

Painted Woods Lake Habitat Enhancement and Flood Reduction Project

Outdoor Heritage Grant Fund Application

McLean County, ND



October 2016

Consulting Engineering • Land Surveying

North Dakota

Bismarck

Minot

West Fargo

Minnesota

Fergus Falls



mooreengineeringinc.com

Project No. 17889

October 28, 2016

North Dakota Industrial Commission
Attn: Outdoor Heritage Fund Program
State Capital – Fourteenth Floor
600 East Boulevard Avenue, Dept. 405
Bismarck ND 58505

Re: Outdoor Heritage Fund Grant Application - Painted Woods Lake Habitat
Enhancement and Flood Damage Reduction Project
McLean County Water Resource Board

Dear Outdoor Heritage Fund Advisory Board,

Enclosed is our Outdoor Heritage Fund Grant Application Request for support of the first phase of the Painted Woods Lake Habitat Enhancement and Flood Damage Reduction Project. This is a multiagency-multiyear project involving a unique natural area in the State of North Dakota, the area surrounding Painted Woods Lake in McLean County. Our program goals for this Project overlap strongly with the directives of the Outdoor Heritage Fund program, including enhancing fish and wildlife habitat, improving public access for sportsman, improving and protecting water quality, and improving plant diversity. We look forward to a successful outcome from your review.

Sincerely,

MCLEAN COUNTY WATER RESOURCE BOARD



Lynn Oberg
Water Board Chairman

Attachment

Outdoor Heritage Fund Grant Application



The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance conservation practices in this state by:

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

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;

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

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

Exemptions

Outdoor Heritage Fund grants may not be used to finance the following:

- A. Litigation;
- B. Lobbying activities;
- C. Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- D. The acquisition of land or to encumber any land for a term longer than twenty years; or
- E. Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

NO CONSIDERATION:

In addition to those specific items in law that are ineligible for funding, in the absence of a finding of exceptional circumstances by the Industrial Commission, the following projects will NOT receive consideration for funding:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Budget Form for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Budget Form for how this will be calculated);

- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Budget Form for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

Application Deadline

Applications for this grant round cycle are due on **November 1, 2016 at 5:00 p.m. CT.** All information, including attachments, must be submitted by that date. See instructions below for submission information.

Instructions

Please download this Word document (available on the Industrial Commission/Outdoor Heritage Fund Program website at <http://www.nd.gov/ndic/outdoor-infopage.htm>) to your computer and provide the information as requested. You are not limited to the spacing provided except in those instances where there is a limit on the number of words. After completing the application, save it and attach it to an e-mail and send it to outdoorheritage@nd.gov or print it and mail it to the address noted in the next paragraph.

Attachments in support of your application may be sent by mail to North Dakota Industrial Commission, ATTN: Outdoor Heritage Fund Program, State Capitol – Fourteenth Floor, 600 East Boulevard Ave. Dept. 405, Bismarck, ND 58505 or by e-mail to outdoorheritage@nd.gov. The application and all attachments must be received or postmarked by the application deadline. You will be sent a confirmation by e-mail of receipt of your application.

You may submit your application at any time prior to the application deadline. Early submission is appreciated and encouraged to allow adequate time to review your application and ensure that all required information has been included. Incomplete applications may not be considered for funding. **Any item noted with an * is required.**

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

Name of Organization * McLean County Water Resources District

Federal Tax ID# * 45-600-2231

Contact Person/Title * Lynn Oberg, Chairman

Address * PO Box 1108

City * Washburn

State * ND

Zip Code * 58577

E-mail Address * obergm@westriv.com

Web Site Address (Optional) mcleancountynd.gov

Phone * 701 400 7793

Fax # (if available)

List names of co-applicants if this is a joint proposal

MAJOR Directive: (select the Directive that best describes your grant request)*

Choose only one response

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

☐ **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;

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

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

Additional Directive: (select the directives that also apply to the grant application purpose)*

Choose all that apply

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

☒ **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;

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

☐ **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: (select the category that describes your organization)*

☐ State Agency

☒ Political Subdivision

☐ Tribal Entity

☐ Tax-exempt, nonprofit corporation.

Project Name* **Painted Woods Lake Area Habitat Enhancement and Flood Damage Reduction Project**

Abstract/Executive Summary. **An Executive Summary of the project stating its objectives, expected results, duration, total project costs and participants.*** (no more than 500 words)

Overview

The Painted Woods Lake Area Habitat Enhancement and Flood Damage Reduction Project (Project) is located at the outlet of the 305 square mile Painted Woods Creek watershed, an area of historic statewide importance. The large majority of the watershed is privately owned land that drains into Painted Woods Lake, a Sovereign Land of the State of North Dakota (Figure 1 - Appendix A). Painted Woods Lake is contiguous with the east side of a federal Wildlife Development Area (WDA) owned by the US Fish and Wildlife Service (FWS) and managed by the North Dakota Department of Game and Fish (NDGF). The lower end of the Painted Woods Creek watershed has seen some dramatic flooding impacts over the last 30 years, with there being significant damage to private lands near Painted Woods Lake and to

the infrastructure at Painted Woods Lake. It is apparent that the Painted Woods Creek watershed does not have an adequate outlet and that the wildlife, fishery and recreation resources in the area are also being adversely affected by flooding.



One of the priorities for the project is the replacement of the old lake level control structure located within the WDA at the lake outlet, an activity that will provide significant habitat improvement. In addition, to assist in minimizing the flooding impacts, to create long term solutions to the flooding issues and to enhance the public's ability to use a recreational resource, a parcel of land on the east side of Painted Woods Lake was purchased this year by the American Foundation for Wildlife and partners. The ownership of this parcel was transferred to the NDGF who will manage the land as a Wildlife Management Area (WMA). This recent purchase was fully supported by the McLean County Commission and approved by the Governor of North Dakota.

Painted Woods Lake has been a state wide resource for hunting, fishing and general recreation for over a hundred years and it is a long term objective of the Project to improve and protect this resource and the surrounding public resources. In the last 50 years, however, access to the lake has been limited. One public access point was created by the purchase of the federal WDA in the early 1980s. The land purchase this year will lead to the

public access points. Creating wildlife habitat within this new parcel will greatly improve the resource as presently there is limited wildlife habitat found there.

Painted Woods Creek enters the north end of Painted Woods Lake. Water flows south and west through the lake to its outlet, a channel known as Merry's Creek, through which water flows approximately 5000-ft to the Missouri River. Snow and ice accumulations in the northern end of the lake, along with cattails that have recently grown there, frequently restrict spring floods from flowing through the lake to Merry's Creek, particularly after winters of moderate to heavy snowfall. When this happens, flood waters break out at multiple locations north of the lake, flowing westward of Painted Woods Creek between US Highway 83 and the lake (Figure 1). Flood waters then flow west cross country to the Missouri River, causing gully erosion and head cutting of overflow channels on private lands.

Benefits the Project Will Provide

Goals and objectives of the Project include providing fish and wildlife habitat; providing access for sportsmen; improving, maintaining and restoring water quality and plant diversity; and developing, conserving and restoring fish and wildlife habitat. Phase 1 of the project involves construction of a new lake level control structure to replace the existing aging structure (Alternate 3C - Figure 1). Benefits the new structure will provide include providing a rock ramp fish passage facility to restore fish passage from the Missouri River into Painted Woods Lake and Painted Woods Creek watershed. The replacement structure will have a low flow draw down gate and the ability to raise the water level 2-ft above the normal operating pool elevation on a temporary basis for the control of undesirable aquatic vegetation. Wetland habitat diversity will be supported by the new control structure by the ability to flood wetland areas. Stream banks will be restored at the lake outlet which will reduce the erosion of the banks and improve water quality. In addition, the present relatively small gravel parking lot for the WDA will be enlarged.

Project Duration:* The final design and construction for the first year program which this grant will support will be completed by the end of 2017.

Amount of Grant request \$ * \$508,227.87

Total Project Costs \$* \$1,263,926.20

(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 \$*

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

Funding

Matching funds will be a combination of materials and cash.

Source(s) of Matching Funds*

Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

The Bureau of Reclamation is providing 4000 cubic yards of rip rap to be delivered to the project site and having a value for this phase of the project of \$184,375 (see attached letter).

The US Fish and Wildlife Service has verbally offered \$50,000 towards the fish passage facility (see attached letter).

It is anticipated that the State Water Commission will provide \$435,426.17 in cost share funding for the project (see attached letter).

In addition, funding of \$85,897.16 is being provided by other sources.

Preliminary engineering plans and concept study were supported by \$98,800 in funding from the McLean WRD and \$53,200 in funding from the State Water Commission (\$152,000 total).

Certifications *

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

☒ 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 – Briefly summarize your organization's history, mission, current programs and activities. *

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The McLean County Water Resources District (McLean WRD) has been in existence for many decades and is governed by a three person board. It has the responsibility within McLean County to manage, conserve, protect, develop and control waters of the state, both navigable and non-navigable, surface or subsurface, the control of floods, the prevention of damage to property therefrom, all to the benefit of public purposes. It is the policy of the McLean WRD to provide for management, conservation, protection, development and control of water resources on a watershed basis, to work cooperatively with other resource agencies to strengthen and mutually support related programs, and to protect and promote the health, safety and general welfare of the people of North Dakota.

The McLean WRD manages a variety of programs including those related to drainage permits, legal drains, maintaining, protecting and controlling streamflow, protection and maintenance of water bodies, managing flooding issues, protection and maintenance of water quality and construction, operation and maintenance of a variety of dams.

The McLean WRD does not have staff, but does obtain financial management services from the McLean County Auditor. To accomplish program goals the McLean WRD retains professional services for legal and engineering needs when necessary.

Important ongoing projects include the Painted Woods Lake Enhancement and Flood Reduction Project, the Fort Mandan/4H Camp Flood Control Project, management of the Yanktonai Dam, which is rated as having significant hazard, and support of drainage improvement projects at the Cities of Washburn and Underwood.

Some projects completed by the McLean WRD involve volunteers who provide their time, and sometimes equipment. For example, some berms along the west side of Painted Woods Lake that were build prior to federal ownership of the land were breached by volunteers using personal equipment.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program *

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Please indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. If your project includes tree/shrub/grass planting, please provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan. If your project includes Section 319 program funding, please provide, in detail, the specific best management practices that will be implemented and the specific projects for which you are seeking funding. Please note that if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

Project History

Aspects of the present program were begun and subject to management efforts by the State Water Commission in the early 1980s. Recently the McLean WRD, because of urgent need, assumed overall program management and obtained an alternatives analysis and preliminary engineering for the Project by Moore Engineering, in part supported by cost share funding from the State Water Commission. Furthermore, because a large portion of the 305 square mile Painted Woods Creek watershed lies in Burleigh County, the McLean WRD has reached out to the Burleigh County Water Resource District to provide an understanding of the issues and to gain support (see support letter in Appendix). Painted Woods Creek, which has many miles of channel, supports numerous uses including agriculture, fish and wildlife habitat, recreation and receives water from the McClusky Canal.

Long Term Program

The Painted Woods Lake Area Habitat Enhancement and Flood Damage Reduction Project is a multiyear project with multiple components, this grant application is for the first year activities (described below). Long Term Project components include the following (Figure 1 – Appendix A):

1. Replacement of the Painted Woods Lake outlet control dam. The new structure would replace the aging structure now existing. Fishery enhancement would involve restoring fish passage from the Missouri River into the lake and Painted Woods Creek by the construction of a rock ramp fish passage facility. The replacement structure will have a low flow draw down gate and the ability to raise the water level 2-ft above the normal operating pool elevation on a temporary basis for the control of aquatic vegetation in the lake and enhancement of wetland diversity adjacent to the lake. In addition, the present relatively small gravel parking lot for the WDA will be enlarged.



2. A High Flow Channel to divert flood waters from Painted Woods Creek into the east side of Painted Woods Lake. The high flow channel will follow the course of the Goose Creek channel, which is largely silted in at this time. Goose Creek formerly branched from Painted Woods Creek just downstream from US Highway 83, and had a course approximately $\frac{1}{4}$ mile east of and roughly parallel to the north-south orientation of Painted Woods Lake. The High Flow Channel will diverge westerly from the Goose Creek alignment approximately midway down Painted Woods Lake to divert flood waters into the lake. Wetland habitat will be created adjacent to the high flow channel.
3. Purchase of the Hecht property located immediately north of the new WMA. The Hecht property is strategically located on the northeastern shore of Painted Woods Lake and along the eastern bank of Painted Woods Creek between the lake and US

Highway 83. The Goose Creek Channel runs south through the Hecht property to the new WMA. It is anticipated that development of the Hecht property would involve similar long term goals as the new WMA. The McLean WRD now has the legal authority to restore the Goose Creek Channel through the Hecht property to its historic condition.

4. Construction of a low berm along the west end of the northwestern portion of Painted Woods Lake to prevent overflow of flood waters from the lake to the Missouri River.
5. Restore Merry's Creek below the Painted Woods Lake water level control structure. The proposed improvements involve restoration of the severely eroded and unstable stream banks by constructing stable side slopes, stabilizing the banks with a wildlife supporting vegetation, and stabilizing the bank toe with rip rap. Water quality will be improved and protected and wildlife habitat provided by the restoration process.
6. Mechanical removal of sediment from Painted Woods Lake, particularly in the central portion of the lake where cattails are now heavily colonized and where blockage to flood flows through the lake is severe.
7. Continuing the program to points on Painted Woods Creek higher in the watershed where habitat improvement is needed. For instance, the McLean WRD is in the planning stages for providing fish passage at the Katz Dam located upstream of US Highway 83.

First Year Activities – This Grant Application

The first year program is focused on replacing the lake level control structure and the restoring the stream channel in its immediate area.

1. A new lake level control structure will be constructed to replace the existing aging structure. Preliminary engineering for the work was completed by Moore Engineering and Barr Engineering in May 2016 (see preliminary plans in Appendix B). Benefits the new structure will provide include providing a rock ramp fish passage facility to allow fish passage from the Missouri River into Painted Woods Lake and the Painted Woods Creek watershed, reconnecting the diverse Missouri River ecosystem with the watershed. The replacement structure will have a low flow draw down gate and the ability to raise the water level 2-ft above the normal operating pool elevation on a temporary basis for the control of undesirable aquatic vegetation. Wetland areas adjacent to the lake can be periodically flooded to help support diverse vegetation and habitat. The new structure will have walk ways and guardrails that provide operator access and gate operation equipment that meet present day safety standards. Eroding stream banks in the area immediately downstream of the existing structure will be restored. In addition, the present relatively small gravel parking lot for the WDA will be enlarged. The new structure will have features like cathodic protection of the sheet pile which will provide a structure lifespan of greater than 50-years.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.*

Include a brief background and work experience for those managing the project.

Management of the final design of construction would be by the McLean WRD, using the services of Moore Engineering. The McLean WRD selected Moore Engineering as their provider of engineering services following the requirements of the North Dakota Century Code 54-44.7. It was Moore Engineering and partner Barr Engineering who completed the preliminary design and Opinion of Probable Construction Cost for the Project and they have completed similar projects for other county water resources districts for many years.

After construction is complete, long term management would be largely overseen by the US Fish and Wildlife Service and the North Dakota Department of Game and Fish who are the owner and manager, respectively, of the land the lake level control structure is located on. These agencies have management plans for the management of each WDA or WMA. Both agencies complete annual maintenance activities at the wildlife areas they manage based on need in any particular year. The McLean WRD will continue to develop and work on additional phases of the Project and monitor long term management needs of the Project area and the facilities that would be constructed as part of this project.

Evaluation – Describe your plan to document progress and results. *

How will you tell if the project is successful? Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Completion of the construction of the new lake level control structure will be the primary measure of success. Once the new structure is complete, fish passage from the Missouri River into Painted Woods Creek and Painted Woods Lake will be reestablished, and enhanced management of aquatic vegetation and wetland habitat can begin. The new structure will have a lifespan of greater than 50-years, so the benefits will be long term.

It is anticipated that both final engineering and construction phases include monthly reporting by the McLean WRD to granting agencies. Monthly reporting would include short project status reports and summaries of work completed that month along with monthly costs incurred. A final project close out report including a summary of the construction and final expenditure summary will be provided. The McLean WRD has completed this type of reporting to the State Water Commission for multiple projects in the last several years.

Financial Information

ATTACHMENT: **Project Budget – Using the standard project budget format that is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> , please include a detailed total project budget that specifically outlines all the funds you are requesting. Note that a minimum of 25% match funding is required.***

The project budget should identify all matching funds, funding sources and indicate whether the matching funds are in the form of cash or in-kind services. Effective July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose. As noted on the standard project budget format, certain values have been identified for in-kind services. Please utilize these values in identifying your matching funds. **NOTE: No indirect costs will be funded.**

☒ I certify that a project budget will be sent to the Commission*

Sustainability – Indicate how the project will be funded or sustained in future years. *

Include information on the sustainability of this project after all the funding from the Outdoor Heritage Fund has been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The new lake level control structure will be capable of lasting more than 50 years with limited maintenance. Its controls are relatively simple and do not involve many parts that can fail. The rock ramp fish passage facility will have a grade where target species such as northern pike can easily swim up and over the structure without human assistance. Both the FWS and NDGF have annual maintenance funds that are used for periodic needs.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested. *

The requested grant would support the activities to be completed the first year of the program, the final design and construction of the new lake level control structure. If less funding is available then that requested part of the work would be delayed until the second year. For instance, the project includes components such as the sheet pile dam and associated gates, the rock ramp fish passage facility, and the stream bank restoration. Part of the construction could be delayed until the second year when additional funding would be available.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * Please note it is a requirement that there be signage at the location of the project acknowledging the funding from the Outdoor Heritage Fund if appropriate for your project.

The McLean Water Resources District will provide a sign at the WDA parking area to be enlarged that names all project sponsors. The location of Painted Woods Lake and associated WDA/WMA near the Bismarck/Mandan/Washburn communities and excellent highway system result in a very high visitation rate for fishing, hunting and outdoor recreation. The signage with the Outdoor Heritage Fund listed as a project partner will be viewed and appreciated by all who visit.

**Proposed Budget - Outdoor Heritage Grant Application
Painted Woods Lake Mitigation Plan
McLean County Water Resource District**

November 4, 2016

| | Engineer's Opinion of Probable Cost | Funding Contributions | | | | | |
|----------------------------|--|-----------------------|---------------------------------|------------------------------------|--------------------------|---------------|----------------|
| Project Expense | Replacement Lake Level Control | OHF Request | US Fish and Wildlife Service | State Water Commission Grant | Bureau of Reclamation | Other Sources | Total Funding |
| Total Construction | \$1,000,842.00 | \$421,556.85 | \$50,000.00 | \$344,910.15 | \$184,375.00 | | \$1,000,842.00 |
| Engineering - Design* | \$75,500.00 | \$10,538.92 | | \$24,150.00 | | \$40,811.08 | \$75,500.00 |
| Engineering - Construction | \$75,500.00 | \$10,538.92 | | \$27,675.00 | | \$37,286.08 | \$75,500.00 |
| Contingencies (10%) | \$100,084.20 | \$65,593.18 | | \$34,491.02 | | | \$100,084.20 |
| Geotechnical Engineering | \$12,000.00 | | | \$4,200.00 | | \$7,800.00 | \$12,000.00 |
| Totals | \$1,263,926.20 | \$508,227.87 | \$50,000.00 | \$435,426.17 | \$184,375.00 | \$85,897.16 | \$1,263,926.20 |



MEI Project 17889
November 4, 2016

**Painted Woods Lake Alternative 3C - New Lake Level Control Structure
Painted Woods Lake Outlet Structure Improvement
McLean County Water Resource District
McLean County, North Dakota**

Engineer's Opinion of Probable Cost

| | ITEM | UNIT | QUANTITY | UNIT PRICE | TOTAL | FUNDING SOURCES | |
|-----------------------------------|--|------|----------|--------------|-----------------------|---------------------|---------------------|
| | | | | | | NDSWC | OTHER |
| 1. | Mobilization | LS | 1 | \$100,000.00 | \$100,000.00 | \$22,500.00 | \$77,500.00 |
| 2. | Water Control | LS | 1 | \$50,000.00 | \$50,000.00 | \$22,500.00 | \$27,500.00 |
| 3. | Demolition of Existing Structure | LS | 1 | \$15,000.00 | \$15,000.00 | \$6,750.00 | \$8,250.00 |
| 4. | Weir - Install Sheet Pile | SF | 2,510 | \$45.00 | \$112,950.00 | \$50,827.50 | \$62,122.50 |
| 5. | Weir - Reinforced Concrete Cap | CY | 25 | \$1,000.00 | \$25,000.00 | \$11,250.00 | \$13,750.00 |
| 6. | Weir - Low Flow Stop Log System | LS | 1 | \$10,000.00 | \$10,000.00 | \$4,500.00 | \$5,500.00 |
| 7. | Weir - Flashboard System | LF | 91 | \$100.00 | \$9,100.00 | \$4,095.00 | \$5,005.00 |
| 8. | Drawdown Control Structure-Reinforced Concrete | CY | 14 | \$1,000.00 | \$14,000.00 | \$6,300.00 | \$7,700.00 |
| 9. | Drawdown Control Structure-Stoplog System | LS | 1 | \$20,000.00 | \$20,000.00 | \$9,000.00 | \$11,000.00 |
| 10. | Drawdown Control Structure-Structural Steel, Grating, Handrail | LB | 2,250 | \$10.00 | \$22,500.00 | \$10,125.00 | \$12,375.00 |
| 11. | Drawdown Control Structure-Jib Crane | EA | 1 | \$4,500.00 | \$4,500.00 | \$2,025.00 | \$2,475.00 |
| 12. | Divider Wall - Sheet Pile | SF | 2510 | \$45.00 | \$112,950.00 | \$50,827.50 | \$62,122.50 |
| 13. | Granular Filter for Rock Spillway | CY | 301 | \$102.00 | \$30,702.00 | \$13,815.90 | \$16,886.10 |
| 14. | Filter Rock for Rock Spillway | CY | 437 | \$100.00 | \$43,700.00 | \$19,665.00 | \$24,035.00 |
| 15. | Base Rock for Rock Spillway | CY | 1350 | \$88.00 | \$118,800.00 | \$15,187.50 | \$103,612.50 |
| 16. | Boulders for Rock Riffles | EA | 127 | \$350.00 | \$44,450.00 | \$5,715.00 | \$38,735.00 |
| 17. | Channel Excavation | CY | 500 | \$15.00 | \$7,500.00 | \$3,375.00 | \$4,125.00 |
| 18. | Riprap for Downstream Channel | CY | 101 | \$100.00 | \$10,100.00 | \$1,136.25 | \$8,963.75 |
| 19. | Granular Fill under Riprap in Drawdown Channel | CY | 45 | \$102.00 | \$4,590.00 | \$2,065.50 | \$2,524.50 |
| 20. | Stabilize Downstream Left River Bank | LS | 1 | \$85,000.00 | \$85,000.00 | \$25,650.00 | \$59,350.00 |
| 21. | Stabilize Downstream Right River Bank | LS | 1 | \$120,000.00 | \$120,000.00 | \$39,600.00 | \$80,400.00 |
| 22. | Fences, Gates and Signage | LS | 1 | \$5,000.00 | \$5,000.00 | \$2,250.00 | \$2,750.00 |
| 23. | Site Restoration | LS | 1 | \$15,000.00 | \$15,000.00 | \$6,750.00 | \$8,250.00 |
| 24. | Parking Lot Expansion | LS | 1 | \$20,000.00 | \$20,000.00 | \$9,000.00 | |
| Total Construction | | | | | \$1,000,842.00 | \$344,910.15 | \$644,931.85 |
| Preliminary Engineering | | | | | Completed | | |
| Engineering - Design | | | | | \$75,500.00 | \$24,150.00 | \$51,350.00 |
| Engineering - Construction | | | | | \$75,500.00 | \$27,675.00 | \$47,825.00 |
| Contingencies (10%) | | | | | \$100,084.20 | \$34,491.02 | \$65,593.19 |
| Legal Fees | | | | | \$0.00 | \$0.00 | \$0.00 |
| Aministrative Fees | | | | | \$0.00 | \$0.00 | \$0.00 |
| Geotechnical Engineering | | | | | \$12,000.00 | \$4,200.00 | \$7,800.00 |
| Right-of-Way Administration | | | | | \$0.00 | \$0.00 | \$0.00 |
| Easements & Monuments | | | | | \$0.00 | \$0.00 | \$0.00 |
| Utility Company Relocations | | | | | \$0.00 | \$0.00 | \$0.00 |
| Utility Relocation Administration | | | | | \$0.00 | \$0.00 | \$0.00 |
| Fiscal | | | | | \$0.00 | \$0.00 | \$0.00 |
| TOTAL PROJECT COST | | | | | \$1,263,926.20 | \$435,426.17 | \$817,500.04 |



Scoring of Grants

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking sheet(s) that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Awarding of Grants*

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant. Please note the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> that set forth the general provisions that will be included in any contract issued by the North Dakota Industrial Commission. Please indicate if you can meet all the provisions of the sample contract. If there are provisions in

that contract that your organization is unable to meet, please indicate below what those provisions would be. *

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

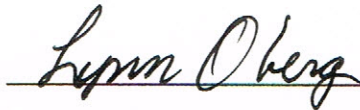
If you have any questions about the application or have trouble submitting the application, please contact Karlene Fine at 701-328-3722 or kfine@nd.gov

Revised: December 16, 2015

Certification

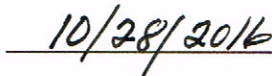
The information contained in this grant application has been developed under the authority of the McLean County Water Resource Board who will meet the financial and other program requirements of the Outdoor Heritage Fund Program. Technical Support was provided by Roger Clay, PE, of Moore Engineering Inc., who is available to answer engineering and other technical related questions (701-551-1083, rclay@mooreengineeringinc.com).

Signed:

A handwritten signature in black ink, appearing to read "Lynn Oberg", is written over a horizontal line.

Lynn Oberg, Chairman
McLean County Water Resources District

Date:

A handwritten date "10/28/2016" in black ink is written over a horizontal line.

Appendix A

Figure 1

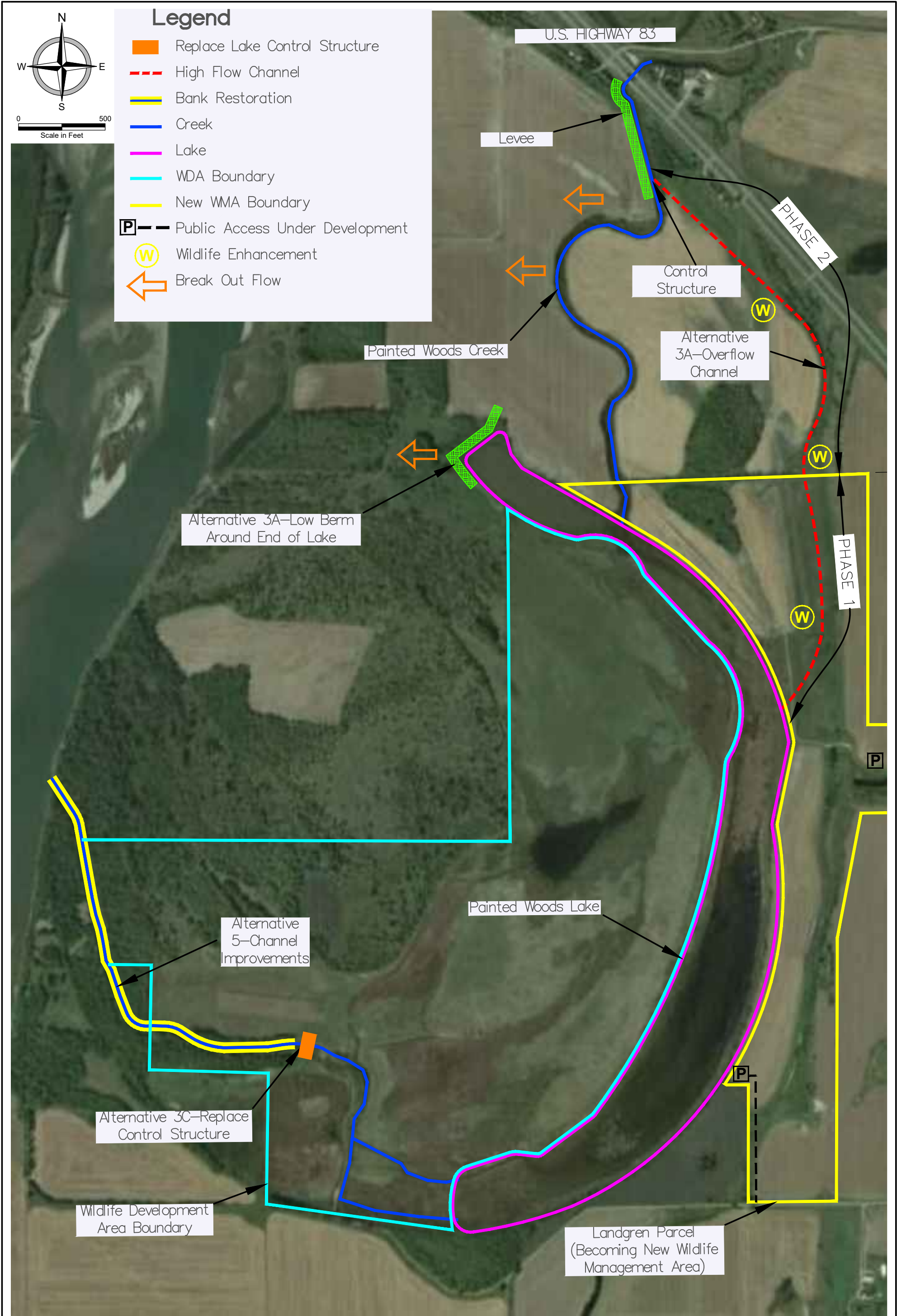


FIGURE 1
PAINTED WOODS LAKE ALTERNATIVES
McLEAN COUNTY, NORTH DAKOTA

| | |
|-------------|----------|
| PROJECT No. | 17889 |
| DATE: | 10.28.16 |
| REVISED: | --- |
| DRAWN BY: | ASM/AJB |
| CHECKED BY: | RAC |



Appendix B

Preliminary Plans

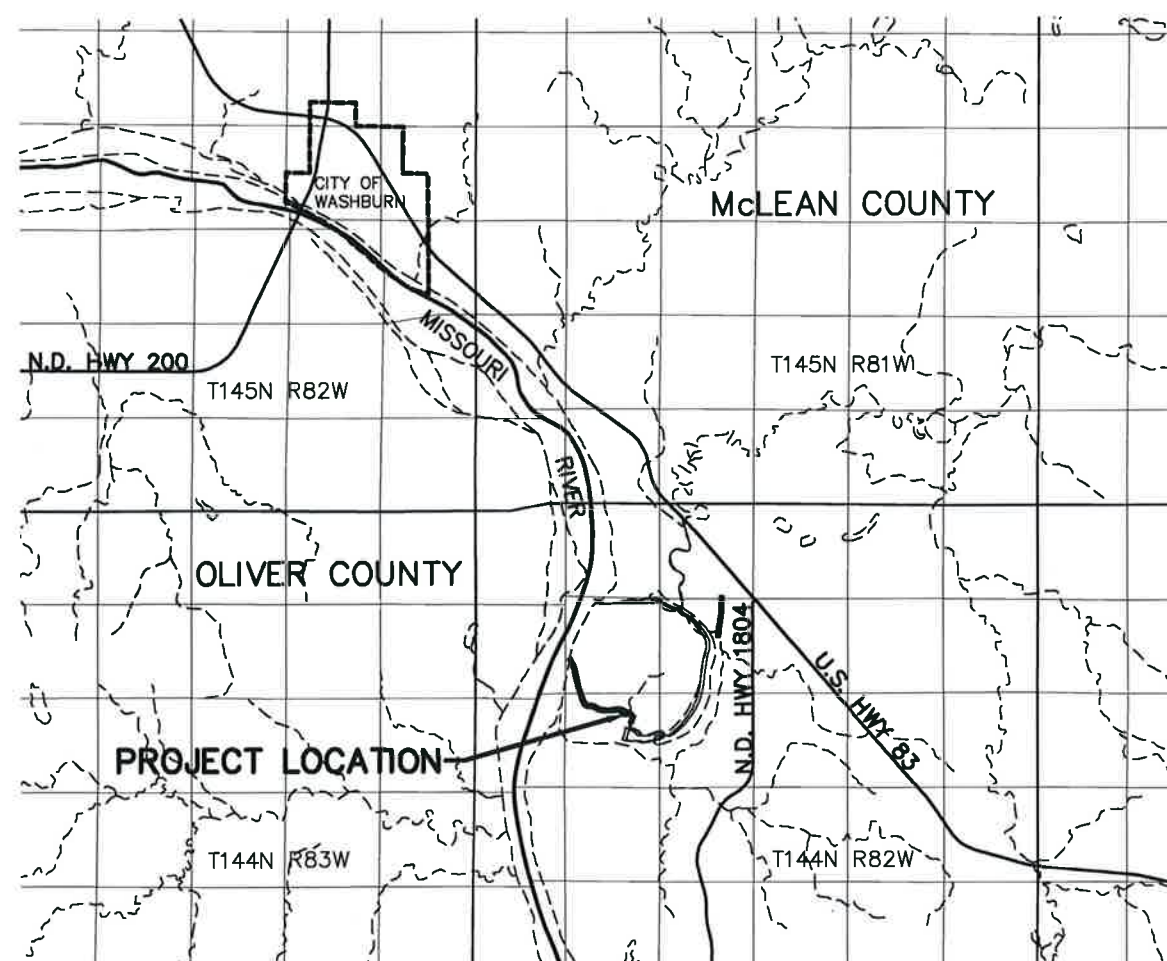


PAINTED WOODS LAKE HABITAT ENHANCEMENT PROJECT NEW LAKE LEVEL CONTROL STRUCTURE McLEAN COUNTY, NORTH DAKOTA



Consulting Engineering • Land Surveying
925 10th Avenue East • West Fargo, North Dakota
www.mooreengineeringinc.com

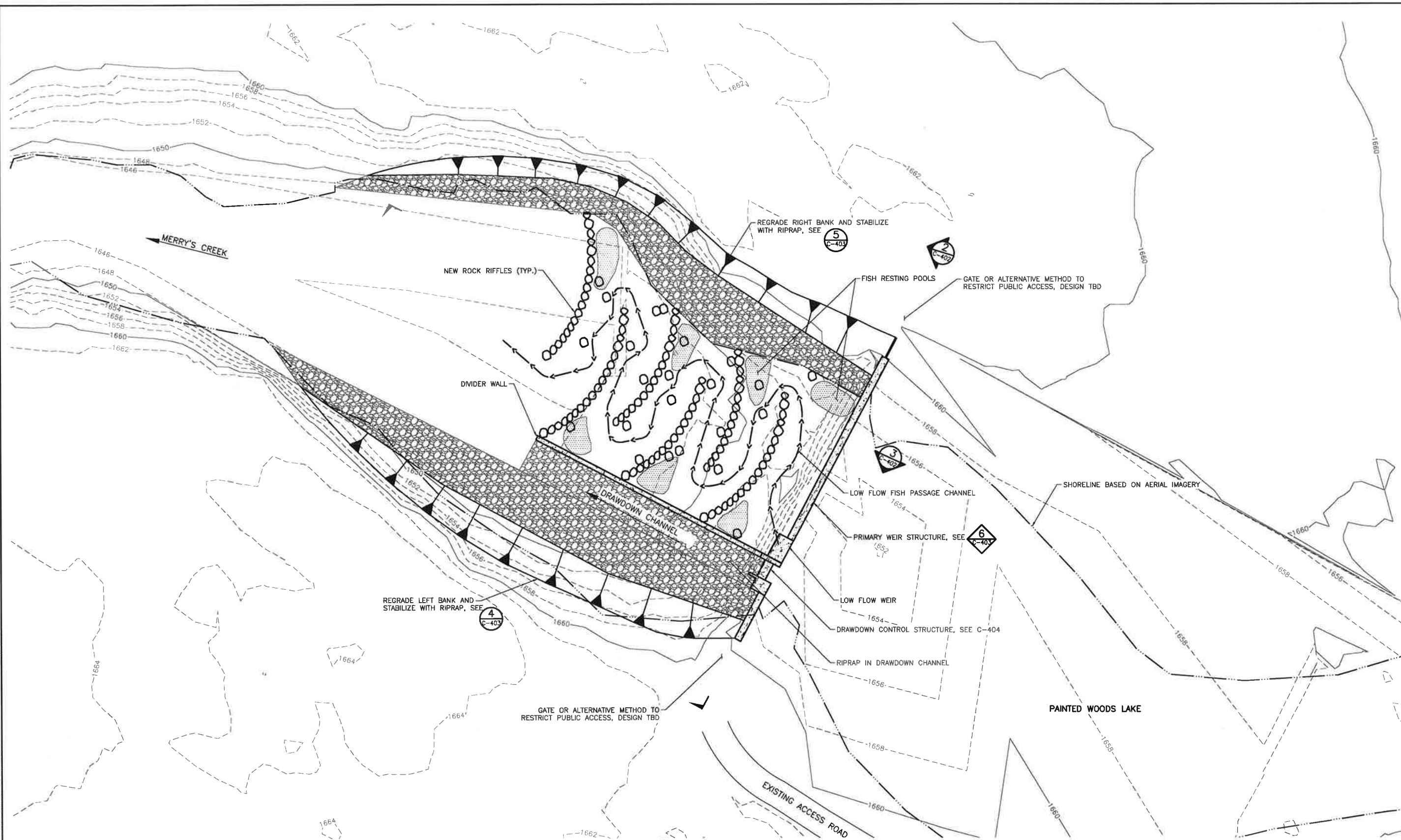
VICINITY MAP



PROJECT No. 17889

PRELIMINARY

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NOTES:
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| CLIENT | 5/4/16 | 5/10/16 | 5/25/16 | | | | | | |
| BID | | | | | | | | | |
| CONSTRUCTION | | | | | | | | | |
| RELEASED TO/FOR | A | B | C | D | 1 | 2 | 3 | | |
| DATE RELEASED | | | | | | | | | |

BARR
Corporate Headquarters
Minneapolis, Minnesota
Ph: 1-800-632-2277

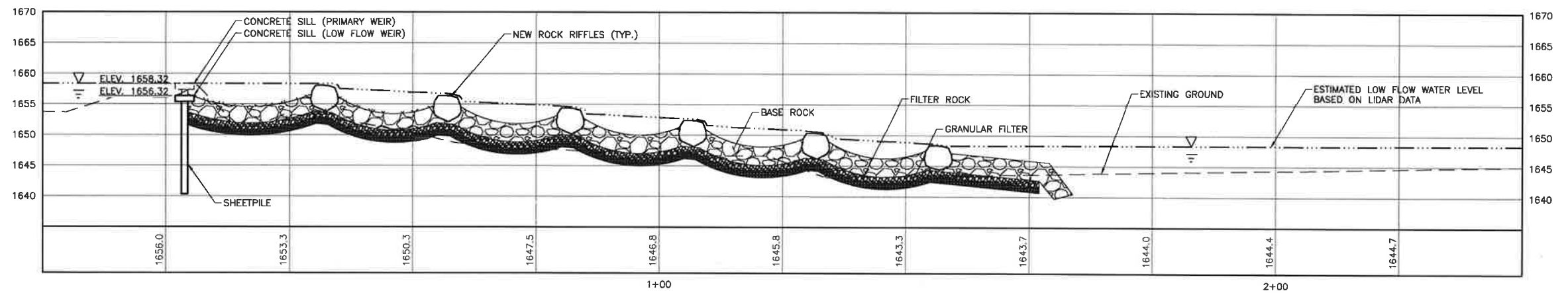
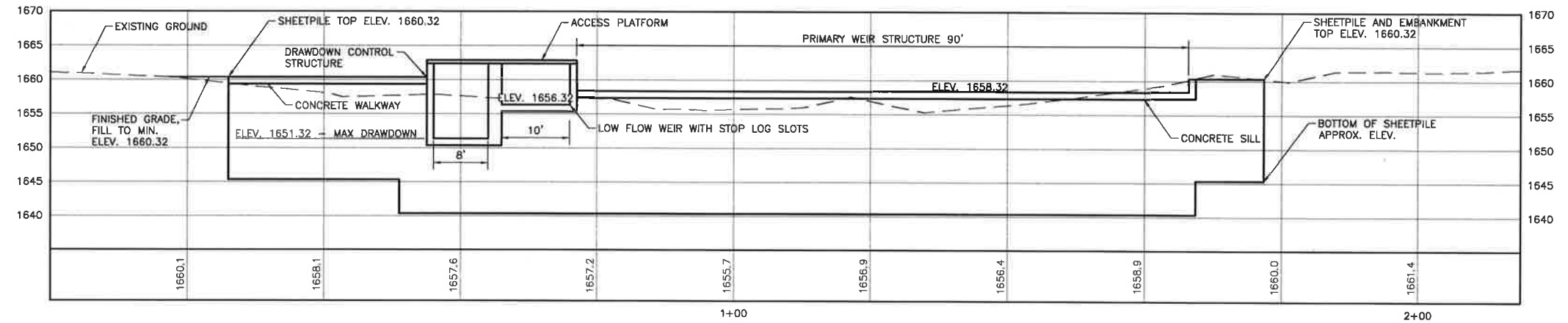
Project Office:
BARR ENGINEERING CO.
234 WEST CENTURY AVENUE
BISMARCK, ND 58503
Ph: 1-800-632-2277
Fax: (701) 222-6371
www.barr.com

| | |
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| Scale | AS SHOWN |
| Date | 4/22/2016 |
| Drawn | STD |
| Checked | MTP2 |
| Designed | BARR |
| Approved | |

MOORE ENGINEERING, INC
BISMARCK, ND

PAINTED WOODS LAKE OUTLET
MCLEAN COUNTY, ND
OUTLET STRUCTURE MODIFICATIONS
SITE PLAN

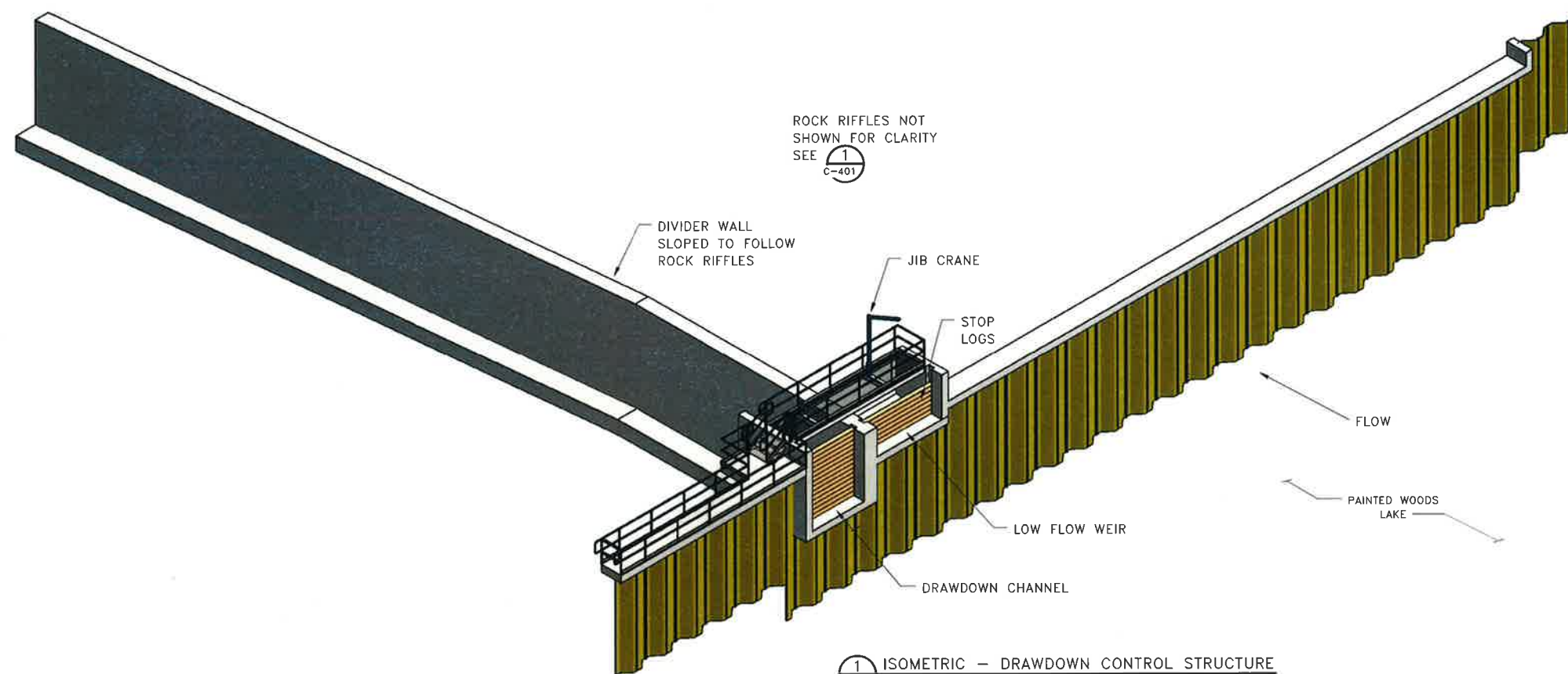
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| BARR PROJECT No. | 34/28-1052 |
| CLIENT PROJECT No. | |
| DWG. No. | C-401 |
| REV. No. | C |



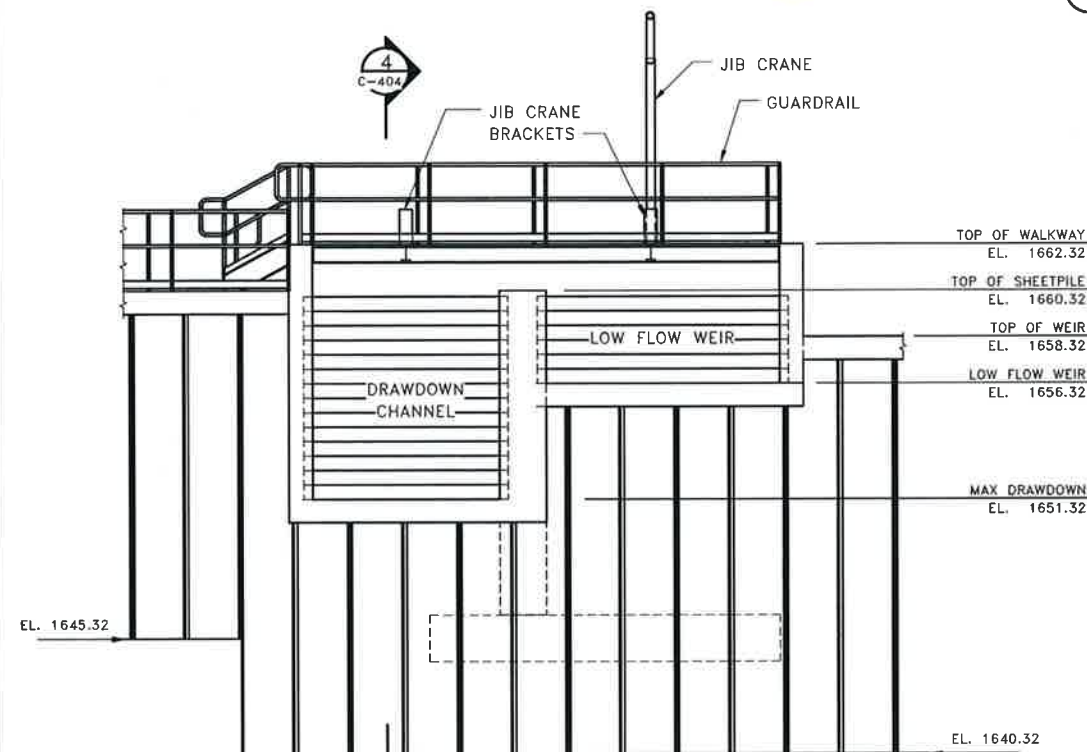
NOTES:
1. ALL ELEVATIONS SHOWN ARE IN NAVD88 VERTICAL DATUM.

PRELIMINARY
DRAFT

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(1) ISOMETRIC - DRAWDOWN CONTROL STRUCTURE
N.T.S.



(3) SECTION - DRAWDOWN CONTROL STRUCTURE
1/4" = 1'-0"

NOTE:
ALL ELEVATIONS SHOWN ARE IN NAVD88 VERTICAL DATUM.

| NO. | BY | CHK. | DATE | REVISION DESCRIPTION |
|-----|-----|------|----------|--------------------------|
| C | DWU | PFB | 05/25/16 | REVISED ISSUED TO CLIENT |
| B | DWU | PFB | 05/10/16 | REVISED ISSUED TO CLIENT |
| A | DWU | PFB | 05/04/16 | ISSUED TO CLIENT |

| CLIENT | 5/4 | 5/10 | 5/25 | | | | | | |
|-----------------|-----|------|------|---|---|---|---|--|--|
| BID | | | | | | | | | |
| CONSTRUCTION | | | | | | | | | |
| RELEASED TO/FOR | A | B | C | 0 | 1 | 2 | 3 | | |
| DATE RELEASED | | | | | | | | | |

BARR
Corporate Headquarters:
Minneapolis, Minnesota
Ph: 1-800-632-2277

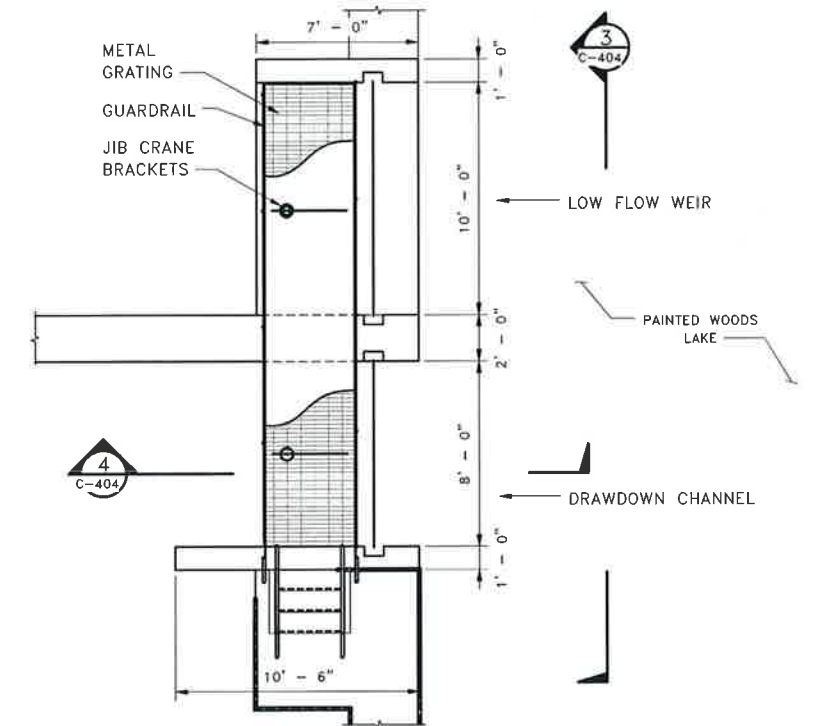
Project Office:
BARR ENGINEERING CO.
234 WEST CENTURY AVE.
BISMARCK, ND 58503
Ph: 1-800-225-1966
Fax: (218) 262-3460
www.barr.com

| Scale | AS SHOWN |
|----------|------------|
| Date | 05/04/2016 |
| Drawn | DWU |
| Checked | PFB |
| Designed | PFB |
| Approved | |

MOORE ENGINEERING, INC
BISMARCK, ND

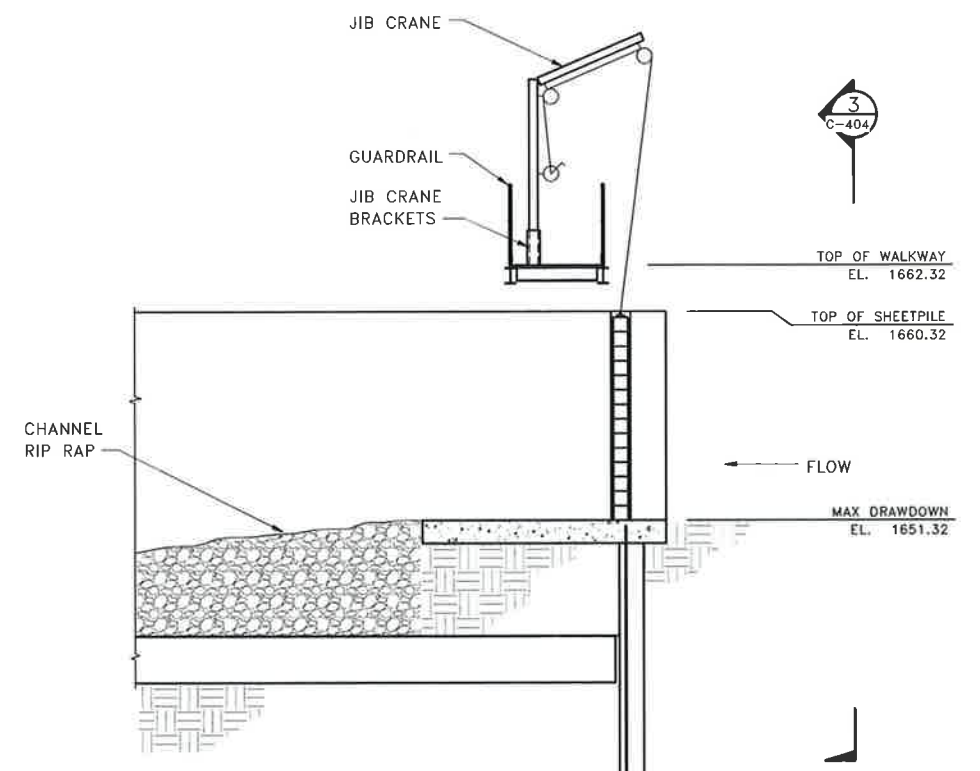
PAINTED WOODS LAKE OUTLET
MCLEAN COUNTY, ND
OUTLET STRUCTURE MODIFICATIONS
DRAWDOWN CONTROL STRUCTURE

| | |
|--------------------|------------|
| BARR PROJECT No. | 34/28-1052 |
| CLIENT PROJECT No. | |
| DWG No. | C-404 |
| REV No. | C |



(2) PLAN - DRAWDOWN CONTROL STRUCTURE
1/4" = 1'-0"

0 1 5 10
SCALE



(4) SECTION - DRAWDOWN CONTROL STRUCTURE
1/4" = 1'-0"

0 1 5 10
SCALE

PRELIMINARY DRAFT

Appendix C

Letters of Support



United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Dakotas Area Office

P.O. Box 1017

Bismarck, ND 58502-1017

IN REPLY REFER TO:

DK-4100

WTR-1.10

AUG 16 2016

Mr. Lynn Oberg, Chairman
McLean County Water Resource District
1237 Riverside Lane
Washburn, ND 58577

Subject: Painted Woods Lake Water Control Weir, Garrison Diversion Unit, Pick-Sloan
Missouri Basin Program

Dear Mr. Oberg:

I am writing in response to your consulting engineer's request for a letter of support for McLean County Water Resource District Board's (Board) proposed project in the Painted Woods Lake Area. The Board's proposal includes replacing the existing control weir constructed to restore Painted Woods Lake to its historic elevation. With concurrence from the U.S. Fish and Wildlife Service (Service) and ND Game and Fish Department (Department) our support of the Board's project will be to provide rock rip-rap which may be used for either maintenance of the existing weir or for use on the Board's proposed replacement weir.

The existing weir is in need of repair to allow for continued operations until it is replaced. We have plans to replace the walk-way on the weir this fall. We are also working together with the Service and Department on plans to haul and stockpile up to 4,000 cubic yards of rock rip-rap at the weir site this winter. We propose delaying placement of the rip-rap pending your Board's decision and timing for replacing the weir. If the plans are definite that the weir is to be replaced, this rock may be used for the replacement weir project. If the plans to replace the weir are delayed for an undisclosed amount of time, we will proceed with plans to place the rip-rap on the existing weir.

We wish to further explain that we are proceeding to clarify that all future maintenance of the existing weir structure will be included as part of the overall management of the Painted Woods Lake Wildlife Development Area managed by the Service and the Department. The weir structure will no longer be maintained separately by the Bureau of Reclamation. All plans for construction, operations and maintenance of a replacement weir structure should be discussed with the Service and the Department.

Please contact Mike Marohl at 701-221-1259 or Darrin Goetzfried at 701-221-1272 if you have any questions.

Sincerely,



David Rosenkrance
Area Manager

cc: Mr Todd Frerichs
U.S. Fish and Wildlife Service
Audubon National Wildlife Refuge
Coleharbor, ND 58531

Mr. Dan Halstad
North Dakota Game and Fish Department
406 Dakota Avenue
Riverdale, ND 58565-0506

Mr. Scott Peterson
North Dakota Game and Fish Department
100 North Bismarck Expressway
Bismarck, ND 58501-5095

Mr. Duane DeKrey
Garrison Diversion Conservancy District
P.O. Box 140
Carrington, ND 58421



United States Department of the Interior

**U.S. FISH AND WILDLIFE SERVICE
Missouri River Fish and Wildlife Conservation Office
3425 Miriam Avenue
Bismarck, North Dakota 58501**

August 9, 2016

To: Chairman, McLean County Water Resource Board

From: Project Leader, Missouri River FWCO

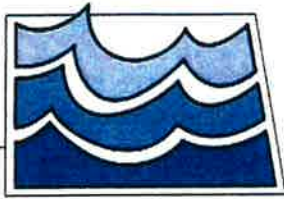
Subject: Painted Woods Creek Restoration

I wanted to let you know that in support of continuing to work collaboratively towards improving connectivity and functionality of the Painted Woods Creek restoration project; I will be working with you and other partners to submit a project proposal for additional funds to apply toward the project through the U.S. Fish & Wildlife Service's (Service) Fish Passage Program.

This program has funding available for partners to implement fish passage on structures that fragment river habitats. We will submit a proposal for this first portion of the Painted Woods watershed project this fall for fiscal year 2017 funding. In addition, for your information, the process involves a project being submitted to the Service. The submitted proposal and all other fish passage projects are then reviewed and prioritized based on a number of criteria such as regional priorities, species benefitted, habitat restoration value, and partnership participation and contribution. While there is uncertainty of funding availability, I am supportive of the approach being taken on this watershed and would like to continue our office's involvement in the development of solutions.

If you have any questions, please feel free to give me a call at (701) 355-8547 and thank you for the opportunity to be involved.

Cc: Project Manager, Moore Engineering, inc.



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 • FAX (701) 328-3696 • <http://swc.nd.gov>

August 18, 2016

Mr. Lynn Oberg
McLean County Water Resource District
1237 Riverside Lane
Washburn, ND 58577

Dear Mr. Oberg:

I am responding to your letter of June 20, 2016 in which you posed three questions relating to potential cost share assistance for planned improvements in the area of Painted Woods Lake.

You indicated that the project would typically be eligible for 45% cost share assistance as a rural flood control project, but asked whether or not a higher percentage might be made available given the unique setting and issues. In this case, I concur that our policy provides for 45% cost share assistance on eligible items as a rural flood control project. I do not believe there is a basis for a greater percentage.

You inquired whether or not the monies being provided by the ND Natural Resources Trust and ND Game and Fish Department for purchasing additional property in the area might be considered a local match. Land purchases are ineligible under our cost share policy, therefore any state funds provided by other agencies for land purchase, while possibly helpful to your ability to achieve your intended benefits, would not count as a local match toward this agency's participation on eligible items.

You also inquired whether certain improvements to the control structure such as replacement of failing catwalks and railings might be eligible for 75% cost share as dam safety improvements. Typically dam safety improvements are those improvements to a facility that mitigate a threat of dam failure. While improving appurtenances like catwalks and railings to improve the safety of dam operators is commendable, it would not fit as the type of dam safety improvement for which a 75% cost share would be eligible. Those facilities would still be eligible for 45% cost share assistance as components of the overall rural flood control project.

In this case, where there will be a federal contribution, please be aware that the cost share assistance provided by the State Water Commission will be 45% of the non-federal share. Therefore, we will need to know the anticipated federal contribution toward each component.

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

GARLAND ERBELE, P.E.
CHIEF ENGINEER AND SECRETARY

Please also be aware that it will be necessary to file all permit applications required by this office prior to funds being obligated. This may include a sovereign lands authorization, a construction permit, and possibly a water use permit.

I hope this information is helpful. Please feel free to call with any additional questions at (701)328-4958.

Sincerely,

A handwritten signature in blue ink, appearing to read "Craig Odenbach", with a stylized flourish at the end.

Craig Odenbach, P.E., CFM
Director, Water Development Division

C: Jerry Heiser, SWC



Burleigh County Water Resource District

**1811 East Thayer Avenue
Bismarck, North Dakota 58501
(701) 222-3499
www.bcwrld.org**

October 27, 2016

Mr. Lynn Oberg, Chairman
McLean County Water Resources District
1237 Riverside Lane
Washburn, ND 58577

Mr. Oberg,

Thank you for providing information and the report on the Painted Woods Lake Mitigation Study that addresses issues associated with the lake. We understand these issues include:

- Cattails in the lake
- Condition of existing control structure
- Erosion along Merry's Creek
- Eroded outlet at the Fahlgren Overflow
- Ice jams at the US HWY 83 crossing
- Flooded cropland downstream of US HWY 83

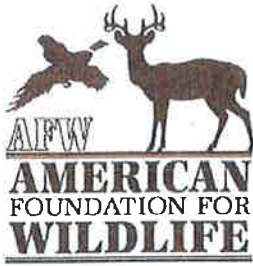
The Burleigh County Water Resource District supports the McLean County Water Resource District in its efforts to complete the project and alleviate some or all of the issues listed above.

A handwritten signature in blue ink, appearing to read "Dennis Reep".

Dennis Reep, Chairman
Burleigh County Water Resource District

Current Board Members:

Dennis Reep, Chairman, Bismarck 223-7052 Greg Larson, Vice Chairman, Bismarck 400-7217 Gordon Weixel, Secretary/Treasurer, Bismarck 258-5390
Rick Detwiller, Bismarck 223-8782 Rodney Beck, Bismarck 222-8430



P.O. Box 236 • Bismarck, ND 58502 • 701-222-0266 • Fax 701-222-3084

October 24, 2016

North Dakota Industrial Commission
ATTN: Outdoor Heritage Fund Program
State Capitol – Fourteenth Floor
600 East Boulevard Ave., Dept. 405
Bismarck, ND 58505

Dear Outdoor Heritage Advisory Board:

The American Foundation for Wildlife (Foundation) is a North Dakota nonprofit conservation organization established in 1972. A unique private, nonprofit corporation, the Foundation works to make sure our state's important natural resources heritage will always be a part of our future by balancing wildlife conservation and management with the interests and values of our landowners, citizens, and communities.

The Foundation was very excited to work with McLean County to complete the Painted Woods Wildlife Management Area addition in July 2016. This addition addressed water management, private land flooding problems and will enhance the wildlife, fishery, and overall natural resource values and outdoor experiences for the area. This property was recently donated to the North Dakota Game and Fish Department for wildlife and water management as well as to ensure public access for outdoor recreational enjoyment. This Outdoor Heritage Fund (OHF) proposal will be a critical step in creating long term solutions to the water management in the lower portion of the Painted Woods watershed. The Foundation supports the McLean County Water Resource Districts plan to reduce flooding on private lands, enhance existing wildlife habitat, and increase public access.

We are happy to provide our endorsement of the Painted Woods grant proposal and look forward toward its future accomplishments.

Sincerely,

Vern Axtman
Vice President