

MINIDOKA IRRIGATION DISTRICT 98 WEST 50 SOUTH RUPERT, ID 83350 (208) 436-3188

"M.I.D. IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER"

#### WaterSMART Small-Scale Water Efficiency Projects Funding Opportunity Number R22AS00195 Minidoka Irrigation District's Piping of Lateral 24

Lateral 24 is a part of Minidoka Irrigation District's oldest infrastructure. This portion of the lateral is in a geographic area with an incredibly high sand content in the soil cross-section. Due to the nature of the surrounding soil types, there are significant amounts of sand blowing into the lateral, as well as significant water loss in the area.

Installing 1, 420 feet of 24" 80 high-density polyvinyl chloride pipe will reduce the loss of water, not only saving the District a significant amount of water that will remain in storage, it will allow the District to better serve their water users.

> The Project Manager will be: Shawna Adams 98 West 50 South Rupert, Idaho 83350 midshawna@gmail.com 208-260-1097 SAM/DUNS Number: 081826240



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# **Technical Proposal & Evaluation Criteria**

### **Executive Summary**

April 14, 2022 Minidoka Irrigation District City: Rupert County: Minidoka State: Idaho Minidoka Irrigation District is a Category A Applicant

Minidoka Irrigation District (MID) serves approximately 1,300 water users with over 502 miles of canals, laterals, and drainage systems. MID receives storage water from the Minidoka, American Falls, Palisades, and Jackson Dams. Minidoka Irrigation District is part of the Minidoka Project, one of the Bureau of Reclamation's oldest projects in the entire United States.

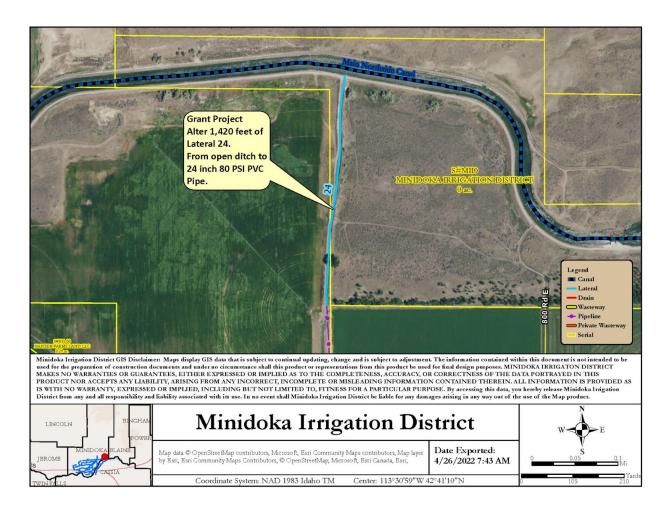
The District has functioned for many years without the necessary upgrades for the present and future needs of the District's customers. To continue to work towards their goals of water conservation and improving water delivery service, Minidoka Irrigation District will convert an existing open lateral to a 1,420' pipeline, tying into a previously installed pipeline. Replacing the open lateral will not only prevent water loss due to seepage and rodent holes but also allow Minidoka Irrigation District to be proactive in mitigating potential property damage. Piping the lateral will allow MID to better manage the water flow, reducing waste and reallocating water to the system for crop production.

The project is expected to begin in January 2024, taking just under four weeks to complete, with an estimated completion date at the end of January 2024.

The project is not located on a Federal facility.

### **Project Location**

Lateral 24 is located approximately 2.24 miles downstream, northwest, of the Main northside diversion gate at the Minidoka Dam, in Minidoka County in the State of Idaho. Please see the map below for a detailed depiction of the location.



## **Technical Project Description**

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work.

To complete this project, we will be using a 2.5 CY track excavator, a 1.5 CY backhoe, and 12 CY dump trucks, all currently owned by Minidoka Irrigation District.

Depending on what material is found below the surface, we may also need the use of a rock hammer. This would be rented for the duration of the project. From that point, we will be installing twenty-four-inch (24"), eighty (80) pounds per square inch (PSI) high-density polyvinyl chloride pipe. The top end of the lateral will be dug down slightly, matching it with the existing headgate and stub pipe. The downstream end of the lateral will be consistent with the bottom of the existing ditch, and in line with the existing pipeline. We will not be using the dirt that is on-site to bed the pipe or backfill around the pipe, as it will be coming from sediment and sand-filled ditch, therefore would not be suitable. We will be using soil from other sources in the District to provide suitable, long-lasting bedding. We will be using the transit level frequently to ensure the slope and fall are within appropriate parameters.

## **Evaluation Criteria**

### **Evaluation Criterion A - Project Benefits**

#### Benefits to Category A Applicant's Water Delivery System

Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.

A benefit to piping Lateral 24 is the update to the original infrastructure. This specific stretch of lateral has not been updated since it was originally installed, with the exception of cleaning the sediment and sand out frequently. While the infrastructure has served the District very well, even the best-made waterways need improvements after over one hundred years of use. We plan to install infrastructure that, barring unforeseen circumstances, will ensure the Minidoka Irrigation District the ability to provide water to the farm ground in the area for a long time to come.

This section of the lateral is a mix of sand and gravel and loses approximately 0.81 cubic feet per second for a loss of 185 acre-feet of water each irrigation

season in this specific section of the lateral. Almost every year the spring winds fill this lateral with sand that must be excavated before the irrigation season. The sand also damages irrigation pumps during the summer. The landowner has replaced three pumps in the last six years because of the sand. This pipeline will reduce maintenance costs and eliminate seepage losses in this section. The pipeline will extend from the head of the lateral south for 1,420 feet, tying into a previously installed pipeline. In 2021, in collaboration with the landowner, the District piped the worst section of the lateral. This project is intended to complete the piping of the top end of this lateral from the headworks to the pipeline.

#### **Broader Benefits**

#### Describe the broader benefits that are expected to occur as a result of the project.

Due to the loss of water in the area, water delivery suffers at times when demand is high. The road base and surrounding areas become oversaturated, leading to farm equipment getting bogged down, stuck, then damaging the field surface during recovery.

The benefit of installing the pipeline is primarily the prevention of water loss and damage to crops. With the installation of the pipeline, the stress on the system during times of high demand will be reduced drastically, leading to the neighboring farms being able to irrigate at the same time instead of on a rotational basis.

When looking at a simple cost-to-benefit ratio, by installing the pipeline, Minidoka Irrigation will be able to conserve an additional 158 acre-feet of water per irrigation season. Other benefits include greater efficiency and drought resilience, as well as less demand on the storage system.

Since receiving Title Transfer, the District has begun converting deep well water users to surface water through soft conversions. This reduces the strain on the already stressed aquifer, as well as brings the landowner into compliance with the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan, reducing the pull on the aquifer.

When taking into account the amount of water that will not be removed from the system, increasing conservation of resources, and reducing the strain on the aquifer, the benefit is immeasurable. To attempt to attach a financial number to the savings, MID can use the current rental rates. As previously mentioned, since receiving Title Transfer, MID has begun converting groundwater users to surface water. The District currently rents water at \$35.00 per acre-foot, and \$15.00 per acre-foot for wheeling and delivery, for a total of \$50.00 per acre-foot. The reduction of 158 acre-feet of loss is equivalent to \$7,900.00 in savings each irrigation season. This allows for more available rental water for water users in and around the District.

## **Evaluation Criterion B - Planning Efforts Supporting the Project**

#### **Plan Development**

Describe how your project is supported by an existing planning effort. Identify the planning effort and who developed it.

Minidoka Irrigation District currently has an existing plan in place to reduce our water use by heightened water conservation through improved or enhanced infrastructure. A component of this plan is to reduce the loss of water through leakage and operational spill. Installing this pipeline, as previously mentioned, allows all water pulled from the canal, and ultimately the storage system, to go exactly where it is intended with very little to no unwanted diversion.

This plan has been developed over time by the Board of Directors and is reevaluated and refined regularly by the General Manager.

#### Support for the Project

Describe to what extent the proposed project is supported by the identified plan.

This project is directly supported by the aforementioned water conservation plan by improving the aging infrastructure in the area. The canals and laterals were very well designed, and suit their purpose exactly as intended. However, when the opportunity emerges to improve a site in a way that was not available at the time of initial construction, the opportunity must be taken advantage of. MID is working diligently to ensure the District is able to ensure the delivery of valuable water to their water users.

### **Evaluation Criterion C - Implementation and Results**

### **Implementation Plan**

Describe the implementation plan for the proposed project.

Minidoka Irrigation District plans to break ground on the piping of Lateral 24 after the 2023 Irrigation Season. The District begins the water run-out process towards the end of October, meaning that well before the first week of January the lateral should be drained down and dry. The pipe for the project would have been ordered approximately six to eight weeks prior to groundbreaking, to allow for the manufacture and delivery of the order. The order for the pipe will be placed on or around October 1st, 2023.

This project will involve three separate and distinct phases:

Phase 1- Project Area Preparation (6 days)

This portion of the project will include the removal of the sand and sediment-filled ditch, digging down approximately two to three feet where needed to ensure the pipe is able to be bedded appropriately.

Phase 2- Pipeline Installation (15 days)

This portion of the project will include ensuring the appropriate bedding material is in place, as well as laying the entire length of the pipeline and associated spurs or diversion points

### Phase 3- Backfill and Project Cleanup (5 days)

This phase of the project includes backfilling the area, leaving a road surface on top. At this time, MID will also clean up the associated area, ensuring that the surrounding area is left in the same condition as when we began the project, if not better.

#### **Required Permits**

There are currently no permits required to be filed for this project. The project lies in an established easement on previously disturbed ground. MID fully intends to comply with all applicable and required permits at the time of implementation.

### **Engineering and Design Work**

There has not currently been any design work completed specifically for this project. This project is very similar to numerous other pipelines the District has previously completed. The District has had a high level of success with previously completed pipeline projects.

### New Policies or Administrative Action Required to Implement the Project

There are no new policies or administrative actions required to implement or complete this project. This project aligns with the District's established Water Management and Conservation Plan.

#### Timeline for Completion of Environmental and Cultural Resource Compliance

Minidoka Irrigation District received Title Transfer in January 2021. Documentation included in this process included an extensive Environmental and Cultural Resource Compliance study. This lateral is previously disturbed ground, therefore was included in the study.

### **Evaluation Criterion D - Nexus to Reclamation**

Describe the nexus between the proposed project and a Reclamation project or activity.

The project is located within the Minidoka Project, one of the oldest Bureau of Reclamation Projects in the United States. The Minidoka Project waters over one million acres of land on the Upper Snake River Plain in Idaho. While Minidoka Irrigation District has received Title Transfer, the District still maintains storage in and receives water from Jackson Lake, Palisades, American Falls, and Lake Walcott.

## **Overlap of Duplication of Effort Statement**

Applicants must provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

This project is currently not associated with any other active or anticipated projects.

## **Project Budget**

## **Funding Plan**

Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

The total estimated cost for this project is \$143,942.95. The anticipated federal contribution has been calculated at \$71,971.48, 50% of the total budget. Minidoka Irrigation District is prepared to fund the remaining 50% of the anticipated costs at \$71,971.48. These funds are available through in-kind contributions from wages and benefits as well as the use of district-owned equipment. The additional cash contributions will be allocated from the annual Operations and Maintenance budget. These funds are currently available and will be allocated to this project pending award approval and receipt of Notice to Proceed.

# **Budget Proposal**

The total project cost is the sum of all allowable items of costs, including all required cost-sharing and voluntarily committed cost-sharing, including third-party contributions, that are necessary to complete the project.

Budget/Item Description	Qty	Unit/Price	Total
Salaries and Wages-Position title x hourly wage/ sala	ry x est. hours for ass	isted activity	
Manager	10	\$57.69	\$576.90
Watermaster	10	\$28.63	\$286.30
Foreman	80	\$28.70	\$2,296.00
Supervisor	80	\$23.19	\$1,855.20
Project Manager	40	\$21.00	\$840.00
Administrative Assistant	20	\$20.06	\$401.20
Laborer	200	\$20.79	\$4,158.00
Mechanic	15	\$25.75	\$386.25
Laborer	220	\$19.21	\$4,226.20
Total			\$15,026.05
FRINGE BENEFITS			
Manager	10	\$17.63	\$176.30
Watermaster	10	\$16.24	\$162.40
Foreman	80	\$8.78	\$702.40
Supervisor	80	\$11.56	\$924.80
Project Manager	40	\$14.73	\$589.20
Administrative Assistant	20	\$13.62	\$272.40
Laborer	200	\$11.56	\$2,312.00
Mechanic	15	\$16.71	\$250.65
Laborer	220	\$14.59	\$3,209.80
			\$8,599.95

EQUIPMENT-leased Equipment use rate + hourly wage/salary x est.	hours for a	ssited activit	y	
Volvo EC200 EL 2018 #67 Track Excavator (FEMA #8283)	125	\$158.86	\$19,857.50	
Dump Truck (FEMA #8722)	150	\$79.62	\$11,943.00	
Hyster Tilt-Deck #54 1973 Trailer (FEMA #8600)	4	\$16.71	\$66.84	
Transport Tractor (FEMA #8799)	4	\$42.33	\$169.32	
John Deer 310 Backhoe (FEMA #8572)	20	\$43.46	\$869.20	
Rock Hammer Rental (Thorton Construction)	24	\$200.00	\$4,800.00	
Rock Hammer Transport	2	\$150.00	\$300.00	
Jumping Jack Compactor	20	\$84.00	\$1,680.00	
Drum Compactor	1	\$240.00	\$240.00	
Total			\$39,925.86	
SUPPLY/MATERIALS-Describe all major types of supplies/materials, unit pric	e, # of units	, to be used	on activity	
24" 80psi PVC	1420	\$53.76	\$76,339.20	
24" Starter coupler	1	\$301.89	\$301.89	
Bedding Materials (refined soil) (by load)	50	\$75.00	\$3,750.00	
Total			\$80,391.09	
TOTAL ESTIMATED PROJECT COST			\$143,942.95	
Federal Grant Contribution 71,971.4				
Minidoka Irrigation District's Contribution 71,971.4				

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## **Budget Narrative**

The manpower estimated to complete this project totals roughly 675 hours at varying hourly rates as determined by position.

The District's Manager is expected to provide feedback and direction on an as-needed basis for this project.

The Watermaster will be expected to provide data and support regarding flows and ongoing assistance as needed.

The Foreman and Supervisor will be expected to oversee the minutiae of the day-to-day operations and installation. They will ultimately be responsible for ensuring the pipeline is bedded and laid correctly.

The Project Manager will be managing and monitoring the progress on this project, completing reports and required process updates as stipulated in the award letter and package.

The Administrative Assistant will be responsible for accounting for the hours allocated and billed to the project.

There are two different levels of pay for the maintenance crew, so those have been split out accordingly. These will be the individuals who will be installing the physical pipe. This also includes equipment operators and truck drivers.

The fringe benefits associated with this project are the standard benefits that are paid to all hourly and salary-based employees, regardless of standard district projects or other grant-based projects.

## **Environmental and Cultural Resource Compliance**

As a result of Title Transfer, an extensive Environmental and Cultural Compliance study has already been completed for the District. This study encompassed all previously disturbed ground. This lateral falls within the coverage of the previously conducted study.

# **Required Permits or Approvals**

There are currently no permits required to be filed for this project. The project lies in an established easement on previously disturbed ground.

# Letters of Support and Partnership

Appendix B includes a letter of support from the landowner in the area that has had to replace numerous pumps due to blowing sand and sediment in this waterway. This is the landowner that was previously mentioned in this proposal. They have been directly affected in a production and financial manner.

# **Official Resolution**

Due to the schedule of our Board Meetings, this will be available and submitted on May 18, 2022. There is an unsigned draft of the resolution attached as Appendix A.

# **Conflict of Interest Disclosure**

Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, applicants must state in their application if any actual or potential conflict of interest exists at the time of submission. There are currently no known actual or potential conflicts of interest at the time of

There are currently no known actual or potential conflicts of interest at the time of submission.

# **Uniform Audit Reporting Statement**

Minidoka Irrigation District does not anticipate expending more than \$750,000.00 in federal award funds during this fiscal year, so this section does not apply to this proposal or application.

#### RESOLUTION OF THE BOARD OF DIRECTORS OF THE MINIDOKA IRRIGATION DISTRICT BUREAU OF RECLAMATION WATERSMART GRANT

**Whereas,** the Board of Directors of the Minidoka Irrigation District (MID) desires to apply for a Bureau of Reclamation WaterSMART Grant, also known as a financial assistance award, for the purpose of conducting a system optimization review on waterways operated and maintained by MID, and

**Whereas,** the estimated cost of the project is \$143,942.95 and the Board of Directors desires to apply for a financial assistance award in the amount of \$71,971.48, and

**Whereas,** the Bureau of Reclamation requires the Board of Directors of MID to adopt a resolution containing certain information in order to apply for and obtain a financial assistance award,

**Now, therefore,** upon motion made, seconded, and carried, **it is resolved** by the Board of Directors of MID:

- The Chair of the Board of Directors of MID, Ronald Kowitz, is authorized to enter into and sign agreements and other documents on behalf of MID committing MID to financial and legal obligations associated with the receipt of a financial assistance award.
- The Board of Directors of MID has reviewed and supports the application for a financial assistance award submitted by MID.
- MID has funds on deposit and employees and equipment that can provide the amount of funding/or in-kind contributions as specified in the funding plan.
- MID will work with the Bureau of Reclamation to meet established deadlines for entering into a grant, financial assistance award, or cooperative agreement.

Dated May 17, 2022

Minidoka Irrigation District

By \_

Ronald Kowitz, Chair of the Board of Directors

Attest:

Ruth S. Bailes, Secretary of the Board of Directors

Hansen Farms Land LLC Kent Hansen 680 N 302 E Rupert, ID 83350 208-431-4228

April 26, 2022

RE: Completing the North End of the Lateral 24 Pipeline

To Whom It May Concern

I am writing this letter in support of Minidoka Irrigation District securing grant funding to complete the piping of Lateral 24. Our farm ground has been directly affected by the blowing sediment and sand in the area, resulting in having to replace numerous irrigation pumps over the past few years. This directly affects our fam's crop production rates and has an impact on resulting downtime.

We collaborated with MID on piping the middle section of the open lateral in the Spring of 2021. While this has led to a distinct improvement on our farmland, the need is still present for the completion of the pipeline. Presently, with the open channel to the upstream side of the pipeline, the blowing sand and washed in sediment get deposited into the pipeline, resulting in restriction and reduction in flow.

I believe that piping the top half of this lateral will not only benefit our farm directly but also benefit the District's water delivery in this area as a whole.

Kent Hansen, CEO

Kent The



#### MINIDOKA IRRIGATION DISTRICT 98 WEST 50 SOUTH RUPERT, ID 83350 (208) 436-3188

"M.I.D. IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER"

April 26, 2022

RE: SWEP22 - R22AS00195

Minidoka Irrigation District does not intend to use any funds from the above-referenced grant proposal for the purpose of lobbying to influence an officer or employee of any agency or Congressional member/staff regarding federal awards.

Sincerely,

Dan Davidson General Manager