

City of McVile
PO Box 275, 113 N Main St
McVile, ND 58254

February 29, 2016

North Dakota Industrial Commission
Outdoor Heritage Fund
State Capital - 14th Floor
600 E Boulevard Avenue, Suite #405
Bismarck, ND 58505

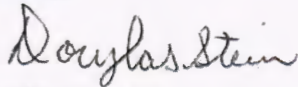
Dear Heritage Fund Advisory Board and Industrial Commission Members:

The City of McVile, a local government municipality, wishes to submit our application to the Outdoor Heritage Fund. The application will illustrate how this project meets all of the directives and qualifications required for this funding opportunity.

Our project includes preservation of our natural environment around our local McVile Dam and Recreational facility. McVile's plan is to restore and improve this area to ensure its continued use for fishing, birding, boating, kayaking, camping, and ice fishing. McVile Dam is vital to our community as it encourages naturalist and recreation tourists to visit and stay in our community generating revenue for our local businesses. Although our community is small, the McVile Dam is used not only by residents of Nelson County, but outdoor enthusiasts who have come from the Upper Midwest and beyond. We also benefit from the increased traffic generated by the explosion of interest in Devils Lake, Stump Lake and surrounding fisheries.

Enclosed please find further information and supporting documentation for our grant submittal. We appreciate the opportunity of funding consideration for our project. If you have any further questions, please contact Renae Arneson, Grants Administrator and former city auditor at 701-741-1591 or email to renae.arneson@gmail.com. Again, thank you for your time and consideration of our request.

Sincerely,



Douglas Stein, Mayor

DS/rea
Enclosures

Outdoor Heritage Fund Grant Application



Name of Organization **City of McVile**

Federal Tax ID# **45-6002116**

Contact Person/Title **Renae Arneson/ City of McVile Grants Administrator**

Address **PO Box 275**

City **McVile**

State **ND**

Zip Code **58254**

E-mail Address **mcvillend@gondtc.com cc to: renae.arneson@gmail.com**

Web Site Address (Optional): **www.mcvile.com**

Phone **701-322-4343 / alternate 701-741-1591**

Fax # (if available) **701-322-4343**

List names of co-applicants if this is a joint proposal: **McVile Park Board and Nelson County Water Resource Board**

MAJOR Directive:

X **Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands

Additional Directive(s)

X **Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

X **Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

X **Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

X **Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Type of organization:

X Political Subdivision

Project Name: McVilLe Dam Revitalization

Abstract/Executive Summary

Objectives, expected results:

The project objective is to save an existing and vibrant year round recreation asset and fish and wildlife habitat for future generations. Without the necessary improvements to the McVilLe Dam, the alternative will be to remove the dam completely, draining the reservoir and degrading the basin that has contained the reservoir since 1910. The upgrades to the campground sewage system will not only add fully modernized camping infrastructure, but will ensure the reservoir will not be impacted by groundwater contamination from the existing septic system. The City of McVilLe views the revitalization of the dam and investments in modernization of the campground as the only option to preserve this reservoir and its natural and scenic beauty, as well as protect the water resource benefits of a fish and wildlife habitat and recreation area that exists because of the dam and reservoir. The result will be a preserved recreation asset, fish and wildlife habitat, and a modernized campground that will attract more visitors and sportsmen to McVilLe and Nelson County.

Duration: Dam and campground infrastructure and construction is expected to last 12 months. Maintenance and marketing/promotion of the recreation area to visitors will be ongoing.

Total cost and participants:

The total project cost for the dam revitalization and campground improvements is estimated at \$1,100,000. This amount includes: dam restoration (stilling basin structure, toe drain, culvert rehabilitation, spillway replacement, and drawdown structure); campsite sewer system installation; and engineering and administrative fees. Participants will include the City of McVilLe staff (public works staff and auditor), McVilLe Park Board, the McVilLe Shade Tree Committee, and the Nelson County Water Resource District. The City of McVilLe is the lead, with engineering firm Kadrmas, Lee & Jackson (KLJ) assisting in the construction supervision.

Project Duration: 12 months

Amount of Grant request \$800,000.00

Total Project Costs \$1,100,000.00

(Note that in-kind and indirect costs can be used for matching funds)

A minimum of 25% Match Funding is required. Amount of Matching Funds: **\$300,000**

Please indicate if the matching funds will be in-kind, indirect or cash. **Cash**

Source(s) of Matching Funds

Source	Amount	Status
Enbridge's Eco Footprint grant	\$125,000	Pending, application submitted January 2016
State Water Commission (dam improvements)	\$155,000	Pending, State Water Commission at a 35% cost share for preliminary work and a 75% cost share for construction. The project will be presented to the State Water Commission at the May 2016 SWC meeting
City Funds • Recreational camping fees • City and Park Board taxes	\$20,000	Secured, see project budget table (pg. 7)
Total Match	\$300,000	

Certifications

X I certify that this application has been made with the support of the governing body and chief executive of my organization.

X I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted on Page 1 of this application.

Narrative

Organization Information –

The sponsors for the project are the City of McVile, the McVile Park Board, and the Nelson County Water Resource District. The City of McVile is acting as lead sponsor for the project. The City of McVile's past auditor and current grants administrator Renae Arneson, acts as the primary contact for the project. This group has worked together for the past 25 years regarding the McVile Dam, including minor improvements and commissioning of the recent feasibility study.

The city also appoints a Shade Tree Committee which is a five-person board of volunteers that oversees the quality of the trees in the community and assists the city in participation of the Tree City USA program. The Shade Tree Committee will be involved in the landscaping and tree planting for the recreation area. The committee will also work with the park district to beautify the area after construction. The committee will also utilize the input and expertise from the Natural Resources

Conservation Service (NRCS) and the Red River Riparian Program in regard to appropriate plant/tree/shrub species when restoring the landscape at the recreation areas post construction.

We have involved many local and state agencies in identifying possible partners in this project. The city has held joint meetings with the North Dakota State Water Commission, the North Dakota Department of Transportation (NDDOT), North Dakota Game and Fish Department, the Nelson County Water Resource Board, the Nelson County Commission, and the Nelson County Highway Department regarding this project.

Purpose of Grant

Background

- Constructed in 1910, McVile Dam is located southeast of the City of McVile on the McVile Coulee in Nelson County, ND. It was originally built to serve as a water supply reservoir for the City of McVile.
- In 1964, the embankment was altered to accommodate the realignment of ND Highway 15. This included the installation of a highway embankment, the placement of a clay core along the north side of the highway, a concrete spillway and a culvert outlet. The City of McVile discontinued use of the reservoir as its water supply, but the infrastructure remained and has continued to be used for recreation and wildlife and fish habitat.
- Under a 1960 agreement between the City of McVile and NDDOT, the City of McVile became responsible for the components of the dam infrastructure not associated with the state highway. NDDOT has insisted all the items listed above are the community's responsibility in full because NDDOT concludes the dam is not needed for functionality of the highway.
- In 2012, the ND State Water Commission's (NDSWC) dam inspection report listed numerous deficiencies with the condition of McVile Dam. It was also listed as being in "terrible shape" and not meeting any dam safety standards with a recommendation to address the items of issue to ensure the continuation of the vitality of the recreational area.
- The McVile Dam and reservoir currently provides year-round recreation for fresh water and ice fishing, boating, kayaking, canoeing, camping and swimming. The reservoir is stocked with walleye, northern, trout, largemouth bass, bluegill and perch. The lake contains no rough fish. There are also 20 partially modern campsites located in the park. Camping amenities include electrical hook-ups, fresh water hook-ups, bathrooms, campfire pit areas and firewood, playground equipment, picnic shelters, docks and boat ramps. The dam and reservoir provide a unique and scenic natural and recreational amenity to this community located in rural North Dakota.

Project goals, strategies, and benefits

The grant funding for this project will provide resources for restoration of the dam water control features and correcting the seepage problem under the earthen embankment and other concerns noted in the NDSWC's dam inspection report. Preserving the dam will ensure the continued vitality of the reservoir. The water commission has already determined the dam does not meet any safety standards yet it is critically important to our community's environmental, recreational and educational amenities, as well as fish and wildlife habitat.

The revitalization would include replacing the outlet stilling basin, installing toe drainage systems, relining the culvert outfall pipe, replacing the spillway to meet current dam safety standards, and replacing the seasonal drawdown pipe system. The preservation of the dam will enhance the area

and provide opportunity for extended camping in the area. The increased use of the camping area will provide a boost to the local businesses including the restaurant, lodge, laundromat, grocery store, convenience store, pubs and gas stations.

Grant funding will also support updating the campground sewer system to include the connection of the recreational and campground area to McVilleville's sanitary sewer system to accommodate a sewer dumping station at the park and campground and the existing campsites with individual sewer hook-ups. This will require construction of a sewer main, lift station, and force main to connect to the city sewer system. These improvements will allow for campers to stay at the campsites for longer durations without the need to travel to a sewage dump facility, as well as ensure the reservoir is protected from potential groundwater contamination.

Improvements at the dam and recreation area will increase recreational user traffic to our community. Nearby Stump Lake Park (10 miles NW) averages 20,000 visitors annually and is one of the fastest growing recreation areas in the state. McVilleville Dam's campground cannot currently accommodate any modern recreational vehicles and campers to its recreation area, missing the opportunity to attract this traffic traveling through town.

The 2013-2017 North Dakota State Comprehensive Outdoor Recreation Plan (SCORP), region four (including the counties of Pembina, Walsh, Nelson and Grand Forks) indicated that the primary recreation needs in the region were modern campgrounds (52%) and natural areas/parks/playgrounds/picnic areas (73%). Secondary needs identified by the report included water access (53%, of which 43% specified lakes or rivers). McVilleville Dam and reservoir serves each of these needs.

The City of McVilleville hired the KLJ engineering firm to assess and prioritize these needs and to provide associated costs. The total restoration costs, taking into account all needed improvements to keep the reservoir in existence and to create fully modern campsites were included in the engineering projections.

Project Alignment with OHF directives

Directive A:

Without the dam restoration, the alternative is the end of the reservoir and its associated fish and wildlife habitat and access to the fishing asset for sportsmen and other recreational users.

Directive B:

Draining of the reservoir will leave a 100-year-old water-filled basin degraded, saturated, and void of any vegetation, vulnerable to downstream sediment transport.

Directive C:

Rehabilitation of the dam will conserve and assure the fish and wildlife habitat provided by the reservoir for future generations.

Directive D:

As noted in directives A, B, and C, saving the McVilleville Dam and reservoir will conserve a natural area that has existed for more than 100 years and the enhancements to the campground will assure future viability of the recreation and habitat asset now enjoyed by sportsmen.

Management of Project

The City of McVille, as lead sponsor, will manage the project. The KLJ engineering firm has already been retained to outline the best practices to address all deficiencies in the NDSWC report. KLJ has also assisted in determining the best practices to ensure the reservoir is protected from potential groundwater contamination with the connection of the area to McVille's sanitary sewer system to accommodate a sewer dumping station at the park and campground, as well as equipping existing campsites with sanitary sewer hook-ups.

With the technical assistance of KLJ, the city will employ surveyors and licensed contractors for the construction aspects of the project. All decisions will be approved by the three entities involved in the project. The current city public works director and former city auditor who is now the current city grants administrator have a combined 40 years of experience working for the city.

Evaluation

The immediate successful effects of the project will include:

- Securing the dam's viability assures the preservation of the water habitat and recreation area for future generations.
- Connecting the recreation area to the city's sanitary sewer system will ensure ground and surface water quality is protected, preventing seepage from the current septic system from entering the reservoir and downstream waters.
- The community will immediately plan for promotion of the recreational and habitat asset and can plan for community and educational events at the site.

Long term successful effects of the project include:

- McVille will remain an attractive option for recreation enthusiasts looking for opportunities to enjoy the natural environment at the site.
- The site can become a choice for visitors who normally travel through town on their way to the large campgrounds of Devils Lake and Stump Lake. Every year we receive inquiries from potential visitors who opt to stay elsewhere because of the campground's current inability to serve modern recreational vehicles. Improvements will serve as an opportunity to attract new visitors and their subsequent business activity. The proposed improvements to the campsites can be measured by the occupancy rates of the campsites pre and post project.

The proposed revitalization will retain a vital part of the community's outdoor recreational assets. Implementing the needed improvements would reflect positively on the community's resolve in protecting its resource heritage.

This project would be recorded in the NDSWC's annual dam inspection reports. Additionally, implementation could save lives as well as provide insurance against property loss for both public and private infrastructures downstream of this dam.

Financial Information

Project Budget

Project Expense	OHF Request	Applicant's Match Share (cash)	Applicant's Match Share (in-kind)	Applicant's Match Share (indirect)	Other Project Sponsor's Share	Total Each Project Expense
Construction & Contingency	\$ 747,600.00	\$ 169,400.00	\$ -	\$ -	\$ -	\$ 917,000.00
Permitting	\$ 10,700.00	\$ 22,500.00	\$ -	\$ -	\$ -	\$ 33,200.00
Design Engineering	\$ 29,300.00	\$ 20,500.00	\$ -	\$ -	\$ -	\$ 49,800.00
Construction Engineering	\$ -	\$ 83,000.00	\$ -	\$ -	\$ -	\$ 83,000.00
Legal & Administration	\$ 12,400.00	\$ 4,600.00	\$ -	\$ -	\$ -	\$ 17,000.00
Total Costs	\$ 800,000.00	\$ 300,000.00	\$ -	\$ -	\$ -	\$ 1,100,000.00

Expense Explanation

- Construction & Contingency includes all direct construction costs associated with the construction of the project.
- Permitting, Design Engineering, and Construction Engineering will include services provided by a Licensed Engineer. The Engineer shall acquire all necessary environmental permits, survey the site, develop plans and specifications, provide bidding services, and provide construction administration and observation of the project. The grant request for the services provided by the Engineer is capped at 5% as required by this program.
- Legal and Administrative services shall cover the costs associated with obtaining necessary easements for work within the BNSF right of way.

X I certify that a project budget will be sent to the Commission. **It is noted in the table and narrative at the top of this page.**

Sustainability

The City of McVile is responsible for the physical components of McVile Dam as outlined by a 1960 agreement between the City of McVile and NDDOT. This agreement requires the City of McVile to maintain the dam infrastructure not associated with the state highway.

Revenues generated from the campsites will maintain the sewer system piping and pumps.

Our residents understand the importance of this recreational amenity to our area. A survey was sent to the city's residents regarding this project to gage our community's commitment to restoring and preserving the McVile Dam area. A total of 95% of the residents supported the decision to move forward with the dam improvements.

However, grant funds would alleviate the need for increased taxation and user fees to be used on construction. McVile residents are already financing several community projects with a current debt load of \$2.9 million, which is currently financed and paid for by residential and business user fees. The community's percent of population characterized as low to moderate income is 53.85%.

Partial Funding

In the event the funding award from the Outdoor Heritage Fund is less than requested, the City of McVille will continue to assess all possible funding options. If additional funding is not secured, the project will be constructed in the priority order listed below:

1. Stilling basin replacement
2. Seepage toe drain system
3. Erosion corrections
4. Culvert rehabilitation
5. Spillway replacement
6. Drawdown pipe improvements
7. Campsite sanitary system improvements

Partnership Recognition

A plaque will be installed to acknowledge the assistance of the Outdoor Heritage Fund, along with other grantors. A new map of the area will be placed in the City Office with recognition from the Outdoor Heritage Fund. Local television advertising and newspapers articles will also be produced. The city's social media will be updated to include the sponsors names.

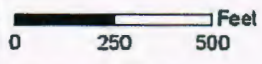
All contributors would also be recognized at occasions such as ground breaking and ribbon cutting events pre and post construction.

LOCATION MAP

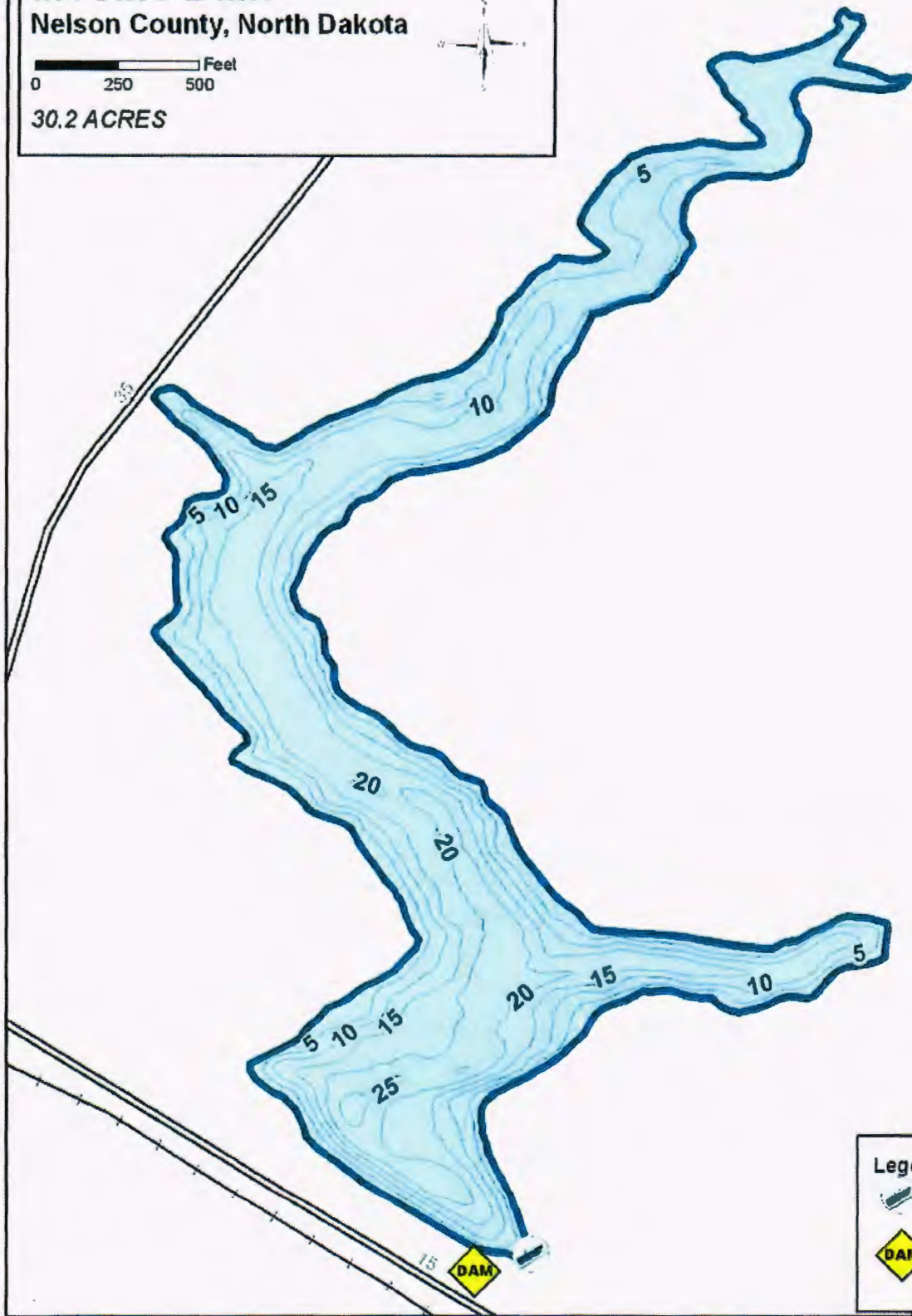


McVile Dam

Nelson County, North Dakota



30.2 ACRES



Legend

- Boat Ramps
- Dams

OPINION OF COST
McVile Dam Improvements
McVile City, North Dakota

	ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
Dam Improvements	1 Stilling Basin Structure	1	LSUM	\$ 226,000.00	\$ 226,000.00
	2 Toe Drain	1	LSUM	\$ 120,000.00	\$ 120,000.00
	3 Culvert Lining	1	LSUM	\$ 204,000.00	\$ 204,000.00
	4 Spillway Structure	1	LSUM	\$ 160,000.00	\$ 160,000.00
	5 Drawdown Structure	1	LSUM	\$ 40,000.00	\$ 40,000.00
	6 Campsites	1	LSUM	\$ 167,000.00	\$ 167,000.00

ESTIMATED CONSTRUCTION COST =	\$	917,000.00
PERMITTING (4%) =	\$	33,200.00
DESIGN ENGINEERING (5%) =	\$	49,800.00
CONSTRUCTION ENGINEERING (9%) =	\$	83,000.00
LEGAL & ADMINISTRATION (2%) =	\$	17,000.00
TOTAL COST =	\$	1,100,000.00

OPINION OF COST
McVille Dam Improvements
Stilling Basin Structure
McVille City, North Dakota

	ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
1	Mobilization	1	LSUM	\$ 20,000.00	\$ 20,000.00
2	Removal of Existing Stilling Basin	1	LSUM	\$ 20,000.00	\$ 20,000.00
3	Excavation	1	LSUM	\$ 20,000.00	\$ 20,000.00
4	Installation of Pre-Cast Structure	34	LF	\$ 5,000.00	\$ 170,000.00
5	Misc. Concrete (End Sections)	1	LSUM	\$ 30,000.00	\$ 30,000.00
6	Erosion Control	1	LSUM	\$ 5,000.00	\$ 5,000.00
ESTIMATED CONSTRUCTION COST =					\$ 205,000.00
CONTINGENCIES =					\$ 21,000.00
TOTAL COST =					\$ 226,000.00

OPINION OF COST
McVille Dam Improvements
Seepage - Toe Drain Collection System
McVille City, North Dakota

ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
1 Mobilization	1	LSUM	\$ 16,000.00	\$ 16,000.00
2 Filter Material	300	CY	\$ 60.00	\$ 18,000.00
3 Common Excavation	1,200	CY	\$ 20.00	\$ 24,000.00
4 Toe Drain Piping	900	LF	\$ 40.00	\$ 36,000.00
5 Restoration & Erosion Control	1	LSUM	\$ 15,000.00	\$ 15,000.00
ESTIMATED CONSTRUCTION COST =				\$ 109,000.00
CONTINGENCIES =				\$ 11,000.00
TOTAL COST =				\$ 120,000.00

OPINION OF COST
McVile Dam Restoration
Culvert Lining
McVile City, North Dakota

	ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
1	Mobilization	1	LSUM	\$ 15,000.00	\$ 15,000.00
2	Culvert Lining	142	LF	\$ 1,200.00	\$ 170,400.00
ESTIMATED CONSTRUCTION COST =					\$ 185,400.00
ENGINEERING, LEGAL, CONTINGENCIES =					\$ 18,600.00
TOTAL COST =					\$ 204,000.00

OPINION OF COST
McVile Dam Restoration
Spillway Structure
McVile City, North Dakota

	ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
1	Mobilization	1	LSUM	\$ 10,000.00	\$ 10,000.00
2	Removal of Existing Spillway Structure	1	LSUM	\$ 15,000.00	\$ 15,000.00
3	Excavation/Coffer Dam	1	LSUM	\$ 25,000.00	\$ 25,000.00
4	Installation replacement Spillway Structure	1	LSUM	\$ 75,000.00	\$ 75,000.00
5	Temporary Spillway by-pass Pumping	1	LSUM	\$ 10,000.00	\$ 10,000.00
6	Erosion Control	1	LSUM	\$ 10,000.00	\$ 10,000.00
ESTIMATED CONSTRUCTION COST =					\$ 145,000.00
CONTINGENCIES =					\$ 15,000.00
TOTAL COST =					\$ 160,000.00

OPINION OF COST
McVile Dam Restoration
Drawdown Structure
McVile City, North Dakota

	ITEM	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT
1	Mobilization	1	LSUM	\$ 6,000.00	\$ 6,000.00
2	Remove existing pipe	475	LF	\$ 6.00	\$ 2,850.00
3	Removal of existing manhole	1	EA	\$ 500.00	\$ 500.00
4	12" PVC pipe	475	LF	\$ 50.00	\$ 23,750.00
5	12-inch butterfly valve and stem	1	EA	\$ 3,500.00	\$ 3,500.00
				ESTIMATED CONSTRUCTION COST =	\$ 36,600.00
				CONTINGENCIES =	\$ 3,400.00
				TOTAL COST =	\$ 40,000.00

**OPINION OF COST
MCVILLE DAM MODERN CAMPSITES
MCVILLE, NORTH DAKOTA**

	ITEM	TOTAL	UNIT	UNIT	PRICE
1	BOND & MOBILIZATION	1	L SUM	\$	10,000.00
2	SAN SEWER PIPE 6IN	800	LF	\$	25.00
3	SEWER HOOK-UP 4IN	20	EA	\$	500.00
4	SAN SEWER CLEANOUT 6IN	2	EA	\$	2,000.00
5	2IN FORCEMAIN - BORED	800	LF	\$	25.00
6	GRINDER LIFT STATION & CONTROLS	1	LS	\$	75,000.00
7	DUMP STATION	1	LS	\$	4,000.00
8	ASPHALT PATCHING	70	SY	\$	75.00
9	SEEDING (HYDROMULCH)	1	ACRE	\$	3,500.00

ESTIMATED CONSTRUCTION COST =

CONTINGENCY =

TOTAL PROJECT COSTS =

**CURRENT
AMOUNT**

\$	10,000.00
\$	20,000.00
\$	10,000.00
\$	4,000.00
\$	20,000.00
\$	75,000.00
\$	4,000.00
\$	5,250.00
\$	3,500.00
<hr/>	
\$	151,750.00
\$	15,250.00
\$	167,000.00