

CONVERTING
THE COURTLAND 5th – 48.8 LATERAL
TO A BURIED PIPE SYSTEM

Funding Opportunity No. R21AS00300

WaterSMART Grants: Small-Scale Water Efficiency Projects

APPLICANT:

KANSAS BOSTWICK IRRIGATION DISTRICT
528 MAIN STREET
COURTLAND, KS 66939

PROJECT MANAGER:

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Technical Proposal and Evaluation Criteria

Executive summary

Date: March 15th, 2021 **Applicant Name:** Kansas Bostwick Irrigation District

City: Courtland **County:** Republic **State:** Kansas

Through the activities outlined in this application, Kansas Bostwick Irrigation District (KBID), a Category A applicant, plans to convert the Courtland 5th – 48.8 lateral canal into a buried pipe system and save an estimated 302.4 acre-feet of water annually. The project will reduce losses due to seepage, evaporation and operational spills. If successful through this application, the funding awarded will be used to aid in purchasing materials needed to complete this project. This project accomplishes one of the specific goals outlined in the FOA through the piping of canals to conserve water. If successful through this application, the project will begin February 1st, 2022 and will be completed, at the very latest, by the end of May 2022. The proposed project takes place within and as part of KBID which is a Bureau of Reclamation Irrigation District. Since inception, KBID has had perpetual easements and right-of-way for its canal system which passes through private landowner property.

Project Location

The 48.8 lateral is located in Republic County, Kansas and is approximately 3.3 miles north and 0.5 mile east of Courtland, KS. The project latitude is 39°82'N and longitude is 97°88'W.



Project Description

This pipeline project will complete the piping entire lateral. This particular project will complete the piping of the upper end of the 48.8 lateral and connect it to the previously-piped lower end of the 48.8 lateral which occurred in 3 previous smaller pipeline projects in 1988, 1995 and 1999.

The pipeline initiation point will be at mile station 2618 + 50.0 on the Courtland 5th Canal at the headgate of the 48.8 lateral.

Project preparation will include bull dozer and patrol work to prepare the alignment of the proposed buried line and excavator work to remove existing structures. Removed structures will be broken with the KBID crane and wrecking ball if they are too large to load and haul. Structures will be loaded with the KBID loaders into dump trucks and taken to an established scrap yard. The stockpiling of materials and pipe needed for the project will also take place during these early stages of the project.

At the initiation point of the line, or present headgate area, three 24" x 20' perforated aeration screens will be installed and plumbed into the existing headgate C.H.O. box and connected to the initial piece of plastic pipe. Then the pipeline installation will begin. The KBID Hydromaxx 2700 trencher will be used to trench the line for the pipe installation and will utilize a laser transit to ensure proper grade control. An excavator with a sling is used to swing the pipe into the trench and align the pipe to be pushed together. A bull dozer or patrol will then used to backfill the trench-line after the pipe is installed.

All pipe used in this project will be rated for 80 PSI and installed to manufacturer criteria. This project will initiate with 24" PIP for the first 1770' of the line. At the 1770' mark, one turnout will be installed then reducing demand on the line to a level that 21" PIP can be installed. Over the next 2,530' of the project, seven field turnouts will be plumbed into the 21" line at various locations as needed. Finally, over the last 650' stretch of line, 18" PIP will be installed and connected to the previously buried portion of the lower end of the 48.8 lateral which consists of 15" PIP continuing south to the terminal end of the 48.8 lateral and existing waste-way. All angle fitting, Tee-fittings, and couplers used will consist of those with solvent welded design and rated at 100 PSI.

After all the pipe and turnout infrastructure needs are installed, the KBID crew will begin removing any and all scrap or excess material remaining at the site. Any remaining open lateral, which is not in the alignment of the pipeline, will also be destroyed at this time-frame of the project. KBID will leave the

project area in a manner that the landowner can do further earthwork if so desired with their own farm equipment.

With the previous experience completing these types of projects and the skill of the KBID staff, along with owning the full line of equipment required, it's important to note that none of the project tasks will require any labor or machinery support outside of the district's own work force & equipment.

Evaluation Criteria

E.1.1. Evaluation Criterion A—Project Benefits (35 points)

Up to **35 points** may be awarded based upon evaluation of the benefits that are expected to result from implementing the proposed project. This criterion considers a variety of project benefits, including the significance of the anticipated water management benefits and the public benefits of the project. This criterion prioritizes projects that modernize existing infrastructure in order to address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region.

- Describe the expected benefits and outcomes of implementing the proposed project.

There are many reasons KBID would like to complete the conversion of this open lateral canal to entirely buried pipe system. The most recognizable expected objective of this project will be **saving and conserving an estimated 302.4 acre-feet annually** due to diminished seepage, mitigated operational spills, and evaporative losses. This project would also mitigate operations and maintenance costs for the district and have ancillary benefits to the environment.

- What are the benefits to the applicant's water supply delivery system?

A benefit to KBID's water supply delivery system would be the fact that the pipeline will increase the consistency of delivery to the specific field turnouts involved as well as increased pressure to those turnouts. In contrast to delivering water through constant head orifices as is currently done, following the project, the water will be delivered through aeration screens at the initiation point, geared butterfly valves and flowmeters with needle-dial readouts. The overall result will be screened water free of debris, fish and crawfish that previously would have been abandoned in fields, with a more easily and accurately measured flow.

- If other benefits are expected explain those as well. Consider the following:
 - Extent to which the proposed project improves overall water supply reliability
 - The expected geographic scope benefits from the proposed project (e.g., local, sub-basin,

basin)

- Extent to which the proposed project will increase collaboration and information sharing among water managers in the region
- Any anticipated positive impacts/benefits to local sectors and economies (e.g., agriculture, environment, recreation, tourism)
- Extent to which the project will complement work done in coordination with NRCS in the area (e.g., with a direct connection to the district's water supply). Describe any on-farm efficiency work that is currently being completed or is anticipated to be completed in the future using NRCS assistance through EQIP or other programs.

While the projected annual water savings of 302.4 acre-feet is not a colossal amount in the big scheme of things within the basin, every bit of conservation effort does have a positive long-term cumulative effect on the available water supply for all water users reliant on flows of the Republican River. Bostwick Irrigation District in Nebraska (NBID) is also reliant on the same source of water as KBID. Therefore, any savings realized by one irrigation district is potentially realized by the other as an increase in overall water supply year in and year out with a higher degree of annual reliability. The positive impacts from projects like this one can be felt throughout the local and sub-basin area of South Central Nebraska and North Central Kansas.

Obviously, the water savings experienced through this project, in a cumulative effect with the plethora of other similar pipeline projects completed by KBID over the years, has in essence, extended each irrigation season. Therefore, in years of short supply, the amount of water available to irrigate crops with, goes further. This has the effect of increasing crop yields which subsequently helps the local economy which is almost solely reliant on agriculture.

Along with the positive benefits to the local economy reliant on agriculture, pipeline projects like this one also have allowed for more water to be stored in KBID's supply reservoirs later into each summer allowing for increased recreational opportunities like water skiing and fishing.

Another often overlooked benefit to these projects, like the one outlined in this application, is the elimination of the need to chemically maintain the vegetation that invades the micro-ecosystems associated with open canals. Thus, the environment experiences a benefit by not being subject to the added injection of chemicals used to control certain vegetative species.

E.1.2 Evaluation Criterion B—Planning Efforts Supporting the Project (35 points)

Up to **35 points** may be awarded based on the extent to which the proposed on- the-ground project is supported by an applicant’s existing water management plan, water conservation plan, System Optimization Review, or identified as part of another planning effort led by the applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs.

Describe how your project is supported by an existing planning effort.

With the approval of this application, continuity may be maintained in KBID's goal of converting open lateral canals to piped systems to further the objective of conserving water. KBID has previously worked in conjunction with the Bureau of Reclamation on numerous awards for converting canals to pipelines. KBID has been awarded Water Conservation Field Services Program grants, a 2025 challenge grants, as well as more recently awarded WaterSMART grants which have all aided in allowing KBID to continue making positive and water-conserving improvements to our infrastructure. A good exhibit of how devoted to this goal KBID is, one must only look to the 71 miles of pipe the district has buried without outside assistance.

- Does the proposed project implement a goal or address a need or problem identified in the existing planning effort?

The award available through this FOA will allow KBID to maintain continuity in the goal of converting all feasible lateral canals to piped systems.

- Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.

The project outlined in this application has been determined as a priority in KBID's existing planning efforts due to the size of funding needed to complete the project in regards to the dollar amount available through this FOA. In addition, the canal outlined to be converted to pipe in this application has become troublesome in its 'ability to maintain consistent delivery volumes.

E.1.3 Evaluation Criterion C—Project Implementation (10 points)

Up to **10 points** may be awarded based upon the extent to which the applicant is capable of proceeding with the proposed project upon entering into a financial assistance agreement. Applicants that describe a detailed plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Task 1 - Site Preparation - will begin whenever able after February 1st, 2022

Task 2 - Laying pipeline and installing turnouts - when able following Task 1

Task 3 - Concluding tasks of the project after the pipe is laid - site cleanup and final dirt work - will conclude by May of 2022

As a general rule, the duration of each portion of the project is estimated in the following manner: Task 1 represents 30% of the project, Task 2 represents 60% of the project, and Task 3 representing 10% of the project.

The CW 48.8 lateral project will begin whenever possible after February 1st, 2022 and end in May 2022 prior to the 2022 irrigation season beginning. If unforeseen circumstance occurs and a delay was encountered, the project would commence following the 2022 irrigation season and be completed prior to the 2023 irrigation season.

Task 1, lasting approximately 25 work days, will be considered the project preparation phase and will include bull dozer and patrol work to prepare the alignment of the proposed buried line and excavator work to remove existing structures. Removed structures will be broken with the KBID crane and wrecking ball if they are too large to load and haul. Structures will be loaded with the KBID loaders into dump trucks and taken to an established scrap yard. The stockpiling of materials and pipe needed for the project will also take place during these early stages of the project.

Task 2, lasting approximately 52 work days, will begin the plumbing in of the three 24" x 20' perforated aeration screens at the current 48.8 headgate location. Then, the pipeline installation will begin. As stated earlier in this application, the KBID Hydromaxx 2700 trencher will be used to trench the line for the pipe installation. A bull dozer or patrol will then be used to backfill the trench-line after the pipe is installed. During this portion of the project all angle fittings, Tee-fittings, couplers, valves and flowmeters will be installed at each turnout location.

Task 3 will commence after all the pipe and turnout infrastructure needs are installed, and will last approximately 9 work days. The KBID crew will begin removing any and all scrap or excess material remaining at the site. Any remaining open lateral, which is not in the alignment of the pipeline, will also be destroyed at this time-frame of the project.

- Describe any permits that will be required, along with the process for obtaining such permits.

No permits have been identified to be needed for this project.

- Identify and describe any engineering or design work performed specifically in support of the proposed project.

As with all pipelines KBID has installed in the past, this one shall be installed following the manufacturer's design criteria. KBID has consulted Reclamation engineers in the design of similar projects and will do so for this one. All meter installations shall meet State of Kansas specifications.

- Describe any new policies or administrative actions required to implement the project.

No new policies or administrative actions were required to implement this project.

- Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?

All environmental compliance estimates and costs have been discussed previously and developed with the help of employees of the Nebraska Kansas Area Office of the Bureau of Reclamation.

E.1.4. Evaluation Criterion D— Nexus to Reclamation (10 points)

Up to **10 points** may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. Describe the nexus between the proposed project and a Reclamation project or activity, including:

- Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:
 - Does the applicant receive Reclamation project water?
 - Is the project on Reclamation project lands or involving Reclamation facilities?
 - Is the project in the same basin as a Reclamation project or activity?
 - Will the proposed work contribute water to a basin where a Reclamation project is located?
- Will the project benefit any tribe(s)?

Kansas Bostwick Irrigation District (KBID) is a Pick-Sloan Project headquartered in Courtland, Kansas. KBID is a Bureau of Reclamation irrigation district served by and lying within the Bureau of Reclamation's Nebraska-Kansas Project Area headquartered in McCook, Nebraska. Water storage for the

district is within the Corps of Engineers Harlan County Reservoir in Nebraska and in the Bureau of Reclamation's Lovewell Reservoir in Kansas, both of which are in the same basin of the Republican River.

Project Budget

Funding Plan and Letters of Commitment

Kansas Bostwick's contribution to the project funding will come partially from the irrigation district's conservation reserve funds as well as O&M funds raised on annual basis through assessments. The Board of Directors also charges each irrigator receiving a benefit from every project a fee for that benefit. It is Board Policy that anyone receiving a benefit should in some way participate in the cost of the improvement to the system. This will not be considered in the application and will be a portion of the districts share.

As a result of the 2015 United States Supreme Court Settlement concerning the Republican River, in the case of The State of Kansas, Plaintiff v. The State of Nebraska and The State of Colorado, the Court ordered that the State of Kansas be awarded a settlement amount of \$5.5 million from the State of Nebraska.

This led to significant collaboration between many users on the Republican River. Through the action of several individuals representing multiple agencies within the State of Kansas and key state legislators, \$3.5 million of the award was secured to be used for water conservation projects in the Republican River Basin in Kansas.

Of the \$3.5 million, KBID subsequently signed a contract with the Kansas Water Office (KWO) for \$2.5 million of these non-Federal funds (see KWO Contract No. 16-115 and letter of commitment in the appendix). The KWO is the agency who is charged with holding these funds for dispersal to the District. Therefore, the KWO will be an integral partner with KBID on projects like the one described within this application. This contract outlines that the \$2.5 million earmarked for KBID be used to fund materials purchases for various projects outlined within the contract.

In the past KBID has received multiple WaterSMART and Field-Service grant awards. Currently KBID is waiting to hear on the result of an application submitted in September of 2020 for Funding Opportunity No. BOR-DO-21-F001 for the automation of the Courtland Canal. With the approval of this application KBID will be able to maintain continuity with its goals and continued plans of water conservation projects.

If successful, KBID will contribute \$50,769.47 to the project by way of providing the equipment and labor. The material needs for the project total \$152,468.50. To cover the materials costs, KBID will utilize award funding in the amount of \$75,000 as well as an additional \$77,468.50 from the U.S. Supreme Court Settlement funds earmarked for water conservation projects within the district and held by the Kansas Water Office (KWO) for disbursement. Therefore, total project costs would come to \$203,237.97. Therefore, the non-federal funding provided by KBID and the KWO would equal 63.1% of the total, and award funding comprising the remaining 36.9%.

This project to pipe the upper end of the 48.8 lateral will convert the entire lateral into a fully-piped project which will have multiple benefits to the system. Three smaller portions of the lower end of the 48.8 lateral were piped in 1988, 1995 and 1999. The total investments in these earlier projects totaled \$2,494.89, \$4604.00 and \$15,514.86 respectively.

Budget Proposal

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$75,000.00
Costs to be paid by the applicant	\$50,769.47
Value of third-party contributions	\$77,468.50
TOTAL PROJECT COST	\$203,237.97

BUDGET ITEM DESCRIPTION	COMPUTATION		QUANTITY TYPE	TOTAL COST
	\$/UNIT	QUANTITY		
Salaries and Wages				
Excav. Optr (TA)	\$21.51	81.10	HOURS	\$1,744.46
Trencher Optr. (DD)	\$17.21	81.10	HOURS	\$1,395.73
Loader Optr (RE)	\$19.73	81.10	HOURS	\$1,600.10
Excav Optr. (WF)	\$17.09	81.10	HOURS	\$1,386.00
Laborer (FH)	\$17.32	81.10	HOURS	\$1,404.65
Laborer (TJ)	\$16.96	81.10	HOURS	\$1,375.46
Dozer Optr. (GK)	\$15.99	81.10	HOURS	\$1,296.79
Laborer (CL)	\$16.39	81.10	HOURS	\$1,329.23
Foreman (BM)	\$16.24	81.10	HOURS	\$1,317.06
Laborer (AS)	\$15.69	81.10	HOURS	\$1,272.46
Laborer (RW)	\$15.90	81.10	HOURS	\$1,289.49
Fringe Benefits				
Excav. Optr (TA)	\$14.70	81.10	HOURS	\$1,191.87
Trencher Optr. (DD)	\$10.85	81.10	HOURS	\$879.69
Loader Optr (RE)	\$6.49	81.10	HOURS	\$526.06
Excav Optr. (WF)	\$6.56	81.10	HOURS	\$531.94
Laborer (FH)	\$10.81	81.10	HOURS	\$876.44
Laborer (TJ)	\$14.61	81.10	HOURS	\$1,184.65
Dozer Optr. (GK)	\$14.73	81.10	HOURS	\$1,194.43
Laborer (CL)	\$6.42	81.10	HOURS	\$520.85
Foreman (BM)	\$11.62	81.10	HOURS	\$942.41
Laborer (AS)	\$10.74	81.10	HOURS	\$871.41
Laborer (RW)	\$14.52	81.10	HOURS	\$1,177.40

Equipment				
JCB Excavator (Equivalent A28:E38 - 47,400#, 153 HP)	\$47.36	36.43	EQUIP HRS	\$1,725.39
CAT 320C Excavator (Equivalent - 47,400#, 153 HP)	\$47.36	29.93	EQUIP HRS	\$1,417.37
CAT 323FL Excavator	\$47.36	29.93	EQUIP HRS	\$1,417.37
CAT 314 Long-Reach Excavator	\$53.84	20.32	EQUIP HRS	\$1,094.26
CAT D7 Dozer (Equivalent CAT D7)	\$143.65	25.91	EQUIP HRS	\$3,722.48
IHC TD-15 Dozer (Equivalent - 145 HP)	\$85.77	2.54	EQUIP HRS	\$217.90
Fiat-Allis 14C Dozer (Equivalent 155 HP)	\$85.77	60.97	EQUIP HRS	\$5,229.65
Linkbelt ls-78 Crane (Equivalent 30 ton 80' boom)	\$80.46	0.51	EQUIP HRS	\$40.88
Skid Steer (Equivalent 60" bucket, 67 HP)	\$19.98	1.52	EQUIP HRS	\$30.46
Galion Motorgrader (Equivalent - 179 HP)	\$65.52	14.74	EQUIP HRS	\$965.45
CAT 130 Motorgrader (Equivalent - 179 HP)	\$65.52	14.74	EQUIP HRS	\$965.45
Hough International 540 Loader #1 (Equivalent - 208 HP)	\$93.02	0.76	EQUIP HRS	\$70.90
Komatsu 540 Loader #2 (Equivalent - 208 HP)	\$93.02	0.76	EQUIP HRS	\$70.90
2700 Hydramaxx Port Industries Trencher	\$163.96	41.16	EQUIP HRS	\$6,748.06
JLG 1255 Telehandler	\$51.90	32.21	EQUIP HRS	\$1,671.91
New Holland E35B Mini-Excavator	\$12.96	5.59	EQUIP HRS	\$72.44

Supplies and Materials				
24" PIP PIPE	\$30.25	1,832	MATERIALS	\$55,418.00
21" PIP PIPE	\$23.91	2,606	MATERIALS	\$62,309.46
18" PIP PIPE	\$17.28	670	MATERIALS	\$11,577.60
24" X 20' AERATION SCREENS	\$1,080.00	3	MATERIALS	\$3,240.00
24" COUPLERS FOR SCREENS	\$68.00	3	MATERIALS	\$204.00
AERATION END CAP	\$54.30	1	MATERIALS	\$54.30
24" CMP 90° ELBOW - SW	\$391.00	1	MATERIALS	\$391.00
H-STANDS FOR SCREENS	\$90.00	4	MATERIALS	\$360.00
24" 45° ELBOW - SW	\$680.07	2	MATERIALS	\$1,360.14
24" x 12" TEE FITTING - SW	\$476.06	1	MATERIALS	\$476.06
24" 90° ELBOW - SW	\$1,054.32	1	MATERIALS	\$1,054.32
24" X 21" REDUCER - SW	\$214.35	1	MATERIALS	\$214.35
21" 90° ELBOW - SW	\$479.61	1	MATERIALS	\$479.61
21" X 12" TEE FITTING - SW	\$337.54	7	MATERIALS	\$2,362.78
21" X 18" REDUCER - SW	\$145.62	1	MATERIALS	\$145.62
18" 45° ELBOW - SW	\$154.88	2	MATERIALS	\$309.76
18" X 15" REDUCER	\$108.74	1	MATERIALS	\$108.74
12" X 10" REDUCER - SW	\$35.96	9	MATERIALS	\$323.64
10" COUPLER - SW	\$21.01	9	MATERIALS	\$189.09
15" END CAP - SW	\$52.66	1	MATERIALS	\$52.66
12" END CAP - SW	\$36.80	1	MATERIALS	\$36.80
10" END CAP - SW	\$30.93	1	MATERIALS	\$30.93
10" 90° ELBOW - SW	\$83.35	12	MATERIALS	\$1,000.20
10" BOLTED REPAIR COUPLERS	\$116.63	4	MATERIALS	\$466.52
10" UNDERGROUND GEAR VALVES	\$231.00	6	MATERIALS	\$1,386.00
10" VAN STONE FLANGES	\$80.22	12	MATERIALS	\$962.64
10" VALVE EXTENSION STEMS - 48"	\$147.00	6	MATERIALS	\$882.00
2" ALUM. VENT-VAC RELIEF VALVES	\$12.48	6	MATERIALS	\$74.88
2" AIRVENT PIPE (FEET)	\$1.98	90	MATERIALS	\$178.20
FLOWMETER	\$1,472.00	4	MATERIALS	\$5,888.00
10" METER TUBE	\$232.80	4	MATERIALS	\$931.20
TOTAL DIRECT COSTS				\$203,237.93
Indirect Costs				
Type of rate	percentage	\$ base		N/A
TOTAL ESTIMATED PROJECT COSTS				\$203,237.93

Budget Narrative

Jared "Pete" Gile is the Superintendent of KBID and will be the Project Manager. He will be in charge of the day-to-day operations of the project and will be assisted by on-site foremen. Office Manager, Tracie Nelson will be in charge of tracking specific figures and costs as the project unfolds. Both individual's roles are considered normal day to day costs for KBID and within their regular daily scope of duties as employees of the district, so their salaries, specifically applicable to this project will not be included as a project costs and the same goes for executing compliance and reporting requirements.

Field crew hours and the subsequent associated salary and fringe benefit figures were calculated using actual project numbers from previous projects of similar size and scope completed by KBID. KBID has buried laterals with its equipment and crew for years and has many years of data to aid in extrapolating these calculated figures for estimating costs relating to hours work be each employee.

The labor rates included for all personnel is certified to be the actual labor rates of each individual identified in this application. Also included in the tables below are the actual fringe benefit rates for each individual which includes Health coverage, FICA, and KPERs retirement.

2021 KBID SALARIES	
EMPLOYEE	HOURLY WAGE
Excav. Optr (TA)	\$17.21
Trencher Optr. (DD)	\$19.73
Loader Optr (RE)	\$17.09
Excav Optr. (WF)	\$16.96
Laborer (FH)	\$16.24
Laborer (TJ)	\$16.39
Dozer Optr. (GK)	\$17.32
Laborer (CL)	\$15.99
Foreman (BM)	\$21.51
Laborer (AS)	\$15.90
Laborer (RW)	\$15.69

2021 KBID PERSONNEL WAGES & BENEFITS PAID BY EMPLOYER									
EMPLOYEE	MEDICARE		FICA		KPERS		HEALTH INSURANCE		HOURLY FRINGE TOTAL
	Monthly	Hourly	Monthly	Hourly	Monthly	Hourly	Monthly	Hourly	
Excav. Optr (TA)	\$37.79	\$0.21	\$161.59	\$0.92	\$285.37	\$1.62	\$2,101.79	\$11.94	\$14.70
Trencher Optr. (DD)	\$46.32	\$0.26	\$198.04	\$1.13	\$327.16	\$1.86	\$1,337.54	\$7.60	\$10.85
Loader Optr (RE)	\$36.53	\$0.21	\$156.18	\$0.89	\$283.38	\$1.61	\$665.54	\$3.78	\$6.49
Excav Optr. (WF)	\$39.36	\$0.22	\$168.28	\$0.96	\$281.22	\$1.60	\$665.54	\$3.78	\$6.56
Laborer (FH)	\$38.47	\$0.22	\$164.49	\$0.93	\$269.28	\$1.53	\$1,429.78	\$8.12	\$10.81
Laborer (TJ)	\$37.40	\$0.21	\$159.90	\$0.91	\$271.78	\$1.54	\$2,101.79	\$11.94	\$14.61
Dozer Optr. (GK)	\$38.50	\$0.22	\$164.62	\$0.94	\$287.20	\$1.63	\$2,101.79	\$11.94	\$14.73
Laborer (CL)	\$37.84	\$0.22	\$161.81	\$0.92	\$265.14	\$1.51	\$665.54	\$3.78	\$6.42
Foreman (BM)	\$49.04	\$0.28	\$209.70	\$1.19	\$356.67	\$2.03	\$1,429.78	\$8.12	\$11.62
Laborer (AS)	\$37.47	\$0.21	\$160.20	\$0.91	\$263.65	\$1.50	\$1,429.78	\$8.12	\$10.74
Laborer (RW)	\$36.62	\$0.21	\$156.57	\$0.89	\$260.17	\$1.48	\$2,101.79	\$11.94	\$14.52

ESTIMATED LABOR HOURS PER TASK - 48.8						
EMPLOYEE	TASK 1	TASK 2	TASK 3	TOTAL HOURS	TOTAL HOURLY WAGE	TOTAL COST
Excav. Optr (TA)	41.00	34.89	5.21	81.1	\$31.91	\$2,587.60
Trencher Optr. (DD)	0.00	81.1	0	81.1	\$30.58	\$2,479.79
Loader Optr (RE)	41.00	34.89	5.21	81.1	\$23.58	\$1,912.06
Excav Optr. (WF)	41.00	34.89	5.21	81.1	\$23.52	\$1,907.40
Laborer (FH)	18.63	50.26	12.21	81.1	\$27.05	\$2,193.51
Laborer (TJ)	41.00	27.89	12.21	81.1	\$31.00	\$2,513.87
Dozer Optr. (GK)	65.00	16.1	0	81.1	\$32.05	\$2,599.08
Laborer (CL)	0.00	68.89	12.21	81.1	\$22.41	\$1,817.64
Foreman (BM)	20.00	48.57	12.53	81.1	\$33.13	\$2,686.88
Laborer (AS)	0.00	68.89	12.21	81.1	\$26.64	\$2,160.90
Laborer (RW)	0.00	68.89	12.21	81.1	\$30.21	\$2,449.86
TOTALS	267.63	535.26	89.21	892.1	\$312.07	\$25,308.58

As KBID owns all the necessary equipment and machinery that will be required for this project, none will have to be rented. KBID established hourly rates for this application by using rates established by the United States Army Corps of Engineers within their Construction Equipment Ownership and Operating Expense Schedule. Estimates on the number of hours required for each machine were extrapolated from using actual numbers and data from similar sized projects KBID has completed in the past.

All of the materials and supplies needed for the project are listed above in the Budget Proposal Table. The supplies are itemized by major category, unit price, quantity and purpose. All items are those that will be used in the field for accomplishing the goals of this project. All costs were derived from actual product costs or by quotes received by KBID on each product within the last 365 days.

No work will be done on this project by sub recipients, consultants, or contractors.

After consulting with staff at the Bureau of Reclamation's Nebraska-Kansas Area Office in regards to activities undertaken by Reclamation for environmental and regulatory compliance, KBID is expecting no extra cost to be incurred for these measures.

No other expenses or indirect costs have been identified.

If successful, KBID will contribute \$50,769.47 to the project by way of providing the equipment and labor. The material needs for the project total \$152,468.50. To cover the materials costs, KBID will utilize award funding in the amount of \$75,000 as well as an additional \$77,468.50 from the U.S. Supreme Court Settlement funds earmarked for water conservation projects within the district and held by the Kansas Water Office (KWO) for disbursement. Therefore, total project costs would come to \$203,237.97. Therefore, the non-federal funding provided by KBID and the KWO would equal 63.1% of the total, and award funding comprising the remaining 36.9%.

Environmental and Cultural Resources Compliance

Construction of Kansas Bostwick Irrigation District was done in several phases. The first phase of the project, or Block I, was completed in 1957. The final phase of the project, or Block IV, was completed in 1969. As one can imagine, the construction of approximately 250 miles of canals and water delivery structures through previously unirrigated land caused a significant impact to the local environments where the construction originally took place.

At KBID, we like to think that through the conversion of open canals to buried pipe systems, we are returning the local environment surrounding these projects to the way they existed prior to canal construction, but still with the benefit of irrigation for increased crop production.

The proposed project should have minimal impact on the surrounding environment. The earth-disturbing work that will occur through the project will be to excavate a trench to lower the pipe into. After the pipe is placed in the trench, it will be back-filled by a bull-dozer or patrol. The remaining profile of the open canal will be eliminated by a bull-dozer and along with a patrol, will be used to smooth and feather out the soil that previously made up the canal channel and profile. The only way in which air quality should be affected during the project is through any dust that may be kicked up by tires or tracks of the machines while they are in operation.

There aren't any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places.

The Summary of the Final Environmental Impact Statement for the Republican River Basin in conjunction with the Repayment and Long-Term Water Service Contract Renewals that was published in June of 2000 didn't identify any Threatened or Endangered Species in our area of the basin and to this day there are none known to exist.

There are no wetlands or surface waters inside the project boundaries that fall under the Clean Water Act jurisdiction as "Waters of the United States" that would potentially be impacted by this project.

There are no known archaeological sites in the proposed project area.

The proposed project will have no effect on low income or minority populations.

The proposed project will not limit access to any ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

This project will require no special permits or approvals.

KANSAS BOSTWICK IRRIGATION DISTRICT NO. 2

RESOLUTION

2021-02

Whereas the Republican River Basin is frequented by drought,

Whereas water is the lifeblood of the agricultural community,

Whereas WaterSMART grants provide a source of funding for capital improvements of the District,

Whereas the converting of open ditch lateral to buried pipelines will conserve large volumes of water and improve efficiencies,

Whereas funding is needed to maintain continuity in the District's efforts to improve efficiency,

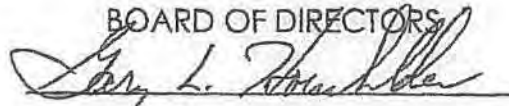
Now therefore be it resolved that the Kansas Bostwick Irrigation District No. 2 Board of Directors agrees and authorizes that this application be submitted to the Bureau of Reclamation for the consideration under the **WaterSMART Grants: Small-Scale Water Efficiency Projects, Funding Opportunity Number R21AS00300** grant program for the conversion of the:

Courtlund 5th - 48.8 Lateral

to buried piped systems. If selected, the Board of Directors agree to provide in-kind funding to the project and will work closely with Reclamation to meet all established deadlines.

The foregoing Resolution was considered by the Board of Directors of the Kansas Bostwick Irrigation District No. 2 at a meeting held on 9 March 2021, and unanimously adopted.

BOARD OF DIRECTORS



Gary L. Housholder - President



Brad D. Peterson - Secretary



Monty D. Dahl - Treasurer

**Conversion of Open Irrigation Canals to Buried Pipe Systems
Within the Kansas Bostwick Irrigation District
Kansas Water Office Contract Number 16-115**

OPENING CLAUSE:

This Contract between the Kansas Water Office, 900 SW Jackson Ave, Suite 404, Topeka, Kansas, 66612 and the Kansas Bostwick Irrigation District, P.O. Box 165, Courtland, KS 66939. The parties enter into this Contract for the purposes of completing a conversion of open irrigation canals to that of buried pipe systems.

I. PROJECT TITLE

The project has been entitled: Conversion of open irrigation canals to buried pipe systems within the Kansas Bostwick Irrigation District. All references to this Contract shall include this title and the Kansas Water Office Contract Number: 16-115.

II. SCOPE OF WORK

- A. The Scope of Work, Deliverables and the Payment Schedule, Attachment B, is hereby incorporated in this contract and made a part hereof by reference.
- B. The Kansas Water Office will have 30 business days from the date of receipt to review the deliverable, ask for changes or approve the deliverable.

III. COMPENSATION

- A. The Kansas Water Office agrees to pay, Kansas Bostwick Irrigation District (KBID), an approximate cost of Two Million and Five Hundred Thousand Dollars and No/100 (\$2,500,000.00) for the work to be completed or performed under the attachments incorporated into this agreement by reference as Attachments B and C. Payments will be made based upon actual costs incurred for the purchase of materials to complete tasks included in the Scope of Work from KBID, under the schedule in Attachment B, upon receipt, review and acceptance by the Kansas Water Office of the indicated deliverables listed in Attachment B. Additional projects may be added as approved by the Kansas Water Office, if the entire 2,500,000.00 is not expended on these projects. See the Payments clause, *infra*.
- B. The Conversion of Open Irrigation Canals to Buried Pipe Cost Estimate, Attachment C, is hereby incorporated in this contract and made a part hereof by reference. The Kansas Water Office and the Kansas Bostwick Irrigation District agree that Attachment C is the best estimate, as of the date of this contract, for prices of the materials needed to complete the project and agree that the price may fluctuate depending on outside variables.
- C. The Kansas Bostwick Irrigation District agrees to contribute in kind services by providing machinery and cost of labor as shown in Attachment C in an amount of approximately \$1,157,000.00.

ORIGINAL JAN 26 2016
COPY

III. PAYMENTS

Invoices for payments for work completed under the terms of this Contract, as outlined in the attachments to this Contract should be sent to:

**Kansas Water Office
Attention: Accounts Payable
900 SW Jackson St., Suite 404
Topeka, Kansas 66612**

Payments will be due and payable 30 calendar days following the receipt of the invoice from, Kansas Bostwick Irrigation District (KBID). No payment will be remitted unless and until the appropriate work or work to be delivered has been received and approved by the Kansas Water Office in the manner specified in the attachments hereto.

IV. EFFECTIVE DATES

This Contract shall be effective for the period of January 11, 2016, through June 30, 2024, inclusive.

V. MODIFICATION AND EXTENSION/RENEWAL OF CONTRACT

This Contract may be modified, extended or renewed by written agreement of all parties to this Contract. The parties agree that any request by Kansas Bostwick Irrigation District (KBID) for an extension of time of the completion of the Contract should be communicated to the Kansas Water Office no later than 60 days prior to the stated completion date.

VI. CONTACT PERSONS

Each party has designated a contact person to facilitate communication between the parties for purposes of this Contract. The designated contact person may be changed by either party at any time by sending notice of such change, via first class mail, to the appropriate party at the address first given above.

A. The Kansas Water Office contact person for purposes of this Contract will be:

Name: Katie Goff
Address: 900 SW Jackson St., Suite 404, Topeka, KS 66612
Phone: (785) 296-0863
E-mail: Katie.Goff@kwo.ks.gov

B. The Kansas Water Office contact person for purposes of contract administration will be:

Name: Earl Lewis
Address: 900 SW Jackson St., Suite 404, Topeka, KS 66612
Phone: (785) 296-3185
E-mail: Earl.Lewis@kwo.ks.gov

C. The Kansas Bostwick Irrigation District (KBID) contact person for purposes of this Contract will be:

Name: Jared "Pete" Gile
Address: P.O. Box 165, Courtland, KS 66939-7941
Phone: (785) 374-4514
E-mail: kbid@courtland.com

VII. OWNERSHIP OF INFORMATION, DOCUMENTS, ETC.

All reports, information, data, photos, documents, procedures, and descriptions accumulated, developed or acquired by Kansas Bostwick Irrigation District (KBID), under this Contract shall be jointly owned by the Kansas Water Office and KBID. Either party may use, release or otherwise use any such materials without the written approval of the other party.

VIII. ADDITIONAL PROVISIONS

- A. **KANSAS CONTRACT PROVISIONS ATTACHMENT.** The provisions found in contractual provisions attachment (Form DA-146a – Attachment A), which is attached hereto, are hereby incorporated in this contract and made a part thereof.
- B. **HEADINGS.** Headings used in this Agreement are informational and not to be considered persuasive or determinative of any clause or matter in dispute.
- C. **FUNDING.** The Kansas Bostwick Irrigation District agrees to explore other opportunities for funding in order to meet the estimated total cost to complete projects listed in Attachment C.

IX. SIGNATURES

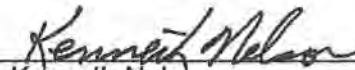
In agreement to the terms of this Contract, we set our hand this 22nd day of January 2016, under the authority and power granted to us by virtue of our position or office.

For the Kansas Water Office



Tracy Streeter
Director
Kansas Water Office

Kansas Bostwick Irrigation District



Kenneth Nelson
Superintendent
Kansas Bostwick Irrigation District

State of Kansas
 Department of Administration
 DA-146a (Rev. 06-12)

CONTRACTUAL PROVISIONS ATTACHMENT A

Important: This form contains mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the vendor/contractor's standard contract form, then that form must be altered to contain the following provision:

"The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof, said contract being the 22nd day of January, 2016.

1. **Terms Herein Controlling Provisions:** It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated. Any terms that conflict or could be interpreted to conflict with this attachment are nullified.
2. **Kansas Law and Venue:** This contract shall be subject to, governed by, and construed according to the laws of the State of Kansas, and jurisdiction and venue of any suit in connection with this contract shall reside only in courts located in the State of Kansas.
3. **Termination Due To Lack Of Funding Appropriation:** If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of the State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.
4. **Disclaimer Of Liability:** No provision of this contract will be given effect that attempts to require the State of Kansas or its agencies to defend, hold harmless, or indemnify any contractor or third party for any acts or omissions. The liability of the State of Kansas is defined under the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.).
5. **Anti-Discrimination Clause:** The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Contractor agrees to comply with all applicable state and federal anti-discrimination laws.

The provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting State agency cumulatively total \$5,000 or less during the fiscal year of such agency.

6. **Acceptance Of Contract:** This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.
7. **Arbitration, Damages, Warranties:** Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-8403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.
8. **Representative's Authority To Contract:** By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.
9. **Responsibility For Taxes:** The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.
10. **Insurance:** The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), the contractor shall bear the risk of any loss or damage to any property in which the contractor holds title.
11. **Information:** No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 et seq.
12. **The Eleventh Amendment:** "The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."
13. **Campaign Contributions / Lobbying:** Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.

ATTACHMENT B**Scope of Work, Deliverables and the Payment Schedule****SCOPE OF WORK**

Item No.	Work Item Description
1.	All materials needed for the project will be ordered by KBID to allow for delivery to site location before work begins. Materials can include PVC pipe, (as small as 10", or as large as 36"), lateral turnouts and fittings.
2.	Bull dozer and patrol work will be done to prepare the alignment of the proposed buried line and excavator work to remove existing structures. Removed structures will be broken with the KBID crane and wrecking ball if they are too large to load and haul. Structures will be loaded with the KBID loaders into dump trucks and taken to an established scrap yard.
3.	The KBID Hydramaxx Wheel Trencher will be used to trench the line for the pipe. An excavator with a sling will be used to swing the pipe into the trench and align the pipe to be pushed together. A bull dozer will be used to back fill the trench.
4.	KBID will pick up any and all scrap or excess material left on the site and leave the site in a manner that the landowner can work it with his farm equipment.
5.	Any open lateral, which is not in the alignment of the pipeline, will be destroyed and left in a manner that the landowner can work the area with his farm equipment and returned to the farmer's operations.

Open Irrigation Canals to be Converted to Buried Pipe System	
Canal Project in Order of Priority	Miles of Open Canal to be Eliminated
31.1 – 3 rd Section	1.91
32.1 – 3 rd Section	2.99
33.0 – 3 rd Section	3.84
1.3R – Ridge Canal	3.05
2.6 – Ridge Canal	2.19
PUMP #1 North Canal	5.33
48.8 – Courtland 5 th Canal	0.93
50.7 – Courtland 5 th Canal	2.90
Total	23.14

DELIVERABLES

The KBID shall submit project deliverables to the KWO, 900 SW Jackson St, Ste. 404, Topeka, KS 66612.

1. Prior to purchase of materials, for which reimbursement will be sought, for the canal conversion projects listed in the Scope of Work above, KBID will provide to the KWO a listing of all expected materials to be purchased. The Kansas Water Office will review and respond to the proposed purchase within 7 calendar days.
2. By October 31 of each calendar year, KBID will provide to KWO verify purchase of equipment and supplies with Financial Estimate and Invoice Receipt. The Kansas Water Office will use this deliverable as basis for payment under the terms of this contract.
3. By June 30 of each calendar year, for the preceding 12 month period, KBID will provide to the KWO a report of:
 - a. the open irrigation canal section or sections converted to buried pipe systems,
 - b. the amount of in kind contribution provided by KBID,
 - c. other sources and amounts of funding obtained and used (if applicable),
 - d. the estimated amount of water loss saved as a result of the conversion,
 - e. significant issues encountered during implementation,
 - f. any significant changes to plans to canal conversion previously submitted, and
 - g. general plans of work for conversion of open irrigation canal to buried pipe systems to be accomplished in the subsequent July to June, 12 month period.

COMPENSATION AND PAYMENT SCHEDULE

The Kansas Water Office agrees to pay the KBID an approximate amount of \$2,500,000.00 for the deliverables identified in Attachment B, above. If the described projects are constructed for less than \$2,500,000.00 the remaining amount and any additional funds that may be available may be used for additional projects as approved by the Kansas Water Office.

Payments will be made within 30 days, upon receipt of a financial estimate and an invoice as described in deliverable 2 by October 31 each year from the KBID, and subject to all deliverables above for the preceding 12 months being considered final as provided in Section III of this Contract.

ATTACHMENT C

**Conversion of Open Irrigation Canals to Buried Pipe
Cost Estimate**

Canal Project in Order of Priority	Miles of Open Canal to be Eliminated	Material Cost Est.	KBID In Kind Labor/Machinery Cost Est.
31.1 – 3 rd Section	1.91	\$237,590.02	\$95,500.00
32.1 – 3 rd Section	2.99	\$432,053.00	\$149,500.00
33.0 – 3 rd Section	3.84	\$625,392.76	\$192,000.00
1.3R – Ridge Canal	3.05	\$383,467.02	\$152,500.00
2.6 – Ridge Canal	2.19	\$176,772.97	\$109,500.00
PUMP #1 North Canal	5.33	\$653,560.18	\$266,500.00
48.8 – Courtland 5 th Canal	0.93	\$112,526.69	\$46,500.00
50.7 – Courtland 5 th Canal	2.90	\$503,394.86	\$145,000.00
Totals	23.14	\$3,124,757.50	\$1,157,000.00
	Total Cost	\$4,281,757.50	
	10% Contingency Added	\$4,709,933.25	

March 16, 2021

Dear WaterSMART Grants Selection Committee,

The Kansas Water Office (KWO) is pleased to support the WaterSMART grant application by the Kansas Bostwick Irrigation District (KBID). The KBID intends to use the grant to convert the open irrigation canal Courtland 5th – 48.4 Lateral to a buried pipe system.

The proposed project will contain a 0.93 mile stretch of canal, and will cost an estimated total of \$203,237.97. The KWO offers to pay a portion of the total project cost to cover the materials of the project in the amount of \$77,468.50.

The date the funds from KWO will be made available to the KBID would be 7 calendar days after the KBID provides to the KWO a listing of all expected materials to be purchased. There would be no other time constraints on the availability of funds.

Contingencies associated with the funds from KWO would include: KBID will provide to the KWO verification of the purchase of equipment and supplies with Financial Estimate and Invoice Receipt. Also, the KBID will provide to the KWO a report of the preceding 12-month period, which would include:

- a) the open irrigation canal section or sections converted to buried pipe systems,
- b) the amount of in-kind contribution provided by KBID,
- c) other sources and amounts of funding obtained and used (if applicable),
- d) the estimated amount of water loss saved as a result of the conversion,
- e) significant issues encountered during implementation,
- f) any significant changes to plans for canal conversion previously submitted, and
- g) general plans of work for conversion of open irrigation canal to buried pipe systems to be accomplished in the subsequent July to June, 12-month period.

Again, we are pleased to support the WaterSMART grant application by the Kansas Bostwick Irrigation District. Please let me know if you need further information or clarification in order for funding of this grant to move forward.

Sincerely,



Connie Owen
Director
Kansas Water Office

To whom it may concern:

My name is Ryan Carlgren and I'm an irrigator with farm ground north of Courtland, KS. Pete has informed me he's submitting a grant application to install a buried pipeline to replace the open canal that currently feeds my pivot and some gravity fed irrigation pipe. Being the furthest downstream irrigator on this canal my turnouts are always the first one to suffer whenever we have upstream issues or a lack of water. If this canal was done away with and it was all made into a solid pipeline Pete explains that my troubles on the bottom end will be over. Therefore, I'm in full support of this project.

Thanks for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Carlgren', written in a cursive style.

Ryan Carlgren