

**LAKE AGASSIZ WATER AUTHORITY**

**BOARD OF DIRECTORS**

**Holiday Inn  
Fargo, North Dakota  
May 18, 2018**

A meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held at the Holiday Inn, Fargo, North Dakota, on May 18, 2018. The meeting was called to order by Chair Mahoney at 11 a.m.

**MEMBERS PRESENT**

Chair Tim Mahoney (departed at 11:30 a.m.)  
Vice Chair Ken Vein  
Director LaVonne Althoff  
Director John Hancock  
Director Mark Johnson  
Director Ralf Mehnert-Meland  
Director Don Moen  
Director Bob Keller  
Alternate Dave Piepkorn for Chair Tim Mahoney  
Alternate David Shelkoph for Director Dave Carlsrud  
Alternate Steve Metzger for Director Neil Fandrich  
Associate Member Carol Siegert  
Secretary Duane DeKrey

**MEMBERS ABSENT**

Director Rick Bigwood  
Director Keith Nilson  
Associate Member Don Bajumpaa

**OTHERS PRESENT**

Staff members of the Garrison Diversion Conservancy District were present along with others. A copy of the registration sheet is attached to these minutes as Annex I.

The meeting was recorded to assist with compilation of the minutes.

**AGENDA**

Chair Mahoney stated that an addition has been made to the original agenda and suggested it be approved as revised.

**Motion by Director Mehnert-Meland to approve the revised board agenda. Second by Director Althoff. Upon voice vote, motion carried.**

## **CONSIDERATION OF THE MINUTES**

**Motion by Director Hancock to dispense with a reading of the March 16, 2018, board minutes and approve them as distributed. Second by Director Johnson. Upon voice vote, motion carried.**

## **OFFICER REPORT**

Ken Vein, Vice Chair, provided a report on recent meetings and activities he has participated in involving LAWA.

## **COMMITTEE REPORTS**

**Technical Advisory Committee** - - Al Grasser, Chair, LAWA Technical Advisory Committee, reported that the committee last met on March 29. At that time, they heard updates on the StateMod and the North Dakota Pollutant Discharge Elimination System (NDPDES) Permit. A report on pipe depth was also provided, which resulted in the committee's recommendation to approve a minimum of seven feet of pipe cover on the Red River Valley Water Supply Project's (RRVWSP) first 28-mile pipeline segment. The board will be asked to act on this recommendation today.

The committee was also presented with and recommends the approval of the task orders for unmanned aircraft services, Missouri River Intake preliminary design and stakeholder re-engagement, which are all three on the agenda for consideration by the board today.

## **RED RIVER VALLEY WATER SUPPLY PROJECT UPDATE**

**Central North Dakota Environmental Assessment** - - Tami Norgard, Vogel Law, provided an update on the Central North Dakota Environmental Assessment (EA). Comments on the revised draft of the EA closed May 17. Comments were received from eight organizations, and the concerns appear to be similar to those raised previously, including depletions, inter basin transfer and cumulative impacts.

**Upper Sheyenne River Analysis** - - Chair Mahoney gave a status report on the Upper Sheyenne River Analysis, stating that a meeting was held with the mayor and officials of Devils Lake on April 27 to review the draft technical memorandum prepared after evaluating the feasibility, including costs, of an alternative discharge location farther north and west of Lake Ashtabula for the RRVWSP.

Chair Mahoney said if the discharge location is moved to the Upper Sheyenne River area, there is concern with how large a pipe is needed and how much evaporation there could be. There is also concern with discharging water into the Upper Sheyenne River and moving further away from Carrington, the Stutsman area and other points included in the present plan.

The present project is more focused on the users located in central North Dakota and into the eastern part of the state.

The secondary issue is the claim that there could be \$100-\$200 million in savings by using an Upper Sheyenne River discharge location.

Chair Mahoney said that was countered with the fact that there are some technical issues that would add additional costs.

**Presentation of Preliminary Design Report** - - Kip Kovar, Deputy Program Manager, RRVWSP Engineering, referred to the Executive Summary included in the meeting books and reviewed the information contained in the Preliminary Design Report (PDR) via PowerPoint.

The PDR summarizes the preliminary design activities and decisions for the RRVWSP by expanding upon the Conceptual Design Report (CDR) completed in January.

*Chair Mahoney left the meeting at 11:30 a.m. Ken Vein took over as Acting Chair, and Dave Piepkorn assumed the alternate position representing Chair Mahoney on the board.*

**Minimum Pipeline Depth** - - Mr. Kovar said the original idea in 2009 was to have five feet of cover over the pipe rather than seven and a half feet in order to save capital costs. Circumstances have changed since then, and he explained the concerns with pipe depth, which were discussed at the last LAWA TAC meeting, including pipe protection. The committee is recommending a minimum of seven feet of pipe cover on the first 28-mile segment of the pipeline. The estimated construction cost to go from five feet of cover to seven feet is approximately \$10 million.

**Motion by Director Althoff to approve a minimum cover of seven feet on the pipe depth for the first 28-mile segment of the RRVWSP. Second by Director Johnson. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

**Financial Update** - - Merri Mooridian, Deputy Program Manager, RRVWSP Administration, and Steve Burian, Advanced Engineering and Environmental Services (AE<sub>2</sub>S) provided a financial update and project overview via PowerPoint.

Ms. Mooridian said during the interim biennium, an emphasis has been placed on developing a robust financial model. Today they will explain the work that has been done, where the model currently stands and what remains to be done. The main pipeline is what has been modeled to date. The extension pipelines are not included in the main modeling, but they have been included in cost allocation per system.

As a reminder, 35 systems signed development agreements in 2016. Of this amount, 20 are cities and 15 are rural water systems. System meetings will be scheduled with each system again soon.

Mr. Burian reviewed the key components of the financial plan, key cost components of the core pipeline and what assumptions were used to create a starting point for the model, as well as key components for alternative financial models, including construction timeline and local financing components.

Ms. Mooridian said the request for the legislative leadership is bookends that could be put into the project participation agreements; a high end and a low end on the cost share so that

the models can be run giving the users a sense of what their costs could be. This could then be placed in the agreements as contingencies.

**Work Plan Update** - - Mr. Kovar referred to the RRWSP Work Plan Update dated May 7, which provides the status on each of the approved task orders. A copy of the update is attached to these minutes as Annex II.

### Task Orders

#### **Unmanned Aircraft Services**

Mr. Kovar presented the Unmanned Aircraft Services Task Order at a cost of \$71,443. The objective of this task order is to provide supportive visuals through oblique view videos that can be reviewed by multiple parties in order to gain a better understanding of areas and corridors. Specifically, the videos will provide a great perspective of trees, highline poles, steep topographic relief, farmsteads, and crossing of wetlands, rivers, railroads, and roads. This will prove valuable when doing detailed design work.

**Motion by Alternate Metzger to approve the Unmanned Aircraft Services Task Order in the amount of \$71,443. Second by Alternate Schelkoph. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

#### **Stakeholder Re-Engagement Round 2**

Ms. Mooridian presented the task order for round two of the user commitment meetings, stating that a new round of meetings is required for each of the current 35 participants to provide them updated information, which is expected to result in the participants signing a Participation Agreement and Water Use Contract. This task order provides funding to support Garrison Diversion in those meetings. Meetings are expected to begin this summer and end in the fall.

This task includes overall project management and development of a status list showing the progress with each user and any issues associated with that user. The overall objective of this task is to keep the project on schedule and on budget given the scope and timeline of the assignment. The anticipated cost of this task order is \$400,000.

**Motion by Director Johnson to approve the Stakeholder Re-Engagement Round 2 Task Order in the amount of \$400,000. Second by Director Hancock. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

#### **NDPDES Permit Application Supplement**

Mr. Kovar reported on work done and previous meetings with the State Department of Health regarding biota treatment. As a result, a permit application supplement will be submitted. He presented the task order for the NDPDES Permit Application Supplement. The purpose of this task order is to provide the engineer and its subconsultants authorization to complete additional work necessary to support a recommendation of an

appropriate level of treatment to protect the aquatic environment of the Red River basin in accordance with the latest direction by the State Department of Health and to assist Garrison Diversion with securing a new discharge permit. The cost of the task order is \$195,000.

The NDPDES permit application supplement will be prepared by the engineer in collaboration with Garrison Diversion, Vogel Law Firm, and the engineer's subconsultants.

Ms. Norgard provided background information on the permit process and explained the approach being used to prepare the application for the State Department of Health.

Mr. Burian added that Black & Veatch is refining work on the treatment process so it is better understood in terms of what is being proposed for treatment. He also identified the aquatic invasive species that are being studied.

**Motion by Alternate Shelkoph to approve the NDPDES Permit Application Supplement Task Order in the amount of \$195,000. Second by Alternate Metzger. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

**Program Management Update** - - Ms. Mooridian referred to the graph illustrating the legislative contingencies from HB1020 and updated the board on the status of each of the project components.

**Planning Level Budget** - - Ms. Mooridian referred to and reviewed the Planning Level Budget. As of May 10, \$5.2 million has been expended on Conceptual Design, \$9.8 million on Preliminary Design, \$2.5 million on Final Design, Easement and Administration and \$0 on construction. Of the \$43.9 million estimated program budget, a total of \$17.6 million has been spent. The smaller table at the bottom of the page shows a breakdown of the state appropriation and LAWA cost share by biennium.

Ms. Mooridian also referred to and reviewed the graph showing cumulative project spending. Copies of the budget and graph are attached to these minutes as Annex III.

## **FINANCIAL REPORT**

**2018 Budget Analysis Statement** - - Ms. Mooridian referred to and reviewed the Budget Analysis statement for the period of January 1, 2018, to April 30, 2018, a copy which is attached to these minutes as Annex IV.

Total income through April is \$33,274. Expenses are \$14,603. The total bank balance at the end of April was \$727,945.

**Motion by Director Johnson to approve the Budget Analysis Statement for the period of January 1, 2018, through April 30, 2018. Second by Director Hancock. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

**Bills Paid** - - Bills paid since the last meeting were \$7,175 for consulting fees to Brownstein Hyatt Farber Schreck and \$285 for 2018 membership dues to the ND Rural Water Systems Association.

**Summary of Dues and Cost Share Payments** - - Ms. Mooridian referred to the table showing membership dues and cost share payments received. Dues collected so far in 2018 total \$33,250.

### **UNFINISHED BUSINESS**

**Contract Development/MOU** - - Acting Chair Vein stated that currently LAWA is identified in state statute as a political subdivision and has been working very closely with Garrison Diversion. A formal agreement is needed that will identify the relationship of the two boards, and a Memorandum of Understanding (MOU) is being developed. Tami Norgard will represent Garrison Diversion, and LAWA would be looking to hire its own attorney, specifically for the intent of the MOU and a long-term agreement.

Acting Chair Vein reported that he has been working with Chair Mahoney and Bruce Grubb, Fargo's City Administrator, and they have made the recommendation to use the firm of Ohnstad Twichell, more specifically, John Shockley, who has worked on the Fargo Diversion Project.

Acting Chair Vein commented that this is being brought forward to the board to concur with retaining John Shockley. An engagement letter has been prepared for the board to consider.

Ms. Norgard said the board did have independent counsel in 2007 when Mike Dwyer was assisting with a MOU that was being negotiated at that time. Since the Record of Decision did not get signed, the MOU was never finalized. Chair Mahoney asked that she start preparing a MOU back in November, and there is a draft. LAWA will need its own legal counsel to negotiate a bulk water supply agreement with Garrison Diversion. Work needs to begin on those agreements, but in the interim in order to protect Garrison Diversion, it needs to be understood that LAWA must pay the 10 percent cost share. This would be included in the MOU, along with how decisions are made, how consultants are selected, etc.

Acting Chair Vein added that the board does want to make sure there is no conflict of interest with Ohnstad Twichell and their other clients.

Acting Chair Vein said that he has just received an engagement letter from Ohnstad Twichell addressed to him and Chair Mahoney. He would like the board to accept and approve the engagement letter. A cost schedule will be brought back to the board at a later date.

Alternate Siegert asked if a copy of the engagement letter could be provided to the board members for their review.

Ms. Norgard suggested that a couple of LAWA representatives be delegated to review and negotiate the retainer agreement. She added that it is not unusual to not know what the end cost will be for legal services.

Acting Chair Vein stated that the hourly rate structure is included in the engagement letter, but there is not a scope to develop a price range at this point in time.

Mr. Shockley addressed the board, stating that his understanding is that Ohnstad Twichell is being retained to work on the MOU between LAWA and Garrison Diversion. There may be additional work in the future that can be discussed at a later date.

Mr. Shockley said initially, the firm was concerned internally about how to address any conflicts of interest that they may have regarding some of the users. The firm wants to make sure upfront that any potential conflicts have been identified and have contacted administrators from different communities to make sure there were no conflicts.

Mr. Shockley said, as an additional precaution, they are designating three attorneys and one paralegal as representation for LAWA with a creation of a Chinese wall between those people and the rest of the firm.

Mr. Shockley said the fee schedule is currently \$310 for the highest hourly fee and \$165 per hour for the lowest. Once the scope of the engagement is better known, a budget can be put together.

Acting Chair Vein apologized for not getting the engagement letter with Ohnstad Twichell to the board sooner, but in order to keep the project moving forward, they would like to proceed with the engagement for services.

Ms. Norgard said since the board has not reviewed the agreement, Vice Chair Vein could delegate who he would like to have review the agreement with Ohnstad Twichell, and then the motion gets put into place without having to wait until the next meeting.

Acting Chair Vein said he wants the board to be comfortable, and anyone who wants to be a part of the process should contact him or Chair Mahoney. Obviously, a report will be provided at the next board meeting if there are any issues.

**Motion by Director Keller to approve a contract between LAWA and Ohnstad Twichell for legal services subject to acceptance of the Review Committee. Second by Director Moen. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Moen and Vein. Those voting nay: Mehnert-Meland. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

The Review Committee will consist of Chair Mahoney, Vice Chair Vein and Alternate Member Siegert.

## **NEW BUSINESS**

**Request for Statement of Qualifications and Preliminary Proposals for Value Engineering Services** - - Duane DeKrey, Secretary, provided the background on the value engineering concept.

Mr. Kovar referred to and explained the Draft Statement of Qualifications and Preliminary Proposals for Value Engineering Services in which Garrison Diversion is requesting Statements of Qualifications and Preliminary Proposals (SOQ/PP) from firms to provide a Value Engineering Team for review of the RRVWSP Preliminary Design Report (PDR) and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5.

The value engineering team will be made up of five to ten people, who will spend approximately one week studying the PDR and will come up with alternatives to add value to the process. They will then write a report that will go to the owners to review. Once the report is settled upon, it is sent to the engineers, and they begin to determine how to implement the recommendations into the design.

The budget amount for this effort is being estimated at \$150,000 to \$200,000.

Mr. Kovar said a selection committee will evaluate the firms submitting SOQ/PP to determine the top three firms and conduct interviews. Based on the submittals and interviews, the selection committee will choose the best-qualified firm.

Mr. Kovar suggested that the selection committee consist of two representatives from LAWA, two from Garrison Diversion and one from the State Water Commission.

Mr. Kovar stated once the SOQ/PP is approved, it will go out for advertisement. After the proposals are received, the committee would begin its evaluations and make a recommendation. Everything should be finalized by either late August or early September.

Ms. Mooridian reminded the board that this is the type of committee that was used when LAWA and Garrison Diversion were seeking national legal counsel and for the municipal advisor. The only addition would be a State Water Commission representative.

Acting Chair Vein added that Chair Mahoney will be in charge of appointing the two representatives from LAWA.

A copy of the SOQ/PP is attached to these minutes as Annex V.

**Motion by Alternate Schelkoph to approve the Request for Statement of Qualifications and Preliminary Proposals for Value Engineering Services. Second by Director Johnson. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.**

#### **OTHER**

There being no further business to come before the committee, the meeting adjourned at 1 p.m.

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Timothy Mahoney, Chair

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Duane DeKrey, Secretary



REGISTRATION

LAWA Board Meeting  
Fargo, North Dakota  
May 18, 2018

NAME	ADDRESS
Kimberly Cook	GDCD
Kristofer S. Frutso	Moorhead Public Service
Dave Pieper	Fargo City Comm.
Keith Myklebust	East Grand Forks Wash
BRIAN JOHNSON	EGF WATER & LIGHT
Al Grasser	City of Grand Forks
Steve Burian	AE <sub>2</sub> S
Roger Fenstad	GDCD - Cass Co.
Greg Beschold	GDCD - Barnes
Geneva Kaiser	GDCD - Stutsman Co; Stutsman Rural Water
GARY A. LEE	Senator - Dist. 22
April Walker	West Fargo A. Walker Consulting
John Shockey	Christie Twichell, P.C.
Way Paul Anderson	GDCD - Ransom Co.
KEN ROISE	GDCD - Burleigh Co.
Dave Schelkopf	Valley City
Steve Meyer	Carrington, GDCD
John Harlock	Agassiz Water District
TAMI Nordard	Vogel Law Firm
Lisa Schaper	GDCD
Men. Monahan	GDCD
Duane DeKrey	GDCD
Marty Mahoney by Duane DeKrey	Fargo
Ken Dem	Grand Forks
Kip Kover	GDCD
Mark Johnson	CRWA, LAWA
Kenneth Althoff	SEW, LAWA
Carol Sargent	Heintz City Assn. Mbr



## RRVWSP Work Plan Update May 7, 2018

### Goal

Spring 2016	Completed Conceptual Design and Cost Estimate
Summer 2017	Completed Preliminary Design and Cost Estimate for pipeline and pump station(s)
2017 - 2018	Complete Phased Final Design and Cost Estimates
2019 - 2027	Phased Bidding and Construction

Total draft budget to complete Conceptual, Preliminary and Final designs is \$66 million. The ND legislature appropriated \$12.359 million for the RRVWSP for the 2015-2017 biennium. The conceptual design phase has been completed; therefore, no further updates will be included in this report. The ND legislature appropriated \$30 million for the RRVWSP for the 2017-2019 biennium.

### Preliminary Design

The conceptual design was released in September 2016. The majority of the preliminary design has been completed; of the \$10 million cost estimate, approximately \$200,000 remains to be expended on the task orders. Moving forward with limited funds, it is cost effective to start project phasing. The Implementation Plan will provide a road map to move forward with items that have to be completed first, which include permit phasing, design phasing, and construction phasing.

### Final Design

The draft preliminary design was released early October 2017. Moving forward with limited funds, it is cost effective to start project phasing. Priority items to move forward first with final design and construction are discharge structure, trenchless crossings and portions of the intake.

**1) Pipeline segment 28 miles** – This task order will begin final design on a portion of the RRVWSP and is the first of several pipeline design task orders that will be executed to complete the project. Given the current level of state and local funding allocated for the project's design and construction, the length of the initial segment selected for final design and preparation of construction contract documents is approximately 28 miles. The general location of the 28-mile pipeline segment is in Foster and Wells Counties. The alignment and limits of the pipeline being designed under this task order are identified on the RRVWSP route overview map. This task order will deliver bid ready documents for this 28-mile segment. Estimated cost is \$3,840,000.

Status –Letters have been sent to utility companies asking for facility locations and details where crossings might occur. A portion of the 60% submittals were developed for review.

**2) Geotechnical** – This task order will allow engineers to drill supplemental borings along the Preliminary Design Report (PDR) pipeline alignment and discharge site and to complete laboratory testing of soil samples collected. These supplemental borings are necessary to characterize subsurface soil conditions not covered by the 2008 investigation. Relevant existing

soils data from the 2008 investigation will be used to the maximum extent practical to support activities. Estimated cost is \$544,000.

Status –All borings and soil resistivity tests are complete. Developed draft Geotechnical Baseline Report and Corrosion Protection Design Guide.

**3) Sediment Transport Analysis** – This task order will provide information as requested by the North Dakota State Water Commission (SWC) to evaluate the Sovereign Lands Permit for the Missouri River intake, as well as support the overall design of the intake screens. Estimated cost is \$396,000.

Status – All field work was completed prior to the river freezing. A request was made to USACE for a river analysis model HEC-RAS. Developed 1D and 3D models and completed geomorphic analyses.

**4) Trenchless Crossings** – This task order is for final design of tunneled or trenchless crossings in the first 28-mile section of pipeline selected for final design. The general outcome of this task order will be the preparation of construction contract documents. Estimated cost is \$452,000.

Status – A portion of the 60% submittals were developed for review.

**5) Discharge Site Structure** – This task order is for final design of the discharge structure. The general outcome of this task order will be the preparation of construction contract documents. Estimated cost is \$508,000.

Status – The control valve and discharge structure were moved to a combined site due to wetland concerns. Started developing grading, drainage and site civil plans. Evaluating re-aeration approach and finalizing hydraulics plan.

**6) Land Services** – This task order is for survey support services, easement and option acquisition for RRWSP parcels. The RRWSP pipeline is separated into segment 1, 2a and 2b, 3 and 4. Authorization has been approved to move forward with only segment 1. Estimated cost for segment 1 is \$556,446.

Status – Drafting several letters that will start the land acquisition phase. Prepare legal descriptions for the survey certificates for easement work.

## **Financial**

**1) Financial Modeling/Cost Allocation** – The task order is to develop a financial plan for the RRWSP. Various funding methods, project implementation scenarios, and cost-share scenarios are being evaluated. Financing strategies will be generated from these scenarios. Estimated cost is \$363,800.

Status – The cost allocation model was refined to include a tiered allocation structure, which considers how project users will benefit from the project by assessing water supply needs, as well as access to project water. Feasibility and ability to pay studies are being conducted for roughly ten systems - both large and small systems. This work

is in conjunction with the work being completed by Ernst & Young Infrastructure Advisors (EYIA).

**2) Municipal Advisor** – EYIA was selected through an RFP process to provide municipal advisory services for the RRWSP. In addition, Springsted will be retained on an as-needed basis for the issuance of bonds and related efforts. These firms have a fiduciary responsibility to GDCD. Estimated cost is \$374,835.

Status – EYIA is refining a financial model using capital spend rates based on different financing scenarios and construction periods. The financial modeling includes quantified market risks, costs associated with continued project operations, maintenance and renewal for project long-term and recurring replacement assets. EYIA's work is jointly occurring and being incorporated into modeling being completed by AE2S and Black & Veatch. The models are reviewed by the LAWA Financial Advisory Committee.

### **Program**

**1) Program Management** – The overall RRWSP is expected to spend \$30 million in the 2017-2019 biennium and potentially \$180 million or more the next biennium. The objective of this task order will support the development and maintenance of a variety of program management support tools to help successfully execute the project. The tools and processes are expected to be developed and implemented during this biennium and be ready to support a significantly increased program size in the following biennium. Estimated cost is \$491,000.

Status – Program management meeting #1 focused on all aspects of PM, PM #2 focused on the schedule, and other meetings were held developing PM tools and gaining knowledge about program delivery models.

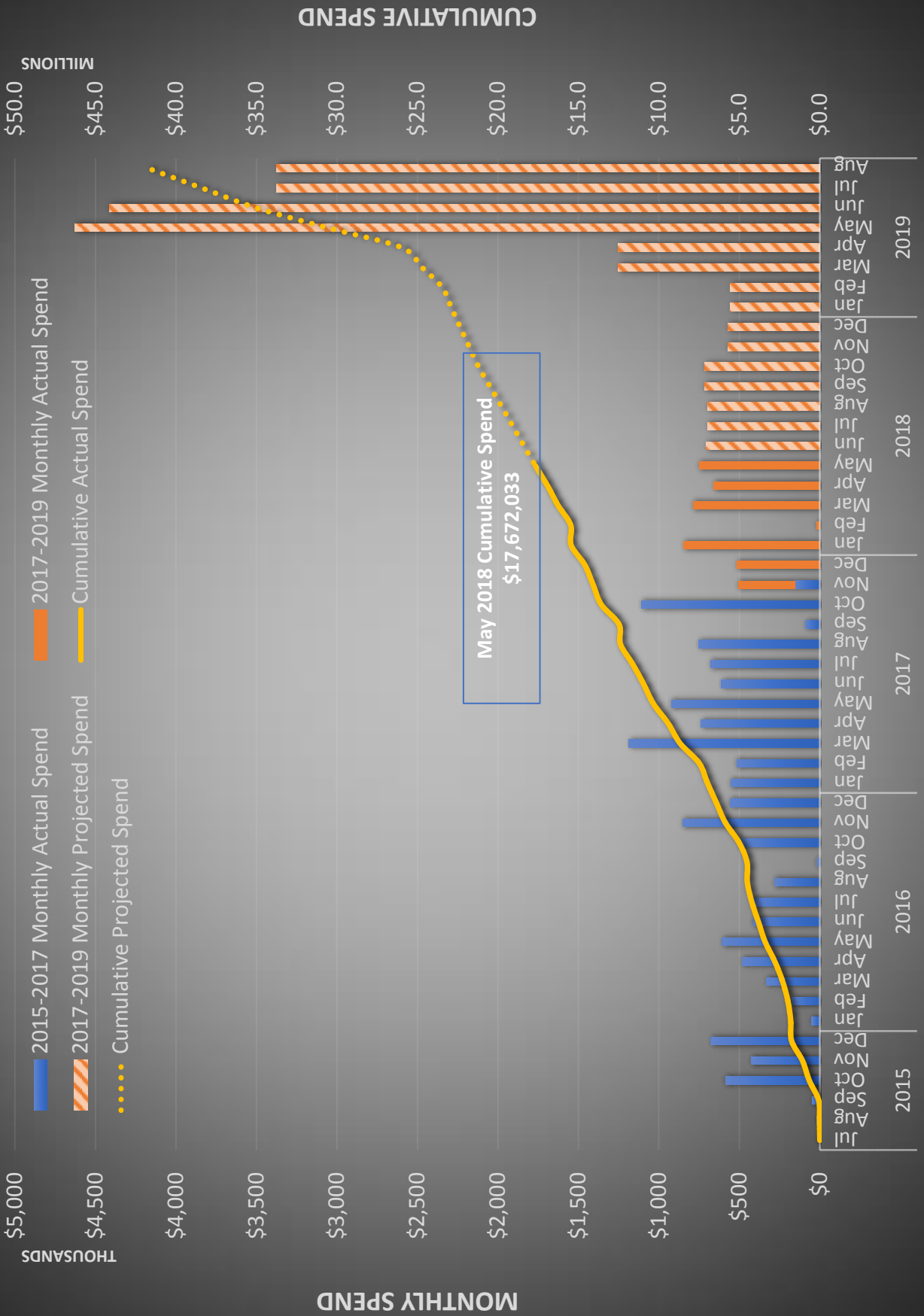
**Red River Valley Water Supply Project  
Planning Level Budget**

May 10, 2018	Percent Complete	Current Estimate	Actual Expenses	Outstanding Expenses
<b>Conceptual Design Subtotal</b>	100%	\$ 5,302,987	\$ 5,297,121	\$ 5,866
<b>Preliminary Design</b>				
Missouri River Conventional Intake Design	100%	\$ 1,010,778	\$ 1,010,778	\$ -
Pipeline Alignment McClusky to Split & Land Services (ROE)	100%	\$ 3,436,073	\$ 3,435,888	\$ 185
Pipeline Alignment Washburn-McClusky & Land Services (ROE)	100%	\$ 592,433	\$ 592,433	\$ -
Pipeline from Split to Baldhill Creek (RRV) Land Services (ROE)	100%	\$ 574,726	\$ 574,726	\$ -
Land Services (Aerial)	100%	\$ 259,694	\$ 259,694	\$ -
Main Pump Station and Break Tank	91%	\$ 997,267	\$ 911,504	\$ 85,763
StateMod (includes amendments 1 & 2)	91%	\$ 422,801	\$ 382,833	\$ 39,968
Pipeline Extensions	100%	\$ 627,333	\$ 624,528	\$ 2,805
Discharge Design (Sheyenne/Baldhill)	94%	\$ 617,000	\$ 581,345	\$ 35,655
Administration (cost & schedule, communications, LAWA)	100%	\$ 240,208	\$ 240,208	\$ -
Legal	100%	\$ 370,283	\$ 370,283	\$ -
Financial Modeling	100%	\$ 363,800	\$ 363,800	\$ -
Municipal Advisor	100%	\$ 374,835	\$ 374,835	\$ -
Workflow Manager	90%	\$ 150,000	\$ 135,698	\$ 14,302
<b>Preliminary Design Subtotal</b>	<b>98%</b>	<b>\$ 10,037,231</b>	<b>\$ 9,858,553</b>	<b>\$ 178,678</b>
<b>Final Design</b>				
<b>Engineering</b>				
Pipeline Final Design - 28 miles	24%	\$ 3,840,000	\$ 912,483	\$ 2,927,517
Trenchless Final Design	31%	\$ 452,000	\$ 141,036	\$ 310,964
Discharge Final Design	11%	\$ 508,000	\$ 57,159	\$ 450,841
Land Services	22%	\$ 556,446	\$ 120,853	\$ 435,593
<i>Land Agent Services</i>	<i>Upcoming</i>	\$ 464,225	\$ -	\$ 464,225
Geotechnical	70%	\$ 544,000	\$ 380,942	\$ 163,058
Sediment Transport	33%	\$ 396,000	\$ 132,201	\$ 263,799
Missouri River Intake Final Design	3%	\$ 1,985,000	\$ 60,833	\$ 1,924,167
Upper Sheyenne Discharge Analysis *	93%	\$ 36,723	\$ 34,109	\$ 2,614
<i>Unmanned Aircraft System Services</i>	<i>Upcoming</i>	\$ 71,443	\$ -	\$ 71,443
<i>Value Engineering</i>	<i>Upcoming</i>	\$ 200,000	\$ -	\$ 200,000
<i>NDPDES Permit Application Supplement</i>	<i>Upcoming</i>	\$ 195,000	\$ -	\$ 195,000
<b>Easements &amp; Options</b>				
<i>Exercise Existing Options</i>	<i>Upcoming</i>	\$ 1,777,775	\$ -	\$ 1,777,775
<i>Acquire New Options &amp; Easements</i>	<i>Upcoming</i>	\$ 1,008,000	\$ -	\$ 1,008,000
<b>Financial, Administration, Legal, Etc.</b>				
Financial Modeling/Cost Allocation	19%	\$ 1,021,047	\$ 189,598	\$ 831,449
Program Management Set Up	88%	\$ 491,000	\$ 429,896	\$ 61,104
Administration (communications, LAWA)	6%	\$ 550,000	\$ 33,300	\$ 516,700
<i>Stakeholder Support</i>	<i>Upcoming</i>	\$ 398,830	\$ -	\$ 398,830
Legal	4%	\$ 600,000	\$ 23,950	\$ 576,050
<i>Undesignated</i>	<i>Upcoming</i>		\$ -	\$ -
<b>Final Design, Easement &amp; Administration Subtotal</b>	<b>17%</b>	<b>\$ 15,095,489</b>	<b>\$ 2,516,359</b>	<b>\$ 12,579,130</b>
<b>Construction</b>				
<i>Pipeline Trenchless Construction</i>	<i>Upcoming</i>	\$ 7,000,000	\$ -	\$ 7,000,000
<i>Discharge Construction</i>	<i>Upcoming</i>	\$ 2,000,000	\$ -	\$ 2,000,000
<i>Intake Construction</i>	<i>Upcoming</i>	\$ 4,000,000	\$ -	\$ 4,000,000
<i>Construction Phase Engineering (Trenchless &amp; Intake)</i>	<i>Upcoming</i>	\$ 500,000		\$ 500,000
<b>Construction Subtotal</b>	<b>0%</b>	<b>\$ 13,500,000</b>	<b>\$ -</b>	<b>\$ 13,500,000</b>
<b>Total Program Budget</b>	<b>40%</b>	<b>\$ 43,935,707</b>	<b>\$ 17,672,033</b>	<b>\$ 26,263,673</b>

2015/2017 State Appropriation \$12,359,000	\$ 12,359,000
2015/2017 LAWA Cost Share \$1,373,225	\$ 1,373,225
2015/2017 total	\$ 13,732,225
2017/2019 State Appropriation	\$ 30,000,000
<b>RRVWSP Program Budget</b>	<b>\$ 43,732,225</b>
<b>2017/2019 Appropriation Spent to Date</b>	<b>\$ 3,939,808</b>
<b>2017/2019 Committed Outstanding</b>	<b>\$ 8,642,535</b>
<b>2017/2019 Not Committed</b>	<b>\$ 18,680,215</b>

\* not subject to local cost share

# Red River Valley Water Supply Project Planning Level Budget





**2018 Budget Analysis**

For the period of January 1, 2018 - April 30, 2018

<b>Income</b>	<b>2018 Budget</b>	<b>Actual as 04/30/18</b>	<b>Balance of Budget</b>
Dues Income	\$ 29,000.00	\$ 33,250.00	\$ (4,250.00)
Interest Income	\$ 50.00	\$ 24.31	\$ 25.69
Miscellaneous	\$ -	\$ -	\$ -
Cost Share/Development Agr.	\$ 89,000.00	\$ -	\$ 89,000.00
<b>Total Income</b>	<b>\$ 118,050.00</b>	<b>\$ 33,274.31</b>	<b>\$ 84,775.69</b>

**Expenses**

Dues Expenses	\$ 1,280.00	\$ 1,285.00	\$ (5.00)
Accounting	\$ 6,500.00	\$ 6,000.00	\$ 500.00
Directors Expense	\$ 500.00	\$ -	\$ 500.00
Insurance	\$ 550.00	\$ -	\$ 550.00
Service Fees	\$ 66.00	\$ 22.00	\$ 44.00
Engineering	\$ -	\$ -	\$ -
Adm/Legal/Financial	\$ 53,500.00	\$ 7,296.67	\$ 46,203.33
<b>Total Expenses</b>	<b>\$ 62,396.00</b>	<b>\$ 14,603.67</b>	<b>\$ 47,792.33</b>

**Account Activity**

Beg. Bank Balance 1-1-18		\$ 709,274.57
Income Received		\$ 33,274.31
<b>Total Funds Available</b>		<b>\$ 742,548.88</b>
Service Fees	\$ 143.67	
#1139 Eide Bailly	\$ 6,000.00	
#1140 ND Water Coalition	\$ 1,000.00	
#1141 ND Rural Water Systems	\$ 285.00	
#1142 Garrison Diversion	\$ 7,175.00	
<b>Total Expenses</b>	<b>\$ 14,603.67</b>	
<b>Ending Bank Balance</b>		<b>\$ 727,945.21</b>



**Red River Valley Water Supply Project**  
**Request for Statement of Qualifications**  
**and**  
**Preliminary Proposal for Value Engineering Services**

**May 9, 2018**

The Garrison Diversion Conservancy District (Garrison Diversion) is requesting Statements of Qualifications and Preliminary Proposals (SOQ/PP) from firms to provide a Value Engineering Team (VE Team) for review of the Red River Valley Water Supply Project Preliminary Design Report (PDR) dated April 2018 and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5. The firm will be selected using the following process:

- A) The Selection Committee will conduct an initial evaluation of firms that submit a SOQ/PP. The Selection Committee will determine the top three firms and conduct phone interviews to obtain clarification on the submittals and to collect additional information. Based on the submittals and phone interviews, the Selection Committee will determine the best-qualified firm.
- B) After the Selection Committee has determined the best-qualified firm, all other firms will be notified that the selection process has been completed, and they were not selected. Negotiations with the first ranked firm will then be initiated. If those negotiations are unsuccessful, Garrison Diversion will enter negotiations with the second ranked firm.
- C) Garrison Diversion reserves the right to evaluate the submitted SOQ/PP, to waive any irregularities therein, or to reject any and all SOQ/PP should it be deemed in the best interest of Garrison Diversion.

**The deadline for receipt of the SOQ/PP is 2:00 p.m. CST, (insert date).** Ranking will take place the following week with phone interviews to follow. It is the Selection Committee's goal to complete the process as indicated in the Schedule under Scope of Services.

The SOQ/PP can be emailed or delivered on flash or thumb drive to:

Kip Kovar, P.E.  
District Engineer/Deputy Program Manager for RRVWSP Engineering  
Garrison Diversion Conservancy District  
PO Box 140  
401 Hwy 281 NE (physical address)  
Carrington, ND 58421

If you have any questions concerning the project or the preparation of a SOQ/PP, please contact Kip Kovar at 701-652-3194 (work), 701-652-5736 (cell), or [kipk@gdcd.org](mailto:kipk@gdcd.org).

## Scope of Services

### Introduction

The Red River Valley Water Supply Project (Project) is being undertaken to provide a reliable supplemental water supply to eastern and central North Dakota (ND), primarily in the event of future severe drought conditions. The Project may also provide water to support industrial development in addition to being an environmental benefit to local downstream rivers during times of severe drought by augmenting natural flows. The current Project is a state and locally funded Project, replacing the previously federally funded version. The attached figure shows the pipeline alignment and the Project's major hydraulic structures.

### Background

The Project consists of a conventional surface water intake on the Missouri River and an associated pumping station, a biota water treatment facility, several hydraulic facilities along the pipeline's alignment, and a 167-mile pipeline that will flow from the Missouri River near Washburn, ND, to the Sheyenne River immediately north of Lake Ashtabula. The peak capacity of the system will be 165 cubic feet per second (cfs). As conditions warrant, water will be taken directly from the pipeline as well as released from Baldhill Dam (Lake Ashtabula) and transported to the end users via the Sheyenne and Red Rivers (River System), in addition to meeting certain aquatic needs.

As Garrison Diversion's engineering consultant, the Black & Veatch/AE2S Team (Project Team) was tasked with providing a PDR and a 60-percent design submittal for Pipeline Contract 5 (28 miles of pipeline). In addition, the Project Team is securing construction related permits, completing cultural and environmental evaluations and assessments along the alignment, and assisting Garrison Diversion in obtaining access agreements and 150-foot permanent easements. The Project Team is also assisting Garrison Diversion with property platting and acquisition of parcels on which to build facility assets.

### VE Project Description

The source of water will be the Missouri River through a conventional intake south of the City of Washburn, ND. A 72-inch diameter pipeline will convey water approximately 167 miles east to the Sheyenne River. The water will be pumped through two pump stations: 1) Missouri River Intake Pumping Station (MRIPS) and 2) Main Pumping Station (MPS). The MRIPS will pump water from the Missouri River to treatment facilities, located at the MPS, to meet State requirements. Water will then be pumped from the MPS to a high point where it will enter Hydraulic Break Tanks (HBT) and then flow by gravity to the Control Valve Structure (CVS) and Discharge Structure and finally into the Sheyenne River. Lake Ashtabula will serve as a regulating reservoir, allowing controlled releases of the water as needed.

The VE will focus on the hydraulics and pipeline components, as more fully described in the PDR (and the 60-percent pipeline design submittal). Specific items for review include:

- Technical/cost/value review of the proposed utilization of HBT in the conveyance system (versus none)
- Technical/cost/value considerations (benefits/drawbacks) of a pressure control structure deployed between HBT and CVS
- Technical/cost/value review of the proposed number and type of pipeline isolation valves
- Technical/cost/value review of proposed pipe material and interior/exterior coatings
- Technical/cost/value review of proposed trenchless crossings designs. (Note: the need for the trenchless crossings is not being reviewed but alternative designs or construction techniques should be evaluated.)
- Technical/cost/value review of proposed number of air release/vacuum relief facilities
- Technical/cost/value review of proposed blow-off facilities
- Technical/cost/value review of proposed fiber optic data/communication system
- Technical/cost/value review of proposed corrosion control plan
- Technical/cost/value review of proposed agricultural land restoration plan

As a part of the Conceptual Design Report, developed prior to the PDR, a 400-foot corridor for the pipeline was established; therefore, evaluation of other corridors will not be a part of this VE evaluation. Garrison Diversion has obtained easement options for about 50 percent of the necessary pipeline right-of-way.

### **VE Scope of Work**

It is intended that the selected Value Engineering Team will conduct a 40-hour value engineering workshop to be held in Fargo, ND, at a time and place as agreed by Garrison Diversion and the Value Engineering Team.

The work will consist of the following individual task:

- Communicating with Garrison Diversion's project manager either in person or by telephone and reaching a decision about details of the value engineering study, including the duration of each proposed workshop.
- Reach an agreement with Garrison Diversion's project manager regarding the date for the value engineering workshop(s) and the team members to be provided by Garrison Diversion, if any, and by the Value Engineering Team, if any.
- Prior to the value engineering workshop, accomplish the following activities:
  - Coordinate workshop logistics;
  - Review the design documents and other documents about the Project provided by Garrison Diversion with the Value Engineering Team;

- Using information provided by Garrison Diversion and by the design team, prepare cost, energy, life-cycle cost, space, and/or other models appropriate; and
- Conduct a validation of the estimated project cost.
- Workshop will be conducted using a job plan consistent with the Society of American Value Engineers (SAVE) International guidelines for value studies. The workshop will be conducted in the location identified in this SOQ/PP. The facility in which the workshop will be conducted will be provided and paid for by EDCE. The value engineering workshop will consist of the following six phases conducted over a period of five (5) consecutive days:
  - Information Phase
  - Function Analysis Phase
  - Creativity Phase
  - Evaluation Phase
  - Development Phase
  - Presentation Phase
- Following the value engineering workshop, conduct the following activities:
  - Submit the preliminary value report in electronic and hard copy format, consisting of the workshop products within fourteen (14) days of the completion of the values workshop;
  - Review the design team written responses to the preliminary value engineering report, consult with the Value Engineering Team as necessary, and prepare for a decision-making meeting;
  - Attend the decision-making meeting and provide information to the decision-makers at the meeting relative to the pros and cons of each value recommendation. Respond to the concerns raised by the design team and others, and assist the designer, design project manager and Garrison Diversion's project manager in reaching decisions about whether to incorporate each value recommendation into the project.
  - Prepare a draft final report within fourteen (14) days following the decision-making meeting that document the entire VE study, including the decision made.

Make appropriate revisions to the draft final report based on comments from Garrison Diversion's project manager and provide an electronic and ( ) hard copies within fourteen (14) days following receipt of comments from Garrison Diversion's project manager.

#### **VE Materials** –

- Preliminary Design Report
- Pipeline Contract 5 – 60% design submittal
- Trenchless Crossings Contract 5 – 60% design submittal

- Engineer's Opinion of Probable Construction costs

### **Schedule**

The following schedule is anticipated for the study;

- Issue SOQ/PP mid-May
- Firm submit qualifications plus 3 weeks
- Selection Committee evaluates qualifications and short-list plus 1 week
- Selection Committee conduct interviews plus 1 week
- Notify most qualified firm
- Scope/Fee/Negotiation plus 2 weeks
- Board Approval (Garrison Diversion & Lake Agassiz Water Authority) 3-week window
- Notice to Proceed
- Pre-workshop tasks plus 2 weeks
- Workshop 1 week: August
- Preliminary Report plus 2 weeks
- Decision/Implementation plus 1 week
- Draft Final Report plus 2 weeks
- Final Report plus 2 weeks

### **Criteria for Evaluation of the SOQ/PP**

The criteria for both evaluating and ranking the firms will include the following:

1. The education, experience and expertise of the VE team members. Garrison Diversion expects the team listed in the proposal to perform the work on the Project. (Any proposed Project Manager without SAVE certification will disqualify the firm's proposal.)
2. The firm's specific experience history of performance on similar VE projects for pipeline projects.
3. Availability of the proposed personnel to perform the required work in the timeframe of the VE review.
4. The firm's approach to planning, organizing and managing the VE effort, including communication procedures, approach to problem solving, cost estimating, quality improvement program and similar factors.
5. Recommendations and opinions of firm's previous VE clients as to its ability to provide valuable VE recommendations and meet deadlines and remain within budget.

## Instructions for Preparation of SOQ/PP

### **General**

In order to minimize the work of the firms initially submitting and the review time required by the Selection Committee, the following instructions should be followed in preparing the SOQ/PP. We ask firms to judge for themselves if they feel qualified to perform the work and if they do, to submit to this request.

- \* Organize the submittal into the following sections:

- Section 1 – Project Team Organization
- Section 2 – General Information about the firm
- Section 3 – Experience Record and References
- Section 4 – VE Session Approach
- Section 5 – Estimated Cost of the Preliminary Proposal
- Section 6 – Summary

- \* Limit the contents of the submittal to that described for each section.

- \* Be succinct.

### **Section 1 - Project Team Organization**

Provide the following information about the organization or team which you would establish for this particular project.

- \* Name of firm(s)
- \* Relationship of the firms, if more than one.

Will relationship be a joint venture or a prime-sub type? If prime-sub type, state which firm will be the prime and what role the subs will play in the Project.

- \* Key personnel expected to be assigned to the project.

List the VE team members on the Project. If more than one firm is involved, provide this information for each firm and clearly indicate who will serve as project manager for the entire team.

- \* Brief Resumes

Provide an abbreviated resume for each individual listed in the Project organization. Include the following information in each resume:

- Name
- Title within the firm
- Project assignment

- Education - degree/year/university/specialty
- Registration - state/year
- Certifications or special training that relate to VE reviews
- Number of years with current firm
- Summary of experience relative to this type of project

## **Section 2 - General Information about the Firm**

- \* Type of firm (private/public Corporation, partnership)
- \* Number of years in business
- \* Office locations - list home office and office of Project Manager
- \* Type of services firm normally provides
- \* Technology capabilities
- \* Availability of personnel for the project
- \* Professional liability insurance - limits of current coverage

## **Section 3 - Experience Record and References**

Prepare a tabulation of information about three projects performed by the firm during the last ten years which best illustrates the firm's ability to perform services required for this Project. Following is the minimum information required:

- \* Location of project and owner; provide name of an individual, address and phone number of owner representative who is personally familiar with the project
- \* Characteristics of the facility: comparable pipeline size and other project characteristics that reflect the Project's elements under review
- \* Brief description of the project and results of the review

The described experience referenced should reflect upon the Project Manager. The submittal may include an additional project to represent experience of any other firms involved in the project to highlight their skills. The projects highlighted should note the key people who participated in that project and their role.

## **Section 4 - Approach**

The Project is a major investment for the State of North Dakota and the local water users. Garrison Diversion is concerned with the following critical areas in regards to the Project:

- Economy, reliability and efficiency of the final recommended technology
- Life cycle cost control

- Maintenance and maintainability
- Constructability
- Restoration of the pipeline corridor
- Environmental impacts and mitigation

In this section, prepare a preliminary proposal on how the firm will evaluate the pipeline Preliminary Design. Include what key elements the firm feels are critical in the decision-making process.

Subsequent to your review of the overall scope of the Project, Garrison Diversion would be interested in any comments which may differ from or serve to strengthen the overall Project.

DRAFT



Red River Valley Water Supply Project  
Garrison Diversion Conservancy District

