$73,384 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$55,000 | \$18,384 | \$73,384 |  | \$73,384 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,384 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2048 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$56,500 | \$16,851 | \$73,351 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$56,500 | \$16,851 | \$73,351 |  | \$73,351 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,351 |
|  |  |  |  |  |  |  |
| 2049 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$58,000 | \$15,276 | \$73,276 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$58,000 | \$15,276 | \$73,276 |  | \$73,276 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,276 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2050 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$59,500 | \$13,660 | \$73,160 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$59,500 | \$13,660 | \$73,160 |  | \$73,160 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,160 |
|  |  |  |  |  |  |  |
| 2051 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$61,000 | \$12,004 | \$73,004 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$61,000 | \$12,004 | \$73,004 |  | \$73,004 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,004 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2052 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$63,000 | \$10,299 | \$73,299 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$63,000 | \$10,299 | \$73,299 |  | \$73,299 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,299 |
|  |  |  |  |  |  |  |
| 2053 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$64,500 | \$8,545 | \$73,045 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$64,500 | \$8,545 | \$73,045 |  | \$73,045 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,045 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2054 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$66,500 | \$6,744 | \$73,244 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$66,500 | \$6,744 | \$73,244 |  | \$73,244 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,244 |
| 2055 Total |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$68,500 | \$4,888 | \$73,388 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$68,500 | \$4,888 | \$73,388 |  | \$73,388 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$73,388 |
|  |  |  |  |  |  |  |


| Northern Kentucky Water District |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Debt Service |  |  |  |  |  |  |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  | Total Debt |
| Year | Series | Principal | Interest | Total |  | Service |
| 2056 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 | 0 |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 | 0 |  |
|  | USDA 2000 | \$0 | \$0 | \$0 | 0 |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 | 0 |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 | 0 |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 | 0 |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 | 0 |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 | 0 |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 | 0 |  |
|  | 2006 | \$0 | \$0 | \$0 | 0 |  |
|  | 2009 | \$0 | \$0 | \$0 | 0 |  |
|  | 2011 | \$0 | \$0 | \$0 | 0 |  |
|  | 2012 | \$0 | \$0 | \$0 | 0 |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 | 0 |  |
|  | 2014A | \$70,000 | \$2,984 | \$72,984 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$70,000 | \$2,984 | \$72,984 |  | \$72,984 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$72,984 |
|  |  |  |  |  |  |  |
| 2057 Total |  |  |  |  |  |  |
|  | 1997 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 1998 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | USDA 2000 | \$0 | \$0 | \$0 |  |  |
|  | 2001 Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002A Def. 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2002B Def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003A def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003B def. 2013 | \$0 | \$0 | \$0 |  |  |
|  | 2003C def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2004 def 2014 | \$0 | \$0 | \$0 |  |  |
|  | 2006 | \$0 | \$0 | \$0 |  |  |
|  | 2009 | \$0 | \$0 | \$0 |  |  |
|  | 2011 | \$0 | \$0 | \$0 |  |  |
|  | 2012 | \$0 | \$0 | \$0 |  |  |
|  | 2013A | \$0 | \$0 | \$0 |  |  |
|  | 2013B | \$0 | \$0 | \$0 |  |  |
|  | 2014A | \$73,500 | \$1,011 | \$74,511 |  |  |
|  | 2014B | \$0 | \$0 | \$0 |  |  |
|  | 2016A | \$0 | \$0 | \$0 |  |  |
|  | 2018 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Senior Debt |  | \$73,500 | \$1,011 | \$74,511 |  | \$74,511 |
|  |  |  |  |  |  |  |
|  | KIA F-06-03 | \$0 | \$0 | \$0 |  |  |
|  | KIA C-08-01 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-08-07 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-09-02 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-13-012 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-14-015 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-15-011 | \$0 | \$0 | \$0 |  |  |
|  | KIA F-16-027 | \$0 | \$0 | \$0 |  |  |
|  | KIA B-15-003 | \$0 | \$0 | \$0 |  |  |
|  |  |  |  |  |  |  |
| Total Subordinate Debt |  | \$0 | \$0 | \$0 |  | \$0 |
|  |  |  |  |  |  |  |
| Total Debt Service Senior \& Subordinate |  |  |  |  |  | \$74,511 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | Maximum Debt Service |  |  | \$21,031,690 |
|  |  |  | Maximum Senior Debt |  |  | \$18,679,861 |
|  |  |  |  |  |  |  |



| USDA 2000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 5 | 1 | 2018 | \$0 | \$0 | \$0 |
| 11 | 1 | 2018 | \$0 | \$43,525 | \$43,525 |
|  |  | 2018 Total | \$0 | \$43,525 | \$43,525 |
| 5 | 1 | 2019 | \$49,000 | \$43,525 | \$92,525 |
| 8 | 1 | 2019 | \$0 | \$42,300 | \$42,300 |
|  |  | 2019 Total | \$49,000 | \$85,825 | \$134,825 |
| 5 | 1 | 2020 | \$51,000 | \$42,300 | \$93,300 |
| 11 | 1 | 2020 | \$0 | \$41,025 | \$41,025 |
|  |  | 2020 Total | \$51,000 | \$83,325 | \$134,325 |
| 5 | 1 | 2021 | \$54,000 | \$41,025 | \$95,025 |
| 11 | 1 | 2021 | \$0 | \$39,675 | \$39,675 |
|  |  | 2021 Total | \$54,000 | \$80,700 | \$134,700 |
| 5 | 1 | 2022 | \$56,000 | \$39,675 | \$95,675 |
| 11 | 1 | 2022 | \$0 | \$38,275 | \$38,275 |
|  |  | 2022 Total | \$56,000 | \$77,950 | \$133,950 |
| 5 | 1 | 2023 | \$59,000 | \$38,275 | \$97,275 |
| 11 | 1 | 2023 | \$0 | \$36,800 | \$36,800 |
|  |  | 2023 Total | \$59,000 | \$75,075 | \$134,075 |
| 5 | 1 | 2024 | \$62,000 | \$36,800 | \$98,800 |
| 11 | 1 | 2024 | \$0 | \$35,250 | \$35,250 |
|  |  | 2024 Total | \$62,000 | \$72,050 | \$134,050 |
| 5 | 1 | 2025 | \$65,000 | \$35,250 | \$100,250 |
| 11 | 1 | 2025 | \$0 | \$33,625 | \$33,625 |
|  |  | 2025 Total | \$65,000 | \$68,875 | \$133,875 |
| 5 | 1 | 2026 | \$68,000 | \$33,625 | \$101,625 |
| 11 | 1 | 2026 | \$0 | \$31,925 | \$31,925 |
|  |  | 2026 Total | \$68,000 | \$65,550 | \$133,550 |
| 5 | 1 | 2027 | \$72,000 | \$31,925 | \$103,925 |
| 11 | 1 | 2027 | \$0 | \$30,125 | \$30,125 |
|  |  | 2027 Total | \$72,000 | \$62,050 | \$134,050 |
| 5 | 1 | 2028 | \$75,000 | \$30,125 | \$105,125 |
| 11 | 1 | 2028 | \$0 | \$28,250 | \$28,250 |
|  |  | 2028 Total | \$75,000 | \$58,375 | \$133,375 |
| 5 | 1 | 2029 | \$79,000 | \$28,250 | \$107,250 |
| 11 | 1 | 2029 | \$0 | \$26,275 | \$26,275 |
|  |  | 2029 Total | \$79,000 | \$54,525 | \$133,525 |
| 5 | 1 | 2030 | \$83,000 | \$26,275 | \$109,275 |
| 11 | 1 | 2030 | \$0 | \$24,200 | \$24,200 |
|  |  | 2030 Total | \$83,000 | \$50,475 | \$133,475 |
| 5 | 1 | 2031 | \$87,000 | \$24,200 | \$111,200 |
| 11 | 1 | 2031 | \$0 | \$22,025 | \$22,025 |
|  |  | 2031 Total | \$87,000 | \$46,225 | \$133,225 |
| 5 | 1 | 2032 | \$92,000 | \$22,025 | \$114,025 |
| 11 | 1 | 2032 | \$0 | \$19,725 | \$19,725 |
|  |  | 2032 Total | \$92,000 | \$41,750 | \$133,750 |
| 5 | 1 | 2033 | \$96,000 | \$19,725 | \$115,725 |
| 11 | 1 | 2033 | \$0 | \$17,325 | \$17,325 |


| USDA 2000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
|  |  | 2033 Total | \$96,000 | \$37,050 | \$133,050 |
| 5 | 1 | 2034 | \$102,000 | \$17,325 | \$119,325 |
| 11 | 1 | 2034 | \$0 | \$14,775 | \$14,775 |
|  |  | 2034 Total | \$102,000 | \$32,100 | \$134,100 |
| 5 | 1 | 2035 | \$107,000 | \$14,775 | \$121,775 |
| 11 | 1 | 2035 | \$0 | \$12,100 | \$12,100 |
|  |  | 2035 Total | \$107,000 | \$26,875 | \$133,875 |
| 5 | 1 | 2036 | \$112,000 | \$12,100 | \$124,100 |
| 11 | 1 | 2036 | \$0 | \$9,300 | \$9,300 |
|  |  | 2036 Total | \$112,000 | \$21,400 | \$133,400 |
| 5 | 1 | 2037 | \$118,000 | \$9,300 | \$127,300 |
| 11 | 1 | 2037 | \$0 | \$6,350 | \$6,350 |
|  |  | 2037 Total | \$118,000 | \$15,650 | \$133,650 |
| 5 | 1 | 2038 | \$124,000 | \$6,350 | \$130,350 |
| 11 | 1 | 2038 | \$0 | \$3,250 | \$3,250 |
|  |  | 2038 Total | \$124,000 | \$9,600 | \$133,600 |
| 5 | 1 | 2039 | \$130,000 | \$3,250 | \$133,250 |
|  |  | 2039 Total | \$130,000 | \$3,250 | \$133,250 |
|  |  | Grand Total | \$1,741,000 | \$1,112,200 | \$2,853,200 |


| Series 2011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$537,106 | \$537,106 |
|  |  | 2018 Total | \$0 | \$537,106 | \$537,106 |
| 2 | 1 | 2019 | \$1,015,000 | \$537,106 | \$1,552,106 |
| 8 | 1 | 2019 | \$0 | \$521,881 | \$521,881 |
|  |  | 2019 Total | \$1,015,000 | \$1,058,987 | \$2,073,987 |
| 2 | 1 | 2020 | \$1,055,000 | \$521,881 | \$1,576,881 |
| 8 | 1 | 2020 | \$0 | \$500,781 | \$500,781 |
|  |  | 2020 Total | \$1,055,000 | \$1,022,662 | \$2,077,662 |
| 2 | 1 | 2021 | \$1,095,000 | \$500,781 | \$1,595,781 |
| 8 | 1 | 2021 | \$0 | \$478,881 | \$478,881 |
|  |  | 2021 Total | \$1,095,000 | \$979,662 | \$2,074,662 |
| 2 | 1 | 2022 | \$1,140,000 | \$478,881 | \$1,618,881 |
| 8 | 1 | 2022 | \$0 | \$456,081 | \$456,081 |
|  |  | 2022 Total | \$1,140,000 | \$934,962 | \$2,074,962 |
| 2 | 1 | 2023 | \$1,185,000 | \$456,081 | \$1,641,081 |
| 8 | 1 | 2023 | \$0 | \$432,381 | \$432,381 |
|  |  | 2023 Total | \$1,185,000 | \$888,462 | \$2,073,462 |
| 2 | 1 | 2024 | \$1,235,000 | \$432,381 | \$1,667,381 |
| 8 | 1 | 2024 | \$0 | \$407,681 | \$407,681 |
|  |  | 2024 Total | \$1,235,000 | \$840,062 | \$2,075,062 |
| 2 | 1 | 2025 | \$1,285,000 | \$407,681 | \$1,692,681 |
| 8 | 1 | 2025 | \$0 | \$381,981 | \$381,981 |
|  |  | 2025 Total | \$1,285,000 | \$789,662 | \$2,074,662 |
| 2 | 1 | 2026 | \$1,340,000 | \$381,981 | \$1,721,981 |
| 8 | 1 | 2026 | \$0 | \$354,344 | \$354,344 |
|  |  | 2026 Total | \$1,340,000 | \$736,325 | \$2,076,325 |
| 2 | 1 | 2027 | \$1,395,000 | \$354,344 | \$1,749,344 |
| 8 | 1 | 2027 | \$0 | \$324,700 | \$324,700 |
|  |  | 2027 Total | \$1,395,000 | \$679,044 | \$2,074,044 |
| 2 | 1 | 2028 | \$1,460,000 | \$324,700 | \$1,784,700 |
| 8 | 1 | 2028 | \$0 | \$293,675 | \$293,675 |
|  |  | 2028 Total | \$1,460,000 | \$618,375 | \$2,078,375 |
| 2 | 1 | 2029 | \$1,520,000 | \$293,675 | \$1,813,675 |
| 8 | 1 | 2029 | \$0 | \$261,375 | \$261,375 |
|  |  | 2029 Total | \$1,520,000 | \$555,050 | \$2,075,050 |
| 2 | 1 | 2030 | \$1,590,000 | \$261,375 | \$1,851,375 |
| 8 | 1 | 2030 | \$0 | \$225,600 | \$225,600 |
|  |  | 2030 Total | \$1,590,000 | \$486,975 | \$2,076,975 |
| 2 | 1 | 2031 | \$1,660,000 | \$225,600 | \$1,885,600 |
| 8 | 1 | 2031 | \$0 | \$188,250 | \$188,250 |
|  |  | 2031 Total | \$1,660,000 | \$413,850 | \$2,073,850 |
| 2 | 1 | 2032 | \$1,745,000 | \$188,250 | \$1,933,250 |
| 8 | 1 | 2032 | \$0 | \$144,625 | \$144,625 |
|  |  | 2032 Total | \$1,745,000 | \$332,875 | \$2,077,875 |
| 2 | 1 | 2033 | \$1,835,000 | \$144,625 | \$1,979,625 |
| 8 | 1 | 2033 | \$0 | \$98,750 | \$98,750 |
|  |  | 2033 Total | \$1,835,000 | \$243,375 | \$2,078,375 |


| Series 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | ---: | ---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |
| 2 | 1 | 2034 | $\$ 1,925,000$ | $\$ 98,750$ | $\$ 2,023,750$ |  |
| 8 | 1 | 2034 | $\$ 0$ | $\$ 50,625$ | $\$ 50,625$ |  |
|  |  | 2034 Total | $\mathbf{\$ 1 , 9 2 5 , 0 0 0}$ | $\mathbf{\$ 1 4 9 , 3 7 5}$ | $\mathbf{\$ 2 , 0 7 4 , 3 7 5}$ |  |
| 2 | 1 | 2035 | $\$ 2,025,000$ | $\$ 50,625$ | $\$ 2,075,625$ |  |
| 8 | 1 | 2035 | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
|  |  | 2035 Total | $\mathbf{\$ 2 , 0 2 5 , 0 0 0}$ | $\mathbf{\$ 5 0 , 6 2 5}$ | $\mathbf{\$ 2 , 0 7 5 , 6 2 5}$ |  |
|  |  | Grand Total | $\mathbf{\$ 2 4 , 5 0 5 , 0 0 0}$ | $\mathbf{\$ 1 1 , 3 1 7 , 4 3 4}$ | $\mathbf{\$ 3 5 , 8 2 2 , 4 3 4}$ |  |


| Series 2012 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$1,036,875 | \$1,036,875 |
|  |  | 2018 Total | \$0 | \$1,036,875 | \$1,036,875 |
| 2 | 1 | 2019 | \$3,650,000 | \$1,036,875 | \$4,686,875 |
| 8 | 1 | 2019 | \$0 | \$945,625 | \$945,625 |
|  |  | 2019 Total | \$3,650,000 | \$1,982,500 | \$5,632,500 |
| 2 | 1 | 2020 | \$4,150,000 | \$945,625 | \$5,095,625 |
| 8 | 1 | 2020 | \$0 | \$841,875 | \$841,875 |
|  |  | 2020 Total | \$4,150,000 | \$1,787,500 | \$5,937,500 |
| 2 | 1 | 2021 | \$4,365,000 | \$841,875 | \$5,206,875 |
| 8 | 1 | 2021 | \$0 | \$732,750 | \$732,750 |
|  |  | 2021 Total | \$4,365,000 | \$1,574,625 | \$5,939,625 |
| 2 | 1 | 2022 | \$4,590,000 | \$732,750 | \$5,322,750 |
| 8 | 1 | 2022 | \$0 | \$618,000 | \$618,000 |
|  |  | 2022 Total | \$4,590,000 | \$1,350,750 | \$5,940,750 |
| 2 | 1 | 2023 | \$4,720,000 | \$618,000 | \$5,338,000 |
| 8 | 1 | 2023 | \$0 | \$500,000 | \$500,000 |
|  |  | 2023 Total | \$4,720,000 | \$1,118,000 | \$5,838,000 |
| 2 | 1 | 2024 | \$4,970,000 | \$500,000 | \$5,470,000 |
| 8 | 1 | 2024 | \$0 | \$375,750 | \$375,750 |
|  |  | 2024 Total | \$4,970,000 | \$875,750 | \$5,845,750 |
| 2 | 1 | 2025 | \$5,220,000 | \$375,750 | \$5,595,750 |
| 8 | 1 | 2025 | \$0 | \$245,250 | \$245,250 |
|  |  | 2025 Total | \$5,220,000 | \$621,000 | \$5,841,000 |
| 2 | 1 | 2026 | \$5,495,000 | \$245,250 | \$5,740,250 |
| 8 | 1 | 2026 | \$0 | \$107,875 | \$107,875 |
|  |  | 2026 Total | \$5,495,000 | \$353,125 | \$5,848,125 |
| 2 | 1 | 2027 | \$4,315,000 | \$107,875 | \$4,422,875 |
|  |  | 2027 Total | \$4,315,000 | \$107,875 | \$4,422,875 |
|  |  | Grand Total | \$41,475,000 | \$10,808,000 | \$52,283,000 |


| Series 2013A |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$513,013 | \$513,013 |
|  |  | 2018 Total | \$0 | \$513,013 | \$513,013 |
| 2 | 1 | 2019 | \$720,000 | \$513,013 | \$1,233,013 |
| 8 | 1 | 2019 | \$0 | \$495,013 | \$495,013 |
|  |  | 2019 Total | \$720,000 | \$1,008,026 | \$1,728,026 |
| 2 | 1 | 2020 | \$755,000 | \$495,013 | \$1,250,013 |
| 8 | 1 | 2020 | \$0 | \$476,138 | \$476,138 |
|  |  | 2020 Total | \$755,000 | \$971,151 | \$1,726,151 |
| 2 | 1 | 2021 | \$795,000 | \$476,138 | \$1,271,138 |
| 8 | 1 | 2021 | \$0 | \$456,263 | \$456,263 |
|  |  | 2021 Total | \$795,000 | \$932,401 | \$1,727,401 |
| 2 | 1 | 2022 | \$835,000 | \$456,263 | \$1,291,263 |
| 8 | 1 | 2022 | \$0 | \$435,388 | \$435,388 |
|  |  | 2022 Total | \$835,000 | \$891,651 | \$1,726,651 |
| 2 | 1 | 2023 | \$880,000 | \$435,388 | \$1,315,388 |
| 8 | 1 | 2023 | \$0 | \$413,388 | \$413,388 |
|  |  | 2023 Total | \$880,000 | \$848,776 | \$1,728,776 |
| 2 | 1 | 2024 | \$925,000 | \$413,388 | \$1,338,388 |
| 8 | 1 | 2024 | \$0 | \$390,263 | \$390,263 |
|  |  | 2024 Total | \$925,000 | \$803,651 | \$1,728,651 |
| 2 | 1 | 2025 | \$970,000 | \$390,263 | \$1,360,263 |
| 8 | 1 | 2025 | \$0 | \$366,013 | \$366,013 |
|  |  | 2025 Total | \$970,000 | \$756,276 | \$1,726,276 |
| 2 | 1 | 2026 | \$1,020,000 | \$366,013 | \$1,386,013 |
| 8 | 1 | 2026 | \$0 | \$340,513 | \$340,513 |
|  |  | 2026 Total | \$1,020,000 | \$706,526 | \$1,726,526 |
| 2 | 1 | 2027 | \$1,070,000 | \$340,513 | \$1,410,513 |
| 8 | 1 | 2027 | \$0 | \$319,113 | \$319,113 |
|  |  | 2027 Total | \$1,070,000 | \$659,626 | \$1,729,626 |
| 2 | 1 | 2028 | \$1,110,000 | \$319,113 | \$1,429,113 |
| 8 | 1 | 2028 | \$0 | \$296,913 | \$296,913 |
|  |  | 2028 Total | \$1,110,000 | \$616,026 | \$1,726,026 |
| 2 | 1 | 2029 | \$1,155,000 | \$296,913 | \$1,451,913 |
| 8 | 1 | 2029 | \$0 | \$273,813 | \$273,813 |
|  |  | 2029 Total | \$1,155,000 | \$570,726 | \$1,725,726 |
| 2 | 1 | 2030 | \$1,205,000 | \$273,813 | \$1,478,813 |
| 8 | 1 | 2030 | \$0 | \$249,713 | \$249,713 |
|  |  | 2030 Total | \$1,205,000 | \$523,526 | \$1,728,526 |
| 2 | 1 | 2031 | \$1,255,000 | \$249,713 | \$1,504,713 |
| 8 | 1 | 2031 | \$0 | \$223,828 | \$223,828 |
|  |  | 2031 Total | \$1,255,000 | \$473,541 | \$1,728,541 |
| 2 | 1 | 2032 | \$1,310,000 | \$223,828 | \$1,533,828 |
| 8 | 1 | 2032 | \$0 | \$194,353 | \$194,353 |
|  |  | 2032 Total | \$1,310,000 | \$418,181 | \$1,728,181 |
| 2 | 1 | 2033 | \$1,370,000 | \$194,353 | \$1,564,353 |
| 8 | 1 | 2033 | \$0 | \$163,528 | \$163,528 |
|  |  | 2033 Total | \$1,370,000 | \$357,881 | \$1,727,881 |
| 2 | 1 | 2034 | \$1,430,000 | \$163,528 | \$1,593,528 |
| 8 | 1 | 2034 | \$0 | \$133,141 | \$133,141 |
|  |  | 2034 Total | \$1,430,000 | \$296,669 | \$1,726,669 |


| Series 2013A |  |  |  |  |  |  |
| :---: | :---: | :---: | ---: | ---: | ---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |
| 2 | 1 | 2035 | $\$ 1,490,000$ | $\$ 133,141$ | $\$ 1,623,141$ |  |
| 8 | 1 | 2035 | $\$ 0$ | $\$ 102,409$ | $\$ 102,409$ |  |
|  |  | 2035 Total | $\$ 1,490,000$ | $\$ 235,550$ | $\$ 1,725,550$ |  |
| 2 | 1 | 2036 | $\$ 1,555,000$ | $\$ 102,409$ | $\$ 1,657,409$ |  |
| 8 | 1 | 2036 | $\$ 0$ | $\$ 70,338$ | $\$ 70,338$ |  |
|  |  | 2036 Total | $\$ 1,555,000$ | $\$ 172,747$ | $\$ 1,727,747$ |  |
| 2 | 1 | 2037 | $\$ 1,620,000$ | $\$ 70,338$ | $\$ 1,690,338$ |  |
| 8 | 1 | 2037 | $\$ 0$ | $\$ 35,913$ | $\$ 35,913$ |  |
|  |  | 2037 Total | $\$ 1,620,000$ | $\$ 106,251$ | $\$ 1,726,251$ |  |
| 2 | 1 | 2038 | $\$ 1,690,000$ | $\$ 35,913$ | $\$ 1,725,913$ |  |
| 8 | 1 | 2038 | $\$ 0$ | $\$ 0$ | $\$ 0$ |  |
|  |  | 2038 Total | $\$ 1,690,000$ | $\$ 35,913$ | $\$ 1,725,913$ |  |
|  |  | Grand Total | $\$ 23,160,000$ | $\$ 11,898,108$ | $\$ 35,058,108$ |  |


| Series 2013B |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$359,600 | \$359,600 |
|  |  | 2018 Total | \$0 | \$359,600 | \$359,600 |
| 2 | 1 | 2019 | \$1,230,000 | \$359,600 | \$1,589,600 |
| 8 | 1 | 2019 | \$0 | \$328,850 | \$328,850 |
|  |  | 2019 Total | \$1,230,000 | \$688,450 | \$1,918,450 |
| 2 | 1 | 2020 | \$1,295,000 | \$328,850 | \$1,623,850 |
| 8 | 1 | 2020 | \$0 | \$296,475 | \$296,475 |
|  |  | 2020 Total | \$1,295,000 | \$625,325 | \$1,920,325 |
| 2 | 1 | 2021 | \$1,355,000 | \$296,475 | \$1,651,475 |
| 8 | 1 | 2021 | \$0 | \$262,600 | \$262,600 |
|  |  | 2021 Total | \$1,355,000 | \$559,075 | \$1,914,075 |
| 2 | 1 | 2022 | \$1,430,000 | \$262,600 | \$1,692,600 |
| 8 | 1 | 2022 | \$0 | \$226,850 | \$226,850 |
|  |  | 2022 Total | \$1,430,000 | \$489,450 | \$1,919,450 |
| 2 | 1 | 2023 | \$1,500,000 | \$226,850 | \$1,726,850 |
| 8 | 1 | 2023 | \$0 | \$189,350 | \$189,350 |
|  |  | 2023 Total | \$1,500,000 | \$416,200 | \$1,916,200 |
| 2 | 1 | 2024 | \$1,570,000 | \$189,350 | \$1,759,350 |
| 8 | 1 | 2024 | \$0 | \$157,950 | \$157,950 |
|  |  | 2024 Total | \$1,570,000 | \$347,300 | \$1,917,300 |
| 2 | 1 | 2025 | \$1,635,000 | \$157,950 | \$1,792,950 |
| 8 | 1 | 2025 | \$0 | \$125,250 | \$125,250 |
|  |  | 2025 Total | \$1,635,000 | \$283,200 | \$1,918,200 |
| 2 | 1 | 2026 | \$1,700,000 | \$125,250 | \$1,825,250 |
| 8 | 1 | 2026 | \$0 | \$91,250 | \$91,250 |
|  |  | 2026 Total | \$1,700,000 | \$216,500 | \$1,916,500 |
| 2 | 1 | 2027 | \$1,780,000 | \$91,250 | \$1,871,250 |
| 8 | 1 | 2027 | \$0 | \$46,750 | \$46,750 |
|  |  | 2027 Total | \$1,780,000 | \$138,000 | \$1,918,000 |
| 2 | 1 | 2028 | \$1,870,000 | \$46,750 | \$1,916,750 |
| 8 | 1 | 2028 | \$0 | \$0 | \$0 |
|  |  | 2028 Total | \$1,870,000 | \$46,750 | \$1,916,750 |
|  |  | Grand Total | \$15,365,000 | \$4,169,850 | \$19,534,850 |



| Series 2014A |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |
| 2 | 1 | 2035 | \$39,500 | \$17,201 | \$56,701 |  |
| 8 | 1 | 2035 | \$0 | \$16,658 | \$16,658 |  |
|  |  | 2035 Total | \$39,500 | \$33,859 | \$73,359 |  |
| 2 | 1 | 2036 | \$41,000 | \$16,658 | \$57,658 |  |
| 8 | 1 | 2036 | \$0 | \$16,094 | \$16,094 |  |
|  |  | 2036 Total | \$41,000 | \$32,752 | \$73,752 |  |
| 2 | 1 | 2037 | \$42,000 | \$16,094 | \$58,094 |  |
| 8 | 1 | 2037 | \$0 | \$15,517 | \$15,517 |  |
|  |  | 2037 Total | \$42,000 | \$31,611 | \$73,611 |  |
| 2 | 1 | 2038 | \$43,000 | \$15,517 | \$58,517 |  |
| 8 | 1 | 2038 | \$0 | \$14,926 | \$14,926 |  |
|  |  | 2038 Total | \$43,000 | \$30,443 | \$73,443 |  |
| 2 | 1 | 2039 | \$44,000 | \$14,926 | \$58,926 |  |
| 8 | 1 | 2039 | \$0 | \$14,321 | \$14,321 |  |
|  |  | 2039 Total | \$44,000 | \$29,247 | \$73,247 |  |
| 2 | 1 | 2040 | \$45,500 | \$14,321 | \$59,821 |  |
| 8 | 1 | 2040 | \$0 | \$13,695 | \$13,695 |  |
|  |  | 2040 Total | \$45,500 | \$28,016 | \$73,516 |  |
| 2 | 1 | 2041 | \$46,500 | \$13,695 | \$60,195 |  |
| 8 | 1 | 2041 | \$0 | \$13,056 | \$13,056 |  |
|  |  | 2041 Total | \$46,500 | \$26,751 | \$73,251 |  |
| 2 | 1 | 2042 | \$48,000 | \$13,056 | \$61,056 |  |
| 8 | 1 | 2042 | \$0 | \$12,396 | \$12,396 |  |
|  |  | 2042 Total | \$48,000 | \$25,452 | \$73,452 |  |
| 2 | 1 | 2043 | \$49,500 | \$12,396 | \$61,896 |  |
| 8 | 1 | 2043 | \$0 | \$11,715 | \$11,715 |  |
|  |  | 2043 Total | \$49,500 | \$24,111 | \$73,611 |  |
| 2 | 1 | 2044 | \$50,500 | \$11,715 | \$62,215 |  |
| 8 | 1 | 2044 | \$0 | \$11,021 | \$11,021 |  |
|  |  | 2044 Total | \$50,500 | \$22,736 | \$73,236 |  |
| 2 | 1 | 2045 | \$52,000 | \$11,021 | \$63,021 |  |
| 8 | 1 | 2045 | \$0 | \$10,306 | \$10,306 |  |
|  |  | 2045 Total | \$52,000 | \$21,327 | \$73,327 |  |
| 2 | 1 | 2046 | \$53,500 | \$10,306 | \$63,806 |  |
| 8 | 1 | 2046 | \$0 | \$9,570 | \$9,570 |  |
|  |  | 2046 Total | \$53,500 | \$19,876 | \$73,376 |  |
| 2 | 1 | 2047 | \$55,000 | \$9,570 | \$64,570 |  |
| 8 | 1 | 2047 | \$0 | \$8,814 | \$8,814 |  |
|  |  | 2047 Total | \$55,000 | \$18,384 | \$73,384 |  |
| 2 | 1 | 2048 | \$56,500 | \$8,814 | \$65,314 |  |
| 8 | 1 | 2048 | \$0 | \$8,037 | \$8,037 |  |
|  |  | 2048 Total | \$56,500 | \$16,851 | \$73,351 |  |
| 2 | 1 | 2049 | \$58,000 | \$8,037 | \$66,037 |  |
| 8 | 1 | 2049 | \$0 | \$7,239 | \$7,239 |  |
|  |  | 2049 Total | \$58,000 | \$15,276 | \$73,276 |  |
| 2 | 1 | 2050 | \$59,500 | \$7,239 | \$66,739 |  |
| 8 | 1 | 2050 | \$0 | \$6,421 | \$6,421 |  |
|  |  | 2050 Total | \$59,500 | \$13,660 | \$73,160 |  |
| 2 | 1 | 2051 | \$61,000 | \$6,421 | \$67,421 |  |
| 8 | 1 | 2051 | \$0 | \$5,583 | \$5,583 |  |
|  |  | 2051 Total | \$61,000 | \$12,004 | \$73,004 |  |
| 2 | 1 | 2052 | \$63,000 | \$5,583 | \$68,583 |  |
| 8 | 1 | 2052 | \$0 | \$4,716 | \$4,716 |  |
|  |  | 2052 Total | \$63,000 | \$10,299 | \$73,299 |  |
| 2 | 1 | 2053 | \$64,500 | \$4,716 | \$69,216 |  |
| 8 | 1 | 2053 | \$0 | \$3,829 | \$3,829 |  |
|  |  | 2053 Total | \$64,500 | \$8,545 | \$73,045 |  |


| Series 2014A |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |
| 2 | 1 | 2054 | \$66,500 | \$3,829 | \$70,329 |  |
| 8 | 1 | 2054 | \$0 | \$2,915 | \$2,915 |  |
|  |  | 2054 Total | \$66,500 | \$6,744 | \$73,244 |  |
| 2 | 1 | 2055 | \$68,500 | \$2,915 | \$71,415 |  |
| 8 | 1 | 2055 | \$0 | \$1,973 | \$1,973 |  |
|  |  | 2055 Total | \$68,500 | \$4,888 | \$73,388 |  |
| 2 | 1 | 2056 | \$70,000 | \$1,973 | \$71,973 |  |
| 8 | 1 | 2056 | \$0 | \$1,011 | \$1,011 |  |
|  |  | 2056 Total | \$70,000 | \$2,984 | \$72,984 |  |
| 2 | 1 | 2057 | \$73,500 | \$1,011 | \$74,511 |  |
| 8 | 1 | 2057 | \$0 | \$0 | \$0 |  |
|  |  | 2057 Total | \$73,500 | \$1,011 | \$74,511 |  |
|  |  | Grand Total | \$1,733,000 | \$1,130,376 | \$2,863,376 |  |


| Series 2014B |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$171,569 | \$171,569 |
|  |  | 2018 Total | \$0 | \$171,569 | \$171,569 |
| 2 | 1 | 2019 | \$1,980,000 | \$171,569 | \$2,151,569 |
| 8 | 1 | 2019 | \$0 | \$122,069 | \$122,069 |
|  |  | 2019 Total | \$1,980,000 | \$293,638 | \$2,273,638 |
| 2 | 1 | 2020 | \$1,505,000 | \$122,069 | \$1,627,069 |
| 8 | 1 | 2020 | \$0 | \$84,444 | \$84,444 |
|  |  | 2020 Total | \$1,505,000 | \$206,513 | \$1,711,513 |
| 2 | 1 | 2021 | \$440,000 | \$84,444 | \$524,444 |
| 8 | 1 | 2021 | \$0 | \$73,444 | \$73,444 |
|  |  | 2021 Total | \$440,000 | \$157,888 | \$597,888 |
| 2 | 1 | 2022 | \$465,000 | \$73,444 | \$538,444 |
| 8 | 1 | 2022 | \$0 | \$61,819 | \$61,819 |
|  |  | 2022 Total | \$465,000 | \$135,263 | \$600,263 |
| 2 | 1 | 2023 | \$485,000 | \$61,819 | \$546,819 |
| 8 | 1 | 2023 | \$0 | \$54,544 | \$54,544 |
|  |  | 2023 Total | \$485,000 | \$116,363 | \$601,363 |
| 2 | 1 | 2024 | \$495,000 | \$54,544 | \$549,544 |
| 8 | 1 | 2024 | \$0 | \$47,119 | \$47,119 |
|  |  | 2024 Total | \$495,000 | \$101,663 | \$596,663 |
| 2 | 1 | 2025 | \$515,000 | \$47,119 | \$562,119 |
| 8 | 1 | 2025 | \$0 | \$36,819 | \$36,819 |
|  |  | 2025 Total | \$515,000 | \$83,938 | \$598,938 |
| 2 | 1 | 2026 | \$540,000 | \$36,819 | \$576,819 |
| 8 | 1 | 2026 | \$0 | \$26,019 | \$26,019 |
|  |  | 2026 Total | \$540,000 | \$62,838 | \$602,838 |
| 2 | 1 | 2027 | \$550,000 | \$26,019 | \$576,019 |
| 8 | 1 | 2027 | \$0 | \$17,769 | \$17,769 |
|  |  | 2027 Total | \$550,000 | \$43,788 | \$593,788 |
| 2 | 1 | 2028 | \$570,000 | \$17,769 | \$587,769 |
| 8 | 1 | 2028 | \$0 | \$9,219 | \$9,219 |
|  |  | 2028 Total | \$570,000 | \$26,988 | \$596,988 |
| 2 | 1 | 2029 | \$590,000 | \$9,219 | \$599,219 |
| 8 | 1 | 2029 | \$0 | \$0 | \$0 |
|  |  | 2029 Total | \$590,000 | \$9,219 | \$599,219 |
|  |  | Grand Total | \$8,135,000 | \$1,409,668 | \$9,544,668 |


| Series 2016A |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$816,325 | \$816,325 |
|  |  | 2018 Total | \$0 | \$816,325 | \$816,325 |
| 2 | 1 | 2019 | \$2,005,000 | \$816,325 | \$2,821,325 |
| 8 | 1 | 2019 | \$0 | \$766,200 | \$766,200 |
|  |  | 2019 Total | \$2,005,000 | \$1,582,525 | \$3,587,525 |
| 2 | 1 | 2020 | \$2,380,000 | \$766,200 | \$3,146,200 |
| 8 | 1 | 2020 | \$0 | \$706,700 | \$706,700 |
|  |  | 2020 Total | \$2,380,000 | \$1,472,900 | \$3,852,900 |
| 2 | 1 | 2021 | \$2,325,000 | \$706,700 | \$3,031,700 |
| 8 | 1 | 2021 | \$0 | \$648,575 | \$648,575 |
|  |  | 2021 Total | \$2,325,000 | \$1,355,275 | \$3,680,275 |
| 2 | 1 | 2022 | \$2,450,000 | \$648,575 | \$3,098,575 |
| 8 | 1 | 2022 | \$0 | \$587,325 | \$587,325 |
|  |  | 2022 Total | \$2,450,000 | \$1,235,900 | \$3,685,900 |
| 2 | 1 | 2023 | \$2,685,000 | \$587,325 | \$3,272,325 |
| 8 | 1 | 2023 | \$0 | \$520,200 | \$520,200 |
|  |  | 2023 Total | \$2,685,000 | \$1,107,525 | \$3,792,525 |
| 2 | 1 | 2024 | \$2,715,000 | \$520,200 | \$3,235,200 |
| 8 | 1 | 2024 | \$0 | \$452,325 | \$452,325 |
|  |  | 2024 Total | \$2,715,000 | \$972,525 | \$3,687,525 |
| 2 | 1 | 2025 | \$2,865,000 | \$452,325 | \$3,317,325 |
| 8 | 1 | 2025 | \$0 | \$380,700 | \$380,700 |
|  |  | 2025 Total | \$2,865,000 | \$833,025 | \$3,698,025 |
| 2 | 1 | 2026 | \$3,015,000 | \$380,700 | \$3,395,700 |
| 8 | 1 | 2026 | \$0 | \$305,325 | \$305,325 |
|  |  | 2026 Total | \$3,015,000 | \$686,025 | \$3,701,025 |
| 2 | 1 | 2027 | \$3,170,000 | \$305,325 | \$3,475,325 |
| 8 | 1 | 2027 | \$0 | \$226,075 | \$226,075 |
|  |  | 2027 Total | \$3,170,000 | \$531,400 | \$3,701,400 |
| 2 | 1 | 2028 | \$3,300,000 | \$226,075 | \$3,526,075 |
| 8 | 1 | 2028 | \$0 | \$176,575 | \$176,575 |
|  |  | 2028 Total | \$3,300,000 | \$402,650 | \$3,702,650 |
| 2 | 1 | 2029 | \$3,425,000 | \$176,575 | \$3,601,575 |
| 8 | 1 | 2029 | \$0 | \$108,075 | \$108,075 |
|  |  | 2029 Total | \$3,425,000 | \$284,650 | \$3,709,650 |
| 2 | 1 | 2030 | \$3,545,000 | \$108,075 | \$3,653,075 |
| 8 | 1 | 2030 | \$0 | \$54,900 | \$54,900 |
|  |  | 2030 Total | \$3,545,000 | \$162,975 | \$3,707,975 |
| 2 | 1 | 2031 | \$3,660,000 | \$54,900 | \$3,714,900 |
| 8 | 1 | 2031 | \$0 | \$0 | \$0 |
|  |  | 2031 Total | \$3,660,000 | \$54,900 | \$3,714,900 |
|  |  | Grand Total | \$37,540,000 | \$11,498,600 | \$49,038,600 |


| Series 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Projected Schedule for Conversion of BAN 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2018 | \$0 | \$0 | \$0 |
| 8 | 1 | 2018 | \$0 | \$0 | \$0 |
|  |  | 2018 Total | \$0 | \$0 | \$0 |
| 2 | 1 | 2019 | \$0 | \$0 | \$0 |
| 8 | 1 | 2019 | \$0 | \$0 | \$0 |
|  |  | 2019 Total | \$0 | \$0 | \$0 |
| 2 | 1 | 2020 | \$545,000 | \$353,616 | \$898,616 |
| 8 | 1 | 2020 | \$0 | \$347,076 | \$347,076 |
|  |  | 2020 Total | \$545,000 | \$700,692 | \$1,245,692 |
| 2 | 1 | 2021 | \$560,000 | \$347,076 | \$907,076 |
| 8 | 1 | 2021 | \$0 | \$0 | \$0 |
|  |  | 2021 Total | \$560,000 | \$347,076 | \$907,076 |
| 2 | 1 | 2022 | \$575,000 | \$339,936 | \$914,936 |
| 8 | 1 | 2022 | \$0 | \$332,174 | \$332,174 |
|  |  | 2022 Total | \$575,000 | \$672,110 | \$1,247,110 |
| 2 | 1 | 2023 | \$590,000 | \$332,174 | \$922,174 |
| 8 | 1 | 2023 | \$0 | \$323,766 | \$323,766 |
|  |  | 2023 Total | \$590,000 | \$655,940 | \$1,245,940 |
| 2 | 1 | 2024 | \$605,000 | \$323,766 | \$928,766 |
| 8 | 1 | 2024 | \$0 | \$314,994 | \$314,994 |
|  |  | 2024 Total | \$605,000 | \$638,760 | \$1,243,760 |
| 2 | 1 | 2025 | \$625,000 | \$314,994 | \$939,994 |
| 8 | 1 | 2025 | \$0 | \$305,619 | \$305,619 |
|  |  | 2025 Total | \$625,000 | \$620,613 | \$1,245,613 |
| 2 | 1 | 2026 | \$645,000 | \$305,619 | \$950,619 |
| 8 | 1 | 2026 | \$0 | \$295,299 | \$295,299 |
|  |  | 2026 Total | \$645,000 | \$600,918 | \$1,245,918 |
| 2 | 1 | 2027 | \$665,000 | \$295,299 | \$960,299 |
| 8 | 1 | 2027 | \$0 | \$284,160 | \$284,160 |
|  |  | 2027 Total | \$665,000 | \$579,459 | \$1,244,459 |
| 2 | 1 | 2028 | \$690,000 | \$284,160 | \$974,160 |
| 8 | 1 | 2028 | \$0 | \$272,603 | \$272,603 |
|  |  | 2028 Total | \$690,000 | \$556,763 | \$1,246,763 |
| 2 | 1 | 2029 | \$715,000 | \$272,603 | \$987,603 |
| 8 | 1 | 2029 | \$0 | \$260,269 | \$260,269 |
|  |  | 2029 Total | \$715,000 | \$532,872 | \$1,247,872 |
| 2 | 1 | 2030 | \$740,000 | \$260,269 | \$1,000,269 |
| 8 | 1 | 2030 | \$0 | \$247,319 | \$247,319 |
|  |  | 2030 Total | \$740,000 | \$507,588 | \$1,247,588 |
| 2 | 1 | 2031 | \$765,000 | \$247,319 | \$1,012,319 |
| 8 | 1 | 2031 | \$0 | \$233,740 | \$233,740 |
|  |  | 2031 Total | \$765,000 | \$481,059 | \$1,246,059 |
| 2 | 1 | 2032 | \$795,000 | \$233,740 | \$1,028,740 |
| 8 | 1 | 2032 | \$0 | \$219,231 | \$219,231 |
|  |  | 2032 Total | \$795,000 | \$452,971 | \$1,247,971 |
| 2 | 1 | 2033 | \$820,000 | \$219,231 | \$1,039,231 |
| 8 | 1 | 2033 | \$0 | \$203,856 | \$203,856 |
|  |  | 2033 Total | \$820,000 | \$423,087 | \$1,243,087 |
| 2 | 1 | 2034 | \$855,000 | \$203,856 | \$1,058,856 |
| 8 | 1 | 2034 | \$0 | \$187,611 | \$187,611 |
|  |  | 2034 Total | \$855,000 | \$391,467 | \$1,246,467 |


| Series 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Projected Schedule for Conversion of BAN 2017 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 2 | 1 | 2035 | \$890,000 | \$187,611 | \$1,077,611 |
| 8 | 1 | 2035 | \$0 | \$170,479 | \$170,479 |
|  |  | 2035 Total | \$890,000 | \$358,090 | \$1,248,090 |
| 2 | 1 | 2036 | \$925,000 | \$170,479 | \$1,095,479 |
| 8 | 1 | 2036 | \$0 | \$152,441 | \$152,441 |
|  |  | 2036 Total | \$925,000 | \$322,920 | \$1,247,920 |
| 2 | 1 | 2037 | \$960,000 | \$152,441 | \$1,112,441 |
| 8 | 1 | 2037 | \$0 | \$133,721 | \$133,721 |
|  |  | 2037 Total | \$960,000 | \$286,162 | \$1,246,162 |
| 2 | 1 | 2038 | \$1,000,000 | \$133,721 | \$1,133,721 |
| 8 | 1 | 2038 | \$0 | \$114,221 | \$114,221 |
|  |  | 2038 Total | \$1,000,000 | \$247,942 | \$1,247,942 |
| 2 | 1 | 2039 | \$1,040,000 | \$114,221 | \$1,154,221 |
| 8 | 1 | 2039 | \$0 | \$93,681 | \$93,681 |
|  |  | 2039 Total | \$1,040,000 | \$207,902 | \$1,247,902 |
| 2 | 1 | 2040 | \$1,080,000 | \$93,681 | \$1,173,681 |
| 8 | 1 | 2040 | \$0 | \$72,081 | \$72,081 |
|  |  | 2040 Total | \$1,080,000 | \$165,762 | \$1,245,762 |
| 2 | 1 | 2041 | \$1,125,000 | \$72,081 | \$1,197,081 |
| 8 | 1 | 2041 | \$0 | \$49,300 | \$49,300 |
|  |  | 2041 Total | \$1,125,000 | \$121,381 | \$1,246,381 |
| 2 | 1 | 2042 | \$1,170,000 | \$49,300 | \$1,219,300 |
| 8 | 1 | 2042 | \$0 | \$25,315 | \$25,315 |
|  |  | 2042 Total | \$1,170,000 | \$74,615 | \$1,244,615 |
| 2 | 1 | 2043 | \$1,220,000 | \$25,315 | \$1,245,315 |
| 8 | 1 | 2043 | \$0.00 | \$0.00 | \$0.00 |
|  |  | 2043 Total | \$1,220,000.00 | \$25,315.00 | \$1,245,315.00 |
|  |  | Grand Total | \$19,600,000.00 | \$9,971,464.00 | \$29,571,464.00 |


| KIA F-08-07 Various |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 6 | 1 | 2018 | \$0 | \$0 | \$0 |
| 12 | 1 | 2018 | \$95,691 | \$18,615 | \$114,306 |
|  |  | 2018 Total | \$95,691 | \$18,615 | \$114,306 |
| 6 | 1 | 2019 | \$96,169 | \$18,016 | \$114,185 |
| 12 | 1 | 2019 | \$96,650 | \$17,415 | \$114,065 |
|  |  | 2019 Total | \$192,819 | \$35,431 | \$228,250 |
| 6 | 1 | 2020 | \$97,133 | \$16,811 | \$113,944 |
| 12 | 1 | 2020 | \$97,619 | \$16,204 | \$113,823 |
|  |  | 2020 Total | \$194,752 | \$33,015 | \$227,767 |
| 6 | 1 | 2021 | \$98,107 | \$15,594 | \$113,701 |
| 12 | 1 | 2021 | \$98,597 | \$14,981 | \$113,578 |
|  |  | 2021 Total | \$196,704 | \$30,575 | \$227,279 |
| 6 | 1 | 2022 | \$99,090 | \$14,365 | \$113,455 |
| 12 | 1 | 2022 | \$99,586 | \$13,745 | \$113,331 |
|  |  | 2022 Total | \$198,676 | \$28,110 | \$226,786 |
| 6 | 1 | 2023 | \$100,084 | \$13,123 | \$113,207 |
| 12 | 1 | 2023 | \$100,584 | \$12,497 | \$113,081 |
|  |  | 2023 Total | \$200,668 | \$25,620 | \$226,288 |
| 6 | 1 | 2024 | \$101,087 | \$11,869 | \$112,956 |
| 12 | 1 | 2024 | \$101,593 | \$11,237 | \$112,830 |
|  |  | 2024 Total | \$202,680 | \$23,106 | \$225,786 |
| 6 | 1 | 2025 | \$102,100 | \$10,602 | \$112,702 |
| 12 | 1 | 2025 | \$102,611 | \$9,964 | \$112,575 |
|  |  | 2025 Total | \$204,711 | \$20,566 | \$225,277 |
| 6 | 1 | 2026 | \$103,124 | \$9,323 | \$112,447 |
| 12 | 1 | 2026 | \$103,640 | \$8,678 | \$112,318 |
|  |  | 2026 Total | \$206,764 | \$18,001 | \$224,765 |
| 6 | 1 | 2027 | \$104,158 | \$8,030 | \$112,188 |
| 12 | 1 | 2027 | \$104,679 | \$7,379 | \$112,058 |
|  |  | 2027 Total | \$208,837 | \$15,409 | \$224,246 |
| 6 | 1 | 2028 | \$105,202 | \$6,725 | \$111,927 |
| 12 | 1 | 2028 | \$105,728 | \$6,068 | \$111,796 |
|  |  | 2028 Total | \$210,930 | \$12,793 | \$223,723 |
| 6 | 1 | 2029 | \$106,257 | \$5,406 | \$111,663 |
| 12 | 1 | 2029 | \$106,788 | \$4,743 | \$111,531 |
|  |  | 2029 Total | \$213,045 | \$10,149 | \$223,194 |
| 6 | 1 | 2030 | \$107,322 | \$4,075 | \$111,397 |
| 12 | 1 | 2030 | \$107,859 | \$3,405 | \$111,264 |
|  |  | 2030 Total | \$215,181 | \$7,480 | \$222,661 |
| 6 | 1 | 2031 | \$108,398 | \$2,730 | \$111,128 |
| 12 | 1 | 2031 | \$108,940 | \$2,053 | \$110,993 |
|  |  | 2031 Total | \$217,338 | \$4,783 | \$222,121 |
| 6 | 1 | 2032 | \$109,484 | \$1,372 | \$110,856 |
| 12 | 1 | 2032 | \$110,032 | \$688 | \$110,720 |
|  |  | 2032 Total | \$219,516 | \$2,060 | \$221,576 |
|  |  | Grand Total | \$2,978,312 | \$285,713 | \$3,264,025 |


| KIA F-09-02 GAC |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 6 | 1 | 2018 | \$0 | \$0 | \$0 |
| 12 | 1 | 2018 | \$542,297 | \$212,217 | \$754,514 |
|  |  | 2018 Total | \$542,297 | \$212,217 | \$754,514 |
| 6 | 1 | 2019 | \$547,720 | \$206,116 | \$753,836 |
| 12 | 1 | 2019 | \$553,197 | \$199,954 | \$753,151 |
|  |  | 2019 Total | \$1,100,917 | \$406,071 | \$1,506,988 |
| 6 | 1 | 2020 | \$558,729 | \$193,731 | \$752,460 |
| 12 | 1 | 2020 | \$564,316 | \$187,445 | \$751,761 |
|  |  | 2020 Total | \$1,123,045 | \$381,176 | \$1,504,221 |
| 6 | 1 | 2021 | \$569,960 | \$181,097 | \$751,057 |
| 12 | 1 | 2021 | \$575,659 | \$174,685 | \$750,344 |
|  |  | 2021 Total | \$1,145,619 | \$355,782 | \$1,501,401 |
| 6 | 1 | 2022 | \$581,416 | \$168,208 | \$749,624 |
| 12 | 1 | 2022 | \$587,230 | \$161,668 | \$748,898 |
|  |  | 2022 Total | \$1,168,646 | \$329,876 | \$1,498,522 |
| 6 | 1 | 2023 | \$593,102 | \$155,061 | \$748,163 |
| 12 | 1 | 2023 | \$599,033 | \$148,389 | \$747,422 |
|  |  | 2023 Total | \$1,192,135 | \$303,450 | \$1,495,585 |
| 6 | 1 | 2024 | \$605,024 | \$141,650 | \$746,674 |
| 12 | 1 | 2024 | \$611,074 | \$134,843 | \$745,917 |
|  |  | 2024 Total | \$1,216,098 | \$276,493 | \$1,492,591 |
| 6 | 1 | 2025 | \$617,185 | \$127,969 | \$745,154 |
| 12 | 1 | 2025 | \$623,356 | \$121,025 | \$744,381 |
|  |  | 2025 Total | \$1,240,541 | \$248,994 | \$1,489,535 |
| 6 | 1 | 2026 | \$629,590 | \$114,012 | \$743,602 |
| 12 | 1 | 2026 | \$635,886 | \$106,930 | \$742,816 |
|  |  | 2026 Total | \$1,265,476 | \$220,942 | \$1,486,418 |
| 6 | 1 | 2027 | \$642,245 | \$99,776 | \$742,021 |
| 12 | 1 | 2027 | \$648,667 | \$92,551 | \$741,218 |
|  |  | 2027 Total | \$1,290,912 | \$192,327 | \$1,483,239 |
| 6 | 1 | 2028 | \$655,154 | \$85,253 | \$740,407 |
| 12 | 1 | 2028 | \$661,705 | \$77,883 | \$739,588 |
|  |  | 2028 Total | \$1,316,859 | \$163,136 | \$1,479,995 |
| 6 | 1 | 2029 | \$668,322 | \$70,438 | \$738,760 |
| 12 | 1 | 2029 | \$675,006 | \$62,920 | \$737,926 |
|  |  | 2029 Total | \$1,343,328 | \$133,358 | \$1,476,686 |
| 6 | 1 | 2030 | \$681,756 | \$55,326 | \$737,082 |
| 12 | 1 | 2030 | \$688,573 | \$47,656 | \$736,229 |
|  |  | 2030 Total | \$1,370,329 | \$102,982 | \$1,473,311 |
| 6 | 1 | 2031 | \$695,459 | \$39,910 | \$735,369 |
| 12 | 1 | 2031 | \$702,414 | \$32,086 | \$734,500 |
|  |  | 2031 Total | \$1,397,873 | \$71,996 | \$1,469,869 |
| 6 | 1 | 2032 | \$709,438 | \$24,184 | \$733,622 |
| 12 | 1 | 2032 | \$716,532 | \$16,203 | \$732,735 |
|  |  | 2032 Total | \$1,425,970 | \$40,387 | \$1,466,357 |
| 6 | 1 | 2033 | \$723,695 | \$8,141 | \$731,836 |
|  |  | 2033 Total | \$723,695 | \$8,141 | \$731,836 |
|  |  | Grand Total | \$18,863,740 | \$3,447,328 | \$22,311,068 |


| KIA F-14-015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 6 | 1 | 2019 | 68,989.91 | 32,871.43 | 101,861.34 |
| 12 | 1 | 2019 | 69,593.57 | 32,181.53 | 101,775.10 |
|  |  | 2019 Total | 138,583.48 | 65,052.96 | 203,636.44 |
| 6 | 1 | 2020 | 70,202.51 | 31,485.60 | 101,688.11 |
| 12 | 1 | 2020 | 70,816.78 | 30,783.58 | 101,600.36 |
|  |  | 2020 Total | 141,019.29 | 62,269.18 | 203,288.47 |
| 6 | 1 | 2021 | 71,436.43 | 30,075.41 | 101,511.84 |
| 12 | 1 | 2021 | 89,557.31 | 36,489.61 | 126,046.92 |
|  |  | 2021 Total | 160,993.74 | 66,565.02 | 227,558.76 |
| 6 | 1 | 2022 | 90,340.94 | 35,594.03 | 125,934.97 |
| 12 | 1 | 2022 | 91,131.42 | 34,690.63 | 125,822.05 |
|  |  | 2022 Total | 181,472.36 | 70,284.66 | 251,757.02 |
| 6 | 1 | 2023 | 91,928.82 | 33,779.31 | 125,708.13 |
| 12 | 1 | 2023 | 92,733.20 | 32,860.02 | 125,593.22 |
|  |  | 2023 Total | 184,662.02 | 66,639.33 | 251,301.35 |
| 6 | 1 | 2024 | 93,544.62 | 31,932.69 | 125,477.31 |
| 12 | 1 | 2024 | 94,363.13 | 30,997.25 | 125,360.38 |
|  |  | 2024 Total | 187,907.75 | 62,929.94 | 250,837.69 |
| 6 | 1 | 2025 | 95,188.81 | 30,053.61 | 125,242.42 |
| 12 | 1 | 2025 | 96,021.71 | 29,101.73 | 125,123.44 |
|  |  | 2025 Total | 191,210.52 | 59,155.34 | 250,365.86 |
| 6 | 1 | 2026 | 96,861.90 | 28,141.51 | 125,003.41 |
| 12 | 1 | 2026 | 97,709.44 | 27,172.89 | 124,882.33 |
|  |  | 2026 Total | 194,571.34 | 55,314.40 | 249,885.74 |
| 6 | 1 | 2027 | 98,564.40 | 26,195.79 | 124,760.19 |
| 12 | 1 | 2027 | 99,426.84 | 25,210.15 | 124,636.99 |
|  |  | 2027 Total | 197,991.24 | 51,405.94 | 249,397.18 |
| 6 | 1 | 2028 | 100,296.82 | 24,215.89 | 124,512.71 |
| 12 | 1 | 2028 | 101,174.42 | 23,212.91 | 124,387.33 |
|  |  | 2028 Total | 201,471.24 | 47,428.80 | 248,900.04 |
| 6 | 1 | 2029 | 102,059.69 | 22,201.18 | 124,260.87 |
| 12 | 1 | 2029 | 102,952.71 | 21,180.58 | 124,133.29 |
|  |  | 2029 Total | 205,012.40 | 43,381.76 | 248,394.16 |
| 6 | 1 | 2030 | 103,853.55 | 20,151.05 | 124,004.60 |
| 12 | 1 | 2030 | 104,762.28 | 19,112.50 | 123,874.78 |
|  |  | 2030 Total | 208,615.83 | 39,263.55 | 247,879.38 |
| 6 | 1 | 2031 | 105,678.95 | 18,064.88 | 123,743.83 |
| 12 | 1 | 2031 | 106,603.63 | 17,008.10 | 123,611.73 |
|  |  | 2031 Total | 212,282.58 | 35,072.98 | 247,355.56 |
| 6 | 1 | 2032 | 107,536.42 | 15,942.06 | 123,478.48 |
| 12 | 1 | 2032 | 108,477.36 | 14,866.70 | 123,344.06 |
|  |  | 2032 Total | 216,013.78 | 30,808.76 | 246,822.54 |
| 6 | 1 | 2033 | 109,426.54 | 13,781.92 | 123,208.46 |
| 12 | 1 | 2033 | 110,384.01 | 12,687.67 | 123,071.68 |
|  |  | 2033 Total | 219,810.55 | 26,469.59 | 246,280.14 |
| 6 | 1 | 2034 | 111,349.88 | 11,583.82 | 122,933.70 |
| 12 | 1 | 2034 | 112,324.19 | 10,470.32 | 122,794.51 |
|  |  | 2034 Total | 223,674.07 | 22,054.14 | 245,728.21 |


| KIA F-14-015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | ---: | ---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 6 | 1 | 2035 | $113,307.03$ | $9,347.07$ | $122,654.10$ |
| 12 | 1 | 2035 | $114,298.47$ | $8,214.00$ | $122,512.47$ |
|  |  | 2035 Total | $227,605.50$ | $17,561.07$ | $245,166.57$ |
| 6 | 1 | 2036 | $115,298.58$ | $7,071.02$ | $122,369.60$ |
| 12 | 1 | 2036 | $116,307.44$ | $5,918.03$ | $122,225.47$ |
|  |  | 2036 Total | $231,606.02$ | $12,989.05$ | $244,595.07$ |
| 6 | 1 | 2037 | $117,325.13$ | $4,754.96$ | $122,080.09$ |
| 12 | 1 | 2037 | $118,351.73$ | $3,581.70$ | $121,933.43$ |
|  |  | 2037 Total | $235,676.86$ | $8,336.66$ | $244,013.52$ |
| 6 | 1 | 2038 | $119,387.31$ | $2,398.18$ | $121,785.49$ |
| 12 | 1 | 2038 | $120,432.12$ | $1,204.31$ | $121,636.43$ |
|  |  | 2038 Total | $239,819.43$ | $3,602.49$ | $243,421.92$ |
|  |  | Grand Total | $4,000,000.00$ | $846,585.62$ | $4,846,585.62$ |


| KIA F-15-011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
|  | 1 | 2018 | 74,193.85 | 35,350.94 | 109,544.79 |
|  |  | 2018 Total | 74,193.85 | 35,350.94 | 109,544.79 |
| 6 | 1 | 2019 | 74,843.04 | 34,609.01 | 109,452.05 |
| 12 | 1 | 2019 | 85,863.79 | 38,509.63 | 124,373.42 |
|  |  | 2019 Total | 160,706.83 | 73,118.64 | 233,825.47 |
| 6 | 1 | 2020 | 86,615.10 | 37,650.99 | 124,266.09 |
| 12 | 1 | 2020 | 87,372.98 | 36,784.85 | 124,157.83 |
|  |  | 2020 Total | 173,988.08 | 74,435.84 | 248,423.92 |
| 6 | 1 | 2021 | 88,137.49 | 35,911.12 | 124,048.61 |
| 12 | 1 | 2021 | 88,908.70 | 35,029.74 | 123,938.44 |
|  |  | 2021 Total | 177,046.19 | 70,940.86 | 247,987.05 |
| 6 | 1 | 2022 | 89,686.66 | 34,140.64 | 123,827.30 |
| 12 | 1 | 2022 | 90,471.41 | 33,243.78 | 123,715.19 |
|  |  | 2022 Total | 180,158.07 | 67,384.42 | 247,542.49 |
| 6 | 1 | 2023 | 91,263.03 | 32,339.07 | 123,602.10 |
| 12 | 1 | 2023 | 92,061.59 | 31,426.43 | 123,488.02 |
|  |  | 2023 Total | 183,324.62 | 63,765.50 | 247,090.12 |
| 6 | 1 | 2024 | 92,867.13 | 30,505.82 | 123,372.95 |
| 12 | 1 | 2024 | 93,679.72 | 29,577.14 | 123,256.86 |
|  |  | 2024 Total | 186,546.85 | 60,082.96 | 246,629.81 |
| 6 | 1 | 2025 | 94,499.41 | 28,640.35 | 123,139.76 |
| 12 | 1 | 2025 | 95,326.28 | 27,695.36 | 123,021.64 |
|  |  | 2025 Total | 189,825.69 | 56,335.71 | 246,161.40 |
| 6 | 1 | 2026 | 96,160.38 | 26,742.10 | 122,902.48 |
| 12 | 1 | 2026 | 97,001.79 | 25,780.49 | 122,782.28 |
|  |  | 2026 Total | 193,162.17 | 52,522.59 | 245,684.76 |
| 6 | 1 | 2027 | 97,850.55 | 24,810.48 | 122,661.03 |
| 12 | 1 | 2027 | 98,706.74 | 23,831.98 | 122,538.72 |
|  |  | 2027 Total | 196,557.29 | 48,642.46 | 245,199.75 |
| 6 | 1 | 2028 | 99,570.43 | 22,844.90 | 122,415.33 |
| 12 | 1 | 2028 | 100,441.67 | 21,849.20 | 122,290.87 |
|  |  | 2028 Total | 200,012.10 | 44,694.10 | 244,706.20 |
| 6 | 1 | 2029 | 101,320.53 | 20,844.79 | 122,165.32 |
| 12 | 1 | 2029 | 102,207.09 | 19,831.58 | 122,038.67 |
|  |  | 2029 Total | 203,527.62 | 40,676.37 | 244,203.99 |
| 6 | 1 | 2030 | 103,101.41 | 18,809.50 | 121,910.91 |
| 12 | 1 | 2030 | 104,003.54 | 17,778.49 | 121,782.03 |
|  |  | 2030 Total | 207,104.95 | 36,587.99 | 243,692.94 |
| 6 | 1 | 2031 | 104,913.57 | 16,738.46 | 121,652.03 |
| 12 | 1 | 2031 | 105,831.56 | 15,689.32 | 121,520.88 |
|  |  | 2031 Total | 210,745.13 | 32,427.78 | 243,172.91 |
| 6 | 1 | 2032 | 106,757.59 | 14,631.01 | 121,388.60 |
| 12 | 1 | 2032 | 107,691.72 | 13,563.43 | 121,255.15 |
|  |  | 2032 Total | 214,449.31 | 28,194.44 | 242,643.75 |
| 6 | 1 | 2033 | 108,634.02 | 12,486.51 | 121,120.53 |
| 12 | 1 | 2033 | 109,584.57 | 11,400.17 | 120,984.74 |
|  |  | 2033 Total | 218,218.59 | 23,886.68 | 242,105.27 |
| 6 | 1 | 2034 | 110,543.43 | 10,304.33 | 120,847.76 |


| KIA F-15-011 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Payment Date |  |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |  |  |  |  |
| 12 | 1 | 2034 | $111,510.69$ | $9,198.89$ | $120,709.58$ |  |  |  |  |  |
|  |  | 2034 Total | $222,054.12$ | $19,503.22$ | $241,557.34$ |  |  |  |  |  |
| 6 | 1 | 2035 | $112,486.41$ | $8,083.78$ | $120,570.19$ |  |  |  |  |  |
| 12 | 1 | 2035 | $113,470.66$ | $6,958.92$ | $120,429.58$ |  |  |  |  |  |
|  |  | 2035 Total | $225,957.07$ | $15,042.70$ | $240,999.77$ |  |  |  |  |  |
| 6 | 1 | 2036 | $114,463.53$ | $5,824.22$ | $120,287.75$ |  |  |  |  |  |
| 12 | 1 | 2036 | $115,465.09$ | $4,679.58$ | $120,144.67$ |  |  |  |  |  |
|  |  | 2036 Total | $229,928.62$ | $10,503.80$ | $240,432.42$ |  |  |  |  |  |
| 6 | 1 | 2037 | $116,475.41$ | $3,524.93$ | $120,000.34$ |  |  |  |  |  |
| 12 | 1 | 2037 | $117,494.57$ | $2,360.17$ | $119,854.74$ |  |  |  |  |  |
|  |  | 2037 Total | $233,969.98$ | $5,885.10$ | $239,855.08$ |  |  |  |  |  |
| 6 | 1 | 2038 | $118,522.87$ | $1,185.19$ | $119,708.06$ |  |  |  |  |  |
|  |  | 2038 Total | $118,522.87$ | $1,185.19$ | $119,708.06$ |  |  |  |  |  |
|  |  | Grand Total | $4,000,000.00$ | $861,167.29$ | $4,861,167.29$ |  |  |  |  |  |


| KIA F-16-027 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 12 | 1 | 2021 | 83,951.21 | 40,000.00 | 123,951.21 |
|  |  | 2021 Total | 83,951.21 | 40,000.00 | 123,951.21 |
| 6 | 1 | 2022 | 84,685.78 | 39,160.49 | 123,846.27 |
| 12 | 1 | 2022 | 85,426.78 | 38,313.63 | 123,740.41 |
|  |  | 2022 Total | 170,112.56 | 77,474.12 | 247,586.68 |
|  | 1 | 2023 | 86,174.27 | 37,459.36 | 123,633.63 |
| 12 | 1 | 2023 | 86,928.29 | 36,597.62 | 123,525.91 |
|  |  | 2023 Total | 173,102.56 | 74,056.98 | 247,159.54 |
| 6 | 1 | 2024 | 87,688.92 | 35,728.33 | 123,417.25 |
| 12 | 1 | 2024 | 88,456.19 | 34,851.45 | 123,307.64 |
|  |  | 2024 Total | 176,145.11 | 70,579.78 | 246,724.89 |
| 6 | 1 | 2025 | 89,230.18 | 33,966.89 | 123,197.07 |
| 12 | 1 | 2025 | 90,010.95 | 33,074.58 | 123,085.53 |
|  |  | 2025 Total | 179,241.13 | 67,041.47 | 246,282.60 |
| 6 | 1 | 2026 | 90,798.54 | 32,174.48 | 122,973.02 |
| 12 | 1 | 2026 | 91,593.03 | 31,266.49 | 122,859.52 |
|  |  | 2026 Total | 182,391.57 | 63,440.97 | 245,832.54 |
| 6 | 1 | 2027 | 92,394.47 | 30,350.56 | 122,745.03 |
| 12 | 1 | 2027 | 93,202.92 | 29,426.62 | 122,629.54 |
|  |  | 2027 Total | 185,597.39 | 59,777.18 | 245,374.57 |
| 6 | 1 | 2028 | 94,018.45 | 28,494.58 | 122,513.03 |
| 12 | 1 | 2028 | 94,841.11 | 27,554.40 | 122,395.51 |
|  |  | 2028 Total | 188,859.56 | 56,048.98 | 244,908.54 |
| 6 | 1 | 2029 | 95,670.97 | 26,605.99 | 122,276.96 |
| 12 | 1 | 2029 | 96,508.09 | 25,649.28 | 122,157.37 |
|  |  | 2029 Total | 192,179.06 | 52,255.27 | 244,434.33 |
| 6 | 1 | 2030 | 97,352.54 | 24,684.19 | 122,036.73 |
| 12 | 1 | 2030 | 98,204.37 | 23,710.67 | 121,915.04 |
|  |  | 2030 Total | 195,556.91 | 48,394.86 | 243,951.77 |
| 6 | 1 | 2031 | 99,063.66 | 22,728.63 | 121,792.29 |
| 12 | 1 | 2031 | 99,930.47 | 21,737.99 | 121,668.46 |
|  |  | 2031 Total | 198,994.13 | 44,466.62 | 243,460.75 |
| 6 | 1 | 2032 | 100,804.86 | 20,738.69 | 121,543.55 |
| 12 | 1 | 2032 | 101,686.90 | 19,730.64 | 121,417.54 |
|  |  | 2032 Total | 202,491.76 | 40,469.33 | 242,961.09 |
| 6 | 1 | 2033 | 102,576.66 | 18,713.77 | 121,290.43 |
| 12 | 1 | 2033 | 103,474.21 | 17,688.00 | 121,162.21 |
|  |  | 2033 Total | 206,050.87 | 36,401.77 | 242,452.64 |
| 6 | 1 | 2034 | 104,379.61 | 16,653.26 | 121,032.87 |
| 12 | 1 | 2034 | 105,292.93 | 15,609.46 | 120,902.39 |
|  |  | 2034 Total | 209,672.54 | 32,262.72 | 241,935.26 |
| 6 | 1 | 2035 | 106,214.24 | 14,556.54 | 120,770.78 |
| 12 | 1 | 2035 | 107,143.61 | 13,494.40 | 120,638.01 |
|  |  | 2035 Total | 213,357.85 | 28,050.94 | 241,408.79 |
| 6 | 1 | 2036 | 108,081.12 | 12,422.96 | 120,504.08 |
| 12 | 1 | 2036 | 109,026.83 | 11,342.15 | 120,368.98 |
|  |  | 2036 Total | 217,107.95 | 23,765.11 | 240,873.06 |
| 6 | 1 | 2037 | 109,980.82 | 10,251.87 | 120,232.69 |


| KIA F-16-027 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
| Estimated per KIA until Final Loan Closeout |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 12 | 1 | 2037 | 110,943.15 | 9,152.07 | 120,095.22 |
|  |  | 2037 Total | 220,923.97 | 19,403.94 | 240,327.91 |
| 6 | 1 | 2038 | 111,913.90 | 8,042.64 | 119,956.54 |
| 12 | 1 | 2038 | 112,893.15 | 6,923.50 | 119,816.65 |
|  |  | 2038 Total | 224,807.05 | 14,966.14 | 239,773.19 |
| 6 | 1 | 2039 | 113,880.96 | 5,794.57 | 119,675.53 |
| 12 | 1 | 2039 | 114,877.42 | 4,655.76 | 119,533.18 |
|  |  | 2039 Total | 228,758.38 | 10,450.33 | 239,208.71 |
| 6 | 1 | 2040 | 115,882.60 | 3,506.98 | 119,389.58 |
| 12 | 1 | 2040 | 116,896.57 | 2,348.16 | 119,244.73 |
|  |  | 2040 Total | 232,779.17 | 5,855.14 | 238,634.31 |
| 6 | 1 | 2041 | 117,919.27 | 1,179.21 | 119,098.48 |
|  |  | 2041 Total | 117,919.27 | 1,179.21 | 119,098.48 |
|  |  | Grand Total | 4,000,000.00 | 866,340.86 | 4,866,340.86 |


| KIA B15-003 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |
|  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |
| 6 | 1 | 2018 | - |  |  |
| 12 | 1 | 2018 | 32,482.03 | 6,448.53 | 38,930.56 |
|  |  | 2018 Total | 32,482.03 | 6,448.53 | 38,930.56 |
|  | 1 | 2019 | 32,603.83 | 6,312.26 | 38,916.09 |
| 6 12 | 1 | 2019 | 32,726.10 | 6,157.38 | 38,883.48 |
|  |  | 2019 Total | 65,329.93 | 12,469.64 | 77,799.57 |
|  | 1 | 2020 | 32,848.82 | 6,001.93 | 38,850.75 |
| 12 | 1 | 2020 | 32,972.01 | 5,845.89 | 38,817.90 |
|  |  | 2020 Total | 65,820.83 | 11,847.82 | 77,668.65 |
| 6 | 1 | 2021 | 33,095.64 | 5,689.29 | 38,784.93 |
| 12 | 1 | 2021 | 33,219.75 | 5,532.09 | 38,751.84 |
|  |  | 2021 Total | 66,315.39 | 11,221.38 | 77,536.77 |
| 6 | 1 | 2022 | 33,344.33 | 5,374.29 | 38,718.62 |
| 12 | 1 | 2022 | 33,469.38 | 5,215.90 | 38,685.28 |
|  |  | 2022 Total | 66,813.71 | 10,590.19 | 77,403.90 |
| 6 | 1 | 2023 | 33,594.88 | 5,056.92 | 38,651.80 |
| 12 | 1 | 2023 | 33,720.86 | 4,897.35 | 38,618.21 |
|  |  | 2023 Total | 67,315.74 | 9,954.27 | 77,270.01 |
| 6 | 1 | 2024 | 33,847.31 | 4,737.18 | 38,584.49 |
| 12 | 1 | 2024 | 33,974.24 | 4,576.40 | 38,550.64 |
|  |  | 2024 Total | 67,821.55 | 9,313.58 | 77,135.13 |
| 6 | 1 | 2025 | 34,101.65 | 4,415.02 | 38,516.67 |
| 12 | 1 | 2025 | 34,229.53 | 4,253.03 | 38,482.56 |
|  |  | 2025 Total | 68,331.18 | 8,668.05 | 76,999.23 |
| 6 | 1 | 2026 | 34,357.89 | 4,090.45 | 38,448.34 |
| 12 | 1 | 2026 | 34,486.74 | 3,927.24 | 38,413.98 |
|  |  | 2026 Total | 68,844.63 | 8,017.69 | 76,862.32 |
| 6 | 1 | 2027 | 34,616.05 | 3,763.45 | 38,379.50 |
| 12 | 1 | 2027 | 34,745.86 | 3,599.01 | 38,344.87 |
|  |  | 2027 Total | 69,361.91 | 7,362.46 | 76,724.37 |
| 6 | 1 | 2028 | 34,876.17 | 3,433.96 | 38,310.13 |
| 12 | 1 | 2028 | 35,006.95 | 3,268.30 | 38,275.25 |
|  |  | 2028 Total | 69,883.12 | 6,702.26 | 76,585.38 |
| 6 | 1 | 2029 | 35,138.23 | 3,102.02 | 38,240.25 |
| 12 | 1 | 2029 | 35,269.99 | 2,935.12 | 38,205.11 |
|  |  | 2029 Total | 70,408.22 | 6,037.14 | 76,445.36 |
| 6 | 1 | 2030 | 35,402.26 | 2,767.58 | 38,169.84 |
| 12 | 1 | 2030 | 35,535.01 | 2,599.43 | 38,134.44 |
|  |  | 2030 Total | 70,937.27 | 5,367.01 | 76,304.28 |
| 6 | 1 | 2031 | 35,668.27 | 2,430.63 | 38,098.90 |
| 12 | 1 | 2031 | 35,802.02 | 2,261.21 | 38,063.23 |
|  |  | 2031 Total | 71,470.29 | 4,691.84 | 76,162.13 |
| 6 | 1 | 2032 | 35,936.29 | 2,091.15 | 38,027.44 |
| 12 | 1 | 2032 | 36,071.04 | 1,920.45 | 37,991.49 |
|  |  | 2032 Total | 72,007.33 | 4,011.60 | 76,018.93 |
| 6 | 1 | 2033 | 36,206.31 | 1,749.11 | 37,955.42 |
| 12 | 1 | 2033 | 36,342.09 | 1,577.12 | 37,919.21 |
|  |  | 2033 Total | 72,548.40 | 3,326.23 | 75,874.63 |
| 6 | 1 | 2034 | 36,478.37 | 1,404.50 | 37,882.87 |


| KIA B15-003 |  |  |  |  |  |  |
| :---: | :---: | :---: | ---: | ---: | ---: | :---: |
| Effective June 30, 2018 |  |  |  |  |  |  |
| Payment Date |  |  |  |  |  |  |
| Month | Day | Year | Principal | Interest | Total |  |
| 12 | 1 | 2034 | $36,615.16$ | $1,231.24$ | $37,846.40$ |  |
|  |  | 2034 Total | $73,093.53$ | $2,635.74$ | $75,729.27$ |  |
| 6 | 1 | 2035 | $36,752.47$ | $1,057.32$ | $37,809.79$ |  |
| 12 | 1 | 2035 | $36,890.29$ | 882.74 | $37,773.03$ |  |
|  |  | 2035 Total | $73,642.76$ | $1,940.06$ | $75,582.82$ |  |
| 6 | 1 | 2036 | $37,028.63$ | 707.51 | $37,736.14$ |  |
| 12 | 1 | 2036 | $37,167.48$ | 531.63 | $37,699.11$ |  |
|  |  | 2036 Total | $74,196.11$ | $1,239.14$ | $75,435.25$ |  |
| 6 | 1 | 2037 | $37,306.86$ | 355.09 | $37,661.95$ |  |
| 12 | 1 | 2037 | $37,446.61$ | 178.03 | $37,624.64$ |  |
|  |  | 2037 Total | $74,753.47$ | 533.12 | $75,286.59$ |  |
|  |  | Grand Total | $1,361,377.40$ | $132,377.75$ | $1,493,755.15$ |  |

$\qquad$

NORTHERN KENTUCKY WATER DISTRICT

## Project

# 24-inch Cross-Country Water Main Replacement Project, Edgewood/Crestview Hills, Kenton County, Kentucky 

184-0776

CURRENT BALANCE SHEET AND INCOME STATEMENT

## Northern Kentucky Water District <br> Statement of Net Position <br> June 30, 2018

| Assets and Deferred Outflows of Resources |  |  |
| :---: | :---: | :---: |
| Current Assets |  |  |
| Cash and Cash Equivalents | \$ | 28,963,750 |
| Investments |  | 896,197 |
| Accounts Receivable |  |  |
| Customers, Net |  | 4,845,767 |
| Unbilled Customers |  | 6,100,000 |
| Other |  | 253,630 |
| Assessments Receivable |  | 142,896 |
| Inventory Supplies for New Installation <br> and Maintenance, at Cost 1,631,339 |  |  |
| Prepaid Items |  | 509,505 |
| Restricted Assets - Cash and Cash Equivalents |  |  |
| Bond Proceeds Fund |  | - |
| Debt Service Account |  | 3,156,156 |
| Improvement, Repair \& Replacement |  | - |
| Total Current Assets |  | 46,499,240 |
| Noncurrent Assets |  |  |
| Restricted Assets - Cash and Cash Equivalents |  |  |
| Bond Proceeds Fund |  | 16,822,313 |
| Debt Service Account |  | 10,579,890 |
| Improvement, Repair \& Replacement |  | 5,274,498 |
| Customer Deposits Fund |  | 1,019,308 |
| Restricted Assets - Investments |  |  |
| Bond Proceeds Fund |  | - |
| Debt Service Reserve Account |  | 18,746,722 |
| Miscellaneous Deferred Charges |  | 3,862,892 |
| Capital assets |  |  |
| Land, System, Buildings and Equipment |  | 482,569,856 |
| Construction in Progress |  | 20,470,452 |
| Total Capital Assets |  | 503,040,308 |
| Less Accumulated Depreciation |  | 156,979,996 |
| Total Capital Assets, Net of Accumulated Depreciation |  | 346,060,312 |
| Total Noncurrent Assets |  | 402,365,935 |
| Total Assets |  | 448,865,175 |
| Deferred Outflows of Resources |  |  |
| Deferred Outflows Related to Pension |  | 5,586,334 |
| Deferred Loss on Refundings |  | 4,588,218 |
| Total Deferred Outflows of Resources |  | 10,174,552 |
| Total Assets and Deferred Outflows of Resources | \$ | 459,039,727 |

## Northern Kentucky Water District <br> Statement of Net Position June 30, 2018

| Liabilities and Deferred Inflows of Resources |  |  |
| :---: | :---: | :---: |
| Current Liabilities |  |  |
| Bond Indebtedness | \$ | 11,813,757 |
| Bond Anticipation Note |  | 26,223,167 |
| Notes Payable |  | 3,260,548 |
| Accounts Payable |  | 909,987 |
| Accrued Payroll \& Taxes |  | 158,336 |
| Other Accrued Liabilities |  | 262,394 |
| Liabilities Payable - Restricted Assets |  |  |
| Accrued Interest Payable |  | 3,156,156 |
| Accounts Payable |  | - |
| Total Current Liabilities |  | 45,784,345 |
| Long-Term Liabilities (Net of Current Portion) |  |  |
| Liabilities Payable - Restricted Assets |  |  |
| Accounts Payable |  | 229,542 |
| Customer Deposits |  | 1,019,308 |
| Compensated Absences |  | 708,261 |
| Arbitrage Liability |  | 536,447 |
| Bond Indebtedness |  | 155,454,255 |
| Bond Anticipation Notes Payable |  | - - |
| Notes Payable |  | 35,362,558 |
| Net Pension Liability |  | 18,765,118 |
| Total Long-Term Liabilities |  | 212,075,489 |
| Total Liabilities |  | 257,859,834 |
| Deferred Inflows of Resources |  |  |
| Deferred Inflows Related to Pension |  | 2,292,472 |
| Total Liabilities and Deferred Inflows of Resources |  | 260,152,306 |
| Net Position |  |  |
| Net Investment in Capital Assets |  | 118,534,245 |
| Restricted For |  |  |
| Debt Service Funds |  | 29,326,612 |
| Capital Improvement Projects |  | 21,867,269 |
| Unrestricted |  | 29,159,295 |
| Total Net Position |  | 198,887,421 |
| Total Liabilities, Deferred Inflows of Resources, and Net Position | \$ | 459,039,727 |

## Northern Kentucky Water District Statement of Revenues, Expenses and Changes in Net Position

|  | $\begin{gathered} \text { Jul-Dec } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { Jan-Jun } \\ 2018 \end{gathered}$ | Total Test Year 6/30/2018 |
| :---: | :---: | :---: | :---: |
| Operating Revenues |  |  |  |
| Water Sales | 27,698,944 | 25,258,937 | 52,957,881 |
| Forfeited Discounts | 415,360 | 424,676 | 840,036 |
| Rents from Water Property | 224,993 | 189,399 | 414,392 |
| Other Water Revenues | 193,360 | 194,515 | 387,875 |
| Total Operating Revenues | 28,532,657 | 26,067,527 | 54,600,184 |
| Operating Expenses |  |  |  |
| Operating \& Maintenance Expenses |  |  |  |
| Salaries \& Wages | 3,882,652 | 3,931,152 | 7,813,804 |
| Employee Pension \& Benefits | 2,293,543 | 2,369,958 | 4,663,501 |
| Taxes Other than Income Taxes | 296,871 | 286,063 | 582,934 |
| Purchased Power | 1,162,114 | 1,230,011 | 2,392,125 |
| Chemicals | 1,283,749 | 928,400 | 2,212,149 |
| Materials \& Supplies | 982,990 | 1,069,956 | 2,052,946 |
| Contractual Services | 1,747,633 | 1,745,234 | 3,492,867 |
| Transportation | 264,156 | 257,087 | 521,243 |
| Insurance | 272,863 | 287,190 | 560,053 |
| Bad Debt Expense | 224,465 | 106,727 | 331,192 |
| Miscellaneous | 122,678 | 117,398 | 240,076 |
| Regulatory Commission Assessment | 64,054 | 64,054 | 128,108 |
| Total Operating \& Maintenance Expenses | 12,597,768 | 12,393,230 | 24,990,998 |
| Depreciation Expense | 5,841,455 | 5,905,678 | 11,747,133 |
| Total Operating Expenses | 18,439,223 | 18,298,908 | 36,738,131 |
| Net Operating Income | 10,093,434 | 7,768,619 | 17,862,053 |
| Non-Operating Income (Expense) |  |  |  |
| Investment Income | 543,831 | 681,640 | 1,225,471 |
| Miscellaneous Non-Operating Income | 303,896 | 240,485 | 544,381 |
| Loss on Abandonment of Mains | $(514,633)$ | $(183,110)$ | $(697,743)$ |
| Interest on Long Term Debt | $(4,395,168)$ | $(3,886,634)$ | $(8,281,802)$ |
| Amortization of Debt Premiums and Bond Issuance Costs | 516,153 | 525,303 | 1,041,456 |
| Pension Expense | $(1,948,542)$ | - | $(1,948,542)$ |
| Arbitrage Expense | $(111,934)$ | $(51,318)$ | $(163,252)$ |
| Gain on Sale of Capital Assets | 24,224 | - | 24,224 |
| Total Non-Operating Expenses | $(5,582,173)$ | $(2,673,634)$ | $(8,255,807)$ |
| Change in Net Position Before |  |  |  |
| Capital Contributions | 4,511,261 | 5,094,985 | 9,606,246 |
| Capital Contributions | 934,305 | 516,241 | 1,450,546 |
| Change in Net Position | 5,445,566 | 5,611,226 | 11,056,792 |
| Net Position - July 1, 2017 |  |  | 187,830,629 |
| Net Position - June 30, 2018 |  |  | 198,887,421 |

