

MINUTES

North Dakota State Water Commission Bismarck, North Dakota

April 9, 2019

The North Dakota State Water Commission (State Water Commission or Commission) held a meeting at the State Office Building, Bismarck, North Dakota, on April 9, 2019. Governor Burgum called the meeting to order at 1:01 p.m., and requested Garland Erbele, State Engineer, and Chief Engineer-Secretary to the State Water Commission, call the roll. Governor Burgum announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:

Governor Burgum, Chairman
Doug Goehring, Commissioner, ND Department of Agriculture, Bismarck
Katie Andersen, Jamestown
Michael Anderson, Hillsboro
Richard Johnson, Devils Lake
Leander McDonald, Bismarck
Mark Owan, Williston
Matthew Pedersen, Valley City
Jason Zimmerman, Minot

OTHERS PRESENT:

Garland Erbele, State Engineer, and Chief Engineer-Secretary, State Water Commission
State Water Commission Staff
Jennifer Verleger, General Counsel, Attorney General's Office
Approximately 50 people interested in agenda items.

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

CONSIDERATION OF AGENDA:

The agenda for the April 9, 2019, State Water Commission meeting was presented; there were no modifications.

CONSIDERATION OF DRAFT MINUTES FOR FEBRUARY 14, 2019, and MARCH 14, 2019, SUBCOMMITTEE MEETING MINUTES:

The draft minutes for the February 14, 2019, State Water Commission meeting and March 14, 2019, subcommittee meetings were reviewed. There were no modifications.

It was moved by Governor Burgum, seconded by Commissioner Anderson, and unanimously carried, that the minutes for February 14, 2019, and March 14, 2019, subcommittee meetings be approved as presented.

STATE WATER COMMISSION FINANCIAL REPORTS:

The allocated program expenditures for the period ending February 28, 2019, were presented and discussed by David Laschkewitsch, Director of Administrative Services. The total expenditures were within the authorized budget amounts.

The Project Summary for the 2017-2019 Biennium, **APPENDIX A**, provided information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund. The final summary for projects showed approved projects totaling \$660,585,359 with expenditures of \$285,064,246. A balance of \$20,893,968 remains available to commit to projects in the 2017-2019 biennium.

The oil extraction tax deposits into the Resources Trust Fund total \$287,050,417 through March 2019 and are currently \$64,439,905 or 28.9 percent above budgeted revenues.

Deposits received for the Water Development Trust Fund total \$23,874,965 through March 2019 and are currently \$14,874,965 above the budget revenues of \$9,000,000. The large increase was due to a settlement agreement between the state and the major tobacco companies over enforcement of the 1998 Tobacco Master Settlement agreement. The next scheduled deposit is April 2019 and anticipated to be \$9,000,000.

David introduced Heide Delorme. Heide will join the State Water Commission April 22 as Director of Administrative Services. David retires from this position April 30 after 35 years of service to the State of North Dakota.

LEGISLATIVE UPDATE

Garland Erbele provided a brief update on House Bills 1085, 1320, and Senate Bills 2139, 2090, 2362, and 2020.

VALLEY CITY - \$480,283 **(SWC Project No. 1504-08)**

Valley City requested cost-share assistance for the Permanent Flood Protection Erosion Sites project. In 2009 Valley City encountered a record flood and a near record flood in the 2011. Repeated flooding eroded the natural vegetation that supported the river banks at the erosion sites. Without the natural vegetation, the erosion has accelerated during non-flooding years.

The proposed project would armor two erosion sites by utilizing riprap within the channel and seeding. The projects would consist of earthwork, fabric, riprap, and erosion control items. Permanent flood protection is not planned in these areas for several years; however, the erosion control is needed to ensure emergency measures are implemented in the interim. The estimated construction cost is \$600,354. The funding request included construction, construction engineering, and permitting of the project areas. Valley City requested 80 percent cost-share, or \$480,283, for construction and construction engineering costs of the project. The cost-share request is attached as **APPENDIX B**.

Secretary Erbele recommended the State Water Commission approve the request of Valley City for state cost-share at 80 percent at an amount not to exceed \$480,283. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Johnson that the State Water Commission approve state cost-share at 80 percent at an amount not to exceed \$480,283. The approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Zimmerman, Goehring, and Governor Burgum voted aye. Commissioner Pedersen abstained. There were no nay votes. Governor Burgum announced the motion carried.

MINOT SYSTEM WIDE IMPROVEMENT FRAMEWORK (SWIF) - \$214,279 **(SWC Project No. 2107-02)**

On June 22, 2017, the State Water Commission originally approved funding for Minot's 2017 levee repair, bank stabilization, and snagging and clearing project which included improvements necessitated as part of the SWIF process for the existing flood control system. Bids for the construction of the project came in under the engineer's original estimate, and Minot requested the unused funds of \$368,778 be reallocated to additional SWIF-related efforts which was approved on June 14, 2018. On October 11, 2018, the State Water Commission approved an additional \$387,433 for the project, totaling \$756,211 in cost-share funds. The cost-share for the project is 50 percent for eligible bank stabilization portions and 60 percent for eligible flood control portions.

Minot requested an additional \$214,279 for cost-share funding to complete the project. The new cost-share total would be \$970,490 in state funds. The cost-share request is attached as **APPENDIX C**.

Secretary Erbele recommended the State Water Commission approve the request of Minot for additional state cost-share at an amount not to exceed \$214,279. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman that the State Water Commission approve the request of Minot for additional state cost-share at an amount not to exceed \$214,279. The approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

DEVILS LAKE OUTLET OPERATIONS FUNDING APPROPRIATION - \$2,500,000
(SWC Project No. 416-10)

For the 2017-2019 biennium, \$5,000,000 was budgeted in the State Water Commission's General Water Management Bucket, included in HB 1020, for Devils Lake Outlet Operations. The project has operated on carryover funding from the 2015 - 2017 biennium, and none of the 2017-2019 funds have yet been approved for the project.

The carryover funds are sufficient to cover operation costs for the remainder of this biennium, but they will not be adequate to cover the recently mediated settlements with landowners adjoining the Devils Lake West End Outlet. State Water Commission staff requested obligation of \$2,500,000 of the \$5,000,000 to cover these associated costs.

Secretary Erbele recommended the State Water Commission approve the amount of \$2,500,000 for Devils Lake Outlet Operations, from the funds appropriated by HB 1020 to the State Water Commission for the 2017-2019 biennium.

It was moved by Commissioner Owan and seconded by Commissioner Goehring that the State Water Commission approve the amount of \$2,500,000 for Devils Lake Outlet Operations, from the funds appropriated by HB 1020 to the State Water Commission for the 2017-2019 biennium.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye.

There were no nay votes. Governor Burgum announced the motion unanimously carried.

BOURET DAM REHABILITATION PROJECT - \$591,750
(SWC Project No. 0531)

Benson County Water Resource District (District) requested cost-share assistance for the Bouret Dam rehabilitation project. Bouret Dam is located near Minnewaukan. Bouret Dam was originally built by the Works Progress Administration (WPA) on the Shyenne River in 1939. According to NDCC § 61-16.1-39 and 61-16.1-40, the District is responsible for maintenance of the dam.

Bouret Dam is currently experiencing downstream and structural erosion along with severe cracks at the abutments and separated wing walls. In May 2018, the District completed a feasibility study to determine alternatives for the dam. The District's preferred alternative is removing the existing failing dam and replacing it with an engineered rock ramp. The sponsor indicated the engineered rock ramp would eliminate the existing risk posed by the hydraulic roller, improve river connectivity, enhance recreational opportunities, and reduce the long-term maintenance requirements. The District advanced the project to 90 percent design with cost-share assistance from the State Water Commission.

Construction will begin in fall 2019 or spring 2020. The District owns the land needed for construction. Design is expected to be complete in spring 2019 and construction by fall 2019. The total cost of the Bouret Dam rehabilitation project is \$789,000. The District requested 75 percent cost-share, or \$591,750, for the project. Current State Water Commission policy is to provide 75 percent cost-share assistance to remedy dam safety issues and 40 percent cost-share for recreation projects. In this instance, simply removing the dam would eliminate the threat to public safety, and the rock ramp will provide a recreational benefit. The recommendation was for 75 percent cost-share on the dam removal costs (\$174,000) and 40 percent cost-share on the rock ramp construction (\$223,000). The total cost-share recommendation was \$397,000. The cost-share request is attached as **APPENDIX D**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Bouret Dam rehabilitation project at an amount not to exceed \$397,000. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Johnson and seconded by Commissioner Andersen that the State Water Commission approve 75 percent cost-share on the dam removal costs (\$174,000) and 75 percent cost-share on the rock ramp construction (\$417,750) for total

state cost-share in an amount not to exceed \$591,750. The approval is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

After further discussion, Governor Burgum requested State Water Commission staff to provide Commissioners with updated low-head dam numbers.

KAREY DAM REHABILITATION PROJECT - \$971,325
(SWC Project No. 1453)

Hettinger County Water Resource District (District) requested cost-share assistance for the Karey Dam rehabilitation project. Karey Dam is located near New England. Karey Dam was originally built by the Civilian Conservation Corps in 1930 for the primary purpose of irrigation. According to NDCC § 61-16.1-39 and 61-16.1-40, the Hettinger County Water Resource Board (Board) has responsibility for maintenance of the dam.

Under its current condition, the dam poses a risk to public safety as a drowning hazard due to the hydraulic roller. The dam currently faces significant downstream and structural erosion along with severe cracks at the abutments and separated wing walls. The right abutment was washed out during spring 2018 runoff events. In May 2018, the Board completed a feasibility study (30 percent design) to determine alternatives for the dam.

The District's preferred alternative involves removing the existing failing dam and replacing it with an engineered rock ramp. The District indicated the engineered rock ramp will eliminate the risk associated with the existing hydraulic roller, improve river connectivity, enhance recreational opportunities, and reduce the long-term maintenance requirements. The Board has advanced the project to 90 percent design level with cost-share assistance from the State Water Commission. Construction will begin late fall 2019 or spring 2020.

The total cost of the Karey Dam rehabilitation project is \$1,295,100. The District requested 75 percent cost-share, or \$971,325, in state funds for the project. Current State Water Commission policy is to provide 75 percent cost-share assistance to remedy dam safety issues and 40 percent cost-share for recreation projects. In this instance, simply removing the dam eliminates the threat to public safety, and the rock ramp would provide a recreational benefit. The recommendation was for 75 percent cost-share on the dam removal costs (\$211,000) and 40 percent cost-share on the rock ramp construction (\$406,000). The total cost-share recommendation was \$617,000. The cost-share request is attached as **APPENDIX E**.

Secretary Erbele recommended the State Water Commission approve the request by the District for state cost-share participation in the Karey Dam rehabilitation project at an amount not to exceed \$617,000. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

It was moved by Commissioner McDonald and seconded by Commissioner Pedersen that the State Water Commission approve 75 percent cost-share on the dam removal costs (\$211,000) and 75 percent cost-share on the rock ramp construction (\$760,325) for total state cost-share in an amount not to exceed \$971,325. The approval is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

GOSCHKE DAM - \$44,010
(SWC Project No. 0849-01)

Pembina County Water Resource District (District) requested cost-share assistance for the Goschke Dam Spillway Gate Retrofit project. Goschke Dam is located near Cavalier. The Dam is in need of a new gate/operator, as well as platform and trash rack. The District requested the gate portion of the requested cost-share be expedited due to the importance of the gate being replaced before this spring's runoff. The State Engineer approved the gate replacement cost-share of \$75,000 on March 11, 2019. This pending request is for the replacement of the platform and trash rack. The updated total cost of the project after bid was \$158,680 which is eligible for 75 percent cost-share as a dam safety project with a cost-share of \$119,010. The request is for the remaining costs of the project which include the replacement of the platform and trash rack for \$58,680 resulting in additional cost share of \$44,010. The cost-share request is attached as **APPENDIX F**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Goschke Dam at an amount not to exceed \$44,010. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Goehring and seconded by Commissioner Johnson that the State Water Commission approve state cost-share at 75 percent, not to exceed \$44,010. The approval

is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

UPPER MAPLE RIVER DAM - \$82,320
(SWC Project No. 1878-02)

Maple-Steele Joint Water Resource District (District) requested cost-share assistance for Upper Maple River Dam outlet channel improvements. Upper Maple Dam is located near Hope. A preliminary design for the project was completed. The channel downstream of the principal spillway structure has experienced significant erosion during recent high-flow events. The project would include reconstruction of the failed side slopes, remove unsuitable material, and reinforce the channel with rip rap to protect the dam from future erosion from high-flow events. The District owns the land needed for construction. Design will be completed in spring 2019 and construction completed in fall 2019. The estimated cost of \$147,000 includes construction, engineering, and other related project costs.

The total cost of the Upper Maple River Dam outlet channel improvements project is \$147,000. The District requested 75 percent cost-share as a dam safety project. However, when the dam was originally constructed approximately three to four years ago, the cost-share percentage for the project was 60 percent as a flood control project. The State Water Commission's initial inspection of the dam, shortly after construction was finished, noted the lack of adequate rip-rap at the outlet of the principal spillway. Therefore, the recommendation is to approve cost-share of 60 percent, the same as would have been provided had sufficient rock been placed at the time of the original construction. With contingencies at 10 percent of construction costs and administrative costs ineligible, the cost-share would be \$82,320. The cost-share request is attached as **APPENDIX G**.

Secretary Erbele recommended the State Water Commission approve the request for state cost-share participation in the Upper Maple River Dam outlet channel improvements at an amount not to exceed \$82,320. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits, and the availability of funds.

It was moved by Commissioner Zimmerman and seconded by Commissioner Goehring that the State Water Commission approve state cost-share at 60 percent, not to exceed \$82,320. The approval

is subject to the entire contents of the recommendation, obtaining all applicable permits, and the availability of funds.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT (SWPP) – AWARD OF CONTRACT FOR TRANSFER OF OWNERSHIP STUDY
(SWC Project No. 1736-99)

Based on the direction provided during the February 14, 2019, State Water Commission meeting, State Water Commission staff met with Apex Engineering Group and the project team to negotiate a cost for the SWPP transfer of ownership study. Multiple meetings were held to discuss the scope of the various tasks identified in the Request for Proposal. The project team was also requested to provide a cost for the study divided into two phases.

Phase 1 included the scope of services required to determine the merits and demerits of the state divesting the ownership of the SWPP and the resulting impact to the state, Southwest Water Authority (SWA), and SWPP users. Completing a comparative analysis of the different funding models used by other regional water systems in North Dakota was included as an optional item in Phase 1. Phase 2 included the scope of services required to define the processes and estimate the costs required to transfer ownership of SWPP from State Water Commission to SWA.

The total cost for Phase 1 which included the comparative analysis of different funding models task is \$176,579. The cost for Phase 1 without the comparative analysis is \$127,143. The cost for Phase 2 is \$141,495. Work on Phase 2 would wait until it is determined if ownership of SWPP should be transferred.

The total cost to complete all the tasks together is \$308,344, and the study would be completed by December 2019. The total cost to complete the tasks with Phase 1 first, followed by Phase 2 is \$318,074. The schedule showed the final report for Phase 1 and Phase 2 completed by December 2019 and June 2020 respectively. State Water Commission staff reviewed the proposed budget along with rate sheets provided by the project team, and believe the costs are appropriate given the scope of work.

Included as **APPENDIX H** are tables with the different tasks, scope, and costs for Phases 1 and 2 discussed above, the draft scope of services, and schedule to complete the study with all tasks awarded together and schedule to complete Phase 1 of the study followed by Phase 2.

Two options for the Commission included 1) award the contract for all tasks for a total of \$308,344, and 2) award the contract for Phase 1 with or without the comparative analysis. The award of Phase 1 would include an option to add Phase 2 at a later date based on results of Phase 1.

There was additional discussion regarding the importance of the comparative analysis, and staff were directed to include a comparison of the various governance models as part of the scope for this task.

After discussion, the following motion was made:

It was moved by Commissioner Pedersen and seconded by Commissioner Owan that the State Water Commission award the contract to Apex Engineering Group to complete the transfer of ownership study proposed in Phase 1 with comparative analysis in the amount of \$176,579.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

RED RIVER VALLEY WATER SUPPLY PROJECT (RRVWSP) PERMIT #1416A:

In 1967, State Engineer and Secretary to the State Water Conservation Commission, Milo Hoisveen, granted the U.S. Bureau of Reclamation Water Permit #1416 that allocated 3,145,000 acre-feet annually from the Missouri River for the Garrison Diversion Unit. At the time, it was the single largest water right ever issued in the United States.

In 1986, as a result of the Garrison Diversion Reformulation Act, State Engineer Vern Fahy split Permit #1416 into two parts: #1416, and #1416A and assigned Permit #1416A to the State Water Commission. Permit #1416 kept 1,212,348 million acre-feet annually and 1,932,652 million acre-feet annually went to Permit #1416A.

In 1999, Permit #1416A was split again and assigned 15,000 acre-feet annually to Permit #1416A-01 in the name of the State Water Commission – Northwest Area Water Supply (NAWS) project.

Garrison Diversion Conservancy District (GDCCD) is moving forward with planning and construction of the RRVWSP. GDCCD requested 120,000 acre-feet of water from the Missouri River using State Water Permit #1416A. The original request is attached as **APPENDIX I.**

If the request is approved, the State Engineer would follow standard operating procedures found in NDCC 61-04 and NDAC 89-03 to split and assign the requested quantity of water into the name of GDCD. A statutory procedure would then be followed whereby the approved point of diversion would be moved to a location south of Washburn identified by GDCD as the intake location on the Missouri River.

Secretary Erbele recommended the State Water Commission approve 120,000 acre-feet per year at a rate of 165 cubic feet per second from State Water Commission Water Permit #1416A be assigned to the GDCD for the purpose of supplying water to the RRVWSP from the Missouri River.

After discussion, the following motion was made:

It was moved by Commissioner Zimmerman and seconded by Commissioner Pedersen that the State Water Commission approve 120,000 acre-feet per year at a rate of 165 cubic feet per second from State Water Commission Water Permit #1416A be assigned to the GDCD for the purpose of supplying water to the RRVWSP from the Missouri River.

Commissioners Andersen, Anderson, Johnson, McDonald, Owan, Pedersen, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

ECONOMIC ANALYSIS (EA) AND LIFE CYCLE COST ANALYSIS (LCCA) POLICY DEVELOPMENT

Pat Fridgen, Director of Planning and Education, discussed legislation passed by the North Dakota Legislature in 2017, that created NDCC 61-03-21.4 requiring the State Engineer to: *“develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than one million dollars, and a life cycle analysis process for municipal water supply projects. When the State Water Commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, the State Engineer shall review the economic analysis or life cycle analysis, and inform the State Water Commission of the findings from the analysis and review.”*

Guidance documents and fillable models for EA and LCCA are completed and were approved by the Commission last summer. It is the expectation of the Legislature that those analysis requirements be implemented by the agency starting with the 2019-2021 biennium beginning July 1, 2019.

Existing Legislation provides little direction in terms of how the results of the EA and LCCA are to be used by the Commission. In addition, it does not appear at this stage of the current Legislative session that the requirements to conduct EA and LCCA are going to be removed. Therefore, language will likely need to be added to the agency's cost-share policy to provide necessary guidance.

At the recommendation of the Finance, Planning, and Budget Subcommittee, State Water Commission staff was directed to discuss before the full Commission. There was discussion of whether or not staff should begin drafting policy language related to EA and LCCA requirements and implementation.

After discussion, it was determined that State Water Commission staff would draft language to place in the cost-share policy based on the statute.

PROJECT UPDATES:

Commission staff provided brief updates on the following projects with the summary updates attached as **APPENDIX J**:

Jon Kelsch, Construction Section Chief, Devils Lake Outlet; Laura Ackerman, Investigations Section Chief, Missouri River and Mouse River; Tim Freije, NAWS Project Manager; and, Sindhuja S.Pillai-Grinolds, SWPP Project Manager.

LEGAL UPDATES:

Jennifer Verleger, General Counsel, Attorney General's Office, provided brief legal updates on State Water Commission and Office of the State Engineer litigation, attached as **APPENDIX K**. Legal updates will continue as a standing agenda item.

ROUNDTABLE UPDATES WITH COMMISSIONERS:

Commissioner Pedersen indicated the permanent flood protection erosion sites project is coming together well with the flood protection project.

Commissioner Johnson indicated the Devils Lake Advisory Board will meet May 9 with Canada and Minnesota. The flood levels in Devils Lake are looking positive.

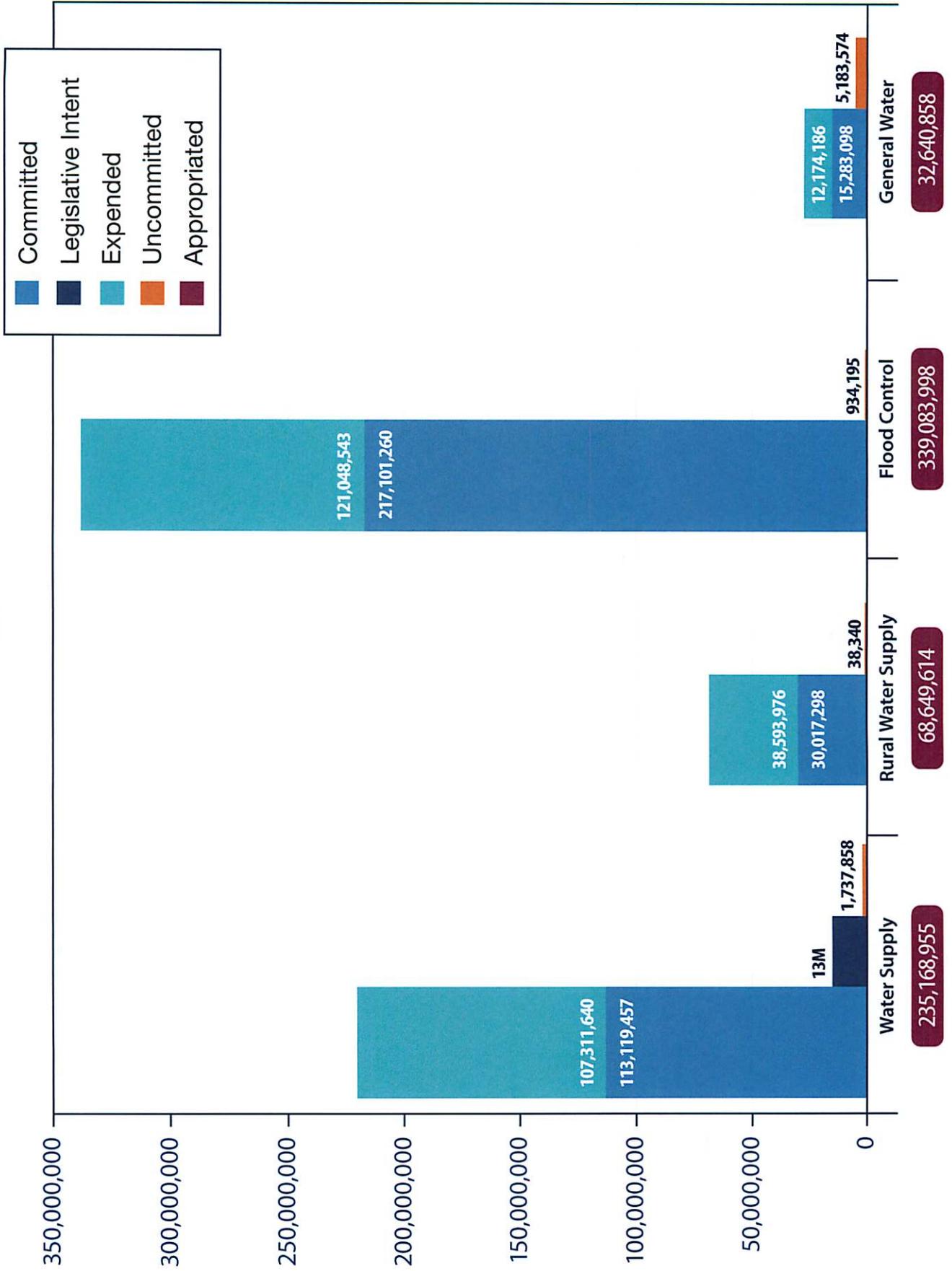
There being no further business to come before the State Water Commission,
Governor Burgum adjourned the April 9, 2019, meeting at 3:45 p.m.



Doug Burgum, Governor
Chairman, State Water Commission

Garland Erbele, P.E.
North Dakota State Engineer,
and Chief Engineer-Secretary
to the State Water Commission

PROJECT FUNDS



**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 BIENNIUM**

Feb-19

	2015-2017 CARRYOVER	2017-2019 FUNDING	2017-2019 BUDGET	SWC/SE APPROVED	REMAINING UNOBLIGATED
MUNICIPAL & REGIONAL WATER SUPPLY:					
MUNICIPAL WATER SUPPLY	54,802,659	40,225,561	95,028,220	95,028,220	0
RED RIVER VALLEY	0	30,000,000	30,000,000	17,000,000	13,000,000
OTHER REGIONAL WATER SUPPLY	60,241,296	48,161,581	108,402,877	108,402,877	0
UNOBLIGATED MUNICIPAL/REG WATER SUPPLY		1,737,858	1,737,858		1,737,858
% OBLIGATED		87.73%			
RURAL WATER SUPPLY:					
RURAL WATER SUPPLY	41,195,208	27,416,067	68,611,274	68,611,274	0
UNOBLIGATED RURAL WATER SUPPLY		38,340	38,340		38,340
% OBLIGATED		99.86%			
FLOOD CONTROL:					
FARGO	78,376,087	66,500,000	144,876,087	144,876,087	0
MOUSE RIVER	29,187,970	58,144,726	87,332,696	87,332,696	0
VALLEY CITY	13,693,459	2,700,354	16,393,813	16,393,813	0
LISBON	9,000,010	0	9,000,010	9,000,010	0
OTHER FLOOD CONTROL	36,063,386	1,614,825	37,678,211	37,678,211	0
PROPERTY ACQUISITIONS	16,849,083	7,408,241	24,257,324	24,257,324	0
WATER CONVEYANCE	19,914,006	(1,302,342)	18,611,664	18,611,664	0
UNOBLIGATED FLOOD CONTROL		934,195	934,195		934,195
% OBLIGATED		99.31%			
GENERAL WATER:					
GENERAL WATER	16,886,983	10,570,301	27,457,284	27,457,284	0
UNOBLIGATED GENERAL WATER		5,183,574	5,183,574		5,183,574
% OBLIGATED		67.10%			
REVOLVING LOAN FUND:					
GENERAL WATER PROJECTS	4,681,900	900,000	5,581,900	5,581,900	0
WATER SUPPLY	354,000	0	354,000	354,000	0
% OBLIGATED		100.00%			
TOTALS	381,246,045	300,233,286	681,479,327	660,585,359	20,893,968

**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 BIENNIUM**

Feb-19

	SWC/SE APPROVED	EXPENDITURES	REMAINING UNPAID
MUNICIPAL & REGIONAL WATER SUPPLY:			
MUNICIPAL WATER SUPPLY	95,028,220	41,541,711	53,486,509
RED RIVER VALLEY	17,000,000	11,000,000	6,000,000
OTHER REGIONAL WATER SUPPLY	108,402,877	54,769,929	53,632,948
RURAL WATER SUPPLY:			
RURAL WATER SUPPLY	68,611,274	38,593,976	30,017,298
FLOOD CONTROL:			
FARGO	144,876,087	22,714,494	122,161,593
MOUSE RIVER	87,332,696	32,345,685	54,987,010
VALLEY CITY	16,393,813	9,235,330	7,158,483
LISBON	9,000,010	7,303,372	1,696,638
OTHER FLOOD CONTROL	37,678,211	19,574,252	18,103,959
PROPERTY ACQUISITIONS	24,257,324	21,879,437	2,377,887
WATER CONVEYANCE	18,611,664	7,995,973	10,615,690
GENERAL WATER:			
GENERAL WATER	27,457,284	12,174,186	15,283,098
REVOLVING LOAN FUND:			
GENERAL WATER PROJECTS	5,581,900	5,581,900	0
WATER SUPPLY	354,000	354,000	0
TOTALS			
	660,585,359	285,064,246	375,521,113
	660,585,359	285,064,246	375,521,113

STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium

WATER SUPPLY

Approved SWC						Approved	Total	Total	Feb-19
By	No	Dept	Sponsor	Project	Date	Approved	Payments	Balance	
Municipal Water Supply:									
	2050-13	5000	Mandan	New Raw Water Intake	10/7/2013	1,515,672	270,291	1,245,381	
	2050-15	5000	Washburn	New Raw Water Intake	10/7/2013	2,281,927	233,049	2,048,878	
	2050-18	5000	Grafton	Water Treatment Plant Phase 3	10/7/2013	48,822	48,822	(0)	
	2050-20	5000	Dickinson	Capital Infrastructure	10/6/2015	1,731,926	0	1,731,926	
	2050-21	5000	Watford City	Capital Infrastructure	8/1/2015	536,627	13,873	522,754	
	2050-26	5000	Fargo	Fargo Water System Regionalization Improvements	7/29/2015	4,131,788	1,854,868	2,276,920	
	2050-28	5000	Mandan	Water Systems Improvement Project	10/6/2015	1,812,123	1,812,123	0	
	2050-29	5000	Minot	Water Systems Improvement Project	10/6/2015	3,478,647	2,879,346	599,301	
	2050-30	5000	Watford City	Water Systems Improvement Project	10/6/2015	5,374,639	548,390	4,826,249	
	2050-31	5000	West Fargo	Water Systems Improvement Project	10/6/2015	392,388	392,388	0	
	2050-32	5000	Williston	Water Systems Improvement Project	10/6/2015	7,857,010	0	7,857,010	
	2050-36	5000	Dickinson	Water Systems Improvement Project	10/6/2015	0	0	0	
	2050-37	5000	Dickinson	Dickinson State Avenue South Water Main	12/11/2015	963,920	0	963,920	
	2050-44	5000	Beulah	Water Treatment Plant	3/9/2016	1,639,813	1,639,813	0	
	2050-49	5000	Grand Forks	Grand Forks Water Treatment Plant	8/23/2017	50,645,520	30,536,713	20,108,807	
	2050-51	5000	Mercer	Connect to McLean-Sheridan	8/23/2017	0	0	0	
	2050-52	5000	New Town	Water Transmission Storage	10/11/2018	1,940,000	662,474	1,277,526	
	2050-53	5000	West Fargo	Brooks Harbor Water Tower	8/23/2017	1,950,000	0	1,950,000	
	2050-54	5000	West Fargo	North Loop Connection	8/23/2017	510,000	0	510,000	
	2050-55	5000	West Fargo	West Loop Connection	8/23/2017	1,110,000	0	1,110,000	
	2050-56	5000	Williston	US Highway 2 Water Main	8/23/2017	434,400	419,029	15,371	
	2050-66	5000	Lincoln	Lincoln Water System Improvement Project	2/8/2018	1,130,000	0	1,130,000	
	2050-67	5000	Williston	Williston Water System Improvements	2/8/2018	2,336,000	0	2,336,000	
	2050-69	5000	Mandan	Sunset Reservoir Water Transmission Line	4/12/2018	3,135,000	158,534	2,976,466	
	2050-70	5000	Wing	Water Tower Repair	4/12/2018	72,000	72,000	0	
TOTAL MUNICIPAL WATER SUPPLY						95,028,220	41,541,711	53,486,509	
Regional Water Supply:									
	1736-05	8000	SWPP	Southwest Pipeline Project	7/11/2017	52,249,989	32,661,365	19,588,624	
	2374	9000	NAWS	Northwest Area Water Supply	2/8/2018	27,108,462	3,996,440	23,112,022	
HB 1020	1973-02	5000	WAWSA	WAWSA	9/15/2014	155,603	155,603	(0)	
	1973-05	5000	WAWSA	WAWSA	10/6/2015	8,888,823	5,835,732	3,053,091	
	1973-06	5000	WAWSA	WAWSA	12/8/2017	20,000,000	12,120,789	7,879,211	
	325-105	5000	RRVWSP	RRVWSP Garrison Diversion	8/23/2017	17,000,000	11,000,000	6,000,000	
TOTAL REGIONAL WATER SUPPLY						125,402,877	65,769,929	59,632,948	
Rural Water Supply:									
	2050-17	5000	Barnes Rural RWD	Improvements	3/11/2015	1,096,634	1,096,634	0	
	2050-23	5000	Greater Ramsey WRD	SW Nelson County Expansion	8/23/2017	1,364,794	1,323,874	40,920	
	2050-25	5000	All Seasons Water District	Bottineau County Extension, Phase I	7/29/2015	299,358	57,503	241,855	
	2050-33	5000	Stutsman RWD	Phase V Storage & Pipeline Expansion Project	10/6/2015	1,172,760	1,172,760	0	
	2050-34	5000	North Prairie RWD	Storage and Water Main	10/6/2015	1,968,086	949,565	1,018,520	
	2050-35	5000	Southeast Water Users Dist	System Wide Expansion Feasibility Study	8/23/2017	13,159,145	8,697,578	4,461,567	
	2050-38	5000	Dakota Rural Water District	Reservoir C Expansion	12/11/2015	52,601	52,601	0	
	2050-41	5000	Northeast Regional WD	City of Devils Lake Water Supply Project	12/11/2015	12,789,020	12,623,392	165,628	
	2050-42	5000	Walsh RWD	Phase 1 & 2 System Expansion	12/11/2015	1,639,753	1,382,441	257,312	
	2050-43	5000	All Seasons Water District	System 4 Connection to System 1	12/11/2015	4,900,000	0	4,900,000	
	2050-45	5000	Garrison Rural Water District	System Expansion Project	3/9/2016	1,271,241	1,271,241	0	
	2050-50	5000	Grand Forks Traill RWD	Eastern Expansion & TRWD Interconnect Feasibility	8/23/2017	126,000	126,000	0	
	2373-39	5000	North Central Rural Water Consortium	Carpio Berthold Phase 2	4/1/2015	2,425,167	1,497,718	927,450	
	2373-41	5000	North Central Rural Water Consortium	Granville-Deering Area	10/24/2016	1,831,540	1,372,348	459,192	
	2050-57	5000	North Central Regional Water District	Mountrail Expansion Phase II	8/23/2017	3,086,000	47,128	3,038,873	
	2050-58	5000	North Central Regional Water District	Mountrail Co. Watery Phase III	8/23/2017	3,430,000	0	3,430,000	
	2050-59	5000	Cass Rural Water District	Horace Storage Tank	10/11/2018	1,846,000	0	1,846,000	
	2050-60	5000	North Prairie Rural District	Reservoir 9 Water Supply	6/12/2018	1,114,620	613,716	500,904	
	2050-61	5000	North Prairie Rural District	Surrey/Silver Spring	6/12/2018	107,430	85,079	22,351	
	2050-62	5000	Traill Rural District	Expansion/Interconnect	8/23/2017	150,880	150,880	0	
	2050-63	5000	Walsh RWD	System Expansion Project	4/12/2018	1,300,000	488,708	811,292	
	2050-64	5000	McLean-Sheridan Water District	Turtle Lake Water Tower	8/9/2018	2,378,450	1,106,234	1,272,216	
	2050-65	5000	Tri-County Rural Water District	System Expansion Project	8/9/2018	2,803,250	151,191	2,652,059	
	2050-71	5000	East Central RWD	Grand Forks/Traill Project	12/7/2018	6,091,545	3,549,025	2,542,520	
	2050-72	5000	Stutsman RWD	Phase 6 Pettibone Project	4/12/2018	2,100,000	778,359	1,321,641	
	2050-73	5000	Northeast Regional WD	Master Plan	10/11/2018	107,000	0	107,000	
TOTAL RURAL WATER SUPPLY						68,611,274	38,693,976	30,017,298	
TOTAL						289,042,371	145,905,617	143,136,754	

SWC Board Approved to Continue

**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium**

FLOOD CONTROL

Approved SWC By	No	Dept	Sponsor	Project	Approved Date	Total Approved	Total Payments	Feb-19 Balance
Flood Control:								
SB 2020	1928-01	5000	Fargo	Fargo Flood Control Project	4/19/2016	20,001,131	20,001,131	0
SB 2020	1928-05	5000	Fargo Metro Flood Diversion	Fargo Metro Flood Diversion Authority 2015-2017	2/14/2019	124,874,956	2,713,363	122,161,593
	1771-01	5000	Grafton	Grafton Flood Control Project	10/12/2016	32,175,000	18,262,222	13,912,778
	1974-06	5000	Souris River Joint WRD	Development of 2011 Flood Inundation Maps	12/18/2015	1,522	0	1,522
	1974-09	5000	Souris River Joint WRD	Mouse River Flood Control Design Engineering	4/12/2018	276,696	276,696	(0)
	1974-11	5000	Souris River Joint WRD	Funding of 214 agreement between SRJB & USACE	12/5/2014	31,500	0	31,500
	1974-12	5000	Souris River Joint WRD	Maple Diversion Design MI-4	4/12/2018	1,345,000	353,214	991,786
	1974-14	5000	Souris River Joint WRD	SIARR Program (Structure Acquisition, Relocation, or Ring Dike)	3/9/2016	5,895,975	3,691,691	2,204,284
	1974-13	5000	Souris River Joint WRD	Tierrecita Vilejo Levee Design	4/12/2018	1,170,000	85,660	1,084,340
	1974-15	5000	Souris River Joint WRD	Perkett Ditch Improvements	12/2/2016	404,593	274,341	130,252
	1974-16	5000	Souris River Joint WRD	Corps of Engineers Feasibility Study MREFPF	4/12/2018	505,546	443,439	62,107
	1974-18	5000	Souris River Joint WRD	Rural Reaches, Preliminary Engineering	10/12/2016	236,941	14,276	222,665
	1974-19	5000	Souris River Joint WRD	4th Avenue Tieback Levee & Burlington Levee - Design Engineering	4/12/2018	2,854,240	2,412,252	441,988
	1974-20	5000	Souris River Joint WRD	Utility Relocations	10/12/2016	422,034	386,355	35,679
	1974-21	5000	Souris River Joint WRD	Highway 83 Bypass & Bridge Replacement	10/12/2016	1,983,623	800,236	1,183,387
	1974-22	5000	Souris River Joint WRD	Broadway Pump Station Phases MI-1	3/29/2017	35,271,200	7,641,744	27,629,456
	1974-23	5000	Souris River Joint WRD	Peterson Coulee Outlet	3/29/2017	1,427,022	0	1,427,022
	1974-25	5000	Souris River Joint WRD	Flood Specific Emergency Action Plan for Ward Co.	7/20/2017	182,000	0	182,000
	1974-26	5000	Souris River Joint WRD	Phases MI-2, MI-3 Construction	8/23/2017	29,348,843	15,530,062	13,818,781
	1974-27	5000	Souris River Joint WRD	Corps of Engineers Section 408 Review Through Section 2145	8/23/2017	74,750	74,750	0
	1974-30	5000	Souris River Joint WRD	Mouse River Park Bridge Design	4/12/2018	390,000	21,538	368,462
	1974-31	5000	Souris River Joint WRD	Sawyer Bridge Design Project	4/12/2018	260,000	26,843	233,158
	1974-32	5000	Souris River Joint WRD	Velva Bridge Design Project	4/12/2018	260,000	28,593	231,407
	1974	5000	Souris River Joint WRD	Phases MI-2, MI-3 Reallocation	4/12/2018	3,932,500	0	3,932,500
	2107-02	5000	City of Minot	SWIF 2018 Outfall Pipe Project	10/11/2018	756,211	90,069	666,142
	2122	5000	US Army Corps of Engineers	Development of Comprehensive Plan for Souris Basin	9/5/2017	302,500	193,929	108,571
	1344-04	5000	Valley City	Sheyenne River Valley Flood Control Project PHII	8/29/2016	58,414	38,278	20,136
	1504-01	5000	Valley City	Permanent Flood Protection Project	5/1/2015	477,445	422,018	55,427
SB 2371	1504-03	5000	Valley City	Permanent Flood Protection PH III	12/9/2016	13,157,600	8,303,493	4,854,107
	1504-06	5000	Valley City	Permanent Flood Protection PH III & PH V	12/8/2017	914,175	471,542	442,633
	1504-07	5000	Valley City	Permanent Flood Protection PH III Construction	10/11/2018	1,786,179	0	1,786,179
	1344-02	5000	Lisbon	Sheyenne River Valley Flood Control Project	8/8/2016	1,000,582	896,611	103,971
	1991-01	5000	Lisbon	Permanent Flood Protection - Levee A Project	5/28/2014	0	0	0
	1991-03	5000	Lisbon	Permanent Flood Protection - Levee C Project	3/11/2015	6,989	6,989	0
	1991-06	5000	Lisbon	Permanent Flood Protection - Levee E Project	3/9/2016	52,000	52,000	0
	1991-08	5000	Lisbon	Permanent Flood Protection - Levee D Project	4/12/2018	2,639,562	2,639,562	0
	1991-10	5000	Lisbon	Permanent Flood Protection - Levee F Project	4/12/2018	4,264,000	3,708,211	555,789
	1991-13	5000	Lisbon	Permanent Flood Protection - Levee C & E Extension	2/14/2019	1,036,877	0	1,036,877
	2079-01	5000	Williston	West Williston Flood Control	12/9/2016	3,655,517	807,820	2,847,697
	2131	5000	Lower Heart River WRD	Flood Risk Reduction Project	6/14/2018	280,000	0	280,000
	1059	5000	Bottineau Co WRD	Baumann Legal Drain	12/7/2018	391,742	0	391,742
	1180	5000	Richland Co WRD	Legal Drain #7 Channel Improvements	12/7/2018	274,541	0	274,541
	2008	5000	City of Mapleton	Recertification of Flood Control Levee System Project	4/12/2018	314,770	314,770	0
	2111	5000	Maple River WRD	Davenport Flood Risk Reduction	7/20/2017	35,000	34,999	1
	2118	5000	Cass County Joint WRD	Sheldon Subdivision Levee	10/11/2018	370,200	0	370,200
	2124	5000	City of Beffield	Heart River & Tributaries Flood Control Study	11/8/2018	27,000	0	27,000
	620	5000	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	6/22/2017	14,855	14,855	0
	1932	5000	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	3/9/2016	67,903	67,903	0
	1705	5000	Red River Joint Water Resource District	Red River Joint WRD Watershed Feasibility Study - Phase 2	9/21/2011	0	0	0
	2073	5000	Walsh Co. WRD	Oslo Area Ag Levee Feasibility Study	7/6/2016	71,683	71,683	0
Subtotal Flood Control						295,280,816	91,173,133	204,107,684
Floodway Property Acquisitions:								
	1993-05	5000	Minot	Minot Phase - Floodway Acquisitions	4/12/2018	14,093,720	13,360,622	733,098
SB 2371	1523-05	5000	Ward County/Minot	Ward County - Floodway Acquisitions	1/27/2012	6,015,347	5,878,250	137,097
SB 2371	1504-05	5000	Valley City	Valley City - Floodway Acquisitions	12/8/2017	3,406,947	2,099,028	1,307,919
SB 2371	2000-05	5000	Sawyer	Sawyer Phase - Floodway Acquisitions	6/13/2012	135,844	0	135,844
	1991-05	5000	Lisbon	Lisbon - Floodway Acquisition	12/9/2016	603,300	539,371	63,929
	1987-05	5000	Burlington	Mouse River Enhanced Flood Plan Property Acquisition	5/10/2017	2,166	2,166	0
Subtotal Floodway Property Acquisitions						24,257,324	21,879,437	2,377,887
TOTAL FLOOD CONTROL						319,538,140	113,052,569	206,485,571
Revolving Loan Fund:								
(General Water)								
	2077-16	1050	Valley City	Valley City Flood Protection - Phase II Construction (LOAN)	12/9/2016	3,289,400	3,289,400	0
	2077-15	1050	Valley City	Valley City Pre Design & Eng & Phase III Buyouts (LOAN)	12/9/2016	1,392,500	1,392,500	0
	2077-14	1050	Lisbon	Permanent Flood Control	8/23/2017	900,000	900,000	0
(Water Supply)								
	2077-13	1050	North Central Rural Water Consortium II	Carpio Berhold Phase 2 (LOAN)	10/12/2016	215,000	215,000	0
	2077-12	1050	North Central Rural Water Consortium	Granville-Surrey-Deering Water Supply Project (LOAN)	10/12/2016	139,000	139,000	0
REVOLVING LOAN TOTAL						5,935,900	5,935,900	0
TOTAL						325,474,040	118,988,469	206,485,571

SWC Board Approved to Continue

STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium
Resources Trust Fund

WATER CONVEYANCE

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Feb-19 Balance
Drain & Channel Improvement Projects:									
SE	1058	2000	2015-17	Bottineau Co. WRD	Stead Legal Drain	2/16/2017	14,738	11,670	3,068
SE	1059	5000	2017-19	Bottineau Co WRD	Baumann Legal Drain	3/7/2018	41,427	0	41,427
SWC	1070	5000	2015-17	Maple River WRD	Drain #14 Channel Improvements	3/29/2017	741,562	136,576	604,986
SWC	1071	5000	2015-17	Maple River WRD	Cass County Drain #15 Channel Improvements	3/9/2016	282,561	179,516	103,045
SWC	1088	5000	2015-17	Maple River WRD	Cass Drain #37 Channel Improvements	3/9/2016	215,157	77,902	137,255
SWC	1089	5000	2015-17	Maple River WRD	Cass County Drain #39 Channel Improvements	3/9/2016	210,568	89,616	120,952
SE	1180	5000	2015-17	Richland Co WRD	Legal Drain No. 7 Channel Improvements	5/11/2017	24,926	19,158	5,768
SE	1140	5000	2015-17	Pembina Co. WRD	Drain 11 Outlet Extension Cost Overrun Project	7/7/2015	5,088	0	5,088
SWC	1222	5000	2015-17	Sargent Co WRD	Drain No 11 Channel Improvements	10/12/2016	1,378,376	0	1,378,376
SWC	1311	5000	2015-17	Trail Co. WRD	Buxton Township Improvement District No. 68	3/9/2016	110,418	81,285	29,133
SWC	1314	5000	2015-17	Wells Co. WRD	Hurdsfield Legal Drain	3/29/2017	644,292	0	644,292
SWC	1331	5000	2015-17	Richland Co WRD	Drain #14 Reconstruction	12/9/2016	252,738	179,852	72,886
SWC	1486	5000	2015-17	Griggs Co. WRD	Thompson Bridge Outlet No. 4 Project	10/6/2015	621,661	0	621,661
SWC	1520	5000	2015-17	Walsh Co. WRD	Walsh County Drain 30-1	3/29/2017	282,307	184,245	98,062
SWC	1520	5000	2017-19	Walsh Co. WRD	Walsh County Drain 30-2	10/11/2018	328,042	8,520	319,522
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	1,131,338	0	1,131,338
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	23,412	2,829	20,583
SWC	1978	5000	2015-17	Richland-Sargent Joint WRD	RS Legal Drain #1 Extension & Channel Improvement	3/29/2017	378,000	301,388	76,612
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diversion Project	3/7/2012	43,821	0	43,821
SE	2016	5000	2015-17	Pembina Co. WRD	Establishment of Pembina County Drain No. 80	4/10/2017	74,965	39,404	35,561
SWC	2049	5000	2015-17	Grand Forks Co. WRD	Grand Forks Legal Drain No. 58	3/29/2017	1,481,850	0	1,481,850
SWC	2088	5000	2015-17	Trail Co. WRD	Stavanger-Belmont Drain No. 52 Channel Impr	10/12/2016	414,652	294,513	120,139
SWC	2081	5000	2015-17	Walsh Co. WRD	Drain #70	10/12/2016	562,429	474,246	88,183
SWC	2087	5000	2015-17	Walsh Co. WRD	Drain #87/McLeod Drain	3/29/2017	5,273,586	2,186,498	3,087,088
SWC	2088	5000	2015-17	Pembina Co. WRD	Drain No. 79	12/9/2016	875,428	791,026	84,402
SWC	2108	5000	2015-17	Walsh Co. WRD	Walsh Co Drain #22	6/22/2017	266,086	184,910	81,176
SE	2112	5000	2017-19	Pembina Co. WRD	Pembina Co Drain #81	7/30/2017	56,000	0	56,000
SE	2093/1427	5000	2015-17	Bottineau Co. WRD	Moen Legal Drain	9/6/2016	18,542	1,130	17,412
Snagging & Clearing Projects:									
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	2/17/2017	51,435	25,827	25,608
SE	1934	5000	2015-17	Trail Co. WRD	Elm River Snagging & Clearing	6/21/2017	47,500	19,803	27,697
SE	2095	5000	2015-17	Nelson Co WRD	Sheyenne River Snagging & Clearing	4/10/2017	19,700	0	19,700
SE	2110	5000	2015-17	Ward Co. WRD	Meadowbrook Snagging & Clearing	6/21/2017	33,000	0	33,000
TOTAL							15,905,605	5,289,915	10,615,690
SWC Board Approved to Continue							[]		

**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium
Resources Trust Fund**

COMPLETED WATER CONVEYANCE

Approved SWC		Dept	Approved		Project	Approved Date	Total Approved	Total Payments	Feb-19
By	No		Biennium	Sponsor					Balance
SWC	568	5000	2013-15	Southeast Cass WRD	Sheyenne River Reaches Snagging & Clearing Project	12/5/2014	10,312	10,312	0
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches II	12/11/2015	27,905	2,451	25,454
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I	12/11/2015	73,902	0	73,902
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches III	12/11/2015	87,035	0	87,035
SE	571	5000	2013-15	Oak Creek WRD	Oak Creek Snagging & Clearing Project	3/30/2015	1,107	0	1,107
SWC	710	5000	2015-17	Maple River WRD	Upper Swan Creek Channel Improvement Project	10/6/2015	62,081	33,484	28,577
SWC	1056	5000	2015-17	Bottineau Co. WRD	Tacoma Bitz Legal Drain	7/6/2016	210,572	49,978	160,594
SWC	1064	5000	2013-15	Rush River WRD	Cass County Drain No. 2 Channel Improvements Project	3/11/2015	41,683	0	41,683
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	11/1/2017	798,562	459,210	339,352
SWC	1176	5000	2015-17	Richland Co. WRD	Legal Drain #2 Reconstruction/Extension Project	3/9/2016	224,231	33,758	190,473
SWC	1179	5000	2015-17	Richland Co. WRD	Legal Drain #5 (Lateral 27) Reconstruction	3/9/2016	180,353	10,937	169,416
SWC	1227	5000	2011-13	Trail Co. WRD	Mergenthal Drain No. 5 Reconstruction	9/15/2014	12,225	0	12,225
SWC	1231	5000	2015-17	Trail Co. WRD	Carson Drain No. 10 Channel Improvements	10/12/2016	141,322	110,912	30,410
SWC	1236	5000	2015-17	Trail Co. WRD	Murray Drain No. 17 Channel Improvements	10/12/2016	127,759	127,759	0
SE	1328	5000	2015-17	North Cass Co. WRD	Drain No. 23 Channel Improv Preliminary Engineering	9/30/2015	921	0	921
SWC	1328	5000	2015-17	North Cass Co. WRD	Drain #23 Channel Improvements	3/9/2016	81,612	53,103	28,509
SE	1334	5000	2017-19	Trail Co WRD	Norway Drain No. 38	3/28/2018	61,917	61,917	0
SWC	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement	7/6/2016	2,599	2,599	0
SWC	1975	5000	2015-17	Walsh Co. WRD	Drain 31-1	10/12/2016	111,543	94,533	17,010
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	5/20/2015	447,653	108,287	341,366
SE	1978	5000	2015-17	Richland-Sargent Joint W	RS Legal Dam #1 - Pre-Construction Engineering	10/24/2016	13,680	13,680	0
SWC	2042	5000	2015-17	Bottineau Co. WRD	Haas Coulee Legal Drain Phase II	6/22/2017	86,361	86,361	0
SWC	2062	5000	2015-17	Trail Co. WRD	Trail Co. Drain #64	7/6/2016	19,549	13,729	5,820
SWC	2074	5000	2015-17	City of Wahpeton	Toe Drain & Encroachment Project	7/6/2016	1,125,482	1,125,482	0
SE	2078	5000	2017-19	Southeast Cass WRD	Raymond-Mapleton Township Imp Dist #76	7/20/2017	3,043	3,043	0
SWC	2080	5000	2015-17	Walsh Co. WRD	Sam Berg Coulee Drain	10/12/2016	182,775	86,233	96,542
SWC	1523	5000	2015-17	Ward Co. WRD	Robinwood Bank Stabilization Project	10/6/2015	98,648	18,238	80,410
SWC	1991	5000	2013-15	City of Lisbon	Sheyenne Riverbank Stabilization Project	9/15/2014	47,768	0	47,768
SE	2058	5000	2015-17	City of Grafton	Grafton Debris Removal Plan	4/10/2017	8,177	8,170	7
SNAGGING & CLEARING PROJECTS									
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I,II,III	12/9/2016	150,073	150,073	0
SE	1287	5000	2013-15	McHenry Co. WRD	Souris River Snagging & Clearing Project	2/3/2015	10,500	0	10,500
SE	1667	5000	2015-17	Trail Co. WRD	Goose River Snagging & Clearing	6/21/2017	47,500	43,811	3,689
TOTAL							4,498,830	2,706,059	1,792,771

**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium
Resources Trust Fund**

GENERAL PROJECTS

									Feb-19
Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance
Hydrologic Investigations:									
SE	1400	3000	2015-17	Fireside Office Solutions	Document Conversion (Water Permit Scanning)	3/28/2018	21,125	19,899	1,226
SWC	2041	3000	2017-19	USGS	Stream Gage Joint Funding Agreement	12/7/2018	422,870	140,957	281,913
Subtotal Hydrologic Investigations							443,995	160,856	283,139
Devils Lake Basin Development:									
SWC	416-10	4700	2015-17	Operations	Devils Lake Outlet Operations	3/9/2016	10,027,973	5,934,027	4,093,946
SE	416-01	5000	2017-19	Devils Lake Basin Joint WRB	Board Manager	6/14/2017	60,000	0	60,000
Subtotal Devils Lake Basin Development							10,087,973	5,934,027	4,153,946
General Water Management:									
SWC	160	5000	2017-19	McLean Co WRD	Painted Woods Lake Flood Damage Reduction & Habitat	8/9/2018	284,768	0	284,768
SE	274	5000	2015-17	City of Neche	Neche Levee Certification Project	3/21/2016	54,000	44,684	9,316
SE	364	5000	2017-19	McLean Co WRD	Yanktonai Dam Emergency Action Plan	1/30/2019	11,793	0	11,793
SE	390	5000	2015-17	Logan County WRD	Beaver Lake Dam Rehabilitation Feasibility Study	6/8/2016	16,076	0	16,076
SE	391	5000	2017-19	Sargent Co WRD	Silver Lake Dam Improvements	12/20/2018	74,625	0	74,625
SWC	394	5000	2017-19	Golden Valley Co WRD	Odlund Dam Rehabilitation Project	12/7/2018	110,055	0	110,055
SWC	399	5000	2017-19	Barnes Co WRD	Kathryn Dam Project	8/9/2018	754,875	0	754,875
SE	420	5000	2015-17	Hettinger Park Board	Mirror Lake Dam Emergency Action Plan	12/2/2016	24,400	12,827	11,573
SE	460	5000	2015-17	Griggs Co. WRD	Ueland Dam Rehabilitation Feasibility Study	5/20/2016	17,500	0	17,500
SE	477	5000	2015-17	Valley City	Mill Dam Rehabilitation Feasibility Study	6/8/2016	15,073	12,136	2,937
SE	512	5000	2015-17	Emmons County WRD	Nieuwsma Dam Emergency Action Plan	11/28/2016	7,532	812	6,720
SE	531	5000	2015-17	Benson Co WRD	Bouret Dam Rehabilitation Feasibility Study	10/11/2016	12,118	10,109	2,009
SE	531	5000	2017-19	Benson Co WRD	Bouret Dam Rehabilitation	12/20/2018	67,234	0	67,234
SWC	551	5000	2015-17	McHenry Co. WRD	Buffalo Lodge Lake Outlet	6/22/2017	134,915	73,375	61,540
SE	561	5000	2015-17	City of Tioga	Tioga Dam EAP	5/20/2016	40,000	0	40,000
SE	667	5000	2017-19	Burke Co WRD	Northgate Dam 2 Emergency Action Plan	9/5/2017	26,396	0	26,396
SWC	848	5000	2017-19	Sargent Co WRD	Brummond/Lubke Dam	10/11/2018	317,111	0	317,111
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Emergency Action Plan	9/29/2015	2,212	0	2,212
SE	849-01	5000	2017-19	Pembina Co. WRD	Goschke Dam Spillway Gate Retrofit	3/11/2019	75,000	0	75,000
SWC	980	5000	2015-17	Cass Co. Joint WRD	Rush River Watershed Detention Study	1/7/2016	127,697	12,487	115,210
SWC	980	5000	2015-17	Cass Co. Joint WRD	Upper Maple River Watershed Detention Study	1/11/2016	128,039	46,371	81,668
SE	1264	5000	2013-15	Barnes Co WRD	Little Dam Repurposing Feasibility Study	6/17/2015	12,385	0	12,385
SE	1270	5000	2015-17	City of Wilton	Wilton Pond Dredging Recreation Project	12/29/2015	35,707	0	35,707
SE	1289	5000	2015-17	McKenzie Co. Weed Board	Control of Noxious Weeds on Sovereign Land	4/10/2017	44,010	16,461	27,549
SWC	1296	5000	2015-17	Pembina Co. WRD	Tongue River NRCS Watershed Plan	3/9/2016	104,703	24,055	80,648
SWC	1301	5000	2015-17	Richland Co. WRD	North Branch Antelope Creek NRCS Small Watershed	3/9/2016	113,400	29,090	84,310
SE	1303	5000	2013-15	Sargent Co WRD	Gwinner Dam Improvement Feasibility Study Program	4/17/2015	20,181	0	20,181
SWC	1303	5000	2015-17	Sargent Co WRD	Shortfoot Creek Watershed Planning Program	3/9/2016	109,047	12,529	96,518
SWC	1389	5000	2013-15	Bank of ND	BND AgPace Program	12/13/2013	170,365	120,000	50,365
SWC	1401	5000	2015-17	Pembina Co. WRD	International Boundary Roadway Dike Pembina	7/20/2017	294,528	33,653	260,875
SE	1403	5000	2017-19	NDSU	ND Water Resource Institute grant student stipends	1/14/2019	25,000	0	25,000
SE	1444	5000	2015-17	City of Pembina	Flood Protection System Certification	4/19/2016	1,657	0	1,657
SE	1453	5000	2015-17	Hettinger County WRD	Karey Dam Rehabilitation Feasibility Study	5/23/2016	6,853	0	6,853
SE	1453	5000	2017-19	Hettinger County WRD	Karey Dam Rehabilitation Design & Planning	12/14/2018	67,916	19,632	48,284
SWC	1851-01	5000	2015-17	ND State Water Commission	Drought Disaster Livestock Water Supply Assistance	2/8/2018	2,025,000	1,323,487	701,513
SWC	1859	5000	2017-15	ND Dept of Health	NPS Pollution	8/23/2017	200,000	91,955	108,045
SWC	2115	5000	2017-19	0	(PMP) Probable Maximum Precipitation Estimates	10/11/2018	600,000	0	600,000
SWC	1968	5000	2015-17	Garrison Diversion	MM 15 Irrigation Project	3/29/2017	321,781	228,166	93,615
SWC	1968	5000	2015-17	Garrison Diversion	MM 42L Irrigation Project	8/23/2017	937,207	888,547	48,660
SWC	1968	5000	2017-19	Garrison Diversion	MM 0 and MM 0.4 Irrigation Project	12/7/2018	1,673,793	0	1,673,793
SWC	2050-68	5000	2017-19	Valley City	Valley City Membrane Replacement Project	2/8/2018	586,350	0	586,350
SE	2055	5000	2015-17	Red River Joint Water Resource District	Lower Red Basin Regional Detention Study	7/17/2015	45,500	0	45,500
SWC	2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/2015	81,200	0	81,200
SWC	2060	5000	2015-17	Walsh Co. WRD	Forest River Watershed Study	4/10/2017	154,012	0	154,012
SWC	2060	5000	2017-19	Walsh Co. WRD	Matejcek Dam Rehabilitation	10/11/2018	279,750	0	279,750
SE	2070	5000	2015-17	Garrison Diversion Conservancy Dist	Mile Marker 42 Irrigation Project	5/20/2016	29,741	0	29,741
SE	2071	5000	2015-17	Foster County WRD	Alkali Lake High Water Feasibility Study	4/19/2016	4,830	0	4,830
SE	2072	5000	2015-17	Barnes Co WRD	Ten Mile Lake Flood Risk Reduction Project	6/8/2016	36,812	0	36,812
SWC	2074	5000	2015-17	City of Wahpeton	Flood Control - Levee Certification	7/6/2016	247,500	0	247,500
SWC	2074	5000	2015-17	City of Wahpeton	Breakout Easements	7/6/2016	265,000	0	265,000
SWC	2075	5000	2015-17	Ward Co. WRD	Second Larson Coulee Detention Pond	7/6/2016	602,307	0	602,307
SWC	2083	5000	2015-17	Pembina Co. WRD	Herzog Dam Gate & Catwalk Retrofit - Construction	10/12/2016	114,632	809	113,823
SE	2085	5000	2015-17	Adams Co WRD	Orange Dam Rehabilitation Feasibility Study	10/13/2016	10,770	1,930	8,840
SE	2089	5000	2015-17	Maple River WRD	Tower Township Improvement District No. 77 Study	12/19/2016	28,175	11,717	16,458
SE	2090	5000	2015-17	International Water Institute	River Watch Program	1/12/2017	24,150	11,944	12,206
SE	2090-02	5000	2017-19	International Water Institute	River of Dreams Program	6/6/2018	23,275	0	23,275
SWC	2096	5000	2015-17	Southeast Cass WRD	Sheyenne-Maple Flood Control Dist #2 Improvements	3/29/2017	1,035,358	43,943	991,416
SE	2109	5000	2017-19	Logan County WRD	McKenna Lake Feasibility Study	6/21/2017	2,247	0	2,247
SE	2109	5000	2017-19	Logan County WRD	McKenna Lake Hydrologic Study	9/12/2018	72,167	0	72,167
SWC	2123	5000	2017-19	Geotech, Inc.	Airborne Electromagnetic (AEM) 2018	8/9/2018	425,000	0	425,000
SE	1396-01	5000	2013-15	Trout, Raley, Montano, Witwer, & Freeman	Missouri River Recovery Program	11/17/2015	46,785	275	46,510
SE	AOC/IRA	5000	2017-19	ND Irrigation Association	Water Irrigation Funding	10/3/2017	75,000	75,000	0
SWC	PS/IRR/LOW	5000	2017-19	Lower Yellowstone Irrigation District #2	Lateral W Irrigation Project	6/14/2018	692,500	116,706	575,794
SE	AOC/WEF	5000	2017-19	ND Water Education Foundation	ND Water Magazine	8/2/2017	26,000	19,500	6,500
SWC	AOC/RRC	5000	2017-19	Red River Basin Commission	Red River Basin Commission Contractor	6/22/2017	200,000	150,000	50,000
SWC	AOC/ASS	5000	2017-19	Assiniboine River Basin Initiative	ARBI's Outreach Efforts	6/22/2017	100,000	50,000	50,000
SE	PS/WRD/UJP	5000	2017-19	Upper Sheyenne River Joint WRB	USRJWB Operational Costs	6/20/2017	6,000	5,143	857
SE	PS/WRD/MRJ	5000	2017-19	Missouri River Joint WRB	MRRIC Terry Fleck	6/7/2017	45,000	18,140	26,860
SE	PS/WRD/MRJ	5000	2017-19	Missouri River Joint WRB	Board Operational Costs	6/7/2017	10,000	4,658	5,342
SE	PS/WRD/LOW	5000	2015-17	Lower Heart WRD	Lower Heart Flood Control Study	5/10/2017	21,140	0	21,140
Subtotal General Projects							14,356,153	3,510,140	10,846,013
TOTAL							24,888,120	9,605,023	15,283,098

SWC Board Approved to Continue

**STATE WATER COMMISSION
PROJECT SUMMARY
2017-2019 Biennium
Resources Trust Fund**

COMPLETED GENERAL PROJECTS

							<i>Feb-19</i>		
Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance
<i>Hydrologic Investigations:</i>									
SE	1396	3000	2017-19	USGS	Maintain Gaging Station East of Lisbon Sheyenne River	9/25/2017	10,500	10,500	0
SE	989	3000	2017-19	ND Dept of Health	Water Sampling Testing	9/25/2017	105,500	105,500	0
SWC	2041	3000	2017-19	USGS	Stream Gage Joint Funding Agreement	12/8/2017	553,790	553,790	0
SWC	2041	3000	2015-17	USGS	Stream Gage Joint Funding Agreement	10/12/2016	136,028	136,028	0
Subtotal Hydrologic Investigations							805,818	805,818	0
SWC	322	5000	2009-11	ND Water Education Four	ND Water: A Century of Challenge	2/22/2010	36,800	35,000	1,800
SWC	346	5000	2015-17	Williams County WRD	Epping Dam Spillway Reconstruction	3/29/2017	19,499	19,439	60
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certification	3/28/2011	32,497	32,497	0
SE	394	5000	2015-17	Golden Valley Co WRD	Odland Dam Rehabilitation Feasibility Study	10/13/2016	13,220	13,220	0
SE	399	5000	2013-15	Barnes Co WRD	Kathryn Dam Feasibility Study	9/19/2014	12,742	7,061	5,681
SE	479	5000	2017-19	Morton Co Parks & Recre	Fish Creek Dam Rehabilitation	10/4/2017	62,970	62,970	0
SE	494	5000	2015-17	Nelson Co. WRD	McVille Dam Emergency Action Plan	5/3/2018	10,000	10,000	0
SE	841	5000	2013-15	Maple River WRD	Garsteig Dam Repair Project	1/26/2015	18,661	0	18,661
SE	848	5000	2015-17	Sargent Co WRD	Tewaakon WS-T-7 (Nelson) Dam EAP	12/18/2015	12,180	1,132	11,048
SE	848	5000	2015-17	Sargent Co WRD	Tewaakon WS-T-1-A (Brummond-Lubke) Dam EAP	12/18/2015	12,016	1,180	10,836
SWC	980	5000	2013-15	Cass Co. Joint WRD	Swan Creek Watershed Detention Study PHII	3/11/2015	122,666	2,152	120,514
SWC	1273	5000	2015-17	City of Oakes	James River Bank Stabilization	12/11/2015	262,500	76,927	185,573
SE	1286	5000	2013-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	6,726	6,726	0
SE	1303	5000	2015-17	Sargent Co WRD	Gwinner Dam Breach Project	3/21/2018	44,364	42,673	1,691
SE	1396	5000	2017-19	USGS	Water Level Monitoring of Missouri River	9/7/2017	15,000	15,000	0
SE	1403	5000	2017-19	NDSU	ND Water Resource Institute grant student stipends	1/9/2018	25,000	25,000	0
SE	1418	5000	2015-17	City of Bisbee	Big coulee Dam EAP	5/10/2017	11,320	11,095	225
SE	1625	5000	2015-17	Carlson McCain, Inc.	Ordinary High Water Mark Delineations Left Bank of Missouri F	12/2/2016	2,000	2,000	0
SWC	1638	5000	2009-11	Multiple	Red River Basin Non-NRCS Rural/Farmstead Ring Dike Progr.	6/23/2009	177,864	0	177,864
SE	1808	5000	2015-17	Steele Co WRD	Beaver Creek Dam Safety Inspection	5/23/2016	2,625	2,625	0
SE	1878-02	5000	2015-17	Maple-Steele Joint WRD	Upper Maple River Dam EAP	5/20/2016	12,800	6,146	6,654
SWC	1968	5000	2013-15	Garrison Diversion	McClusky Canal Mile Marker 10 & 49 Irrigation Project	3/17/2014	51,614	0	51,614
SE	1974	5000	2015-17	USGS	Installation of 5 Rapid Deployment Gages in the Mouse River	3/23/2017	23,200	23,200	0
SE	1974	5000	2015-17	USGS	Regulated Streamflow Frequency for the Upper Souris River B:	12/16/2016	12,367	12,367	0
HB1009	1986	5000	2017-19	ND Dept Agriculture	Wildlife Services 17-201	8/22/2017	125,000	125,000	0
SWC	2065	5000	2015-17	Cass Co. Joint WRD	Lake Bertha Flood Control Project No. 75	3/9/2016	201,350	201,350	0
SWC	2086	5000	2015-17	Southeast Cass WRD	Sheyenne-Maple Flood Control Dist #1 Mitigation Improvement	3/9/2016	169,201	169,201	0
SE	2069	5000	2015-17	Center Township	Wild Rice River Bank Stabilization	4/19/2016	954	954	0
SE	2076	5000	2015-17	Elm River Joint WRD	Elm River Dam #1 Modification Study	7/6/2016	9,503	9,503	0
SE	2094	5000	2015-17	McLean Co WRD	Lower Buffalo Creek Flood Management Feasibility	6/7/2017	7,539	7,534	5
SE	2079-01	5000	2015-17	City of Williston	West Williston Flood Control	10/24/2016	39,900	39,900	0
SE	2099	5000	2017-19	City of Hunter	Hunter Dam Emergency Action Plant	2/22/2018	46,108	46,108	0
SWC	2107-01	5000	2015-17	City of Minot	Levee Repair & Bank Stabilization Project	6/14/2018	581,476	581,476	0
SE	2114	5000	2017-19	HDR Engineering	LCCA & EA Guidance Workshop	5/17/2018	9,804	9,804	0
HB1020	2114	5000	2017-19	HDR Engineering	Economic Analysis-Flood Control & Conveyance Projects	12/28/2017	74,093	74,093	0
HB1020	2119	5000	2017-19	HDR Engineering	Life Cycle Cost Analysis Guidelines & Process Development	12/28/2017	59,263	59,263	0
SE	AOC/MIS	5000	2017-19	Missouri River Advisory C	MRAC Startup Funding	8/3/2017	2,000	2,000	0
SE	AOC/WRD	5000	2015-17	ND Water Resource Distr	ND Water Managers Handbook	6/21/2017	24,750	24,750	0
SE	AOC/WEF/TO'	5000	2017-19	ND Water Education Four	Summer Water Tours	4/30/2018	2,500	2,500	0
SE	NDAWN	5000	2017-19	NDSU	NDAWN CENTER	3/13/2018	1,500	1,500	0
SWC	PS/WRD/ELM	5000	2013-15	Elm River Joint WRD	Dam #3 Safety Improvements Project	9/15/2014	5,672	0	5,672
Subtotal General Projects							2,361,243	1,763,349	597,897
TOTAL							3,167,061	2,569,164	597,897

Water Supply Bucket 2017-2019

Bucket Total		\$120,125,000
Obligated This Biennium	Grand Forks - Water Treatment Plant	\$30,000,000
	Lake Agassiz Water Authority - Red River Valley Water Supply	\$17,000,000
	Lincoln - Water Supply Main	\$1,130,000
	Mandan - Sunset Reservoir Transmission Line	\$3,135,000
	Mercer - McLean Sheridan Connection	\$166,950
	State Water Commission - Northwest Area Water Supply	\$14,600,000
	New Town - Water Tower	\$1,940,000
	State Water Commission - Southwest Pipeline Project	\$13,500,000
	West Fargo - Brooks Harbor Water Tower	\$1,950,000
	West Fargo - North Loop Connection	\$510,000
	West Fargo - West Loop Connection	\$1,110,000
	Western Area Water Supply - Phase 5	\$20,000,000
	Williston - US Highway 2 Water Main	\$434,400
	Williston - 9th Ave E Water Main	\$246,000
	Williston - 18th St Water Main	\$2,090,000
Wing - Water Tower	\$72,000	
Remaining Balance		\$12,240,650
Money Turned Back		\$2,497,208
Remaining Balance		\$14,737,858
April 2019 Agenda		\$0
Remaining Balance		\$14,737,858
Pending Request	Mandan - Raw Water Intake	\$10,977,000
Previously Planned	Lake Agassiz Water Authority - Red River Valley Water Supply	\$13,000,000

Rural Water Supply Bucket 2017-2019		
Bucket Total		\$27,000,000
Obligated This Biennium	East Central Regional Water District - Grand Forks System	\$4,150,000
	East Central Regional Water District - Traill System	\$1,396,880
	East Central Regional Water District - Agassiz WUD	\$232,795
	East Central Regional Water District - Larimore	\$513,750
	Greater Ramsey Water District - Devils Lake Regionalization	\$599,000
	Northeast Regional Water District - Master Plan	\$107,000
	North Prairie Rural Water District - Mountrail County	\$6,516,000
	Southeast Water User District - Expansion System Wide	\$2,749,000
	Stutsman Rural Water District - Phase 6 Pettibone	\$2,100,000
	Walsh Rural Water District - System Improvements	\$1,300,000
	North Prairie Rural Water District - Silver Spring Surrey	\$107,430
	North Prairie Rural Water District - Reservoir 9	\$1,114,620
	Cass Rural Water User District - Horace Tank	\$1,846,000
	McLean-Sheridan Rural Water District - Turtle Lake Tower	\$2,378,450
	Tri-County Rural Water District - McVillage Connection	\$2,803,250
Remaining Balance		(\$914,175.00)
Money Turned Back		\$952,515
Remaining Balance		\$38,340
April 2019 Agenda		\$0
Remaining Balance		\$38,340
Planned Yet This Biennium		\$0
Remaining Balance		\$38,340

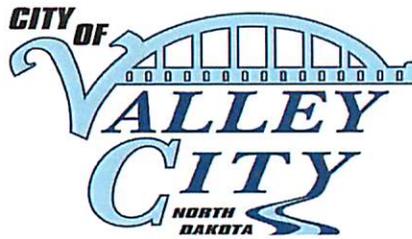
Flood Control Bucket 2017-2019		
Bucket Total		\$136,000,000
Obligated This Biennium	Mouse River Flood Control	\$63,907,784
	Valley City Flood Control	\$2,171,925
	*Pembina Co. WRD	\$56,000
	*SE Cass WRD	\$3,043
	*Bottineau Co. WRD	\$41,427
	*Traill Co. WRD	\$61,917
	Mapleton Re-Certification	\$213,670
	Lower Heart Flood Control	\$280,000
	Davenport Flood Risk Reduction	\$35,000
	Michigan Spillway Flood Assessment	\$42,053
	Valley City Flood Control Phase III Construction	\$1,786,179
	City of Minot SWIF	\$387,433
	Sheldon Subdivision Levee	\$370,200
	City of Belfield	\$27,000
	*Walsh County Drain 30-2	\$328,042
	*Richland County Drain 7	\$274,541
	*Bottineau County Bauman Drain	\$391,742
	Fargo Flood Control	\$66,500,000
	Remaining Balance	
Money Turned Back		\$1,812,153
Remaining Balance		\$934,197
Considered This Meeting	Valley City	\$480,283
	Minot SWIF	\$214,279
Remaining Balance		\$239,635
Not In Water Plan	City of Davenport	\$2,083,600
Remaining Conveyance	*Tri-County Drain	\$737,050

* Conveyance Projects

General Water Management Bucket 2017-2019

Bucket Total		\$15,750,000
Obligated This Biennium	Garrison Diversion Unit, Mile 42 Irrigation	\$937,207
	Drought Disaster Livestock Water Supply	\$500,000
	Drought Disaster Livestock Water Supply	\$775,000
	Drought Disaster Livestock Water Supply	\$500,000
	Valley City Water Treatment Plant	\$586,350
	USGS Cooperative Hydrologic Monitoring	\$553,790
	Wildlife Services - ND Dept. of Agriculture	\$125,000
	Yellowstone Irrigation District	\$692,500
	NPS Pollution – Dept. of Health	\$200,000
	Red River Basin Commission	\$200,000
	Painted Woods Lake Flood Damage Reduction	\$284,768
	Kathryn Dam	\$754,875
	AEM	\$425,000
	Assiniboine Outreach	\$100,000
	Various State Engineer Approvals	\$916,479
	Matacjek Dam	\$279,750
	Brummond-Lubke Dam	\$317,111
	PMP Update	\$600,000
	Garrison Diversion MM 0 and 0.4 Irrigation Project	\$1,673,793
	USGS Cooperative Gaging Network	\$422,870
	Odland Dam Engineering	\$110,055
	Karey Dam Rehabilitation Engineering	\$67,916
	Silver Lake Dam Improvements	\$74,625
Bouret Dam Rehabilitation Engineering	\$67,234	
Remaining Balance		\$4,585,677
Money Turned Back		\$597,897
Remaining Balance		\$5,183,574
Considered This Meeting	Devils Lake Mitigation*	\$2,500,000
	Upper Maple River Dam	\$84,240
	Bouret Dam	\$397,000
	Karey Dam	\$617,000
	Goschke Dam	\$44,010
Remaining Balance		\$1,541,324

City Hall
254 2nd Ave NE
PO Box 390
Valley City, ND 58072-0390



Phone: 701-845-1700
Fax: 701-845-4588
www.valleycity.us

February 22, 2019

North Dakota State Water Commission
ATTN: Cost-Share Program
900 E Boulevard Ave
Bismarck, ND 58505-0850

RECEIVED
FEB 25 2019
STATE WATER COMMISSION

Re: City of Valley City
Permanent Flood Protection
Cost-Share Request

Dear State Water Commission:

The City of Valley City is requesting funding to move forward with bidding the next phase of Permanent Flood Protection. As discussed in previous meetings and requests, the City of Valley City has experienced numerous flood events in recent years and the proposed flood projects will mitigate these impacts and provide a long-term solution to flooding. The proposed request includes the construction aspects of the project.

The proposed erosion control sites cover two areas where the Sheyenne River has eroded the bank and is threatening to impede emergency flood protection measures when needed (see Attachments). This project will consist of earthwork, fabric, riprap, and erosion control items. Permanent flood protection is not planned in these areas for several years; however, the erosion control is necessary at this time to ensure emergency measures may be implemented, if needed. The estimated construction cost for these sites is approximately \$600,354. The current funding request includes monies for construction and construction engineering. A previous request in December 2017 included surveying, design engineering, and permitting of the project areas. Attached is a preliminary opinion of cost for the project and the preliminary construction plans. The City is requesting 80% cost-share or \$480,283 (State) in grant for construction and construction engineering of the project. This is consistent with cost-share requests for construction costs previously established.

Below is a summary of the cost-share request for construction:

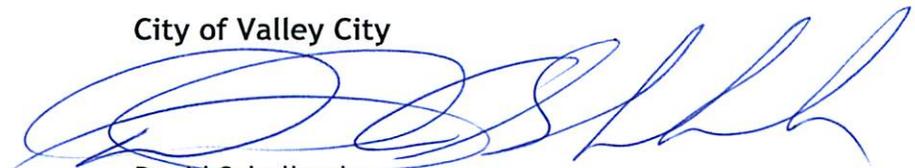
<i>Erosion Control Sites</i>	<i>Total</i>	<i>State</i>	<i>Local</i>
<i>Construction (80%)</i>	\$ 496,160	\$ 396,928	\$ 99,232
<i>Construction Contingency (80%)</i>	\$ 49,616	\$ 39,693	\$ 9,923
<i>Construction Engineering (80%)</i>	\$ 54,578	\$ 43,662	\$ 10,916
<i>Total</i>	\$ 600,354	\$ 480,283	\$ 120,071

The City of Valley City is also requesting a waiver from the selection process and to continue utilizing our engineer, KLJ for the continuation of this project.

If you have any questions or concerns, please contact me at 701-845-1700.

Sincerely,

City of Valley City



David Schelkoph
City Administrator

Attachments: Cost Estimate, Cost-Share Form, Preliminary Construction Plans



COST-SHARE REQUEST
 NORTH DAKOTA STATE WATER COMMISSION
 DEVELOPMENT DIVISION
 SFN 60439 (10/2018)

RECEIVED
 FEB 25 2019
 STATE WATER
 COMMISSION

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 45 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name VC Permanend Flood Protection - Erosion Control Sites		
Sponsor(s) City of Valley City		
County Barnes	City Valley City	Township/Range/Section T140 N / R58W
Description Of Request <input checked="" type="checkbox"/> New <input type="checkbox"/> Updated (previously submitted)		
Specific Needs Addressed By The Project, Program, Or Study Construction Cost Share		
If Study, What Type <input type="checkbox"/> Water Supply <input type="checkbox"/> Hydrologic <input type="checkbox"/> Floodplain Mgmt. <input type="checkbox"/> Feasibility <input type="checkbox"/> Other		
If Project/Program		
<input checked="" type="checkbox"/> Flood Control	<input type="checkbox"/> Multi-Purpose	<input checked="" type="checkbox"/> Bank Stabilization
<input type="checkbox"/> Recreation	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Snagging & Clearing
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Water Retention	<input type="checkbox"/> Rural Flood Control
		<input type="checkbox"/> Dam Safety/EAP
		<input type="checkbox"/> Property Acquisition
		<input type="checkbox"/> Other
Are Connections Of New Rural Customers Located Within The Extra-Territorial Jurisdiction Of Municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Jurisdictions/Stakeholders Involved City of Valley City		
Description Of Problem Or Need And How Project Addresses That Problem Or Need Valley City sits along the Sheyenne River. During the spring, the river swells from snow melt. During the spring of 2009, Valley City encountered a record flood only to repeat it with a near record flood in the spring of 2011. Repeated flooding has eroded the natural vegetation that supported the river banks at the erosion sites. Without the natural vegetation, the erosion has been accelerated during even non-flooding years. The proposed project is to armor the two erosion sites by utilizing riprap within the channel and seeding. Permanent flood protection is not planned in these areas for several years; however, erosion control is now necessary to ensure the areas can be protected in the future.		
Has Feasibility Study Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Has Engineering Design Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Have Land Or Easements Been Acquired?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable

Have You Applied For Any State Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Been Approved For Any State Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Applied For Any Local Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Been Approved For Any Local Permits? Yes No Not Applicable

If Yes, Please Explain

Briefly Explain The Level Of Review The Project Or Program Has Undergone
The project has been presented at 7 neighborhood meetings in 2015/2016.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? No

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2017-2019 7/1/17-6/30/19	2019-2021 7/1/19-6/30/21	Beyond 7/1/21
Federal	\$	\$	\$	\$
State Water Commission	\$ 113,000,000.00	\$ 480,283.00	\$ 11,260,000.00	\$ 66,740,000.00
Other State	\$	\$	\$	\$
Local	\$ 30,000,000.00	\$ 120,071.00	\$ 2,790,000.00	\$ 16,210,000.00
Total	\$ 143,000,000.00	\$ 600,354.00	\$ 14,050,000.00	\$ 82,950,000.00

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied
None

Please Explain Implementation Timelines, Considering All Phases And Their Current Status
Bid late spring, early summer 2019. Construction 2019.

Have Assessment Districts Been Formed? Yes No Ongoing Not Applicable

Submitted By
David Schelkoph, City Administrator

Date

Address
PO Box 390

City
Valley City

State
ND

ZIP Code
58072

Telephone Number
701-845-1700

Engineer Telephone Number
701-845-9446

Sponsor Email Address
dschelkoph@valleycity.us

Engineer Email Address
chad.petersen@kljeng.com

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature 

Date
02/22/19

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

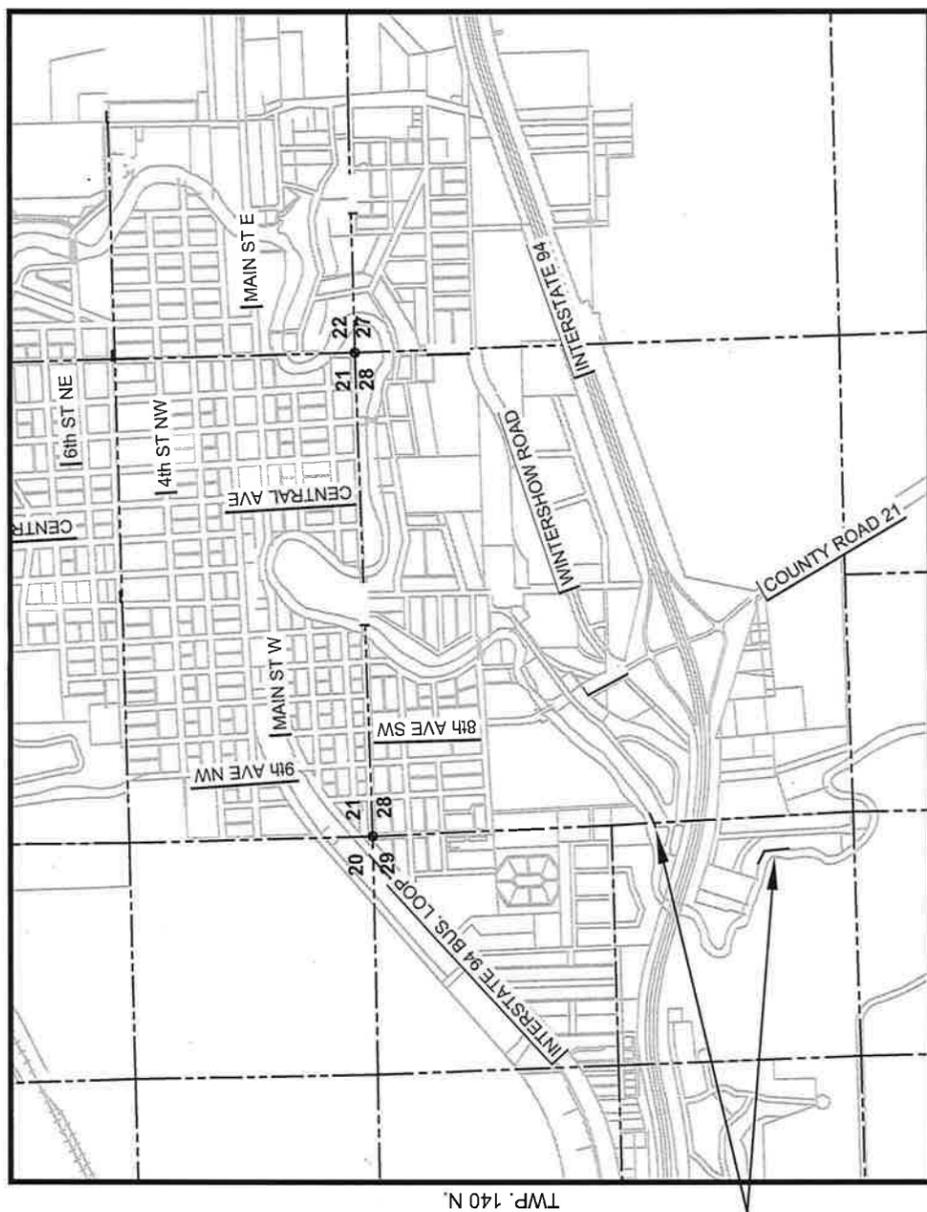
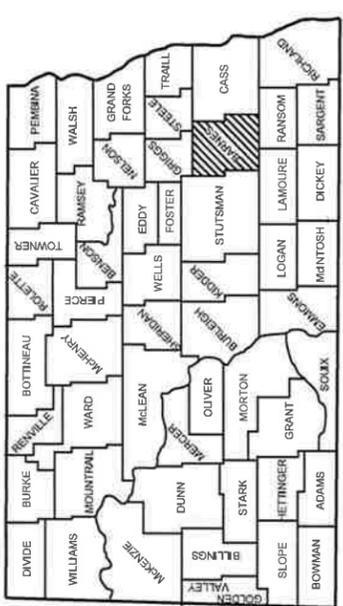
OPINION OF COST
PERMANENT FLOOD PROTECTION
Erosion Mitigation Phase 1
Valley City, North Dakota

ITEM NO	ITEM	RIVERVIEW DR	WOODLAND	TOTAL	UNIT	UNIT PRICE	CURRENT AMOUNT	
1	CONTRACT BOND, MOBILIZATION, TRAFFIC AND EROSION CONTROL	0.2	0.8	1	L SUM	\$ 100,000.00	\$ 100,000.00	
2	REMOVAL OF TREES	3	14	17	EA	\$ 1,000.00	\$ 17,000.00	
3	TOPSOIL, SEEDING, MULCHING	0.06	0.23	0.29	ACRE	\$ 20,000.00	\$ 5,800.00	
4	COMMON EXCAVATION-WASTE	100	400	500	CY	\$ 30.00	\$ 15,000.00	
5	BORROW	125	500	625	CY	\$ 40.00	\$ 25,000.00	
6	STREAMBANK RIPRAP	556	2,222	2,778	CY	\$ 120.00	\$ 333,360.00	
ESTIMATED CONSTRUCTION COST =							\$ 496,160.00	\$ 99,232.00
CONTINGENCY (10%) =							\$ 49,616.00	\$ 9,923.00
CONSTRUCTION ENGINEERING =							\$ 54,578.00	\$ 10,916.00
TOTAL COST =							\$ 600,354.00	\$ 120,071.00
State Share (80%)							\$ 480,283.00	\$ 96,056.80
Local Share (20%)							\$ 120,071.00	\$ 23,914.20

STATE	PROJECT NUMBER	PCN	SECTION NUMBER	SHEET NUMBER
ND	PERMANENT FLOOD PROTECTION EROSION MITIGATION PHASE 1	-	1	1

CITY OF VALLEY CITY, NORTH DAKOTA PERMANENT FLOOD PROTECTION EROSION MITIGATION PHASE 1

Grading, Borrow, Riprap, and Incidentals.



PROJECT LOCATION

RGE. 58 W.

This drawing is preliminary and not for use in obtaining or implementing purposes.

CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NORTH DAKOTA.

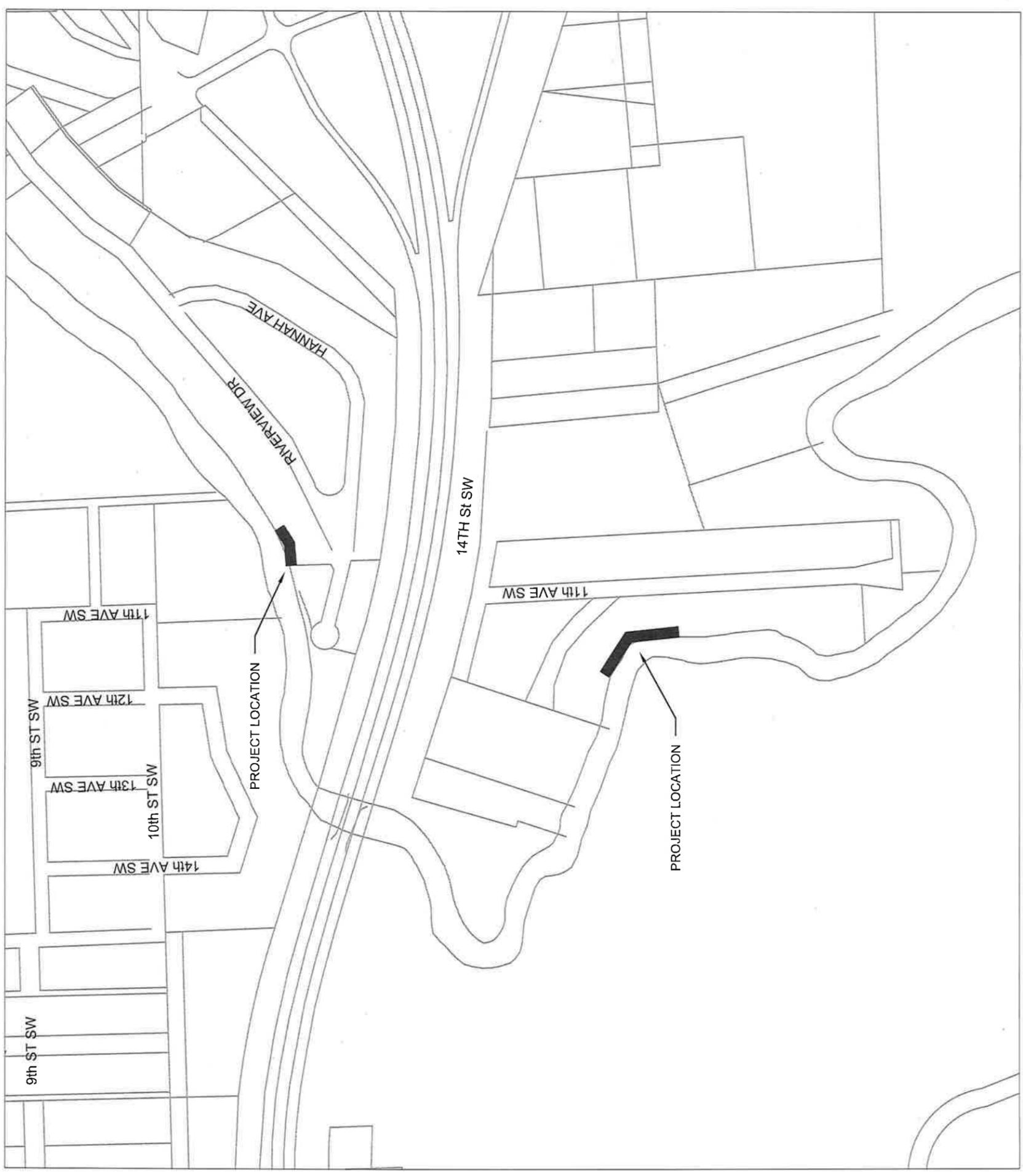
KADRMAS, LEE & JACKSON, INC.

DATE _____ REGISTRATION NUMBER _____



1010 4TH AVENUE SW
P.O. BOX 937
VALLEY CITY, ND 58072-0937
(701) 845-4880, FAX (701) 845-0252
© KLJ 2019

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	PERMANENT FLOOD PROTECTION EROSION MITIGATION PHASE 1	4	1



PROJECT COMPONENTS

█ EROSION MITIGATION SITES

This drawing is preliminary and not for recording or implementation purposes.

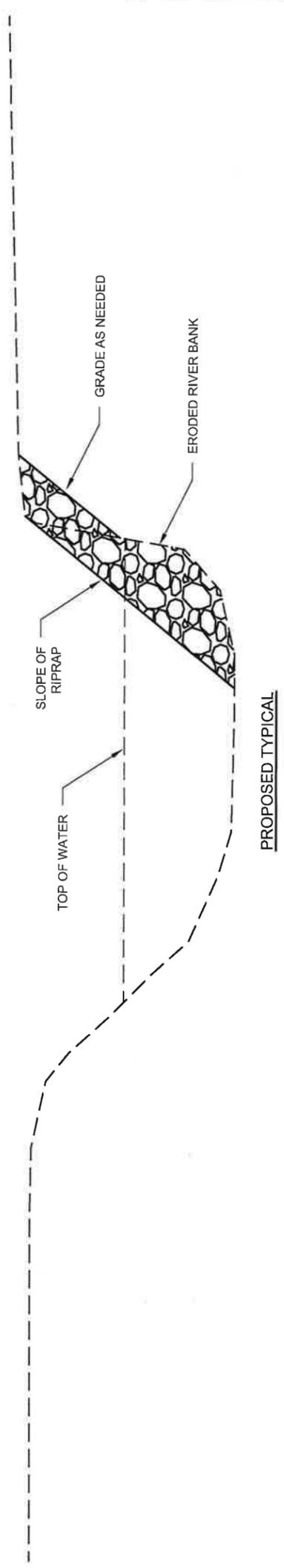
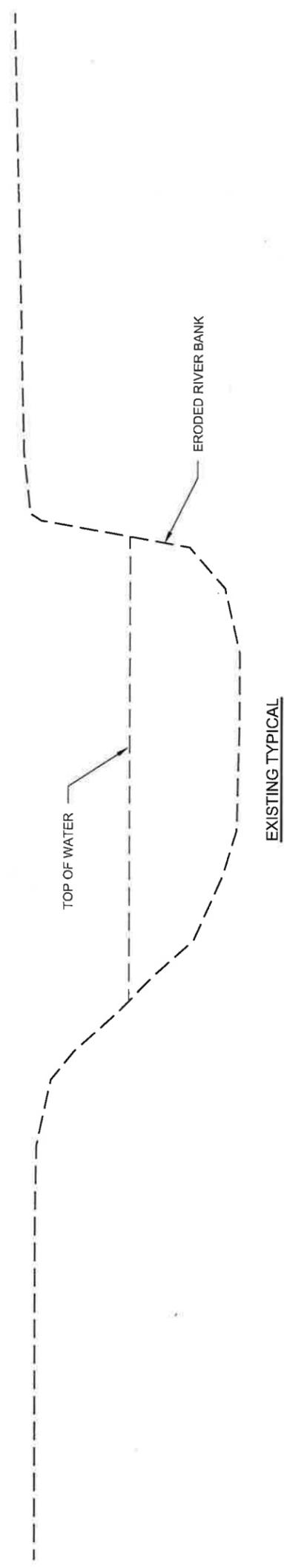
PERMANENT FLOOD PROTECTION
EROSION MITIGATION PHASE 1
VALLEY CITY, NORTH DAKOTA



SCOPE OF WORK

DESIGNED BY	MS	CP	PROJECT NO.
			1804-02661

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	PERMANENT FLOOD PROTECTION EROSION MITIGATION PHASE 1	30	1



This drawing is preliminary and is for planning or implementation purposes.

PERMANENT FLOOD PROTECTION
 EROSION MITIGATION PHASE 1
 VALLEY CITY, NORTH DAKOTA



TYPICAL SECTION

OWNER: MS CONTRACTOR: CP PROJECT NO.: 1804-02661

Riverview District Erosion Map



Riverview Erosion Site



Woodland District Erosion Map



Woodland Erosion Site





Public Works Department

March 11, 2019

Mr. Garland Erbele, P.E., Chief Engineer
North Dakota State Water Commission
900 East Boulevard Avenue, Dept. 770
Bismarck, ND, 58505-0850

RE: Minot SWIF "D" funding

Mr. Erbele:

The City of Minot has been addressing deficiencies in the existing federal flood protection system through the city of Minot over the past 3 years. These deficiencies are required to be addressed in order for the city to remain in the USACE PL-84-99 program.

The North Dakota State Water Commission has provided funding on the last 4 projects, and the City of Minot is very appreciative of the assistance in making these repairs.

In June of 2018 we prepared and bid another series of improvements known as SWIF "D" through the City and the State Water Commission was able to provide a limited amount of funding for these improvements in the amount of \$368,778.00. The City of Minot adjusted the project scope to work within this funding amount and requested additional funding from the Water Commission in October of 2018 and was awarded an additional \$387,433.00 as funding was available.

We recently became aware that additional funding may be available to complete this project and we would like to request the final amount of \$214,279.00 to complete SWIF "D".

I have attached a breakdown of the project costs for the areas within SWIF "D" that are eligible for SWC funding, along with previous amounts allocated to this project.

We appreciate the continued support in correcting identified deficiencies in our existing flood protection project.

Sincerely,

Dan Jonasson
Director of Public Works, City of Minot



Minot SWIF Action D - Cost Share Calculations

Item	Total Est. Project Cost	SWC Cost Share	SWC Cost Share	Local Cost Share
Area 4 Construction - Flood Protection	\$567,409.70	60%	\$340,445.82	\$226,963.88
Area 9 Construction - Flood Protection	\$763,726.95	60%	\$458,236.17	\$305,490.78
Area 22 Construction - Bank Stabilization	\$68,615.90	50%	\$34,307.95	\$34,307.95
Construction Engineering	\$155,000.00	50%	\$77,500.00	\$77,500.00
Construction Eng Addendum	\$120,000.00	50%	\$60,000.00	\$60,000.00
Totals	\$1,674,752.55		\$970,490.00	\$704,262.61
SWC cost share 1 allocation (6-14-2018)			\$368,778.00	
SWC cost share 2 allocation(10-11-2018)			\$387,433.00	
		Total Allocated Thus Far	\$756,211.00	
SWC Requested Cost Share 3			\$214,279.00	

Public Works Department



LOCATION MAP

Date: February 20, 2019

SWC Date Received : 2/20/19

Garland Erbele, PE
State Engineer,
North Dakota State Water Commission,
900 E. Boulevard Ave,
Bismarck, ND 58505

Subject: Construction Funding Request for Bouret Dam Rehabilitation Project
Sheyenne River, Benson County, ND

Dear Mr. Erbele,

The Benson County Water Resource Board (Board) is developing a long-term solution to Bouret Dam (Dam) located on the Sheyenne River, below the West End Outlet of Devils Lake. The Dam is under the Board's jurisdiction according to N.D.C.C. § 61-16.1-39 and § 61-16.1-40. The Dam was built in 1939 by the Works Progress Administration for livestock purposes. Over last eight decades, the Dam has become an integral part of regional landscape and provides tangential benefit of regional recreation. The Dam is in poor physical condition with substantial structural degradation and downstream erosion. The abutments have washed out, and face of the Dam is severely deteriorated. Under its current conditions, the Dam poses significant risk to public safety as a drowning hazard. In May 2018, the Board completed feasibility study on the Dam where preferred alternative of engineered rock ramp for the rehabilitated structure was advanced to 30% level of design. Current height of the Dam is 10 feet. Modified height of the Dam will be 8 feet. The feasibility study was completed by securing cost-share assistance from the North Dakota State Water Commission at 35% cost share percentage. In January 2019, the Board advanced 30% design of the preferred alternative of engineered rock ramp to final design and permitting. At this time, the Board has advanced the project to 90% level design including engineering plans and cost estimate corresponding to it. The Board plans to apply for permits within the next 2 months – before the next State Water Commission Meeting on April 9, 2019. The Board anticipates up to six months to secure required permits. The Board anticipates to begin construction by late-Fall 2019 to early-Spring 2020, depending upon weather conditions. In December 2018, the North Dakota State Water Commission approved final design and permitting phase of the project at 75% cost share percentage.

The advancement to the 90% level design has improved our initial estimates for the project corresponding to quantities and construction costs. The 90% cost estimates are equivalent to Class 1 per ASTM E 2516-06. The mid-range construction cost estimated for the project is \$789,000. This includes construction contingency of 10% and estimated construction engineering support (estimated at 10%).

Bouret Dam Rehabilitation is an important project for Benson County residents and there is public support within the County for the project construction. With this letter and submission of supporting data, the Board respectfully requests cost-share assistance from the North Dakota State Water Commission at 75% of the eligible costs for \$591,750 under the Commission's current cost-share policy, to complete the project construction.

The Board looks forward to attend the upcoming State Water Commission meeting on April 9, 2019 to present the project.

Enclosed are a cost-share request form, project location map, copy of 90% Design Plan Sheets and Class 1 Cost Estimate. If you have any questions, please free to contact me at (701) 771-2311.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth Hoffert". The signature is written in a cursive style with a long horizontal stroke extending to the right.

Ken Hoffert

Chairman

BENSON COUNTY WATER RESOURCE BOARD



COST-SHARE REQUEST
 NORTH DAKOTA STATE WATER COMMISSION
 DEVELOPMENT DIVISION
 SFN 60439 (10/2018)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 45 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name Bouret Dam Rehabilitation Project		
Sponsor(s) Benson County Water Resources Board		
County Benson	City Minnewaukan	Township/Range/Section T151N, R65W, S27
Description Of Request <input type="checkbox"/> New <input checked="" type="checkbox"/> Updated (previously submitted)		
Specific Needs Addressed By The Project, Program, Or Study Construction on Bouret Dam Rehabilitation Project to address concerns associated with dam safety & aging infrastructure		
If Study, What Type <input type="checkbox"/> Water Supply <input type="checkbox"/> Hydrologic <input type="checkbox"/> Floodplain Mgmt. <input type="checkbox"/> Feasibility <input type="checkbox"/> Other		
If Project/Program <input type="checkbox"/> Flood Control <input type="checkbox"/> Multi-Purpose <input type="checkbox"/> Bank Stabilization <input checked="" type="checkbox"/> Dam Safety/EAP <input type="checkbox"/> Recreation <input type="checkbox"/> Water Supply <input type="checkbox"/> Snagging & Clearing <input type="checkbox"/> Property Acquisition <input type="checkbox"/> Irrigation <input type="checkbox"/> Water Retention <input type="checkbox"/> Rural Flood Control <input type="checkbox"/> Other		
Are Connections Of New Rural Customers Located Within The Extra-Territorial Jurisdiction Of Municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Jurisdictions/Stakeholders Involved Benson County Water Resource Board		
Description Of Problem Or Need And How Project Addresses That Problem Or Need <p>The Bouret Dam (Dam) was originally built by the Works Progress Administration (WPA) on the Sheyenne River in 1939. According to N.D.C.C. Sections 61-16.1-39 and 61-16.1-40, the Benson County Water Resource Board (Board) has the responsibility towards the safety and maintenance of the Dam. The Dam is currently facing significant downstream and structural erosion along with severe cracks at the abutments and separated wing walls. In May 2018, the Board completed feasibility study to determine alternatives for the Dam. The preferred alternative involves removing the existing failing dam and replacing it with engineered and constructed rock and boulder ramp. The engineered rock ramp will eliminate the existing risk posed by the hydraulic roller, improve river connectivity, enhanced recreational opportunities, and reduce the long-term maintenance requirements at the Dam. The Board has advanced the project to 90% design under cost share assistance from the State Water Commission. The project has broad and strong local support from within the community. Construction is anticipated to begin in either Fall 2019 or Spring 2020. With this request, the Board would like to request estimated construction funding on the project, based on 90% cost estimate (equivalent to Class 1 per ASTM E 2516-06)</p>		
Has Feasibility Study Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Has Engineering Design Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Have Land Or Easements Been Acquired?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable

Have You Applied For Any State Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Been Approved For Any State Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Applied For Any Local Permits? Yes No Not Applicable

If Yes, Please Explain

Have You Been Approved For Any Local Permits? Yes No Not Applicable

If Yes, Please Explain

Briefly Explain The Level Of Review The Project Or Program Has Undergone
The Board completed feasibility study at 30%-level in May 2018. Public meeting was hosted in May 20281. A final design meeting with the community will take place in May 2019.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? None anticipated. Project has strong local support.

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2017-2019 7/1/17-6/30/19	2019-2021 7/1/19-6/30/21	Beyond 7/1/21
Federal	\$	\$	\$	\$
State Water Commission	\$ 591,750.00	\$ 110,000.00	\$ 481,750.00	\$
Other State	\$	\$	\$	\$
Local	\$ 197,250.00	\$ 50,000.00	\$ 147,250.00	\$
Total	\$ 789,000.00	\$ 160,000.00	\$ 629,000.00	\$ 0.00

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied

Please Explain Implementation Timelines, Considering All Phases And Their Current Status
Permit applications will be submitted in April 2019. SHPO Concurrence will occur by July 2019. Project will go to bid by October 2019. Anticipated to begin construction by late Fall 2019/early Spring 2020 depending upon weather conditions.

Have Assessment Districts Been Formed? Yes No Ongoing Not Applicable

Submitted By
Mr. Ken Hoffert, Chairman, Benson County Water Resource Board

Date
02/20/2019

Address
PO Box 347

City
Minnewaukan

State
ND

ZIP Code
58351

Telephone Number
701-771-2311

Engineer Telephone Number
(701) 255-5474

Sponsor Email Address
KHoffert62@gmail.com

Engineer Email Address
MNangare@barr.com

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature 

Date
2/20/19

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

90% Design Level

ENGINEER'S OPINION OF PROBABLE COST

PROJECT: Bouret Dam Rehabilitation
 LOCATION: Benson County, North Dakota
 PROJECT #: 34031003.01

ESTIMATED COSTS

Item No:	Item Description	Unit	Estimated Quantity	Unit Cost	Total Cost
1	Mobilization & Demobilization	LS	1	\$ 64,000.00	\$ 64,000.00
2	Temporary Erosion Control	LS	1	\$ 10,000.00	\$ 10,000.00
3	Clearing and Grubbing	LS	1	\$ 5,000.00	\$ 5,000.00
4	Strip and Stockpile Topsoil	LS	1	\$ 4,000.00	\$ 4,000.00
5	Water Control	LS	1	\$ 135,000.00	\$ 135,000.00
6	Remove Existing Dam	LS	1	\$ 40,000.00	\$ 40,000.00
7	Sediment Removal	CY	1200	\$ 35.00	\$ 42,000.00
8	PS-27.5 Sheetpile	LF	160	\$ 200.00	\$ 32,000.00
9	Geotextile Fabric (NDDOT Type RR)	SY	1690	\$ 2.50	\$ 4,225.00
10	Granular Filter (12" USACE Type B2)	TON	750	\$ 65.00	\$ 48,750.00
11	Base Rock (30" NDDOT Grade I Riprap)	TON	1875	\$ 70.00	\$ 131,250.00
12	Boulders (3'-4' Nominal Diameter)	EA	111	\$ 600.00	\$ 66,600.00
13	Chinking Rock	TON	75	\$ 95.00	\$ 7,125.00
14	Cobbles	TON	150	\$ 80.00	\$ 12,000.00
15	Bank Excavation and Removal	CY	1960	\$ 12.00	\$ 23,520.00
16	Bank Place and Compact Salvaged Fill	CY	110	\$ 7.00	\$ 770.00
17	Bank Grading	SY	670	\$ 10.00	\$ 6,700.00
18	Place Salvaged Topsoil	CY	110	\$ 5.00	\$ 550.00
19	Place Imported Topsoil	CY	550	\$ 20.00	\$ 11,000.00
20	Mulch and Seed	LS	1	\$ 7,500.00	\$ 7,500.00
	Construction Cost Subtotal				\$652,000
	10% Construction Cost Contingency				\$65,000
	10% Construction Engineering Support				\$72,000
	TOTAL PROJECT COST (Mid Range Estimate)				\$789,000
	Low Range Estimate (-5%)				\$750,000
	High Range Estimate (+10%)				\$868,000

Notes:

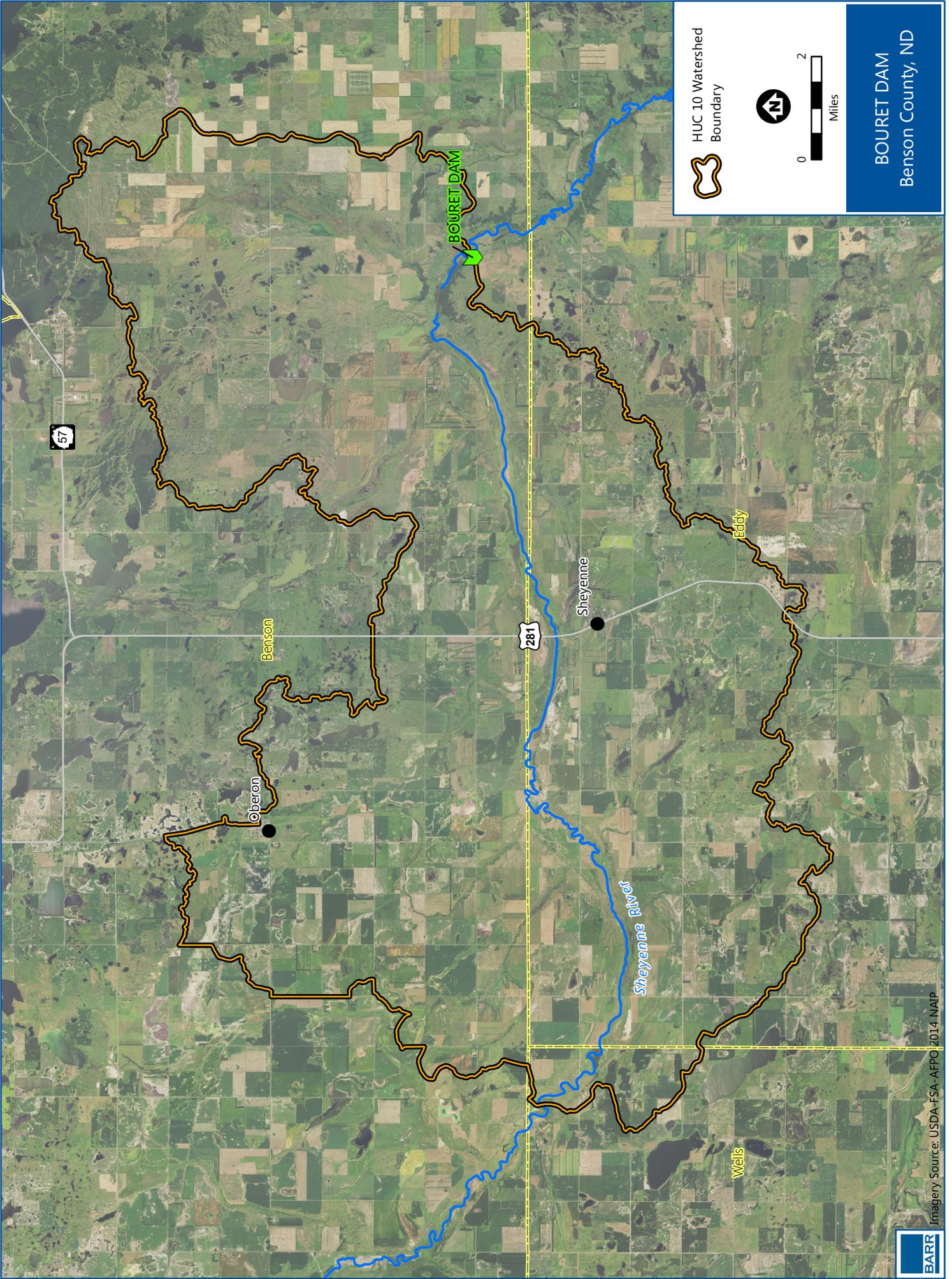
¹ Design Work Completed to Approximately 90% Design Level.

² Quantities Based on Design Work Completed.

³ Unit Prices Based on Information Available at This Time.

⁴ This 90% Design Level (Class 1 per ASTM E 2516-06) cost estimate is based on designs, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of the completion of design, but are not included at this level of project definition. The estimated accuracy range for the Total Project Cost as the project is defined is -5% to +10%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.





HUC 10 Watershed Boundary



0 2 Miles

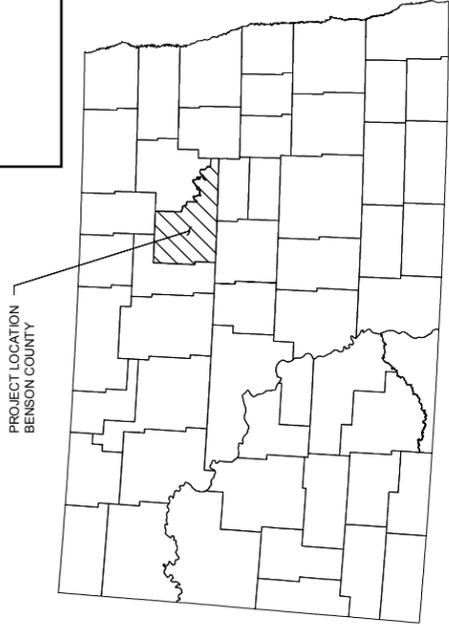
BOURET DAM
Benson County, ND

BOURET DAM REHABILITATION PROJECT

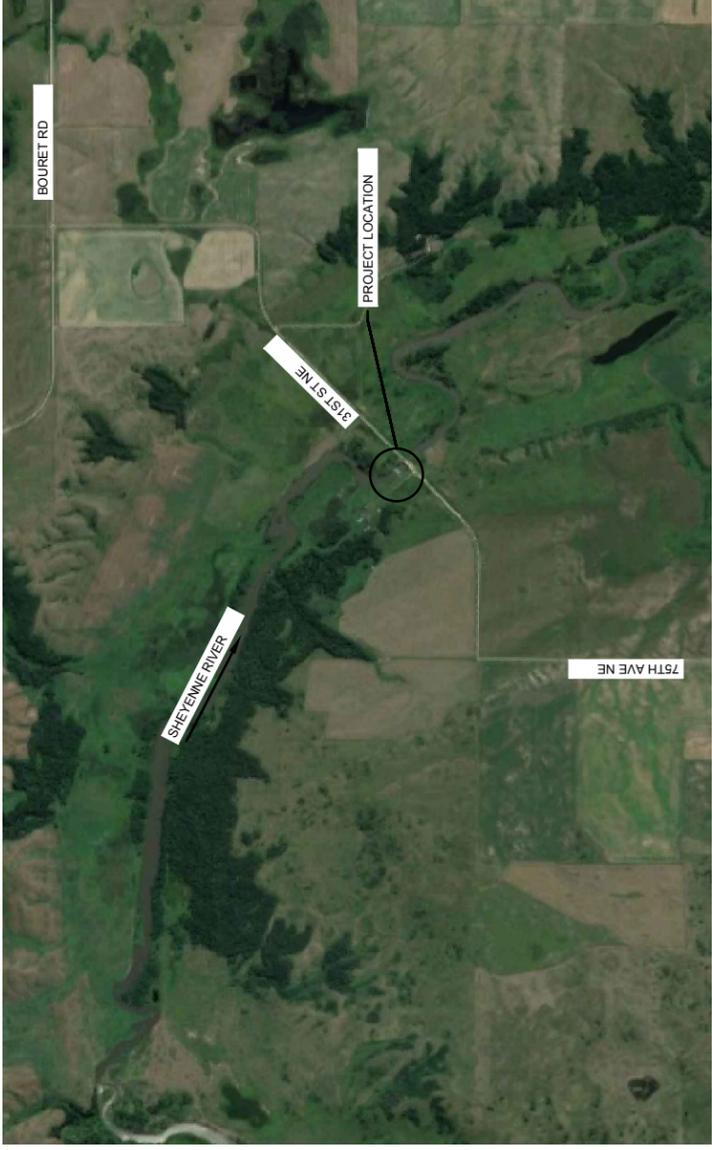
BENSON COUNTY WATER RESOURCE BOARD

SHEYENNE RIVER

MINNEWAUKAN, NORTH DAKOTA



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

GENERAL NOTE:

- LEFT BANK AND RIGHT BANK NOMENCLATURE IN THIS DRAWING SET REFERS TO THE LEFT AND RIGHT BANKS WHEN LOOKING DOWNSTREAM.

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX
XXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XX/XX/XXXX AND
THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY,
234 WEST CENTURY AVENUE, BISMARCK, ND 58503



NORTH DAKOTA ONE CALL:
CALL BEFORE YOU DIG.
1-800-795-0555 or 811

CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD-LOCATING ALL SITE UTILITIES, PRIVATE AND PUBLIC, PRIOR TO STARTING THE WORK. ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. ANY UTILITIES DAMAGED BY CONTRACTOR SHALL BE REPAIRED BY CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER.

CLIENT	BENSON COUNTY WATER RESOURCE BOARD
BD	CONSTRUCTION
RELEASED TO/FOR	

Scale	AS SHOWN
Date	10/25/2017
Drawn	RRR2
Checked	MAN
Designed	JKH2
Approved	JDA

Project Office:
BARR ENGINEERING CO.
234 WEST CENTURY AVENUE
BISMARCK, ND 58503
Ph: 1-800-632-2277
Fax: (701) 222-4371
www.barr.com



DATE RELEASED	3/28/18	2/28/18	2/15/18						
	A	B	C	0	1	2	3		

NO.	BY	CHK APP.	DATE	REVISION DESCRIPTION

BENSON COUNTY WATER
RESOURCE BOARD
MINNEWAUKAN, ND

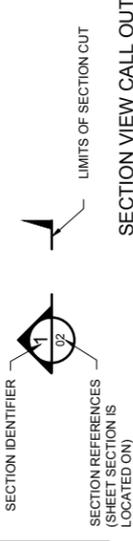
BOURET DAM REHABILITATION
TWIN TREE TOWNSHIP
INDEX, LOCATION MAP AND VICINITY MAP

BARR PROJECT No. 34031003.00
CLIENT PROJECT No.
DWG. No. G-01
REV. No. C

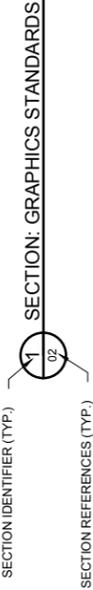
90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION

DRAWING INDEX

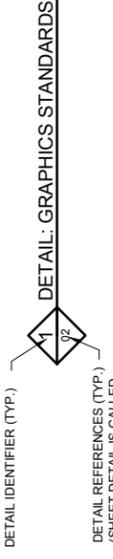
DWG NO.	TITLE
G-01	INDEX, LOCATION MAP, AND VICINITY MAP
G-02	HYDRAULICS AND HYDROLOGY
G-03	HYDRAULICS AND HYDROLOGY
C-01	EXISTING CONDITIONS - PLAN
C-02	PROJECT LAYOUT - PLAN
C-03	SITE ACCESS AND STAGING - PLAN
C-04	WATER CONTROL - PLAN
C-05	DAM DEMOLITION - PLAN AND SECTION
C-06	SEDIMENT REMOVAL - PLAN, SECTION AND PROFILE
C-07	ROCK RIFFLES - PLAN, PROFILE AND SECTION
C-08	ROCK RIFFLES CONSTRUCTION - PLAN AND TABLE
C-09	ROCK RIFFLES - DETAILS
C-10	SITE RESTORATION - PLAN
C-11	TEMPORARY EROSION CONTROL - PLAN
C-12	TEMPORARY EROSION CONTROL - DETAILS



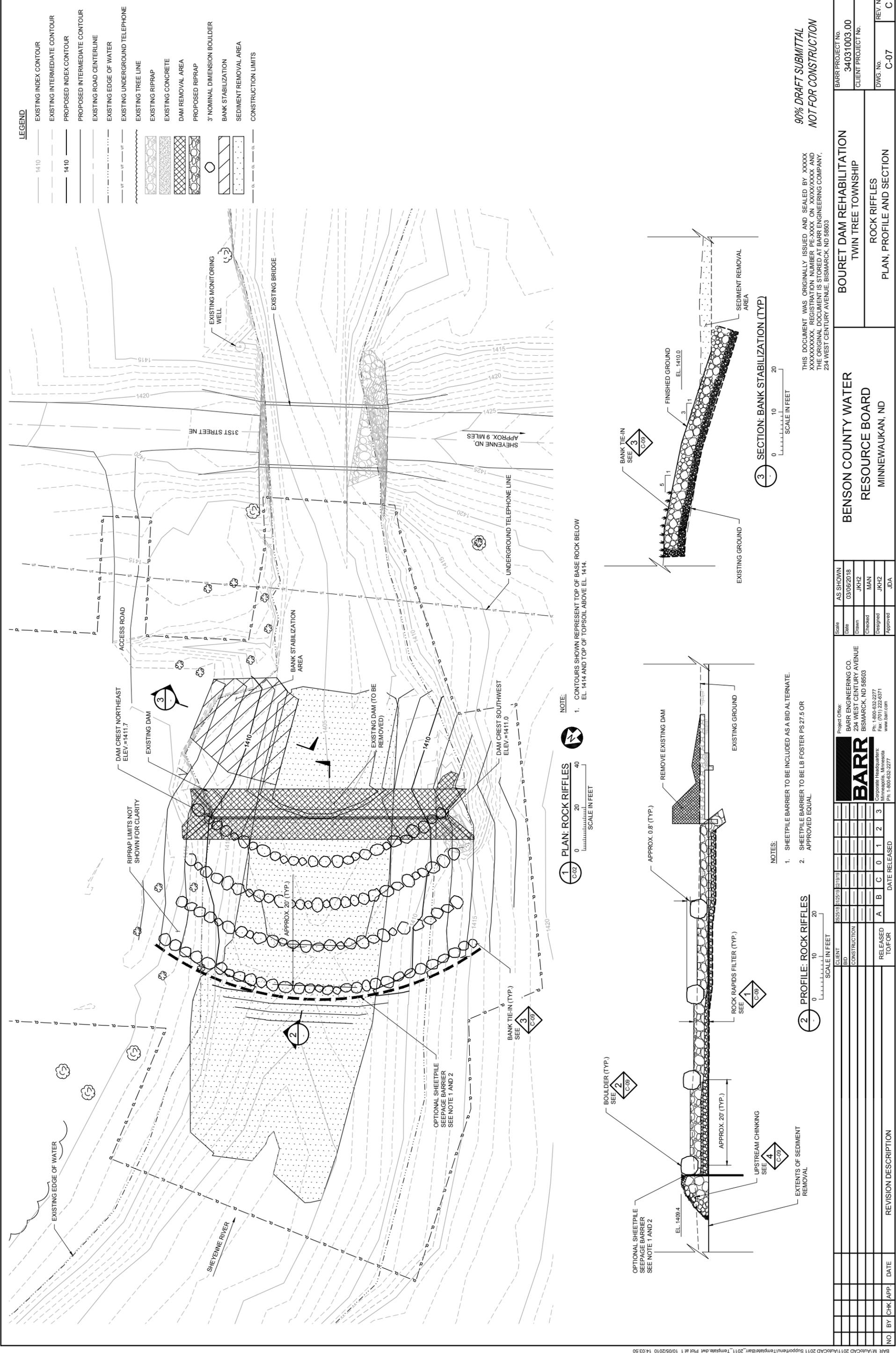
SECTION VIEW CALL OUT



SECTION VIEW TITLE



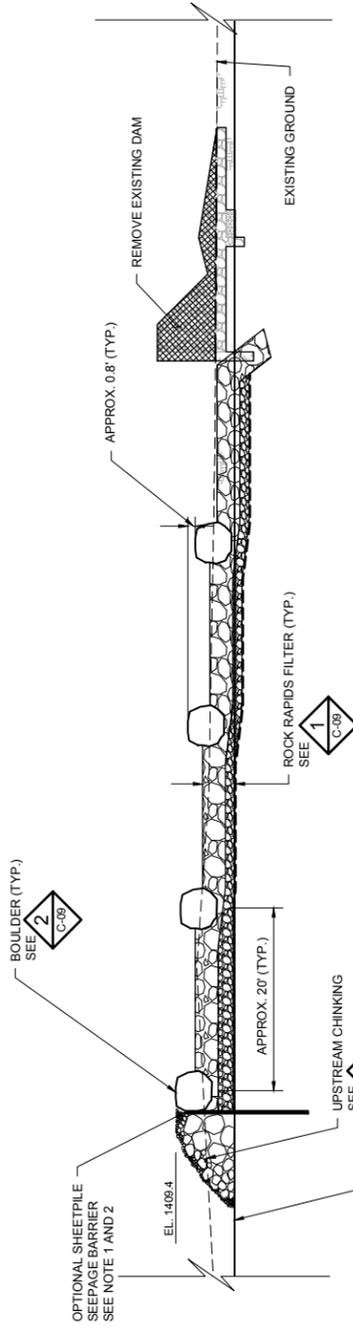
DETAIL VIEW TITLE



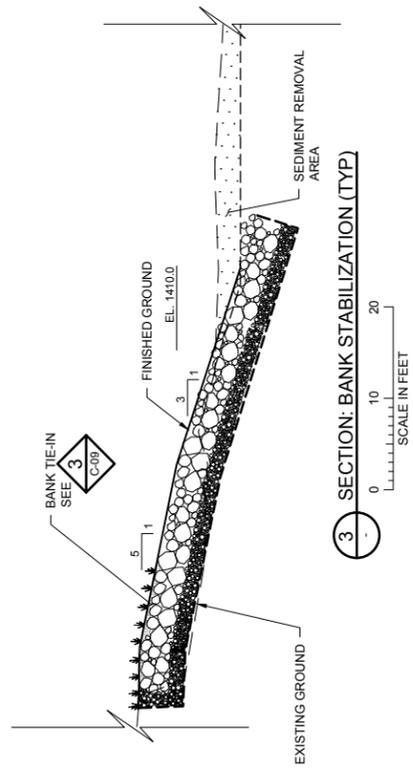
LEGEND

1410	EXISTING INDEX CONTOUR
---	EXISTING INTERMEDIATE CONTOUR
1410	PROPOSED INDEX CONTOUR
---	PROPOSED INTERMEDIATE CONTOUR
---	EXISTING ROAD CENTERLINE
---	EXISTING EDGE OF WATER
---	EXISTING UNDERGROUND TELEPHONE
---	EXISTING TREE LINE
---	EXISTING RIPRAP
---	EXISTING CONCRETE
---	DAM REMOVAL AREA
---	PROPOSED RIPRAP
---	3' NOMINAL DIMENSION BOULDER
---	BANK STABILIZATION
---	SEDIMENT REMOVAL AREA
---	CONSTRUCTION LIMITS

NOTE:
 1. CONTOURS SHOWN REPRESENT TOP OF BASE ROCK BELOW EL. 1414 AND TOP OF TOPSOIL ABOVE EL. 1414.



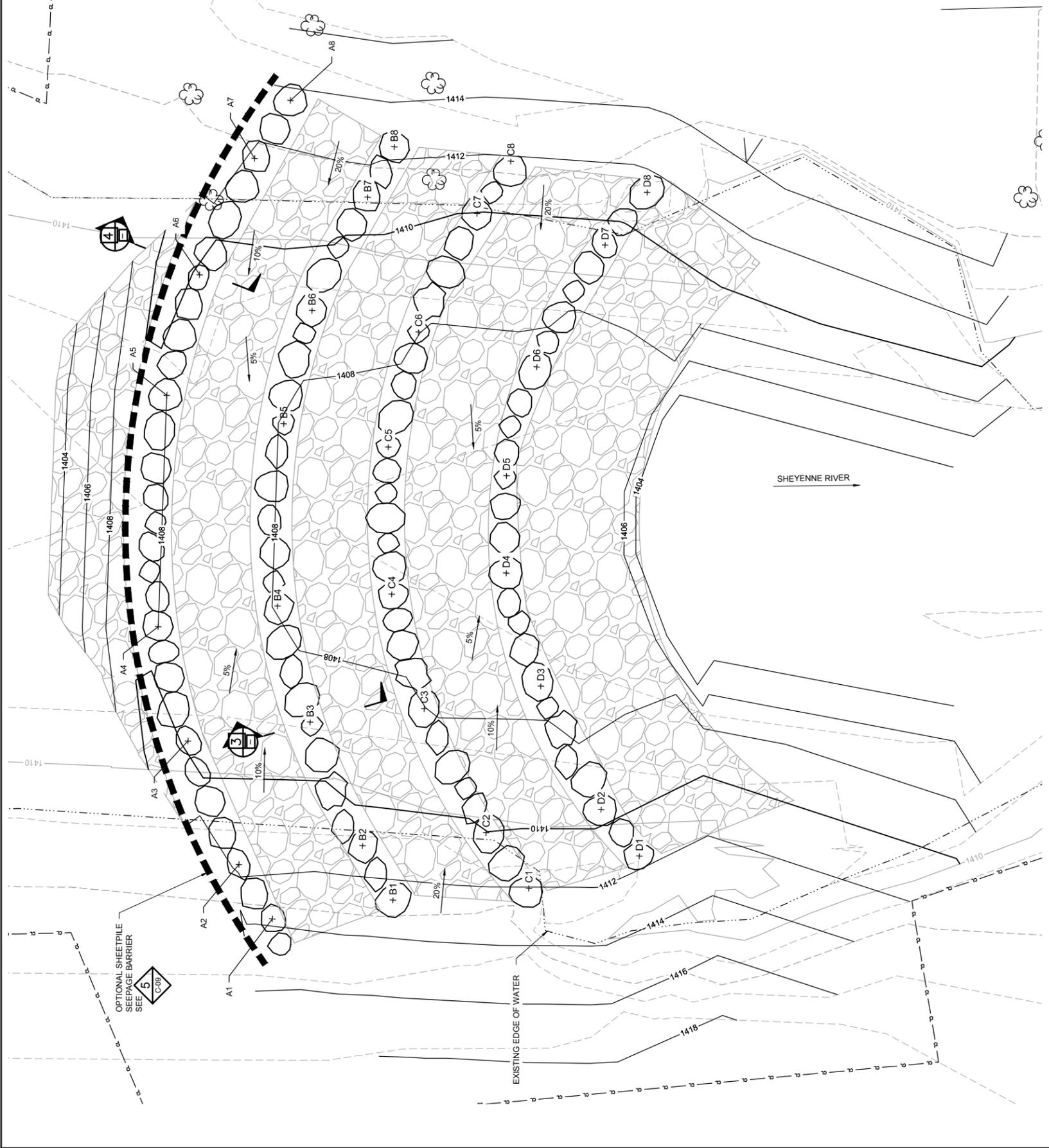
NOTES:
 1. SHEETPILE BARRIER TO BE INCLUDED AS A BID ALTERNATE.
 2. SHEETPILE BARRIER TO BE LB FOSTER PS 27.5 OR APPROVED EQUAL.



90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION

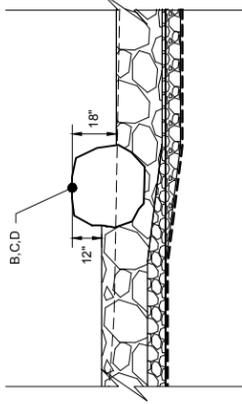
THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX XXXXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XXXXXXXX AND THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY, 234 WEST CENTURY AVENUE, BISMARCK, ND 58503

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION	DATE RELEASED			Project Office: BARR BARR ENGINEERING CO. 234 WEST CENTURY AVENUE BISMARCK, ND 58503 Ph: 1-800-632-2277 Fax: (701) 222-6371 www.barr.com Corporate Headquarters Ph: 1-800-632-2277	AS SHOWN	Scale	BARR PROJECT No. 34031003.00 CLIENT PROJECT No. ROCK RIFFLES PLAN, PROFILE AND SECTION	BENSON COUNTY WATER RESOURCE BOARD MINNEWAUKAN, ND	BOURET DAM REHABILITATION TWIN TREE TOWNSHIP	BARR PROJECT No. 34031003.00 CLIENT PROJECT No. ROCK RIFFLES PLAN, PROFILE AND SECTION
						1	2	3		Date 09/06/2018 Drawn JKH2 Checked IMAN Designed JKH2 Approved JDA	BARR PROJECT No. 34031003.00 CLIENT PROJECT No. ROCK RIFFLES PLAN, PROFILE AND SECTION				

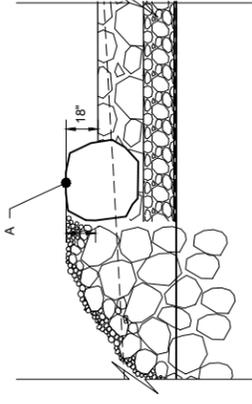


POINT ID	NORTHING	EASTING	ELEVATION
A1	318890.6305	2345000.413	1413.9
A2	318901.2899	2345002.48	1412.9
A3	318922.6545	2345010.253	1410.9
A4	318940.4509	2345019.646	1408.5
A5	318968.5572	2345047.27	1409.5
A6	318979.9643	2345065.227	1410.9
A7	318988.3031	2345085.491	1412.9
A8	318991.487	2345096.639	1413.9
B1	318879.1799	2345017.704	1413.1
B2	318869.5061	2345020.139	1412.1
B3	318911.0472	2345027.744	1410.1
B4	318929.3646	2345036.976	1409.1
B5	318951.6078	2345058.682	1409.1
B6	318962.5967	2345075.231	1410.1
B7	318970.4951	2345095.2	1412.1
B8	318973.7677	2345104.323	1413.1
C1	318865.1072	2345036.116	1412.3
C2	318876.9919	2345037.126	1411.3
C3	318899.6704	2345043.592	1408.3
C4	318917.7981	2345052.676	1408.3
C5	318936.7002	2345069.129	1408.3
C6	318947.6977	2345086.134	1409.3
C7	318955.8967	2345107.068	1411.3
C8	318956.6244	2345117.311	1412.3
D1	318856.5106	2345053.663	1411.5
D2	318889.1652	2345060.82	1408.5
D3	318866.7988	2345054.225	1410.5
D4	318907.3693	2345069.462	1407.5
D5	318919.5941	2345080.66	1407.5
D6	318929.777	2345096.949	1408.5
D7	318937.291	2345119.513	1410.5
D8	318939.0993	2345130.827	1411.5

TABLE: BOULDER COORDINATES AND ELEVATIONS



SECTION: ROCK RIFFLE CONSTRUCTION ELEVATIONS B, C AND D LINES (TYP.)



SECTION: ROCK RIFFLE CONSTRUCTION ELEVATIONS A LINE (TYP.)

PLAN: ROCK RIFFLE CONSTRUCTION

NOTE:
 1. PROPOSED CONTOURS SHOWN REPRESENT TOP OF BASE ROCK. FOR BOULDER ELEVATIONS REFER TO THE TABLE SHOWN ON THIS SHEET.

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION	DATE RELEASED			BARR Project Office: BARR ENGINEERING CO. 233 WEST CENTURY AVENUE BISMARCK, ND 58503 Ph: 1-800-632-2277 Fax: (701) 222-6371 www.barr.com	AS SHOWN	Scale	Project No.	BENSON COUNTY WATER RESOURCE BOARD MINNEWAUKAN, ND	BOURET DAM REHABILITATION TWIN TREE TOWNSHIP ROCK RIFFLES CONSTRUCTION PLAN AND TABLE	BARR PROJECT No. 34031003.00 CLIENT PROJECT No.	DWG. No. C-08 REV. No. B
						A	B	C		0	1	2				

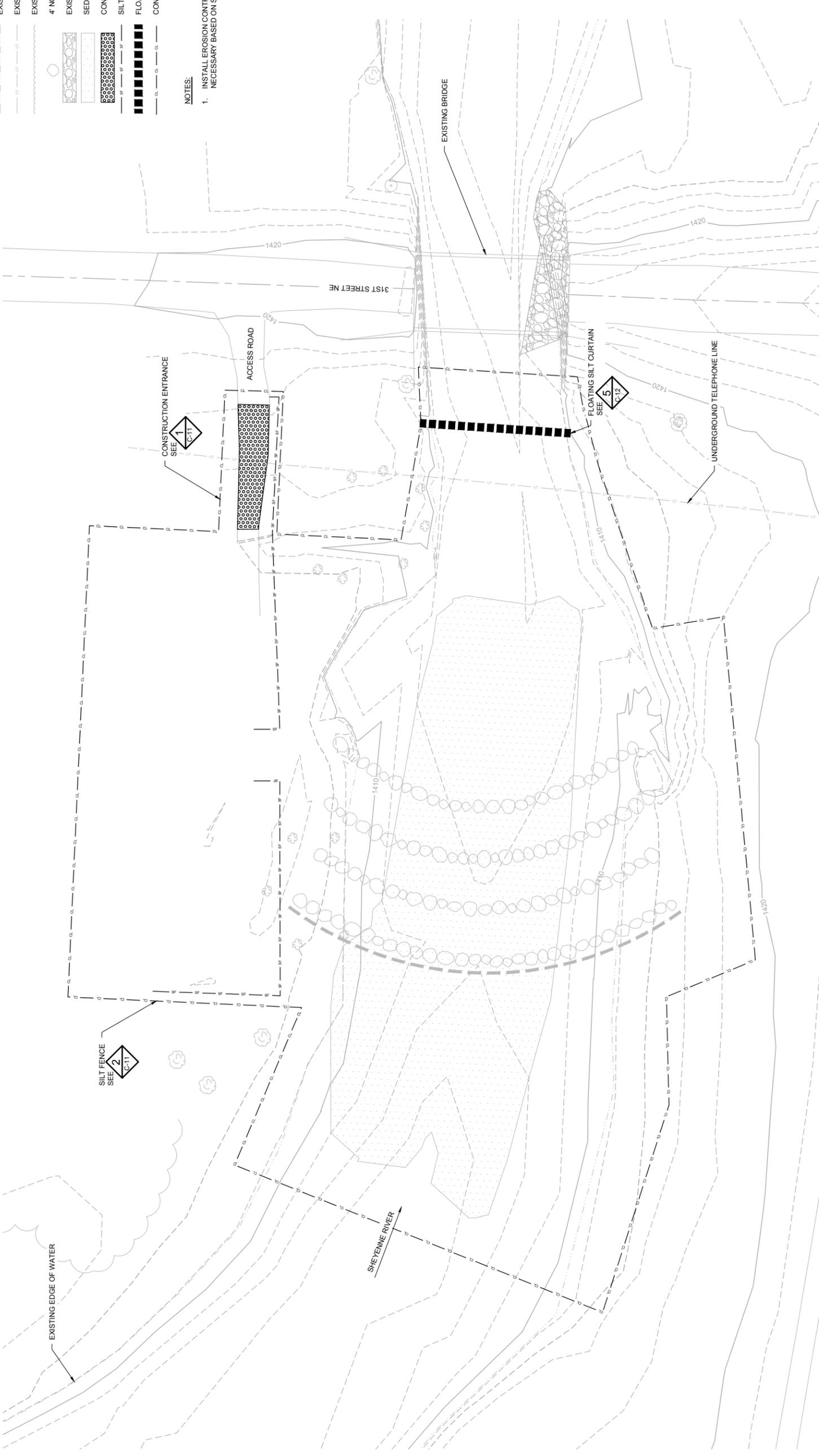
90% DRAFT SUBMITTAL
 NOT FOR CONSTRUCTION

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX
 XXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XXXXXXXX AND
 THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY,
 234 WEST CENTURY AVENUE, BISMARCK, ND 58503

LEGEND

---	1410	EXISTING INDEX CONTOUR
---		EXISTING INTERMEDIATE CONTOUR
---		EXISTING ROAD CL
---		EXISTING EDGE OF WATER
---		EXISTING UNDERGROUND TELEPHONE
---		EXISTING TREE LINE
○		4" NOMINAL DIMENSION BOULDER
○		EXISTING RIPRAP
○		SEDIMENT REMOVAL AREA
○		CONSTRUCTION ENTRANCE
○		SILT FENCE
█		FLOATING SILT CURTAIN
---		CONSTRUCTION LIMITS

NOTES:
 1. INSTALL EROSION CONTROL FEATURES AS NECESSARY BASED ON SITE CONDITIONS.



1 PLAN: TEMPORARY EROSION CONTROL
 SCALE IN FEET
 0 20 40

90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX
 XXXXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XXXXXXXX AND
 THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY,
 234 WEST CENTURY AVENUE, BISMARCK, ND 58503

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION	DATE RELEASED				Project Office: BARR ENGINEERING CO. 234 WEST CENTURY AVENUE BISMARCK, ND 58503 Ph: 1-800-632-2277 Fax: (701) 222-8371 www.barr.com	AS SHOWN Date: 01/04/2019 Drawn: JKH2 Checked: IMAN Designed: JKH2 Approved: JDA	BENSON COUNTY WATER RESOURCE BOARD MINNEWAUKAN, ND	BOURET DAM REHABILITATION TWIN TREE TOWNSHIP TEMPORARY EROSION CONTROL PLAN	BARR PROJECT No. 34031003.00 CLIENT PROJECT No.	DWG. No. C-11 REV. No. B
						A	B	C	0						

Date: February 22, 2019

SWC Date Received : 2/22/19

Garland Erbele, PE
State Engineer,
North Dakota State Water Commission,
900 E. Boulevard Ave,
Bismarck, ND 58505

Subject: Construction Funding Request for Karey Dam Rehabilitation Project
Cannonball River, Hettinger County, ND

Dear Mr. Erbele,

Located on the Cannonball River, Karey Dam (Dam) is a low-head dam under the jurisdiction of Hettinger County Water Resource Board (Board) according to NDCC § 61-16.1-39 and § 61-16.1-40. The Dam was built in 1930 by the Civilian Conservation Corps (CCC) for irrigation purposes with recreation as a tangential benefit. For close to last 90 years, the Dam has become an integral part of the regional landscape. The North Dakota State Water Commission (SWC) Office of the State Engineer (OSE) issued a Conditional Water Use Permit # 5630 to the City of New England (City) for irrigation of the New England Golf Course. Prescriptive water rights permit 5534P was issued to the City for a priority date of July 1, 1936 for beneficial use of recreation and fishing.

Under its current condition, the Dam poses significant risk to public safety as a drowning hazard. The Dam creates a dangerous hydraulic roller, which poses imminent risk to anglers, boaters and other users for potential loss of life. There are large cracks in the concrete structure and the abutments, erosion around the abutments, spalling of the gunite surfacing, and detachment of the wind wall. The right abutment was washed out during spring 2018 due to runoff from a high flow event. The only update was; the Dam received gunite surfacing in the mid 1980's. The North Dakota State Water Commission (SWC) Office of the State Engineer (OSE) conducts annual Dam inspections and the state of the Dam has been described to be in "poor" condition. There have been two reported fatalities on the Cannonball River during the early 1980s.

In May 2018, the Board completed feasibility study on the Dam where preferred alternative of engineered rock ramp for the rehabilitated structure was advanced to 30% level of design. Existing height of the Dam is 15 feet, and it will remain the same under the rehabilitation project to preserve existing upstream storage pool. The feasibility study was completed by securing cost-share assistance from the North Dakota State Water Commission at 35% cost share percentage. In December 2018, the North Dakota State Water Commission approved final design and permitting phase of the project at 75% cost share percentage. In January 2019, the Board advanced 30% design of the preferred alternative of engineered rock ramp to final design and permitting. At this time, the Board has advanced the project to 90% level design including engineering plans and cost estimate corresponding to it. The Board plans to apply for permits within the next 2 months – before the next State Water Commission Meeting

on April 9, 2019. The Board anticipates up to six months to secure required permits. The Board anticipates to begin construction by late-Fall 2019 to early-Spring 2020, depending upon weather conditions.

The advancement to the 90% level design has improved our initial estimates for the project corresponding to quantities and construction costs. The 90% cost estimates are equivalent to Class 1 per ASTM E 2516-06. The mid-range construction cost estimated for the project is \$1,295,100. This includes construction contingency of 10% and estimated construction engineering support (estimated at 10%).

The project has strong public support within the community. Area residents as well as the City of New England, which owns adjacent land, fully supports the project. With this letter and submission of supporting data, the Board respectfully requests cost-share assistance from the North Dakota State Water Commission at 75% of the eligible costs for \$971,321 under the Commission's current cost-share policy, to complete the project construction.

The Board looks forward to attend the upcoming State Water Commission meeting on April 9, 2019 to present the project.

Enclosed are a cost-share request form, project location map, copy of 90% Design Plan Sheets and Class 1 Cost Estimate. If you have any questions, please free to contact me at (701) 290-1075.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Urlacher". The signature is fluid and cursive, with a large initial "D" and "U".

Don Urlacher

Chairman

HETTINGER COUNTY WATER RESOURCE BOARD



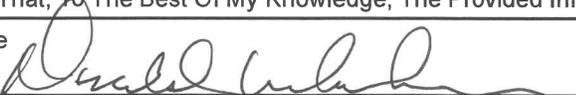
COST-SHARE REQUEST
NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
 SFN 60439 (10/2018)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 45 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name Karey Dam Rehabilitation Project			
Sponsor(s) Hettinger County Water Resource Board			
County Hettinger	City New England	Township/Range/Section T136N, R97W, S32	
Description Of Request <input type="checkbox"/> New <input checked="" type="checkbox"/> Updated (previously submitted)			
Specific Needs Addressed By The Project, Program, Or Study Construction on Karey Dam Rehabilitation Project to address concerns associated with dam safety & aging infrastructure			
If Study, What Type <input type="checkbox"/> Water Supply <input type="checkbox"/> Hydrologic <input type="checkbox"/> Floodplain Mgmt. <input type="checkbox"/> Feasibility <input type="checkbox"/> Other			
If Project/Program			
<input type="checkbox"/> Flood Control	<input type="checkbox"/> Multi-Purpose	<input type="checkbox"/> Bank Stabilization	<input checked="" type="checkbox"/> Dam Safety/EAP
<input type="checkbox"/> Recreation	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Snagging & Clearing	<input type="checkbox"/> Property Acquisition
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Water Retention	<input type="checkbox"/> Rural Flood Control	<input type="checkbox"/> Other
Are Connections Of New Rural Customers Located Within The Extra-Territorial Jurisdiction Of Municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Jurisdictions/Stakeholders Involved Hettinger County Water Resource Board			
Description Of Problem Or Need And How Project Addresses That Problem Or Need Karey Dam (Dam) was originally built by the Civilian Conservation Corps (CCC) in 1930 for the primary purpose of irrigation. According to N.D.C.C. Sections 61-16.1-39 and 61-16.1-40, the Hettinger County Water Resource Board (Board) has the responsibility towards safety and maintenance of the Dam. The Dam is currently facing significant downstream and structural erosion along with severe cracks at the abutments and separated wing walls. Right abutment was washed out during Spring 2018 runoff events. In May 2018, the Board completed feasibility study (30% design) to determine alternatives for the Dam. Preferred alternative involves removal of existing failing Dam, and replacing it with engineered and constructed rock ramp. The engineered rock ramp will eliminate the risk associated with existing hydraulic roller, improve river connectivity, enhanced recreational opportunities, and reduce O&M expenditure. The Board has advanced the project to 90% design level with cost share assistance from the State Water Commission. The project has broad and strong local support from area residents and other stakeholders (City of New England). Construction is anticipated to begin in either Fall 2019 or Spring 2020. With this request, the Board would like to request estimated construction funding for the project based on 90% design level (equivalent to Class 1 per ASTM F 2616-06) +			
Has Feasibility Study Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Has Engineering Design Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Have Land Or Easements Been Acquired?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable

Have You Applied For Any State Permits? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any State Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Applied For Any Local Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any Local Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Briefly Explain The Level Of Review The Project Or Program Has Undergone The Board completed 30% level design in May 2018, at which time two public meetings were hosted as part of it. A final design meeting with the community will take place in May 2019.				
Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? None anticipated. Project has strong local support.				
Funding Timeline (carefully consider when SWC cost-share will be needed)				
Source	Total Cost	2017-2019 7/1/17-6/30/19	2019-2021 7/1/19-6/30/21	Beyond 7/1/21
Federal	\$	\$	\$	\$
State Water Commission	\$ 971,325.00	\$ 150,000.00	\$ 821,325.00	\$
Other State	\$	\$	\$	\$
Local	\$ 323,775.00	\$ 80,000.00	\$ 243,775.00	\$
Total	\$ 1,295,100.00	\$ 230,000.00	\$ 1,065,100.00	\$ 0.00
List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied				
Please Explain Implementation Timelines, Considering All Phases And Their Current Status Permit applications will be submitted in April 2019. SHPO Concurrence will occur by July 2019. Project will go to bid by October 2019. Anticipated to begin construction by late Fall 2019/early Spring 2020 depending upon weather conditions.				
Have Assessment Districts Been Formed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Not Applicable				
Submitted By Mr. Donald Urlacher, Chairman, Hettinger County Water Resource Board				Date 02/22/2019
Address PO Box 157		City Mott	State ND	ZIP Code 58646
Telephone Number (701) 290-1075		Engineer Telephone Number (701) 255-5474		
Sponsor Email Address goober58646@yahoo.com (Wendy Frieze, Secretary)		Engineer Email Address MNangare@barr.com		
I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.				
Signature 				Date 02/22/2019

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

90% Design Level

ENGINEER'S OPINION OF PROBABLE COST

PROJECT: Karey Dam Rehabilitation
 LOCATION: Hettinger County, North Dakota
 PROJECT #: 34211001.00

ESTIMATED COSTS

Item No:	Item Description	Unit	Estimated Quantity	Unit Cost	Total Cost
1	Mobilization & Demobilization	LS	1	\$ 118,000.00	\$ 118,000.00
2	Temporary Erosion Control	LS	1	\$ 20,000.00	\$ 20,000.00
3	Clearing and Grubbing	LS	1	\$ 12,000.00	\$ 12,000.00
4	Strip and Stockpile Topsoil	LS	1	\$ 6,000.00	\$ 6,000.00
5	Water Control	LS	1	\$ 100,000.00	\$ 100,000.00
6	Barbed Wire Fence Removal	LF	101	\$ 6.00	\$ 606.00
7	New Barbed Wire Fence	LF	50	\$ 10.00	\$ 500.00
8	Remove Existing Dam	LS	1	\$ 80,000.00	\$ 80,000.00
9	Sediment Removal	CY	3890	\$ 25.00	\$ 97,250.00
10	PS-27.5 Sheetpile	SF	2980	\$ 27.50	\$ 81,950.00
11	Geotextile Fabric (NDDOT Type RR)	SY	1925	\$ 2.50	\$ 4,812.50
12	Granular Filter - Channel (12" USACE Type B2)	TON	1027	\$ 50.00	\$ 51,350.00
13	Granular Filter - Banks (9" USACE Type B2)	TON	650	\$ 45.00	\$ 29,250.00
14	Base Rock - Channel (30" NDDOT Grade I Riprap)	TON	2566	\$ 80.00	\$ 205,280.00
15	River Bank Riprap (24" NDDOT Grade I Riprap)	TON	1826	\$ 75.00	\$ 136,950.00
16	Boulders (3'-4' Nominal Diameter)	EA	243	\$ 370.00	\$ 89,910.00
17	Chinking Rock	TON	30	\$ 90.00	\$ 2,700.00
18	Cobbles	TON	60	\$ 80.00	\$ 4,800.00
19	Bank Excavation	CY	1593	\$ 6.00	\$ 9,558.00
20	Bank Grading	SY	500	\$ 10.00	\$ 5,000.00
21	Place Salvaged Topsoil	CY	643	\$ 8.50	\$ 5,465.50
22	Mulch and Seed	LS	1	\$ 9,000.00	\$ 9,000.00
	Construction Cost Subtotal				\$1,070,400
	10% Construction Cost Contingency				\$107,000
	10% Construction Engineering Support				\$117,700
	TOTAL PROJECT COST (Mid Range Estimate)				\$1,295,100
	Low Range Estimate (-5%)				\$1,230,300
	High Range Estimate (+10%)				\$1,424,600

Notes:

¹ Design Work Completed to Approximately 90% Design Level.

² Quantities Based on Design Work Completed.

³ Unit Prices Based on Information Available at This Time.

⁴ This 90% Design Level (Class 1 per ASTM E 2516-11) cost estimate is based on designs, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of the completion of design, but are not included at this level of project definition. The estimated accuracy range for the Total Project Cost as the project is defined is -5% to +10%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.





Karey Dam Vicinity Map

Located in T136N, R097W, S32BC
Approx. 3 mile NW of New England, ND
Cannonball River

Legend

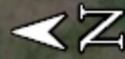
 Karey Dam

 Proposed Construction Footprint

Karey Dam

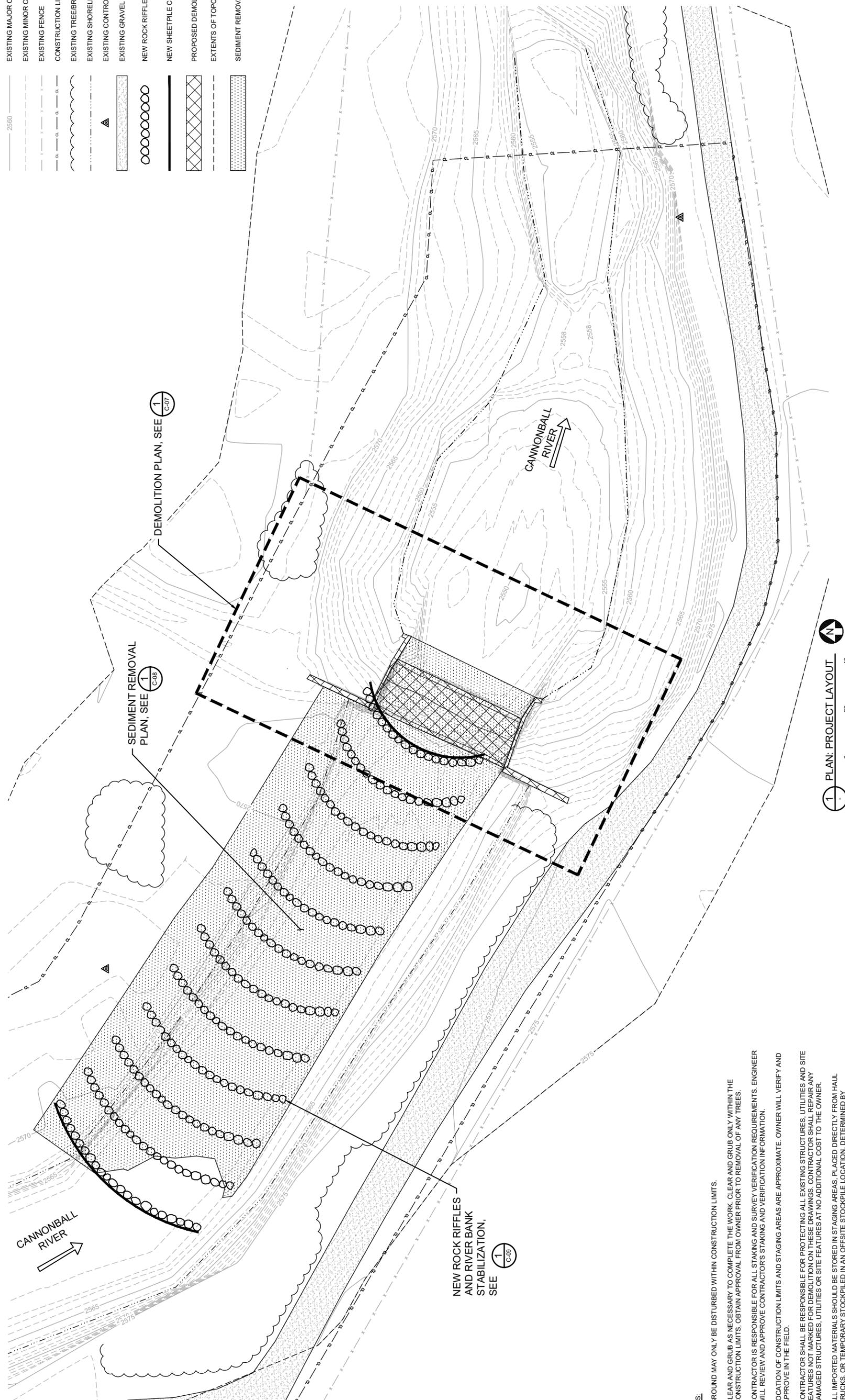
1-18th Ave SW

1-19th Ave SW



LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- CONSTRUCTION LIMITS
- EXISTING TREEBRUSH LINE
- EXISTING SHORELINE
- EXISTING CONTROL POINT
- EXISTING GRAVEL ROAD
- NEW ROCK RIFFLES
- NEW SHEETPILE CUTOFF
- PROPOSED DEMOLITION/REMOVAL
- EXTENTS OF TOPOGRAPHIC SURVEY
- SEDIMENT REMOVAL AREA



DEMOLITION PLAN, SEE 1 (C-07)

SEDIMENT REMOVAL PLAN, SEE 1 (C-06)

NEW ROCK RIFFLES AND RIVER BANK STABILIZATION, SEE 1 (C-08)

CANNONBALL RIVER

CANNONBALL RIVER

- NOTES:**
- GROUND MAY ONLY BE DISTURBED WITHIN CONSTRUCTION LIMITS.
 - CLEAR AND GRUB AS NECESSARY TO COMPLETE THE WORK. CLEAR AND GRUB ONLY WITHIN THE CONSTRUCTION LIMITS. OBTAIN APPROVAL FROM OWNER PRIOR TO REMOVAL OF ANY TREES.
 - CONTRACTOR IS RESPONSIBLE FOR ALL STAKING AND SURVEY VERIFICATION REQUIREMENTS. ENGINEER WILL REVIEW AND APPROVE CONTRACTOR'S STAKING AND VERIFICATION INFORMATION.
 - LOCATION OF CONSTRUCTION LIMITS AND STAGING AREAS ARE APPROXIMATE. OWNER WILL VERIFY AND APPROVE IN THE FIELD.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES, UTILITIES AND SITE FEATURES NOT MARKED FOR DEMOLITION ON THESE DRAWINGS. CONTRACTOR SHALL REPAIR ANY DAMAGED STRUCTURES, UTILITIES OR SITE FEATURES AT NO ADDITIONAL COST TO THE OWNER.
 - ALL IMPORTED MATERIALS SHOULD BE STORED IN STAGING AREAS. PLACED DIRECTLY FROM HAUL TRUCKS OR TEMPORARY STOCKPILED IN AN OFFSITE STOCKPILE LOCATION, DETERMINED BY CONTRACTOR.
 - CONTRACTOR MUST SUBMIT A WATER CONTROL PLAN TO BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION. A BASE CASE WATER CONTROL PLAN IS SHOWN ON DRAWING C-05. CONTRACTOR'S SEQUENCING OF WORK MUST FOLLOW THE APPROVED WATER CONTROL PLAN.



1 PLAN: PROJECT LAYOUT

90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION

BARR PROJECT No. 34211001.00		BARR PROJECT No. 34211001.00	
CLIENT PROJECT No.		CLIENT PROJECT No.	
PROJECT LAYOUT PLAN		PROJECT LAYOUT PLAN	
DWG. No. C-03		REV. No. C	
HETTINGER COUNTY WATER RESOURCE DISTRICT MOTT, NORTH DAKOTA			
KAREY DAM REHABILITATION HETTINGER COUNTY, ND			
AS SHOWN 8/23/2017	Scale Date	Z-JN MTP2	Drawn Checked Designed Approved
Project Office: BARR ENGINEERING CO. 234 WEST CENTURY AVENUE BISMARCK, ND 58503 Ph: 1-800-432-2277 Fax: (701) 222-4371 www.barr.com			
BARR Corporate Headquarters Ph: 1-800-432-2277			
CLIENT CONSTRUCTION	8/23/18 1/25/19 2/19/19	A B C 0 1 2 3	DATE RELEASED TO/FOR
C NUB2 MTP2 B NUB2 MTP2 A ZJN MTP2	2/19/19 1/25/19 5/22/18	PRELIMINARY DRAFT - 90% DESIGN PRELIMINARY DRAFT - 60% DESIGN PRELIMINARY DRAFT - 30% DESIGN	REVISION DESCRIPTION
NO. BY CHK APP. DATE	REVISION DESCRIPTION		



1 PLAN: SITE ACCESS AND STAGING

0 50 100
SCALE IN FEET

90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX
XXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XXXXXXXX AND
THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY,
234 WEST CENTURY AVENUE, BISMARCK, ND 58503

CLIENT	DATE	DATE RELEASED
BARR	2/18/19	
CONSTRUCTION		
RELEASED TO/FOR		
A	B	C
0	1	2
3		

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
B	NJB2	MITZ		2/19/19	PRELIMINARY DRAFT - 90% DESIGN
A	NJB2	MITZ		1/25/19	PRELIMINARY DRAFT - 60% DESIGN

Scale	AS SHOWN
Date	1/8/2019
Drawn	NJB2
Checked	MITZ
Designed	MITZ
Approved	

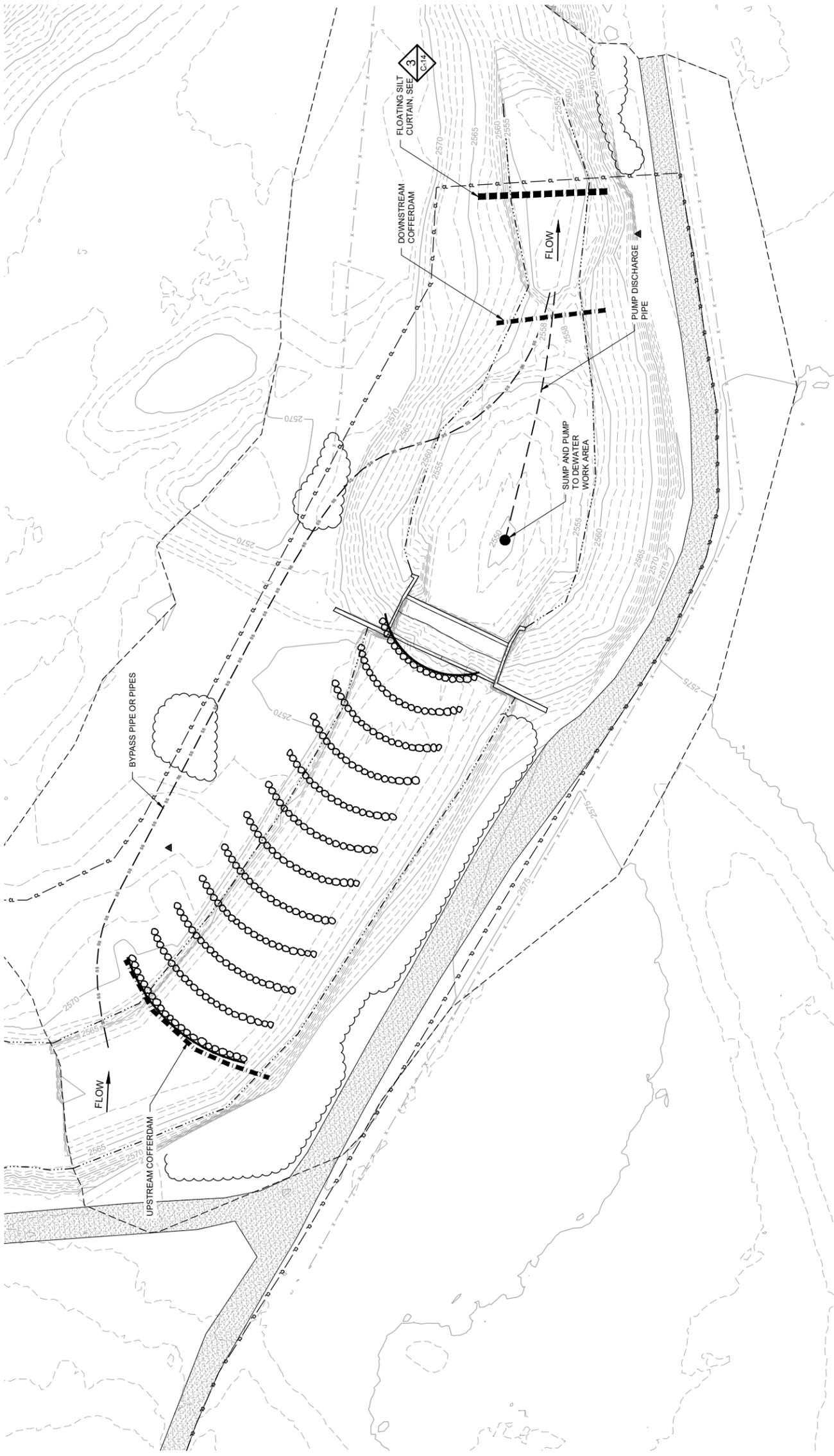
Project Office:
BARR ENGINEERING CO.
234 WEST CENTURY AVENUE
BISMARCK, ND 58503
Ph: 1-800-432-2277
Fax: (701) 222-4371
www.barr.com



HETTINGER COUNTY WATER
RESOURCE DISTRICT
MOTT, NORTH DAKOTA

KAREY DAM REHABILITATION
HETTINGER COUNTY, ND
SITE ACCESS AND STAGING
PLAN

BARR PROJECT No.	34211001.00
CLIENT PROJECT No.	
DWG. No.	C-04
REV. No.	B



- LEGEND:**
- EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - - - EXISTING EDGE OF WATER
 - - - EXISTING WETLAND BOUNDARY
 - - - EXISTING FENCE
 - - - EXISTING TREE/BRUSH LINE
 - EXISTING TREE
 - - - EXTENTS OF TOPOGRAPHIC SURVEY
 - - - CONSTRUCTION LIMITS
 - ▬ COFFERDAM
 - ▬ BYPASS PIPE
 - ▬ PUMP DISCHARGE PIPE
 - SUMP



1 PLAN: WATER CONTROL

GENERAL WATER CONTROL NOTES:

1. CONTRACTOR SHALL SUBMIT A WATER CONTROL PLAN TO BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION AND SHALL MODIFY THE BASE CASE WATER CONTROL PLAN AS CONTRACTOR DEEMS NECESSARY. THE BASE CASE PLAN IS INTENDED TO DEMONSTRATE AN ACCEPTABLE APPROACH TO MANAGE THE WATER.
2. THE WATER CONTROL PLAN SHOWN HERE IS THE BASE CASE WATER CONTROL PLAN. ALL DETAILS, MODIFICATIONS, ADDITIONS AND DELETIONS TO THIS PLAN SHOULD BE ADDRESSED IN THE CONTRACTOR'S WATER CONTROL PLAN.
3. CONTRACTOR'S COFFERDAMS SHALL NOT CONTAIN LOOSE FILL IN DIRECT CONTACT WITH FLOW. ACCEPTABLE COFFERDAM PRODUCTS INCLUDE SAND BAGS, PORTADAM, WATER INFLATED DAMS, JERSEY BARRIERS, OR SHEET PILE. OTHER OPTIONS MUST BE REVIEWED AND APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
4. SEE SHEET C-06 FOR SITE HYDROLOGIC CONDITIONS.
5. MAINTAIN A MINIMUM OF 1.0' FREEBOARD ON COFFERDAMS WHILE WORKING BETWEEN COFFERDAMS. IF 1.0' MINIMUM FREEBOARD IS REACHED, EVACUATE WORK AREA AND CONSULT WITH ENGINEER.
6. CONTRACTOR SHALL SELECT COFFERDAM ELEVATIONS BASED ON SITE HYDROLOGIC CONDITIONS AND CONTRACTOR'S RISK TOLERANCE. MINIMUM COFFERDAM ELEVATIONS ARE:
 UPSTREAM: 2565.0
 DOWNSTREAM: 2562.0
7. CONTRACTOR SHALL SELECT BYPASS PIPE (OR PIPES) SIZE AND INVERT ELEVATIONS BASED ON SITE HYDROLOGIC CONDITIONS AND CONTRACTOR'S RISK TOLERANCE.

SUMMARY OF BASE CASE WATER CONTROL PLAN WORK

1. REMOVE A PORTION OF THE EXISTING DAM AND ALLOW THE WATER LEVEL UPSTREAM OF THE EXISTING DAM TO MATCH TAILWATER LEVELS, TO APPROX. ELEV. 2558' - 2559', AS SHOWN ON GRAPH 5 ON DRAWING C-06.
2. CONSTRUCT UPSTREAM AND DOWNSTREAM COFFERDAMS AND INSTALL BYPASS PIPE TO ROUTE WATER FLOW AROUND THE ROCK RIFLE AREA. PROPOSED SHEETPILE SEEPAGE BARRIER MAY BE UTILIZED IN THE UPSTREAM COFFERDAM CONSTRUCTION IF THE CONTRACTOR DESIRES.
3. DEWATER AREA BETWEEN UPSTREAM AND DOWNSTREAM COFFERDAMS USING SUMPS AND PUMPS. DISCHARGE WATER DOWNSTREAM OF DOWNSTREAM COFFERDAM AND UPSTREAM OF FLOATING SILT CURTAIN.
4. COMPLETE DAM REMOVAL AND CONSTRUCT ROCK RIFFLES. MAINTAIN SUBGRADE OF ROCK RIFFLES IN DEWATERED CONDITION THROUGHOUT RIFLE CONSTRUCTION.
5. REMOVE UPSTREAM AND DOWNSTREAM COFFERDAMS AND BYPASS PIPE. BACKFILL AND COMPACT ANY EXCAVATION FROM BYPASS PIPE REMOVAL.

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY XXXXX XXXXXXXXXX, REGISTRATION NUMBER PE-XXXX ON XXXXXXXX AND THE ORIGINAL DOCUMENT IS STORED AT BARR ENGINEERING COMPANY, 234 WEST CENTURY AVENUE, BISMARCK, ND 58503

NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION
B	NJB2	MIT2		2/19/19	PRELIMINARY DRAFT - 50% DESIGN
A	NJB2	MIT2		1/25/19	PRELIMINARY DRAFT - 60% DESIGN
					RELEASED TO FOR
					DATE RELEASED

Project Office:
BARR
 BARR ENGINEERING CO.
 234 WEST CENTURY AVENUE
 BISMARCK, ND 58503
 Ph: 1-800-432-2277
 Fax: (701) 222-4371
 www.barr.com

Scale	AS SHOWN
Date	1/8/2019
Drawn	NJB2
Checked	MIT2
Designed	MIT2
Approved	

HETTINGER COUNTY WATER RESOURCE DISTRICT
 MOTT, NORTH DAKOTA

KAREY DAM REHABILITATION
 HETTINGER COUNTY, ND
WATER CONTROL PLAN

BARR PROJECT No.	34211001.00
CLIENT PROJECT No.	
DWG. No.	C-05
REV. No.	B

90% DRAFT SUBMITTAL
NOT FOR CONSTRUCTION



COST-SHARE REQUEST
 NORTH DAKOTA STATE WATER COMMISSION
 DEVELOPMENT DIVISION
 SFN 60439 (10/2018)

RECEIVED

MAR - 1 2019

STATE WATER COMMISSION

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 45 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name Goschke Dam Spillway Gate Retrofit (Emergency)			
Sponsor(s) Pembina County Water Resource District			
County Pembina	City Cavalier	Township/Range/Section	
Description Of Request <input checked="" type="checkbox"/> New <input type="checkbox"/> Updated (previously submitted)			
Specific Needs Addressed By The Project, Program, Or Study Dam gate and platform replacement			
If Study, What Type <input type="checkbox"/> Water Supply <input type="checkbox"/> Hydrologic <input type="checkbox"/> Floodplain Mgmt. <input type="checkbox"/> Feasibility <input type="checkbox"/> Other			
If Project/Program			
<input type="checkbox"/> Flood Control	<input type="checkbox"/> Multi-Purpose	<input type="checkbox"/> Bank Stabilization	<input checked="" type="checkbox"/> Dam Safety/EAP
<input type="checkbox"/> Recreation	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Snagging & Clearing	<input type="checkbox"/> Property Acquisition
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Water Retention	<input type="checkbox"/> Rural Flood Control	<input type="checkbox"/> Other
Are Connections Of New Rural Customers Located Within The Extra-Territorial Jurisdiction Of Municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Jurisdictions/Stakeholders Involved Area Landowners			
Description Of Problem Or Need And How Project Addresses That Problem Or Need The Goschke Dam is in need of a new gate/operator, as well as platform and trash rack to ensure the dam works as intended. The existing gate, platform, and trash rack are damaged beyond operability and need to be replaced. This project removes and replaces the existing gate, platform, and trash rack so the dam works as designed. The gate/operator became inoperable in the fall of 2018. The gate/operator needs to be replaced in order to operate the structure for the intended flood control benefits as well as honor Water Appropriations Permits relying on volume held in the Dam.			
Has Feasibility Study Been Completed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Not Applicable
Has Engineering Design Been Completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable
Have Land Or Easements Been Acquired?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable

Have You Applied For Any State Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any State Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Applied For Any Local Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any Local Permits? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Briefly Explain The Level Of Review The Project Or Program Has Undergone N/A.				
Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? No				
Funding Timeline (carefully consider when SWC cost-share will be needed) September 2019				
Source	Total Cost	2017-2019 7/1/17-6/30/19	2019-2021 7/1/19-6/30/21	Beyond 7/1/21
Federal	\$	\$	\$	\$
State Water Commission	\$ 103,110.00	\$ 103,110.00	\$	\$
Other State	\$	\$	\$	\$
Local	\$ 34,370.00	\$ 34,370.00	\$	\$
Total	\$ 137,480.00	\$ 137,480.00	\$ 0.00	\$ 0.00
List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied N/A.				
Please Explain Implementation Timelines, Considering All Phases And Their Current Status Immediate: Installation of a new gate and operator. Summer/Fall 2019: Retrofit a new platform over the riser.				
Have Assessment Districts Been Formed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable				
Submitted By Pembina County Water Resource District				Date 2/08/2019
Address 308 Court House Dr. #5		City Cavalier	State ND	ZIP Code 58220
Telephone Number 701-265-4511		Engineer Telephone Number 701-237-5065		
Sponsor Email Address lkemp@nd.gov		Engineer Email Address zherrmann@houstoneng.com		
I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.				
Signature 				Date 2/27/19

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

ENGINEER'S OPINION OF PROBABLE COSTS

for the
Goschke Dam Principal Spillway Gate Retrofit
County of Pembina, North Dakota
Pembina County Water Resource District
Cavalier, North Dakota

Contract Item	Work	Specification number	Estimated quantity	Unit	Unit Price	Total Cost
1	Mobilization		1	L.S.	\$5,000.00	\$5,000.00
2	Removal of Water	11	1	L.S.	\$5,000.00	\$5,000.00
3	Install Platform Structure	81	1	L.S.	\$50,000.00	\$58,000.00
4	Install Slide Gate	71	1	L.S.	\$14,000.00	\$13,000.00
ESTIMATED CONSTRUCTION COSTS						\$81,000.00
5	Materials					\$24,500.00
6	Engineering and Construction Admin.					\$31,980.00
TOTAL PROJECT COSTS						\$137,480.00

ENGINEER'S OPINION OF PROBABLE COSTS

for the

Goschke Dam Principal Spillway Gate Retrofit
 County of Pembina, North Dakota
 Pembina County Water Resource District
 Cavalier, North Dakota

Contract Item	Work	Specification number	Estimated quantity	Unit	Estimate (Previously Submitted)		Catwalk Replacement		Gate Replacement	
					Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
1	Mobilization		1	L.S.	\$5,000.00	\$5,000.00	\$8,600.00	\$8,600.00	\$0.00	\$0.00
2	Removal of Water	11	1	L.S.	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$0.00	\$0.00
3	Install Platform Structure	81	1	Each	\$58,000.00	\$58,000.00	\$21,600.00	\$21,600.00	\$0.00	\$0.00
4	Install Slide Gate	71	1	Each	\$13,000.00	\$13,000.00	\$0.00	\$0.00	\$70,000.00	\$70,000.00
ESTIMATED CONSTRUCTION COSTS										
5	Materials					\$81,000.00		\$32,200.00		\$70,000.00
6	Engineering and Construction Admin.					\$24,500.00		\$15,500.00		\$9,000.00
TOTAL PROJECT COSTS						\$31,980.00		\$10,980.00		\$21,000.00
ND STATE WATER COMMISSION COST SHARE REQUEST						\$137,480.00		\$58,680.00		\$100,000.00
						\$103,110.00		\$44,010.00		\$75,000.00

PROJECT NO.	SHEET NO.	TOTAL SHEETS
7382-0024	1	5

PEMBINA COUNTY WATER RESOURCE DISTRICT PLANS

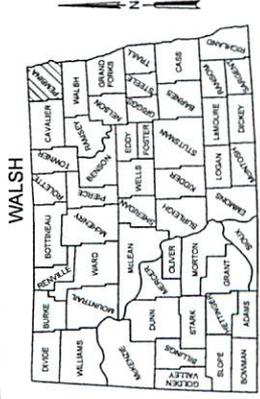
FOR
GOSCHKE DAM GATE AND PLATFORM RETROFIT
HEI PROJECT NO.
7382-0024

PROJECT CONSISTS OF PLATFORM
AND GATE REPAIR & INCIDENTALS.

COVERING SPECIFICATIONS.
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
AS APPLIED TO THE PROJECT SHALL BE USED UNLESS OTHERWISE
SPECIFIED. ALL STANDARD DRAWINGS CURRENTLY IN EFFECT, AND OTHER
CONTRACT PROVISIONS SUBMITTED HEREIN.

TABLE OF CONTENTS.

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	REMOVALS
3	PROPOSED
4	DETAILS
5	



SKETCH MAP OF NORTH DAKOTA
SHOWING COUNTIES

This document was originally
issued and sealed by
LUKE J. BECKERMANN
Registration Number
PE- 10087,
on 2-4-19 and the original
document is stored at
Houston Engineering Inc.

Houston Engineering Inc.

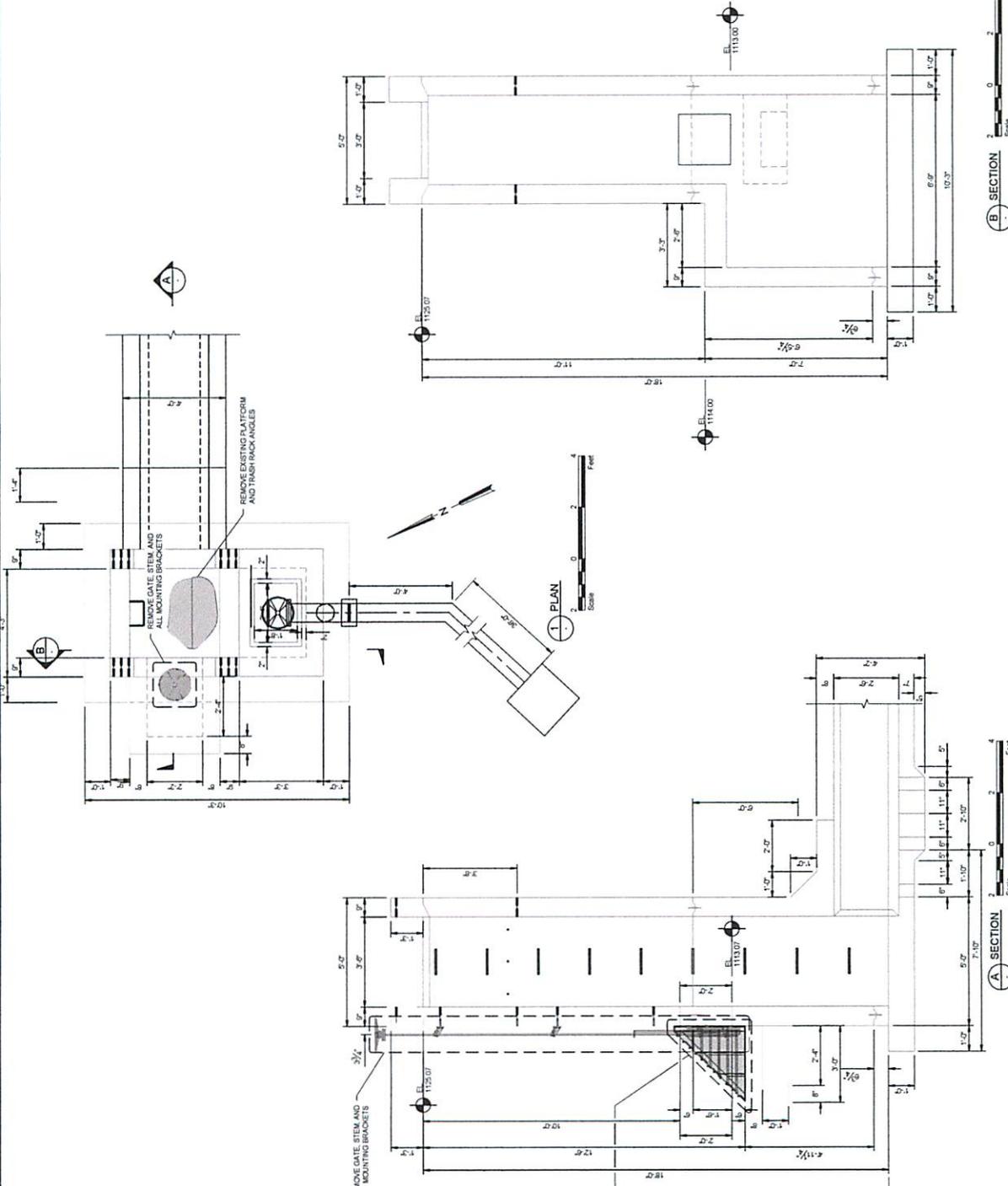
Fargo

P: 701.237.5065
F: 701.237.5101

H:\Projects\7382\7382-0024\Drawings\Cover.dwg (Layout) - 2/4/2019 5:05 PM (Johnson)

LEGEND

REMOVAL



TRASH RACK TO BE REMOVED AND REPAIRED AFTER THE NEW GATE IS INSTALLED. CARE SHALL BE TAKEN TO PROTECT THE TRASH RACK COMPONENTS DURING REMOVAL. ANY INCIDENTAL DAMAGE TO THE TRASH RACK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

This document was originally issued and sealed by
LUKE J. BECKERMANN
 Registration Number
PE-10087
 on 2-4-19 and the original document is stored at
 Houston Engineering Inc.

SCOPE OF WORK
 PROJECT NO. 7382-0024
 SHEET
 2 of 5

GOSCHKE DAM
 GATE AND SPILLWAY RETROFIT
 PEMBINA, COUNTY ND

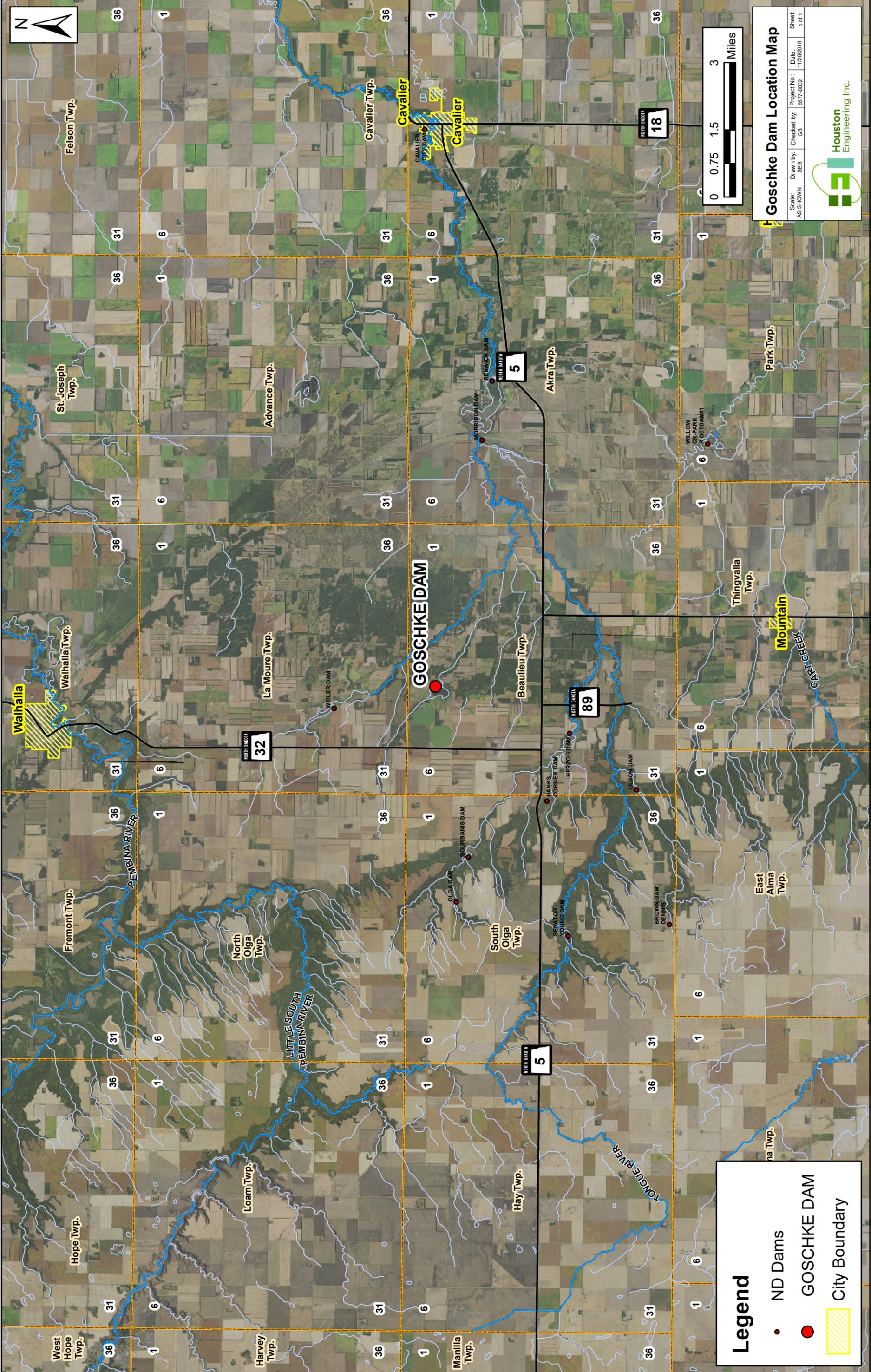
Drawn by
JER
 Date
2-4-19

Checked by
LIB
 Scale
AS SHOWN

Fargo
 P: 701.237.5065
 F: 701.237.5101



No.	Revision	Date	By



Legend

- ND Dams
- GOSCHKE DAM
- ▨ City Boundary



Goschke Dam Location Map

Scale:	AS SHOWN
Drawn by:	SES
Checked by:	GB
Project No.:	1677-0002
Date:	11/28/2018
Sheet:	1 of 1

February 27, 2019

RECEIVED
MAR - 1 2019
STATE WATER COMMISSION

Maple-Steele
Joint Water
Resource District

Beth Nangare
Cost Share Program Administrator
North Dakota State Water Commission
900 East Boulevard Avenue, Dept. 770
Bismarck ND 58505-0850

Dear Beth:

RE: Upper Maple River Dam Outlet Channel Improvements – Cost-Share Request

Rodger Olson
Chairman
Leonard, North Dakota

Josh Ihry
Manager
Hope, North Dakota

Gerald Melvin
Manager
Buffalo, North Dakota

Tor Bergstrom
Manager
Finley, North Dakota

Chad Miller
Manager
Buffalo, North Dakota

Greg Thykeson
Manager
Portland, North Dakota

The Upper Maple River Dam, located approximately five miles south of Hope, North Dakota, was recently constructed to provide flood protection in Cass County, Steele County and Barnes County. Due to recent high flow events, the dam has experienced significant erosion in the outlet channel immediately downstream of the principal spillway. The erosion of the channel, if not repaired and protected, will ultimately affect the function and stability of the dam. In order to address this dam safety issue, the Maple-Steele Joint Water Resource District (District) has been developing a project to repair and improve the outlet channel.

A preliminary design for the Upper Maple River Dam Outlet Channel Improvements Project (Project) has been completed and the Project is currently in the funding phase. The Project will include reconstructing the failed side slopes, removing unsuitable material, and reinforcing the channel with riprap to improve durability of the channel during high flows. The improvements associated with this project are expected to prevent future erosion that may be detrimental to the condition of the dam.

The District will be the Project sponsor and expects to complete design in spring 2019 and to complete construction by the end of 2019. Right of way acquisition will not be necessary, as the District already owns the lands needed for construction. The District has elected to move forward by filing funding applications for the design and construction of the channel improvements.

The District's consultants have developed an estimated cost of \$147,000, which includes construction costs, engineering costs, and other related project activities. With this letter and submission of supporting data, the District respectfully requests 75% cost-share on the eligible items under the State Water Commission Dam Safety section of the Cost-Share Policy for a total of \$110,250.

Enclosed is a map showing the location of the project, a preliminary set of plans, an *Engineer's Opinion of Probable Cost* and the *Cost-Share Request* form. If you have any questions, please feel free to contact us or our project engineer, Mike Opat, Moore Engineering, Inc., at 701-282-4692. Thank you.

Sincerely,

MAPLE-STEELE JOINT WATER RESOURCE DISTRICT



Carol Harbeke Lewis
Secretary-Treasurer

Enclosures

Carol Harbeke Lewis
Secretary-Treasurer
1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrđ@casscountynd.gov
www.casscountynd.gov



COST-SHARE REQUEST
 NORTH DAKOTA STATE WATER COMMISSION
 DEVELOPMENT DIVISION
 SFN 60439 (10/2018)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 45 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name Upper Maple River Dam Principal Spillway Outlet Channel Improvements			
Sponsor(s) Maple-Steele Joint Water Resource District			
County Steele	City	Township/Range/Section T-144-N / R-56-W / S-35	
Description Of Request <input checked="" type="checkbox"/> New <input type="checkbox"/> Updated (previously submitted)			
Specific Needs Addressed By The Project, Program, Or Study Dam Safety Improvements			
If Study, What Type <input type="checkbox"/> Water Supply <input type="checkbox"/> Hydrologic <input type="checkbox"/> Floodplain Mgmt. <input type="checkbox"/> Feasibility <input type="checkbox"/> Other			
If Project/Program			
<input type="checkbox"/> Flood Control	<input type="checkbox"/> Multi-Purpose	<input type="checkbox"/> Bank Stabilization	<input checked="" type="checkbox"/> Dam Safety/EAP
<input type="checkbox"/> Recreation	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Snagging & Clearing	<input type="checkbox"/> Property Acquisition
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Water Retention	<input type="checkbox"/> Rural Flood Control	<input type="checkbox"/> Other
Are Connections Of New Rural Customers Located Within The Extra-Territorial Jurisdiction Of Municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Jurisdictions/Stakeholders Involved Maple-Steele Joint Water Resource District			
Description Of Problem Or Need And How Project Addresses That Problem Or Need			
<p>The Upper Maple River Dam is earthen dry dam that provides flood protection to rural areas in Cass, Steele, and Barnes Counties. The channel downstream of the principal spillway structure is experiencing significant erosion during recent high flow events. The erosion of the channel, if not repaired and protected, will ultimately affect the function and stability of the dam.</p> <p>The improvements will include removing unsuitable material in the channel and reconstructing the slopes. Riprap will be placed around the principal spillway structure and in the channel to protect the dam from future erosion from high-flow events. The improvements associated with this project are expected to prevent future erosion that may be detrimental to the condition of the dam.</p>			
Has Feasibility Study Been Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Not Applicable			
Has Engineering Design Been Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable			
Have Land Or Easements Been Acquired? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable			

Have You Applied For Any State Permits? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any State Permits? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Applied For Any Local Permits? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Have You Been Approved For Any Local Permits? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable				
If Yes, Please Explain				
Briefly Explain The Level Of Review The Project Or Program Has Undergone The proposed improvement project has been discussed at WRD meetings. Preliminary Design has been completed.				
Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? The WRD is unaware of any obstacles at this time				
Funding Timeline (carefully consider when SWC cost-share will be needed)				
Source	Total Cost	2017-2019 7/1/17-6/30/19	2019-2021 7/1/19-6/30/21	Beyond 7/1/21
Federal	\$	\$	\$	\$
State Water Commission	\$	\$ 110,250.00	\$	\$
Other State	\$	\$	\$	\$
Local	\$	\$ 36,750.00	\$	\$
Total	\$ 0.00	\$ 147,000.00	\$ 0.00	\$ 0.00
List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied None				
Please Explain Implementation Timelines, Considering All Phases And Their Current Status Final Design - Spring 2019 Construction - Fall 2019				
Have Assessment Districts Been Formed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ongoing <input type="checkbox"/> Not Applicable				
Submitted By Maple-Steele Joint Water Resource District, Carol Harbeke Lewis, Secretary-Treasurer				Date
Address 1201 Main Ave W		City West Fargo	State ND	ZIP Code 58078-1301
Telephone Number (701) 298-2381		Engineer Telephone Number (701) 499-5867		
Sponsor Email Address LewisC@casscountynd.gov		Engineer Email Address MOp@mooreengineeringinc.com		
I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.				
Signature 				Date 2-27-19

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

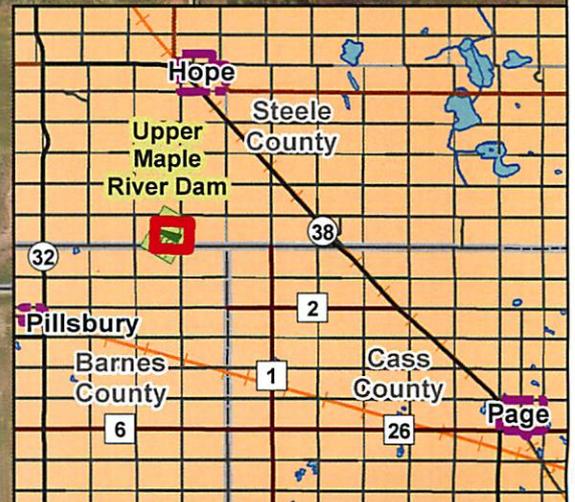
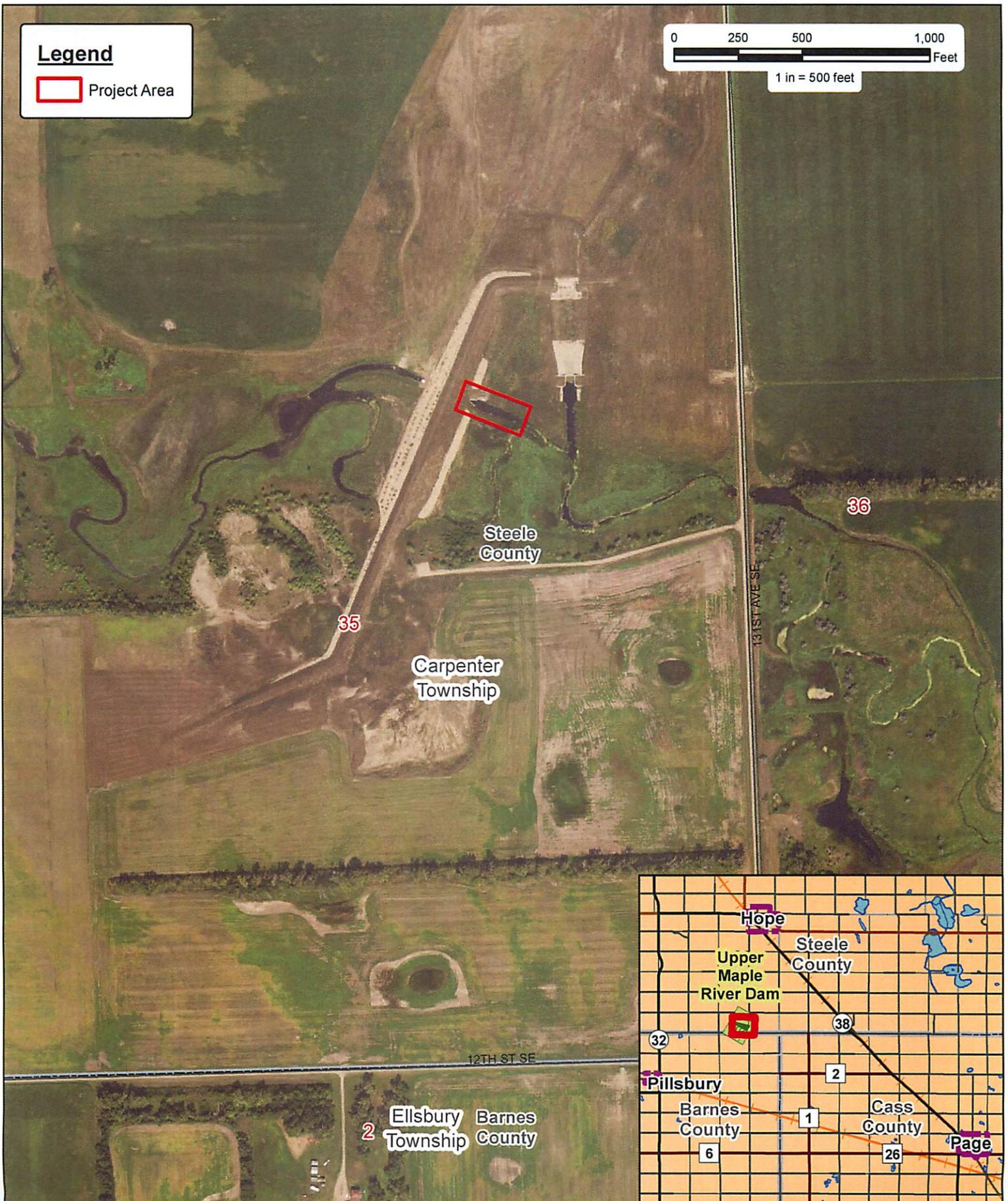
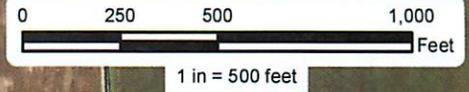
**Upper Maple River Dam Outlet Channel Improvements
Maple - Steele Joint Water Resource District
Cass County, North Dakota**

Engineer's Preliminary Opinion of Probable Cost

					<i>FUNDING SOURCES</i>		
<i>BID ITEM NO. & DESCRIPTION</i>	<i>UNIT</i>	<i>QUANTITY</i>	<i>UNIT PRICE</i>	<i>TOTAL</i>	<i>NDSWC (75%)</i>	<i>LOCAL</i>	
1.	Mobilization	LS	1	\$5,000.00	\$5,000.00	\$3,750.00	\$1,250.00
2.	Topsoil - Stripping & Spreading	LS	1	\$5,000.00	\$5,000.00	\$3,750.00	\$1,250.00
3.	Excavation	CY	300	\$8.00	\$2,400.00	\$1,800.00	\$600.00
4.	Embankment	CY	200	\$8.00	\$1,600.00	\$1,200.00	\$400.00
5.	Riprap - Class III	CY	800	\$80.00	\$64,000.00	\$48,000.00	\$16,000.00
6.	Riprap Filter Blanket	SY	1,500	\$3.00	\$4,500.00	\$3,375.00	\$1,125.00
7.	Dewatering	LS	1	\$5,000.00	\$5,000.00	\$3,750.00	\$1,250.00
8.	Seeding - Type III	LS	1	\$3,000.00	\$3,000.00	\$2,250.00	\$750.00
9.	Floating Silt Curtain	EA	1	\$1,500.00	\$1,500.00	\$1,125.00	\$375.00
Construction Subtotal				\$92,000.00	\$69,000.00	\$23,000.00	
Engineering - Preliminary				\$16,000.00	\$12,000.00	\$4,000.00	
Engineering - Design				\$10,000.00	\$7,500.00	\$2,500.00	
Engineering - Construction				\$10,000.00	\$7,500.00	\$2,500.00	
Owner Administration Expenses				\$1,000.00	\$750.00	\$250.00	
Project Contingencies				\$18,000.00	\$13,500.00	\$4,500.00	
TOTAL PROJECT COST				\$147,000.00	\$110,250.00	\$36,750.00	

Legend

 Project Area



**PROPOSED EROSION PROTECTION PROJECT
UPPER MAPLE RIVER DAM
STEELE COUNTY, NORTH DAKOTA**

Created By: JWP Date Created: 01/28/19 Date Saved: 01/28/19 Date Exported: 01/28/19
Plotted By: jordan prazak Parcel Date: N/A Aerial Image: 2017 County NAIP SIDS Elevation Data: N/A
Horizontal Datum: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet Vertical Datum: NAVD1988
T:\Projects\2000012002\20002_890_ND SWC Project Map.mxd



moore
engineering, inc.

UPPER MAPLE RIVER DAM OUTLET CHANNEL IMPROVEMENTS

MAPLE - STEELE JOINT WATER RESOURCE DISTRICT

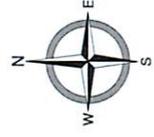
**Carpenter Township,
Steele County, North Dakota**



VICINITY MAP



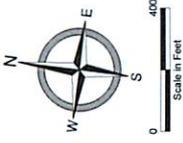
PROJECT LOCATION



PRELIMINARY

PROJECT No. 20002-890

APPROX. SITE LOCATION: 47°14'49"N, 97°43'55"W



HORIZONTAL CONTROL

NORTH DAKOTA COORDINATE SYSTEM OF 1929, SOUTH ZONE
COMBINATION FACTOR (CF) = 9998875
ALL COORDINATES ARE CASS COUNTY GROUND COORDINATES

VERTICAL CONTROL

NGVD 29

BENCHMARKS/SURVEY CONTROL

PRIOR TO PROJECT START, OWNER WILL SET AND ESTABLISH
BENCHMARKS AND SURVEY CONTROL FOR THE PROJECT.

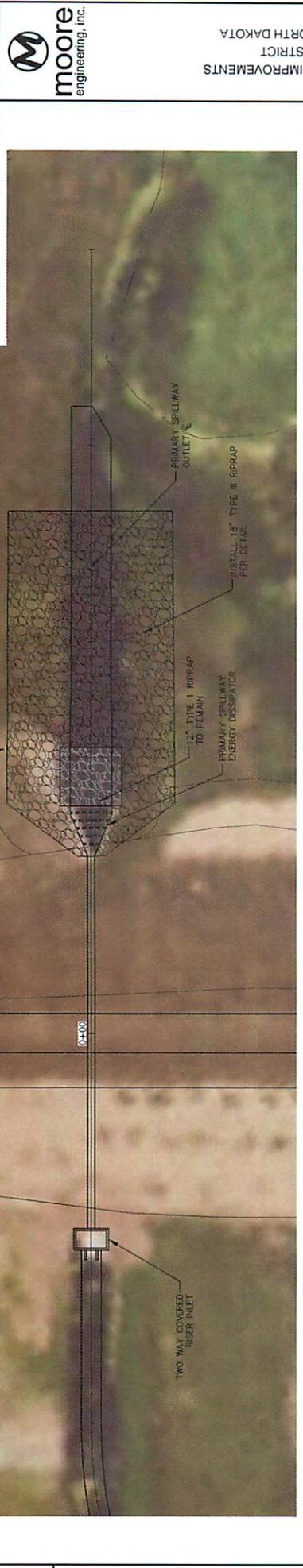
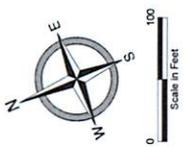
PRELIMINARY



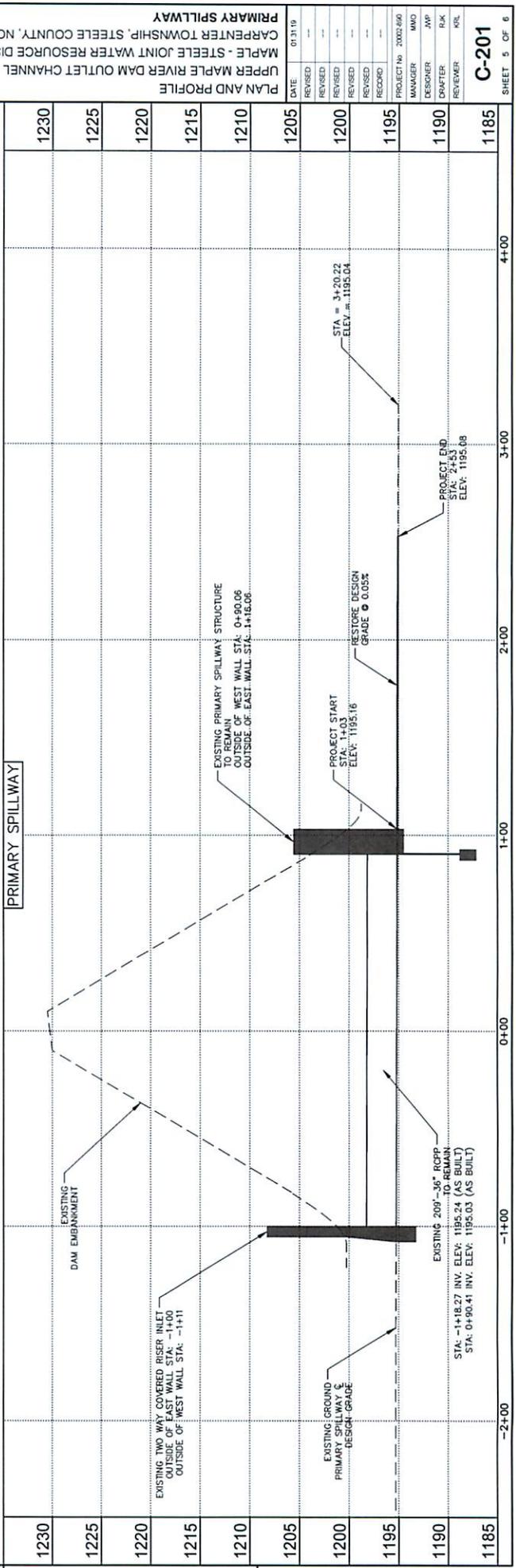
ALIGNMENT LAYOUT AND CONTROL
UPPER MAPLE RIVER DAM OUTLET CHANNEL IMPROVEMENTS
MAPLE - STEELE JOINT WATER RESOURCE DISTRICT
CARPENTER TOWNSHIP, STEELE COUNTY, NORTH DAKOTA
ALIGNMENTS, LINE AND CURVE TABLES, SURVEY CONTROL

DATE	01.31.19
REVISION	---
RECORD	---
PROJECT No.	2002-890
MANAGER	MMD
DESIGNER	JMP
DRAFTER	RLK
REVIEWER	KSL

PRELIMINARY



UPPER MAPLE RIVER DAM OUTLET CHANNEL IMPROVEMENTS
 MAPLE - STEELE JOINT WATER RESOURCE DISTRICT
 CARPENTER TOWNSHIP, STEELE COUNTY, NORTH DAKOTA
 PRIMARY SPILLWAY



DATE	01.31.19
REVISION	---
RECORD	---
PROJECT No.	2002-890
MANAGER	MMO
DESIGNER	AMP
DRAFTER	RAK
REVIEWER	KSL
C-201	
SHEET 5 OF 6	

Scope of Services	Tasks	Cost
Project Management	Kick off meetings, monthly progress meetings, monitor and report project schedule, QA/QC	\$ 14,939.00
Capital Repayment Evaluation	Review details, evaluation of transferring existing Capital Repayment, develop alternatives for Capital Repayment whether ownership is transferred or retained	\$ 39,276.00
Construction Contracts	Evaluate additional work and staff required by SWA	\$ 580.00
Water Rates	Review of existing rates, summarizing the costs identified, allocation of costs, quantify impact to all customers	\$ 26,560.00
Evaluation of results	Evaluation of impacts to water users and State	\$ 23,526.00
<i>Comparative Analysis - Optional*</i>	<i>Reviewing and summarizing different funding models and discussing merits and demerits of the different models</i>	\$ 45,656.00
Technical Memoranda - Capital Repayment and Rate Evaluation	Preparation and presentation to the Commission	\$ 3,440.00
<i>Technical Memoranda - Comparative Analysis - Optional*</i>	<i>Preparation and presentation to the Commission</i>	\$ 3,780.00
Final Report	Preparation and presentation to the Commission	\$ 15,654.00
Reimbursable cost		\$ 3,168.00
Total for Phase 1		\$ 176,579.00
Total for Phase 1 without Comparative Analysis		\$ 127,143.00

Table 1: Phase 1 Scope and Cost

Scope of Services	Tasks	Cost
Project Management	Kick off meetings, monthly progress meetings, monitor and report project schedule, QA/QC	\$ 6,196.00
Ownership of land and associated facilities	Review sample titles and deeds, record search, legal descriptions, chain of title, quantify cost to prepare, execute and record transfer documents.	\$ 20,540.00
Construction Contracts	Review construction documents expected to be open by the end of 2019-2021 biennium and evaluate impacts to ongoing construction and warranty	\$ 9,844.00
Water Supply Contracts	Review sample existing contracts, evaluate the amendment process and quantify cost to amend the contracts	\$ 6,240.00
Easements and permits	Review sample easements and permits, opinion and determination of transferability, quantify permits using GIS, quantify costs to transfer easements and permits, quantify costs for new permits and easements as needed	\$ 50,428.00
Other Agreements	Review other sample agreements, evaluate the amendment process, quantify cost to amend the agreements and to establish new agreements as needed	\$ 24,168.00
Legislation Changes	Review applicable sections of Century code and provide a summary of required changes	\$ 1,940.00
Technical Memoranda covering Ownership, Easements, permits and Contracts, Agreements	Preparation and presentation to the Commission	\$ 8,884.00
Final Report	Preparation and presentation to the Commission	\$ 11,956
Reimbursable cost		\$ 1,299
Total for Phase 2		\$ 141,495.00

Table 2: Phase 2 Scope and Cost



Water | Transportation | Municipal | Facilities

Scope of Services **DRAFT**

Southwest Pipeline Project Transfer of Ownership

North Dakota State Water Commission

March 22, 2019

Task No.*	Description
Alternative 1	
1	Project Management and Administration
2	Capital Repayment Evaluation
4	Construction Contracts – Alt 1
8	Water Rates
9	Evaluation of Results
10	Comparative Analysis
12	Technical Memoranda – Alt 1
13	Alternative 1 Report
Alternative 2	
1	Project Management and Administration
3	Ownership of Land and Associated Facilities
4	Construction Contracts – Alt 2
5	Water Supply Contracts
6	Easements and Permits
7	Other Agreements
11	Legislative Changes
12	Technical Memoranda – Alt 2
13	Final Report

This Scope of Services pertains to the following work items:

The Project includes a study regarding the Transfer of Ownership of the Southwest Pipeline Project (SWPP) from the State Water Commission (SWC) to the Southwest Water Authority (SWA). The purpose of the Study is to determine the advantages and disadvantages of the State divesting ownership of the SWPP. The study will include updates and input from the SWC staff via monthly progress meetings, interim technical memoranda and presentations at regular commission meetings. Comments will be taken after each presentation and addressed in the final reports. The project has been divided into two alternatives at the request of SWC staff. The tasks are numbered according to the original RFP. The individual tasks are described below.

Alternative 1

Task 1, Project Management and Administration - The Project Manager will ensure that the project proceeds in a timely and efficient manner, and that the Owner is provided proper communication of the project status. The subtasks for this section include the following:

- 1.1 Kick-Off Meeting.
- 1.2 Monthly Progress Meetings with SWC.
- 1.3 Monitor and Report Project Schedule.
- 1.4 Quality Assurance/Quality Control.

Task 2, Capital Repayment Evaluation – The Capital Repayment Evaluation will include a review of the existing capital repayment model for the SWPP, and an evaluation of potentially equitable options for adjustments if ownership were transferred or retained. The following subtasks are included:

- 2.1 Review details of the current Capital Repayment program along with historic increases in those payments.
- 2.2 Review details of Capital Repayments made to date, including payments from all customer classes and to State and federal loans and bonds and State Trust Funds.
- 2.3 Review details of the Replacement and Extraordinary Maintenance Fund payments and identify any overlap with future Capital Projects.
- 2.4 Evaluate whether the existing Capital Repayment model, with future payments made into the Trust Fund(s), can be transferred to the SWA or if new debt must be secured to provide a lump-sum payment at the time of ownership transfer.
- 2.5 Develop alternatives for modifying the Capital Repayment model by the SWA if ownership is transferred.
- 2.6 Develop alternatives for modifying the Capital Repayment model by the SWA if ownership is retained by the State Water Commission

Task 4, Construction Contracts – This task includes the evaluation of the effect of transfer of ownership on open construction contracts. The subtasks for this Alternative include the following:

- 4.3 Evaluate additional work for the SWA to perform construction management functions and additional staff requirements.

Task 8, Water Rates – This task includes the evaluation of the potential impact of rates to existing water users. The Water Rate Analysis will not evaluate changes to customer classifications or changing the allocation between the customer groups. Rather the percent change in rates will be proportionate for all customer groups. The subtasks for this section include the following:

- 8.1 Review of existing rates.
- 8.2 Summary of the one time and recurring costs identified above.
- 8.3 Evaluation of the distribution of costs to all customer classes.
- 8.4 Quantify the rate impacts on all customer classes.

Task 9, Evaluation of Results – This task includes the evaluation of the relative merits or lack thereof of the State divesting ownership of the SWPP to the SWA based on the analyses above. The subtasks for this section include the following:

- 9.1 Evaluation of the affordability of water rates with respect to median household incomes.
- 9.2 Evaluation of the impacts to the Trust Fund(s) with respect to the Capital Repayment revenue stream.
- 9.3 Evaluation of other impacts on both the water users and the State of North Dakota.

Task 10, Comparative Analysis – This task includes the completion of a comparative analysis of the funding framework currently used for the SWPP with that currently used by the Western Area Water Supply, Northwest Area Water Supply, and the proposed Red River Valley Water Supply Project. The subtasks for this section include the following:

- 10.1 Review and summarize capital financing programs used or proposed by each of the other 3 large regional water systems, including federal funding, state cost sharing assistance, and local share. Provide general comparative analysis of the funding model utilized by smaller rural water systems.
- 10.2 Document discussion of the merits and demerits of each capital financing model as it pertains to the SWPP

Assumptions:

1. The impacts of the models on the end users is not a part of this analysis.

Task 12, Technical Memoranda – Technical Memoranda will be issued during the course of the project at specific milestones. The goal of the Technical Memoranda is to keep stakeholders updated on key project information and to allow for stakeholder input. The Technical Memoranda planned for this Alternative are:

- 12.3 Technical Memoranda 3 – Capital Repayment and Rate Analysis
- 12.4 Technical Memoranda 4 – Comparative Analysis

Task 13, Alternative 1 Report – This task includes the consolidation of all the above analyses. The subtasks for this section include the following:

- 12.1 Draft Report.
- 12.2 Commission Presentation.
- 12.3 Final Report.

Alternative 2

Task 1, Project Management and Administration - The Project Manager will ensure that the project proceeds in a timely and efficient manner, and that the Owner is provided proper communication of the project status. The subtasks for this section include the following:

- 1.1 Kick-Off Meeting.
- 1.2 Monthly Progress Meetings with SWC.
- 1.3 Monitor and Report Project Schedule.
- 1.4 Quality Assurance/Quality Control.

Task 3, Ownership of Land and Associated Facilities – This task includes the evaluation of a potential process for transferring all land interests and associated facilities from the SWC to the SWA, including a quantification of anticipated costs. All land interests and associated facilities would need to be transferred to the SWA. The subtasks for this section include the following:

- 3.1 Review Titles and Deeds.
- 3.2 Review Legal Descriptions.
- 3.3 Verify the Chain of Title.
- 3.4 Quantify the cost to Prepare Ownership Transfer Documents.
- 3.5 Quantify the cost to Execute and Record Transfer Documents.

Assumptions:

- 2. The SWC owns 38 land parcels for the SWPP. The ownership documents for the SWPP land and associated facilities will be provided by the SWC rather than individually researched through County records.
- 3. A representative sample of the titles and deeds will be reviewed and evaluated.
- 4. The titles and deeds that are reviewed will be taken randomly over the life of the project.

Task 4, Construction Contracts – This task includes the evaluation of the effect of transfer of ownership on open construction contracts. The subtasks for this Alternative include the following:

- 4.1 Review of open construction contracts.
- 4.2 Evaluation of the effects of ownership transfer on ongoing construction and warranties.

Assumptions:

- 1. The SWC will provide copies of construction contracts that are expected to be open by the end of the 2019-2021 Biennium. Those contracts expected to be closed by then will not be reviewed.

Task 5, Water Supply Contracts – This task includes the evaluation of a process for amending the existing water supply contracts. The subtasks for this section include the following:

- 5.1 Review of existing contracts.
- 5.2 Evaluation of the contract amendment process.
- 5.3 Quantify the cost to amend the contracts.

Assumptions:

- 1. Water Supply Contracts will be provided by the SWC
- 2. Approximately 1/3 of the existing water supply contracts will be reviewed.
- 3. The reviewed contracts are assumed to be representative of all contracts for the purpose of estimating the time and cost required to transfer ownership.

Task 6, Easements and Permits – This task includes the evaluation of a process for amending the easements and permits issued to the SWC for the SWPP and any associated impacts to the SWPP. The subtasks for this section include the following:

- 6.1 Review easements and Permits.
- 6.2 Opinion and determination of transferability.
- 6.3 Estimation of the number and type of permits based on GIS information.
- 6.4 Quantify the cost to transfer easements and permits.
- 6.5 Quantify the cost to establish new easements and permits where required.

Assumptions:

- 1. Easement and permit documents will be provided by the SWC.
- 2. A representative sample of easements and permits will be selected over the course of the Project; 32 easements and 32 permits taken from 16 separate contracts spaced over the 40 years of the Project.
- 3. GIS files will be provided by the SWC.
- 4. The reviewed easements and permits are assumed to be representative of all easements and permits for the purpose of estimating the time and cost required to transfer ownership.

Task 7, Other Agreements – This task includes the evaluation of a process for amending the other agreements issued to the SWC for the SWPP and any associated impacts to the SWPP. The subtasks for this section include the following:

- 7.1 Review of other agreements.
- 7.2 Evaluation of the agreement amendment process.
- 7.3 Quantify the cost to amend the agreements.
- 7.4 Quantify the cost to establish new agreements where required.

Task 11, Legislation Changes – This task includes the identification of legislative changes required to transfer the ownership of the SWPP. The subtasks for this section include the following:

- 11.1 Review of the ND Century Code Chapters 61-24.3 and 61-24.5 regarding the SWPP and the SWA.
- 11.2 Summary of provisions requiring modification for Ownership Transfer.

Task 12, Technical Memoranda – Technical Memoranda will be issued during the course of the project at specific milestones. The goal of the Technical Memoranda is to keep stakeholders updated on key project information and to allow for stakeholder input. The Technical Memoranda planned for this Alternative are:

- 12.1 Technical Memoranda 1 – Ownership, Easements and Permits
- 12.2 Technical Memoranda 2 – Contracts and Agreements

Task 13, Final Report – This task includes the consolidation of all the above analyses. The subtasks for this section include the following:

- 12.1 Draft Final Report.
- 12.2 Commission Presentation.
- 12.3 Final Report.

PROJECT SCHEDULE

<u>Milestones</u>	<u>Completion Date (Week of)*</u>
Execute Engineering Agreement – Alternative 1	April, 2019
Deliver Draft Technical Memoranda 3 – Capital Repayment and Rates Analysis and Draft Technical Memoranda 4 – Comparative Analysis to SWC staff	September 19, 2019
Present Draft Technical Memorandum 3 and 4 to Commission	October 3, 2019*
Deliver Draft Alternative 1 Report to SWC Staff	November 21, 2019
Present Draft Alternative 1 Report to Commission	December 6, 2019
Deliver Final Alternative 1 Report to SWC Staff	December 20, 2019
Execute Engineering Agreement – Alternative 2	December, 2019
Deliver Draft Technical Memoranda 1 – Contracts and Agreements to SWC staff	February, 2020
Present Draft Technical Memoranda 1 to Commission	February, 2020
Deliver Draft Technical Memoranda 2 – Ownership, Easements, and Permits to SWC staff	April, 2020
Present Draft Technical Memoranda 2 to Commission	April 2020
Deliver Draft Final Report to SWC Staff	June, 2020
Present Draft Final Report to Commission	June, 2020
Deliver Final Report	June, 2020

*Each presentation of the technical memoranda will be followed by a 30 day comment period. Comments will be addressed in the final reports.



Southwest Pipeline Project Transfer of Ownership Proposed Project Timeline

Proposed Deliverables

Work Schedule and Tasks	2019												
	March	April	May	June	July	August	September	October	November	December			
Project Coordination													
Anticipated Contract Execution													
Milestone Coordination Meetings													
Capital Repayment													
Review details of current Capital Repayment Program													
Review details of Capital Repayments made to date													
Review details of REM payments													
Evaluate whether the existing model can be transferred													
Develop alternatives - SWA Ownership													
Develop alternatives - SWC ownership													
Ownership of Land and Associated Facilities													
Title and Deed Review													
Process Evaluation													
Quantification of Costs													
Construction Contracts													
Contract Review													
Evaluation of Impacts													
Water Supply Contracts													
Contract Review													
Process Evaluation													
Quantification of Costs													
Easements and Permits													
Easement Review													
Determination of Transferrability													
Permit Review													
Process Evaluation													
Quantification of Costs													
Other Agreements													
Agreement Review													
Process Evaluation													
Quantification of Costs													
Water Rate													
Summarize Transfer Costs and Allocation													
Evaluate Rate Impacts													
Evaluation of Results													
Evaluate Feasibility of Alternatives													
Comparative Analysis													
Review and summarize capital financing programs													
Document discussion of merits/demerits of each													
Legislation Changes													
ND Century Code Review													
Assessment of Legislative Changes													
Reports													
Draft Tech Memo #1: Contracts and Agreements													
Draft Tech Memo #2: Ownership, Easements and Permits													
Draft Tech Memo #3: Capital Repayment and Rate Analysis													
Draft Tech Memo #4: Comparative Analysis													
Draft Report													
Presentation of Findings													
Final Report													



**Southwest Pipeline Project Transfer of Ownership
Proposed Project Timeline
Alternates 1 and 2**

Proposed Deliverables

Work Schedule and Tasks	2019 - 2020															
	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	
Alternate 1																
Task 1 - Project Management and Administration	[Grey bar]															
Anticipated Contract Execution	[Yellow]															
Milestone Coordination Meeting		[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]					
Task 2 - Capital Repayment Evaluation	[Grey bar]															
Review details of current Capital Repayment Program		[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Review details of the Capital Repayments made to date			[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Review details of REM payments			[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Evaluate whetehr the existing model can be transferred			[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Develop alternatives - SWA Ownership					[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Develop alternatives - SWC Ownership						[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 4 - Construction Contracts	[Grey bar]															
Evaluation of Impacts	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 8 - Water Rates	[Grey bar]															
Summarize Transfer Costs and Allocation				[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Evaluate Rate Impacts					[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 9 - Evaluation of Results	[Grey bar]															
Evaluate Feasibility of Alternatives							[Yellow]									
Task 10 - Comparative Analysis	[Grey bar]															
Review and summarize capital financing programs	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Document discussion of merits/demerits of each	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 12 - Technical Memoranda	[Grey bar]															
Draft Tech Memo #3: Capital Repayment and Rate Analysis							[Yellow]									
Draft Tech Memo #4: Comparative Analysis							[Yellow]									
Task 13 - Final Report Alternative 1	[Grey bar]															
Draft report								[Yellow]								
Presentation of Findings									[Yellow]							
Final report										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Alternative 2																
Task 1 - Project Management and Administration	[Grey bar]															
Anticipated Contract Execution										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Milestone Coordination Meeting											[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 3 - Ownership of Land and Assoc. Facilities	[Grey bar]															
Title and Deed Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Process Evaluation										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Quantification of Costs										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 4 - Construction Contracts	[Grey bar]															
Contract Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 5 - Water Supply Contracts	[Grey bar]															
Contract Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Process Evaluation										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Quantification of Costs										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 6 - Easements and Permits	[Grey bar]															
Easement Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Determination of Transferability										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Permit Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Process Evaluation										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Quantification of Costs										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 7 - Other Agreements	[Grey bar]															
Agreement Review										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Process Evaluation										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Quantitficaton of Costs										[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 11 - Legislative Changes	[Grey bar]															
ND Century Code Review											[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Assessment of Legislative Changes											[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 12 - Technical Memoranda	[Grey bar]															
Draft Tech Memo #1: Contracts and Agreements											[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Draft Tech Memo #2: Ownership, Easements, and Permits											[Yellow]	[Yellow]	[Yellow]	[Yellow]	[Yellow]	
Task 13 - Final Report Alternative 2	[Grey bar]															
Draft Final Report														[Yellow]	[Yellow]	
Presentation of Findings														[Yellow]	[Yellow]	
Final Report														[Yellow]	[Yellow]	



March 14, 2019

Garland Erbele
State Engineer & Secretary
ND State Water Commission
900 E Blvd Ave, Dept 770
Bismarck, ND 58505

GARRISON DIVERSION
CONSERVANCY DISTRICT
P.O. BOX 140
CARRINGTON, N.D. 58421
(701) 652-3194
FAX (701) 652-3195
gdcd@gdcd.org
www.garrisondiversion.org

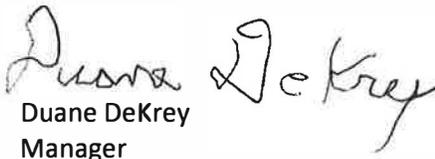
Dear Garland:

As you know, Garrison Diversion Conservancy District (Garrison Diversion) is moving forward with planning and construction of the Red River Valley Water Supply Project (RRVWSP). Garrison Diversion is able to access the final \$13 million appropriated by the 2017-2019 legislature in HB1020 once we can meet the objectives identified therein, one of which is that a water source is secured. As you know from many presentations and meetings with your office, Garrison Diversion plans to use water from the Missouri River, appropriated approximately six miles south of the City of Washburn, McLean County, North Dakota; NE $\frac{1}{4}$, in Section 5, Township 143N, Range 81E.

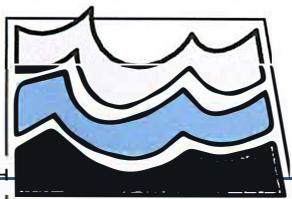
Garrison Diversion hereby requests 120,000 acre-feet of water from the Missouri River using State Water Permit Number 1416A. Permit 1416 was originally held by the Bureau of Reclamation for the purposes of the Garrison Diversion Unit. That permit was split to allow the State of North Dakota to hold a portion of that Permit through Permit Number 1416A for project purposes. The RRVWSP is one of the purposes for which that water right was being held by the State of North Dakota. Garrison Diversion is hereby requesting approval by the State Water Commission, pursuant to its authority found in North Dakota Century Code 61-02-03, for a split of that permit and assignment of 120,000 acre-feet to Garrison Diversion for the RRVWSP intended for MR&I use. Alternatively, the State Engineer could assign the permit to Garrison Diversion pursuant to Administrative Code 89-03-02-08. Either way, once the permit is allocated to Garrison Diversion, it is anticipated that Garrison Diversion will formally request a change in the point of diversion to reflect the precise diversion point being contemplated for the RRVWSP.

Garrison Diversion would appreciate having this request considered at the April 9, 2019, State Water Commission meeting. We would like to be in a position to confirm as many HB1020 factors as possible during this legislative session, so your cooperation on bringing this forward at the upcoming meeting would be greatly appreciated.

Sincerely,


Duane DeKrey
Manager

DD/las



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
 (701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
 Members of the State Water Commission
FROM: Garland Erbele P.E., Chief Engineer – Secretary
SUBJECT: Devils Lake Update
DATE: March 19, 2019

Garland Erbele

Hydrologic Update

The March 19th Devils Lake water surface elevation is 1448.3 feet. This elevation is approximately 1.4 feet below the lake level one year ago. Winter precipitation has been well above average and the Devils Lake Basin is no longer classified in any drought category.

The most recent Devils Lake probabilistic pool forecast was released on March 7th and forecasted a 50 percent chance of a lake rise of 1.5 feet and a 10 percent chance of a lake rise of 2.4 feet. Potential lake levels provided in the National Weather Service probabilistic outlook for the period of March 4, 2019 to September 30, 2019 are provided in the table below. The lake rise and related increase in lake area are also included for reference.

Lake Rise Probability	90%	50%	10%
Lake Elevation (feet)	1449.2	1449.8	1450.7
Feet of lake rise	0.9	1.5	2.4
Lake Area Increase (acres)	7,300	12,500	20,700

Devils Lake Outlet Management Advisory Committee

As of March 19th, a meeting date for the Devils Lake Outlet Management Advisory Committee has not yet been finalized. This committee consists of seventeen stakeholders and provides outlet operation recommendations to the Governor and State Water Commission.

For the past several operating seasons, the committee has recommended full capacity discharge of both Devils Lake Outlets within their specified limitations on downstream water quality and quantity down to a lake elevation of 1448.0 feet. If that elevation were reached, the committee's intent was to re-convene to further discuss future operation. The minimum intake elevation is 1445 ft for the West Outlet and 1446 ft for the East Outlet. If the spring lake rise is on the lower side of the probabilistic forecast, and the outlets are operated similar to recent years, an elevation of 1448.0 feet could be achieved sometime during the 2019 operating season.

GE:JK:TD:ph/416-10



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 •
(701) 328-2750 • TTY 1-800-366-6888 or 711

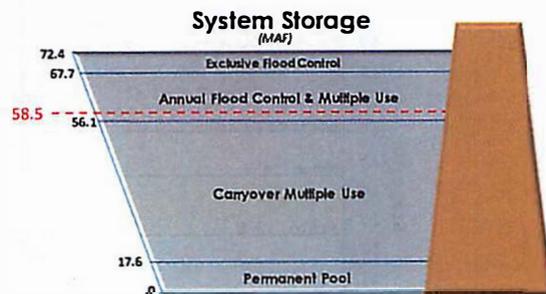
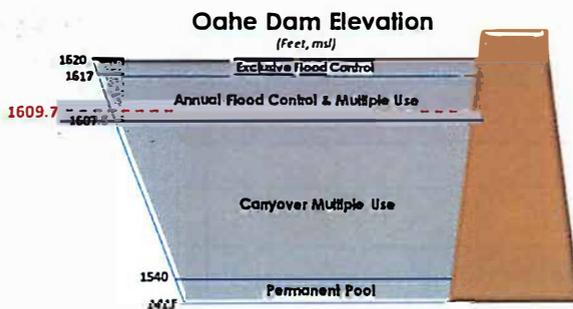
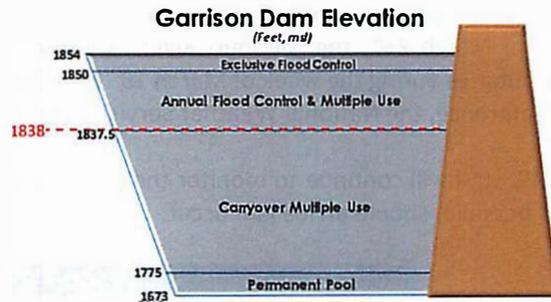
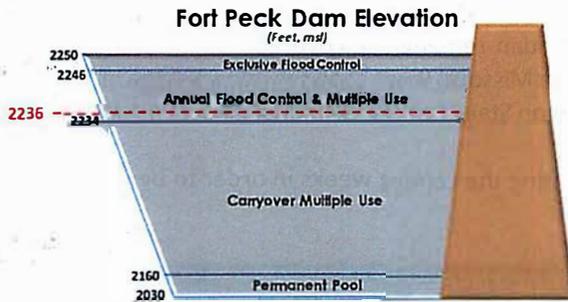
BISMARCK, NORTH DAKOTA 58505-0850
• FAX (701) 328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Missouri River Update
DATE: March 25, 2019

System/Reservoir Status

Reservoir elevations and system volume as of March 25th are presented in the schematics below and identified by the red lines. System storage is presented in million acre-feet (MAF). Historical data for the system is provided in a table on the following page.



DOUG BURGUM, GOVERNOR
CHAIRMAN

GARLAND ERBELE, P.E. CHIEF
ENGINEER-SECRETARY

Table 1: Reservoir System Historical Data

	Reservoir Elevation (feet msl)			Total System Storage (MAF)
	Fort Peck	Garrison	Oahe	
March 25th, 2019	2,236.0	1,838.0	1,609.7	58.5
One-Year Ago	2,234.5	1,837.6	1,608.3	57.2
<u>End of January</u>				
Average	2,228.2	1,832.8	1,603.3	54.8
Record High (elevation [year])	2,246.2 [1979]	1,847.7 [1972]	1,617.9 [1997]	64.6 [1997]
Record Low (elevation [year])	2,197.5 [2007]	1,807.6 [2008]	1,574.4 [2005]	35.6 [2005]

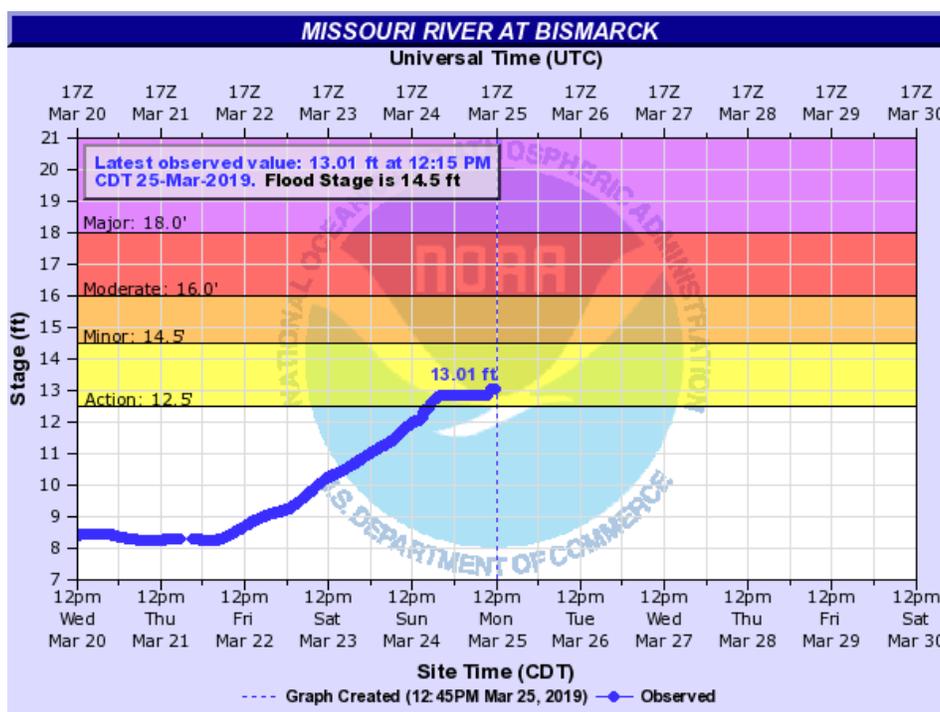
Runoff and Reservoir Forecasts

Garrison Dam releases have been reduced to 13,600 cfs and are forecasted to remain around 13,000 cfs for the coming weeks. The March runoff forecast predicts runoff above Sioux City for this year to be 28.4 MAF or 112 percent of average. Inflows into Lake Sakakawea will continue to rise during the coming weeks as snowpack in the upper basin melts; however, the reservoir is not anticipated to exceed the Annual Flood Control & Multiple Use Zone.

Ice-Affected Flow on the Garrison Reach

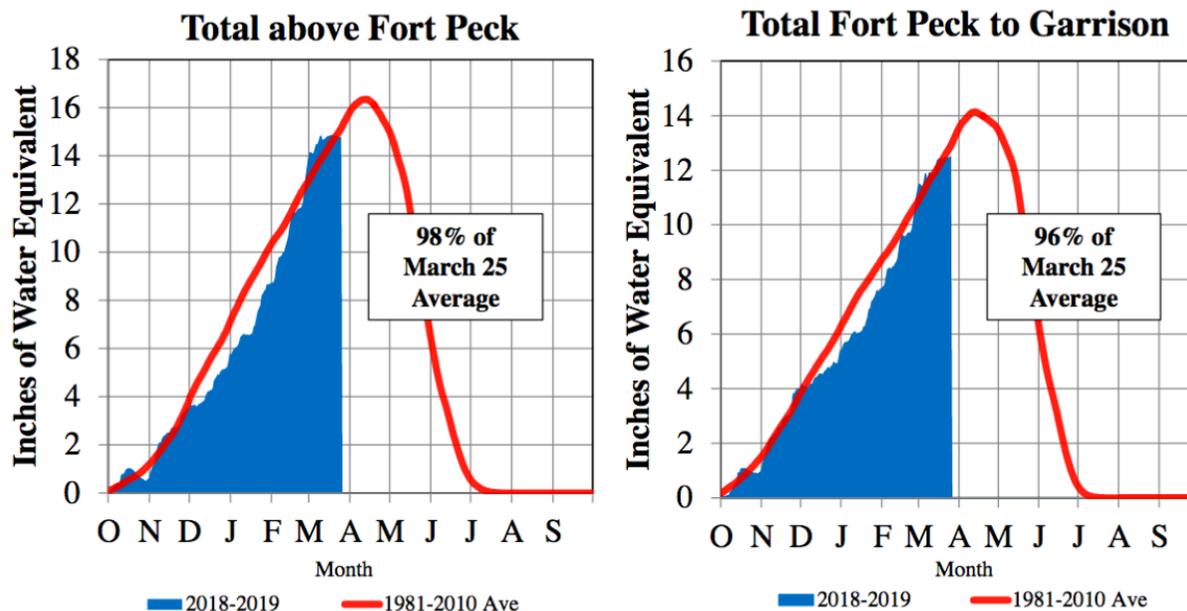
As of March 25th, the Missouri River in Bismarck/Mandan remains ice-covered. High discharge from tributaries during the week of March 18th resulted in the Missouri River gage reaching a stage of 13.0'. As a reference, the National Weather Service defines "Action Stage" at the Bismarck gage as 12.5'.

SWC staff will continue to monitor the river closely during the coming weeks in order to be as proactive as possible, should an ice jam occur.



Mountain Snowpack

The Missouri River snowpack, as of March 25th, is below average. As shown in the figures below, the snowpack in the “Above Fort Peck” reach is 98 percent of average and the “Fort Peck to Garrison Reach” (including the Yellowstone River basin) is 96 percent of average. The mountain snowpack normally peaks around April 15th. SWC staff will continue to monitor the mountain snowpack in preparation for the spring runoff.



Missouri River Recovery Implementation Committee (MRRIC)

Section 5018 of the 2007 Water Resources Development Act (WRDA) authorized the Missouri River Recovery Implementation Committee (MRRIC). The Committee is to make recommendations and provide guidance on activities of the Missouri River Recovery Program (MRRP). MRRIC has nearly 70 members representing local, state, tribal, and federal interests throughout the Missouri River Basin. The representatives for the State of ND on MRRIC are John Paczkowski (primary) and Jesse Kist (alternate).

A Joint Work Group meeting will be held in Nebraska City on April 17-18 for MRRIC members and members of the Bird, Fish, and Human Considerations Work Groups to work on developing recommendations for MRRIC to send to the Corps of Engineers and the Fish and Wildlife Service regarding the Missouri River Recovery Program (MRRP). John Paczkowski is a member of the Bird Work Group, and Jesse Kist is a member of the Bird, Fish, and Human Considerations Work Groups.

Emergent Sandbar Habitat Construction

Emergent Sandbar Habitat in the Missouri River remains a primary habitat metric for the Corps of Engineers to achieve compliance with the Endangered Species Act regarding the threatened piping plover and the endangered least tern. There are no near-term plans for an emergent sandbar habitat (ESH) construction project in the Garrison Reach, as habitat is currently well above the target acreage.

The Corps is currently performing a geomorphology study on the Garrison Reach in order to better understand the dynamics of ESH and to improve their ability to model and forecast ESH acreage.

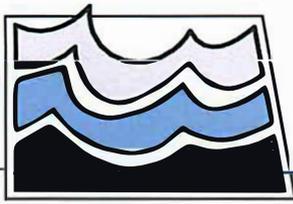
Water Supply Rule

In October, SWC staff became aware that the Corps decided to delay finalizing the Water Supply Rule until August 2019 to allow time to consult with states and tribes. The proposed rule attempts to define how the Corps would require users to enter into storage contracts and be charged for the use of water from Corps' reservoirs for domestic, municipal, and industrial purposes.

The state has previously submitted comments to the Corps that emphasize that the proposed rule is fundamentally flawed due to the Corps' differing interpretation of state versus federal jurisdictions with respect to water appropriation and western water law, and its interpretation of the 1944 Flood Control Act. The proposed rule does not recognize states' rights to allocate water, and it interferes with states' sovereign rights. Language within the proposed rule is also cause for concern relative to the proposed use of Lake Ashtabula as a re-regulation reservoir for the Red River Valley Water Supply Project.

Garrison Reach Cumulative Effects of Bank Stabilization

The Corps of Engineers will be surveying and assessing the Garrison Reach this spring to quantify the amount of bank stabilization that exists along the river. These activities are anticipated to begin the end of April. The information gathered will be used to assist the Corps in better understanding the cumulative effects that bank stabilization has on river dynamics. SWC staff will be in communications with the Corps during this effort and will likely join Corps staff for select portions of the survey to provide a local perspective.



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328 2750 TTY 1-800-366-6888 or 711 • FAX (701) 328 3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Souris River Update
DATE: March 26, 2019

Mouse River Enhanced Flood Protection Project (MREFPP)

The Souris River Joint Board (SRJB) sponsored Mouse River Enhanced Flood Protection Project (MREFPP) is a basin wide project looking to reduce flood risk in the Mouse River Basin within North Dakota.

In Minot, work continues on the Broadway Pump Station and Perkett Ditch Pump Station. Nearly all of the levee fill in phases MI-2 and MI-3 has been placed with the exception of a few tie-in areas. Landscaping in phases MI-2 and MI-3 has taken place, and the western portion of the project is mostly complete. Engineers with the project have also submitted 90-percent designs for the west tieback levee to the U.S. Army Corps of Engineers (Corps) and are looking to submit 50-percent designs for the Maple Diversion to the Corps in mid-July.

Final design for the levee in the City of Burlington has been submitted to the Corps for final approval along with a Section 408-permit application. These submittals are also concurrent with the Colton Avenue Bridge project (i.e. Burlington bridge).

Integrated Feasibility Study

The Integrated Feasibility Study with the Corps is being conducted to determine if the federal government has interest in the MREFPP. It was expected that the final report, the Chief's Report, would be signed by the end of February. The draft version of the Chief's Report, which was reviewed by commission staff, showed federal interest in the Maple Diversion and its north levee, along with a tieback levee on the west side of Minot. Due to the federal government shutdown, the Corps resubmitted the draft report to federal agencies for another extended comment period. It is expected that the report will be signed after this comment period closes. After the report is signed, the components of the project that warranted federal interest can be authorized in any federal congressional legislation.

Plan of Study

The International Joint Commission's (IJC) Plan of Study will review and update the operating agreements for Rafferty, Grant Devine (formerly known as Alameda), Boundary, and Darling Dams. It is anticipated that the study will be complete in 2020. An appointed Study Board, which oversees the study, has begun work on some of the tasks detailed in their work plan. Currently, the study is

moving from the creation of tools and modelling platform phases towards the plan formulation and alternative development phases.

The Study Board conducted a workshop in mid-March with the IJC's Public Advisory Group (PAG) and the Study Board's Resource and Agency Advisory Group (RAAG). The workshop displayed the performance indicators that were developed for the study, and each group provided input on the performance indicators. Performance indicators relate interests on the river to stage or flow, so the study can identify impacts due to alternative operating plans. The Study Board also inquired what alternative operating plans each advisory group would be interested in seeing as a potential alternative. The Study Board plans on running these alternatives to determine their feasibility in the coming months.

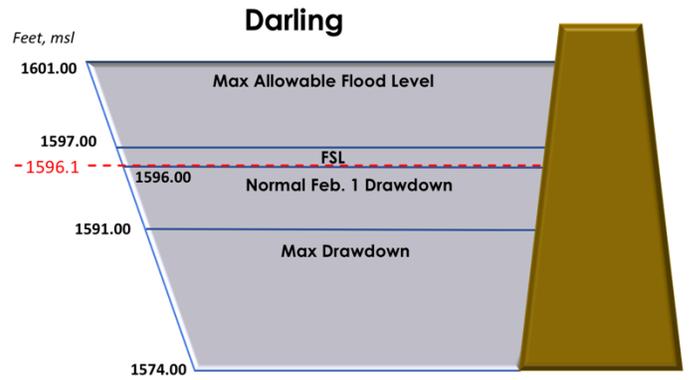
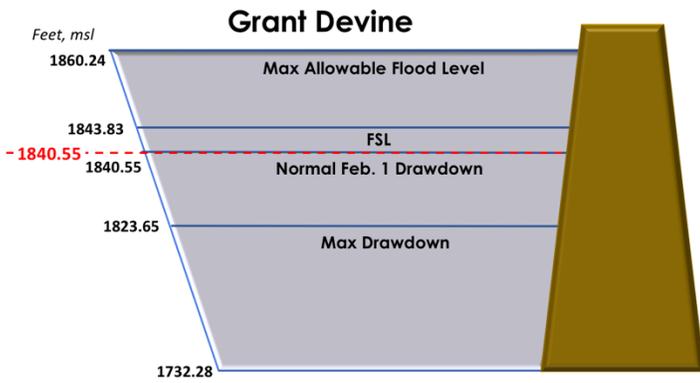
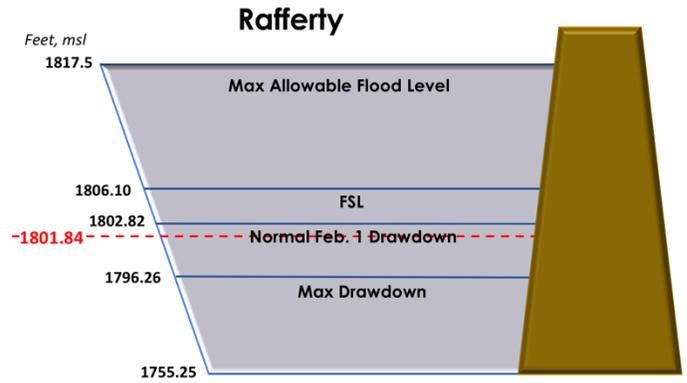
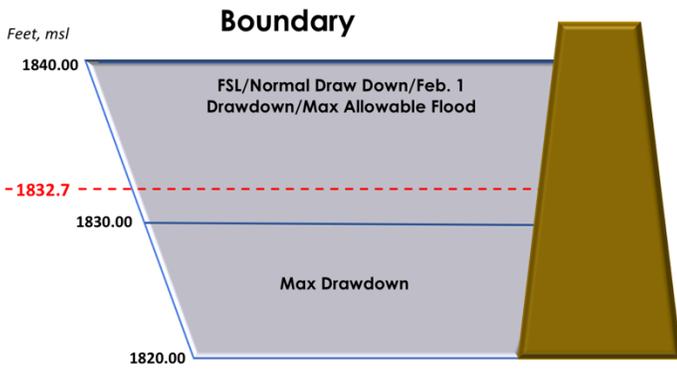
The Study Board has also been working to develop a First Nations, Metis and Tribes Advisory Group. U.S. members of the Study Board along with water commission staff met with the Tribal Historic Preservation Officers from Standing Rock, Three Affiliated Tribes, Spirit Lake, and Turtle Mountain Band of Chippewa to discuss the study and determine if the tribes had any interest in contributing to the study. After the meeting it was determined that the North Dakota tribes are interested, and future meetings are currently being planned.

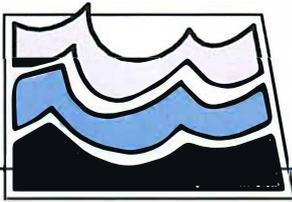
The Study Board is in its approval process of the study's hydrometeorological network report. The report identifies the gaps in the hydrometeorological network and identifies improvements that will help to facilitate water resource management decision-making within the basin. The identified improvements include six real-time precipitation gages, three of which are in North Dakota, and eight real-time stream gages, three of which are in North Dakota. The U.S. Army Corps of Engineers (St. Paul District) is interested in presenting the findings of the hydrometeorological network report at the State Water Commission meeting in June.

System/Reservoir Status Above Minot

Total System

System volume on March 19 in the four reservoirs above Minot was approximately 523,000 acre-feet, with an available flood storage volume of nearly 522,000 acre-ft. The normal end of February storage (for flood and non-flood years) is approximately 540,000 acre-ft.





North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: March 22, 2019

Manitoba & Missouri Lawsuit

Summary judgement was granted to North Dakota on August 10, 2017. Both plaintiffs filed appeals in October, and initial filings were due November 27, 2017. The court issued a briefing schedule January 3, 2018 with appellant's briefs due February 12, 2018, appellee's briefs due March 14, 2018, and appellant's reply briefs due March 28, 2018. A joint motion was filed and approved by the court to hold the case in abeyance for 90 days to allow settlement negotiations between appellant Manitoba and the appellees. Another joint motion was filed and approved by the Court to extend the abeyance further to allow further discussions. A joint motion by North Dakota, Department of Interior, and Province of Manitoba moving to dismiss Manitoba's appeal was filed June 22, 2018 and granted by the Circuit Court the following week. The State of Missouri continued their appeal of the Court's decision briefing only on the issue of their standing in the case. Oral arguments were held November 8, 2018 in the District of Columbia Circuit Court of Appeals. A ruling is expected spring/summer of 2019.

Biota Water Treatment Plant Design

A value planning workshop was held July 30, 2018 through August 2, 2018 for this project. The 30 percent design kickoff workshop was held October 3, 2018 through October 5, 2018. An internal 30 percent design review was held the week of March 18, 2019. A value engineering workshop will be required for the project and is tentatively scheduled for the first week of June 2019. The project should be ready to bid early next year.

NAWS Contract 7-1B – Minot WTP Phase II Improvements

NAWS Contract 7-1B was awarded by the State Water Commission at its February 8, 2018 meeting to PKG Contracting and generally consists of construction of a new primary treatment building at the Minot water treatment facility to replace the aging softening basins, chemical storage and feed systems, a new laboratory, break room, and IT facilities. All contract documents have been executed, and the notice to proceed was signed March 21, 2018. A preconstruction conference was held that same day in Minot. Work on this project is currently underway. The substantial completion date for this contract is December 20, 2019.

NAWS Contract 2-2A-2 – 19th Ave Vault Relocation

NAWS Contract 2-2A-2 was awarded to PKG Contracting, Inc. in the amount of \$515,695. Work performed under this contract was substantially complete in November. Final reclamation work will be in the spring.

NAWS Contract 2-4A – Renville Corner to Westhope

This contract will involve roughly 16 miles of pipe and related appurtenances to extend the potable distribution system from the corner of US Highway 83 and State Highway 5 to south of Westhope. Bids were opened for this contract February 28, 2019. Six bids were received, and Kemper Construction of Minot, North Dakota was the low bidder at \$4,274,260.50. Five of the six bids were lower than the engineer's estimate as the current bidding environment is very beneficial to the project. The contract was awarded to Kemper March 21, 2019. The substantial completion date is October 31, 2019, and the final completion date is June 1, 2020.

NAWS Contract 2-3C – Lansford to Renville Corner

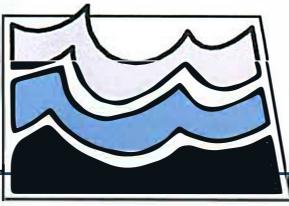
Final contract documents are currently out for final review. No bid date has been set as of this time but is anticipated for May or June. This contract will involve roughly 18 miles of pipe and related appurtenances to extend the potable distribution system north of Minot near Lansford to tie into the existing pipeline along highway 5. This will complete the 'looped' nature of the distribution pipeline greatly expanding our hydraulic capacity and flexibility to serve our customers as well as adding redundancy to the system.

NAWS Contract 6-1A – Intake Modifications to Snake Creek Pumping Plant

The design kickoff meeting for Contract 6-1A was held October 3-5 in Denver. Anticipated design costs are roughly \$2 million with a timeframe of approximately one year. This facility will have to come on line coincident with the completion and commissioning of the Biota Water Treatment Plant.

Remaining project components

Preliminary design has begun for the two remaining pipeline contracts to Bottineau. Design has also been initiated for numerous other critical project components necessary to deliver water to Bottineau and deliver water from Lake Sakakawea to Minot.



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer - Secretary
SUBJECT: SWPP – Project Update
DATE: March 21, 2019

Oliver, Mercer, North Dunn (OMND) Regional Service Area Rural Distribution Contract 7-9G Bid Schedule 1:

Rural distribution contract 7-9G Bid Schedule 1 has been closed out. That was the final rural distribution contract that was open.

Other Contracts

Contract 8-1A New Hradec Reservoir:

This contract involves furnishing and installing a 296,000-gallon fusion powder coated bolted steel reservoir. Olander Contracting Company is the contractor. The contract documents were executed on May 16, 2013, and the Notice to Proceed was issued on June 3, 2013. The substantial completion date on this contract was September 15, 2013. The tank was put into service on February 20, 2014. The contractor disputed the liquidated damages withheld. The contractor did not provide any justification for the delays. The contractor filed a lawsuit against us and their tank sub-contractor in October 2016. Our legal counsel filed an answer to their lawsuit. We did not hear anything regarding the lawsuit for many months. In October 2018, the contractor filed the complaint in the District Court and requested a scheduling conference for the lawsuit. The trial for this lawsuit is currently scheduled for January 14 – 20, 2020. Our legal counsel was contacted recently by the attorneys for the contractor and subcontractor indicating their interest in pursuing mediation on this case.

Contract 3-2D Six (6) MGD Water Treatment Plant (WTP) at Dickinson:

The water treatment plant started producing finished water on February 7, 2018. The contract was considered substantially complete on March 7, 2018.

An issue with delamination of concrete floors was identified, and a solution was provided to the General Contractor. The General Contractor filed a claim disputing the decision by the Engineer on potential change order for the concrete floor repair work. The contractor was directed to complete the repair work, with responsibility for the cost to be resolved thereafter. The floor repair work is complete. A meeting between BW/AECOM, SWC and the contractor to discuss the claim was held. The General Contractor was asked to provide more documentation to support their claim. We received the documentation from the contractor recently, and it is under review.

BW/AECOM has determined the cost responsibility for the temporary and permanent heat and electricity between SWC, General, Mechanical and Electrical contractors and forwarded that information to the contractors. To date, seven change orders totaling \$414,983.39 (2 percent of the contract amount) have been signed by all parties. The General Contractor, John T. Jones Construction Company, is working on administrative items and warranty items.

On the Electrical contract, two change orders totaling \$56,663.26 (2 percent of the contract amount) have been signed by all parties. The contractor, Edling Electric, Inc., is working on administrative items and warranty items.

On the Mechanical Contract, three change orders totaling \$158,644.48 (6 percent of the contract amount) have been signed by all parties. The contractor, Williams Plumbing and Heating, Inc., is working on administrative items and warranty items.

Contract 3-2E Residual Handling Building at Dickinson WTP:

The preconstruction conference for this contract was held on October 5, 2017 with all three contractors; Rice Lake Construction Group, Central Mechanical Inc., and Edling Electric. The General Contractor, Rice Lake Construction Group, mobilized to site on October 16, 2017. The contract has a milestone completion date of September 1, 2018 for having the building enclosed and a Substantial Completion date of February 28, 2019. The Milestone Completion was considered achieved on October 19, 2018. The General Contractor sent a letter indicating that the Electrical and Mechanical contractors were able to begin work on several areas on September 1st and were not impacted, so the intent of the Milestone completion date was achieved on September 1, 2018. BW/AECOM responded to the letter indicating that their statement regarding the Electrical and Mechanical contractors not being impacted by the delayed Milestone completion requires concurrence from the Electrical and Mechanical Contractors. It was also noted that possible additional weather days and days for work change directives have not been accounted for yet. Since then the General Contractor has sent in a time extension request for 81 days on the Milestone, Substantial and Final completion dates. Their request was based on submittal review delays and a trucker strike in India. Their request was reviewed, and 31 days of extension was determined to be justified.

The current schedule from the General contractor, Rice Lake Construction Group indicates that Substantial Completion will be achieved in early April 2019.

The electrical contractor has informed us that the electrical switch gear delivery is delayed and would result in a delay in the substantial completion. BW/AECOM has advised the electrical contractor to pursue the temporary switch gear option, so the General and Mechanical contractors can still achieve substantial completion. The current schedule from the Electrical Contractor, Edling Electric, Inc., shows shipping of the switch gear the week of March 18, 2019.

The Mechanical contractor, Central Mechanical, Inc., has requested a Certificate of Substantial Completion as they have completed all the work that can be completed without the use of electrical switch gear. Their work was inspected, and it was determined that their request is valid. The certificate is under preparation.

Contract 5-1A and 5-2A 2nd Richardton Reservoir and 2nd Dickinson Reservoir:

The State Water Commission (SWC), at its October 12, 2016 meeting, awarded Contract 5-2A, 2nd Dickinson Reservoir, to John T. Jones Construction Company. A preconstruction conference for this contract was held on March 30, 2017. The contractor has completed work on the new reservoir, and the new reservoir came online on September 7, 2018. Work on the existing tank is mostly complete, and the tank is currently being used. Work on the davit and platform on the existing tank remains to be completed. The contract was considered substantially complete on December 5, 2018. The contract completion date on this contract was November 1, 2017. Contractor initially requested a 115-day extension to the contract due to weather delays and changes incorporated into the contract. In response to a request for more documentation, the contractor changed their request to 67 days. We have responded to their request indicating a 45-day extension is justified. Contractor has sent a request to waive liquidated damages for delay in completion of the contract. The contractor attributes lack of available labor and weather as the reason for delay. A response was sent to the contractor reducing the Liquidated Damages to the additional construction administration costs incurred by the State Water Commission from the contract completion date specified in the contract to the actual date of substantial completion. After multiple discussions with the contractor, we agreed to reduce the liquidated damages to the actual field observer's cost on the project which totaled \$44,475.66. The contract amount will be adjusted for the agreed upon liquidated damages in a future change order. To date, one change order totaling \$19,475 has been signed by all parties.

The SWC at its December 9, 2016 meeting awarded Contract 5-1A, 2nd Richardton Reservoir, to Engineering America, Inc. A preconstruction conference was held on June 7, 2017. The contract was approximately 88 percent complete. Engineering America, Inc., went out of business as of the end of July. The bonding company has taken over responsibility for the remaining work on the contract. The bonding company has directed us to get quotes for completing the remaining work with them being responsible for any costs above the remaining funds on the contract. The remaining work on the contract will require five different contractors; a bolted tank contractor, cathodic protection contractor, earthwork contractor, welded tank contractor and fencing contractor. We executed contracts with a bolted tank contractor, welded tank contractor and cathodic protection contractor. The bolted tank contractor and the cathodic protection contractor have completed their work. The welded tank contractor has installed the supplemental overflow for the existing welded tank. Painting of the supplemental overflow will be completed in the Spring when the weather cooperates. We have received the final proposal to complete the earthwork, general and fencing work on the contract. An agreement will be executed soon, and work will commence in spring.

Contract 2-1B Raw Water Line Capacity Upgrade from intake to OMND WTP:

The scope of work for Contract 2-1B generally consists of furnishing and installing 19,026 lineal feet of 30" diameter steel pipeline. The contract was substantially complete on November 15, 2018. A few punch list items, administrative items and landowner releases remain before the contract can be closed out. The contractor submitted a claim for approximately \$280,000 alleging differing subsurface condition. BW/AECOM disagrees with their claim. It is our understanding that the contractor plans on dropping the differing subsurface conditions claim. One change order totaling \$170,866.50 (3 percent of the contract amount) has been signed by all parties.

Contract 1-2A Supplemental Raw Water Intake:

The contractor, J.W. Fowler Company (JWF), launched the Microtunneling Boring Machine (MTBM) along the current alignment in August 2017. On October 5, 2017, JWF had installed approximately 1000 feet of intake pipe when employees observed some cracks on pipe no. 58 located approximately 500 feet from the caisson. After pushing a few additional pipes, the cracks worsened. On October 18, 2017, JWF informed that the best course of action to remediate the incident was to leave the installed pipe string in place and pursue other options to complete the intake pipe to the screen location.

JWF's initial plan was to install a 65 X 25-foot rescue shaft on top of the MTBM to retrieve the machine and relaunch the machine from the rescue shaft. This information was conveyed to the United States Army Corps of Engineers (USACE) to get permission for performing geotechnical exploration. USACE's review indicated that the rescue shaft is located on an established culturally significant site. USACE's ability to allow a rescue shaft at the location would depend on consultation and review by other agencies and tribes and would involve a significant amount of time. JWF explored other options which included constructing an emergency rescue shaft on the shoreline approximately 150' lake side of the MTBM location, installing the intake pipe by using Direct Pipe® option from near the existing shaft to the proposed screen location and using Horizontal Directional Drilling (HDD) for installing the intake pipe. JWF submitted a preliminary insurance package for review. More information is requested from JWF before the package can be accepted.

HDD method is currently the primary focus for JWF. JWF considered 36" outside diameter (OD) steel pipe and 42" OD HDPE pipe as options. JWF's diving subcontractor completed the underwater topographical survey under the lake during the week of September 11. Based on the topographical data obtained, 42" HDPE pipe along the first tunnel drive is the preferred option for the contractor. The contractor has submitted their plan for completing the project using the HDD method. Additional information to address environmental issues was requested from JWF. The schedule submitted with the plan shows the start of HDD in July 2019 with project completion in June 2020. Because of the delay in submitting the application material to Bureau of Reclamation and USACE for the construction permit and easement, it is likely that the construction will not commence this year.

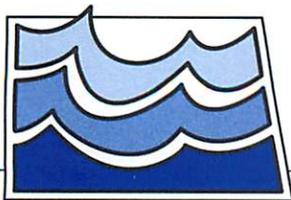
Contract 4-1E/4-2B Upgrades at the Dodge and Richardton pump stations:

Contract documents are executed for all three contracts – General, Mechanical and Electrical. BW/AECOM has started receiving submittals from the contractors for review and approval. Preconstruction conference is scheduled for April 3, 2019. A change order to include upgrading the chloramination equipment at the Dodge pump station to accommodate higher flows will be included in this contract.

Future Contracts:

Specific Authorizations for the design of the 2nd Davis Butte reservoir, 2nd Belfield reservoir, blowoff and inline valve upgrades along the main transmission required because of pump station upgrades, and review of the 911 address information to assess the potential capacity needs of the rural areas have been executed. The reservoirs, blow off upgrades, intake supplemental pump station and rural distribution upgrades contracts are planned for construction next biennium.

GE:SSP:pdh/1736-99



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
 (701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
 State Water Commission
CC: State Engineer Garland Erbele
FROM: Jennifer Verleger, Assistant Attorney General
SUBJECT: State Water Commission Litigation Update
DATE: April 9, 2019

STATE WATER COMMISSION LITIGATION

Case: Manitoba v. Norton
Date Filed: October 21, 2002
Court: U.S. District Court for the District of Columbia
Attorney: Jen Verleger/Nessa Horewitch, SAAG (Beveridge and Diamond)

Consolidated With

Case: Missouri v. Salazar
Date Filed: February 2009
Court: U.S. District Court for the District of Columbia, Case #1:02-cv-02057
 D.C. Circuit Court of Appeals, Govt. of the Province Manitoba, et al. v. Sally Jewell, et al - Case #16-5203
 D.C. Circuit Court of Appeals, Govt. of the Province Manitoba, et al. v. Ryan Zinke, et al - Case #17-5241 (Consolidation with #17-5242)

Judge: Rosemary Collyer (U.S. District Court for the District of Columbia)
 Henderson, Rogers, and Srinivasan (D.C. Circuit Court of Appeals)

Opposing Counsel: Missouri Attorney General's Office

Issues: Manitoba asserts that the U.S. Bureau of Reclamation violated NEPA by failing to prepare an environmental impact statement for the Northwest Area Waters Supply Project ("NAWS"), a project designed to bring Missouri River water to North Central North Dakota. Manitoba is concerned that the project will bring Missouri River Basin biota to and harm the environment of the Hudson Bay Basin. Missouri intervened in the case alleging harm from depletions to the Missouri River.

Current Status: The Bureau/State were granted summary judgment at District Court. Manitoba and Missouri both appealed. Manitoba has since entered into a Memorandum of Understanding with the Bureau regarding the NAWS project and dismissed its appeal.

Missouri was dismissed by the District Court for lack of standing. Missouri's appeal continues. The case has been fully briefed and oral argument was held November 8, 2018.

- Next Steps:** Waiting for decision from D.C. Circuit.
- If we are successful, the case will be over. (Missouri indicated at oral argument they plan to file another case correcting their error if they lose.)
 - If we are unsuccessful, the case will likely be remanded to District Court to address the merits of Missouri's argument, which has already been fully briefed.

Case: **Olander Contracting Co. v. North Dakota State Water Commission and Tank Connection, LLC**
Date Filed: October 7, 2016
Court: Burleigh County District Court (08-2018-CV-02679)
Attorneys: Jennifer Verleger
Opposing Counsel: Matthew Collins (Olander)
Randy Bakke and Brad Wiederholt (Tank Connection)

Issues: The State Water Commission entered into a contract with Olander for the Southwest Pipeline Project, New Hradec tank project. The project was not completed within the contract time. Claims are over payments and liquidated damages.

Current Status: The case is currently in the discovery phase, with initial discovery deadlines of August 1, 2019. Trial is scheduled for January 14-17, 2020.

- Next Steps:** Mediation has been scheduled for May 7, 2019.
- If mediation is unsuccessful, we will need to continue with discovery.



State of North Dakota

Office of the State Engineer

900 EAST BOULEVARD AVE. • BISMARCK, ND 58505-0850
701-328-2750 • FAX 701-328-3696 • <http://swc.nd.gov>

MEMORANDUM

TO: Governor Doug Burgum
State Water Commission

CC: State Engineer Garland Erbele

FROM: Jennifer Verleger, Assistant Attorney General

SUBJECT: Office of the State Engineer Litigation Update

DATE: April 9, 2019

OFFICE OF THE STATE ENGINEER LITIGATION

Case: In re: Fischer Water Appropriations Permit

Date Filed: November 8, 2018

Court: Administrative Action (ALJ Dawson)

Attorneys: Jennifer Verleger

Opposing Counsel: Lynn Mesteth/Jack Dwyer

Issues: Opposition to State Engineer's recommendation to defer water appropriation permit.

Current Status: The ALJ issued a recommended order to dismiss the case. The State Engineer's final order is pending.

Next Steps: If the State Engineer adopts the ALJ's recommended order, waiting to determine whether decision will be appealed to District Court. The appeal must be within 30 days of notice of the State Engineer's final order.

Case: North Dakota Office of the State Engineer and North Dakota Board of University and School Lands v. Bureau of Land Management

Date Filed: April 25, 2016

Court: US DOI Board of Land Appeals (IBLA)

Attorney: Charles Carvell, Jennifer Verleger, Dave Garner

Opposing Counsel: Unknown

Current Status: In 2014, the Bureau of Land Management resurveyed land along the Missouri River to locate the boundary between public domain land owned by the United States and the riverbed owned by the State of North Dakota. The boundary between riparian land and the riverbed is the ordinary high watermark. The Office of State Engineer and

Board of University and School Lands appealed the decision of the Bureau of Land Management to officially file the Supplemental Plats of Survey posted and described in the Federal Register on July 8, 2014. The land is located in Fifth Principal Meridian, Township 154 North, Range 98 West. A Statement of Reasons was filed in June 2016. In July 2018, the IBLA indicated that a panel has not yet been assigned to the case and that we are at least a year away from any work on the case.

Next Steps: Wait to hear from IBLA.

Case: Whiting Oil and Gas Corporation v. Arlen A. Dean, et. al. (27-2016-CV-00040)

Date Filed: January 25, 2016

Court: McKenzie County District Court

Judge: Robin Schmidt

Attorney: Jennifer Verleger (OSE)

Dave Garner (Land Board)

Opposing

Counsel: Paul Forster, Shane Hanson

Kevin Chapman

Bruce Selinger

Peter Morowski

Lawrence Bender

Shane Hanson

Numerous pro se defendants

Issues: Whiting filed an interpleader for the lands underlying a spacing unit located near the Montana border for which the Yellowstone River runs through. Whiting is requesting the Court determine the property interests for the spacing unit so that Whiting can correctly distribute the proceeds from the well located in the unit. There are islands contained within the river for which Whiting is unable to determine ownership.

Current

Status: The State Engineer is currently conducting work with a geomorphologist. Additionally, pending legislation regarding navigability may impact the issues the court must decide.

Next Step: The State Engineer must determine which land it claims as sovereign.

Case: William S. Wilkinson, et. al. v. Board of University & School Lands, Brigham Oil & Gas, LLP; EOG Resources, Inc. (53-2012-CV-00038)

Date Filed: January 2012

Court: Williams County District Court

Judge: Paul Jacobson

Attorney: Jennifer Verleger (OSE)

Dave Garner (Land Board)

Opposing

Counsel: Josh Swanson/Rob Stock (Wilkinson)

Lawrence Bender (EOG)
Lyle Kirmis/John Ward (Statoil)
Michael Mazzone (XTO)

Issues: Plaintiffs claim interests in a tract of land in Williams County that borders the Missouri River. The Plaintiffs filed this as a quiet title action to determine the ownership of the minerals underlying the shorezones in the tract. Both the Land Board and the Plaintiffs have issued oil and gas leases for the shorezone acreage to three separate oil companies, two of which were named as defendants.

The State Engineer claims an interest in the surface ownership (and regulatory authority) and all minerals except oil, gas, and other hydrocarbons below the ordinary high water mark.

Current Status:

This case is pending before the district court after a remand from the N.D. Supreme Court. The Supreme Court remanded based on two issues: 1) “for the district court to determine whether N.D.C.C. ch. 61-33.1 applies and governs ownership of the minerals at issue in this case,” and 2) if the district court decides the State owns the Disputed Minerals, it must reconsider whether there has been a taking.

At the last status conference, the Plaintiffs indicated they plan to file a motion for summary judgment. Additionally, pending legislation could impact N.D.C.C. ch. 61-33.1.

Next Steps:

Additional discovery necessary.
Waiting to determine what N.D.C.C ch. 61-33.1 will say at close of the 66th legislative session.
Waiting for Plaintiffs’ summary judgement brief.
Pending litigation in *Sorum v. State* (which State Engineer is not a party to) will likely significantly impact this litigation and the extent of necessary discovery. The District Court has issued its Order, and there are 60 days to appeal once the final judgment (pending) has been issued.

Case: Whitetail Wave LLC v. XTO Energy, Inc.; the Board of University and School Lands; and the State of North Dakota (27-2015-CV-00164)

Date Filed: June 4, 2015
Court: McKenzie County District Court
Judge: Robin Schmidt
Attorney: Jennifer Verleger (OSE)
Dave Garner (Land Board)

Opposing Counsel: Christopher Sweeney (Whitetail Wave)
Lawrence Bender (XTO Energy)

Issues: This case is challenging the State’s determination of the OHWM, but the tract is located on the east side of the Highway 85 Bridge where the Department has currently leased only the historic channel of the Missouri River. The Plaintiffs are requesting

that title to the minerals be quieted and have alleged claims of Unconstitutional takings, trespass, slander of title and constructive trust/unjust enrichment against the State. The complaint also makes a number of claims against XTO individually. The State Engineer claims an interest in the surface ownership (and regulatory authority) and all minerals except oil, gas, and other hydrocarbons below the ordinary high water mark. The State Engineer has never delineated the ordinary high water mark in this location.

Current

Status: This case is before the district court, but stayed pending a final determination in the *Sorum v. State* litigation.

Next Steps: Provide a status update to the court upon final resolution of *Sorum v. State*.

Case: Mary K. Starin, as Personal Representative of the Estate of Bruno Herman Weyrauch v. Kelly Schmidt, et. al. (53-2015-CV-00986)

Date Filed: August 17, 2015

Court: Williams County District Court

Judge: David Nelson

Attorney: Jennifer Verleger (OSE)
Dave Garner (Land Board)

Opposing Counsel: Dennis Johnson (Weyrauch)

Issues: The Plaintiffs filed this quiet title action to clear title to the minerals on a tract of land located east of the Highway 85 Bridge that is currently inundated by Lake Sakakawea.

The State Engineer claims an interest in the surface ownership (and regulatory authority) and all minerals except oil, gas, and other hydrocarbons below the ordinary high water mark. The State Engineer has never delineated the ordinary high water mark in this location.

Current

Status: This case is before the district court, but stayed pending a final determination in the *Sorum v. State* litigation.

Next Steps: Provide a status update to the court upon final resolution of *Sorum v. State*.