



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## Telephone Call-In Information

**Number:** 1-888-346-3659  
**Access Code:** 4739041#

***Audio Telephone Conference Call Meeting  
Governor's Conference Room - Ground Floor  
State Capitol  
Bismarck, North Dakota***

***February 27, 2014  
1:00 P.M., CST***

## AGENDA

- A. Roll Call
- B. Consideration of *Agenda* - *Information pertaining to the agenda items is available on the State Water Commission's website at <http://www.swc.nd.gov>*
- C. ***Water Supply Infrastructure - Dickinson, Watford City, Williston*** \*\*
- D. ***Red River Valley Water Supply Value Engineering Contract*** \*\*
- E. ***Southwest Pipeline Project:***
  - 1) ***Contract 3-2A, Membrane Systems Equipment Procurement for new Dickinson Water Treatment Plant*** \*\*
  - 2) ***Contract 2-8F, Dunn Center Service Area Main Transmission Line, Phase II*** \*\*
- F. Other Business:
  - 1) Rice Lake Drain Project, Ward County
- G. Adjournment

**\*\* BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION**

To provide telephone accessibility to the State Water Commission meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

## **MINUTES**

### **North Dakota State Water Commission Audio Telephone Conference Call Meeting Bismarck, North Dakota**

**February 27, 2014**

The North Dakota State Water Commission held an audio telephone conference call meeting in the Governor's conference room at the State Capitol, Bismarck, North Dakota, on February 27, 2014. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:00 p.m., and announced a quorum was present.

#### **STATE WATER COMMISSION MEMBERS PRESENT:**

Governor Jack Dalrymple, Chairman  
Tom Bodine, representing Doug Goehring, Commissioner,  
North Dakota Department of Agriculture, Bismarck  
Arne Berg, Member from Devils Lake  
Maurice Foley, Member from Minot  
Larry Hanson, Member from Williston  
George Nodland, Member from Dickinson  
Robert Thompson, Member from Page  
Harley Swenson, Member from Bismarck  
Douglas Vosper, Member from Neche

#### **OTHERS PRESENT:**

Todd Sando, State Engineer, and Chief Engineer-Secretary,  
North Dakota State Water Commission, Bismarck  
State Water Commission Staff  
Andrea Travnicek, North Dakota Office of the Governor, Bismarck  
Jennifer Verleger, North Dakota Office of Attorney General, Bismarck  
Mary Massad, Southwest Water Authority, Dickinson  
Tyson Decker, Bartlett & West/AECOM, Bismarck  
Jim Neubauer, City of Mandan  
Britt Aasmundstad, Department of Agriculture, Bismarck  
Representatives from the Cities of Dickinson, Watford City and Williston (via telephone)

The attendance register is on file with the official minutes.

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

## **CONSIDERATION OF AGENDA**

The agenda for the February 27, 2014 State Water Commission audio telephone conference call meeting was modified to include a discussion of the proposed Rice Lake drain project in Ward county.

***It was moved by Commissioner Foley, seconded by Commissioner Nodland, and unanimously carried, that the agenda be accepted as modified.***

**2013-2015 STATE WATER SUPPLY, COMMUNITY INFRASTRUCTURE - APPROVAL OF STATE COST PARTICIPATION GRANTS (TOTAL-\$32,100,000); (CITY OF DICKINSON-\$18,400,000) (CITY OF WATFORD CITY-\$6,700,000) (CITY OF WILLISTON-\$7,000,000) (SWC Project Nos. 2050DIC; 2050WAT; and 2050WLL)**

Requests from the cities of Dickinson, Watford City, and Williston were presented for the State Water Commission's consideration of state cost participation grant funding for capital infrastructure water projects needed within the next three years to address current and future demands of their systems resulting from the growing population of western North Dakota. These communi-

ties are seeking funds in addition to sales tax, general obligation bonds, energy impact grants, and enterprise funds. The proposed projects are in various stages of planning, design, bidding for construction, and under construction. The estimated water distribution project costs are: City of Dickinson - \$32,100,000, City of Watford City - \$11,700,000, and City of Williston - \$23,200,000.

Representatives of the cities of Dickinson, Watford City and Williston presented additional information relating to their capital infrastructure water projects, and responded to inquiries from the State Water Commission members that included maintenance costs, special city assessments, projects design, costs, and construction.

In December, 2013, the State Water Commission began its review of potential revisions to the Cost Share Policy, Procedure, and General Requirements. Cost share modifications are currently being considered that could expand the criteria for the state's grant program in order that more water supply projects could qualify for state assistance. Governor Dalrymple stated that although the Commission has not approved revisions to the current cost share policy, the state grant requests before the Commission would support critical water supply projects in the cities of Dickinson, Watford City and Williston based on population growth and financial need. Governor Dalrymple also expressed that "expanding the state's grant program would provide assistance in meeting North Dakota's growing needs for access to quality water supplies."

Funding for pre-construction engineering and construction engineering eligible costs was discussed. It was the general consensus of the State Water Commission members to fund the pre-construction engineering costs at 35 percent of the eligible costs, construction engineering costs at 60 percent of the eligible costs, and construction costs at 60 percent of the eligible costs.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation grants of 35 percent of the eligible costs for pre-construction engineering, 60 percent of the eligible costs for construction engineering, and 60 percent of the eligible costs for construction, not to exceed a total state cost participation grant allocation of \$32,100,000 to be disbursed as follows: 1) City of Dickinson - \$18,400,000; 2) City of Watford City - \$6,700,000; and 3) City of Williston - \$7,000,000.

***It was moved by Commissioner Nodland and seconded by Commissioner Berg that the State Water Commission approve state cost participation grants of 35 percent of the eligible costs for pre-construction engineering, 60 percent of the eligible costs for construction engineering, and 60 percent of the eligible costs for construction, not to exceed a total state cost participation grant allocation of \$32,100,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) to be disbursed as follows: 1) City of Dickinson - \$18,400,000; 2) City of Watford City - \$6,700,000; and 3) City of Williston - \$7,000,000. These actions are contingent upon the availability of funds, and are subject to future revisions.***

***Commissioners Berg, Foley, Tom Bodine representing Commissioner Goehring, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**RED RIVER VALLEY WATER SUPPLY  
VALUE ENGINEERING STUDY -  
AUTHORIZATION TO ENTER  
INTO CONTRACT WITH CH2MHILL  
IN THE AMOUNT OF \$375,000  
(SWC Project No. 325)**

On December 23, 2013, the North Dakota State Water Commission issued a Request for Proposals for a value engineering study of the Red River valley water supply alternatives to supply water from the Missouri River to the Red River valley users (municipalities, rural water districts, and industry). The alternatives vary in regard to their alignment, length, and environmental permitting requirements. The overall value engineering study goal is to assist the state select an alignment that provides the best opportunity to complete the project.

Six proposals were received, and the top three scoring firms were interviewed on January 27 and 28, 2014. The top candidate was CH2MHILL, who has considerable experience with similar projects in design, planning, construction, and legal perspectives. The Commission staff negotiated the scope of work with CH2MHILL focusing on deliverables of comparative costs, viability, and risk of a federal nexus for three alternatives compared to the federal preferred alternative in the Environmental Impact Statement performed by the U.S. Bureau of Reclamation, which was finalized in 2007. The negotiated contract cost with CH2MHILL was \$375,000, with an anticipated completion date of May 16, 2014.

It was the recommendation of Secretary Sando that the State Water Commission authorize the Secretary to the Commission to enter into a contract with CH2MHILL for the Red River valley water supply value engineering study, and that the State Water Commission approve an allocation not to exceed \$375,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) to support the contract.

***It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission authorize the Secretary to the Commission to enter into a contract with CH2MHILL for the Red River valley water supply value engineering study, and that the State Water Commission approve an allocation not to exceed \$375,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) to support the contract. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Tom Bodine representing Commissioner Goehring, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**SOUTHWEST PIPELINE PROJECT -  
AUTHORIZATION TO AWARD  
CONTRACT 3-2A, MEMBRANE  
SYSTEMS EQUIPMENT PROCURE-  
MENT AT NEW DICKINSON WATER  
TREATMENT PLANT, TO TONKA  
WATER, PLYMOUTH, MN, IN THE  
AMOUNT OF \$1,934,137.58  
(SWC Project No. 1736-99)**

On January 23, 2014, bid packages were opened for Southwest Pipeline Project, Contract 3-2A, New Dickinson Water Treatment Plant Membrane Systems Procurement. This contract consists of furnishing micro-filtration or ultra-filtration membrane equipment for removing suspended solids for the proposed Dickinson water treatment plant to be located on property east of

the existing Dickinson water treatment plant, which is currently owned by the city of

Dickinson. The scope of supply was generally for membrane systems equipment with a capacity of approximately 6,000,000 million gallons per day (MGD), along with pre-filtration membrane backwash, membrane clean-in-place, air integrity testing, air scouring, and integration and controls equipment. A 'secondary' set of membranes will also be used to recover most of the backwash water generated by the 'primary' membranes.

The new water treatment plant is proposed with a capacity of 6 MGD and will initially operate in conjunction with the existing Dickinson water treatment plant, which has a capacity of 12 MGD. The 6 MGD plant can be expanded in phases for a total capacity of 18 MGD when the existing plant is retired in phases. Some parts of the existing plant are approaching 60 years in age. The new plant will employ ozonation of the raw water to combat taste and odor issues followed by lime softening and membrane filtration.

Competitive sealed proposals were solicited for this contract in accordance with North Dakota Administrative Code 4-12-12. Three proposals were received, one proposal did not contain a valid bid bond, therefore, the proposal was considered non-responsive and was not opened. The other two proposals received were from Tonka Water, Plymouth, MN, and H2O Innovation USA, Inc., Champlin, MN. The award of this contract is based on a 20-year life cycle analysis, completed by Bartlett & West/AECOM.

The bid form included two bid alternates. Bid alternate 1 was for an additional 12 months of warranty on all equipment, excluding the membranes. Bid alternate 2 was for the additional costs of stainless steel support frames for the equipment. The apparent low bid for the base bid with bid alternative 1 was \$1,934,137.58 submitted from Tonka Water, Plymouth, MN,

The contract documents allow the State Water Commission to select the most advantageous bid. Based on the project engineer's review, the bid received from Tonka Water, Plymouth, MN, appeared to be in accordance with the advertisement for construction bid and the bid documents, and is considered to be a responsive bid. It was the recommendation of the project engineer to award Contract 3-2A to Tonka Water, Plymouth, MN. The award of the contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by Tonka Water, and review/approval by the Commission's legal counsel.

The contract will be funded from the 2013-2015 biennium State Water Commission allocation to the Southwest Pipeline Project.

It was the recommendation of Secretary Sando that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 3-2A, New Dickinson Water Treatment Plant Membrane Systems Procurement, based on the base bid plus bid alternate 1, in the amount of \$1,934,137.58, to Tonka Water, Plymouth, MN.

***It was moved by Commissioner Swenson and seconded by Commissioner Hanson that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 3-2A, New Dickinson Water Treatment Plant Membrane Systems Procurement, based on the base bid plus bid alternate 1, in the amount of \$1,934,137.58, to Tonka Water, Plymouth, MN. This action is contingent upon the satisfactory completion and submission of the contract documents by Tonka Water, and the review/approval by the Commission's legal counsel.***

***Commissioners Berg, Foley, Tom Bodine representing Commissioner Goehring, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***SOUTHWEST PIPELINE PROJECT -  
AUTHORIZATION TO AWARD  
CONTRACT 2-8F, DUNN CENTER  
BOOSTER TO NORTH FAIRFIELD  
BOOSTER MAIN TRANSMISSION  
PIPELINE, TO CARSTENSEN  
CONTRACTING, INC., PIPESTONE, MN,  
IN THE AMOUNT OF \$7,162,006.00  
(SWC Project No. 1736-99)***

On January 30, 2014, bid packages were opened for the Southwest Pipeline Project Contract 2-8F, which is Phase II of the main transmission line in Dunn County from the Dunn Center booster station (north of Halliday) to the north Fairfield booster station (west of Killdeer). The contract was divided into three bid schedules in order to have different completion dates and to

accommodate different unit prices for pipeline installation in the western part of the state involving utility crossings.

Bid schedule 1 generally consisted of furnishing and installing approximately 15 miles of 16" AWWA C-905 PVC gasketed joint pipe, road crossings, connections to existing pipelines, and other related appurtenances. The contract specifies an intermediate completion date of August 15, 2014 for bid schedule 1.

Bid schedule 2A generally consisted of furnishing and installing approximately 5 miles of 14" AWWA C-905 PVC gasketed joint pipe, 7 miles of 10" - 6" ASTM D 2241 PVC gasketed joint pipe, two prefabricated steel meter vaults, road crossings, connections to existing pipelines, and other related appurtenances. The contract specifies an intermediate completion date of November 1, 2014 for bid schedule 2A.

Bid schedule 2B generally consisted of furnishing and installing approximately 12.5 miles of 8" - 6" ASTM D 2241 PVC gasketed joint pipe, two prefabricated below grade VFD booster stations, road crossings, connections to existing pipelines, and other related appurtenances. Installation of pipeline in bid schedule 2B will allow serving the Killdeer Mountains, Grassy Butte, and a portion of the Fairfield service area from the Oliver-Mercer-North Dunn water treatment plant. These areas are currently served from the Dickinson water treatment plant. The contract specifies that the work for bid schedule 2B and the entire project will be substantially complete on or before August 1, 2015.

Six bid packages were received for Contract 2-8F from Carstensen Contracting, Inc., Pipestone, MN; Wagner Construction, International Falls, MN; S. J. Louis, Rockville, MN; Merryman Excavation, Woodstock, IL; Northern Improvement Company, Bismarck, ND; and Knife River, Bismarck, ND. All bid packages appeared in order and were opened. The project engineer's estimate was \$7,324,606.50. The apparent low bid received was \$7,162,006.00 submitted by Carstensen Contracting, Inc., Pipestone, MN.

The contract documents allow the State Water Commission to select the most advantageous bid. Based on the project engineer's review, the bid received from Carstensen Contracting, Pipestone, MN, appeared to be in accordance with the advertisement for construction bid and the bid documents, and is considered to be a responsive bid. It was the recommendation of the project engineer to award Contract 2-8F to Carstensen Contracting, Pipestone, MN. The award of the contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by Carstensen Contracting, and review/approval by the Commission's legal counsel.

The contract will be funded from the 2013-2015 biennium State Water Commission allocation to the Southwest Pipeline Project.

It was the recommendation of Secretary Sando that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 2-8F, Oliver-Mercer-North Dunn regional service area, Dunn Center Booster to North Fairfield Booster Main Transmission Pipeline, in the amount of \$7,162,006.00 to Carstensen Contracting, Pipestone MN.

**It was moved by Commissioner Vosper and seconded by Commissioner Nodland that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 2-8F, Oliver-Mercer-North Dunn regional service area, Dunn Center Booster to North Fairfield Booster Main Transmission Pipeline, in the amount of \$7,162,006.00, to Carstensen Contracting, Pipestone, MN. This action is contingent upon the satisfactory completion and submission of the contract documents by Carstensen Contracting, and the review/approval by the Commission's legal counsel.**

**Commissioners Berg, Foley, Tom Bodine representing Commissioner Goehring, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**RICE LAKE DRAIN PROJECT,  
WARD COUNTY  
(SWC Project No. 1262)**

On February 13, 2014, the Office of the State Engineer was in receipt of a letter from Norman Nelson, Mayor, City of Douglas, North Dakota, expressing

concerns relating to the proposed Rice Lake drain project in Ward county.

At the request of the State Water Commission members, the staff responded indicating that the Office of the State Engineer's review of the Application to Drain No. 4035, which is determined to be of statewide significance, is pending contingent upon an updated design of the proposed project from the Rice Lake Recreation Service District Engineer. The review process will proceed upon receipt of the new project design.

There being no additional business to come before the State Water Commission, Governor Dalrymple adjourned the audio telephone conference call meeting at 1:50 p.m.



  
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Jack Dalrymple, Governor  
Chairman, State Water Commission

  
\_\_\_\_\_  
Todd Sando, P.E.  
North Dakota State Engineer,  
and Chief Engineer-Secretary  
to the State Water Commission



# North Dakota State Water Commission

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## MEMORANDUM

*Agenda C*

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd Sando, P.E., Chief Engineer–Secretary  
**SUBJECT:** 2013-2015 State Water Supply – Community Capital Infrastructure Funding  
**DATE:** February 18, 2014

The cities of Dickinson, Watford City, and Williston have a requested cost share grant funding for capital infrastructure water projects needed in the next three years to address current and future demands of their systems resulting from the growing population of western North Dakota. These communities are looking for funding in addition to using sales tax, general obligation bond, energy impact grant, and enterprise funds. The projects are in varying stages including planning, design, bidding for construction, and under construction. The current State Water Commission policy is projects that commence prior to a cost share approval date, and project costs that have been incurred prior to the cost share approval date, except for emergencies as determined by the chief engineer are not eligible. The water distribution project cost is \$32.1 million for Dickinson, \$11.7 million for Watford City, and \$23.2 million for Williston.

Attached is a table of the communities' capital infrastructure water projects showing the total costs, eligible costs, project status, and the potential State Water Commission cost share grants ranging from \$32.1 to \$32.4 million. The table shows total costs with a breakdown for construction, pre-construction engineering, and construction engineering. Dickinson submitted a cost breakdown on the construction and engineering. The cost breakdown for Watford City and Williston are based on construction at 80 percent of the cost, pre-construction engineering at 10 percent of cost, and construction engineering at 10 percent of cost. The cost share is based on 60 percent cost share for construction and there are three options for funding the engineering costs from 35 to 60 percent as follows:

**Option 1** - Pre-construction engineering funded at 35 percent and construction engineering funded at the same percentage as project construction of 60 percent.

**Option 2** - Pre-construction engineering funded at 50 percent and construction engineering funding at 50 percent.

**Option 3** - Pre-construction engineering funded at 35 percent and construction engineering funding at 50 percent with pre-construction engineering funded an additional 15 percent after construction funding is approved.

**I recommend the State Water Commission approve cost share using option 1 with pre-construction engineering funded at 35 percent, construction engineering funded at 60 percent, and construction costs funded at 60 percent of eligible costs, not to exceed \$18.4 million to the city of Dickinson, not to exceed \$6.7 million to the city of Watford city and not to exceed \$7.0 million to the city of Williston, from the funds appropriated to the State Water Commission in the 2013 - 2015 biennium. The recommendation includes allowing cost share on projects that commenced prior to approval date. The funding is in the form of a grant towards eligible costs, contingent on available funding, and subject to future revisions.**

TSS:JNM:pdh/2050DIC/2050WAT/2050WLL

Attachments

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY

**Community Capital Infrastructure Funding**

February 18, 2014

Project	Costs						SWC Grant									Total Grant		
	Total Project Cost	Costs Allocated to Water		Eligible Cost Assumed Break Down			60% Grant Construction	Engineering						Option 1	Option 2	Option 3		
				Construction	Engineering			Option 1		Option 2		Option 3						
		%	\$		Pre-Construction	Construction		35%	60%	50%	50%	35%	50%				15%	
Dickinson Water Supply Projects	\$ 31,750,000	100%	\$ 31,750,000	\$ 27,050,000	\$ 2,440,000	\$ 2,260,000	\$ 16,230,000	\$ 854,000	\$ 1,356,000	\$ 1,220,000	\$ 1,130,000	\$ 854,000	\$ 1,130,000	\$ 339,000	\$ 18,440,000	\$ 18,580,000	\$ 18,553,000	
Watford City Water Supply Projects	\$ 11,708,000	100%	\$ 11,708,000	\$ 9,366,400	\$ 1,170,800	\$ 1,170,800	\$ 5,619,840	\$ 409,780	\$ 702,480	\$ 585,400	\$ 585,400	\$ 409,780	\$ 585,400	\$ 175,620	\$ 6,732,100	\$ 6,790,640	\$ 6,790,640	
Williston Water Supply Projects	\$ 109,581,000	21%	\$ 22,912,000	\$ 9,629,600	\$ 1,303,700	\$ 1,203,700	\$ 5,777,760	\$ 456,295	\$ 722,220	\$ 651,850	\$ 601,850	\$ 456,295	\$ 601,850	\$ 180,555	\$ 6,956,275	\$ 7,031,460	\$ 7,016,460	
<b>Totals</b>	<b>\$ 153,039,000</b>		<b>\$ 66,370,000</b>	<b>\$ 46,046,000</b>	<b>\$ 4,914,500</b>	<b>\$ 4,634,500</b>	<b>\$ 27,627,600</b>	<b>\$ 1,720,075</b>	<b>\$ 2,780,700</b>	<b>\$ 2,457,250</b>	<b>\$ 2,317,250</b>	<b>\$ 1,720,075</b>	<b>\$ 2,317,250</b>	<b>\$ 695,175</b>	<b>\$ 32,128,375</b>	<b>\$ 32,402,100</b>	<b>\$ 32,360,100</b>	

**Community Capital Infrastructure Funding**

**Dickinson Water Supply Projects**

**February 18, 2014**

Project	Costs						SWC Grant									Project Status		
	Total Project Cost	Costs Allocated to Water		Eligible Cost Assumed Break Down			60% Grant Construction	Engineering						Total Grant				
				Construction	Pre-Construction	Construction		Option 1		Option 2		Option 3		Option 1	Option 2		Option 3	
		%	\$					35%	60%	50%	50%	35%	50%					15%
					Pre-Construction	Construction		Pre-Construction	Construction	Pre-Construction	Construction	Pre-Construction	Construction	Pre-Construction	Construction		Pre-Construction	
Finished Water Pumping Facility	\$ 4,885,000	100%	\$ 4,885,000	\$ 4,300,000	\$ 292,500	\$ 292,500	\$ 2,580,000	\$ 102,375	\$ 175,500	\$ 146,250	\$ 146,250	\$ 102,375	\$ 146,250	\$ 43,875	\$ 2,857,875	\$ 2,872,500	\$ 2,872,500	Construction 2014
West Side 1.0 MG Storage Facility for Pressure Zone 2	\$ 6,050,000	100%	\$ 6,050,000	\$ 5,200,000	\$ 425,000	\$ 425,000	\$ 3,120,000	\$ 148,750	\$ 255,000	\$ 212,500	\$ 212,500	\$ 148,750	\$ 212,500	\$ 63,750	\$ 3,523,750	\$ 3,545,000	\$ 3,545,000	Construction 2014
West Side 24-inch Dedicated Water main	\$ 6,380,000	100%	\$ 6,380,000	\$ 5,450,000	\$ 465,000	\$ 465,000	\$ 3,270,000	\$ 162,750	\$ 279,000	\$ 232,500	\$ 232,500	\$ 162,750	\$ 232,500	\$ 69,750	\$ 3,711,750	\$ 3,735,000	\$ 3,735,000	Construction 2014
East Side Water Distribution (Broadway Avenue)	\$ 5,750,000	100%	\$ 5,750,000	\$ 5,000,000	\$ 375,000	\$ 375,000	\$ 3,000,000	\$ 131,250	\$ 225,000	\$ 187,500	\$ 187,500	\$ 131,250	\$ 187,500	\$ 56,250	\$ 3,356,250	\$ 3,375,000	\$ 3,375,000	Construction 2014
River Drive Booster Station and 12-inch Ties	\$ 1,330,000	100%	\$ 1,330,000	\$ 1,100,000	\$ 115,000	\$ 115,000	\$ 660,000	\$ 40,250	\$ 69,000	\$ 57,500	\$ 57,500	\$ 40,250	\$ 57,500	\$ 17,250	\$ 769,250	\$ 775,000	\$ 775,000	Construction 2014
State Avenue Booster Station	\$ 900,000	100%	\$ 900,000	\$ 750,000	\$ 75,000	\$ 75,000	\$ 450,000	\$ 26,250	\$ 45,000	\$ 37,500	\$ 37,500	\$ 26,250	\$ 37,500	\$ 11,250	\$ 521,250	\$ 525,000	\$ 525,000	Construction 2014
East Side 1.0 MG Elevated Storage Tank and 12-inch Water main Ties (Public Works Facility)	\$ 6,275,000	100%	\$ 6,275,000	\$ 5,250,000	\$ 512,500	\$ 512,500	\$ 3,150,000	\$ 179,375	\$ 307,500	\$ 256,250	\$ 256,250	\$ 179,375	\$ 256,250	\$ 76,875	\$ 3,636,875	\$ 3,662,500	\$ 3,662,500	Construction 2014/2015
Water Modeling of Water System	\$ 180,000	100%	\$ 180,000	\$ -	\$ 180,000	\$ -	\$ -	\$ 63,000	\$ -	\$ 90,000	\$ -	\$ 63,000	\$ -	\$ -	\$ 63,000	\$ 90,000	\$ 63,000	
	<b>\$ 31,750,000</b>		<b>\$ 31,750,000</b>	<b>\$ 27,050,000</b>	<b>\$ 2,440,000</b>	<b>\$ 2,260,000</b>	<b>\$ 16,230,000</b>	<b>\$ 854,000</b>	<b>\$ 1,356,000</b>	<b>\$ 1,220,000</b>	<b>\$ 1,130,000</b>	<b>\$ 854,000</b>	<b>\$ 1,130,000</b>	<b>\$ 339,000</b>	<b>\$ 18,440,000</b>	<b>\$ 18,580,000</b>	<b>\$ 18,553,000</b>	

Community Capital Infrastructure Funding

Watford City Water Supply Projects

February 18, 2014

Project	Costs						SWC Grant											Project Status		
	Total Project Cost	Costs Allocated to Water		Eligible Cost Assumed Break Down			60% Grant Construction	Engineering									Total Grant			
				Construction	Engineering			Option 1		Option 2		Option 3			Option 1	Option 2	Option 3			
		Pre-Construction	Construction		35%	60%		50%	50%	35%	50%	15%								
													Pre-Construction	Construction					Pre-Construction	Construction
East Water Tower 1 MG	\$ 4,157,000	100%	\$ 4,157,000	\$ 3,325,600	\$ 415,700	\$ 415,700	\$ 1,995,360	\$ 145,495	\$ 249,420	\$ 207,850	\$ 207,850	\$ 145,495	\$ 207,850	\$ 62,355	\$ 2,390,275	\$ 2,411,060	\$ 2,411,060	Construction 2014		
Northwest Water Tower 1 MG	\$ 3,800,000	100%	\$ 3,800,000	\$ 3,040,000	\$ 380,000	\$ 380,000	\$ 1,824,000	\$ 133,000	\$ 228,000	\$ 190,000	\$ 190,000	\$ 133,000	\$ 190,000	\$ 57,000	\$ 2,185,000	\$ 2,204,000	\$ 2,204,000	Construction 2014		
East End Transmission Main	\$ 845,000	100%	\$ 845,000	\$ 676,000	\$ 84,500	\$ 84,500	\$ 405,600	\$ 29,575	\$ 50,700	\$ 42,250	\$ 42,250	\$ 29,575	\$ 42,250	\$ 12,675	\$ 485,875	\$ 490,100	\$ 490,100	Under Design		
Northwest Transmission Main	\$ 1,838,000	100%	\$ 1,838,000	\$ 1,470,400	\$ 183,800	\$ 183,800	\$ 882,240	\$ 64,330	\$ 110,280	\$ 91,900	\$ 91,900	\$ 64,330	\$ 91,900	\$ 27,570	\$ 1,056,850	\$ 1,066,040	\$ 1,066,040	Construction 2014		
Pressure Zone Improvement	\$ 1,068,000	100%	\$ 1,068,000	\$ 854,400	\$ 106,800	\$ 106,800	\$ 512,640	\$ 37,380	\$ 64,080	\$ 53,400	\$ 53,400	\$ 37,380	\$ 53,400	\$ 16,020	\$ 614,100	\$ 619,440	\$ 619,440	Construction 2014		
	<b>\$ 11,708,000</b>		<b>\$ 11,708,000</b>	<b>\$ 9,366,400</b>	<b>\$ 1,170,800</b>	<b>\$ 1,170,800</b>	<b>\$ 5,619,840</b>	<b>\$ 409,780</b>	<b>\$ 702,480</b>	<b>\$ 585,400</b>	<b>\$ 585,400</b>	<b>\$ 409,780</b>	<b>\$ 585,400</b>	<b>\$ 175,620</b>	<b>\$ 6,732,100</b>	<b>\$ 6,790,640</b>	<b>\$ 6,790,640</b>			

**Community Capital Infrastructure Funding**

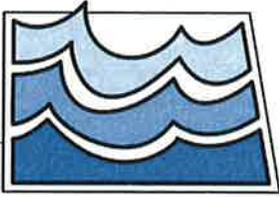
February 18, 2014

**Williston Current Water Supply Projects**

Project	Costs						SWC Grant											Project Status
	Total Project Cost	Costs Allocated to Water		Eligible Cost Assumed Break Down			60% Grant Construction	Engineering						Total Grant				
				Construction	Engineering			Option 1		Option 2		Option 3		Option 1	Option 2	Option 3		
		Pre-Construction	Construction		35%	60%		50%	50%	35%	50%	15%						
Main Street Reconstruction	\$ 8,600,000	9%	\$ 800,000	\$ 640,000	\$ 80,000	\$ 80,000	\$ 384,000	\$ 28,000	\$ 48,000	\$ 40,000	\$ 40,000	\$ 28,000	\$ 40,000	\$ 12,000	\$ 460,000	\$ 464,000	\$ 464,000	Construction 2014
42nd Street West & 16th Ave West	\$ 9,855,000	5%	\$ 495,000	\$ 396,000	\$ 49,500	\$ 49,500	\$ 237,600	\$ 17,325	\$ 29,700	\$ 24,750	\$ 24,750	\$ 17,325	\$ 24,750	\$ 7,425	\$ 284,625	\$ 287,100	\$ 287,100	Under Construction
42nd Street East & University Ave Phase 1	\$ 17,750,000	3%	\$ 512,000	\$ 409,600	\$ 51,200	\$ 51,200	\$ 245,760	\$ 17,920	\$ 30,720	\$ 25,600	\$ 25,600	\$ 17,920	\$ 25,600	\$ 7,680	\$ 294,400	\$ 296,960	\$ 296,960	Under Construction
42nd Street East & University Ave Phase 2	\$ 5,451,000	2%	\$ 125,000	\$ 100,000	\$ 12,500	\$ 12,500	\$ 60,000	\$ 4,375	\$ 7,500	\$ 6,250	\$ 6,250	\$ 4,375	\$ 6,250	\$ 1,875	\$ 71,875	\$ 72,500	\$ 72,500	Construction 2014
23rd Street Water and Sewer Extension	\$ 500,000	25%	\$ 125,000	\$ 100,000	\$ 12,500	\$ 12,500	\$ 60,000	\$ 4,375	\$ 7,500	\$ 6,250	\$ 6,250	\$ 4,375	\$ 6,250	\$ 1,875	\$ 71,875	\$ 72,500	\$ 72,500	Under Construction
Down Town Street Reconstruction	\$ 5,550,000	21%	\$ 1,165,000	\$ 932,000	\$ 116,500	\$ 116,500	\$ 559,200	\$ 40,775	\$ 69,900	\$ 58,250	\$ 58,250	\$ 40,775	\$ 58,250	\$ 17,475	\$ 669,875	\$ 675,700	\$ 675,700	Under Construction
32nd Ave West (Phase I)	\$ 5,250,000	14%	\$ 750,000	\$ 600,000	\$ 75,000	\$ 75,000	\$ 360,000	\$ 26,250	\$ 45,000	\$ 37,500	\$ 37,500	\$ 26,250	\$ 37,500	\$ 11,250	\$ 431,250	\$ 435,000	\$ 435,000	Under Construction
32nd Avenue West (Phase II)	\$ 6,000,000	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Under Construction
70th Street	\$ 2,600,000	4%	\$ 100,000	\$ 80,000	\$ 10,000	\$ 10,000	\$ 48,000	\$ 3,500	\$ 6,000	\$ 5,000	\$ 5,000	\$ 3,500	\$ 5,000	\$ 1,500	\$ 57,500	\$ 58,000	\$ 58,000	Under Construction
US 2 & 85 North Water and Sewer Extension	\$ 4,500,000	44%	\$ 2,000,000	\$ 1,600,000	\$ 200,000	\$ 200,000	\$ 960,000	\$ 70,000	\$ 120,000	\$ 100,000	\$ 100,000	\$ 70,000	\$ 100,000	\$ 30,000	\$ 1,150,000	\$ 1,160,000	\$ 1,160,000	Under Construction
2013 Water and Sewer Replacement (maintenance)	\$ 3,125,000	92%	\$ 2,875,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Non-eligible
2014 Water and Sewer Replacement (maintenance)	\$ 4,000,000	88%	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Non-eligible
Weatherford Cost Share	\$ 300,000	30%	\$ 90,000	\$ 72,000	\$ 9,000	\$ 9,000	\$ 43,200	\$ 3,150	\$ 5,400	\$ 4,500	\$ 4,500	\$ 3,150	\$ 4,500	\$ 1,350	\$ 51,750	\$ 52,200	\$ 52,200	Under Construction
<b>Total</b>	<b>\$ 73,481,000</b>		<b>\$ 12,537,000</b>	<b>\$ 4,929,600</b>	<b>\$ 616,200</b>	<b>\$ 616,200</b>	<b>\$ 2,957,760</b>	<b>\$ 215,670</b>	<b>\$ 369,720</b>	<b>\$ 308,100</b>	<b>\$ 308,100</b>	<b>\$ 215,670</b>	<b>\$ 308,100</b>	<b>\$ 92,430</b>	<b>\$ 3,543,150</b>	<b>\$ 3,573,960</b>	<b>\$ 3,573,960</b>	

**Williston Future Water Supply Projects**

Project	Costs						SWC Grant											Project Status
	Total Project Cost	Costs Allocated to Water		Eligible Cost Assumed Break Down			60% Grant Construction	Engineering						Total Grant				
				Construction	Engineering			Option 1		Option 2		Option 3		Option 1	Option 2	Option 3		
		Pre-Construction	Construction		35%	60%		50%	50%	35%	50%	15%						
56th Street	\$ 4,000,000	5%	\$ 200,000	\$ 160,000	\$ 20,000	\$ 20,000	\$ 96,000	\$ 7,000	\$ 12,000	\$ 10,000	\$ 10,000	\$ 7,000	\$ 10,000	\$ 3,000	\$ 115,000	\$ 116,000	\$ 116,000	Construction 2015
REC Road	\$ 6,000,000	17%	\$ 1,000,000	\$ 800,000	\$ 100,000	\$ 100,000	\$ 480,000	\$ 35,000	\$ 60,000	\$ 50,000	\$ 50,000	\$ 35,000	\$ 50,000	\$ 15,000	\$ 575,000	\$ 580,000	\$ 580,000	Construction 2015
East Highland Drive	\$ 500,000	15%	\$ 75,000	\$ 60,000	\$ 7,500	\$ 7,500	\$ 36,000	\$ 2,625	\$ 4,500	\$ 3,750	\$ 3,750	\$ 2,625	\$ 3,750	\$ 1,125	\$ 43,125	\$ 43,500	\$ 43,500	Construction 2015
University Ave to REC Rd to US 2	\$ 6,100,000	25%	\$ 1,500,000	\$ 1,200,000	\$ 150,000	\$ 150,000	\$ 720,000	\$ 52,500	\$ 90,000	\$ 75,000	\$ 75,000	\$ 52,500	\$ 75,000	\$ 22,500	\$ 862,500	\$ 870,000	\$ 870,000	Construction 2015
6th Ave W (REC Rd to 70th St)	\$ 5,500,000	2%	\$ 100,000	\$ 80,000	\$ 10,000	\$ 10,000	\$ 48,000	\$ 3,500	\$ 6,000	\$ 5,000	\$ 5,000	\$ 3,500	\$ 5,000	\$ 1,500	\$ 57,500	\$ 58,000	\$ 58,000	Construction 2015
Annual Water Main Replacement (maintenance)	\$ 3,000,000	83%	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Non-eligible
135th Ave NW Water Main	\$ 3,000,000	100%	\$ 3,000,000	\$ 2,400,000	\$ 300,000	\$ 300,000	\$ 1,440,000	\$ 105,000	\$ 180,000	\$ 150,000	\$ 150,000	\$ 105,000	\$ 150,000	\$ 45,000	\$ 1,725,000	\$ 1,740,000	\$ 1,740,000	Construction 2015
Engineering (Includes 2017/2018 projects)	\$ 8,000,000	25%	\$ 2,000,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 35,000	\$ -	\$ 50,000	\$ -	\$ 35,000	\$ -	\$ -	\$ 35,000	\$ 50,000	\$ 35,000	Construction 2017/2018
<b>Total</b>	<b>\$ 36,100,000</b>		<b>\$ 10,375,000</b>	<b>\$ 4,700,000</b>	<b>\$ 687,500</b>	<b>\$ 587,500</b>	<b>\$ 2,820,000</b>	<b>\$ 240,625</b>	<b>\$ 352,500</b>	<b>\$ 343,750</b>	<b>\$ 293,750</b>	<b>\$ 240,625</b>	<b>\$ 293,750</b>	<b>\$ 88,125</b>	<b>\$ 3,413,125</b>	<b>\$ 3,457,500</b>	<b>\$ 3,442,500</b>	
<b>Williston Totals</b>	<b>\$ 109,581,000</b>		<b>\$ 22,912,000</b>	<b>\$ 9,629,600</b>	<b>\$ 1,303,700</b>	<b>\$ 1,203,700</b>	<b>\$ 5,777,760</b>	<b>\$ 456,295</b>	<b>\$ 722,220</b>	<b>\$ 651,850</b>	<b>\$ 601,850</b>	<b>\$ 456,295</b>	<b>\$ 601,850</b>	<b>\$ 180,555</b>	<b>\$ 6,956,275</b>	<b>\$ 7,031,460</b>	<b>\$ 7,016,460</b>	



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

*Agenda B*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd Sando, P.E., Chief Engineer-Secretary  
**SUBJECT:** Red River Valley Water Supply Project Value Engineering  
**DATE:** February 19, 2014

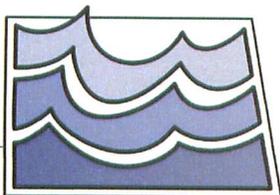
The North Dakota State Water Commission (NDSWC) issued a Request for Proposals (RFP) for Value Engineering (VE) services for the Red River Valley Water Supply Project (RRVWSP) on December 23<sup>rd</sup>, 2013 with proposals due January 17<sup>th</sup>, 2014.

The RFP was different from most VE's in that it is focused more on route alternative evaluation for a proposed State and Local project with respect to federal facilities and permitting, and the possibility of and costs associated with avoiding them whereas most VE's focus on cost reduction and functional enhancement.

Six proposals were received and the top three scoring firms were interviewed January 27<sup>th</sup> and 28<sup>th</sup>. The top candidate was CH2MHill, which has considerable experience with very similar projects from the design, planning, construction and legal perspective. SWC staff negotiated a scope of work with CH2MHill that includes deliverables of comparative costs, viability, and risk of a federal nexus for three alternatives compared to the federal preferred alternative from the Environmental Impact Statement performed by the Bureau of Reclamation finalized in 2007. The negotiated contract cost is \$375,000 and the contract completion date is May 16, 2014. This is a short timeframe but coincides with the expiration of options for easements already obtained for a significant portion of one of the alternatives.

**I recommend the State Water Commission authorize the Chief Engineer and Secretary to enter into a Contract for Red River Valley Water Supply Project Value Engineering with CH2MHill in the amount of \$375,000.**

TS:TF:ph/0325



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

*Agenda E1*  
*Revised Memo*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd S. Sando, P.E., Chief Engineer - Secretary  
**SUBJECT:** SWPP Contract 3-2A – Membrane Systems Equipment Procurement for the new Dickinson Water Treatment Plant  
**DATE:** February 14, 2014

Southwest Pipeline Project (SWPP) Contract 3-2A is the contract for procuring membrane systems equipment for the new 6 Million Gallons per Day (MGD) Water Treatment Plant (WTP) at Dickinson. To meet the current projected population growth in southwest North Dakota due to the oil industry, the required capacity out of the Dickinson WTP is 18 MGD. The existing WTP in Dickinson has a capacity of 12 MGD. The new 6 MGD plant will be built at the site east of the existing WTP. The 6 MGD plant can be expanded in phases for a total capacity of 18 MGD when the existing WTP is retired in phases. A map showing the location of the existing and new WTP is attached to this memo.

Contract 3-2A includes; design phase services to be completed during the final design of the new 6 MGD Dickinson WTP, membrane filtration (microfiltration or ultrafiltration) equipment, and ancillary equipment, and construction phase services. The design and construction phase services will consist of providing consultation to insure the treatment plant is designed to properly utilize the membrane equipment and insuring proper installation of the equipment as well as providing start up services.

Competitive sealed proposals were solicited for this contract in accordance with NDAC 4-12-12. Sealed proposals were opened on January 23, 2014. Three proposals were received. One proposal did not have a signed bid bond and was considered non-responsive and not opened. The other two proposals received were from Tonka Water, Plymouth, Minnesota and H2O Innovation USA, Inc., Champlin, Minnesota. The award of this contract is based on a 20 – year life cycle analysis.

The Bid Form included two Bid Alternates. Bid Alternate 1 was for additional 12 months of warranty on all equipment, excluding the membranes. Bid Alternate 2 was for additional cost of stainless steel support frames for the equipment. Bartlett & West/AECOM has completed the life cycle analysis. The tabulation of bid results along with the life cycle analysis is shown in the attached review of bids letter from Bartlett & West/AECOM. The recommendation from Bartlett & West/AECOM is to award the contract to Tonka Water based on the Base Bid plus Alternate 1, in the amount of \$1,934,137.58.

SWC Memorandum: Contract 3-2A Award

Page 2

February 14, 2014

Membrane water treatment systems vary in many aspects including but not limited to size, configuration, feed pressure requirement, specific capacity, recovery rate, backwash frequency, maintenance wash requirements, and chemical resistance. Because of this, the final design of the WTP is dependent upon the specification of the membrane systems purchased under this contract. The design of the WTP will be able to commence upon award of and receipt of submittals for Contract 3-2A.

**I recommend the State Water Commission authorize the Chief Engineer and Secretary to award SWPP Contract 3-2A membrane equipment procurement for the new 6 MGD Water Treatment Plant at Dickinson, based on the Base Bid plus Bid Alternate 1, in the amount of \$1,934,137.58 to Tonka Water, Plymouth, Minnesota. The award of the contracts will be dependent upon legal review of the contract documents.**

TSS:SSP:pdh/1736-99

Enclosures





February 14, 2014

North Dakota State Water Commission  
Attn: Ms. Sindhuja S.Pillai-Grinolds, P.E., Project Manager  
900 E. Boulevard Ave.  
Bismarck, ND 58505

**SUBJECT: SWPP Contract 3-2A  
New Dickinson WTP Membrane Systems Procurement  
Review of Bids Received  
W.O. 3033.985**

Dear Sindhu:

On Thursday, January 23, 2014, bids were opened for the Southwest Pipeline Project (SWPP) Contract 3-2A – New Dickinson Water Treatment Plant (WTP) Membrane Systems Procurement. This contract consists of furnishing micro-filtration (MF) or ultra-filtration (UF) membrane equipment for removing suspended solids for the proposed Dickinson WTP to be located on property east of the existing Dickinson WTP which is currently owned by the City of Dickinson. The scope of supply was generally for membrane systems equipment with a capacity of approximately 6,000,000 gallons per day (6 MGD), along with pre-filtration, membrane backwash, membrane clean-in-place (CIP), air integrity testing, air scouring, and integration and controls equipment. A 'Secondary' set of membranes will also be used to recover most of the backwash water generated by the 'Primary' membranes.

The new WTP is proposed with a capacity of 6 MGD and will initially operate in conjunction with the existing Dickinson WTP which has a capacity of 11-12 MGD. The site for the new WTP is sufficiently large to support a future expansion to approximately three times the size of the initial phase (18 MGD), at which time the existing WTP could be abandoned. Some parts of the existing plant are approaching 60-years in age. The new WTP will employ ozonation of the raw water to combat taste and odor issues followed by lime softening, and membrane filtration.

State administrative rules for procurement proposals were used for the bidding which allows for bidders to clarify system design and answer any questions that develop during the review of the bid proposals. A twenty-year (20-year) lifecycle analysis was used for the comparison of the bids and the determination of the apparent low bidder. A total of five (5) bid packages were distributed to possible bidders and all five recipients attended the mandatory pre-bid teleconference. Two recipients declined to submit proposals citing the commercial terms and other bidding requirements as reasons for withdrawing. Three (3) bid proposals were received from; Tonka Equipment Company doing business as Tonka Water, Plymouth, MN; H<sub>2</sub>O Innovation USA, Inc. of Champlin, MN; and Evoqua Water Technologies, Lowell, MA (formerly Siemens Industries, Inc). The bid proposal from Evoqua did not contain a valid Bid Bond (it was un-signed) and was not considered. According to information provided by this bidder prior to the bid opening the bid proposal also included a membrane that did not have a membrane challenge study establishing performance characteristics and could not have been considered anyway.

The Bid Form included two Bid Alternates. Bid Alternate 1 on each schedule was for an additional 12 months of warranty on all equipment, excluding membranes. Bid Alternate 2 on each schedule was for the additional costs of stainless steel support frames for the equipment. This alternate, if chosen, might reduce operating costs

somewhat by reducing the need for repainting equipment... Membrane warranties were covered in the technical specifications. MF/UF membranes were required to have a 10 year warranty.

A tabulation of the bid results and lifecycle analysis on this contract is attached and will be distributed to all bidders and other interested parties once the award is authorized as per the Advertisement.

A summary of the Bid Proposals received on Contract 3-2A is provided in the following tables:

<b>SOUTHWEST PIPELINE PROJECT CONTRACT 3-2A</b>			
<b>Base Bid</b>			
<b>Bidder</b>	<b>Base Bid Amount</b>	<b>Amount Higher Than Low Bidder</b>	<b>Comparison to Engineer's Estimate</b>
Tonka Water Plymouth, MN	\$1,934,137.58	-	-\$1,305,862.42 -40.3%
H <sub>2</sub> O Innovation Champlin, MN	\$2,350,000.00	+\$415,862.42 +21.5%	-\$890,000.00 -27.5%
Engineer's Estimate	\$3,240,000.00	+\$1,305,862.42 +67.5%	-

<b>SOUTHWEST PIPELINE PROJECT CONTRACT 3-2A</b>			
<b>Bid Alternates</b>			
<b>Bidder</b>	<b>Alternate 1 2-yr Warranty</b>	<b>Alternate 2 Stainless Steel Frame</b>	<b>Total for Alternates</b>
Tonka Water Plymouth, MN	\$0.00	\$45,000.00	\$45,000.00
H <sub>2</sub> O Innovation Champlin, MN	\$16,800.00	\$103,500.00	\$120,300.00

<b>SWPP CONTRACT 3-2A</b>			
<b>With Bid Alternate 1</b>			
<b>Bidder</b>	<b>Bid Amount</b>	<b>Amount Higher Than Low Bidder</b>	<b>Comparison to Engineer's Estimate</b>
Tonka Water Plymouth, MN	\$1,934,137.58	-	-\$1,305,862.42 -40.3%
H <sub>2</sub> O Innovation Champlin, MN	\$2,366,800.00	+\$432,662.42 +22.4%	-\$873,200.00 -27.0%
Engineer's Estimate	\$3,240,000.00	+\$1,305,862.42 +67.5%	-

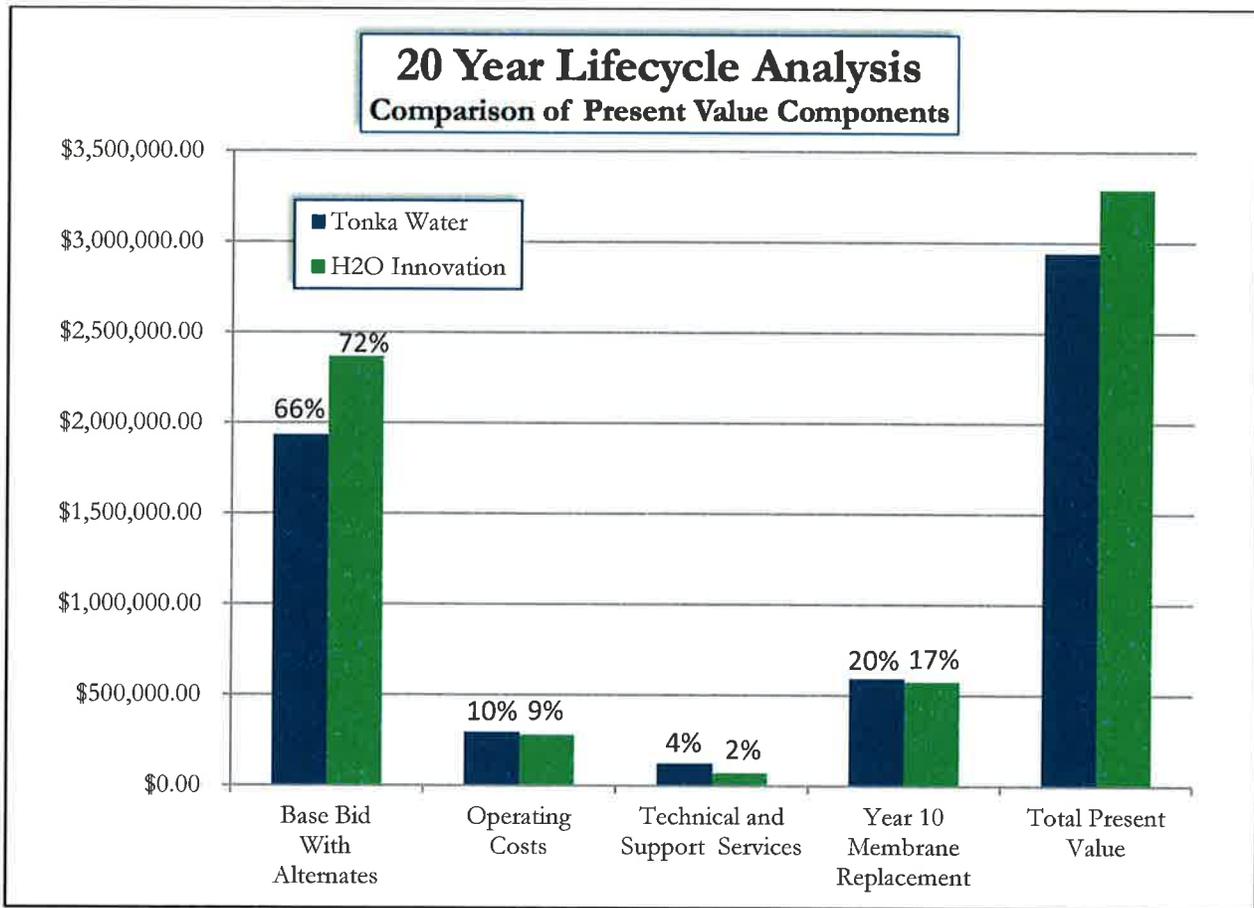
The apparent low bidder for the Base Bid and the Base Bid with the Bid Alternates is Tonka Water of Plymouth, MN. The cost of Bid Alternates 1 is a good value and it is our recommendation to include it in the awarded contract. The cost of Bid Alternate 2, while perhaps a fair value, has to be taken in the context of the size and amount of framing steel contained in the bid proposal. According to the proposal drawings the amount of frame steel in the Tonka bid is substantially less than in the H<sub>2</sub>O Innovation bid. As we work our way through the design phase of the WTP and meet with the membrane provider to discuss options we may decide that stainless steel frames are a good value. Having a price in the bid proposal will allow us to know ahead of asking what the cost of a change order would be. Therefore we do not recommend awarding the contract based on the stainless steel frame Bid Alternate.

The bid prices received for Contract 3-2A are substantially lower than the Engineer's Estimate which was based on the bid prices and schedule of values for the OMND WTP membranes. After the 3-2A bid opening we reviewed the basis of the Engineer's Estimate and saw no reason to question the estimate that we provided. Tonka Equipment Company has numerous installations of their equipment in municipal drinking water applications in the Midwest but is relatively new to the municipal membrane market and it may be that they were very aggressively going after this particular contract in order to gain experience and position themselves for future work. The membranes that Tonka Water intends to utilize have been used extensively in drinking water applications and the membrane manufacturer, DOW Chemical, has provided a letter assuring their support of Tonka Water in this project. This is the same type of assurance that was provided by Toray Industries for the membrane equipment supplier at the OMND WTP. We do not anticipate issues with receiving the required pathogen removal credit from the North Dakota Department of Health. The DOW membranes included in the Tonka bid have already been approved and used in ND for surface water. Because bidders were allowed to use membranes that had not been approved for use in ND a two month pilot study, if needed to get approval, was a bid item.

A lifecycle cost analysis was completed on all of the bids. Bidders were required to provide a guaranteed membrane replacement cost, valid for 12 years after the date of the bid opening. Bidders also provided projections of power usage and chemicals for periodic cleaning of the membranes. The lifecycle cost consists of the sum of the bid amount, the present value of the annualized operations cost, the present value of annual technical and field support services, and the present value of a replacement of the membranes after the 10<sup>th</sup> year of operation. The rate of inflation or interest rate used in the analysis was 4.0%. The lifecycle analysis results for the Base Bid with Bid Alternate 1 are summarized below.

<b>SOUTHWEST PIPELINE PROJECT, CONTRACT 3-2A</b> <b>Present Value 20 Year Lifecycle Costs</b> <b>Base Bid + Bid Alternate 1</b>					
Bidder	Base Bid With Alternates	Operating Costs	Technical and Support Services	Year 10 Membrane Replacement	Total Present Value
Tonka Water	\$1,934,137.58	\$293,318	\$121,030	\$592,200	\$2,940,686
H <sub>2</sub> O Innovation	\$2,366,800.00	\$280,298	\$71,250	\$574,200	\$3,292,548

One can see from the information in the table above that the most significant factor in the lifecycle analysis is the bid price followed by the membrane replacement cost. The present value of the annual technical support services and operating costs are not as significant. This comparison of the lifecycle analysis components is illustrated even more clearly in the column chart below.



The lifecycle cost analysis indicates that the Base Bid with Bid Alternate 1 from Tonka Water will have the lowest overall lifecycle costs, by a margin of \$3,292,548 to 2,940,686 or \$351,862. The projected annual O&M costs which include power for membrane feed and backwash operations, technical and filed support services, and membrane replacement, works out to about \$0.093 per thousand gallons produced based on an annual average production of 2,560,000 gallons per day. This cost does not include labor, chemicals, softening, heat, lights, high service pumps, etc.

The extended warranty for the UF membranes in Tonka Water's bid was written specifically for this project by DOW. Tonka's experience in the municipal drinking water market and the participation by DOW in this project provides us with some assurance in Tonka Water's abilities. Based upon our review, the bid received from Tonka Water appears to be in accordance with the Advertisement for Procurement Proposals and the Bid Documents. It is considered to be a responsible and responsive Bid. References provided by Tonka and by DOW for the proposed membrane have checked out.

Subject to approval by your legal counsel that the bid documents are in order, we recommend that the North Dakota State Water Commission authorize the State Engineer to award SWPP Contract 3-2A – New Dickinson WIP Membrane Systems Procurement, based on the Base Bid plus Bid Alternate 1, in the amount of \$1,934,137.58 to Tonka Water.

The contract documents require that the SWC award the contracts within 91 calendar days after the bid opening as stipulated in the Advertisement for Procurement Proposals. That date would be April 24, 2014.

The award of the contract and the Notice to Proceed are dependent on the satisfactory completion and submission of the contract documents by Tonka Water and your legal counsel's review.

If you have any questions or comments, please contact us.

Sincerely,

**BARTLETT & WEST/AECOM**



James Lennington, PE  
Project Manager

Copy: SWA – Mary Massad

File: SWPP Contract 3-2A: 1.0, and 7.0



ENR CCI = 9664

PROJECT: SWPP

Proj. No. 3033.985

3466 East Century Avenue  
P.O. Box 1077  
BISMARCK, ND 58501

BID TABULATION

New Dickinson Membrane System Equipment Procurement  
Contract 3-2A

DATE: Thursday, January 23, 2014, @ 1:30 P.M.

LOCATION: North Dakota State Water Commission

DESCRIPTION	ENGINEERS ESTIMATE	TONKA WATER PLYMOUTH, MN	H2O INNOVATION USA, INC. CHAMPLIN, MN	BID AMOUNT
	BID AMOUNT	BID AMOUNT	BID AMOUNT	
<b>BASE BID</b>				
<i>Design Phase Services (taxes not included)</i>	\$100,000.00	\$64,718.00	\$175,000.00	
<i>Equipment and Construction Phase Services (taxes included on materials and equipment)</i>				
<i>Pilot Study (If Pilot Study is not required enter \$ 0)</i>	\$30,000.00	\$0.00	\$30,000.00	
<b>Primary MF/UF System (Bidder shall provide a complete functioning system as defined in Specification Section 446010)</b>				
Primary MF/UF Skids	\$2,070,000.00	\$1,191,795.96	\$1,332,500.00	
Pre-Filtration System	\$100,000.00	\$89,351.39	\$97,000.00	
Backwash System (Bidder shall provide a complete functioning system as defined in Specification Section 446010)	\$90,000.00	\$56,648.44	\$60,000.00	
<b>Secondary MF/UF System (Bidder shall provide a complete functioning system as defined in Specification Section 446010)</b>				
Secondary MF/UF Skids	\$400,000.00	\$257,096.75	\$240,000.00	
Backwash System (Bidder shall provide a complete functioning system as defined in Specification Section 446010)	\$50,000.00	\$34,860.58	\$25,500.00	
<b>Combined Systems (Primary and Secondary MF/UF)</b>				
Air Scrub, Integrity Air, and Instrument Air System (Bidder shall provide a complete functioning system as defined in the specifications)	\$100,000.00	\$76,257.51	\$118,000.00	
CIP System Equipment (Bidder shall provide a complete functioning system as defined in the specifications)	\$100,000.00	\$54,469.65	\$74,000.00	
Integration and Controls System (Bidder shall provide a complete functioning system as defined in the specifications)	\$200,000.00	\$108,939.30	\$198,000.00	
<b>Total Base Bid</b>	<b>\$3,240,000.00</b>	<b>\$1,934,137.58</b>	<b>\$2,350,000.00</b>	
<b>ALTERNATE BIDS</b>				
ALTERNATE 1: Provide for additional 12 months of warranty for all materials and workmanship. (Taxes included)		\$0.00	\$16,800.00	
ALTERNATE 2: Provide Primary and Secondary MF/UF skid frames in 304 Stainless Steel material (Taxes included)		\$45,000.00	\$103,500.00	
<b>Total Base Bid + Alternates</b>	<b>\$3,240,000.00</b>	<b>\$1,979,137.58</b>	<b>\$2,470,300.00</b>	
<b>BID FACTORS</b>				
Primary MF/UF Skid Size (provide dimensions of a single skid in feet)- The footprint of the Primary MF/UF System will be evaluated as described in Article 13 of the Instructions to Bidders.				
Number of Primary MF/UF skids provided by Bidder		21' x 10' x 10' 6	23' x 8' x 11.7' 5	
MEMBRANE REPLACEMENT: Guaranteed Maximum MF/UF Membrane Replacement Price Per Module ( The membrane replacement pricing provided will be used in the Lifecycle analysis as described in Article 13 of the Instructions to Bidders)		\$2,350.00	\$2,610.00	
DELIVERY: State the Period of Time for Membrane Filtration System Fabrication and Delivery to Job-Site After Notice to Proceed. (Weeks)		16-18	24	
SUBCONTRACTORS AND MAJOR SUPPLIERS: Provide a list of subcontractors and/or major suppliers for equipment utilized within the membrane package system (i.e. valves, pumps, control panels, membranes, etc.) Attach list to this bid.				



ENR CCI = 9664

Proj. No. 3033.985

PROJECT: SWPP

3456 East Century Avenue  
P.O. Box 1077  
BISMARCK, ND 58501

LIFECYCLE COSTS

New Dickinson Membrane System Equipment Procurement  
Contract 3-2A

DATE: Thursday, January 23, 2014, @ 1:30 P.M.

LOCATION: North Dakota State Water Commission

DESCRIPTION	ENGINEERS ESTIMATE	TONKA WATER PLYMOUTH, MN	H2O INNOVATION USA, INC. CHAMPLIN, MN
<b>Capital Costs</b>			
Design Phase Services	\$100,000.00	\$64,718.00	\$175,000.00
Equipment and Construction Phase Services	\$3,140,000.00	\$1,869,419.58	\$2,175,000.00
<b>Total Base Bid</b>	\$3,240,000.00	\$1,934,137.58	\$2,350,000.00
Bid Alternate 1	\$0.00	\$0.00	\$16,800.00
<b>Total Base Bid + Alternate 1</b>	\$3,240,000.00	\$1,934,137.58	\$2,366,800.00
<b>Present Value 20 Year Lifecycle Analysis Costs</b>			
Primary MF/UF Footprint costs		\$0.00	\$0.00
Membrane Replacement Cost in Year 10		\$592,200.00	\$574,200.00
Technical and Support Services		\$121,030.00	\$71,250.00
Operating Costs		\$293,318.42	\$280,298.32
<b>Total 20 Year Lifecycle Analysis Costs</b>		\$1,006,548.42	\$925,748.32
<b>Total Base Bid +Alternate 1 + Lifecycle Analysis Costs</b>		\$2,940,686.00	\$3,292,548.32

**BID ANOMALIES**  
**SOUTHWEST PIPELINE PROJECT**  
**NEW DICKINSON MEMBRANE SYSTEM EQUIPMENT PROCUREMENT**  
**CONTACT 3-2A**

The Bidder's Proposals for Southwest Pipeline Project Contract 3-2A were reviewed electronically, and the following were noted:

TONKA WATER-PLYMOUTH, MN

On page 2 of 2 of the Bid Sheets, Tonka provided average feed flow rates in lieu of instantaneous feed flow rates for the lifecycle analysis. The instantaneous flow rates for the primary and secondary feed flows were used in the pumping costs calculated in the lifecycle analysis.

On page 1 of 2 of the Bid Sheets, the Total Base Bid line item contained a math error in the amount of -\$19.70. The Total Base Bid was changed to sum of line items to the amount of \$1,934,137.58.

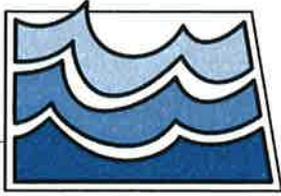
On page 1 of 2 of the Bid Sheets Tonka provided a cost in the Equipment and Construction Phase Services heading in the amount of \$102,712.00. This amount was distributed within the Equipment and Construction Phase line items to equal the original sum of \$1,934,137.58 for the Total Base Bid.

H2O INNOVATION USA, INC.-CHAMPLIN, MN

The Sequence operation times provided by H2O innovation on Page 2 of 2 of the Bid Sheets for the Primary MF/UF System, the Secondary MF/UF System, and the Air Scrub were provided in error and were changed to match the system in the Bid Proposal.

The Air Scrub Power Consumption Rate provided on Page 2 of 2 of the Bid Sheets was provided in error and was changed to match the system in the Bid Proposal.

Some of the membrane module information and corresponding backwash and operating sequence information provided in the Bid Data Sheets was for a different membrane system and was changed to match the system in the Bid Proposal.



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

*Agenda E 2)*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd S. Sando, P.E., Chief Engineer - Secretary  
**SUBJECT:** SWPP Contract 2-8F Dunn Center Service Area Main Transmission Line  
Phase II  
**DATE:** February 10, 2014

Southwest Pipeline Project (SWPP) Contract 2-8F is the second phase of Main Transmission Line (MTL) in Dunn County from Dunn Center booster station (north of Halliday) to North Fairfield booster (West of Killdeer). The contract was divided into three Bid Schedules, in order to have different completion dates and also to accommodate different unit prices for pipeline installation in the western part of the state with many utility crossings. However, the bidding documents specified that the award of the contract would be based on the total base bid of all schedules.

Bid Schedule 1 generally consists of furnishing and installing approximately 15 miles of 16" - 14" AWWA C-905 PVC gasketed joint pipe, road crossings, connections to existing pipelines. The pipeline installation for Bid Schedule 1 is from the Dunn Center booster station to the Dunn Center elevated tank. The contract specifies an Intermediate Completion Date of August 15, 2014 for Bid Schedule 1.

Bid Schedule 2A generally consists of furnishing and installing approximately 5 miles of 14" AWWA C-905 PVC gasketed joint pipe, 7 miles of 10"-6" ASTM D2241 PVC gasketed joint pipe, 2 prefabricated steel meter vaults (for City of Dunn Center and City of Killdeer), road crossings, connection to existing pipelines and other related appurtenances. The contract specifies an Intermediate Completion Date of November 15, 2014 for Bid Schedule 2A.

Bid Schedule 2B generally consists of furnishing and installing approximately 12.5 miles of 8"-6" ASTM D2241 PVC gasketed joint pipe, 2 prefabricated below grade VFD booster stations (Killdeer Mountain Booster and North Fairfield Booster), road crossings, connections to existing pipelines and other related appurtenances. Installation of pipeline in Bid Schedule 2B will allow serving Killdeer Mountain, Grassy Butte and part of Fairfield Service Area from the Oliver Mercer North Dunn water treatment plant. These areas are currently served from the Dickinson Water Treatment Plant. The contract specifies that the work for Bid Schedule 2B and the entire project will be substantially complete on or before August 1, 2015.

Bids for Contract 2-8F were opened on January 30, 2014. Six bid packages were received for Contract 2-8F and all packages appeared in order and were opened. The bid results are summarized below.

February 10, 2014

	<b>Total Base Bid</b>	<b>Amount Higher than Low Bid</b>
Engineer's Estimate	\$7,324,606.50	+ \$162,600.50 2.3%
<b>Carstensen Contracting, Inc. Pipestone, MN</b>	<b>\$7,162,006.00</b>	-
Wagner Construction International Falls, MN	\$7,444,049.00	+ \$282,043.00 3.9%
S.J.Louis Rockville, MN	\$7,600,000.00	+ \$437,994.00 6.1%
Merryman Excavation Woodstock, IL	\$8,032,119.00	+ \$870,113.00 12.1%
Northern Improvement Co. Bismarck, ND	\$8,549,928.20	+ \$1,387,922.20 19.4%
Knife River Boise, ID	\$9,950,149	+ \$2,788,143 38.9%

Carstensen Contracting Inc., is the apparent low bidder for Contract 2-8F with a bid price of \$7,162,006. The estimated total project cost is \$9.3 Million. Carstensen Contracting Inc., have worked on Contract 3-1E for the SWPP and are currently working on Contract 2-8E, Dunn County MTL Phase I for SWPP. They are a responsible contractor and based on the review their bid is considered responsive. Bartlett and West/AECOM have reviewed all bids and has recommended award of Contract 2-8F to Carstensen Contracting Inc., from Pipestone, Minnesota. Their recommendation letter along with the review of bids and bid tab is attached.

**I recommend the State Water Commission authorize the Chief Engineer and Secretary to award SWPP Contract 2-8F in the amount of \$7,162,006 based on the Base Bid to Carstensen Contracting Inc., from Pipestone, Minnesota. The award of the contracts will be dependent upon legal review of the contract documents.**

TSS:SSP:pdh/1736-99

Enclosures

February 4, 2014

North Dakota State Water Commission  
Attn: Ms. Sindhuja S.Pillai-Grinolds, P.E., Project Manager  
900 E. Boulevard Ave.  
Bismarck, ND 58505

**SUBJECT: SWPP OMND Regional Service Area Contract 2-8F  
Dunn Center Booster to North Fairfield Booster Main Transmission Pipeline  
Review of Bids Received  
W.O. 3033.974**

Dear Sindhu:

On Thursday January 30, 2014, bids were opened for the Southwest Pipeline Project (SWPP) Contract 2-8F. This contract consists generally of three (3) Bid Schedules. Bid Schedule No. 1 generally consists of furnishing and installing approximately 15 miles of 16" AWWA C-905 PVC gasketed joint pipe; road crossings; connections to existing pipelines; and other related appurtenances. Bid Schedule No. 2A generally consists of furnishing and installing approximately 5 miles of 14" AWWA C-905 PVC gasketed joint pipe 7 miles of 10" - 6" ASTM D2241 PVC gasketed joint pipe; two (2) prefabricated steel meter vaults; road crossings; connections to existing pipelines; and other related appurtenances. Bid Schedule No. 2B generally consists of furnishing and installing approximately 12.5 miles of 8" - 6" ASTM D 2241 PVC gasketed joint pipe; two (2) prefabricated below grade VFD booster stations, road crossings; connections to existing pipelines; and other related appurtenances. The project is located in Dunn County in North Dakota. The contract documents stipulate a substantial completion date of September 15, 2015 with an intermediate completion date of September 15, 2014 for a portion of the project identified on the plans.

Bid Schedule No. 1 will have an Intermediate Completion Date (Milestone) of August 15, 2014. Bid Schedule No. 2A will have an Intermediate Completion Date (Milestone) of November 15, 2014. Bid Schedule No. 2A includes connections to the cities of Dunn Center and Killdeer. The work for Bid Schedule No. 2B and the entire project will be substantially completed on or before August 1, 2015 and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before September 1, 2015.

Six bid packages were received for Contract 2-8F. All bid packages appeared in order and were opened. A tabulation of the bid results and bidders on this contract is attached. A copy of the bid tab has been provided to all bidders and other interested parties.

The apparent low bid of \$7,162,006.00 received for Contract 2-8F, was submitted by Carstensen Contracting (Carstensen). Carstensen is a reputable contractor and is currently constructing the 2-8E MTL contract. Carstensen is fully capable of satisfactorily completing Contract 2-8F. The low bid received for Contract 2-8F is approximately 2.2% lower than the Engineer's Estimate.

A summary of the bids received on Contract 2-8F is shown in the following table:

<b>SOUTHWEST PIPELINE PROJECT CONTRACT 2-8F</b>			
<b>Dunn Center Booster to North Fairfield Booster Main Transmission Pipeline</b>			
<b>Bidder</b>	<b>Bid Amount</b>	<b>Amount Higher Than Low Bid</b>	<b>Comparison to Engineers Estimate</b>
Carstensen Contracting, Inc. Pipestone, MN	\$ 7,162,006.00	-	- \$162,600.50 -2.2%
Wagner Construction International Falls, MN	\$ 7,444,049.00	+ \$282,043.00 3.9%	+ \$119,442.50 1.6%
S.J. Louis Rockville, MN	\$ 7,600,000.00	+ \$437,994.00 6.1%	+ \$275,393.50 3.8%
Merryman Excavation Woodstock, IL	\$ 8,032,119.00	+ \$870,113.00 12.1%	+ \$707,512.50 9.7%
Northern Improvement Co. Bismarck, ND	\$ 8,549,928.20	+ \$1,387,922.20 19.4%	+ \$1,225,321.70 16.7%
Knife River Boise, ID	\$ 9,950,149.00	+ \$2,788,143.00 38.9%	+ \$2,625,542.50 35.8%
Engineer's Estimate	\$7,324,606.50	+ \$162,600.50 2.3%	-

Based upon our review, the bid received from Carstensen appears to be in accordance with the Advertisement for Construction Bids and the Bid Documents. It is thus considered to be a responsive bid. Subject to approval by your legal counsel that the bid documents are in order from a legal standpoint, we recommend that the North Dakota State Water Commission award Contract 2-8F - Dunn Center Booster to North Fairfield Booster Main Transmission Pipeline, based on the Base Bid, in the amount of \$7,162,006.00 to Carstensen Contracting.

The contract documents require that the SWC award the contract, if awarded, within 61 calendar days after the bid opening as stipulated in the Advertisement for Construction Bids. That date would be April 1, 2014. We understand that funding for this contract may be used to qualify for future federal cost-sharing through the state's Municipal, Rural and Industrial Water Supply Program. Thus the award of the contract requires concurrence from the Garrison Diversion Conservancy District. A copy of this letter and the three lowest bids are being forwarded to the Garrison Diversion Conservancy District and the Bureau of Reclamation, Dakotas Area Office for their consideration.

The award of the contract and the Notice to Proceed are dependent on the satisfactory completion and submission of the contract documents by Carstensen and your legal counsel's review.

If you have any questions or comments, please contact us.

Sincerely,

**BARTLETT & WEST/AECOM**

  
Bryan Ziegler, P.E.  
Project Engineer

Copy: SWA – Mary Massad  
GDCD – Kip Kovar (copy of 3 low bids)  
File: SWPP Contract 2-8F: 7.0

BW/AECOM – RAK, JCL, BJZ  
USBR – Tom Thompson (PDF copy of 3 low bids)



3456 E CENTURY AVENUE ■ BISMARCK ND 58503-0737  
 701.258.1110 ■ FAX 701.258.1111 ■ 800.474.4117  
 WWW.BARTWEST.COM

### Bid Tabulation

PROJECT: SOUTHWEST PIPELINE PROJECT  
 CONTRACT 2-8F  
 DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
 DATE: January 30, 2014  
 LOCATION: ND State Water Commission  
 CCI: 9516

W.O. 3033.974

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Carstensen Contracting Pipestone, MN		Wagner Construction International Falls, MN		S.J. Louis Construction Rockville, MN		Merrymen Excavation Woodstock, IL	
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
<b>BID SCHEDULE NO. 1</b>													
1	16" C-905 DR 25	L.F.	17,340	\$ 35.00	\$ 606,900.00	\$ 33.66	\$ 583,664.40	\$ 32.50	\$ 563,550.00	\$ 34.00	\$ 589,560.00	35.20	610,368.00
2	16" C-905 DR 21	L.F.	16,170	\$ 39.00	\$ 630,630.00	\$ 37.45	\$ 605,566.50	\$ 36.50	\$ 590,205.00	\$ 38.00	\$ 614,460.00	40.00	646,800.00
3	16" C-905 DR 18	L.F.	28,550	\$ 43.00	\$ 1,227,650.00	\$ 41.60	\$ 1,187,680.00	\$ 40.00	\$ 1,142,000.00	\$ 42.00	\$ 1,199,100.00	43.80	1,250,490.00
4	16" C-905 DR 14	L.F.	19,940	\$ 53.00	\$ 1,056,820.00	\$ 50.34	\$ 1,003,779.60	\$ 50.00	\$ 997,000.00	\$ 51.00	\$ 1,016,940.00	53.60	1,068,784.00
5	Work in ROW	L.F.	1,130	\$ 0.60	\$ 678.00	\$ 0.60	\$ 678.00	\$ 0.60	\$ 678.00	\$ 0.60	\$ 678.00	0.60	678.00
6	16" Type 1 Road Crossing	EA	1	\$ 45,000.00	\$ 45,000.00	\$ 42,775.00	\$ 42,775.00	\$ 70,000.00	\$ 70,000.00	\$ 48,000.00	\$ 48,000.00	64,710.00	64,710.00
7	16" Type 3 Road Crossing	EA	9	\$ 12,500.00	\$ 112,500.00	\$ 16,765.00	\$ 150,885.00	\$ 15,500.00	\$ 139,500.00	\$ 13,500.00	\$ 121,500.00	20,000.00	180,000.00
8	16" Type 4 Road Crossing	EA	11	\$ 10,000.00	\$ 110,000.00	\$ 10,500.00	\$ 115,500.00	\$ 12,750.00	\$ 140,250.00	\$ 8,000.00	\$ 88,000.00	13,000.00	143,000.00
9	14" & Larger Bored Gas Line Crossing	EA	10	\$ 2,000.00	\$ 20,000.00	\$ 2,000.00	\$ 20,000.00	\$ 2,000.00	\$ 20,000.00	\$ 2,000.00	\$ 20,000.00	2,000.00	20,000.00
10	14" & Larger Un-bored Gas Line Crossing	EA	10	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	1,500.00	15,000.00
11	16" Gate Valve & Box	EA	6	\$ 9,000.00	\$ 54,000.00	\$ 8,090.00	\$ 48,540.00	\$ 8,000.00	\$ 48,000.00	\$ 9,500.00	\$ 57,000.00	10,000.00	60,000.00
12	2" Cleanout	EA	9	\$ 1,425.00	\$ 12,825.00	\$ 1,543.00	\$ 13,887.00	\$ 1,800.00	\$ 16,200.00	\$ 2,000.00	\$ 18,000.00	2,000.00	18,000.00
13	2" CAV	EA	4	\$ 5,800.00	\$ 23,200.00	\$ 7,572.00	\$ 30,288.00	\$ 6,000.00	\$ 24,000.00	\$ 7,000.00	\$ 28,000.00	5,400.00	21,600.00
14	Dunn Center Tank Turnout	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 30,737.00	\$ 30,737.00	\$ 33,000.00	\$ 33,000.00	\$ 44,000.00	\$ 44,000.00	39,000.00	39,000.00
15	Dunn Center Booster Tie-in	EA	1	\$ 20,000.00	\$ 20,000.00	\$ 14,641.00	\$ 14,641.00	\$ 18,500.00	\$ 18,500.00	\$ 20,000.00	\$ 20,000.00	19,000.00	19,000.00
16	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	20	\$ 50.00	\$ 1,000.00	\$ 65.00	\$ 1,300.00	\$ 50.00	\$ 1,000.00	\$ 50.00	\$ 1,000.00	220.00	4,400.00
<b>Subtotal Items 1 - 16</b>					\$ 3,961,203.00		\$ 3,864,921.50		\$ 3,818,883.00		\$ 3,881,238.00		\$ 4,161,830.00
Bid Adjustment (Addition) (Deduction)					\$ -		\$ -		\$ -		\$ (3,500.00)		\$ (130,000.00)
<b>Total Bid Schedule No. 1</b>					\$ 3,961,203.00		\$ 3,864,921.50		\$ 3,818,883.00		\$ 3,877,738.00		\$ 4,031,830.00

**Bid Tabulation**

PROJECT: W.O. 3033.974  
SOUTHWEST PIPELINE PROJECT  
CONTRACT 2-8F  
DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
 DATE: January 30, 2014  
 LOCATION: ND State Water Commission  
 CCI: 9516

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Carstensen Contracting Pipestone, MN		Wagner Construction International Falls, MN		S.J. Louis Construction Rockville, MN		Merryman Excavation Woodstock, IL	
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
	<b>BID SCHEDULE NO. 2A</b>												
1	14" C-905 DR 25	L.F.	24,980	\$ 32.00	\$ 799,360.00	\$ 27.75	\$ 693,195.00	\$ 27.00	\$ 674,460.00	\$ 28.00	\$ 699,440.00	28.90	721,922.00
2	10" CL. 200 PVC, G J	L.F.	12,380	\$ 16.00	\$ 198,080.00	\$ 17.58	\$ 217,640.40	\$ 19.00	\$ 235,220.00	\$ 18.00	\$ 222,840.00	19.50	241,410.00
3	6" CL. 250 PVC, G J	L.F.	10,290	\$ 10.75	\$ 110,617.50	\$ 11.22	\$ 115,453.80	\$ 15.00	\$ 154,350.00	\$ 13.00	\$ 133,770.00	12.30	126,567.00
4	6" CL. 200 PVC, G J	L.F.	7,950	\$ 9.95	\$ 79,102.50	\$ 10.23	\$ 81,328.50	\$ 14.00	\$ 111,300.00	\$ 11.00	\$ 87,450.00	11.20	89,040.00
5	6" CL. 160 PVC, G J	L.F.	6,710	\$ 9.50	\$ 63,745.00	\$ 9.60	\$ 64,416.00	\$ 13.00	\$ 87,230.00	\$ 11.00	\$ 73,810.00	10.40	69,784.00
6	Work in ROW	L.F.	2,110	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,266.00	0.60	1,266.00
7	14" Type 3 Road Crossing	EA	2	\$ 11,000.00	\$ 22,000.00	\$ 13,615.00	\$ 27,230.00	\$ 12,500.00	\$ 25,000.00	\$ 12,000.00	\$ 24,000.00	15,000.00	30,000.00
8	14" Type 4 Road Crossing	EA	5	\$ 9,500.00	\$ 47,500.00	\$ 8,963.00	\$ 44,815.00	\$ 10,250.00	\$ 51,250.00	\$ 9,000.00	\$ 45,000.00	12,000.00	60,000.00
9	10" Type 1 Road Crossing	EA	1	\$ 23,000.00	\$ 23,000.00	\$ 20,137.00	\$ 20,137.00	\$ 35,000.00	\$ 35,000.00	\$ 30,000.00	\$ 30,000.00	42,000.00	42,000.00
10	10" Type 3 Road Crossing	EA	2	\$ 9,000.00	\$ 18,000.00	\$ 6,501.00	\$ 13,002.00	\$ 5,500.00	\$ 11,000.00	\$ 7,000.00	\$ 14,000.00	8,500.00	17,000.00
11	10" Type 4 Road Crossing	EA	2	\$ 6,500.00	\$ 13,000.00	\$ 5,380.00	\$ 10,760.00	\$ 5,000.00	\$ 10,000.00	\$ 6,500.00	\$ 13,000.00	7,500.00	15,000.00
12	6" Type 3 Road Crossing	EA	5	\$ 3,800.00	\$ 19,000.00	\$ 3,415.00	\$ 17,075.00	\$ 3,500.00	\$ 17,500.00	\$ 4,000.00	\$ 20,000.00	5,000.00	25,000.00
13	6" Type 4 Road Crossing	EA	4	\$ 3,400.00	\$ 13,600.00	\$ 2,362.00	\$ 9,448.00	\$ 2,750.00	\$ 11,000.00	\$ 3,000.00	\$ 12,000.00	4,000.00	16,000.00
14	14" & Larger Bored Gas Line Crossing	EA	5	\$ 2,000.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00	2,000.00	10,000.00
15	14" & Larger Un-bored Gas Line Crossing	EA	5	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	1,500.00	7,500.00
16	12" & Smaller Bored Gas Line Crossing	EA	5	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	1,500.00	7,500.00
17	12" & Smaller Un-bored Gas Line Crossing	EA	5	\$ 1,100.00	\$ 5,500.00	\$ 1,100.00	\$ 5,500.00	\$ 1,100.00	\$ 5,500.00	\$ 1,100.00	\$ 5,500.00	1,100.00	5,500.00
18	14" Gate Valve & Box	EA	1	\$ 7,500.00	\$ 7,500.00	\$ 7,723.00	\$ 7,723.00	\$ 7,500.00	\$ 7,500.00	\$ 9,000.00	\$ 9,000.00	9,700.00	9,700.00
19	10" Gate Valve & Box	EA	1	\$ 3,500.00	\$ 3,500.00	\$ 2,953.00	\$ 2,953.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	3,500.00	3,500.00
20	6" Gate Valve & Box	EA	1	\$ 1,600.00	\$ 1,600.00	\$ 1,604.00	\$ 1,604.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	1,800.00	1,800.00
21	2" Cleanout	EA	2	\$ 1,425.00	\$ 2,850.00	\$ 1,503.00	\$ 3,006.00	\$ 1,800.00	\$ 3,600.00	\$ 2,000.00	\$ 4,000.00	2,000.00	4,000.00
22	2" CAV	EA	1	\$ 5,800.00	\$ 5,800.00	\$ 7,420.00	\$ 7,420.00	\$ 6,000.00	\$ 6,000.00	\$ 7,000.00	\$ 7,000.00	5,400.00	5,400.00
23	Dunn Center Connection	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 5,435.00	\$ 5,435.00	\$ 12,000.00	\$ 12,000.00	\$ 5,000.00	\$ 5,000.00	6,000.00	6,000.00
24	Dunn Center Master Meter	EA	1	\$ 85,000.00	\$ 85,000.00	\$ 121,587.00	\$ 121,587.00	\$ 105,000.00	\$ 105,000.00	\$ 279,000.00	\$ 279,000.00	240,000.00	240,000.00
25	Killdeer Master Meter	EA	1	\$ 105,000.00	\$ 105,000.00	\$ 138,780.00	\$ 138,780.00	\$ 110,000.00	\$ 110,000.00	\$ 273,000.00	\$ 273,000.00	240,000.00	240,000.00
26	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	20	\$ 50.00	\$ 1,000.00	\$ 65.00	\$ 1,300.00	\$ 50.00	\$ 1,000.00	\$ 50.00	\$ 1,000.00	220.00	4,400.00
	<b>Subtotal Items 1 – 26</b>				\$ 1,676,021.00		\$ 1,636,074.70		\$ 1,705,176.00		\$ 1,990,076.00		\$ 2,000,289.00
	Bid Adjustment (Addition) (Deduction)				\$ -		\$ -		\$ -		\$ -		\$ -
	<b>Total Bid Schedule No. 2A</b>				\$ 1,676,021.00		\$ 1,636,074.70		\$ 1,705,176.00		\$ 1,990,076.00		\$ 2,000,289.00

**Bid Tabulation**

PROJECT: SOUTHWEST PIPELINE PROJECT  
CONTRACT 2-8F  
DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
DATE: January 30, 2014  
LOCATION: ND State Water Commission  
CCI: 9516

W.O. 3033.974

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Carstensen Contracting Pipestone, MN		Wagner Construction International Falls, MN		S.J. Louis Construction Rockville, MN		Merryman Excavation Woodstock, IL	
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
<b>BID SCHEDULE NO. 2B</b>													
1	8" CL 250 PVC, G.J.	L.F.	16,220	\$ 18.00	\$ 291,960.00	\$ 14.70	\$ 238,434.00	\$ 18.00	\$ 291,960.00	\$ 16.00	\$ 259,520.00	17.10	277,362.00
2	8" CL 200 PVC, G.J.	L.F.	13,680	\$ 14.50	\$ 198,360.00	\$ 13.15	\$ 179,892.00	\$ 16.00	\$ 218,880.00	\$ 14.00	\$ 191,520.00	15.30	209,304.00
3	8" CL 160 PVC, G.J.	L.F.	30,120	\$ 13.00	\$ 391,560.00	\$ 11.93	\$ 359,331.60	\$ 15.00	\$ 451,800.00	\$ 13.00	\$ 391,560.00	14.00	421,680.00
4	6" CL 250 PVC, G.J.	L.F.	6,350	\$ 11.25	\$ 71,437.50	\$ 11.18	\$ 70,993.00	\$ 15.00	\$ 95,250.00	\$ 13.00	\$ 82,550.00	12.30	78,105.00
5	6" CL 200 PVC, G.J.	L.F.	5,510	\$ 10.50	\$ 57,855.00	\$ 10.42	\$ 57,414.20	\$ 14.00	\$ 77,140.00	\$ 12.00	\$ 66,120.00	11.30	62,263.00
6	6" CL 160 PVC, G.J.	L.F.	8,000	\$ 10.00	\$ 80,000.00	\$ 9.59	\$ 76,720.00	\$ 13.50	\$ 108,000.00	\$ 11.00	\$ 88,000.00	10.50	84,000.00
7	Work in ROW	EA	2,100	\$ 0.60	\$ 1,260.00	\$ 0.60	\$ 1,260.00	\$ 0.60	\$ 1,260.00	\$ 0.60	\$ 1,260.00	0.60	1,260.00
8	8" Restrained Joint Area	EA	700	\$ 55.00	\$ 38,500.00	\$ 57.25	\$ 40,075.00	\$ 95.00	\$ 66,500.00	\$ 54.00	\$ 37,800.00	60.00	42,000.00
9	8" Type 1 Road Crossing	EA	1	\$ 15,000.00	\$ 15,000.00	\$ 16,130.00	\$ 16,130.00	\$ 18,000.00	\$ 18,000.00	\$ 28,000.00	\$ 28,000.00	50,000.00	50,000.00
10	8" Type 3 Road Crossing	EA	5	\$ 5,500.00	\$ 27,500.00	\$ 4,905.00	\$ 24,525.00	\$ 4,250.00	\$ 21,250.00	\$ 6,000.00	\$ 30,000.00	7,000.00	35,000.00
11	8" Type 4 Road Crossing	EA	6	\$ 5,200.00	\$ 31,200.00	\$ 3,507.00	\$ 21,042.00	\$ 3,750.00	\$ 22,500.00	\$ 5,000.00	\$ 30,000.00	5,500.00	33,000.00
12	6" Type 3 Road Crossing	EA	5	\$ 4,200.00	\$ 21,000.00	\$ 3,387.00	\$ 16,935.00	\$ 3,250.00	\$ 16,250.00	\$ 4,000.00	\$ 20,000.00	4,800.00	24,000.00
13	6" Type 4 Road Crossing	EA	6	\$ 3,900.00	\$ 23,400.00	\$ 3,020.00	\$ 18,120.00	\$ 2,750.00	\$ 16,500.00	\$ 3,000.00	\$ 18,000.00	3,500.00	21,000.00
14	12" & Smaller Bored Gas Line Crossing	EA	10	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	1,500.00	15,000.00
15	12" & Smaller Un-bored Gas Line Crossing	EA	15	\$ 1,100.00	\$ 16,500.00	\$ 1,100.00	\$ 16,500.00	\$ 1,100.00	\$ 16,500.00	\$ 1,100.00	\$ 16,500.00	1,100.00	16,500.00
16	8" Gate Valve & Box	EA	2	\$ 3,200.00	\$ 6,400.00	\$ 2,231.00	\$ 4,462.00	\$ 2,000.00	\$ 4,000.00	\$ 2,200.00	\$ 4,400.00	2,500.00	5,000.00
17	6" Gate Valve & Box	EA	2	\$ 2,000.00	\$ 4,000.00	\$ 1,603.00	\$ 3,206.00	\$ 1,500.00	\$ 3,000.00	\$ 1,500.00	\$ 3,000.00	1,800.00	3,600.00
18	2" Cleanout	EA	3	\$ 1,750.00	\$ 5,250.00	\$ 1,800.00	\$ 5,400.00	\$ 1,800.00	\$ 5,400.00	\$ 2,000.00	\$ 6,000.00	2,000.00	6,000.00
19	2" CAV	EA	2	\$ 6,250.00	\$ 12,500.00	\$ 7,311.00	\$ 14,622.00	\$ 1,800.00	\$ 3,600.00	\$ 7,000.00	\$ 14,000.00	5,400.00	10,800.00
20	8" Tie-in	EA	2	\$ 7,500.00	\$ 15,000.00	\$ 6,910.00	\$ 13,820.00	\$ 8,500.00	\$ 17,000.00	\$ 8,000.00	\$ 16,000.00	6,500.00	13,000.00
21	6" Tie-in	EA	2	\$ 4,500.00	\$ 9,000.00	\$ 4,140.00	\$ 8,280.00	\$ 6,500.00	\$ 13,000.00	\$ 5,000.00	\$ 10,000.00	4,400.00	8,800.00
22	4" Tie-in	EA	1	\$ 3,500.00	\$ 3,500.00	\$ 2,630.00	\$ 2,630.00	\$ 6,000.00	\$ 6,000.00	\$ 5,000.00	\$ 5,000.00	4,900.00	4,900.00
23	Killdeer Booster Station Tie-In	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 13,111.00	\$ 13,111.00	\$ 15,000.00	\$ 15,000.00	\$ 14,000.00	\$ 14,000.00	10,000.00	10,000.00
24	Killdeer Mountain Booster #16-1	EA	1	\$ 145,000.00	\$ 145,000.00	\$ 212,672.00	\$ 212,672.00	\$ 195,000.00	\$ 195,000.00	\$ 190,000.00	\$ 190,000.00	385,000.00	385,000.00
25	Killdeer Mountain Tank Turnout	EA	1	\$ 20,000.00	\$ 20,000.00	\$ 9,213.00	\$ 9,213.00	\$ 12,500.00	\$ 12,500.00	\$ 3,000.00	\$ 3,000.00	5,000.00	5,000.00
26	North Fairfield Booster Station Tie-In	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 15,062.00	\$ 15,062.00	\$ 17,500.00	\$ 17,500.00	\$ 19,000.00	\$ 19,000.00	15,000.00	15,000.00
27	North Fairfield Booster #20-1	EA	1	\$ 135,000.00	\$ 135,000.00	\$ 204,600.00	\$ 204,600.00	\$ 190,000.00	\$ 190,000.00	\$ 170,756.00	\$ 170,756.00	385,000.00	385,000.00
28	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	24	\$ 50.00	\$ 1,200.00	\$ 65.00	\$ 1,560.00	\$ 50.00	\$ 1,200.00	\$ 50.00	\$ 1,200.00	220.00	5,280.00
<b>Subtotal Items 1 - 28</b>					\$ 1,687,382.50		\$ 1,661,009.80		\$ 1,919,990.00		\$ 1,732,186.00		\$ 2,227,854.00
Bid Adjustment (Addition) (Deduction)					\$ -		\$ -		\$ -		\$ -		\$ (227,854.00)
<b>Total Bid Schedule No. 2B</b>					\$ 1,687,382.50		\$ 1,661,009.80		\$ 1,919,990.00		\$ 1,732,186.00		\$ 2,000,000.00
<b>Total Bid (Schedules 1, 2A, and 2B)</b>					\$ 7,324,606.50		\$ 7,162,006.00		\$ 7,444,049.00		\$ 7,600,000.00		\$ 8,032,119.00
<b>SUBCONTRACTORS</b>						BORING: DENNY'S ELECTRIC, DICKINSON, ND		BORING: EBI, MN		BORING: EBI		BORING: EBI, DULUTH, MN	
						SEEDING: PIPER LAND RESOURCES, DAVENPORT, ND		SEEDING: WAGNER/HCI, MN/ND		SEEDING: SELF		SEEDING: N/A	
<b>SUPPLIERS</b>						PREFAB. VAULTS: DAKOTA PUMP & CONTROL, WATERTOWN, SD		PREFAB. VAULTS: DAKOTA PUMP, ND/SD		PREFAB. VAULTS: DAKOTA PUMP/ENGINEERING AMERICA		PREFAB. VAULTS: DAKOTA PUMP, MITCHELL, SD	
						MANHOLES: CRETEX, BISMARCK, ND		MANHOLES: CRETEX, BISMARCK, ND		MANHOLES: CRETEX, BISMARCK, ND		MANHOLES: CRETEX, BISMARCK, ND	
						MATERIALS: FERGUSON, FARGO, ND		MATERIALS: FERGUSON, FARGO WATER, MN PIPE, ND/ND/MN		MATERIALS: FARGO WATER, FARGO, ND		MATERIALS: FARGO WATER, FARGO, ND	
<b>PIPE MANUFACTURER</b>						DIAMOND PLASTICS		DIAMOND PLASTICS/ NORTHERN PIPE, NE/ND		DIAMOND PIPE/ NORTHERN PIPE, GRAND ISLAND NE/FARGO, ND		DIAMOND PIPE/ NORTHERN PIPE, GRAND ISLAND NE/FARGO, ND	



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### Bid Tabulation

PROJECT: SOUTHWEST PIPELINE PROJECT  
 CONTRACT 2-8F  
 DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
 DATE: January 30, 2014  
 LOCATION: ND State Water Commission  
 CCI: 9516

W.O. 3033.974

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Northern Improvement Co. Bismarck, ND		Knife River Corp. Northwest Boise, ID		Unit Price	Extension	Unit Price	Extension
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension				
<b>BID SCHEDULE NO. 1</b>													
1	16" C-905 DR 25	L.F.	17,340	\$ 35.00	\$ 606,900.00	\$ 37.50	\$ 650,250.00	\$ 45.10	\$ 782,034.00				
2	16" C-905 DR 21	L.F.	16,170	\$ 39.00	\$ 630,630.00	\$ 42.30	\$ 683,991.00	\$ 52.80	\$ 853,776.00				
3	16" C-905 DR 18	L.F.	28,550	\$ 43.00	\$ 1,227,650.00	\$ 47.20	\$ 1,347,560.00	\$ 54.00	\$ 1,541,700.00				
4	16" C-905 DR 14	L.F.	19,940	\$ 53.00	\$ 1,056,820.00	\$ 60.20	\$ 1,200,388.00	\$ 69.20	\$ 1,379,648.00				
5	Work in ROW	L.F.	1,130	\$ 0.60	\$ 678.00	\$ 0.60	\$ 678.00	\$ 0.60	\$ 678.00				
6	16" Type 1 Road Crossing	EA	1	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 45,000.00	\$ 101,000.00	\$ 101,000.00				
7	16" Type 3 Road Crossing	EA	9	\$ 12,500.00	\$ 112,500.00	\$ 18,000.00	\$ 162,000.00	\$ 9,800.00	\$ 88,200.00				
8	16" Type 4 Road Crossing	EA	11	\$ 10,000.00	\$ 110,000.00	\$ 14,500.00	\$ 159,500.00	\$ 6,500.00	\$ 71,500.00				
9	14" & Larger Bored Gas Line Crossing	EA	10	\$ 2,000.00	\$ 20,000.00	\$ 2,000.00	\$ 20,000.00	\$ 2,000.00	\$ 20,000.00				
10	14" & Larger Un-bored Gas Line Crossing	EA	10	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00				
11	16" Gate Valve & Box	EA	6	\$ 9,000.00	\$ 54,000.00	\$ 10,000.00	\$ 60,000.00	\$ 12,000.00	\$ 72,000.00				
12	2" Cleanout	EA	9	\$ 1,425.00	\$ 12,825.00	\$ 2,160.00	\$ 19,440.00	\$ 2,200.00	\$ 19,800.00				
13	2" CAV	EA	4	\$ 5,800.00	\$ 23,200.00	\$ 9,570.00	\$ 38,280.00	\$ 10,000.00	\$ 40,000.00				
14	Dunn Center Tank Turnout	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 42,500.00	\$ 42,500.00	\$ 35,000.00	\$ 35,000.00				
15	Dunn Center Booster Tie-in	EA	1	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 17,500.00	\$ 17,500.00				
16	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	20	\$ 50.00	\$ 1,000.00	\$ 54.90	\$ 1,098.00	\$ 110.00	\$ 2,200.00				
<b>Subtotal Items 1 - 16</b>					\$ 3,961,203.00		\$ 4,465,685.00		\$ 5,040,236.00				
Bid Adjustment (Addition) (Deduction)					\$ -		\$ -		\$ -				
<b>Total Bid Schedule No. 1</b>					\$ 3,961,203.00		\$ 4,465,685.00		\$ 5,040,236.00				



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### Bid Tabulation

PROJECT: W.O. 3033.974  
 SOUTHWEST PIPELINE PROJECT  
 CONTRACT 2-8F  
 DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
 DATE: January 30, 2014  
 LOCATION: ND State Water Commission  
 CCI: 9516

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Northern Improvement Co. Bismarck, ND		Knife River Corp. Northwest Boise, ID		Unit Price	Extension	Unit Price	Extension
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension				
<b>BID SCHEDULE NO. 2A</b>													
1	14" C-905 DR 25	L.F.	24,980	\$ 32.00	\$ 799,360.00	\$ 35.80	\$ 894,284.00	\$ 37.30	\$ 931,754.00				
2	10" CL 200 PVC, G J	L.F.	12,380	\$ 16.00	\$ 198,080.00	\$ 22.70	\$ 281,026.00	\$ 29.50	\$ 365,210.00				
3	6" CL 250 PVC, G.J.	L.F.	10,290	\$ 10.75	\$ 110,617.50	\$ 12.50	\$ 128,625.00	\$ 18.30	\$ 188,307.00				
4	6" CL 200 PVC, G.J.	L.F.	7,950	\$ 9.95	\$ 79,102.50	\$ 11.40	\$ 90,630.00	\$ 16.90	\$ 134,355.00				
5	6" CL 160 PVC, G.J.	L.F.	6,710	\$ 9.50	\$ 63,745.00	\$ 10.50	\$ 70,455.00	\$ 16.50	\$ 110,715.00				
6	Work in ROW	L.F.	2,110	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,266.00				
7	14" Type 3 Road Crossing	EA	2	\$ 11,000.00	\$ 22,000.00	\$ 16,500.00	\$ 33,000.00	\$ 7,400.00	\$ 14,800.00				
8	14" Type 4 Road Crossing	EA	5	\$ 9,500.00	\$ 47,500.00	\$ 12,200.00	\$ 61,000.00	\$ 4,500.00	\$ 22,500.00				
9	10" Type 1 Road Crossing	EA	1	\$ 23,000.00	\$ 23,000.00	\$ 26,300.00	\$ 26,300.00	\$ 50,000.00	\$ 50,000.00				
10	10" Type 3 Road Crossing	EA	2	\$ 9,000.00	\$ 18,000.00	\$ 8,690.00	\$ 17,380.00	\$ 4,400.00	\$ 8,800.00				
11	10" Type 4 Road Crossing	EA	2	\$ 6,500.00	\$ 13,000.00	\$ 6,180.00	\$ 12,360.00	\$ 3,700.00	\$ 7,400.00				
12	6" Type 3 Road Crossing	EA	5	\$ 3,800.00	\$ 19,000.00	\$ 5,640.00	\$ 28,200.00	\$ 3,350.00	\$ 16,750.00				
13	6" Type 4 Road Crossing	EA	4	\$ 3,400.00	\$ 13,600.00	\$ 4,470.00	\$ 17,880.00	\$ 2,550.00	\$ 10,200.00				
14	14" & Larger Bored Gas Line Crossing	EA	5	\$ 2,000.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00				
15	14" & Larger Un-bored Gas Line Crossing	EA	5	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00				
16	12" & Smaller Bored Gas Line Crossing	EA	5	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00	\$ 1,500.00	\$ 7,500.00				
17	12" & Smaller Un-bored Gas Line Crossing	EA	5	\$ 1,100.00	\$ 5,500.00	\$ 1,100.00	\$ 5,500.00	\$ 1,100.00	\$ 5,500.00				
18	14" Gate Valve & Box	EA	1	\$ 7,500.00	\$ 7,500.00	\$ 9,900.00	\$ 9,900.00	\$ 10,000.00	\$ 10,000.00				
19	10" Gate Valve & Box	EA	1	\$ 3,500.00	\$ 3,500.00	\$ 4,380.00	\$ 4,380.00	\$ 3,500.00	\$ 3,500.00				
20	6" Gate Valve & Box	EA	1	\$ 1,600.00	\$ 1,600.00	\$ 2,320.00	\$ 2,320.00	\$ 2,000.00	\$ 2,000.00				
21	2" Cleanout	EA	2	\$ 1,425.00	\$ 2,850.00	\$ 2,420.00	\$ 4,840.00	\$ 2,200.00	\$ 4,400.00				
22	2" CAV	EA	1	\$ 5,800.00	\$ 5,800.00	\$ 10,700.00	\$ 10,700.00	\$ 9,950.00	\$ 9,950.00				
23	Dunn Center Connection	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 8,030.00	\$ 8,030.00	\$ 8,200.00	\$ 8,200.00				
24	Dunn Center Master Meter	EA	1	\$ 85,000.00	\$ 85,000.00	\$ 144,000.00	\$ 144,000.00	\$ 200,000.00	\$ 200,000.00				
25	Killdeer Master Meter	EA	1	\$ 105,000.00	\$ 105,000.00	\$ 162,300.00	\$ 162,300.00	\$ 245,000.00	\$ 245,000.00				
26	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	20	\$ 50.00	\$ 1,000.00	\$ 62.70	\$ 1,254.00	\$ 110.00	\$ 2,200.00				
<b>Subtotal Items 1 - 26</b>					\$ 1,676,021.00		\$ 2,040,630.00		\$ 2,377,807.00				
Bid Adjustment (Addition) (Deduction)					\$ -		\$ -		\$ (56,217.00)				
<b>Total Bid Schedule No. 2A</b>					\$ 1,676,021.00		\$ 2,040,630.00		\$ 2,321,590.00				



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### Bid Tabulation

PROJECT: SOUTHWEST PIPELINE PROJECT  
 CONTRACT 2-8F  
 DUNN CENTER BOOSTER TO NORTH FAIRFIELD BOOSTER MTL  
 DATE: January 30, 2014  
 LOCATION: ND State Water Commission  
 CCI: 9516

W.O. 3033.974

Item	Description	Unit	Estimated Quantity	Engineer's Estimate		Northern Improvement Co. Bismarck, ND		Knife River Corp. Northwest Boise, ID		Unit Price	Extension	Unit Price	Extension
				Unit Price	Extension	Unit Price	Extension	Unit Price	Extension				
<b>BID SCHEDULE NO. 2B</b>													
1	8" CL. 250 PVC, G.J.	L.F.	16,220	\$ 18.00	\$ 291,960.00	\$ 17.00	\$ 275,740.00	\$ 24.00	\$ 389,280.00				
2	8" CL. 200 PVC, G.J.	L.F.	13,680	\$ 14.50	\$ 198,360.00	\$ 15.10	\$ 206,568.00	\$ 20.50	\$ 280,440.00				
3	8" CL. 160 PVC, G.J.	L.F.	30,120	\$ 13.00	\$ 391,560.00	\$ 13.70	\$ 412,644.00	\$ 19.00	\$ 572,280.00				
4	6" CL. 250 PVC, G.J.	L.F.	6,350	\$ 11.25	\$ 71,437.50	\$ 12.10	\$ 76,835.00	\$ 20.00	\$ 127,000.00				
5	6" CL. 200 PVC, G.J.	L.F.	5,510	\$ 10.50	\$ 57,855.00	\$ 11.10	\$ 61,161.00	\$ 17.30	\$ 95,323.00				
6	6" CL. 160 PVC, G.J.	L.F.	8,000	\$ 10.00	\$ 80,000.00	\$ 10.20	\$ 81,600.00	\$ 16.30	\$ 130,400.00				
7	Work in ROW	EA	2,100	\$ 0.60	\$ 1,260.00	\$ 0.60	\$ 1,266.00	\$ 0.60	\$ 1,260.00				
8	8" Restrained Joint Area	EA	700	\$ 55.00	\$ 38,500.00	\$ 64.80	\$ 45,360.00	\$ 65.00	\$ 45,500.00				
9	8" Type 1 Road Crossing	EA	1	\$ 15,000.00	\$ 15,000.00	\$ 23,000.00	\$ 23,000.00	\$ 47,000.00	\$ 47,000.00				
10	8" Type 3 Road Crossing	EA	5	\$ 5,500.00	\$ 27,500.00	\$ 7,270.00	\$ 36,350.00	\$ 3,800.00	\$ 19,000.00				
11	8" Type 4 Road Crossing	EA	6	\$ 5,200.00	\$ 31,200.00	\$ 5,770.00	\$ 34,620.00	\$ 3,100.00	\$ 18,600.00				
12	6" Type 3 Road Crossing	EA	5	\$ 4,200.00	\$ 21,000.00	\$ 5,090.00	\$ 25,450.00	\$ 3,400.00	\$ 17,000.00				
13	6" Type 4 Road Crossing	EA	6	\$ 3,900.00	\$ 23,400.00	\$ 3,830.00	\$ 22,980.00	\$ 2,600.00	\$ 15,600.00				
14	12" & Smaller Bored Gas Line Crossing	EA	10	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00	\$ 1,500.00	\$ 15,000.00				
15	12" & Smaller Un-bored Gas Line Crossing	EA	15	\$ 1,100.00	\$ 16,500.00	\$ 1,100.00	\$ 16,500.00	\$ 1,100.00	\$ 16,500.00				
16	8" Gate Valve & Box	EA	2	\$ 3,200.00	\$ 6,400.00	\$ 3,350.00	\$ 6,700.00	\$ 2,500.00	\$ 5,000.00				
17	6" Gate Valve & Box	EA	2	\$ 2,000.00	\$ 4,000.00	\$ 2,460.00	\$ 4,920.00	\$ 2,000.00	\$ 4,000.00				
18	2" Cleanout	EA	3	\$ 1,750.00	\$ 5,250.00	\$ 2,240.00	\$ 6,720.00	\$ 2,000.00	\$ 6,000.00				
19	2" CAV	EA	2	\$ 6,250.00	\$ 12,500.00	\$ 10,400.00	\$ 20,800.00	\$ 10,500.00	\$ 21,000.00				
20	8" Tie-in	EA	2	\$ 7,500.00	\$ 15,000.00	\$ 11,700.00	\$ 23,400.00	\$ 9,000.00	\$ 18,000.00				
21	6" Tie-in	EA	2	\$ 4,500.00	\$ 9,000.00	\$ 7,820.00	\$ 15,640.00	\$ 8,000.00	\$ 16,000.00				
22	4" Tie-in	EA	1	\$ 3,500.00	\$ 3,500.00	\$ 10,200.00	\$ 10,200.00	\$ 6,500.00	\$ 6,500.00				
23	Killdeer Booster Station Tie-In	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 32,900.00	\$ 32,900.00	\$ 13,000.00	\$ 13,000.00				
24	Killdeer Mountain Booster #16-1	EA	1	\$ 145,000.00	\$ 145,000.00	\$ 270,500.00	\$ 270,500.00	\$ 375,000.00	\$ 375,000.00				
25	Killdeer Mountain Tank Turnout	EA	1	\$ 20,000.00	\$ 20,000.00	\$ 15,500.00	\$ 15,500.00	\$ 9,000.00	\$ 9,000.00				
26	North Fairfield Booster Station Tie-In	EA	1	\$ 25,000.00	\$ 25,000.00	\$ 38,800.00	\$ 38,800.00	\$ 25,000.00	\$ 25,000.00				
27	North Fairfield Booster #20-1	EA	1	\$ 135,000.00	\$ 135,000.00	\$ 261,000.00	\$ 261,000.00	\$ 370,000.00	\$ 370,000.00				
28	Flexible Utility Marker Posts & Reflective Decals for Road Crossings	EA	24	\$ 50.00	\$ 1,200.00	\$ 60.80	\$ 1,459.20	\$ 110.00	\$ 2,640.00				
<b>Subtotal Items 1 - 28</b>					\$ 1,687,382.50	\$ 2,043,613.20	\$ 2,661,323.00						
Bid Adjustment (Addition) (Deduction)					\$ -	\$ -	\$ (73,000.00)						
<b>Total Bid Schedule No. 2B</b>					\$ 1,687,382.50	\$ 2,043,613.20	\$ 2,588,323.00						
<b>Total Bid (Schedules 1, 2A, and 2B)</b>					\$ 7,324,606.50	\$ 8,549,928.20	\$ 9,950,149.00						
<b>SUBCONTRACTORS</b>						BORING: N/A	BORING: FBI DRILLING, DULUTH, MN						
						SEEDING: N/A	SEEDING: SELF						
<b>SUPPLIERS</b>						PREFAB VAULTS: DAKOTA PUMP, INC. ENGINEERING AMERICA, MITCHELL, SD/ OAKDALE, MN	PREFAB VAULTS: DAKOTA PUMP & CONTROL, WATERTOWN, SD						
						MANHOLES: CRETEX, BISMARCK, ND	MANHOLES: HANCOCK, HANCOCK, MN						
<b>PIPE MANUFACTURER</b>						MATERIALS: FERGUSON, FARGO, ND	MATERIALS: FARGO WATER, FARGO, ND						
						NORTHERN PIPE, CERTAINTEED, PERFORMANCE PIPE, FARGO, ND/MCPHERSON, KS/PLANO, TX	DIAMOND PLASTICS/ NORTHERN PIPE, GRAND ISLAND, NE/FARGO, ND						

**BID ANOMALIES  
NORTH DAKOTA STATE WATER COMMISSION**

**CONTACT 2-8F**

The Bidder's Proposals for the contractor bidding on the North Dakota State Water Commission Contract 2-8F were checked electronically, and the following were noted:

WAGNER CONSTRUCTION – INTERNATIONAL FALLS, MN

The Total Bid (Schedules 1, 2A, & 2B) was not filled out on the Bid Form. The Amount should have shown \$7,444,049.00.