

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC APPLICATION OF)
CANNONSBURG WATER DISTRICT)
FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY TO)
INSTALL A ZONE METERING)
SYSTEM AND OTHER SYSTEM)
IMPROVEMENTS, AUTHORIZATION) CASE NO. 2020-00118
TO EXECUTE AN ASSISTANCE)
AGREEMENT WITH THE KENTUCKY)
INFRASTRUCTURE AUTHORITY,)
AND AUTHORIZATION TO DISBURSE)
SURCHARGE PROCEEDS)**

APPLICATION

Pursuant to KRS 278.020 and KRS 278.300, Cannonsburg Water District (“Cannonsburg District”) applies to the Public Service Commission (“Commission”) for a Certificate of Public Convenience and Necessity (“Certificate”) to install a zone metering system and other system improvements, for authorization to enter into an Assistance Agreement with the Kentucky Infrastructure Authority (“KIA”) to borrow an amount not to exceed \$622,000 to finance the installation of the proposed zone metering system and other system improvements, and for authorization to disburse certain proceeds from surcharges

assessed pursuant to Commission Orders in Cases No. 2011-00117¹ and No. 2018-00376.²

In support of its Application,³ Cannonsburg District provides the following:

A. General Information

1. The full name and post office address of Cannonsburg District is: Cannonsburg Water District, 1606 Cannonsburg Road, Ashland, Kentucky 41102. Its e-mail address is: tim@cannonsburgwater.com.

2. Copies of all orders, pleadings and other communications related to this proceeding should be directed to:

Tim Webb
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¹ *Application of Cannonsburg Water District for (1) Approval of Emergency Rate Relief and (2) Approval of the Increase in Nonrecurring Charges*, Case No. 2011-00217 (Ky.PSC Jun. 4, 2012).

² *Application of Cannonsburg Water District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076*, Case No. 2018-00376 (Ky.PSC May 13, 2019).

³ To facilitate the Commission's initial review of this Application, Cannonsburg District has attached a "Filings Requirements List" that consists of four pages, lists each statutory and regulatory requirement for an application for a Certificate and for authorization to issue an evidence of indebtedness, and identifies the exhibit or paragraph that satisfies the requirement.

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3. Cannonsburg District is not a corporation, limited liability company or limited partnership. It has no articles of incorporation or partnership agreements.

4. Cannonsburg District is a water district created under the provisions of KRS Chapter 74.

5. Boyd County Court created Cannonsburg District pursuant to an order entered June 10, 1966. A copy of this Order and subsequent Orders modifying Cannonsburg District's territory are attached as **Exhibit 1** of this Application.

6. As of December 31, 2018, Cannonsburg District provided retail water service to approximately 3,525 customers in Boyd and Greenup Counties, Kentucky.⁵

7. A copy of the Resolution of Cannonsburg District's Board of Commissioners authorizing the filing of this Application is attached as **Exhibit 2** of this Application.

⁴ On April 3, 2020, pursuant to 807 KAR 5:001, Section 8, Cannonsburg District notified the Commission of its election of the use of electronic filing procedures for this proceeding.

⁵ *Annual Report of Cannonsburg Water District to the Public Service Commission of the Commonwealth of Kentucky for the Calendar Year Ended December 31, 2018* ("2018 Annual Report") at Ref Pages 5 and 27.

B. Background

8. Cannonsburg District has experienced significant water loss problems for several years. In its Order of June 4, 2012, in Case No. 2011-00217, the Commission found that during the period from 2002 through 2010, unaccounted-for water losses represented approximately 31.31 percent of Cannonsburg District's water purchases. Alarmed at this level of water loss and concerned that required ratemaking procedures would severely restrict Cannonsburg District's cash flow, limit the funds available to Cannonsburg District to address its non-revenue water problem, and impair Cannonsburg District's ability to take the necessary action to focus on its leak detection and repair, the Commission authorized Cannonsburg District to assess a monthly surcharge ("First Surcharge") of \$5.53 for 36 months, or until \$700,875 was collected, to fund unaccounted-for water loss reduction efforts.⁶ It further ordered Cannonsburg District to submit a comprehensive unaccounted-for water loss reduction plan.⁷

9. In response to the Commission's Order, Cannonsburg submitted a water loss reduction plan in which it proposed to divide its system into nine zones and to install ten six-inch master meters.⁸ Within the nine zones, it planned to install

⁶ Case No. 2011-00217, Order of June 4, 2012 at 9.

⁷ *Id.* at 10.

⁸ Cannonsburg Water District, "Water Loss Prevention and Leak Detection Program" (Sep. 12, 2012) (filed in Case No. 2011-00217); Letter from Paul Amburgey, E.L. Robinson Engineering, to Ann Ramser, Staff Attorney, Public Service Commission (July 17, 2014) (filed in Case No. 2011-002012).

14 one-inch bypass meters to gather information to devise a more detailed water loss reduction plan. In June 2014, the Commission approved this plan and authorized the use of the monthly surcharge proceeds to purchase and install the proposed meters.⁹

10. Several problems beset Cannonsburg District's initial efforts to establish a zone system. Cannonsburg District completed installation of the metering equipment in October 2014. In January 2015, however, it experienced problems with the ten master meters. These meters were not designed for submerged or wet pit conditions and malfunctioned.¹⁰ In July 2015, the meters' manufacturer replaced the defective meters.¹¹ Cannonsburg District, however, experienced problems with the replacements, including an incompatible communication system and meter components that were unsuited to the environment in which the meters were located.¹² Many of the replacement master meters have not functioned properly.¹³ These equipment failures, along with a lack of a sufficient number of monitoring meters, prevented the development and implementation of an effective zone

⁹ *Cannonsburg Water District's Unaccounted-for Water Loss Reduction Plan, Surcharge and Monitoring*, Case No. 2014-00267 (Ky.PSC Aug. 7, 2014).

¹⁰ Letter from Danny Clarkson, General Manager, Cannonsburg Water District, to Jeff Derouen, Executive Director, Public Service Commission (Mar. 19, 2015) (filed in Case No. 2014-00267); Letter from Alan S. Morrison, P.E., The C.I. Thornburg, Co., to Danny Clarkson, General Manager, Cannonsburg Water District (Mar. 16, 2015) (filed in Case No. 2014-00267).

¹¹ Letter from Danny Clarkson, General Manager, Cannonsburg Water District, to Ann Ramser, Staff Attorney, Public Service Commission (July 23, 2015) (filed in Case No. 2014-00267).

¹² Letter from Alan S. Morrison, P.E., The C.I. Thornburg, Co., to Danny Clarkson, General Manager, Cannonsburg Water District (Aug. 11, 2015);

¹³ Case No. 2018-00376, VR: 04/25/2019, 9:58:10-10:00:08.

metering system and hampered Cannonsburg District's efforts to reduce its water loss.

11. As shown in **Exhibit 3** to this Application, Cannonsburg District's zone metering system as of May 2019 consisted of 10 zones, each of which is served through a six-inch zone meter. In addition, Cannonsburg District has installed 14 bypass meters that divide some of the zones into smaller areas.

12. In addition to its efforts to establish a zone meter system, Cannonsburg District has sought to reduce its water loss by replacing meters registering customer usage. In 2015, Cannonsburg District acquired and installed approximately 2,800 Sensus iPerl meters to replace existing 5/8-inch x 3/4-inch and one-inch mechanical meters.¹⁴ The iPerl meters have no moving parts and use a solid-state electromagnetic flow technology to measure water flow. They have a greater degree of accuracy in their measurement of water usage, especially at low water flows.¹⁵ Installed with each of these meters was a radio transmitting unit that enabled the meter to transmit consumption, status, and diagnostic data to Cannonsburg District's offices at designated times and upon demand. Cannonsburg District also installed

¹⁴ *Application of Cannonsburg Water District for a Certificate of Public Convenience and Necessity to Construct, Finance and Increase Rates Pursuant to KRS 278.023*, Case No. 2015-00181 (Ky.PSC July 8, 2015).

¹⁵ The meter's manufacturer contends that the meters register with 100 percent accuracy at flows as low as .03 gallons per minute. In contrast, most mechanical meters fail to register any flows at .03 gallons per minute and only 50 percent of flows at 0.05 gallons per minute. See Gregory L. Richards, Michael C. Johnson, and Steven L. Barfuss, *Apparent Losses Caused By Water Meter Inaccuracies at Ultralow Levels*, J. AWWA 123 (May 2010)

the communications infrastructure necessary for these transmissions to be relayed to Cannonsburg District's office. After the installation of these meters, Cannonsburg District noted an increase in water sales from existing customers that is likely attributable to these meter's greater accuracy.

13. In 2018, Cannonsburg District applied to the Commission for an adjustment of rates, in which it sought authorization to assess a monthly surcharge of \$4.00 per active meter for a period of four years to generate approximately \$680,000 to support additional water reduction efforts, including the expansion of its existing zone metering system.¹⁶ On May 13, 2019, the Commission authorized such a surcharge ("Second Surcharge") as "a reasonable means of funding its continuing unaccounted-for water loss reduction efforts," including a proposed expansion of its zone metering system.¹⁷

14. Despite these efforts, Cannonsburg District has been unable to achieve a significant reduction in its water loss. As shown in Table 1, Cannonsburg has reported unaccounted-for water loss in excess of 20 percent of total water purchases for each of the last ten years. During this period, it has experienced an average annual water loss of 27.7 percent of its total water purchases. Since 2012, when the

¹⁶ *Application of Cannonsburg Water District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076*, Case No. 2018-00376 (Ky. PSC filed Nov. 13, 2018). The surcharge was not originally part of this application. While the application was pending before the Commission, Cannonsburg District moved for authorization to assess a surcharge. *See* Case No. 2018-00376, Motion for Surcharge (Ky. PSC filed Apr. 22, 2019).

¹⁷ Case No. 2018-00376, Order of May 13, 2019 at 7-8.

Commission in Case No. 2011-00217 authorized a surcharge for water loss reduction efforts, Cannonsburg District has experienced an average annual water loss of 28.29 percent.

Year	Purchased Water (gallons)	Line Loss (gallons)	Line Loss (%)
2010	538,431,000	142,452,000	26.46
2011	518,449,000	124,894,000	24.09
2012	449,503,000	98,323,000	21.87
2013	401,458,000	83,305,000	20.75
2014	431,952,000	120,696,000	27.94
2015	417,132,000	116,547,000	27.94
2016	414,208,000	139,023,000	33.56
2017	388,854,000	144,245,000	37.09
2018	384,998,000	107,325,000	27.88
2019	371,894,000	108,871,000	29.27
Average		118,568,100	27.69

C. Phase I: Proposed Revision and Expansion of Zone Metering System

15. Cannonsburg District proposes a series of system improvements to significantly improve its ability to locate and repair leaks within its distribution system and well as replace known defective water service lines. These improvements will be made in two phases. Phase I involves the redesign and expansion of Cannonsburg District’s zone metering system. Phase II involves the systematic

¹⁸ The source for this table is Cannonsburg District’s financial and statistical reports for the year from 2010 to 2018, which were filed pursuant to 807 KAR 5:006, Section 4(2). A copy of Cannonsburg District’s Water Loss Report for Calendar Year 2019 is found at **Exhibit 25** of this Application.

replacement of Cannonsburg District's polybutylene ("BlueMax") service lines, which are particularly susceptible to pinhole leaks and cracking due to the natural chlorine content of finished water and the manufacturing process used to produce the piping.¹⁹ This Application requests a Certificate for the first phase of those improvements.

16. The Phase I Project primarily involves the purchase and installation of 49 large-sized Sensus Omni meters: ten six-inch meters, 28 four-inch meters, and eleven three-inch meters. A portion of these meters will replace the 24 existing meters in Cannonsburg District's zone metering system.²⁰ The additional meters will be used to create three additional metering zones and additional sub-zones. Meters will also be located at each purchasing point to enable Cannonsburg District to accurately gauge the volume of water purchased from its wholesale suppliers. Increasing the number of zones and sub-zones will enable the water district to more quickly locate and isolate water leaks. Furthermore, all meters will be linked into Cannonsburg District's existing communications infrastructure to enable the water district to monitor its zone and sub-zone meters in real time and to react immediately to changing conditions in its water system.

¹⁹ Case No. 2018-00376, VR: 04/25/2019, 9:18:39-9:23:30.

²⁰ The existing zone meters will not only be replaced, but the entire meter setting will also be replaced. This action will avoid the problems experienced with the initial efforts to install a zone meter system in which the purchased meters proved incompatible with the existing meter setting.

17. The Phase I Project also includes:

a. The purchase of 200 additional iPerl 5/8-inch x 3/4-inch meters, which will allow Cannonsburg District to replace the remaining mechanical meters used to register customer usage and to allow these meters and existing iPerl meters to operate within the water district's communications infrastructure;

b. The purchase of 600 transceiver sets (MXUs for customer meters to transmit the radio signal from the meter to Cannonsburg District's communications infrastructure). Following the purchase and installation of the transceiver sets, all of Cannonsburg District's customer meters will communicate directly with its communications infrastructure. No longer will Cannonsburg district employees have to "drive-by" 600 meters each month over an approximately 180-mile route to receive the meter readings; and

c. The development of a hydraulic model for the water district, which will enable Cannonsburg District to understand how its distribution system operates and to model various changes to its distribution to improve the quality of water service and reduce operating costs.

18. The proposed Phase I Project is consistent with the Commission's guidance to all water utilities with significant water loss to "begin installing zone

meters to help identify problem areas” and, where possible, to “install[] bypass meters . . . to help isolate leaks into smaller areas.”²¹

19. On March 9, 2020 and March 16, 2020 in accordance with KRS 424.260, Cannonsburg District published in the *Daily-Independent* an advertisement for bids on the Phase I Zone Metering Project.

20. On March 24, 2020, Cannonsburg District’s Board of Commissioners received and opened three bids. The bid of Triple B Construction, LLC of Ashland, Kentucky, which was \$390,613.74, was the lowest submitted bid. A copy of the certified bid tabulations is attached as **Exhibit 4** to this Application.²²

21. After review of these bids, Cannonsburg District’s Board of Commissioners adopted a Resolution awarding a contract for the proposed meter purchase and installation to Triple B Construction, LLC contingent upon receipt of a favorable recommendation regarding its bid from the Project Engineer and an Order from the Commission authorizing Cannonsburg District to enter an Assistance Agreement with KIA in the amount of \$622,000, to purchase and install the metering equipment, and issuing a Certificate for the Phase I Project. This Resolution is attached as **Exhibit 5** of this Application.

²¹ *Electronic Investigation Into Excessive Water Loss By Kentucky’s Jurisdictional Water Utilities*, Case No. 2019-00041 (Ky.PSC Nov. 22, 2019) at 6-7.

²² The request for bids does not include three of the ten six-inch meters. Because of the favorable bid received from Triple B Construction, Cannonsburg District intends to issue a change order to add the purchase and installation of three additional six-inch meters and meter settings. This addition is reflected in the Project Engineer’s Opinion of Probable Project Cost.

22. On March 27, 2020, Bell Engineering, the Project Engineer, recommended that the contract for the proposed meter purchase and installation be awarded to Triple B Construction, LLC. A copy of the Project Engineer's recommendation is attached to this Application as **Exhibit 6**.

D. Certificate of Public Convenience and Necessity

23. Cannonsburg District restates and incorporates the information contained in paragraphs 8 through 22 of this Application.

24. The proposed meter equipment will be located throughout Cannonsburg District's territory, which consists of portions of Boyd and Greenup Counties, Kentucky. A map depicting the general vicinity in which the metering equipment will be installed is found at page 3 of 24 of **Exhibit 7** of the Application.

25. The proposed metering equipment will not complete with that of another public utility. Its purchase and installation will not result in the wasteful duplication of utility facilities or inefficient investment.

26. The plans for the proposed installation of the metering equipment and establishment of the zone metering system are set forth in **Exhibit 7** of the Application.

27. A detailed description and the specifications for the metering equipment are set forth in **Exhibits 8 through 14** to this Application.

28. The Phase I Project requires an encroachment permit from the Kentucky Department of Highways to place certain meters on state highway rights-of-way. Cannonsburg District has applied for such a permit and will provide a copy of this permit when issued. Cannonsburg District has received authorization from the Boyd County Judge Executive to place certain of its meters on county road rights-of-way. A copy of its application to the Kentucky Department of Highways and the authorization from the Boyd County Judge Executive are found at **Exhibit 15 and Exhibit 16** to this Application. No other franchises, permits, or regulatory approvals are required for the proposed purchase and installation of the meter equipment.

29. The Phase I Project does not require the approval of the Kentucky Division of Water. See **Exhibit 17** to this Application.

30. The proposed Phase I Project does not require the acquisition of any parcels of land or easements.

31. The total estimated cost of the proposed Phase I Project is **\$819,103**. The Project Engineer's Opinion of Probable Costs is attached as **Exhibit 18** to this Application. Cannonsburg District proposes to finance this cost through an Assistance Agreement with KIA through which Cannonsburg District will borrow

\$622,000 from KIA and through the use of approximately \$197,103 of the proceeds from the First Surcharge.²³

32. There is no expected additional annual cost for the operation of the proposed metering equipment. Indeed, Cannonsburg District expects a **decrease** in annual costs of approximately \$5,572 once the metering equipment is installed. A statement of annual cost of operating the proposed equipment is set forth at **Exhibit 19** of the Application.

33. The Proposed Facilities will not compete with the facilities of any other public utility.

E. Authorization to Enter Assistance Agreement

34. Cannonsburg District restates and incorporates the information contained in paragraphs 8 through 33 of this Application.

35. A description of Cannonsburg District's water system and its property, stated at original cost by accounts, is contained in *Annual Report of Cannonsburg Water District to the Public Service Commission for the Year Ending December 31, 2018* ("2018 Annual Report"), a copy of which Cannonsburg District has previously

²³ As of May 31, 2019, Cannonsburg District had retained First Surcharge proceeds (plus accrued interest) of \$521,691.83. See Letter from Tim Webb, General Manager, Cannonsburg District, to Gwen Pinson, Executive Director, Public Service Commission (June 26, 2019) (filed in Case No. 2014-00267).

been filed with the Commission and which is incorporated by reference into this Application.²⁴

36. Cannonsburg District does not propose to issue any stock or bonds.

37. Cannonsburg District proposes to enter into an Assistance Agreement with KIA to borrow an amount not to exceed \$622,000. The proposed loan will bear interest at a rate of 2.00 percent per annum and will be payable over a period not to exceed four years from the date of last draw of the loan proceeds. In addition to interest, Cannonsburg District will be required to pay a 0.2 percent annual administration fee on the unpaid, principal balance. The Assistance Agreement will be secured by a pledge of Cannonsburg District's revenues. Additional details regarding the proposed loan are set forth in the Conditional Commitment Letter of February 10, 2020, a copy of which is attached as **Exhibit 20**. The Minutes of the KIA Board of Directors' Meeting of February 6, 2020 and the Board's Resolution approving the proposed Assistance Agreement adopted at that meeting are attached as **Exhibit 21** and **Exhibit 22** to this Application.

38. The proceeds from the proposed loan will finance the proposed Phase I Project. An itemized list of project expenditures is found at **Exhibit 18**.

²⁴ As of the filing of this Application, Cannonsburg District has not yet filed its financial and statistical report for the year ending December 31, 2019. It requested and received an extension from the Commission to submit this report no later than June 30, 2020.

39. A copy of the budget for the construction is attached as **Exhibit 18**. All proceeds from the Assistance Agreement will be used in accordance with the Project Budget.

40. No real property will be acquired with proceeds from the Assistance Agreement.

41. No proceeds from the Assistance Agreement will be used to refund outstanding obligations.

42. A copy of Cannonsburg District's written notification to the State Local Debt Officer is attached as **Exhibit 23**.

43. For the 12-month period ending December 31, 2018, Cannonsburg District had less than \$5,000,000 in gross annual revenues.

44. Pursuant to 807 KAR 5:001, Section 18(2)(a), the following information is provided:

a. Cannonsburg District's 2018 Annual Report is incorporated by reference into this Application. Cannonsburg District also incorporates into this Application its audited financial statements for the year ending December 31, 2018, which has previously been filed with the Commission.

b. No material changes have occurred in Cannonsburg District's financial condition since December 31, 2018.

c. Cannonsburg District is not authorized to issue any stock.

d. There are no trust deeds or mortgages.

45. Plans and a map of the proposed Phase I Project meter installation are found at **Exhibits 7 and 8** of this Application respectively. A description of the metering equipment to be installed is found at **Exhibits 9 through 14** to this Application.

46. A detailed estimate of the acquired property, arranged according to the Uniform System of Accounts for Class A/B Water Districts and Associations, is attached to this Application as **Exhibit 24** of this Application.

47. The proposed loan will not require Cannonsburg District to seek an adjustment of its rates for service. Cannonsburg District, however, intends to use the proceeds of the Second Surcharge to service the debt payments required under the proposed Assistance Agreement.²⁵

48. Cannonsburg District's execution of an Assistance Agreement with KIA to borrow \$622,000 is for a lawful objective within Cannonsburg District's corporate purposes, is necessary, appropriate for, and consistent with Cannonsburg District's proper performance of its service to the public. It will not impair Cannonsburg District's ability to perform that service and is reasonably necessary and appropriate for such purpose.

²⁵ The Second Surcharge is expected to produce proceeds of \$680,000. Total principal and interest payments under the proposed Assistance Agreement are \$653,182.

F. Authorization To Disburse Surcharge Proceeds For Phase I Project Costs and for Assistance Agreement Payments

49. In its Order of June 4, 2012 in Case No. 2011-00117, the Commission authorized Cannonsburg District to assess the First Surcharge, but expressly directed that the proceeds be placed in a separate interest-bearing account and that no disbursements be made from this account prior to the Commission's approval of Cannonsburg District's comprehensive unaccounted-for water loss reduction plan.²⁶

50. In Case No. 2014-00217, the Commission authorized the disbursement of \$133,562 of surcharge proceeds but prohibited further disbursements without Commission prior approval.²⁷

51. As of May 31, 2019, Cannonsburg District had retained First Surcharge proceeds (plus accrued interest) of \$521,691.83.²⁸ These funds are still on hand. Upon the issuance of a Certificate for the proposed Phase I Project, Cannonsburg District proposes to disburse approximately \$197,103 of First Surcharge proceeds to pay Phase I Project expenses exceeding the amount of the proposed KIA loan.

52. The Commission's issuance of a Certificate constitutes the Commission's determination that the proposed Phase I Project is necessary, will not

²⁶ Case No. 2011-00117, Order of June 4, 2012 at 10.

²⁷ Case No. 2014-00217, Order of Aug. 7, 2014 at 5. The Commission has authorized only one additional disbursement of surcharge proceeds. *See* Case No. 2014-00217, Order of Dec. 12, 2014 at 7.

²⁸ *See* Letter from Tim Webb, General Manager, Cannonsburg District, to Gwen Pinson, Executive Director, Public Service Commission (June 26, 2019) (filed in Case No. 2014-00267).

result in wasteful duplication of facilities or inefficient investment, and is an appropriate expenditure of Cannonsburg District's funds for water loss reduction efforts.

53. In its Order of May 13, 2019 in Case No. 2018-00376, the Commission authorized Cannonsburg District to assess the Second Surcharge, but expressly directed that the proceeds be placed in a separate interest-bearing account and that no disbursements be made from this account without prior Commission approval.²⁹

54. Commission authorization to enter the proposed Assistance Agreement will represent the Commission's determination that the use of the proceeds of the Assistance Agreement for the Phase I Project, which is intended to reduce Cannonsburg District's water loss, is reasonable and necessary. It therefore follows that use of the Second Surcharge proceeds to retire the debt represented by the Assistance Agreement is an appropriate use of those proceeds to reduce Cannonsburg District's water loss.

55. If the Commission issues a Certificate for the proposed Phase I Project and authorizes Cannonsburg District to execute the proposed Assistance Agreement with KIA, it should grant a blanket authorization to Cannonsburg District to disburse approximately \$197,103 of First Surcharge proceeds to pay Phase I Project costs exceeding the amount of the proposed KIA loan. The Order granting the Certificate

²⁹ Case No. 2018-00376, Order of May 13, 2019 at 12.

should also authorize Cannonsburg District to disburse to KIA or KIA's designated agent from the account containing the Second Surcharge proceeds the amounts necessary to make the semi-annual debt service payments under the proposed Assistance Agreement. Such authorization will eliminate the need for Cannonsburg District to obtain separate Commission approval of individual project expenses and of each scheduled principal and interest payment.

56. Notwithstanding the issuance of the requested blanket authorizations, the Commission can continue to monitor the amounts disbursed from the surcharge accounts since Cannonsburg District will continue to submit monthly activity reports reflecting the amounts disbursed from the surcharge accounts and the purpose of each disbursement.³⁰

G. Conclusion

WHEREFORE, Cannonsburg Water District requests that the Commission:

1. Place this Application at the head of the Commission's docket as KRS 278.300(2) requires;

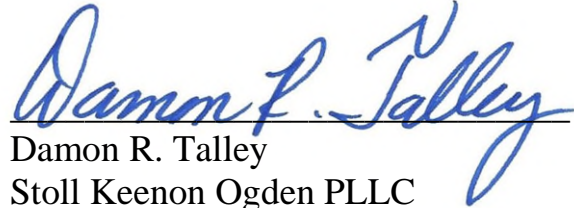
³⁰ Cannonsburg District estimates that, upon completion of the Phase I Project and retirement of the debt represented by the proposed Assistance Agreement, approximately \$341,406 will remain in the surcharge accounts. This amount will be used to finance a portion of the cost of the Phase II Project.

2. Enter an Order that
 - a. Grants a Certificate of Public Convenience and Necessity to Cannonsburg District to construct and install the proposed Phase I Project, including the purchase and installation of 49 water meters of various sizes to establish a zoned metered system as part of its water loss reduction program and the purchase of 200 5/8-inch x 3/4-inch meters to replace existing customer meters;
 - b. Authorizes Cannonsburg District to enter into and execute an Assistance Agreement with KIA and to borrow a sum no greater than \$622,000;
 - c. Authorizes Cannonsburg District to disburse approximately \$197,103 of First Surcharge proceeds to pay Phase I Project expenses exceeding the amount of the proposed KIA loan;
 - d. Authorizes Cannonsburg District to disburse to KIA or KIA's designated agent from the account containing the Second Surcharge proceeds the amounts necessary to make the debt service payments under the proposed Assistance Agreement at the times prescribed by the Assistance Agreement; and
 - e. Grants the relief requested above without holding an evidentiary hearing in this matter and within 30 days of the filing of this Application;
3. Incorporate by reference the records of Cases No. 2014-00267 and No. 2018-00376 in the record of this proceeding.

4. Grant any and all such other relief to which Cannonsburg District may be entitled.

Dated: April 30, 2020

Respectfully submitted,



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Counsel for Cannonsburg Water District

COMMONWEALTH OF KENTUCKY)
) SS
COUNTY OF BOYD)

The undersigned, Robert McGuire, being duly sworn, deposes and states that he is the Chairman of Cannonsburg Water District, the Applicant in the above proceedings; that he has read this Application and has noted its contents; that the same is true of his own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, he believes same to be true.

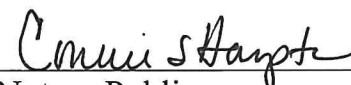
IN TESTIMONY WHEREOF, witness the signature of the undersigned on this 4 / 30, 2020.



Robert McGuire
Chairman, Board of Commissioners
Cannonsburg Water District

Subscribed and sworn to before me by Robert McGuire in his capacity as Chairman of Cannonsburg Water District on this 4/30, 2020.

My Commission expires: 11 / 22 / 23.


 SAC

Notary Public
Notary ID: 546644



CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Cannonsburg Water District's electronic filing of this Application is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on April 30, 2020; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and that within 30 days following the termination of the state of emergency declared in Executive Order 2020-215, this Application in paper medium will be delivered to the Public Service Commission.


Damon R. Talley

FILING REQUIREMENTS

FILING REQUIREMENTS FOR AN APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

Source Authority	Requirement	Location
807 KAR 5:001, § 14(1)	Applicant's name, mailing address and e-mail address	Page 2, Para 1
807 KAR 5:001, § 14(1)	Statutory Reference – KRS 278.020	Page 1
807 KAR 5:001, § 4(3)	Signature of Applicant's Attorney	Page 22
807 KAR 5:001, § 4(3)	Name, Address, Telephone Number, Fax Number, and e-mail address of Applicant's Attorney	Page 22
807 KAR 5:001, § 14(2)	If Applicant is corporation: State and date of incorporation, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 Not Applicable
807 KAR 5:001, § 14(3)	If Applicant is a limited liability company: State and date of organization, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 Not Applicable
807 KAR 5:001, § 14(4)	If the Applicant is a limited partnership: a certified copy of limited partnership agreement and all amendments or statement identifying prior Commission proceedings in which limited partnership agreement and all amendments filed	Page 3, Para 3 Not Applicable
807 KAR 5:001, § 15(2)(a)	The facts relied upon to show that the public convenience and necessity requires the proposed construction	Pages 4-12, Paras 8-22
807 KAR 5:001, § 15(2)(b)	Copies of franchises or permits for the proposed construction or extension	Page 13, Para 28 Exhibits 15 and 16
807 KAR 5:001, § 15(2)(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	Page 9, Para 16 Page 12, Para 24 Page 14, Para 33 Exhibit 7
807 KAR 5:001, § 15(2)(d)1	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 (Only one copy submitted pursuant to 807 KAR 5:001, Section 8)	Page 12, Para 24 Exhibit 7

Source Authority	Requirement	Location
807 KAR 5:001, § 15(2)(d)2	Plans and specifications and drawings of the proposed plant, equipment, and facilities	Page 12, Para 26-27 Exhibits 7-14
807 KAR 5:001, § 15(2)(e)	The manner in detail in which the Applicant proposes to finance the proposed construction or extension.	Pages 13-14, Para 31
807 KAR 5:001, § 15(2)(f)	An estimated annual cost of operation after the proposed facilities are placed into service	Page 14, Para 32 Exhibit 19
807 KAR 5:001, § 4(13)	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	Exhibits 7, 8, and 18

**FILING REQUIREMENTS FOR AN APPLICATION FOR A
AUTHORITY TO ISSUE EVIDENCES OF INDEBTEDNESS**

Source Authority	Requirement	Location
807 KAR 5:001, § 14(1)	Applicant's name, mailing address and e-mail address	Page 2, Para 1
807 KAR 5:001, § 14(1)	Statutory Reference – KRS 278.300	Page 1
807 KAR 5:001, § 4(3)	Signature of Applicant's Attorney	Page 22
807 KAR 5:001, § 4(3)	Name, Address, Telephone Number, Fax Number, and e-mail address of Applicant's Attorney	Page 22
807 KAR 5:001, § 14(2)	If Applicant is corporation: State and date of incorporation, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 Not Applicable
807 KAR 5:001, § 14(3)	If Applicant is a limited liability company: State and date of organization, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 Not Applicable
807 KAR 5:001, § 14(4)	If the Applicant is a limited partnership: a certified copy of limited partnership agreement and all amendments or statement identifying prior Commission proceedings in which limited partnership agreement and all amendments filed	Page 3, Para 3 Not Applicable
KRS 278.300(2)	Application is made under oath and signed on utility's behalf 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	Page S-1
807 KAR 5:001, § 18(1)(a)	Information required by 807 KAR 5:001, § 14	See Above
807 KAR 5:001, § 18(1)(b)	Description of Applicant's property and the field of its operation	Pages 14-15, Para 35
807 KAR 5:001, § 18(1)(c)	Description of amount and kinds of stock to be issued	Page 15, Para 36 Not Applicable
807 KAR 5:001, § 18(1)(c)	Description of amount, terms and interest rate of bond or note	Page 15, Para 37
807 KAR 5:001, § 18(1)(c)	Description of how bond or note will be secured	Page 15, Para 37
807 KAR 5:001, § 18(1)(d)	Statement of how proceeds are to be used	Page 15, Para 38
807 KAR 5:001, § 18(1)(e)	If proceeds will be used to acquire, construct, improve, or extend property: a detailed description of property and all contracts	Pages 9-10, Paras 16-17
807 KAR 5:001, § 18(1)(f)	Requirements if proceeds are to refund outstanding obligations	Page 16, Para 41 Not Applicable
807 KAR 5:001, § 18(1)(g)	Applicant's written notification to state local debt officer regarding proposed issuance	Page 16, Para 42 Exhibit 23

Source Authority	Requirement	Location
807 KAR 5:001, § 18(2)(a) 807 KAR 5:001, § 12(1)(b)	Financial Exhibit	Page 16, Para 44
807 KAR 5:001, § 18(2)(b)	Copies of trust deeds or mortgages	Page 16, Para 44d
807 KAR 5:001, § 12(2)(c)	If property acquired: maps and plans of property	Page 12, Para 24 Exhibit 7
807 KAR 5:001, § 12(2)(c)	If property acquired: detailed estimates by USoA account number	Page 17, Para 46 Exhibit 24

EXHIBITS

TABLE OF EXHIBITS

<u>Tab No.</u>	<u>Description</u>
1	Orders Establishing Cannonsburg Water District
2	A Resolution of the Board of Commissioners of Cannonsburg Water District Authorizing An Application to the Kentucky Public Service Commission For A Certificate of Public Convenience and Necessity To Purchase Metering Equipment and To Install A Zone Metering System and For Authority To Enter An Assistance Agreement With the Kentucky Infrastructure Authority To Borrow \$622,000 (Resolution No. 2020-02-01 Feb. 19, 2020)
3	Map of Existing Zone Meters and Bypass Meters For the Cannonsburg Water District (May 2019)
4	Certified Bid Tabulations
5	A Resolution of the Board of Commissioners of Cannonsburg Water District Awarding a Contract for the Purchase and Installation of Metering Equipment (Resolution No. 2020-03-01 March 24, 2020)
6	Letter from Alan Bowman, Bell Engineering, to Tim Webb, General Manager, Cannonsburg Water District, subject: Recommendation for Award Contract 691-19-01 (Mar. 27, 2020)
7	Bell Engineering, Plans for Phase I – Zone Metering Project (July 2019)
8	Bell Engineering, Specifications for Contract 691-19-01, Phase I – Zone Metering Project (Feb. 2020)
9	Sensus, OMNI™ Turbo (T ²) Water Meter, Data Sheet
10	Sensus, OMNI™ Turbo (T ²) Water Meter, Specifications
11	Sensus, iPERL Smart Water Meter, Data Sheet
12	Sensus, SmartPoint 520M Pit Set Module, Data Sheet
13	Sensus, Flexnet® R100NA Outdoor Collector, Data Sheet
14	Gutermann AG, Zonescan 820 Correlating Radio Loggers
15	Application to Kentucky Department of Highways for Encroachment Permit
16	Letter from Eric Chaney, Boyd County Judge Executive, to Tim Webb (Mar. 6, 2020)
17	Electronic mail messages between

<u>Tab No.</u>	<u>Description</u>
18	Bell Engineering, Opinion of Probable Cost (Revised) (Apr. 10, 2020)
19	Expected Annual Cost of Operating New Equipment and Facilities
20	Letter from Linda Bridwell, Deputy Executive Director, Kentucky Infrastructure Authority, to Robert McGuire, Chairman, Cannonsburg Water District (Feb. 10, 2020) (Conditional Commitment Letter)
21	Kentucky Infrastructure Authority Board of Directors Resolution and KIA Staff Analysis (Feb. 6, 2020)
22	Minutes of Kentucky Infrastructure Authority Full Board Meeting of February 6, 2020
23	Notice to State Local Debt Officer
24	Detailed Estimate of Acquired Property Classified According To The Uniform System of Accounts For Class A/B Water Districts and Associations
25	Water Loss Report for Calendar Year 2019

EXHIBIT 1

RECEIVED Exhibit 1

IN RE:

CANNONSBURG WATER DISTRICT

MAR 2 1942

DIVISION OF UTILITY ENGINEERING & SERVICES
ORDER ESTABLISHING

A Petition having been filed seeking the creation of the Cannonsburg Water District and the same having been signed by more than seventy-five resident freeholders of the proposed district; and the allegations of the petition that the only water available for the residents within the boundary of the proposed water district as described in the petition is that which is obtained from wells, cisterns or springs and that such is inadequate for the use of said residents being undenied the same are taken as true.

It is therefore ordered that there be, and there is hereby, established "The Cannonsburg Water District" which shall encompass the land lying within the following description, to-wit:

Beginning at the southwestern intersection of U. S. Route 60 and County Road opposite Check's Garage near Rockdale, Boyd County, Kentucky, thence south 70° 30' West 3045 feet; thence south 35° 00' west 2900 feet to a point on the east side of Stephens Hollow, thence up Stephens Hollow north 26° 00' west 1300 feet; thence south 64° 00' west 1000 feet; thence south 26° 00' east 2300 feet, thence south 54° 00' west 3810 feet to the center of East Fork approximately 900 feet downstream from the East Fork Bridge on the Meade-Springer Road; thence with the center line of East Fork downstream to the Boyd-Greenup County line, thence with the Greenup-Boyd County line southwesterly to the common corner of Boyd, Carter and Greenup Counties, thence with the Carter-Boyd County line southeasterly to the center of Williams Creek near Coalton, thence south 70° 00' east 20,150 feet to a point in old U. S. 23 south of Mavity; thence up Bear Creek south 32° 00' east 12000 feet; thence north 31° 00' east 27,700 feet to a point in Old U. S. 23 near Oakland Church on Chadwick Creek; thence north 29° 00' west 13,800

*Order Book # 33
Page # 255*

feet to a point in Catletts Creek Road near top of Bayless Hill; thence north $64^{\circ} 00'$ west 3100 feet to a point; thence south $38^{\circ} 00'$ west 2700 feet to a point north of Shopes Creek Road; thence north $65^{\circ} 30'$ west 8300 feet to a point at the southwesterly intersection of old U. S. 60 and County Road near Johnson Dairy at Rockdale; thence with southerly side of County Road connecting Old U. S. Route 60 and New U. S. Route 60, 900 feet to the point of beginning.

This the ^{10th} ~~3rd~~ day of June, 1966.

Garret R. Hall

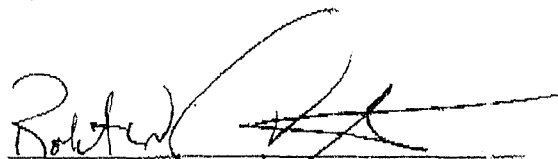
JUDGE, BOYD COUNTY COURT.

RESOLUTION NO. 144

A Resolution of the Greenup County Fiscal Court was adopted and approved by the Fiscal Court at its August 19, 2003, meeting, allowing the Cannonsburg Water District to extend its boundary for the purpose of installing water lines to certain areas in Greenup County.

NOW, THEREFORE, BE IT RESOLVED by the Fiscal Court of Greenup County, Kentucky, that the Cannonsburg Water District is permitted to extend its boundary up Lost Lick Road approximately one-half mile (which includes a portion of Happy Ridge), up Sand Gap Road and up Logtown Road to supply water to these areas.

This the 19th day of August, 2003.



ROBERT W. CARPENTER
COUNTY JUDGE/EXECUTIVE
GREENUP COUNTY, KENTUCKY

4 Yeas

0 Nays

ATTEST:


FISCAL COURT CLERK

EXHIBIT 2

RESOLUTION 2020-02-01

**A RESOLUTION OF THE BOARD OF COMMISSIONERS OF
CANNONBURG WATER DISTRICT AUTHORIZING AN
APPLICATION TO THE KENTUCKY PUBLIC SERVICE COMMISSION
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
TO PURCHASE METERING EQUIPMENT AND TO INSTALL A ZONE
METERING SYSTEM AND FOR AUTHORITY TO ENTER AN
ASSISTANCE AGREEMENT WITH THE KENTUCKY
INFRASTRUCTURE AUTHORITY TO BORROW \$622,000**

WHEREAS, in the last ten years (2010-2019), Cannonsburg Water District has experienced an average unaccounted-for water loss of 28 percent of its total water purchases;

WHEREAS, the regulations of the Public Service Commission provide that any level of unaccounted-for water loss in excess of fifteen percent of total water purchased is unreasonable and prohibit a water utility from recovering through its rates the cost of any unaccounted-for water loss exceeding fifteen percent;

WHEREAS, Cannonsburg Water District's high level of unaccounted-for water loss has placed great strains upon Cannonsburg Water District's finances and operations and significantly affects its ability to provide reasonable water service;

WHEREAS, as part of its plan to reduce its level of unaccounted-for water loss to acceptable levels, Cannonsburg Water District proposes to purchase sufficient metering equipment to establish a zone metering system that will enable it to quickly detect and repair water leaks and breaks ("Phase I Zone Metering Project");

WHEREAS, the expected total cost to install a zone metering system is \$1,152,000;

WHEREAS, Cannonsburg Water District has approximately \$530,000 remaining from the proceeds of a water loss reduction surcharge previously assessed to fund water loss reduction efforts and proposes to borrow the remaining funds to finance the cost of the establishment of its proposed zone metering system;

WHEREAS, on February 6, 2020, the Kentucky Infrastructure Authority approved a loan (C20-001) to Cannonsburg Water District from the Authority's Government Agencies Program (Fund C) in the amount of \$662,000 for the Phase I Zone Metering Project, which involves the purchase of metering equipment and installation of a zone metering system;

WHEREAS, Cannonsburg Water District is a water district created pursuant to KRS Chapter 74;

WHEREAS, KRS 278.015 provides that a water district is a utility and is subject to the jurisdiction of the Public Service Commission in the same manner and to the same extent as any other utility;

WHEREAS, KRS 278.020(1) prohibits any person from commencing the construction of any plant or facility or installing any equipment to provide utility service, except for that in the

ordinary course of business, until that person has obtained a certificate of public convenience and necessity from the Kentucky Public Service Commission; and

WHEREAS, KRS 278.300(1) prohibits a utility from issuing an evidence of indebtedness without obtaining prior authorization from the Kentucky Public Service Commission;

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF COMMISSIONERS OF CANNONBURG WATER DISTRICT AS FOLLOWS:

Section 1. The facts, recitals, and statements contained in the foregoing preamble of this Resolution are true and correct and are hereby affirmed and incorporated as a part of this Resolution.

Section 2. The Chairman and General Manager are authorized and directed to take any and all actions reasonably necessary to execute and submit an application to the Kentucky Public Service Commission for authorization to execute an assistance agreement with the Kentucky Infrastructure Authority to borrow \$622,000 to be repaid over a period of four years and for a certificate of public convenience and necessity for the Phase I Zone Metering Project and any other required approvals.

ADOPTED BY THE BOARD OF COMMISSIONERS OF CANNONBURG WATER DISTRICT at a meeting held on February 19, 2020, signed by the Chairman, and attested by the Secretary.



Robert McGuire, Chairman

ATTEST:



Mark Kazee, Secretary

CERTIFICATION

The undersigned Secretary of Cannonsburg Water District (“the District”) does hereby certify that the foregoing is a true copy of a Resolution duly adopted by the District’s Board of Commissioners at a meeting properly held on February 19, 2020, signed by the Chairman of the Board of Commissioners, attested by the Secretary of the Board of Commissioners, and is now in full force and effect.

WITNESS my hand this 19th day of February 2020.

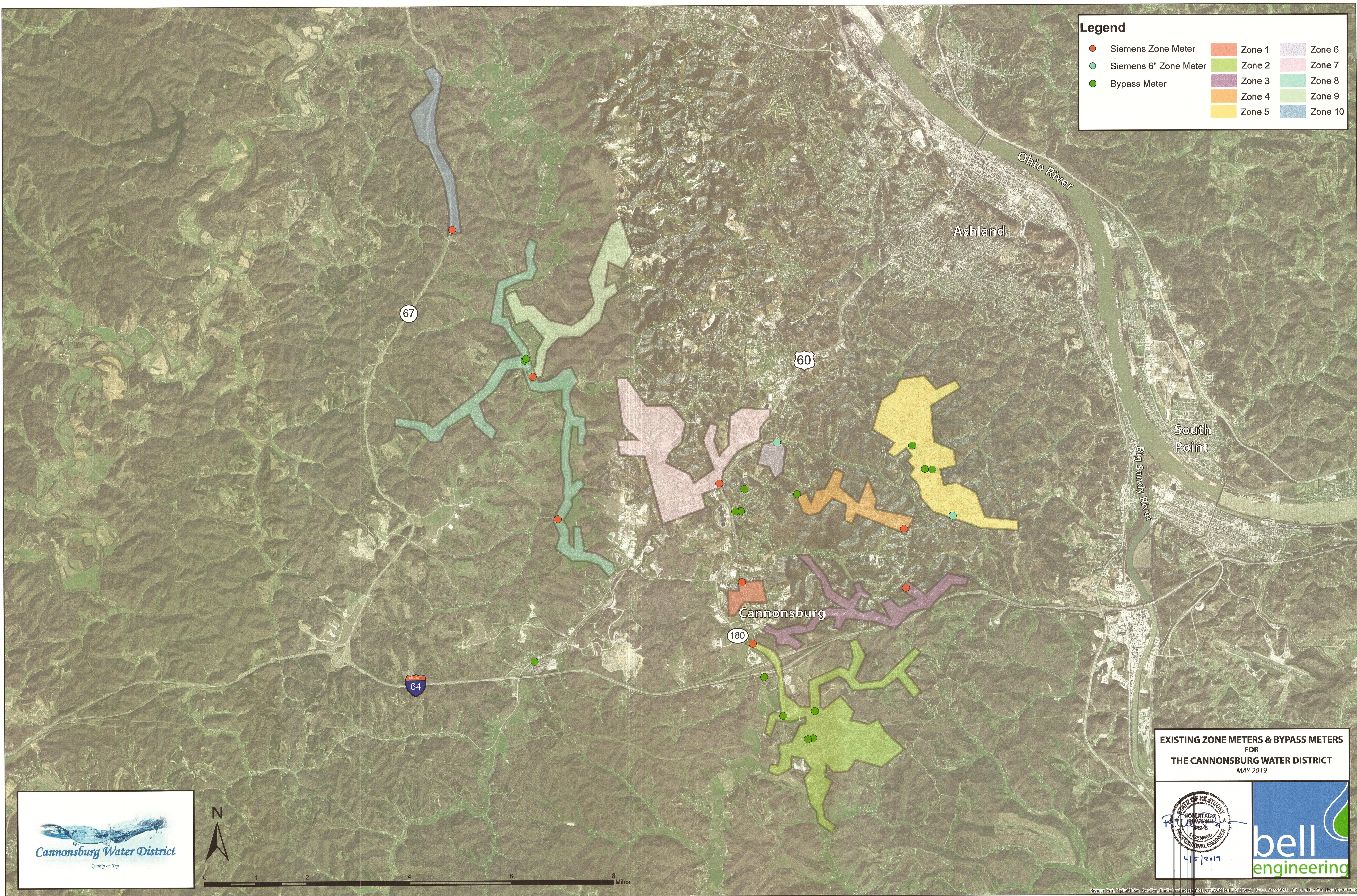


Mark Kazee, Secretary

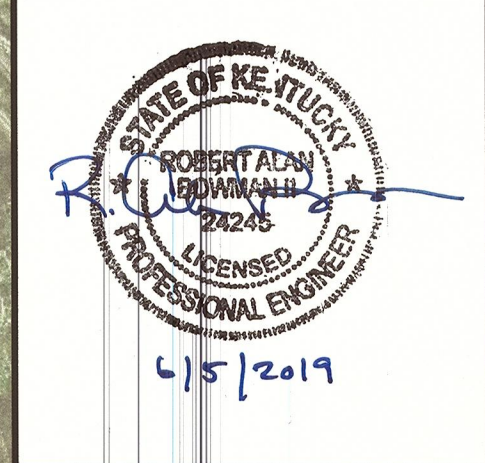
EXHIBIT 3

Legend

● Siemens Zone Meter	Zone 1	Zone 6
● Siemens 6" Zone Meter	Zone 2	Zone 7
● Bypass Meter	Zone 3	Zone 8
	Zone 4	Zone 9
	Zone 5	Zone 10



**EXISTING ZONE METERS & BYPASS METERS
FOR
THE CANNONBURG WATER DISTRICT
MAY 2019**

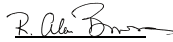


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXHIBIT 4

We certify that the following is true and complete tabulation of all bids received by the Cannonsburg Water District on March 24, 2020, for the titled project.

BELL ENGINEERING



Item No.	Description	Quantity	Unit	Triple B Construction 2405 South Big Run Road Ashland, Kentucky 41102		Southern Ohio Trenching and Excavating, Inc. 3228 County Road 103 Ironton, Ohio 45638		Opell Excavating LLC 12084 Virginia Boulevard Ashland, Kentucky 41102	
				Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
1.	4-Inch Zone Meter Setting on Existing 6-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	26	Each	\$8,250.94	\$214,524.44	\$16,970.00	\$441,220.00	\$17,602.33	\$457,660.58
2.	3-Inch Zone Meter Setting on Existing 3-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	9	Each	\$5,565.94	\$50,093.46	\$14,100.00	\$126,900.00	\$13,402.53	\$120,622.77
3.	6-Inch Zone Meter Setting on Existing 6-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	4	Each	\$10,268.94	\$41,075.76	\$19,500.00	\$78,000.00	\$20,955.83	\$83,823.32
4.	3-Inch Zone Meter Setting on Existing 6-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	2	Each	\$6,464.94	\$12,929.88	\$15,264.00	\$30,528.00	\$14,791.43	\$29,582.86
5.	6-Inch Zone Meter Setting on Existing 8-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	2	Each	\$11,435.94	\$22,871.88	\$20,653.00	\$41,306.00	\$22,439.53	\$44,879.06
6.	4-Inch Zone Meter Setting on Existing 8-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	2	Each	\$8,811.93	\$17,623.86	\$17,750.00	\$35,500.00	\$19,373.12	\$38,746.24
7.	6-Inch Zone Meter Setting on Existing 10-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	1	Each	\$12,815.53	\$12,815.53	\$22,430.00	\$22,430.00	\$25,057.08	\$25,057.08
8.	6-Inch Zone Meter Setting on Existing 12-Inch Water Line Line Including but Not Limited to Sensus Omni AMR Meter w/ Strainer, Clow Resilient Seat Gate Valves, Valve Boxes and Collars, DIMJ Fittings, Foster Adaptors, Alpha Romac Couplings, ABS Meter Vault w/ lid, PVC SDR-21 Pipe, DI CL 350 Flanged to Plain End Pipe, as Well as Unclassified Excavation, Assembly, Testing, Transport, Disinfection, Bedding, Installation, and Backfill; in Order to Make the Zone Meter Setting Operational, Complete	1	Each	\$14,476.93	\$14,476.93	\$24,425.00	\$24,425.00	\$27,884.62	\$27,884.62
9.	Bituminous Surface Replacement, Furnish and Install Including Saw Cut of Existing Pavement, Complete	30	Tons	\$80.00	\$2,400.00	\$100.00	\$3,000.00	\$200.00	\$6,000.00
10.	Crushed Stone, on Order of the Engineer, Furnish and Install, Complete	100	Tons	\$18.02	\$1,802.00	\$20.00	\$2,000.00	\$25.00	\$2,500.00
TOTAL BASE BID CONTRACT 691-19-01				\$390,613.74		\$805,309.00		\$836,756.53	

EXHIBIT 5

RESOLUTION 2020-03-01

**A RESOLUTION OF THE BOARD OF COMMISSIONERS OF
CANNONBURG WATER DISTRICT AWARDING A CONTRACT FOR
THE PURCHASE AND INSTALLATION OF METERING EQUIPMENT**

WHEREAS, Cannonburg Water District (“Cannonburg District”) caused to be published in accordance with the provisions of KRS Chapter 424 an advertisement for bids on the Contract 691-19-01 (Phase I, Zone Metering Project) in the March 9, 2020 and March 16, 2020 editions of the *Daily-Independent*;

WHEREAS, on March 24, 2020, in accordance with the terms of the advertisement Cannonburg District opened the bids received on Contract 691-19-01;

WHEREAS, Triple B Construction, LLC, of Ashland, Kentucky, submitted a bid of \$390,613.74, which was the lowest of the bids on Contract 691-19-01 that were in accordance with the terms of the advertisement;

WHEREAS, Cannonburg District’s Board of Commissioners finds that Contract 691-19-01 should be awarded to the lowest bidder, contingent upon Cannonburg District’s receipt of a favorable Recommendation of Award Letter from Bell Engineering and of a certificate of public convenience and necessity from the Kentucky Public Service Commission authorizing Cannonburg District to proceed with Contract 691-19-01;

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF COMMISSIONERS OF CANNONBURG WATER DISTRICT AS FOLLOWS:

Section 1. The facts, recitals, and statements contained in the foregoing preamble of this Resolution are true and correct and are hereby affirmed and incorporated as a part of this Resolution.

Section 2. The Board of Commissioners hereby declares the bid of Triple B Construction, LLC in the amount of \$390,613.74 to be the lowest and best bid and awards Contract 691-19-01 to this firm, contingent upon Cannonburg District’s receipt of a favorable Recommendation of Award Letter from Bell Engineering and of a certificate of public convenience and necessity from the Kentucky Public Service Commission authorizing Cannonburg District to proceed with Contract 691-19-01.

ADOPTED BY THE BOARD OF COMMISSIONERS OF CANNONBURG WATER DISTRICT at a meeting held on March 24, 2020, signed by the Chairman, and attested by the Secretary.



Robert McGuire, Chairman

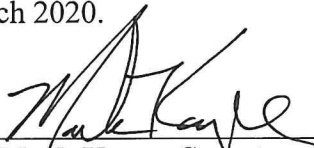
ATTEST


Mark Kazee, Secretary

CERTIFICATION

The undersigned Secretary of Cannonsburg Water District (“the District”) does hereby certify that the foregoing is a true copy of a Resolution duly adopted by the District’s Board of Commissioners at a meeting properly held on March 24, 2020, signed by the Chairman of the Board of Commissioners, attested by the Secretary of the Board of Commissioners, and is now in full force and effect.

WITNESS my hand this 24th day of March 2020.



Mark Kazee, Secretary

EXHIBIT 6



March 27, 2020

Mr. Tim Webb
Cannonsburg Water District
1606 Cannonsburg Road
Ashland, KY 41102

**Subject: Recommendation for Award
Contract 691-19-01
Phase 1 Zone Metering Project
Cannonsburg Water District
Cannonsburg, Kentucky**

Dear Mr. Webb:

We are pleased to submit our recommendations for award of the subject contract. Following the March 24, 2020 bid opening, we reviewed, mathematically checked, tabulated all bids received and contacted references. Enclosed please the Bid Tabulation for your review and acceptance as desired.

Contractor interest in your project was fair, with three (3) bids received. The project low bid totaled \$390,613.74 compared to Bell Engineering’s Opinion of Probable Construction Cost (OPCC) of \$859,500.00. The low bid was \$468,886.26 below the Engineer’s OPCC.

Bidder Rank	Bidder Name	Bid Amount	Difference Above Low
1	Triple B Construction, LLC	\$390,613.74	N/A
2	Southern Ohio Trenching and Excavating, Inc.	\$805,309.00	\$414,695.26
3	Opell Excavating, LLC	\$836,756.53	\$446,142.79
Engineer’s Opinion of Probable Construction Cost		\$859,500.00	\$468,886.26

March 27, 2020
Page 2
Mr. Tim Webb

The low bidder, Triple B Construction, LLC has been contacted and have informed us that they are satisfied with their bid and are capable of performing the work. We reviewed the Kentucky Secretary of State's website and find that Triple B Construction, LLC was organized in 2014 with a good standing. We contacted the references provided by Triple B Construction, LLC for current and past projects. In general, they have not had any significant issues with Triple B Construction, LLC that would cause concern. Each reference contacted recommended Triple B Construction, LLC and would use them again.

Contingent on PSC approval and based on our conversation with Triple B Construction, LLC and the comments received from references, we suggest the District pass a resolution of award for this contract to Triple B Construction, LLC. Once PSC approval is obtained, please notify Bell Engineering to distribute contract documents for execution. We will be happy to meet with you to discuss bid results at your convenience, if desired. Should you have any questions about this or any other matter, please do not hesitate to call.

Sincerely,
BELL ENGINEERING

A handwritten signature in black ink, appearing to read "R. Alan Bowman", with a long horizontal flourish extending to the right.

R. Alan Bowman, P.E.
Project Manager

Enclosure

- Certified Tabulation of all Bids Received

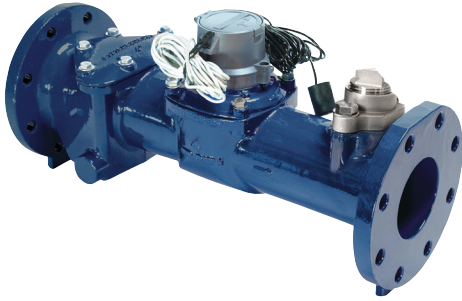
EXHIBIT 7

**PLANS FOR PHASE I
PROJECT SUBMITTED AS
A SEPARATE DOCUMENT**

EXHIBIT 8

**SPECIFICATIONS FOR
PHASE I PROJECT
SUBMITTED AS A
SEPARATE DOCUMENT**

EXHIBIT 9



OMNI™ Turbo (T²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10" OMNI T² Meter

The OMNI T² meter operation is based on advanced Floating Ball Technology (FBT).

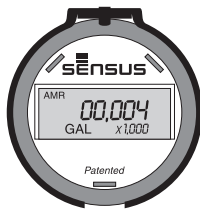
DESCRIPTION:

- Floating Ball Technology (FBT)

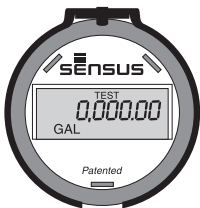
ELECTRONIC REGISTER DISPLAY DIAGRAM



Totalization Mode



AMR/AMI Mode



Resettable Test Mode



Rate of Flow Mode

Conformance to Standards

The OMNI T² meter meets and far exceeds the most recent revision of AWWA Standard C701 class II standards. Each meter is performance tested to ensure compliance. All OMNI meters are NSF/ANSI Standard 61, Annex F and G approved.

Performance

The patented measurement principles of the OMNI T² meter ensure greater accuracy, expanded accuracy range and longer service life than any other comparable class meter. The OMNI T² meter has no restrictions on sustained flow rates within its continuous range. The floating ball measurement technology allows installation in any orientation and flows up to maximum rated capacity without undue wear or accuracy degradation.

Construction

The OMNI T² meter consists of two basic assemblies; the maincase and the measuring chamber. The measuring chamber assembly includes the "floating ball" impeller with a coated titanium shaft, hybrid axial bearings, integral flow straightener and an all electronic programmable register with protective bonnet. The maincase is made from industry proven Ductile Iron with an approved NSF epoxy coating. Maincase features are; easily removable measuring chamber, unique chamber seal to the maincase using a high pressure o-ring, testing port and a convenient integral strainer.

OMNI Electronic Register

The OMNI T² electronic register is hermetically sealed with an electronic pickup containing no mechanical gearing. The large character LCD displays AMR, totalization, rate of flow and a resettable test totalizer. OMNI register features include AMR resolution units that are fully programmable, fully programmable pulse output frequency, integral customer data logging capability and integral resettable accuracy testing feature compatible with UniPro and Sensus flow verification software. The

large, easy-to-read LCD also displays both forward and reverse flow directions. The OMNI T² electronic register has a 10-year battery life guarantee.

Magnetic Drive

Meter registration is achieved by utilizing a fully magnetic pickup system. This is accomplished by the magnetic actions of the embedded rotor magnets and the ultra sensitive register pickup probe. The only moving component in water is the “floating ball” impeller.

Measuring Element

The hydro-dynamically balanced impeller floats between the bearings. The Floating Ball Technology (FBT) allows the measuring element to operate virtually without friction or wear, thus creating the extended upper and lower flow ranges capable on only the OMNI T² meter.

Strainer

The OMNI T² with the AWWA compliant “V” shaped strainer uses a stainless steel screen along with Floating Ball Technology (FBT). This creates a design that greatly improves accuracy, even in difficult settings. A removable strainer cover permits easy access to the screen for routine maintenance.

Maintenance

The OMNI T² meter is designed for easy maintenance. Should any maintenance be required, the measuring chamber and/or strainer cover can be removed independently. Replacement parts or complete measuring chambers are available for repairs. OMNI T² replacement measuring chambers may also be utilized to upgrade some third-party meters to achieve increased accuracy and extended service life.

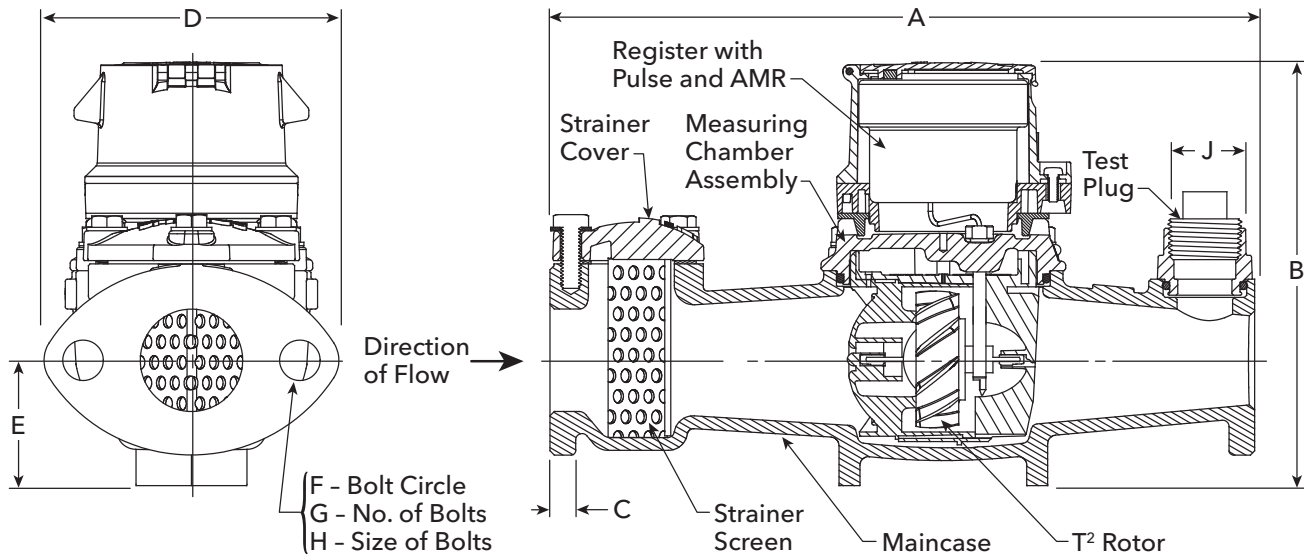
AMR/AMI Systems

Meters and Electronic Registers are compatible with current Sensus AMR/AMI systems and other AMI communication systems that use the Sensus UI1203 protocol.

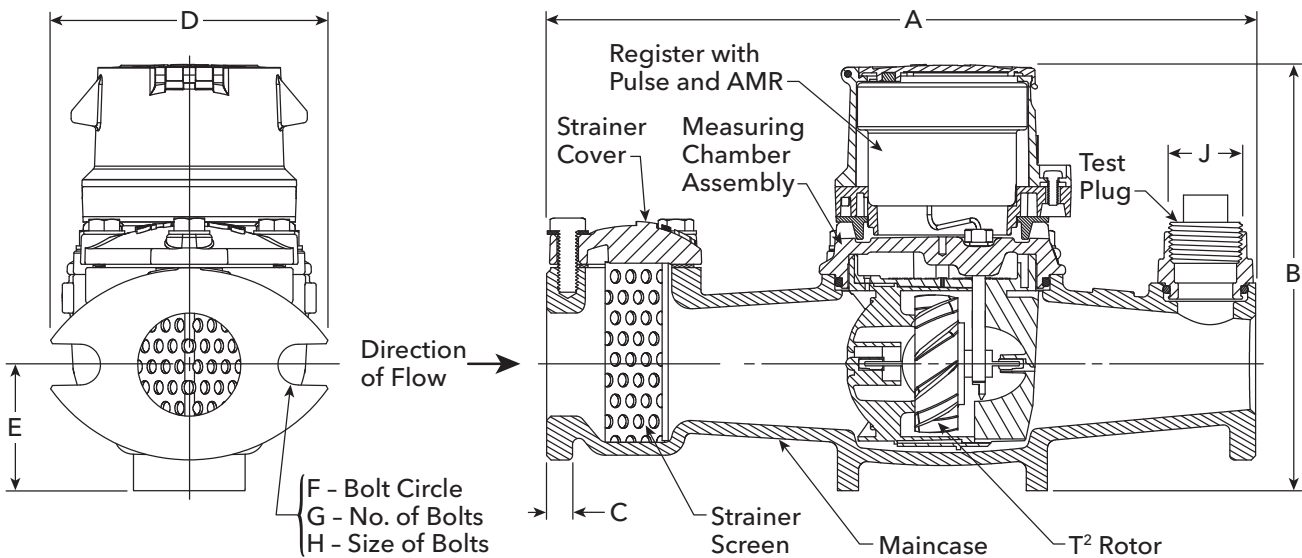
Guarantee

Sensus OMNI T² Meters are backed by “The Sensus Guarantee.” Ask your Sensus representative for details or see Bulletin G-500.

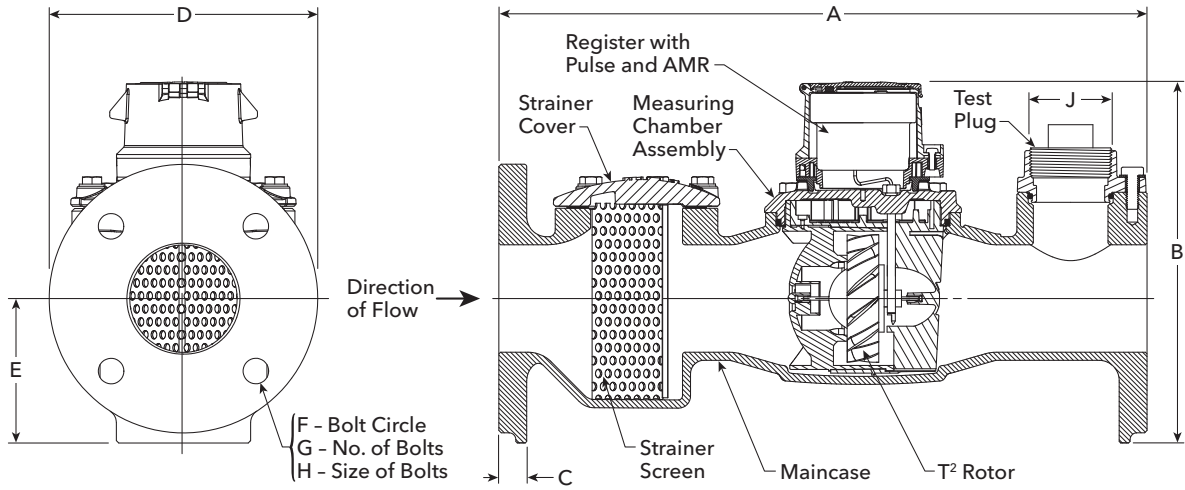
OMNI^{T2}: 1-1/2"



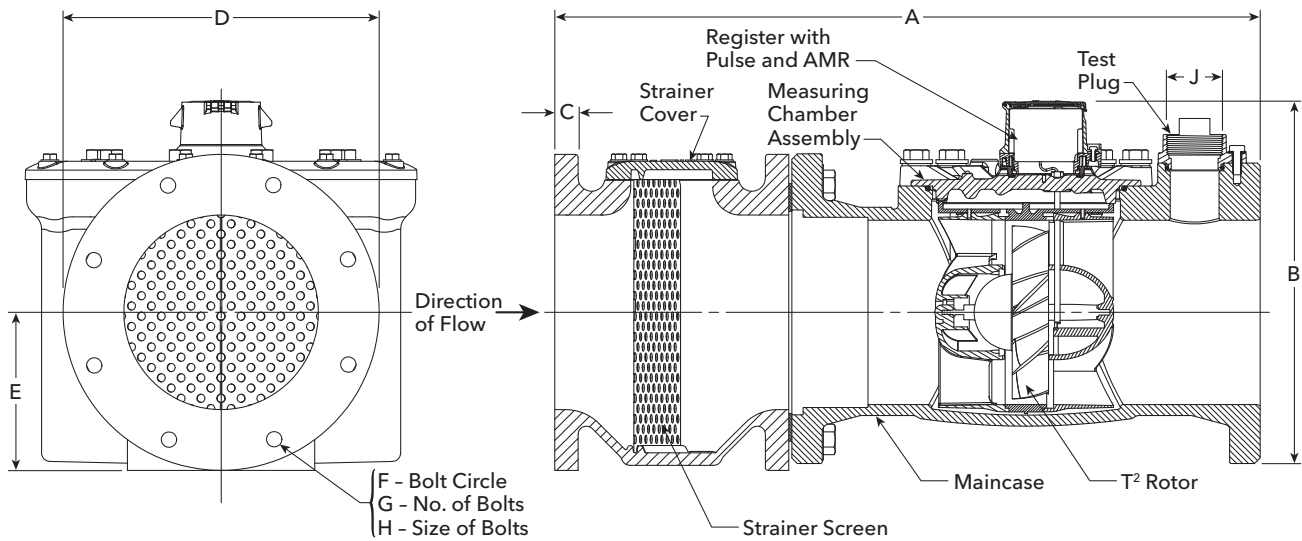
OMNI^{T2}: 2"



OMNI T²: 3" - 6"



OMNI T²: 8" - 10"



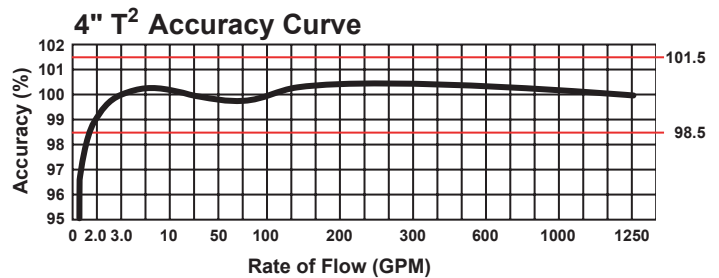
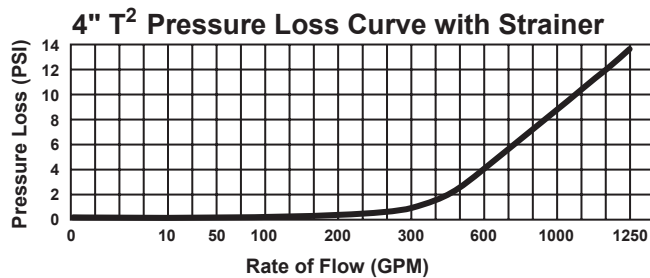
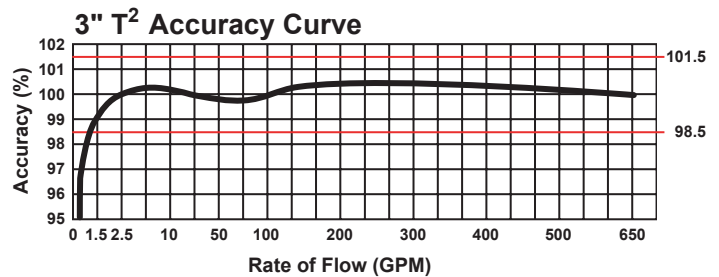
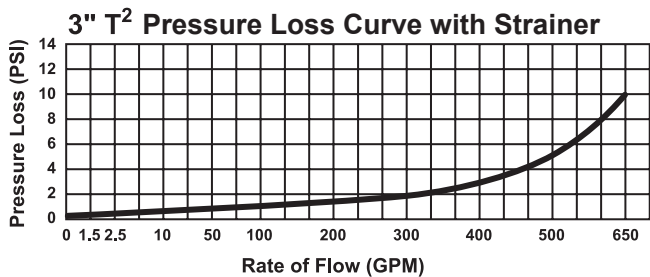
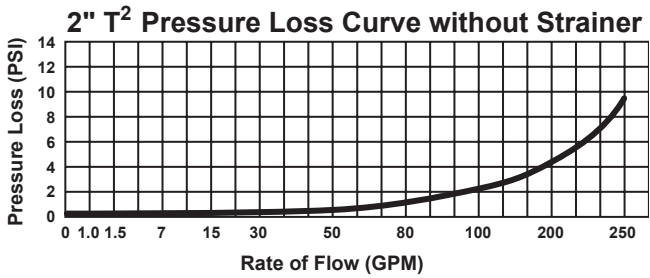
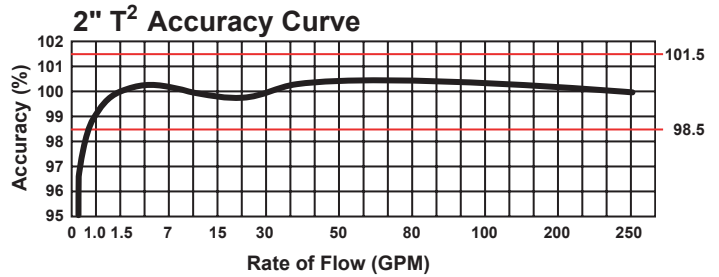
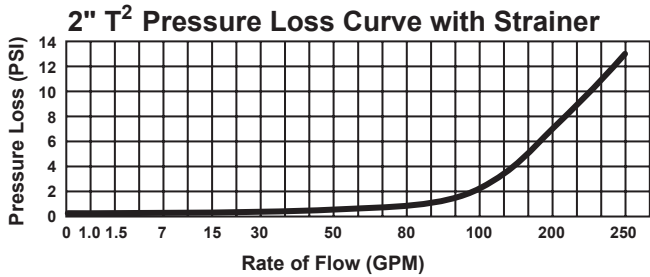
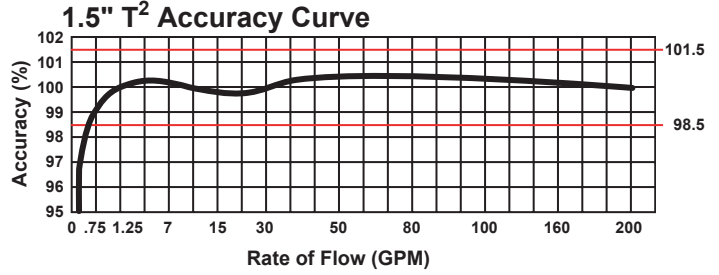
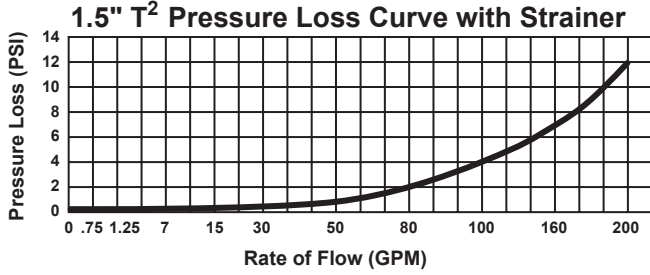
Dimensions and Net Weights

Meter and Pipe Size	Normal Operating Range		Connections	A	B	C	D	E	F	G	H	J	Net Weight	Shipping Weight
1-1/2" DN 40mm	1.25 gpm .28 m ³ /hr	200 gpm 45 m ³ /hr	Flanged	13" 330mm	7-7/8" 200mm	15/16" 24mm	5-7/16" 138mm	2-5/16" 59mm	4" 102mm	2	5/8" 16mm	1" 25mm	18.8 lbs. 8.53 kg.	22.5 lbs. 10.2 kg.
2" DN 50mm	1.5 gpm .34 m ³ /hr	250 gpm 57 m ³ /hr	Flanged	17" 432mm	7-7/8" 200mm	1" 25mm	5-3/4" 146mm	2-5/16" 59mm	4-1/2" 114mm	2	3/4" 19mm	1-1/2" 38mm	27.4 lbs. 12.4 kg.	34.5 lbs. 15.6 kg.
2" w/o Strainer DN 50mm	1.5 gpm .34 m ³ /hr	250 gpm 57 m ³ /hr	Flanged	10" 254mm	7-7/8" 200mm	1" 25mm	5-3/4" 146mm	2-5/16" 59mm	4-1/2" 114mm	2	3/4" 19mm	N/A	17.4 lbs. 7.9 kg.	24.5 lbs. 11.1 kg.
3" DN 80mm	2.5 gpm .57 m ³ /hr	650 gpm 148 m ³ /hr	Flanged	19" 483mm	8-3/4" 225mm	3/4" 19mm	7-7/8" 200mm	4-1/8" 105mm	6" 153mm	4	5/8" 16mm	2" 51mm	48.5 lbs. 22.0 kg.	57.4 lbs. 26.0 kg.
4" DN 100mm	3.0 gpm .68 m ³ /hr	1250 gpm 284 m ³ /hr	Flanged	23" 584mm	11- 3/16" 284mm	15/16" 24mm	9-1/8" 232mm	4-3/4" 121mm	7-1/2" 191mm	8	5/8" 16mm	2" 51mm	67.9 lbs. 30.8 kg.	75.8 lbs. 34.4 kg.
6" DN 150mm	4 gpm .91 m ³ /hr	2500 gpm 568 m ³ /hr	Flanged	27" 686mm	13-1/4" 337mm	15/16" 24mm	11" 279mm	5-3/4" 146mm	9-1/2" 241mm	8	3/4" 19mm	2" 51mm	140 lbs. 63.5 kg.	165 lbs. 74.8 kg.
8" DN 200mm	5 gpm 1.1 m ³ /hr	3500 gpm 795 m ³ /hr	Flanged	30-1/8" 765mm	15" 381mm	11/16" 17mm	13-1/2" 343mm	6-3/4" 171mm	11-3/4" 298mm	8	3/4" 19mm	2" 51mm	471 lbs. 214 kg.	521 lbs. 236 kg.
10" DN 250mm	6 gpm 1.4 m ³ /hr	5500 gpm 1249 m ³ /hr	Flanged	41-1/8" 1045mm	19" 483mm	11/16" 17mm	16" 406mm	8-1/2" 216mm	14-1/4" 362mm	12	7/8" 22mm	2" 51mm	685 lbs. 311 kg.	745 lbs. 338 kg.

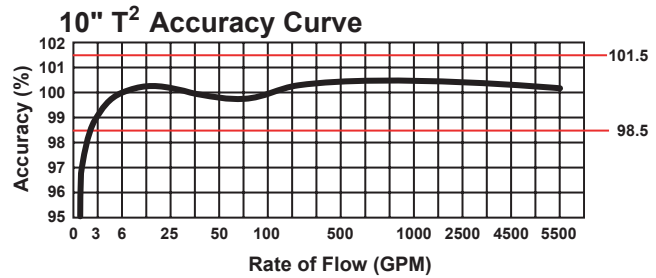
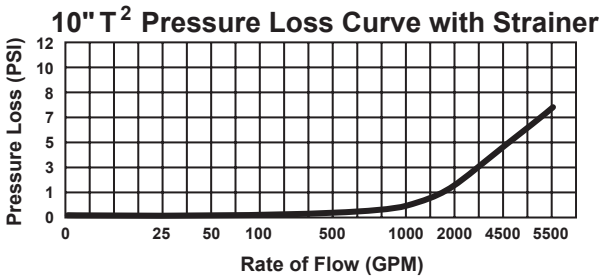
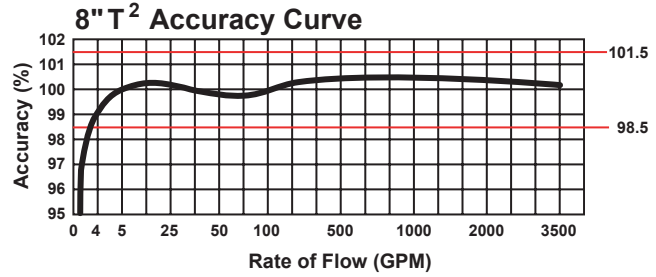
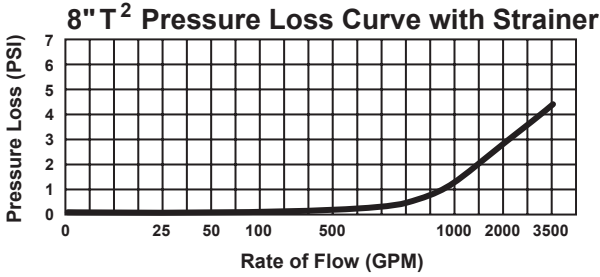
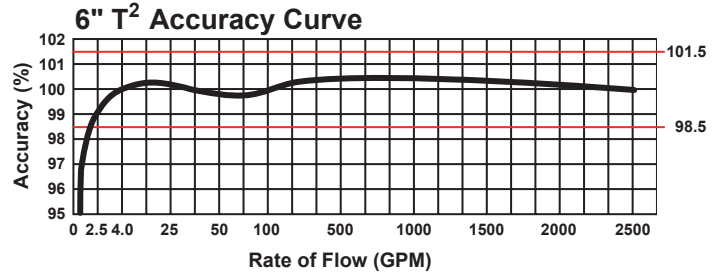
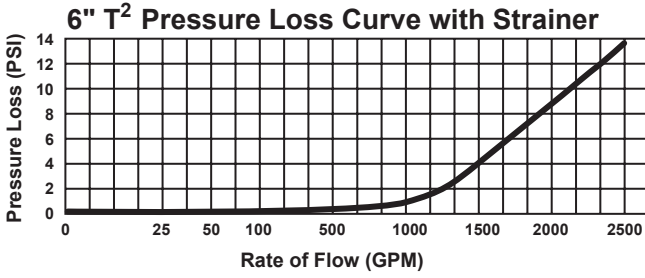
Specifications

Service	Measurement of potable and reclaim water. Storage temperature: -22F (-30C) to 155F (68.3C) Operating temperatures: Air: -22F (-30C) to 150F (65.6C) Water: 33F (0.6C) to 80F (26.7)	Pressure Loss	1-1/2": 6.9 psi @ 160 GPM (0.48 bar @ 36 m ³ /hr) 2": 7.0 psi @ 200 GPM (0.48 bar @ 45 m ³ /hr) 3": 5.1 psi @ 500 GPM (0.35 bar @ 114 m ³ /hr) 4": 8.7 psi @ 1000 GPM (0.60 bar @ 227 m ³ /hr) 6": 8.2 psi @ 2000 GPM (0.57 bar @ 454 m ³ /hr) 8": 5.1 psi @ 3500 GPM (0.35 bar @ 795 m ³ /hr) 10": 7.2 psi @ 5500 GPM (0.50 bar @ 1249 m ³ /hr)
Operating Range (100% ± 1.5%)	1-1/2": 1.25 - 200 GPM (0.28 - 45 m ³ /hr) 2": 1.5 - 250 GPM (0.34 - 57 m ³ /hr) 3": 2.5 - 650 GPM (0.57 - 148 m ³ /hr) 4": 3 - 1250 GPM (0.68 - 284 m ³ /hr) 6": 4 - 2500 GPM (0.91 - 568 m ³ /hr) 8": 5 - 3500 GPM (1.1 - 795 m ³ /hr) 10": 6 - 5500 GPM (1.4 - 1249 m ³ /hr)	Maximum Operating Pressure	200 PSI (13.8 bar)
Low flow (95% - 101.5%)	1-1/2": 0.75 GPM (0.17 m ³ /hr) 2": 1.0 GPM (0.23 m ³ /hr) 3": 1.5 GPM (0.34 m ³ /hr) 4": 2.0 GPM (0.45 m ³ /hr) 6": 2.5 GPM (0.57 m ³ /hr) 8": 4 GPM (0.91 m ³ /hr) 10": 5 GPM (1.1 m ³ /hr)	Flange Connections	U.S. ANSI B16.1 / AWWA Class 125
Maximum Continuous Operation	1-1/2": 160 GPM (36 m ³ /hr) 2": 200 GPM (45 m ³ /hr) 3": 500 GPM (114 m ³ /hr) 4": 1000 GPM (227 m ³ /hr) 6": 2000 GPM (454 m ³ /hr) 8": 3500 GPM (795 m ³ /hr) 10": 5500 GPM (1249 m ³ /hr)	Test Ports	NPT
Maximum Intermittent Operation	1-1/2": 200 GPM (45 m ³ /hr) 2": 250 GPM (57 m ³ /hr) 3": 650 GPM (148 m ³ /hr) 4": 1250 GPM (284 m ³ /hr) 6": 2500 GPM (568 m ³ /hr) 8": 4700 GPM (1067 m ³ /hr) 10": 7000 GPM (1590 m ³ /hr)	Register	Fully electronic sealed register with programmable registration (Gal. /Cu.Ft. / Cu. Mtr. / Imp. Gal. / Acre Ft.) Programmable AMR/AMI reading and pulse outputs Guaranteed 10-year battery life
		NSF Approved Materials	Maincase: Coated Ductile Iron Measuring Chamber: Thermoplastic Rotor "Floating Ball": Thermoplastic Radial Bearings: Hybrid Thermoplastic Thrust Bearings: Sapphire/Ceramic Jewel Magnets: Ceramic Strainer Screen: Stainless Steel Strainer Cover: Coated Ductile Iron Test Plug: Stainless Steel

Head Loss Curves



Head Loss Curves



637 Davis Drive
Morrisville, NC 27560
1-800-638-3748
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EXHIBIT 10

1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

SCOPE

These specifications set forth the minimum acceptable design criteria and performance requirements for Turbine-type cold water meters including the following potential service applications and general considerations:

- Intended where a moderately wide flow range is anticipated
- Measurement of water usage for typical billing applications
- Measurement intended for typical commercial and industrial applications
- Measurement of low flow usage above OMNI C² Meter threshold levels
- Measurement of constant medium to extended high flow usage

CONFORMANCE TO STANDARDS

The meter package shall meet or exceed all requirements of ANSI/AWWA Standard C701 for Class II turbine meter assemblies. Each meter assembly shall be performance tested to ensure compliance.

The meter package shall meet or exceed all requirements of NSF/ANSI Standard 61, Annex F and G.

MAINCASES

The meter maincase shall be of epoxy coated ductile iron composition. The epoxy coating shall be provided as standard fusion-bonded and adhere to NSF for non-lead regulation compliance.

PERFORMANCE

The meter assembly shall have performance capability of continuous operation up to the rated maximum flows as listed below without affecting long-term accuracy or causing any undue component wear. The meter assembly shall also provide a 25% flow capacity in excess of the maximum flows listed for intermittent flow demands. Maximum headloss through the meter/strainer assembly shall not exceed those listed in the following table per meter size.

OPERATING CHARACTERISTICS

Meter Size	Low Flow (95% Min.)	Operating Range (98.5 - 101.5%)	Intermittent Flows (98.5 - 101.5%)	Pressure Loss (Not to Exceed)
1-1/2"	.75 GPM	1.25 to 160 GPM	200 GPM	6.9 PSI @ 160 GPM
2"	1.0 GPM	1.5 to 200 GPM	250 GPM	7.0 PSI @ 200 GPM
3"	1.5 GPM	2.5 to 500 GPM	650 GPM	5.1 PSI @ 500 GPM
4"	2.0 GPM	3.0 to 1000 GPM	1250 GPM	8.7 PSI @ 1000 GPM
6"	2.5 GPM	4.0 to 2000 GPM	2500 GPM	8.2 PSI @ 2000 GPM
8"	4 GPM	5 to 3500 GPM	4700 GPM	5.1 PSI @ 3500 GPM
10"	5 GPM	6 to 5500 GPM	7000 GPM	7.2 PSI @ 5500 GPM

MEASURING CHAMBER

The measuring chamber shall consist of a measuring element, removable housing, and all-electronic register. The measuring element shall be mounted on a horizontal, stationary stainless steel shaft with sleeve bearings and be essentially weightless in water. The measuring element comes integrated with the advanced Floating Ball Technology design. The measuring chamber shall be capable of operating within the above listed accuracy limits without calibration when transferred from one maincase to another of the same size. The measuring shall be so configured to capture all flows as specified above.

DIRECT MAGNETIC DRIVE SYSTEM

The direct magnetic drive shall occur between the motion of the measuring element blade position and the electronic register. The OMNI direct drive system with Floating Ball Technology is designed to extend service life, enhance low flow sensitivity and provide extended flow capacity and overall accuracy of the meter assembly. Any and all additional intermediate, magnetic or mechanical, drive couplings are not acceptable.

ELECTRONIC REGISTER

The meter's register is all-electronic and does not contain any mechanical gearing to display flow and accurate totalization. The electronic register includes the following partial list of features:

- AMR resolution units fully programmable
- Pulse output frequency fully programmable
- Integral data logging capability
- Integral resettable accuracy testing feature
- Large, easy-to-read LCD display
- 10-year battery life guarantee

MAXIMUM OPERATING PRESSURE

The meter assembly shall operate properly without leakage, damage, or malfunction up to a maximum working pressure of 200 pounds per square inch (psig).

STRAINERS

The meter strainer shall be integral and cast as part of the meter’s maincase. The strainer’s screen shall have a minimum net open area of at least two (2) times the pipe opening and be a V-shaped configuration for the purpose of maintaining a full unobstructed flow pattern. The strainer body shall be a coated ductile iron fusion-bonded epoxy identical to that of the meter’s maincase. All fasteners shall be stainless steel capable of maintaining the following static pressure ratings and physical dimensions:

Meter Size	Maximum Operating Pressure	Centerline to Strainer Base	Overall Length (Not to Exceed)
1-1/2"	200 PSIG	2-5/16 INCHES	13 INCHES
2"	200 PSIG	2-5/16 INCHES	17 INCHES
3"	200 PSIG	4-1/8 INCHES	19 INCHES
4"	200 PSIG	4-3/4 INCHES	23 INCHES
6"	200 PSIG	5-3/4 INCHES	27 INCHES
8"	200 PSIG	6-3/4 INCHES	30-1/8 INCHES
10"	200 PSIG	8-1/2 INCHES	41-1/8 INCHES

STRAIGHTENING VANES

A straightening vane assembly is mandatory and shall be positioned directly upstream of the measuring element. The straightening vane assembly shall be an integral component of the measuring chamber.

CONNECTIONS

Flanges for the 1-1/2" and 2" size meter assemblies shall be of the 2-bolt oval flange configuration. The 3", 4", 6", 8" and 10" size meter assemblies shall have flanges of the Class 125 round type, flat faced and shall conform to ANSI B16.1 for specified diameter, drilling and thickness.

CERTIFICATIONS AND MARKINGS

All sizes of meter packages shall display the sizes, model, manufacturer name, and direction of flow. Such display shall be cast on the side of the meter maincase.

GUARANTEE AND MAINTENANCE PROGRAM

Meters shall be guaranteed against defects in material and workmanship for a period of one (1) year from date of shipment. In addition, the meter supplier shall submit nationally published literature clearly outlining its factory maintenance program and current price schedule covering complete measuring chamber exchange.

INTENT

Subject meter specifications are designed to establish minimum guidelines for selecting an extremely critical metering device. Areas of concern to be evaluated in the selection process include, but are not limited to, ease of installation, operational features and benefits, readability and future system maintenance expense. A design, which reflects longevity of proper operation in all elements and high degree of sustained accuracy within the entire range of the meter assembly, is to be considered mandatory. Enhanced accuracy levels and performance are desired and will not be compromised.

RECOMMENDATION

Sensus
OMNI T² Meter

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EXHIBIT 11



iPERL Smart Water Meter

Electromagnetic Flow Measurement System

Sensus iPERL® smart water meters are designed to capture both lost water and lost revenue. The innovative magnetic technology delivers unmatched low flow registration and minimal pressure loss. With no moving parts, iPERL maintains its accuracy over a 20 year lifetime and is equipped with smart water alarms – delivering the intelligence you need to quickly resolve issues in the field.

CAPABILITIES

- The iPERL meter has an operating range of 0.11 gpm (0.025 m³/hr) to 55 gpm (12.5 m³/hr)—it even starts to register flow as low as 0.03 gpm (0.007 m³/hr).
- Sizes include: 5/8" (DN 15 mm), 3/4" (DN 20 mm) and 1" (DN 25 mm)
- iPERL can be installed horizontally, vertically or diagonally.

BENEFITS

- Maximize investment with iPERL's magnetic technology, which delivers a 20-year accuracy warranty, with no repairs
- Get smart water alarms to detect issues such as leaks, reverse flow, empty pipe, etc.
- Improve low flow accuracy to drive additional revenue

Industry Leading Performance

The patented measurement technology of the iPERL water meter provides enhanced accuracy at both low and high flows. Over a 20-year lifespan, your iPERL will measure just as accurately as the day it was installed.

Solid State Magnetic Technology

By avoiding the use of a mechanical measuring element inside the flow tube, metering performance is linear over the entire flow range – ensuring no reduction in accuracy at any flow rate over the life of the meter. The iPERL meter uses our patented remanent magnetic field technology – requiring far less energy and delivering superior accuracy.

Alarms

Quick resolution of field issues is made possible with configurable smart water alarms including leak detection, reverse flow, empty pipe, magnetic tamper and low battery. When integrated with our FlexNet® communication network, remotely gathering and transmitting data has never been more reliable or profitable.

Construction

The iPERL meter body is made of composite alloy and contains no metal material. Inside the meter body is an electronic register and a measuring device that is comprised of a composite alloy flow tube. Embedded in the flow tube are coated silver electrodes. iPERL utilizes these to measure the fluid velocity through the flow tube – enabling less power consumption and predictable meter performance. The iPERL meter has a 20-year accuracy warranty and a 20-year battery life guarantee.

iPERL Smart Water Meter

Electronic Register

The 9-digit hermetically-sealed electronic register with LCD display was designed to eliminate dirt, fog and moisture contamination in pit settings. The large, easy-to-read display includes AMR digits, direction of flow, units of measure and smart water alarms. The AMR digits and units of measure are fully programmable. The register also provides integrated customer data logging.

AMI / AMR Compatibility

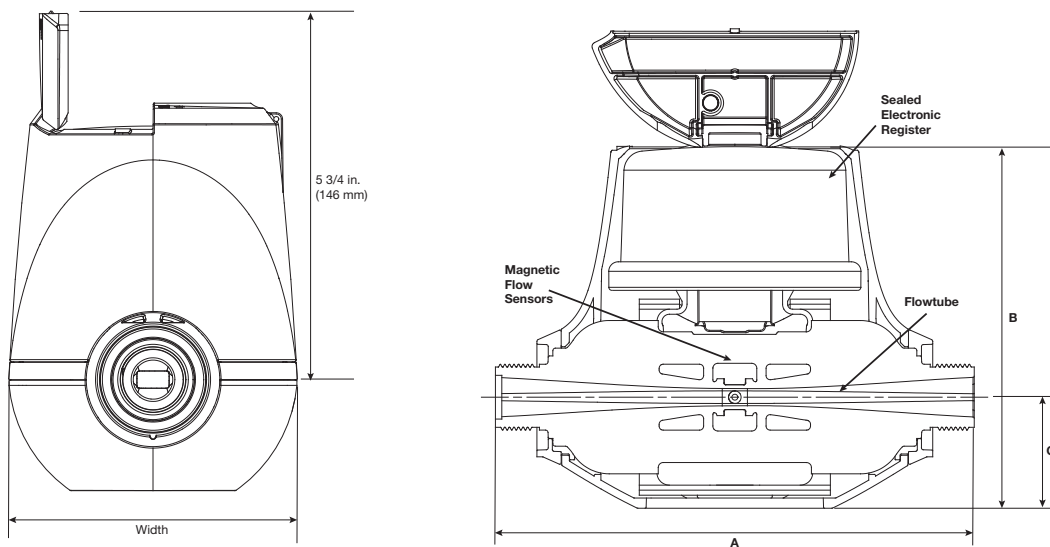
Sensus iPERL meters are compatible with common AMR/AMI systems, including the Sensus FlexNet® communication network.

Conformance to Standards

The Sensus iPERL meter meets the requirements of NSF 61, Annex F/G and 372 and exceeds the most recent revision of AWWA Standard C-715.

Tamper Resistant

The integrated construction of the iPERL water meter prevents removal of the register to obtain free water. The magnetic tamper and low field alarms will both indicate any attempt to tamper with the magnetic field of the iPERL meter.



Dimensions and Net Weights

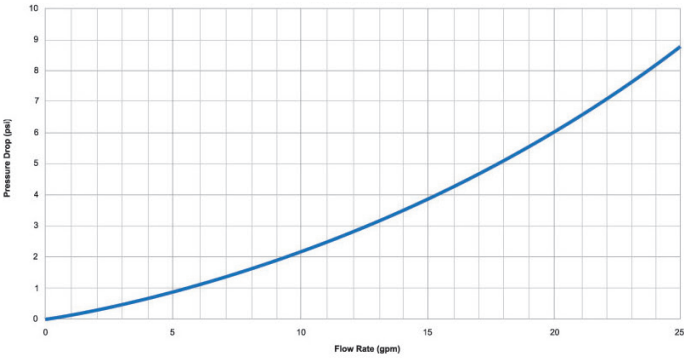
Meter Size	A	B	C	Spud Ends	NPSM Thread Size	Width	Net Weight
5/8" (DN 15 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	5/8" (15 mm)	3/4" (20 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
5/8" x 3/4" (DN 15mm x 20 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
3/4" Short (DN 20 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
3/4" (DN 20 mm)	9" (229 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.2 lb. (1.5 kg)
1" (DN 25 mm)	10-3/4" (273 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	1" (25 mm)	1-1/4" (32 mm)	4-1/2" (114 mm)	3.3 lb. (1.6 kg)

Specifications

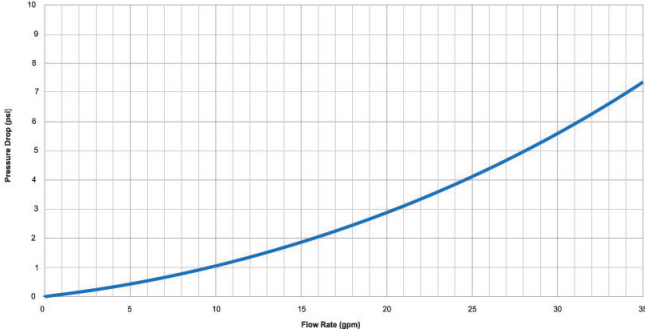
Service	Measurement of potable and reclaim water. 0-100% humidity. Fully submersible. IP68 rated.
Temperature	Water operating temperature range of 33 °F (0.55 °C) to 80 °F (26.7 °C) . Ambient air operating temperature -22 °F (-30 °C) to -140 °F (60 °C). Storage air temperature -30 °F (-34.4 °C) to 158F (70 °C).
Starting Flow	5/8" (DN 15 mm) size: 0.03 gpm (0.007 m ³ /h) 3/4" (DN 20 mm) size: 0.03 gpm (0.007 m ³ /h) 1" (DN 25 mm) size: 0.11 gpm (0.025 m ³ /h)
Low Flow Range (±3%)	5/8" (DN 15 mm) size: >0.11 gpm (0.025 m ³ /hr) to <0.18 gpm (0.041 m ³ /hr) 3/4" (DN 20 mm) size: >0.11 gpm (0.025 m ³ /hr) to <0.18 gpm (0.041 m ³ /hr) 1" (DN 25 mm) size: >0.3 gpm (0.068 m ³ /hr) to <0.4 gpm (0.09 m ³ /hr)
Normal Water Operating Flow Range (±1.5%)	5/8" (DN 15 mm) size: 0.18 to 25 gpm (0.04 to 5.7 m ³ /hr) 3/4" (DN 20 mm) size: 0.18 to 35 gpm (0.04 to 8.0 m ³ /hr) 1" (DN 25 mm) size: 0.4 to 55 gpm (0.09 to 12.5 m ³ /hr)
Maximum Operating Pressure	5/8" and 3/4" size: 200 psi (13.8 bar) 1" size: 175 psi (12.1 bar)
Measurement Technology	Solid state electromagnetic flow
Register	Hermetically sealed, 9-digit programmable electronic register, AMR/AMI compatible.
Materials	External housing - Thermal plastic; Flowtube - Polyphenylene sulfide alloy; Electrode - Silver/silver chloride; Register cover - Tempered glass

Headloss Curves

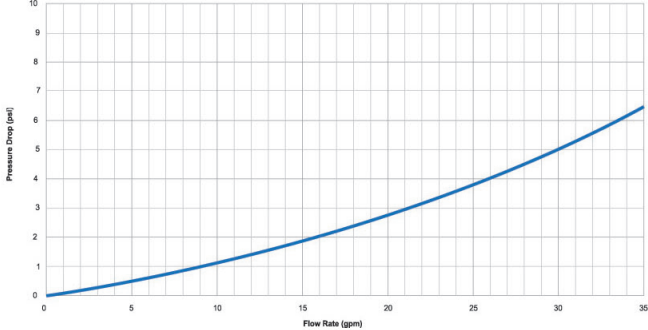
5/8" Headloss Curve



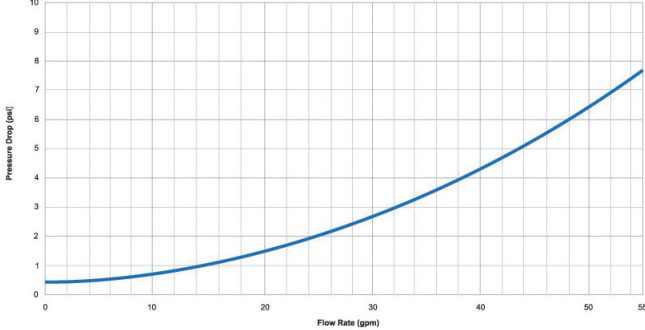
3/4" Headloss Curve



5/8" x 3/4" Headloss Curve



1" Headloss Curve



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EXHIBIT 12



SmartPoint 520M

Pit Set Module

The SmartPoint® 520M Pit Set Module is a radio transceiver that provides water utilities inbound and outbound access to water measurement and ancillary device diagnostics via radio signal. The SmartPoint 520M is designed for submersible, pit-set environments.

BENEFITS:

- Easily receives input from either walk-by/drive-by or fixed-base collection device
- Controls both deployment and lifetime operation costs
- Compact installation that saves time, space and money - without reducing system performance
- Delivers a fast, efficient and reliable connection at minimal cost
- Minimizes new infrastructure investment
- Enables effective leak detection

TouchCoupler Design

The SmartPoint 520M Module utilizes TouchCoupler, the patented Sensus inductive coupling communication platform, to interface with the encoded meter. With TouchCoupler, the SmartPoint 520M Module can connect to the meter using existing two wire AMR installations instead of requiring utilities to access the meter to install a new three-wire connection. This results in a fast, efficient and reliable connection at minimal cost.

Operation

With its migratable, two-way communication ability, the M-Series SmartPoint functions as a walk-by/drive-by endpoint, fixed-base endpoint, or combination of the two. This flexibility increases utility data collection capabilities and streamlines operations. The SmartPoint 520M Module receives input from the meter register and remotely sends data to a walk-by/drive-by or fixed-base collection device. The SmartPoint 520M Module easily migrates from walk-by/drive-by to fixed base by simply installing a Base Station.

In walk-by/drive-by mode, the SmartPoint 520M Module collects data and awaits an activation signal from the Vehicle Gateway Basestation (VGB) or Hand-Held Device (HHD). Upon signal receipt, it transmits readings, the meter identification number and any alarms.

As a fixed-base endpoint, the SmartPoint 520M Module interacts with one or more strategically placed Base Stations located in the utility service area. Top of the hour readings and other diagnostics are instantly forwarded to the Regional Network Interface (RNI)[™] at time of transmission. The FlexNet® communication network provides unmatched reliability by using expansive tower receiver coverage of metering end points, data/message redundancy, failover backup provisions and operation on FCC primary use (unshared) RF spectrum.

SmartPoint 520M

Pit Set Module

Powerful Transmission, Flexible Platform

The SmartPoint® 520M Pit Set Module offers several advantages that control both deployment and lifetime operation costs. Its powerful, industry-leading two watt transmitter broadcasts over large distances and minimizes collection infrastructure. And after the SmartPoint is installed, its migratable, two-way system platform can be updated without requiring personnel to visit each meter and/or inconveniencing customers.

Additional Smartpoint 520M Module Features

The SmartPoint 520M Module obtains hourly

readings and can monitor continuous flow over a programmable period of time, alerting the utility to leak conditions. In addition, the SmartPoint stores up to 840 consumption intervals (35 days of hourly consumption), providing the utility with the ability to extract detailed usage profiles for consumer information and dispute resolution. The SmartPoint also incorporates a two-port design, allowing the utility to connect multiple registers and ancillary devices (such as acoustic monitoring) to a single SmartPoint. This results in a compact installation that saves time, space and money - without reducing system performance.

Specifications

Service	Pit set installation interfacing the utility meter to the Sensus FlexNet communication network. Unit requires 1.75" diameter hole in pit lid; fits pit lid thicknesses up to 1.75"
Physical characteristics	Width: 4.43" x Height: 5.09" x Depth: 3"
Weight	1.0 lbs/16.0 oz
Color	Black
Frequency range	900 - 950 MHz, 8000 channels X 6.25 kHz steps
Modulation	Proprietary Narrow Band
Memory	Non-Volatile
Power	Lithium Thionyl Chloride batteries
Approvals	US: FCC CFR 47: Part 24D, Part 101C, Part 15 Licensed operation Canada: Industry Canada (IC) RSS-134, RSS-119
Operating temperature	- 22° F to +185° F - 30° C to + 85° C
Options	Dual or single port availability; TouchCoupler only, wired only
Installation environment	100% condensing, water submersible
Compatibility	TouchCoupler and Wired Version: Sensus Encoder Registers, Badger ADE water registers, Master Meter AccuLinx, and Hersey Translator (approved TR/PL Lead) Wired Version Only: Elster Encoder (Sensus protocol), Neptune ARB VI (ProRead), Hersey Translator, Zenner PMN Nitro 01, McCrometer flowcom FC100-00M, and Kamstrup flowIQ 2100 Refer to the 510M/520M SmartPoint® Module Water Meter and Ancillaries Compatibility Quick Guide for the latest compatibility information.
Warranty	20 years - Based on six transmissions per day. Refer to Sensus G-500 for warranty.



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EXHIBIT 13



FlexNet® R100NA Outdoor Collector

The R100NA Outdoor Collector integrates seamlessly with the Sensus FlexNet communication network and enables secure, high performance communication directly to the RNI.

Designed to fill-in network coverage for meters in hard-to-reach locations, this outdoor collector features alarm monitoring, next-generation encryption, load profile support, and remote endpoint configuration.

FEATURES

- Network coverage for hard-to-reach meters
- GPS receiver for time synchronization
- Full duplex operation
- One hour battery backup
- Alarms and reporting capability
- Flexible backhaul via integrated cellular or Ethernet
- Utility pole, wall, and tower mount
- FCC-licensed, CFR 47, Part 15B, 24D, 101C certified
- Single-door NEMA 4 enclosure

APPLICATIONS

- Two-way Advanced Meter Infrastructure (AMI)
- Demand Response (DR)
- Home Area Networks (HAN)
- Sensus VantagePoint® Lighting Control

Low-Cost 100 Percent Coverage

The R100NA collector provides a low-cost infill solution that provides direct backhaul coverage. This enables you to reach every meter with minimal infrastructure while maintaining Sensus' high-performance point-to-multipoint architecture.

Common Operating System

The R100NA shares a common operating system with Sensus FlexNet Base Station products, ensuring a simple, consistent configuration and management of all FlexNet infrastructure components.

Licensed Radio Spectrum

In North America, Federal Communications Commission/Innovation, Science and Development Canada protected primary-use spectrum avoids competition with other wireless services, interference from other radio devices, and the risk of being taken over by emergency service providers.

Small Footprint

A lightweight unit with flexible pole or wall-mounting options enables strategic deployment with a discreet appearance.

Industry Leading Security

Sensus has achieved General Electric/Wurldtech™ Achilles® communications certification for critical infrastructure security against cyber threats.

FlexNet® R100NA Outdoor Collector



Properties

Receive Bandwidth	75 KHz
Transceivers	Single
Spectrum	Licensed 900 MHz PCS/MAS
Duplexing	Single transmit Three receive channels - simultaneous/ dedicated
Applications	Single
Expandability	No
Compatibility	SNMP
FlexNet	Requires RNI 3.3.3 or newer

Enclosure - Pole/Wall Mount

Height	12" (30.5 cm)
Width x Depth	12" (30.5 cm) x 6" (15.2 cm)
Weight	21.1 lbs (9.57 kg)
Capacity	One transceiver
Temperature	-40° F to +131° F (-40° C to +55° C)
Voltage	120 VAC
Battery Backup	One hour
NEMA Rating	4
Air Conditioned	No

Kit Components

Cable	50 feet of coaxial cable
Antenna	Laird Model FG8963 3dBd antenna and jumper

Note: The RF Network Design may call out a different coaxial cable or antenna than what ships with the R100NA Outdoor Collector.



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EXHIBIT 14



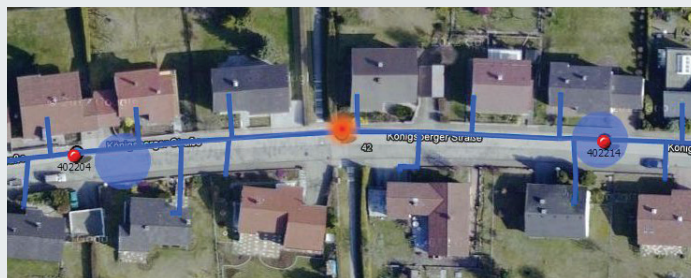
ZONESCAN 820

Correlating Radio Loggers

Use correlating radio loggers to identify and pinpoint leaks with ease, display the loggers and the leaks on your smartphone or tablet and store the data on ZONESCAN Net.



GUTERMANN is pushing the boundaries of acoustic leak detection and bridges the gap between mobile and fixed approaches. The unique modularity of ZONESCAN works in your favour!



The global success story of ZONESCAN 820

The ZONESCAN logger was the first correlating logger in the world, launched in 2001, and has been sold tens of thousands of times. Since then it has been re-engineered to perfection: it's become smaller, more sensitive and more robust. The interior does entirely without any cables and the degree of industrial miniaturisation is unmatched.

The ZONESCAN 820 logger is the only logger on the market with a proprietary radio module, designed in-house to perfectly fulfil the very high requirements of frequent outdoor use. At GUTERMANN we have a zero-tolerance policy for hardware failures. Needless to say, the loggers are IP68 protected.

The ZONESCAN family is entirely modular

Whether you use your ZONESCAN 820 loggers in a lift & shift, drive-by or fixed network (remote access) mode, you only ever buy one type of logger that can be used for all purposes. This allows you to change your work mode along the way or to add more loggers to your collection in the future.

The bi-directional radio connection allows us to help you upgrade your loggers' firmware at any time in order for you to be fully up to date with the latest technology.

The brand new ZONESCAN Smart management tool lets you export all your project data into ZONESCAN Net should you ever choose to manage your network and store all data "in the cloud" (see next page).

30 times more sensitive thanks to correlation

GUTERMANN invented the correlating logger in 2001. Today we know that pure noise logging produces too many false positives (false alarms) and false negatives (unidentified leaks). In busy cities there is just too much noise and electrical interference that renders noise level logging ineffective.

ZONESCAN 820 loggers can filter out ambient noises around the loggers (thanks to correlation) and electrical and mechanical sounds on the pipe (with advanced spectrum analysis) and identify real leaks.

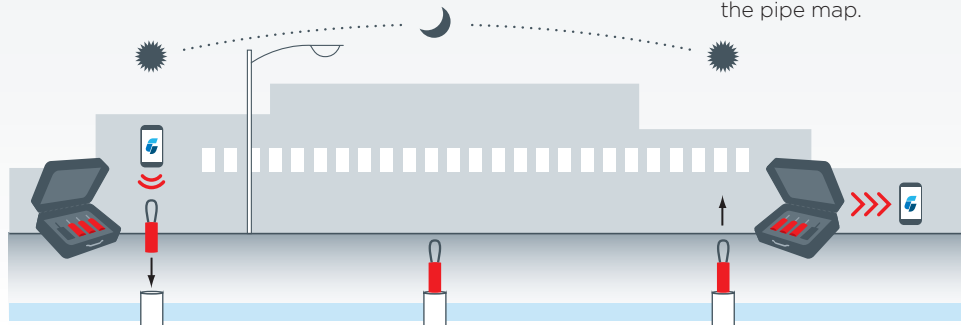
Another crucial benefit of correlation is the ability to automatically and accurately pinpoint the location of the identified leak. With your pipe data imported, the leak will be placed on the correct spot on the pipe map.

ZONESCAN - the logger of worldwide reference

The ZONESCAN 820 logger has become the leak noise logger of choice for many of the large European, Asian and US technology companies seeking to establish themselves as solution providers in leak detection. They have all chosen to align their own solutions with the ZONESCAN family of products.

The ZONESCAN product family is available in more radio frequencies than any other logger: fixed 868 MHz frequency in Europe and the Middle East, 916 MHz frequency in Australia and Israel, 925 MHz frequency in Japan or 915 MHz frequency with frequency hopping (spread spectrum) in North America, to name just the most important ones.

Lift & Shift mode



Scan & Deploy

Log Data Overnight

Collect, Read Out & Re-deploy

Download & Send (Optional)





Lift & Shift mode (see illustration bottom left)

When the term "Lift & Shift" was first introduced by GUTERMANN engineers, this method of performing periodic leakage surveys in confined areas and collecting the data for subsequent analysis on the transport of the loggers from area A to area B was the most common way of using loggers. To this date, it is still a popular method for utilities that like to assign leakage teams to periodically check all areas of the pipe network for new leaks.

In Lift & Shift, the operator programmes the loggers before deploying them overnight and collecting them on the next day in order to download and review the collected data.

Drive-by mode (see illustration bottom right)

In "Drive-by" mode the loggers remain permanently at their assigned locations in the pipe network. In periodic intervals at the utility's discretion the operator drives by the logger locations and the ZONESCAN Commlink automatically picks up the recorded data from the loggers. Up to 30 days' worth of logging can be stored, as well as one night's correlation data.

The Drive-by method is preferred by utilities who want to minimise the frequency of surveying specific areas and therefore reduce any leak runtime. They also want the option of drawing on longer historical data for each logger in order to analyse specific leak situations.



ZONESCAN Smart for smart operators

ZONESCAN smart is revolutionising mobile leak detection as you know it. Java-based and available for all Android-run smartphones and tablets, it is the most advanced and user-friendly operating software for any mobile noise logger system. The convenient auto filter greatly improves your leak hit rate.

All relevant data (logger positions, leak positions, imported pipe data) and even your own current position are displayed on OpenStreetmap or Google Maps in the same clear and neat fashion as we know it from ZONESCAN net.

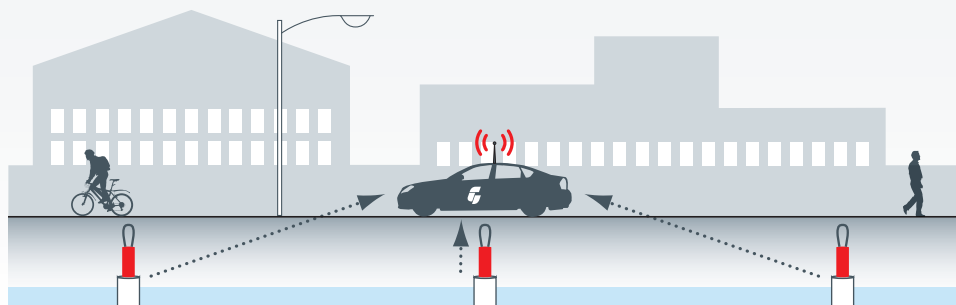
ZONESCAN smart can be used for both Drive-by and for Lift & Shift operation. And all data can be exported to your ZONESCAN Net project.

Upgrade to Fixed Network Monitoring

If you already own ZONESCAN 820 loggers, you can upgrade them to fixed network monitoring ZONESCAN Alpha. Simply deploy them permanently on your pipe network and connect them via ZONESCAN repeaters and Alpha units to your cloud-based ZONESCAN Net account. And you won't ever have to leave your office again, except for leak repairs.

Our ZONESCAN smart and ZONESCAN net platforms are compatible. You can exchange data easily between them. Use ZONESCAN smart for maximum convenience in the field, and use ZONESCAN net for unlimited data storage, long-term correlation and data analysis and for sharing your network data within your organisation as well as extended reporting tools.

Drive-by mode



Read Out & Re-programme



Download & Send (Optional)

ZONESCAN 820

Correlating Radio Loggers

Legend

1. Android-based tablet or smartphone (optional)
2. Car roof antenna
3. System Communication Link
4. ZONESCAN 820 Correlating Radio Loggers
5. Robust carrying case



ZONESCAN 820 is the leading leak detecting and pinpointing logger system on the market. Can you afford to use anything else?

System configuration

- ZONESCAN 820 loggers
- 1 System Communication Link
 - 1 Software (ZONESCAN smart for Android tablets/phones or PC software)
 - 1 Car roof antenna
 - 1 User manual
 - 2 years factory warranty

Accessories

- 1 robust carrying case for up to 40 loggers, the Commlink and accessories

Technical specifications of the ZONESCAN 820 loggers

Casing:	High-quality Aluminium casing (stainless steel casing upon request)
Ingress Protection:	IP68, submersible up to 2 meters
Temperature range:	-30°C to +70°C
Battery life:	Depending on user-specific usage, but optimised in firmware
Dimensions:	100 mm x 41.5 mm (height x diameter)
Weight:	310 grams
Data transmission:	Proprietary radio, country-specific public frequency

Software Features

ZONESCAN smart:

- for smartphones or tablets with Android 2.3 or higher
- Visualisation of loggers and the current GPS position on the map
- Choice of Google Maps or OpenStreetMap Project map data
- no online data connectivity or SIM card required
- KML layers can be imported and displayed (e.g. pipe network or hydrants)
- Intelligent "Leak Score" facilitates the identification and distinction of real leak noises
- Data storage and backup on ZONESCAN net possible with an individual customer account
- Recorded sound signals can be replayed anytime
- Lifelong software updates

ZONESCAN pc:

- Windows XP, Vista, 7, 8 (32 and 64 bit)
- Detailed visualisation and analysis of noise histograms, sound spectra and correlations
- automatic correlation of all ZONESCAN loggers in the specific project
- Export of measurement data as KML file for subsequent visualisation of the results in Google Earth
- Project import and export for a simple exchange and backup of measurements



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EXHIBIT 15

**ENCROACHMENT
PERMITS FOR PHASE I
PROJECT SUBMITTED AS
A SEPARATE DOCUMENT**

EXHIBIT 16



BOYD COUNTY FISCAL COURT



ERIC CHANEY, Judge Executive

KEITH WATTS
County Commissioner
District 1

LARRY D. BROWN
County Commissioner
District 2

RANDY STAPLETON
County Commissioner
District 3

March 6, 2020

Mr. Tim Webb
Cannonsburg Water District
1606 Cannonsburg Road
Ashland, KY 41102

Re: Use of Right-of-Ways for Zone Meter Construction

Mr. Webb,

Boyd County Fiscal Court hereby grants Cannonsburg Water District permission to perform work within the Boyd County Right-of-Way necessary for the construction of the Phase I Zone Meter Project. It is understood that disturbed areas within the Right-of-Way will be re-established to existing conditions.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Chaney", with a long, sweeping underline.

Eric Chaney
Boyd County Judge Executive

EXHIBIT 17

Wuetcher, Gerald

From: Tim Webb <tim@cannonsburgwater.com>
Sent: Thursday, April 30, 2020 4:18 PM
To: Talley, Damon; Wuetcher, Gerald
Subject: FW: Cannonsburg Zone Metering Project Phase 1

Gentlemen,

Please see email chain between Alan Bowman and Terry Humphries regarding a construction application for the Division of Water.

Thanks

Tim Webb
District Manager
Cannonsburg Water District

1606 Cannonsburg Road
Ashland, KY 41102
Office:606-928-9808
Cell:606-694-5482
Fax:606-928-4788

www.cannonsburgwater.com

From: Humphries, Terry (EEC) <Terry.Humphries@ky.gov>
Sent: Monday, February 17, 2020 2:35 PM
To: Alan Bowman <abowman@hkbell.com>; Tim Webb <tim@cannonsburgwater.com>
Cc: Parsley, Sarah J (KIA) <sarah.parsley@ky.gov>; Bridwell, Linda C (KIA) <linda.bridwell@ky.gov>
Subject: RE: Cannonsburg Zone Metering Project Phase 1

Alan,
Installation of meters within the distribution system does not require a construction application from the Division of Water as they will not significantly impact the hydraulics of the system as you have noted. If you need a letter on letterhead, please let me know. Thanks.

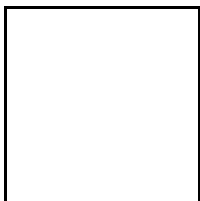
Terry Humphries, P.E.
Supervisor, Engineering Section
Water Infrastructure Branch
KY Division of Water
300 Sower Blvd, 3rd Floor
Frankfort, KY 40601
(502)782-6983

From: Alan Bowman [<mailto:abowman@hkbell.com>]
Sent: Monday, February 17, 2020 9:26 AM
To: Humphries, Terry (EEC) <Terry.Humphries@ky.gov>; Tim Webb <tim@cannonsburgwater.com>
Subject: Cannonsburg Zone Metering Project Phase 1

Terry

KIA approved Cannonsburg's loan application at the last board meeting. Prior to letting, they have requested a letter from KYDOW. As we have discussed on previous occasions, the project involves cutting in zone meters throughout the system. No new customers will be added, no additional line will be installed and the project will not impact the existing system hydraulics. You have previously indicated that we do not need to submit the plans for review. Is there any way we could get a letter from your office indicating such that would satisfy KIA. Thank you.

Alan



Alan Bowman, PE
Project Engineer

P: 859-278-5412 | C: 859-319-6784 | F: 859-278-2911
abowman@hkbell.com | www.hkbell.com

2480 Fortune Drive, Suite 350
Lexington, KY 40509



This email has been checked for viruses by Avast antivirus software.
www.avast.com

EXHIBIT 18



Lexington, KY | 859.278.5412
 Hopkinsville, KY | 270.886.5466
 Asheville, NC | 828.774.5499

OPINION OF PROBABLE PROJECT COST (REVISED)

Project: PHASE 1 - ZONE METERING
Date: APRIL 2020
Est. By: RAB
Client: CANNONSBURG WATER DISTRICT
Contract No.: 691-19-B
Checked By:
 No Design Completed
 Preliminary
 Final Design
Drawing No.: N/A

ITEM NO.	ITEM DESCRIPTION	QUANTITY		MATERIAL		LABOR		TOTAL COST
		NO.	UNIT	PER UNIT	TOTAL	PER UNIT	TOTAL	
1	Triple B Construction, base bid for Phase 1	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$390,614
2	Contingency for Phase 1 Project (Approx. 15%)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$60,000
3	Change Order for Three (3) additional "Sub-Zone" meters at base bid price for 6-inch Meter	3	Each	\$10,269	\$30,806.82	XXXXXX	XXXXXX	\$30,807
4	Correlator Leak Detection Equipment, Communication Package and Training	1	Each	\$18,682	\$18,682	XXXXXX	XXXXXX	\$18,682
5	Flex Net System Upgrade Iperl Metering Devices	200	Each	\$125	\$25,000	XXXXXX	XXXXXX	\$25,000
6	Flex Net System Upgrade R100NA Collector/Repeater Tower	1	Each	\$10,500	\$10,500	XXXXXX	XXXXXX	\$10,500
7	Flex Net System Upgrade 520M MXU for Metering Devices	600	Each	\$135	\$81,000	XXXXXX	XXXXXX	\$81,000
8	Engineering Design Fees	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$55,000
9	Engineering Bidding Fees	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$7,500
10	Engineering Construction Administration Fees	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$20,000
11	Engineering RPR (Inspection)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$20,000
12	Hydraulic Model	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$25,000
13	Legal Fees	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$30,000
14	Land (Utility Bond for KYDOT Encroachment Permits)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$5,000
15	K/A Administrative Fee	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	\$10,000
TOTAL OPINION OF PROBABLE PROJECT COST								\$819,103

STATE OF KENTUCKY
 PROFESSIONAL ENGINEER
 License No. 24245
 4/16/2020

EXHIBIT 19

EXPECTED ANNUAL COST OF OPERATING NEW EQUIPMENT AND FACILITIES

No additional annual costs are expected with the addition of new equipment. No additional licenses for software for meters are required. As the equipment has its own power supplies, no additional purchase power expense is expected.

Currently Cannonsburg District expends 8 manhours monthly to read customer meters. An employee must travel approximately 180 miles to collect the meter readings in a water district vehicle. The proposed equipment will eliminate this expense. Expected annual savings are **\$5,571.60**.

Labor: $\$45.10 \text{ per hour}^* \times 8 \text{ hours per month} \times 12 \text{ months} = \$4,329.60$

Vehicle: $180 \text{ miles per month} \times 12 \text{ months} \times \$0.575 \text{ per mile}^{**} = \$1,242$

* Average hourly employee cost based upon wages, pension expense, and employer taxes

** 2020 IRS Standard Mileage Rate

EXHIBIT 20



KENTUCKY INFRASTRUCTURE AUTHORITY

Andy Beshear
Governor

100 Airport Road
Frankfort, Kentucky 40601
(502) 573-0260
(502) 696-0676 (fax)
kia.ky.gov

Edith Halbleib
Executive Director

February 10, 2020

Honorable Robert McGuire, Chairman
Cannonsburg Water District
1606 Cannonsburg Road
Ashland, KY 41102

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND
CONDITIONAL COMMITMENT LETTER (C20-001)**

Dear Chairman McGuire:

The Kentucky Infrastructure Authority ("the Authority") commends your efforts to improve public service facilities in your community. On February 6, 2020, the Authority approved your loan for the Phase 1 - Zone Metering Project subject to the conditions stated below. The total cost of the project shall not exceed \$1,152,000, without prior authorization, of which the Authority loan shall provide \$622,000 of the funding. Other anticipated funding for the project is reflected in Attachment B. 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 Cannonsburg 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 February 10, 2021 (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.

Chairman McGuire
February 10, 2020
Page 2

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.

Sincerely,



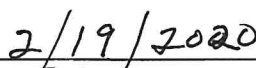
Linda Bridwell, PE
Deputy Executive Director
Kentucky Infrastructure Authority

Attachments

cc: Tim Webb, Cannonsburg Water District
Bell Engineering, Alan Bowman

Please sign and return a copy of this letter indicating your acceptance of this commitment and its terms. Complete the attached "Authorization for Electronic Deposit of Vendor Payment Form" and the "ACH Debit Authorization Form" and return to the **US Bank address at the bottom of each form**. Also included are the "Legal Counsel Certification Letter" sample and the "Statement of Approval of Projections of Revenue and Expenses" for you to complete at the appropriate time.


Accepted


Date

Chairman McGuire
February 10, 2020
Attachment A

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

1. The Authority project loan shall not exceed \$622,000.
2. The loan shall bear interest at the rate of 2.00% per annum commencing with the first draw of funds.
3. The loan shall be repaid over a period not to exceed 4 years from the date of the last 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. KIA requires the use of Automated Clearing House (ACH) debits for payment of all balances due on the loan. This will ensure that payments are credited timely to your account without the risk of incurring late payment fees. If the due date falls on a weekend or holiday your account will be debited on the next business day. Please complete and return the attached authorization to U.S. Bank for processing.
5. Full principal payments will commence on June 1, or December 1, immediately succeeding the date of the last draw of funds, provided that if such June 1, or December 1, shall be less than three months since the date of the last draw of funds, then the first principal payment date shall be the June 1, or December 1, which is at least six months from the date of the last draw of funds. Full payments will be due each six months thereafter until the loan is repaid.
6. A loan servicing fee of 0.20% of the outstanding loan balance shall be payable to the Authority as a part of each interest payment.
7. Loan funds will only be disbursed after execution of the Assistance Agreement as project costs are incurred.
8. The Authority requires that an annual financial audit be provided for the life of the loan.
9. The final Assistance Agreement must be approved by ordinance or resolution, as applicable, of the city council or appropriate governing board.

Chairman McGuire
February 10, 2020
Attachment A

10. The borrower must maintain a 1.1 debt coverage ratio throughout the life of the KIA loan. All borrowers are subject to at least an annual financial review for compliance.

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. Upon completion of final design of the facilities in the attached project description, favorable approval shall be obtained of such design by all appropriate parties as required by Kentucky statute or administrative regulation.
2. The Borrower must provide certification from their legal counsel stating 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 state and local procurement laws.
3. Documentation of final funding commitments from all parties other than the Authority as reflected in the Attachment B description shall be provided prior to preparation of the Assistance Agreement and disbursement of the loan monies. Rejections of any anticipated project funding, or any new funding sources not reflected in Attachment B shall be immediately reported and may cause this loan to be subject to further consideration.
4. Upon receipt of construction bids a tabulation of such bids and engineer's recommendations on compliance with bid specifications and recommendation for award, shall be forwarded to the Authority for final approval and sizing of this loan and the project.
5. 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.
6. 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.
7. 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

Chairman McGuire
February 10, 2020
Attachment A

projections of operating expenses have not materially changed. The “as bid” project budget shall be reviewed and approved by your consultant engineer.

8. All easements or purchases of land shall be completed prior to commencement of construction. Certification of all land or easement acquisitions shall be provided to the Authority.
9. The Borrower must provide documentation of Clearinghouse Endorsement and Clearinghouse Comments.
10. The Borrower must complete and return the attached “Authorization for Electronic Deposit of Vendor Payment” form to the Authority, and “ACH Debit Authorization” form to US Bank.
11. The Borrower will implement the Kentucky Uniform System of Accounting (KUSoA), or an alternative approved by the Authority and assure that rates and charges for services are based upon the cost of providing such service.
12. The Borrower will provide Final Design Plans in an AutoCAD Drawing File Format (DWG), referenced to the appropriate (North, South or Single) Kentucky State Plane Coordinate System (NAD83-Survey Feet) on a Compact Disc (CD). The recipient shall provide the Authority a digital copy (pdf) of the record drawings from the project within three months of construction completion.

There are no special conditions listed in Attachment B that must be resolved.

Fund B/C LOAN CONDITIONS CHECKLIST

Congratulations on receiving a conditional commitment of funding from KIA's Fund B/C Loan Program. Borrowers will now be assigned a Compliance Analyst to help guide them through the rest of the loan process based on which Area Development District (ADD) they are located. Please submit all documents to one of the following contacts:

- Julie Bickers (Julie.Bickers@ky.gov, 502-892-3455): Purchase, Pennyrite, Green River, Barren River, Lake Cumberland.
- Debbie Landrum (Debbie.Landrum@ky.gov, 502-892-3454): Lincoln Trail, KIPDA, Northern KY, Bluegrass.
- Sarah Parsley (Sarah.Parsley@ky.gov, 502-892-3177): Buffalo Trace, Gateway, FIVCO, Big Sandy, KY River, Cumberland Valley

After all of the conditions of the Conditional Commitment Letter have been fulfilled, KIA will initiate the Assistance Agreement with the borrower. The Assistance Agreement must be fully executed before any funds may be disbursed. The following is a list of items needed to process your loan (forms can be found here <https://kia.ky.gov/FinancialAssistance/Pages/Forms.aspx>):

Before bid opening, submit the following items to the designated agency.

Submit

To:

- | | | |
|-----|--------------------------|---|
| KIA | <input type="checkbox"/> | Conditional Commitment Letter (this letter is sent to the borrower via email shortly following KIA board approval and is to be signed by the authorizing official) |
| KIA | <input type="checkbox"/> | Authorization for Electronic Deposit/Debit of Borrower Disbursements/ Payment (these forms are attached to the loan commitment letter sent after KIA board approval and are to be signed by the authorizing official and forwarded to US Bank) |
| KIA | <input type="checkbox"/> | Eclearinghouse Endorsement (if not already submitted with loan application) |
| DOW | <input type="checkbox"/> | Plans and specifications (Kentucky Division of Water will review and KIA will need copy of approval letter) |
| KIA | <input type="checkbox"/> | Proof of compliance with any special condition identified in the Conditional Commitment Letter (e.g. adopted ordinance). |

After the project has opened bids, please submit the following items to the designated agency assigned below. It is imperative that the remaining standard conditions are fulfilled by the deadlines set forth in the Conditional Commitment Letter.

Submit

To:

- | | | |
|-----|--------------------------|---|
| KIA | <input type="checkbox"/> | Bid Advertisement |
| KIA | <input type="checkbox"/> | Bid Tabulation and Engineer's Recommendation |
| KIA | <input type="checkbox"/> | As-Bid Budget |
| KIA | <input type="checkbox"/> | Procurement Certification (KIA sends to borrower after bid opening for signature.) |
| KIA | <input type="checkbox"/> | Certification of obtainable revenue projections (KIA sends to borrower after bid opening for signature.) |
| KIA | <input type="checkbox"/> | Certification of clear site (KIA sends to borrower after bid opening for signature.) |
| KIA | <input type="checkbox"/> | Plans and specifications approval from the Kentucky Division of Water |
| KIA | <input type="checkbox"/> | Public Service Commission (PSC) approval , (CPCN and Authorization to Incur Debt) if applicable. |

AUTHORIZATION FOR ELECTRONIC DEPOSIT
OF BORROWER PAYMENT
KENTUCKY INFRASTRUCTURE AUTHORITY
(FUND C20-001)

Borrower Information:

Name: Cannonsburg Water District

Address: 1606 Cannonsburg Road

City: Ashland State: KY Zip: 41102

Federal I.D. # ██████████

Contact Name: Tim Webb Telephone: 606-928-9808

Email: tim@cannonsburgwater.com

Financial Institution Information:

Bank Name: City National Bank

Branch: Cannonsburg Phone No: 606-929-9700

City: Ashland State: KY Zip: 41102

Transit / ABA No.: ██████████

Account Name: Surcharge - Non Revenue

Account Number: ██████████

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.

Signature:  Date: 2-24-2020

Name Printed: Tim Webb Job Title: District Manager

Please return completed form to: U.S. Bank
Attention: Corporate Trust Administration
One Financial Square
Mail Code: CN-KY-0850
Louisville, KY 40202

KIA Loan # C20-001

**ACH DEBIT AUTHORIZATION FORM
AUTHORIZATION AGREEMENT FOR PRE-ARRANGED PAYMENTS
(DEBITS)**

The undersigned hereby authorizes U.S. Bank National Association Corporate Trust Department ("U.S. Bank") to initiate debit entries to the account indicated below at the bank named below:

CHECKING: SAVINGS:
BANK NAME: City National Bank BRANCH: Cannonsburg
CITY: Ashland STATE: KY ZIP CODE: 41102
BANK TRANSIT/ABA #: [REDACTED] ACCOUNT #: [REDACTED]

This authority is to remain in full force and effect until U.S. Bank has received written notification from the undersigned of its termination in such time and in such manner as to afford U.S. Bank a reasonable opportunity to act. The undersigned has the right to stop payment of a debit entry by reasonable prior written notification to U.S. Bank. After the above account has been charged, the undersigned has the right to have the amount of any erroneous debit immediately credited to its account by U.S. Bank up to 30 days following issuance of a statement.

NAME OF ENTITY: Cannonsburg Water District
ADDRESS: 1606 Cannonsburg Road
Ashland, KY 41102

TAX IDENTIFICATION NUMBER: [REDACTED]

By:  Date: 2-24-2020
Authorized Signer

Send to: U.S. Bank
Attention: Corporate Trust Administration
One Financial Square
Mail Code: CN-KY-0850
Louisville, KY 40202

SAMPLE LETTER

[Letterhead of Counsel for Water Utility]

[Date]

Kentucky Infrastructure Authority
100 Airport Road
Frankfort, Kentucky 40601

RE: Loan#
 City of xxxxx

Ladies and Gentlemen:

The undersigned is an attorney at law duly admitted to the practice of law in the Commonwealth of Kentucky and is legal counsel to the XXXXXXXXXXXX, hereinafter referred to as the "Water Utility ". I am familiar with the organization and existence of the Water Utility and the laws of the Commonwealth applicable thereto. Additionally I am familiar with the water project (the "Project") with respect to which the funding commitment by and between the Kentucky Infrastructure Authority ("Authority") and the Water Utility.

I have reviewed the commitment letter by and between the Authority and the Water Utility and the documentation regarding wage rates and procurement with respect to the Project.

Based upon my review I am of the opinion that:

The Water Utility has prepared construction specifications in accordance with all procurement procedures including those for construction, land, equipment and professional services that are a part of the project are in compliance with all applicable state and local procurement laws.

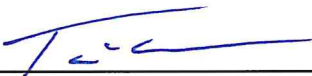
Respectfully,

**STATEMENT OF APPROVAL
OF PROJECTIONS OF REVENUE AND EXPENSES**

Borrower Name: Cannonsburg Water District

Loan No.: C20-001

I hereby certify that the revenue projections in the attached descriptions are still obtainable and that projections of operating expenses have not materially changed based on the "as-bid" budget submitted for the Project.

Signed: 

Tim Webb - District Manager

Borrower


2-24-2020

Date

SITE CERTIFICATE

I certify that the loan recipient, the Cannonsburg Water District, of Boyd County, KY, has acquired all real property including easements and rights-of-way that are or will be required for the construction, (erection, extension, modification, addition) operation and maintenance of the Phase I Zone Meter Project project.

Date this 24TH day of FEBRUARY 20.

, District Manager
Borrower Title

ATTACHMENT B

**Cannonsburg Water District
C20-001**

EXECUTIVE SUMMARY		Reviewer	Ashley Adams	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	February 6, 2020	
FUND C, GOVERNMENTAL AGENCIES FUND		KIA Loan Number	C20-001	
REVOLVING LOAN FUND		WRIS Number	WX21019056	
BORROWER	CANNONSBURG WATER DISTRICT BOYD COUNTY			
BRIEF DESCRIPTION				
This project will install zone meters at key locations throughout the Cannonsburg Water District's system in order to monitor system flows in real time in an effort to reduce unaccounted for water in the system.				
PROJECT FINANCING		PROJECT BUDGET		
Fund C Loan	\$622,000	Administrative Expenses	RD Fee %	Actual %
Local Funds	530,000	Legal Expenses		
		Eng - Design / Const	8.9%	7.1%
		Eng - Insp	5.7%	4.7%
		Construction		
		Contingency		
TOTAL	\$1,152,000	TOTAL		\$1,152,000
REPAYMENT	Rate	2.00%	Est. Annual Payment	\$163,823
	Term	4 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bell Engineering		
	Bond Counsel	Rubin & Hays		
PROJECT SCHEDULE	Bid Opening	Apr-20		
	Construction Start	Jul-20		
	Construction Stop	Dec-20		
DEBT PER CUSTOMER	Existing	\$519		
	Proposed	\$672		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,597	\$48.41 (for 4,000 gallons)	
	Additional	0	\$48.41 (for 4,000 gallons)	
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	235,331	78,757	156,574	3.0
Audited 2017	67,202	70,701	(3,499)	1.0
Audited 2018	179,056	94,563	84,493	1.9
Projected 2019	313,654	92,525	221,129	3.4
Projected 2020	403,316	97,451	305,865	4.1
Projected 2021	377,519	264,557	112,962	1.4
Projected 2022	352,838	280,410	72,428	1.3
Projected 2023	327,663	280,549	47,114	1.2

Reviewer: Ashley Adams
Date: February 6, 2020
Loan Number: C20-001

**KENTUCKY INFRASTRUCTURE AUTHORITY
GOVERNMENTAL AGENCIES LOAN FUND (FUND C)
CANNONSBURG WATER DISTRICT, BOYD COUNTY
PROJECT REVIEW
WX21019056**

I. PROJECT DESCRIPTION

The Cannonsburg Water District is requesting a Fund C loan in the amount of \$622,000 for the Phase 1 Zone Metering project. The purpose of the project is to reduce unaccounted for water in the system through improved operating efficiency and capital planning. Currently the District has reported water loss of approximately 27%. The project is consistent with the efforts of the District to reduce unaccounted for water and has been presented to, and has the support of, the Public Service Commission.

This project will involve the installation of approximately 53 zone meters. The meters will be installed throughout the existing distribution system at critical locations identified by the owner and engineer. Of the 53 zone meters, 10 will replace existing malfunctioning metering devices. Installation of the zone meters will enable the Cannonsburg Water District to subdivide their existing system into designated metering areas (DMA) and sub-metering areas.

Metered output will be incorporated into the existing smart metering system currently used by the Cannonsburg Water District. The proposed project will allow the District to monitor system flows in real time and compare metered flows to metered billings within the established DMAs.

The District serves approximately 3,597 customers in Boyd, Greenup, and Carter counties. It is a distribution system only, purchasing the majority of its water (389 million gallons annually) from the City of Ashland. The District is under order from the PSC to reduce water loss from Case No. 2014-00267. Water loss has been reduced from approximately 55% in January 2017 to approximately 27% in January 2019.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 10,000
Legal Expenses	30,000
Engineering Fees - Design	50,000
Engineering Fees - Construction	21,000
Engineering Fees - Inspection	47,000
Construction	904,000
Contingency	90,000
Total	\$ 1,152,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund C Loan	\$ 622,000	55%
Local Funds	530,000	45%
Total	\$ 1,152,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 622,000
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 622,000
Interest Rate	2.00%
Loan Term (Years)	4
Estimated Annual Debt Service	\$ 162,579
Administrative Fee (0.20%)	1,244
Total Estimated Annual Debt Service	\$ 163,823

V. PROJECT SCHEDULE

Bid Opening	April 2020
Construction Start	July 2020
Construction Stop	December 2020

VI. RATE STRUCTURE

A. Customers

	<u>Current</u>
Residential	3,309
Commercial	286
Industrial	2
Total	3,597

B. Rates

	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	05/13/19	01/01/17
Minimum (2,000 gallons)	\$25.33	\$24.34
Next 3,000 Gallons	9.54	9.17
Water Loss Surcharge	4.00	
Cost for 4,000 gallons	\$48.41	\$42.68
Increase %	13.4%	
Affordability Index (Rate/MHI)	1.1%	

VII. DEMGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 8,985 with a Median Household Income (MHI) of \$54,840. The median household income for the Commonwealth is \$46,535. The project will qualify for a 2% interest rate based on the shortened loan terms allowable in Fund C.

Year	Population		% Change	County Unemployment	
	Year	County		Date	Rate
1980		55,513		June 2005	6.5%
1990		51,150	-7.9%	June 2010	10.2%
2000		49,752	-2.7%	June 2015	7.1%
2010		49,542	-0.4%	June 2019	6.6%
Current		48,486	-2.1%		
Cumulative %			-12.7%		

VIII. FINANCIAL ANALYSIS

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

HISTORY

Total revenues decreased 3% from \$2.5 million in 2016 to \$2.4 million in 2018. Fluctuations in revenue are attributable to the closing of a steel mill in the area which reopened at the end of 2018 under new ownership. Water revenue from the idled mill

in 2018 was around \$30,000 while revenues have since increased back to \$128,000 annually in 2019 according to the system (audit not yet complete). Operating expenses remained relatively flat at \$2.3 million during the same time period. Debt coverage was 3.0, 1.0, and 1.9 from 2016-2018, respectively.

The balance sheet reflects a current ratio of 2.6, a debt to equity ratio of 1.0, 43.1 days sales in accounts receivable and 1.5 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Rate revenues will increase 4.1% based on a previously approved rate increase in May 2019 and remain flat thereafter.
- 2) A surcharge was approved by the PSC in May 2019 to pay for this project. It is expected to generate approximately \$172,656 annually each year through 2023 (or until the surcharge collected equals \$680,000).
- 3) Revenues will increase for the reopened steel mill, however, they were not factored into this analysis which should result in an even better cash position than what is forecasted.
- 4) Expenses will increase 2% for inflation.
- 5) Debt service coverage is 1.4 in 2021 when full principal and interest repayments begin.

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

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$32,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$1,600 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KRWFC	\$ 222,000	2025
USDA Bond	1,654,000	2055
KIA Loan (B18-011 i/a/o \$57,271)		TBD
Total	\$ 1,867,000	

X. CONTACTS

Legal Applicant	
Entity Name	Cannonsburg Water District
Authorized Official	Robert McGuire (Chairman)
County	Boyd
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Road Ashland, KY 41102

Project Administrator	
Name	Tim Webb
Organization	Cannonsburg Water District
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Rd Ashland, KY 41102

Consulting Engineer	
PE Name	Alan Bowman
Firm Name	Bell Engineering
Email	abowman@hkbell.com
Phone	606-365-2534
Address	2480 Fortune Dr Ste 350 Stanford, KY 40484

XI. RECOMMENDATIONS

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

CANNONBURG WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)

	Audited <u>2016</u>	Audited <u>2017</u>	Audited <u>2018</u>	Projected <u>2019</u>	Projected <u>2020</u>	Projected <u>2021</u>	Projected <u>2022</u>	Projected <u>2023</u>
Balance Sheet								
Assets								
Current Assets	787,144	668,422	671,770	734,608	809,181	831,773	846,259	855,682
Other Assets	6,310,003	6,475,954	6,270,771	6,037,000	7,242,737	7,113,352	6,951,539	6,769,475
Total	7,097,147	7,144,376	6,942,541	6,771,608	8,051,918	7,945,125	7,797,798	7,625,157
Liabilities & Equity								
Current Liabilities	266,716	265,503	257,832	259,832	268,353	450,176	453,176	456,176
Long Term Liabilities	2,765,552	3,283,672	3,227,543	1,840,271	2,364,750	2,131,406	1,895,062	1,655,718
Total Liabilities	3,032,268	3,549,175	3,485,375	2,100,103	2,633,103	2,581,582	2,348,238	2,111,894
Net Assets	4,064,879	3,595,201	3,457,166	4,671,505	5,418,815	5,363,543	5,449,560	5,513,263
Cash Flow								
Revenues	2,508,250	2,407,259	2,443,029	2,600,884	2,714,269	2,714,269	2,714,269	2,714,269
Operating Expenses	2,275,941	2,343,548	2,270,507	2,293,764	2,317,487	2,343,284	2,367,965	2,393,140
Other Income	3,022	3,491	6,534	6,534	6,534	6,534	6,534	6,534
Cash Flow Before Debt Service	235,331	67,202	179,056	313,654	403,316	377,519	352,838	327,663
Debt Service								
Existing Debt Service	78,757	70,701	94,563	92,525	97,451	100,734	116,587	116,726
Proposed KIA Loan	0	0	0	0	0	163,823	163,823	163,823
Total Debt Service	78,757	70,701	94,563	92,525	97,451	264,557	280,410	280,549
Cash Flow After Debt Service	156,574	(3,499)	84,493	221,129	305,865	112,962	72,428	47,114
Ratios								
Current Ratio	3.0	2.5	2.6	2.8	3.0	1.8	1.9	1.9
Debt to Equity	0.7	0.9	1.0	0.4	0.5	0.5	0.4	0.4
Days Sales in Accounts Receivable	40.6	50.8	43.1	43.1	43.1	43.1	43.1	43.1
Months Operating Expenses in Unrestricted Cash	2.0	1.3	1.5	1.7	2.0	2.1	2.1	2.1
Debt Coverage Ratio	3.0	1.0	1.9	3.4	4.1	1.4	1.3	1.2

EXHIBIT 21

KENTUCKY INFRASTRUCTURE AUTHORITY
Minutes of the Full Board

Meeting Date/Location: **February 6 – 1:00 p.m.**
Kentucky Infrastructure Authority
100 Airport Road, Third Floor, Frankfort

Members present:

Mr. Dennis Keene, Commissioner, Department for Local Government
Mr. Winston Miller, proxy for. Holly M. Johnson, Secretary, Finance and Administration Cabinet
Mr. Paul Miller, proxy for Rebecca Goodman, Secretary, Energy and Environment Cabinet
Mr. Claude Christensen, representing Kentucky League of Cities
Mr. Ron Lovan, Representing the Kentucky Section of the American Water Works Association
Mr. Jeb Pinney, proxy for Kent Chandler, Executive Director), Public Service Commission
Mr. Bobby Aldridge, proxy for Interim Secretary Larry Hayes, Cabinet for Economic Development
Mr. Russell Rose, representing Kentucky Rural Water Association
Mr. David A. Voegelé, representing Kentucky Association of Counties

Members absent:

Mr. Robert A. Amato, representing Kentucky Municipal Utilities Association
Mr. Kurt Stafford, representing the For-Profit Water Companies

DLG Staff:

Mr. Eddie Jacobs, Chief of Staff
Mr. Matthew Stephens, General Counsel
Ms. Megan Armstrong, Public Information Officer

KIA Staff:

Ms. Edith Halbleib, Executive Director
Ms. Linda Bridwell, Deputy Executive Director
Ms. Ashley Adams, Financial Analyst
Mr. Jeff Abshire, Fiscal Officer and KIA Treasurer
Ms. Julie Bickers, Regional Compliance Coordinator
Mr. Dustin Horn, WRIS Geoprocessing Specialist
Ms. Debbie Landrum, Regional Compliance Coordinator
Ms. Meg Link, Administrative Specialist III and KIA Secretary
Ms. Sarah Parsley, Regional Compliance Coordinator
Mr. Don Schierer, WRIS Resource Management Analyst
Mr. Tom Schubert, GIS Specialist

Guests:

Mr. Jory Becker, Division of Water
Mr. Alan Bowman, Bell Engineering
Ms. Bethany Couch, Office of Financial Management
Mr. Matt Curtis, Bluegrass Engineering, PLLC
Mr. Kyle Cunningham, Pennyryle Area Development District
Mr. Matt Curtis, Bluegrass Engineering, PLLC
Ms. Lori Dials, Division of Water
Mr. Mike Hansen, HDR Engineers
Mr. Richard Harrison, Ohio River Valley Water Sanitation Commission

Mr. Carey Johnson, Division of Water
Mr. Russell Neal, Division of Water
Ms. Kimberly Padgett, RCAP
Mr. Taylor Payne
Mr. Roger Recktenwald
Mr. Bruce Scott
Mr. John Steinmetz, Banks Engineering
Ms. Julia Wang, Legislative Research Commission
Mr. Tim Webb, CWD
Ms. Sandy Williams, Office of Financial Management

PROCEEDINGS

Commissioner Dennis Keene, called the meeting of the Kentucky Infrastructure Authority (KIA) Board to order. He noted that the press notification distribution had been done appropriately and confirmed a quorum was present. Guests at the table were asked to introduce themselves.

I. BUSINESS (Board Action Required)

1. APPROVAL OF MINUTES

For: KIA Regular Board Meeting of January 9, 2020

Mr. Russ Rose moved to approve the minutes of the January 9, 2020, regular board meeting. Mr. Ron Lovan seconded, and the motion carried unanimously.

B. NEW PROJECTS/ACTION ITEMS

1. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR A FEDERALLY ASSISTED DRINKING WATER REVOLVING FUND LOAN (F20-034) FOR AN AMOUNT UP TO \$2,094,675 TO THE CITY OF LYON COUNTY WATER DISTRICT, LYON COUNTY, KENTUCKY

Mr. Jory Becker, DOW, Ms. Ashley Adams, KIA, and Mr. Mike Hansen HDR, representing the Lyon County Water District, discussed the District's request for a Fund F Loan in the amount up to \$2,094,675 for the Water System and Storage Tank Improvements project. This project will address several areas throughout the distribution system to help improve water age, water quality, pressure issues, and maintenance in the system.

Two water tanks will be rehabilitated including the Lamasco glass lined standpipe tank and the Jack Thompson tank. The Lamasco tank needs coating on the interior to mitigate a rust problem as well as installation of a mixing system and work on the exterior valve vault to install a bypass valve for better control at the tank site. The Jack Thompson elevated storage tank needs coating on the interior and exterior per the latest inspection.

The project will also loop several lines in the KY 295 area in order to increase circulation of water and improve water quality. This includes an interconnect between KY 295 and KY 373 and another between US 62 and KY 295. The KY 373 to KY 295 Loop project is a project that loops a line that dead ends at the City of Eddyville's master meter valve. The line is also the first phase in allowing the Crittenden Livingston County Water District to serve the City of Kuttawa as a backup source or possibly a primary source. In addition, the loop will allow additional water to be transmitted by the City of Eddyville to the City of Kuttawa as a backup water source.

The US 62 & KY 295 project provides another connection between the Lyon County Water District and the City of Kuttawa. Along with the KY 373 to KY 295 project described above, the project provides a means of allowing Kuttawa to receive water from the Crittenden Livingston County Water District and a higher volume feed from the City of Eddyville. The new feed will currently serve as a backup water supply for Kuttawa and could serve as Kuttawa's primary water supply in the event Kuttawa ceases operation of its water treatment plant.

In addition, an undersized 2" line in the Tinsley Creek Subdivision will be replaced with an adequately sized line to resolve water quality and pressure issues in the area and a creek crossing near KY 274 will also be replaced as the line is very shallow and in danger of immediate failure.

The Lyon County Water District is a PSC regulated distribution system that does not produce water. The District purchases approximately 111 MG of water annually primarily from the Kuttawa Water Department (41 MG) and Princeton Water (41 MG) in addition to the Crittenden-Livingston County Water District (12 MG), and the Eddyville Water Department (6 MG).

Mr. Jeb Pinney asked if the City of Kuttawa would cease water operations. Mr. Becker said since there were two interconnections to ensure there is adequate service provided in its current state and should problems arise in the future. Ms. Adams noted there has been some discussion about regionalization in the area.

Mr. Jeb Pinney recused himself from voting. Mr. Ron Lovan moved to approve the Fund F Loan, (F20-034), in an amount up to \$2,094,675 with the standard and the following special conditions: 1) The District will need to apply to the Public Service Commission (PSC), pursuant to KRS 278.300, for debt authorization for the \$2,094,675 million loan. This debt authorization application should include a forecast for meeting debt service projected through no less than 2025; 2) By May 1, 2020, the District will need a resolution from the Lyon County Water District Board, demonstrating their intentions to increase revenues as necessary and authorized by the PSC to meet the loan requirements over the life of the loan. KIA Staff review indicates that revenues would need to increase by \$220,000 annually which equates to an approximate 18% rate increase by January 1, 2022 to meet expenses and debt service in the first full year of repayment; and 3) Prior to the assistance agreement being executed, the District must receive a Certificate of Public Convenience and Necessity, pursuant to KRS 278.020, from the PSC for any portion of the project that may require it, or provide an opinion from legal counsel or the staff of the PSC, or a declaratory order from the PSC, that a CPCN is not required for any portion of the assets to

be constructed as part of the loan agreement. Judge David Voegele seconded and the motion was unanimously approved.

2.. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR AN INFRASTRUCTURE REVOLVING FUND LOAN (C20-001) FOR AN AMOUNT UP TO \$622,000 TO THE CANNONSBURG WATER DISTRICT, BOYD COUNTY, KENTUCKY

Mr. Jory Becker, DOW, Ms. Ashley Adams, KIA, and Mr. Tim Webb, representing the Cannonsburg Water District, discussed the District's request for a Fund C Loan in an amount up to \$622,000 for the Phase 1 Zone Metering project. The purpose of the project is to reduce unaccounted for water in the system through improved operating efficiency and capital planning. Currently the District has reported water loss of approximately 27%. The project is consistent with the efforts of the District to reduce unaccounted for water and has been presented to, and has the support of, the Public Service Commission.

This project will involve the installation of approximately 53 zone meters. The meters will be installed throughout the existing distribution system at critical locations identified by the owner and engineer. Of the 53 zone meters, 10 will replace existing malfunctioning metering devices. Installation of the zone meters will enable the Cannonsburg Water District to subdivide their existing system into designated metering areas (DMA) and sub-metering areas.

Metered output will be incorporated into the existing smart metering system currently used by the Cannonsburg Water District. The proposed project will allow the District to monitor system flows in real time and compare metered flows to metered billings within the established DMAs.

The District serves approximately 3,597 customers in Boyd, Greenup, and Carter counties. It is a distribution system only, purchasing the majority of its water (389 million gallons annually) from the City of Ashland. The District is under order from the PSC to reduce water loss from Case No. 2014-00267. Water loss has been reduced from approximately 55% in January 2017 to approximately 27% in January 2019.

Mr. Claude Christensen moved to approve the Fund C Loan (C20-001) in an amount up to \$622,000 for with the standard conditions. Mr. Ron Lovan seconded and the motion was unanimously approved.

3. A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR AN INFRASTRUCTURE REVOLVING FUND LOAN (C20-003) FOR AN AMOUNT UP TO \$100,000 TO THE CITY OF LEWISPORT, HANCOCK COUNTY, KENTUCKY

Mr. Jory Becker, DOW, Ms. Ashley Adams, KIA, and Mr. Matt Curtis, Bluegrass Engineering, representing the City of Lewisport, discussed the City of Lewisport's request for a Fund C loan in an amount up to \$100,000 for the Lewisport UV & headworks Upgrade project and the Yellow Creek Waterline Replacement project. This loan has both a water and sewer component.

The sewer project will involve upgrading the current UV systems at the Wastewater Treatment Plant as well as replacing the headworks. The UV upgrade will be a sole source upgrade with the original UV company in order to keep some of the existing components of the system as a cost savings measure.

The water project will add approximately 300 LF of 8" waterline at the Yellow Creek in order to create redundancy and prevent service loss to 400 customers in the area in the event the existing line fails. This will require boring under the creek in order to connect the line on both sides.

Lewisport Municipal Water Works serves approximately 1,086 drinking water customers and 700 sewer customers in Hancock County. The City also has a natural gas distribution system which services 1,238 customers including one industrial customer.

Mr. Russ Rose moved to approve the Fund C Loan (C20-003) in an amount up to \$100,000 to the City of Lewisport with the standard conditions and one special condition: The City of Lewisport shall pledge the revenues of all of the proprietary funds including water, sewer, and gas in order to properly secure the loan. Inclusion of all existing rate ordinances shall occur in the preparation of the assistance agreement Exhibit C. Judge David Voegelé seconded and the motion was unanimously approved.

4. A RESOLUTION OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING AND APPROVING THE ISSUANCE OF OBLIGATIONS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY TO REIMBURSE CAPITAL EXPENDITURES MADE BY GOVERNMENTAL AGENCIES PURSUANT TO LOANS MADE BY THE KENTUCKY INFRASTRUCTURE AUTHORITY TO SUCH GOVERNMENTAL AGENCIES

This is a routine resolution allowing KIA to reimburse expenses that are paid out of the Authority's funds with bond proceeds. The projects listed below are covered under this resolution:

BORROWER	FUND	AMOUNT UP TO
Lyon County Water District	F20-034	\$2,094,675
Cannonsburg Water District	C20-001	\$ 622,000
City of Lewisport	C20-003	\$ 100,000

Mr. Ron Lovan moved to approve the reimbursement resolution. Mr. Claude Christensen seconded and the motion carried unanimously.

EXECUTIVE DIRECTOR'S REPORT

Executive Director Edith Halbleib addressed the group and discussed the State Revolving Funds Call for Projects concluded on December 16th. A project has to be on the Division of Water's priority list to be eligible to receive federal funding from the EPA. DOW completed an initial review of the projects and requested modifications or answers no later than January 28th and is now ranking the projects.

KIA has a standing partnership meeting with the American Council of Engineering Companies in Kentucky (ACED-KY) every two months and met in January. The group discussed ways to begin evaluation of the design-build delivery process for project construction. The group also discussed the framework of the Federal programs administered by KIA.

The Capital budget includes the KIA submitted operating expenses. The expenses are funded from Restricted Fund' loan fees (54%), the General Fund (33%) and Federal Funds (13%) for 2020, budgeted operating expenses are \$3.2 million which includes about \$200,000 for an IT project and additional facilities costs for the full year impact of the office relocation.

KIA staff is trying to learn more about reductions in a couple of requested items, and whether additional clarification may prove helpful:

- 1) The FY 2021 and 2022 Capital budget eliminate a newly allowed federal grant, which is attached to the DWSRF, called the Assistance for Small and Disadvantaged Communities Grant. The grant requires a 55%/45% Federal/State Match. A budget request for the state match requested \$615,000 per year in state funds, which ideally would be state-allocated funds, but could possibly be Fund B revolving loan funds.
- 2) KIA had intended to apply for an additional \$25,000,000 in Fund B State Revolving Funds. The FY 2022 Capital budget also eliminate the \$25,000,000 sought for 2022.
- 3) KIA requested \$3,700,000 and \$3,900,000, respectively, reflecting higher facility costs, \$250K incremental IT spending each year, and certain staff cross training efforts. Operating funds are paid by administrative fees from restricted federal funds, which are audited for compliance annually by the EPA. The Capital Budget authorizes approximately \$3,000,000 each year.

ANNOUNCEMENTS/NOTIFICATIONS

- Next scheduled KIA board meeting:
Thursday, March 5, 2020, 1:00 p.m.
100 Airport Road, Third Floor
Frankfort, Kentucky

There being no further business, Mr. Ron Lovan moved to adjourn. Mr. Russ Rose seconded and the motion carried unanimously. The February 6, 2020 meeting of the Board of the Kentucky Infrastructure Authority was adjourned.

Submitted by:


Margaret F. Link, Secretary
Kentucky Infrastructure Authority

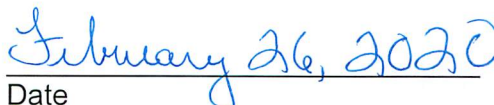

Date

EXHIBIT 22



BOARD MEETING BOOKLET

FEBRUARY 6, 2020

Kentucky Infrastructure Authority
100 Airport Road, Third Floor
Frankfort, Kentucky 40601-3646
502-573-0260
<http://kia.ky.gov>



AGENDA

**KENTUCKY INFRASTRUCTURE AUTHORITY
BOARD MEETING
100 Airport Road, Third Floor
February 6, 2020, 1:00 P.M.**

Call to Order:

Chair Dennis Keene

- Confirmation of Press Notice
- Confirmation of Quorum
- Recognition of Members/Guests

I. BUSINESS (Board Action Required)

A. Minutes

- | | | |
|---|--------------------|---|
| 1. Consideration of Approval of the Minutes of January 9, 2020
<i>(Attachment I.A.1.)</i> | Chair Dennis Keene | 5 |
|---|--------------------|---|

B. New Projects / Action Items

- | | | |
|---|--|----|
| 1. Resolution and Order of the Board of Directors for Approval of a Fund F loan (F20-034) in the amount of \$2,094,675 to the Lyon County Water District, Lyon County, Kentucky (WX21143017)
<i>(Attachment I.B.1.)</i> | Mr. Jory Becker, DOW
Ms. Ashley Adams | 17 |
| 2. Resolution and Order of the Board of Directors for Approval of a Fund C loan (C20-001) in the amount of \$622,000 to the Cannonsburg Water District County, Kentucky (WX21019056)
<i>(Attachment I.B.2.)</i> | Ms. Ashley Adams, KIA | 31 |
| 3. Resolution and Order of the Board of Directors for Approval of a Fund C loan (C20-003) in the amount of \$100,000 to the City of Lewisport, Hancock County, Kentucky (SX21091019 & WX21091100)
<i>(Attachment I.B.3.)</i> | Ms. Ashley Adams, KIA | 43 |
| 4. Resolution and Order of the Board of Directors Authorizing and Approving the Issuance of Obligations of the Kentucky Infrastructure Authority to Reimburse Capital Expenditures made by Governmental Agencies Pursuant to Loans made by the Kentucky Infrastructure Authority to such Governmental Agencies
<i>(Attachment I.B.4.)</i> | Ms. Ashley Adams, KIA | 55 |

II. EXECUTIVE DIRECTOR'S REPORT

III. ANNOUNCEMENTS/NOTIFICATIONS

Chair Dennis Keene

Next KIA Board Meeting:
Tentatively: Thursday, March 5th, 1:00 p.m.
Kentucky Infrastructure Authority
100 Airport Road, Third Floor, Frankfort

IV. ADJOURN

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I.B.2.

A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR AN INFRASTRUCTURE REVOLVING FUND LOAN (C20-001) FOR AN AMOUNT UP TO \$622,000 TO THE CANNONBURG WATER DISTRICT, BOYD COUNTY, KENTUCKY

WHEREAS, the Kentucky Infrastructure Authority (the "Authority") has been duly created as a body corporate and politic constituting a public corporation and a governmental agency of the Commonwealth of Kentucky pursuant to Chapter 224A of the Kentucky Revised Statutes (the "Act"); and

WHEREAS, pursuant to the Act, the Authority is duly and legally authorized to make loans to Governmental Agencies for the purpose of providing funds for the construction and acquisition of sanitary sewer facilities, water facilities or other types of infrastructure, and in that regard, to enter into Assistance Agreements with such Governmental Agencies governing the provisions in respect of which such loans are to be made, the amounts thereof and the repayment provisions in respect thereto; and

WHEREAS, the Authority anticipates entering into an Assistance Agreement for a loan from the Authority's Governmental Agencies Program (Fund C) with the Cannonsburg Water District, subject to final determination of amount when the factors involving such financing have been determined; and

WHEREAS, the Authority intends to utilize money in the Governmental Agencies Fund to make the loan to the governmental agency for the aforementioned purposes; and

WHEREAS, the Authority wishes to establish terms and conditions on said Governmental Agencies Fund loans.

NOW, THEREFORE, THE KENTUCKY INFRASTRUCTURE AUTHORITY, ACTING BY AND THROUGH ITS BOARD OF DIRECTORS AS ITS DULY AUTHORIZED AND EMPOWERED GOVERNING BODY, DOES HEREBY RESOLVE AND ORDER, AS FOLLOWS:

Section 1. All statements of fact set forth in the preambles to this Resolution and Order are incorporated herein by reference, the same as if set forth verbatim. All such statements of fact are hereby declared to be true and accurate in all material respects.

Section 2. The Authority hereby authorizes the issuance of a conditional Governmental Agencies Fund loan commitment for an amount up to \$622,000 of project expense, to the Cannonsburg Water District for the Phase 1 Zone Metering project. Such amounts are subject to adjustment by further action of the Authority or may be adjusted by action of the Executive Director based on adjustment in project costs of not more than (10%) ten percent of the loan amount authorized by this resolution. Upon satisfaction of all conditions of the commitment, execution of an assistance agreement for this loan is authorized.

Section 3. The loan shall be repayable over 4 years at an annual interest rate of 2%. In addition to debt service, a 0.2% annual administration fee on the unpaid, principal balance will be charged. From annual revenues, \$1,600 must be set aside in a borrower held replacement reserve each December 1 until the balance reaches \$32,000 and maintained for the life of the loan. These terms are subject to adjustment upon execution of the loan agreement, upon changes in the project conditions or determination that the project will require authority financing to be done on a taxable basis.

Section 4. This Resolution and Order shall be in full force and effect from and after its adoption at a properly held meeting of the Kentucky Infrastructure Authority this 6th day of February, 2020.

DENNIS KEENE, CHAIR
KENTUCKY INFRASTRUCTURE AUTHORITY

ATTEST:

MARGARET F. LINK, SECRETARY
KENTUCKY INFRASTRUCTURE AUTHORITY

REVIEWED BY:

MATTHEW STEPHENS, GENERAL COUNSEL
DEPARTMENT FOR LOCAL GOVERNMENT

EXECUTIVE SUMMARY		Reviewer	Ashley Adams	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	February 6, 2020	
FUND C, GOVERNMENTAL AGENCIES FUND		KIA Loan Number	C20-001	
REVOLVING LOAN FUND		WRIS Number	WX21019056	
BORROWER		CANNONSBURG WATER DISTRICT BOYD COUNTY		
BRIEF DESCRIPTION				
This project will install zone meters at key locations throughout the Cannonsburg Water District's system in order to monitor system flows in real time in an effort to reduce unaccounted for water in the system.				
PROJECT FINANCING		PROJECT BUDGET		
Fund C Loan	\$622,000	RD Fee %	Actual %	
Local Funds	530,000			
		Administrative Expenses		\$10,000
		Legal Expenses		30,000
		Eng - Design / Const	8.9%	7.1%
		Eng - Insp	5.7%	4.7%
		Construction		904,000
		Contingency		90,000
TOTAL	\$1,152,000	TOTAL		\$1,152,000
REPAYMENT	Rate	2.00%	Est. Annual Payment	\$163,823
	Term	4 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bell Engineering		
	Bond Counsel	Rubin & Hays		
PROJECT SCHEDULE	Bid Opening	Apr-20		
	Construction Start	Jul-20		
	Construction Stop	Dec-20		
DEBT PER CUSTOMER	Existing	\$519		
	Proposed	\$672		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,597	\$48.41	(for 4,000 gallons)
	Additional	0	\$48.41	(for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	235,331	78,757	156,574	3.0
Audited 2017	67,202	70,701	(3,499)	1.0
Audited 2018	179,056	94,563	84,493	1.9
Projected 2019	313,654	92,525	221,129	3.4
Projected 2020	403,316	97,451	305,865	4.1
Projected 2021	377,519	264,557	112,962	1.4
Projected 2022	352,838	280,410	72,428	1.3
Projected 2023	327,663	280,549	47,114	1.2

Reviewer: Ashley Adams
Date: February 6, 2020
Loan Number: C20-001

**KENTUCKY INFRASTRUCTURE AUTHORITY
GOVERNMENTAL AGENCIES LOAN FUND (FUND C)
CANNONSBURG WATER DISTRICT, BOYD COUNTY
PROJECT REVIEW
WX21019056**

I. PROJECT DESCRIPTION

The Cannonsburg Water District is requesting a Fund C loan in the amount of \$622,000 for the Phase 1 Zone Metering project. The purpose of the project is to reduce unaccounted for water in the system through improved operating efficiency and capital planning. Currently the District has reported water loss of approximately 27%. The project is consistent with the efforts of the District to reduce unaccounted for water and has been presented to, and has the support of, the Public Service Commission.

This project will involve the installation of approximately 53 zone meters. The meters will be installed throughout the existing distribution system at critical locations identified by the owner and engineer. Of the 53 zone meters, 10 will replace existing malfunctioning metering devices. Installation of the zone meters will enable the Cannonsburg Water District to subdivide their existing system into designated metering areas (DMA) and sub-metering areas.

Metered output will be incorporated into the existing smart metering system currently used by the Cannonsburg Water District. The proposed project will allow the District to monitor system flows in real time and compare metered flows to metered billings within the established DMAs.

The District serves approximately 3,597 customers in Boyd, Greenup, and Carter counties. It is a distribution system only, purchasing the majority of its water (389 million gallons annually) from the City of Ashland. The District is under order from the PSC to reduce water loss from Case No. 2014-00267. Water loss has been reduced from approximately 55% in January 2017 to approximately 27% in January 2019.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 10,000
Legal Expenses	30,000
Engineering Fees - Design	50,000
Engineering Fees - Construction	21,000
Engineering Fees - Inspection	47,000
Construction	904,000
Contingency	90,000
Total	\$ 1,152,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund C Loan	\$ 622,000	55%
Local Funds	530,000	45%
Total	\$ 1,152,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 622,000
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 622,000
Interest Rate	2.00%
Loan Term (Years)	4
Estimated Annual Debt Service	\$ 162,579
Administrative Fee (0.20%)	1,244
Total Estimated Annual Debt Service	\$ 163,823

V. PROJECT SCHEDULE

Bid Opening	April 2020
Construction Start	July 2020
Construction Stop	December 2020

VI. RATE STRUCTURE

A. Customers

	<u>Current</u>
Residential	3,309
Commercial	286
Industrial	2
Total	3,597

B. Rates

	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	05/13/19	01/01/17
Minimum (2,000 gallons)	\$25.33	\$24.34
Next 3,000 Gallons	9.54	9.17
Water Loss Surcharge	4.00	
Cost for 4,000 gallons	\$48.41	\$42.68
Increase %	13.4%	
Affordability Index (Rate/MHI)	1.1%	

VII. DEMGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 8,985 with a Median Household Income (MHI) of \$54,840. The median household income for the Commonwealth is \$46,535. The project will qualify for a 2% interest rate based on the shortened loan terms allowable in Fund C.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	55,513		June 2005	6.5%
1990	51,150	-7.9%	June 2010	10.2%
2000	49,752	-2.7%	June 2015	7.1%
2010	49,542	-0.4%	June 2019	6.6%
Current	48,486	-2.1%		
Cumulative %		-12.7%		

VIII. FINANCIAL ANALYSIS

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

HISTORY

Total revenues decreased 3% from \$2.5 million in 2016 to \$2.4 million in 2018. Fluctuations in revenue are attributable to the closing of a steel mill in the area which reopened at the end of 2018 under new ownership. Water revenue from the idled mill

in 2018 was around \$30,000 while revenues have since increased back to \$128,000 annually in 2019 according to the system (audit not yet complete). Operating expenses remained relatively flat at \$2.3 million during the same time period. Debt coverage was 3.0, 1.0, and 1.9 from 2016-2018, respectively.

The balance sheet reflects a current ratio of 2.6, a debt to equity ratio of 1.0, 43.1 days sales in accounts receivable and 1.5 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Rate revenues will increase 4.1% based on a previously approved rate increase in May 2019 and remain flat thereafter.
- 2) A surcharge was approved by the PSC in May 2019 to pay for this project. It is expected to generate approximately \$172,656 annually each year through 2023 (or until the surcharge collected equals \$680,000).
- 3) Revenues will increase for the reopened steel mill, however, they were not factored into this analysis which should result in an even better cash position than what is forecasted.
- 4) Expenses will increase 2% for inflation.
- 5) Debt service coverage is 1.4 in 2021 when full principal and interest repayments begin.

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

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$32,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$1,600 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KRWFC	\$ 222,000	2025
USDA Bond	1,654,000	2055
KIA Loan (B18-011 i/a/o \$57,271)		TBD
Total	\$ 1,867,000	

X. CONTACTS

Legal Applicant	
Entity Name	Cannonsburg Water District
Authorized Official	Robert McGuire (Chairman)
County	Boyd
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Road Ashland, KY 41102

Project Administrator	
Name	Tim Webb
Organization	Cannonsburg Water District
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Rd Ashland, KY 41102

Consulting Engineer	
PE Name	Alan Bowman
Firm Name	Bell Engineering
Email	abowman@hkbell.com
Phone	606-365-2534
Address	2480 Fortune Dr Ste 350 Stanford, KY 40484

XI. RECOMMENDATIONS

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

**CANNONSBURG WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
Balance Sheet								
Assets								
Current Assets	787,144	668,422	671,770	734,608	809,181	831,773	846,259	855,682
Other Assets	6,310,003	6,475,954	6,270,771	6,037,000	7,242,737	7,113,352	6,951,539	6,769,475
Total	7,097,147	7,144,376	6,942,541	6,771,608	8,051,918	7,945,125	7,797,798	7,625,157
Liabilities & Equity								
Current Liabilities	266,716	265,503	257,832	259,832	268,353	450,176	453,176	456,176
Long Term Liabilities	2,765,552	3,283,672	3,227,543	1,840,271	2,364,750	2,131,406	1,895,062	1,655,718
Total Liabilities	3,032,268	3,549,175	3,485,375	2,100,103	2,633,103	2,581,582	2,348,238	2,111,894
Net Assets	4,064,879	3,595,201	3,457,166	4,671,505	5,418,815	5,363,543	5,449,560	5,513,263
Cash Flow								
Revenues	2,508,250	2,407,259	2,443,029	2,600,884	2,714,269	2,714,269	2,714,269	2,714,269
Operating Expenses	2,275,941	2,343,548	2,270,507	2,293,764	2,317,487	2,343,284	2,367,965	2,393,140
Other Income	3,022	3,491	6,534	6,534	6,534	6,534	6,534	6,534
Cash Flow Before Debt Service	235,331	67,202	179,056	313,654	403,316	377,519	352,838	327,663
Debt Service								
Existing Debt Service	78,757	70,701	94,563	92,525	97,451	100,734	116,587	116,726
Proposed KIA Loan	0	0	0	0	0	163,823	163,823	163,823
Total Debt Service	78,757	70,701	94,563	92,525	97,451	264,557	280,410	280,549
Cash Flow After Debt Service	156,574	(3,499)	84,493	221,129	305,865	112,962	72,428	47,114
Ratios								
Current Ratio	3.0	2.5	2.6	2.8	3.0	1.8	1.9	1.9
Debt to Equity	0.7	0.9	1.0	0.4	0.5	0.5	0.4	0.4
Days Sales in Accounts Receivable	40.6	50.8	43.1	43.1	43.1	43.1	43.1	43.1
Months Operating Expenses in Unrestricted Cash	2.0	1.3	1.5	1.7	2.0	2.1	2.1	2.1
Debt Coverage Ratio	3.0	1.0	1.9	3.4	4.1	1.4	1.3	1.2

EXHIBIT 23

Page 1

**NOTIFICATION OF INTENT TO FINANCE
AND APPLICATION FOR DEBT APPROVAL**Form # SLDO-1
Revised 1/1/2011

For DLG staff use only:

File # _____
Received _____

Completion and delivery of this form to the address below shall satisfy the requirements of KRS 65.117, which prohibits any city, county, urban-county, consolidated local government, charter county, special district, or taxing district from entering into any financing obligation of any nature, except leases under \$200,000, without first notifying the state local debt officer in writing. This form shall also serve as application for approval of debt issuance when applicable. An electronic version of the form is available at www.dlg.ky.gov.

✓ **Type of debt to be issued (must check one):** **SLDO Approval Required** **Complete Sections**

<input type="checkbox"/> Short Term Borrowing - KRS 65.7701 et seq.	No	A, B, C
<input type="checkbox"/> Lease from \$200,000 - \$500,000 - KRS 65.940 et seq.	No	A, B, D
<input type="checkbox"/> Lease exceeding \$500,000 - KRS 65.940 et seq.	Yes (Counties only)	A, B, D
<input type="checkbox"/> General Obligation Bond - KRS Chapter 66	Yes (Counties only)	A, B, E
<input type="checkbox"/> Public Project Rev. Bond - KRS Chapter 58	No	A, B, E
<input type="checkbox"/> Public Project Rev. Bond w/Lease - KRS 66.310(2)	Yes (Counties only)	A, B, D, E
<input type="checkbox"/> Industrial Revenue Bond - KRS Chapter 103	Yes (All Borrowers)	A, B, F
<input type="checkbox"/> Other Bonds (True Revenue, Utility Assessment, TIF)	No	A, B, E

X Assistance Agreement (Kentucky Infrastructure Authority)

Section A - Borrower Information

Agency Name	Cannonsburg Water District		
Governing Body	Cannonsburg Water District Board of Commissioners		
Street Address	1606 Cannonsburg Road		
P.O. Box #	City	Ashland	
County	Boyd	Zip	41102
Authorized Official	Tim Webb		

Section B - Terms of Financial Obligation

Please provide all relevant information. Fields in **bold** are mandatory.

Principle Amount:	\$0.00	Date of Issue:	06/01/2020
Maturity Date(s):	12/01/2024	Payment Schedule: (must attach schedule)	
Term:	4 Years	Number of Renewal Periods:	0
Interest Rate(s):	2.00	Type of Interest (fixed or variable):	Fixed
Retirement Method:	Interest and Principal Payments Made Every 6 months		
Lender's Name:	Kentucky Infrastructure Authority		
Lender's Address:	100 Airport Road, Frankfort, KY 40601		
Right of Termination:	Yes		
Termination Penalties:	None		
Prepayment Provisions:	None		
Trustee or Paying Agent:	None		
AOC Funded Percentage:	0.00		

Page 2

**NOTIFICATION OF INTENT TO FINANCE
AND APPLICATION FOR DEBT APPROVAL**

Form # SLDO-1
Revised 1/1/2011

Section C - Note (Loan) Information/Documentation

Purpose - Briefly explain the documented need that necessitates this note (loan) and the public purpose it is intended to address. (Attach additional information if necessary):

Water District has a high level of water loss. Proposed loan will finance the purchase and installation of meters to allow the establishment of a zoned meter system that will enable the water district to more quickly and effectively identify and repair water leaks and thus reduce system water loss. KIA analysis of loan is attached.

Pledge of Taxes/Description:

None

Pledge of Revenue/Description:

Water District's revenues from water sales will be pledged as collateral for loan.

Pledge of Project Revenues (Attach documentation which substantiates the revenue projections):

Have bids been sought by the local governments to determine the financial and programmatic competitiveness of the note (loan) proposal? Yes No

If No, explain what steps were taken to ensure adequate competition.

Loan was obtained from the Kentucky Infrastructure Authority, a public corporation and an agency of the Commonwealth of Kentucky.

Required Attachments

- 1. Certification from local government attesting to the ability to meet additional financial commitments necessitated by the note and statement as to taxes and revenues to be collected during the term of the note.

Section D - Lease Information/Documentation

Describe the real or personal property to be acquired or constructed:

Not applicable - No real or personal property will be leased.

Type of Lease : General Obligation Revenue

Is Lease Annually Renewable? Yes No

Does Agency seek approval without a hearing? Yes No Justification: Revenue Refunding

If yes, must attach certification from counsel regarding county obligation.

Does this lease refund a prior lease? Yes No

If yes, please state the name, date and principal amount of original issue(s) being refunded:

Required Attachments (If lease requires SLDO approval)

- 1. Minutes from the local public hearing
- 2. Affidavit of publication of SLDO hearing (if hearing is required) and newspaper advertisement tear sheet
- 3. Copy of lease
- 4. Executed copy of ordinance/resolution of fiscal court authorizing the lease
- 5. Certification from local government attesting to the ability to meet additional financial commitments necessitated by the lease and statement as to taxes and revenues to be collected during the term of the lease.

Page 3

**NOTIFICATION OF INTENT TO FINANCE
AND APPLICATION FOR DEBT APPROVAL**

Form # SLDO-1
Revised 1/1/2011

Section E - Bond Information/Documentation

Please provide all relevant information. Fields in **bold** are mandatory

Describe the purpose of the bond:

Not applicable - No bonds will be issued

Bond Counsel:

Counsel Address:

Financial Advisor:

Advisor Address:

Bond Series:

Call Date:

Does this bond refund a prior bond? Yes No

If yes, please state the name, date and principal amount of original issue(s) being refunded:

Required Attachments (If SLDO Approval is Required)

1. Minutes from the local public hearing
2. Affidavit of publication of SLDO hearing and newspaper advertisement tear sheet
3. Executed copy of ordinance/resolution of fiscal court authorizing financial plan for the issuance of the bonds
4. Proposed plan of financing
5. Preliminary official statement (if applicable)
6. Sources and uses table

Additional Required Attachments for KRS Chapter 103 Bonds

1. Documentation in an appropriate form substantiating the project's eligibility under KRS 103.2101(1)(a)-(e).
2. If the project requires approval of the reduction in property taxes, attach any documentation provided to agency responsible for approval.

By signing below, the Authorized Official certifies that the foregoing is true and accurate to the best of his or her knowledge.

Name (please print)Tim Webb	Date: 04/30/2020
Title: General Manager	Signature: /s/ Tim Webb

Mail to:
Department for Local Government
Attn: State Local Debt Officer
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Fax to: 502-573-3712



BOARD MEETING BOOKLET

FEBRUARY 6, 2020

Kentucky Infrastructure Authority
100 Airport Road, Third Floor
Frankfort, Kentucky 40601-3646
502-573-0260
<http://kia.ky.gov>



AGENDA

**KENTUCKY INFRASTRUCTURE AUTHORITY
BOARD MEETING
100 Airport Road, Third Floor
February 6, 2020, 1:00 P.M.**

Call to Order:

Chair Dennis Keene

- Confirmation of Press Notice
- Confirmation of Quorum
- Recognition of Members/Guests

I. BUSINESS (Board Action Required)

A. Minutes

- | | | |
|---|--------------------|---|
| 1. Consideration of Approval of the Minutes of January 9, 2020
<i>(Attachment I.A.1.)</i> | Chair Dennis Keene | 5 |
|---|--------------------|---|

B. New Projects / Action Items

- | | | |
|---|--|----|
| 1. Resolution and Order of the Board of Directors for Approval of a Fund F loan (F20-034) in the amount of \$2,094,675 to the Lyon County Water District, Lyon County, Kentucky (WX21143017)
<i>(Attachment I.B.1.)</i> | Mr. Jory Becker, DOW
Ms. Ashley Adams | 17 |
| 2. Resolution and Order of the Board of Directors for Approval of a Fund C loan (C20-001) in the amount of \$622,000 to the Cannonsburg Water District County, Kentucky (WX21019056)
<i>(Attachment I.B.2.)</i> | Ms. Ashley Adams, KIA | 31 |
| 3. Resolution and Order of the Board of Directors for Approval of a Fund C loan (C20-003) in the amount of \$100,000 to the City of Lewisport, Hancock County, Kentucky (SX21091019 & WX21091100)
<i>(Attachment I.B.3.)</i> | Ms. Ashley Adams, KIA | 43 |
| 4. Resolution and Order of the Board of Directors Authorizing and Approving the Issuance of Obligations of the Kentucky Infrastructure Authority to Reimburse Capital Expenditures made by Governmental Agencies Pursuant to Loans made by the Kentucky Infrastructure Authority to such Governmental Agencies
<i>(Attachment I.B.4.)</i> | Ms. Ashley Adams, KIA | 55 |

II. EXECUTIVE DIRECTOR'S REPORT

III. ANNOUNCEMENTS/NOTIFICATIONS

Chair Dennis Keene

Next KIA Board Meeting:
Tentatively: Thursday, March 5th, 1:00 p.m.
Kentucky Infrastructure Authority
100 Airport Road, Third Floor, Frankfort

IV. ADJOURN

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I.B.2.

A RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS OF THE KENTUCKY INFRASTRUCTURE AUTHORITY AUTHORIZING ISSUANCE OF A CONDITIONAL COMMITMENT FOR AN INFRASTRUCTURE REVOLVING FUND LOAN (C20-001) FOR AN AMOUNT UP TO \$622,000 TO THE CANNONBURG WATER DISTRICT, BOYD COUNTY, KENTUCKY

WHEREAS, the Kentucky Infrastructure Authority (the "Authority") has been duly created as a body corporate and politic constituting a public corporation and a governmental agency of the Commonwealth of Kentucky pursuant to Chapter 224A of the Kentucky Revised Statutes (the "Act"); and

WHEREAS, pursuant to the Act, the Authority is duly and legally authorized to make loans to Governmental Agencies for the purpose of providing funds for the construction and acquisition of sanitary sewer facilities, water facilities or other types of infrastructure, and in that regard, to enter into Assistance Agreements with such Governmental Agencies governing the provisions in respect of which such loans are to be made, the amounts thereof and the repayment provisions in respect thereto; and

WHEREAS, the Authority anticipates entering into an Assistance Agreement for a loan from the Authority's Governmental Agencies Program (Fund C) with the Cannonsburg Water District, subject to final determination of amount when the factors involving such financing have been determined; and

WHEREAS, the Authority intends to utilize money in the Governmental Agencies Fund to make the loan to the governmental agency for the aforementioned purposes; and

WHEREAS, the Authority wishes to establish terms and conditions on said Governmental Agencies Fund loans.

NOW, THEREFORE, THE KENTUCKY INFRASTRUCTURE AUTHORITY, ACTING BY AND THROUGH ITS BOARD OF DIRECTORS AS ITS DULY AUTHORIZED AND EMPOWERED GOVERNING BODY, DOES HEREBY RESOLVE AND ORDER, AS FOLLOWS:

Section 1. All statements of fact set forth in the preambles to this Resolution and Order are incorporated herein by reference, the same as if set forth verbatim. All such statements of fact are hereby declared to be true and accurate in all material respects.

Section 2. The Authority hereby authorizes the issuance of a conditional Governmental Agencies Fund loan commitment for an amount up to \$622,000 of project expense, to the Cannonsburg Water District for the Phase 1 Zone Metering project. Such amounts are subject to adjustment by further action of the Authority or may be adjusted by action of the Executive Director based on adjustment in project costs of not more than (10%) ten percent of the loan amount authorized by this resolution. Upon satisfaction of all conditions of the commitment, execution of an assistance agreement for this loan is authorized.

Section 3. The loan shall be repayable over 4 years at an annual interest rate of 2%. In addition to debt service, a 0.2% annual administration fee on the unpaid, principal balance will be charged. From annual revenues, \$1,600 must be set aside in a borrower held replacement reserve each December 1 until the balance reaches \$32,000 and maintained for the life of the loan. These terms are subject to adjustment upon execution of the loan agreement, upon changes in the project conditions or determination that the project will require authority financing to be done on a taxable basis.

Section 4. This Resolution and Order shall be in full force and effect from and after its adoption at a properly held meeting of the Kentucky Infrastructure Authority this 6th day of February, 2020.

DENNIS KEENE, CHAIR
KENTUCKY INFRASTRUCTURE AUTHORITY

ATTEST:

MARGARET F. LINK, SECRETARY
KENTUCKY INFRASTRUCTURE AUTHORITY

REVIEWED BY:

MATTHEW STEPHENS, GENERAL COUNSEL
DEPARTMENT FOR LOCAL GOVERNMENT

EXECUTIVE SUMMARY		Reviewer	Ashley Adams	
KENTUCKY INFRASTRUCTURE AUTHORITY		Date	February 6, 2020	
FUND C, GOVERNMENTAL AGENCIES FUND		KIA Loan Number	C20-001	
REVOLVING LOAN FUND		WRIS Number	WX21019056	
BORROWER		CANNONSBURG WATER DISTRICT BOYD COUNTY		
BRIEF DESCRIPTION				
This project will install zone meters at key locations throughout the Cannonsburg Water District's system in order to monitor system flows in real time in an effort to reduce unaccounted for water in the system.				
PROJECT FINANCING		PROJECT BUDGET		
Fund C Loan	\$622,000	RD Fee %	Actual %	
Local Funds	530,000			
		Administrative Expenses		\$10,000
		Legal Expenses		30,000
		Eng - Design / Const	8.9%	7.1%
		Eng - Insp	5.7%	4.7%
		Construction		904,000
		Contingency		90,000
TOTAL	\$1,152,000	TOTAL		\$1,152,000
REPAYMENT	Rate	2.00%	Est. Annual Payment	\$163,823
	Term	4 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bell Engineering		
	Bond Counsel	Rubin & Hays		
PROJECT SCHEDULE	Bid Opening	Apr-20		
	Construction Start	Jul-20		
	Construction Stop	Dec-20		
DEBT PER CUSTOMER	Existing	\$519		
	Proposed	\$672		
OTHER DEBT	See Attached			
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached			
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>	
	Current	3,597	\$48.41	(for 4,000 gallons)
	Additional	0	\$48.41	(for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.			
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	235,331	78,757	156,574	3.0
Audited 2017	67,202	70,701	(3,499)	1.0
Audited 2018	179,056	94,563	84,493	1.9
Projected 2019	313,654	92,525	221,129	3.4
Projected 2020	403,316	97,451	305,865	4.1
Projected 2021	377,519	264,557	112,962	1.4
Projected 2022	352,838	280,410	72,428	1.3
Projected 2023	327,663	280,549	47,114	1.2

Reviewer: Ashley Adams
Date: February 6, 2020
Loan Number: C20-001

**KENTUCKY INFRASTRUCTURE AUTHORITY
GOVERNMENTAL AGENCIES LOAN FUND (FUND C)
CANNONSBURG WATER DISTRICT, BOYD COUNTY
PROJECT REVIEW
WX21019056**

I. PROJECT DESCRIPTION

The Cannonsburg Water District is requesting a Fund C loan in the amount of \$622,000 for the Phase 1 Zone Metering project. The purpose of the project is to reduce unaccounted for water in the system through improved operating efficiency and capital planning. Currently the District has reported water loss of approximately 27%. The project is consistent with the efforts of the District to reduce unaccounted for water and has been presented to, and has the support of, the Public Service Commission.

This project will involve the installation of approximately 53 zone meters. The meters will be installed throughout the existing distribution system at critical locations identified by the owner and engineer. Of the 53 zone meters, 10 will replace existing malfunctioning metering devices. Installation of the zone meters will enable the Cannonsburg Water District to subdivide their existing system into designated metering areas (DMA) and sub-metering areas.

Metered output will be incorporated into the existing smart metering system currently used by the Cannonsburg Water District. The proposed project will allow the District to monitor system flows in real time and compare metered flows to metered billings within the established DMAs.

The District serves approximately 3,597 customers in Boyd, Greenup, and Carter counties. It is a distribution system only, purchasing the majority of its water (389 million gallons annually) from the City of Ashland. The District is under order from the PSC to reduce water loss from Case No. 2014-00267. Water loss has been reduced from approximately 55% in January 2017 to approximately 27% in January 2019.

II. PROJECT BUDGET

	<u>Total</u>
Administrative Expenses	\$ 10,000
Legal Expenses	30,000
Engineering Fees - Design	50,000
Engineering Fees - Construction	21,000
Engineering Fees - Inspection	47,000
Construction	904,000
Contingency	90,000
Total	\$ 1,152,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund C Loan	\$ 622,000	55%
Local Funds	530,000	45%
Total	\$ 1,152,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$ 622,000
Less: Principal Forgiveness	0
Amortized Loan Amount	\$ 622,000
Interest Rate	2.00%
Loan Term (Years)	4
Estimated Annual Debt Service	\$ 162,579
Administrative Fee (0.20%)	1,244
Total Estimated Annual Debt Service	\$ 163,823

V. PROJECT SCHEDULE

Bid Opening	April 2020
Construction Start	July 2020
Construction Stop	December 2020

VI. RATE STRUCTURE

A. Customers

	<u>Current</u>
Residential	3,309
Commercial	286
Industrial	2
Total	3,597

B. Rates

	<u>Current</u>	<u>Prior</u>
Date of Last Rate Increase	05/13/19	01/01/17
Minimum (2,000 gallons)	\$25.33	\$24.34
Next 3,000 Gallons	9.54	9.17
Water Loss Surcharge	4.00	
Cost for 4,000 gallons	\$48.41	\$42.68
Increase %	13.4%	
Affordability Index (Rate/MHI)	1.1%	

VII. DEMGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 8,985 with a Median Household Income (MHI) of \$54,840. The median household income for the Commonwealth is \$46,535. The project will qualify for a 2% interest rate based on the shortened loan terms allowable in Fund C.

Year	Population		County Unemployment	
	County	% Change	Date	Rate
1980	55,513		June 2005	6.5%
1990	51,150	-7.9%	June 2010	10.2%
2000	49,752	-2.7%	June 2015	7.1%
2010	49,542	-0.4%	June 2019	6.6%
Current	48,486	-2.1%		
Cumulative %		-12.7%		

VIII. FINANCIAL ANALYSIS

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

HISTORY

Total revenues decreased 3% from \$2.5 million in 2016 to \$2.4 million in 2018. Fluctuations in revenue are attributable to the closing of a steel mill in the area which reopened at the end of 2018 under new ownership. Water revenue from the idled mill

in 2018 was around \$30,000 while revenues have since increased back to \$128,000 annually in 2019 according to the system (audit not yet complete). Operating expenses remained relatively flat at \$2.3 million during the same time period. Debt coverage was 3.0, 1.0, and 1.9 from 2016-2018, respectively.

The balance sheet reflects a current ratio of 2.6, a debt to equity ratio of 1.0, 43.1 days sales in accounts receivable and 1.5 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Rate revenues will increase 4.1% based on a previously approved rate increase in May 2019 and remain flat thereafter.
- 2) A surcharge was approved by the PSC in May 2019 to pay for this project. It is expected to generate approximately \$172,656 annually each year through 2023 (or until the surcharge collected equals \$680,000).
- 3) Revenues will increase for the reopened steel mill, however, they were not factored into this analysis which should result in an even better cash position than what is forecasted.
- 4) Expenses will increase 2% for inflation.
- 5) Debt service coverage is 1.4 in 2021 when full principal and interest repayments begin.

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

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$32,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$1,600 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
KRWFC	\$ 222,000	2025
USDA Bond	1,654,000	2055
KIA Loan (B18-011 i/a/o \$57,271)		TBD
Total	\$ 1,867,000	

X. CONTACTS

Legal Applicant	
Entity Name	Cannonsburg Water District
Authorized Official	Robert McGuire (Chairman)
County	Boyd
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Road Ashland, KY 41102

Project Administrator	
Name	Tim Webb
Organization	Cannonsburg Water District
Email	tim@cannonsburgwater.com
Phone	606-928-9808
Address	1606 Cannonsburg Rd Ashland, KY 41102

Consulting Engineer	
PE Name	Alan Bowman
Firm Name	Bell Engineering
Email	abowman@hkbell.com
Phone	606-365-2534
Address	2480 Fortune Dr Ste 350 Stanford, KY 40484

XI. RECOMMENDATIONS

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

**CANNONSBURG WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	<u>Audited</u> <u>2016</u>	<u>Audited</u> <u>2017</u>	<u>Audited</u> <u>2018</u>	<u>Projected</u> <u>2019</u>	<u>Projected</u> <u>2020</u>	<u>Projected</u> <u>2021</u>	<u>Projected</u> <u>2022</u>	<u>Projected</u> <u>2023</u>
Balance Sheet								
Assets								
Current Assets	787,144	668,422	671,770	734,608	809,181	831,773	846,259	855,682
Other Assets	6,310,003	6,475,954	6,270,771	6,037,000	7,242,737	7,113,352	6,951,539	6,769,475
Total	7,097,147	7,144,376	6,942,541	6,771,608	8,051,918	7,945,125	7,797,798	7,625,157
Liabilities & Equity								
Current Liabilities	266,716	265,503	257,832	259,832	268,353	450,176	453,176	456,176
Long Term Liabilities	2,765,552	3,283,672	3,227,543	1,840,271	2,364,750	2,131,406	1,895,062	1,655,718
Total Liabilities	3,032,268	3,549,175	3,485,375	2,100,103	2,633,103	2,581,582	2,348,238	2,111,894
Net Assets	4,064,879	3,595,201	3,457,166	4,671,505	5,418,815	5,363,543	5,449,560	5,513,263
Cash Flow								
Revenues	2,508,250	2,407,259	2,443,029	2,600,884	2,714,269	2,714,269	2,714,269	2,714,269
Operating Expenses	2,275,941	2,343,548	2,270,507	2,293,764	2,317,487	2,343,284	2,367,965	2,393,140
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Proposed KIA Loan	0	0	0	0	0	163,823	163,823	163,823
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Cash Flow After Debt Service	156,574	(3,499)	84,493	221,129	305,865	112,962	72,428	47,114
Ratios								
Current Ratio	3.0	2.5	2.6	2.8	3.0	1.8	1.9	1.9
Debt to Equity	0.7	0.9	1.0	0.4	0.5	0.5	0.4	0.4
Days Sales in Accounts Receivable	40.6	50.8	43.1	43.1	43.1	43.1	43.1	43.1
Months Operating Expenses in Unrestricted Cash	2.0	1.3	1.5	1.7	2.0	2.1	2.1	2.1
Debt Coverage Ratio	3.0	1.0	1.9	3.4	4.1	1.4	1.3	1.2

EXHIBIT 24

**Detailed Estimate of Acquired Property Classified According
To The Uniform System of Accounts For
Class A/B Water Districts and Associations**

Account No.	Account Description	Estimate
331	Transmission and Distribution Mains	\$588,948
334	Meters and Meter Installations	\$116,500
346	Communications	\$ 18,682
	TOTAL	\$724,130

EXHIBIT 25

Annual Water Use Report

Water Utility: Cannonsburg Water District PWSID: KY0100064

Year: 2019

Line #	Item	Gallons	
1	Water Produced, Purchased and Distributed		
2	Water Produced	0	
3	Water Purchased	371,894,000	
4	Water Produced & Purchased	371,894,000	
5			
6	Water Sales		
7	Residential	146,435,000	
8	Commercial	49,669,000	
9	Industrial	21,082,000	
10	Bulk Loading Stations	51,000	
11	Wholesale	43,578,000	
12	Other Sales (explain) _____ Office, Shop, Sampling	457,000	
13	Total Water Sales	261,272,000	70.3%
14			
15	Other Water Used		
16	Utility and/or Water Treatment Plant	0	
17	Wastewater Treatment Plant	0	
18	System Flushing	1,352,000	
19	Fire Department Usage	76,000	
20	Other Usage (explain) _____ DBP Maintenance	323,000	
21	Total Other Water Used	1,751,000	0.5%
22			
23	Water Loss		
24	Tank Overflows	12,000	
25	Line Breaks	3,349,000	
26	Line Leaks	105,510,000	
27	Other _____		
28	Total Line Loss	108,871,000	29.3%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	Water Loss Percentage		
33	Unaccounted-For Water (Line 28 Divided by Line 4)	29.3%	