

Outdoor Heritage Fund Grant Application



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

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

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

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

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

Exemptions

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

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

NO CONSIDERATION:

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

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

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

Application Deadline

Applications for this grant round cycle are due on **May 1, 2017 at 5:00 p.m. CT.** All information, including attachments, must be submitted by that date. See instructions below for submission information.

Instructions

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

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

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

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

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

Name of Organization *
State Historical Society of North Dakota

Federal Tax ID# *
45-6013195

Contact Person/Title *
Claudia Berg

Address *
612 East Boulevard Avenue

City *
Bismarck

State *
North Dakota

Zip Code *
58505

E-mail Address *
cberg@nd.gov

Web Site Address (Optional)
history.nd.gov, statemuseum.nd.gov and ndstudies.gov

Phone *
701.328.2667

Fax # (if available)
701.328.3710

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

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

Choose only one response

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

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

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

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

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

Choose all that apply

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

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

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

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

Type of organization: (select the category that describes your organization)*

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Project Name*

Double Ditch State Historic Site and Recreation Area Bank Stabilization Project

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

Double Ditch Indian Village was a large Mandan earthlodge village and major trading center from the late 1400s to late 1700s. This village when established had a population of about 2,000 and was larger than 93 percent of North Dakota communities today. Thousands of people lived and were buried at this site for more than 300 years—spanning 10 generations of Mandans.

Since 2011 the bank of the Missouri River at Double Ditch has been eroding (rotational slumping) at an accelerated level. The erosion has become more dramatic in the past couple years, as large areas of the river bank have slumped into the river **exposing eighteen human burials since April 2013**. The human remains were reinterred by the Mandan, Hidatsa, and Arikara Nation.

Since 2015, this site has developed an additional crack that will slump another 75 feet back into the site covering 27,962 square feet unless bank stabilization occurs. Engineers have determined slumping will not stop until it works through 400 feet from the existing crack. That will mean a loss of 14 acres—over half of the Mandan village. Double Ditch will remain dangerously unstable, and human remains will continue to become exposed until action is taken to stabilize the site. Funding is critical to help with the agency's responsibility to preserve thousands of human graves and a major historic site—a true gem on state land.

This project will significantly enhance the recreational use of this 177 acre location (specifically along the river bank) 9 miles north of Bismarck. The stabilized and reshaped bank will allow for enhanced fishing access on the river, a landing area for non-motorized water craft such as kayaks and canoes, area for bird watching/wildlife, interpretation of natural resources, bicycle/walking trail, and safer environment for the recreating public. The reshaped bank will be planted with native riparian trees

and shrubs, native grasses and forbs. This is a green space in close proximity to Bismarck offering much outdoor recreation for the public.

The engineering design for the stabilization has been completed and is above the high water mark of the Missouri River. The project is being advertised with a mandatory pre-bid meeting scheduled for May 5, 2017, bid opening May 17, and construction anticipated to be initiated by June 14. Following the bidding process and awarding a contract, work at the site will take approximately five to six months to complete.

The project represents a partnership between the State Historical Society of North Dakota and the Mandan, Hidatsa, and Arikara Nation in all aspects of the project.

The 2015 North Dakota Legislative Assembly appropriated one-time funding of \$3.5 million to stabilize approximately 2,230 linear feet of riverbank at this significant Mandan village known nationally and internationally. The funding solution included General Fund dollars, Disaster Relief Fund, and a loan from the Bank of North Dakota. A grant from the Outdoor Heritage Fund would greatly assist with the completion of this important project and provide funding that will not need to be borrowed from the Bank of North Dakota to complete the project.

Project Duration:*

Construction is anticipated to take five to six months (Initiate June 14, 2017, completion date dependent on the weather).

Amount of Grant request \$ *

\$282,529

Total Project Costs \$*

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

\$3,564,529

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

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

\$3,032,000 (91.5%)

Source(s) of Matching Funds*

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

Cash \$3,000,000

In-kind \$32,000

The \$3,000,000 in eligible matching funds – (Consists of \$2,500,000 from the Disaster Relief Fund and \$500,000 from ND State Parks and Recreation Department. The \$500,000 from the ND State Parks and Recreation Department is from the Resources Trust Fund.) The legislative authority for these cash matching funds is attached.

Certifications *

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

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

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities. *

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

The Society is under the supervision of the 12-member State Historical Board (seven members appointed by the Governor and five statutory members). The board appoints the Director of the State Historical Society of North Dakota to administer the agency and carry out policies and directives. The agency is organized into five divisions: Administration; Archaeology and Historic Preservation Division; Museum Division; Communications and Education Division; State Archives.

- Administration is headed by the Assistant Director and is responsible for overall agency support, budgeting and fiscal matters, personnel management, custodial, and security.
- The Archaeology and Historic Preservation Division has three primary functions: 1) operates as the North Dakota State Historic Preservation Office, 2) manages 57 state historic sites, and 3) manages the archaeological artifact collections.
- The Museum Division collects and manages artifact collections representative of North Dakota history and culture; designs and mounts interpretive exhibits at the North Dakota Heritage Center and ten historic sites.
- The Communications and Education Division produces public and educational programs and events; produces publications including a journal and newsletter, oversees IT, agency marketing and public relations, and coordinates visitor services for the Heritage Center.
- The State Archives Division collects, manages and references documentary resources relating to state history and culture. The Division is the official state archives, preserving North Dakota government records.

The agency was established in 1895. The North Dakota Heritage Center and State Museum, on the Capitol grounds, is home of the State Historical Society of North Dakota. The agency has 78 FTE, 50 temporary/part-time staff, 50+ seasonal staff, and 200+ volunteers. The agency web sites are history.nd.gov, statemuseum.nd.gov and ndstudies.gov.

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

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Please indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. If your project includes tree/shrub/grass planting, please provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement

certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan. If your project includes Section 319 program funding, please provide, in detail, the specific best management practices that will be implemented and the specific projects for which you are seeking funding. Please note that if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

The Double Ditch State Historic Site and Recreation Area is a highly visited area providing an outdoor space to enjoy the Missouri River in a rural area but yet in vicinity of Bismarck. The primary purpose of the project is to protect Double Ditch Mandan village from further erosion and exposure of human burials while at the same time providing added enhancements and interpretation to this nationally recognized historic site and recreation area.

Needs:

At Double Ditch large portions of the slope are slumping into the Missouri River. The active erosion has and still is migrating toward the River and a new tension crack has formed above the current slumps. Additionally, as evidenced with the continuous movement recorded by the installed inclinometers, a topographic signature was observed March 3, 2016 within the Village-proper where the next tension crack, and subsequent block failure, is anticipated to occur. The project is critical to stop the ongoing slumping of the site and exposure of numerous burials. The erosion has created a safety issue for the visiting public in that the existing trail has been severely impacted with an erosion exposure approximately 25 feet in height. Visitors may access the slumped area from the river side as well as the trail that is currently blocked off. This is a safety concern for the state as well as the visitors.

Goals:

The stabilization area is approximately 2,230 linear feet as measured along the existing riverbank and the maximum width is approximately 390 feet. The results of the November 11, 2015 site visit indicated that the slide area is approximately 1,000 feet long, and can be divided into two adjacent slides. The south slide section is approximately 400 feet. The north slide section is approximately 600 feet. The river bank north of the slide area has experienced erosion and is at a near vertical slope. This bank will be regraded so the slope of the bank is flatter and less vertical. The slides' overall shapes are arcs with the south leg of the north slide and the north leg of the south slide intersecting.

To stabilize the riverbank toe, a rock filled trench was selected because rock of sufficient size and quality is readily available and is routinely specified by North Dakota Department of Transportation. To stabilize the slope, removing the mass on the upper slope, adding mass to the lower slope, and installing pipe pile walls to provide strength across the failure planes is the selected solution. The pipe pile walls include driving 12" diameter steel pipes located approximately 70 feet from the toe of the slope. The pipe piles are estimated as 25' long and spaced 3' apart, located approximately 15 feet below the ground to intercept the failure surface and to allow vegetation to grow on the slope above the pipe piles. Two rows of the pipe piles are required to provide enough strength across the failure planes to stabilize the slope. Native vegetative plantings will be included to help stabilize the soil.

The reshaped bank on the south end provides an opportunity to create new trails (walking and bicycle) and safe access to the river for various recreational activities and appreciation of our natural resources. At the north end of the project area will be an established trail leading to the shore for canoe and kayak access to the river. This primitive boat access is sorely needed north of the

Bismarck area, as the next landing is 20 miles north of Double Ditch. The native plantings will provide an area for appreciation and education of our natural resources on public lands.

Strategies:

During the initial planning for the project value engineering was undertaken to ensure thoughtful consideration of not only the stabilization of the bank but also for further enhancements of the area that would benefit our community, state, and the visiting public. This exercise with the engineers and their specialists included staff from the State Historical Society of North Dakota, and the Mandan, Hidatsa and Arikara Nation. The aim was to provide conservation, education, safety, and recreational enhancements for a well-rounded project and healthy benefits for our users of the area.

Benefits:

The project will positively impact environmental, social and economic conditions for users and area communities. The project will prevent the further erosion of the Mandan village and exposure of human burials along the bank. The trail (bicycle and walking) provide a healthy recreational opportunity for the public with interpretive signs providing information regarding natural resources and a connection to the Mandan village. The reshaped bank will provide more user friendly access and safety to the river for fishing and wildlife and bird watching. Native plantings will help beautify the site and stabilize the reshaped bank. The primitive boat landing will provide users with public river access out of the city of Bismarck. The nearest current access is 20 river miles north of Double Ditch and this will provide access between Bismarck and the landing much farther north. This provides a current unmet need regarding river access.

Timeline:

Engineering Design completed: February 6, 2017

Construction Project advertised: April 2017

Mandatory pre-bid meeting : May 5, 2017

Bid opening: May 17, 2017

Construction to be initiated by: June 14, 2017, work at the site will take approximately five to six months to complete, dependent on weather. Aim is for November or December but some planting and installation of signs could occur spring 2018.

Design for enhanced trail: June-July 2017 (trail installation was be completed with the other construction/reshaping of the bank)

Design and fabrication of six interpretive signs along bank: August – November, 2017

Installation of signage: when all plantings and construction completed – no later than spring 2018

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

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

The project will be managed by the Atwell team or a local engineering company Atwell recommends and that is approved by the State Historical Society. Atwell, LLC is a multi-disciplinary engineering, natural and cultural resources and environmental consulting firm. The Atwell team has completed over 385 riverine, stream, and wetland projects, creating, restoring and/or rehabilitating over 190 miles of river and stream, 671 acres of riparian habitat and 178 acres of wetlands. The team also includes Water Resources Solutions (WRS), a comprehensive water resources management firm specializing in strategic visioning and tactical and strategic planning. WRS helps public and private clients achieve their unique visions of innovative and ecologically friendly water resources

engineering. Wildhorse Riverworks, Inc. (WRI) offers a full range of stream and wetland project assistance from the initial site assessment and survey to project design, installation, and planting. Braun Intertec provides geotechnical, environmental and testing solutions in the private and public sectors. Method of measurement for each task is outlined in the Technical Specifications for the construction project and is tied to payment. The engineer will determine successful completion of each task.

The State Historical Society of North Dakota will be monitoring all construction activities that have the potential to disturb cultural remains. All possible precautions (including a geophysical survey, coring of anomalies, archaeological excavation, and the design of the bank stabilization) have been made in order to limit the possible disturbance of archaeological features in the area of the project. However, the possibility of features within the project area does exist. Archaeologists from the SHSND will monitor all construction activities occurring at depths where cultural resources are possible. If feature types such as storage pits or hearths are encountered during the project construction, work will be temporarily suspended in that immediate area of the site and salvage excavation of that feature will occur by staff of the SHSND avoiding unnecessary delays.

If human remains or burial goods are encountered during the project construction, work will be suspended in that immediate area of the site and North Dakota Century Code 23-06-27 and North Dakota Administrative Code 40-02-03 will be followed. Archaeologists from the SHSND have protocols in place with the Mandan, Hidatsa and Arikara Nation regarding the salvage and reburial of the remains.

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

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

The engineering plans/technical specifications have specific methods of measurements that are tied to payment for each phase of the construction project. These plans can be provided, if requested.

All reporting required for this grant will be submitted in a timely manner.

The project will be successful once the site is stabilized, bank revegetated as indicated in the engineer plans (Sheets 22 & 23), trail for kayak & canoe landing constructed (location indicated on Sheet 22), walking & bicycle trail completed, interpretive signs highlighting natural resources installed, amenities for birdwatching/wildlife watching, fishing access in place with the reshaping of the bank, and visitors enjoying this public area.

Interpretive signs will be designed and fabricated during the construction of the project so that they will be installed once stabilization is complete.

Financial Information

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

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

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

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

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

Double Ditch State Historic Site and Recreation Area is part of the Historic Sites system managed by the State Historical Society of North Dakota. The site will be maintained as part of our state wide system by our Maintenance Supervisor and temporary staff he manages.

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

The trail in the area that has slumped and other enhancements will not be possible.

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

A sign will be installed that acknowledges the funding from the Outdoor Heritage Fund.

Scoring of Grants

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

Awarding of Grants*

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of

the grant. Please note the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> that set forth the general provisions that will be included in any contract issued by the North Dakota Industrial Commission. Please indicate if you can meet all the provisions of the sample contract. If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be. *

The State Historical Society of North Dakota can meet the provisions of the contract.

Responsibility of Recipient

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

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

Revised: January 18, 2017

Outdoor Heritage Fund Grant Application

Double Ditch Bank Stabilization – Source(s) of Matching Funds

Description	Funding Amount
2015-17 SB 2018 Section 5 - State Disaster Relief Fund Appropriation	2,000,000.00
2017-19 HB 1018 Section 6- State Disaster Relief Fund Appropriation	500,000.00
2017-19 HB 1018 Section 6- Transfer from Parks and Rec (Resources Trust Fund)	500,000.00
Total Matching Funds	3,000,000.00

Section 5 of the 2015-17, SB 2018 authorizing a \$2,000,000 legislative appropriation from the State Disaster Relief Fund is provided below:

SECTION 5. APPROPRIATION - STATE DISASTER RELIEF FUND - DOUBLE DITCH HISTORIC SITE REPAIRS. There is appropriated out of any moneys in the general fund in the state treasury, not otherwise appropriated, the sum of \$250,000, and from the state disaster relief fund in the state treasury, the sum of \$2,000,000, or so much of the sum as may be necessary, to the state historical society for double ditch historic site repairs, for the biennium beginning July 1, 2015, and ending June 30, 2017.

Section 6 of the 2017-19, HB 1018 authorizing a \$500,000 legislative appropriation from the State Disaster Relief Fund and \$500,000 from ND State Parks and Recreation is provided below:

SECTION 6. APPROPRIATION - STATE DISASTER RELIEF FUND - DOUBLE DITCH HISTORIC SITE REPAIRS. There is appropriated out of any moneys in the state disaster relief fund in the state treasury, not otherwise appropriated, the sum of \$500,000, or so much of the sum as may be necessary, and from other funds received from a grant from the parks and recreation department, the sum of \$500,000, or so much of the sum as may be necessary, to the state historical society for the purpose of defraying the expenses of double ditch historic site repairs, for the biennium beginning July 1, 2017, and ending June 30, 2019. For the purposes of calculating the unobligated balance of the state disaster relief fund under section 57-51.1-07.5, the moneys appropriated in this section from the state disaster relief fund may not be considered an obligation of the state disaster relief fund until after July 31, 2017. The funding appropriated in this section is considered one-time funding.

Note: The State Historical Society has authority to carryover any funds appropriated for the Double Ditch project during the 2015-17 biennium should the project not be completed by June 30, 2017.

Outdoor Heritage Fund Grant Application - Budget Form

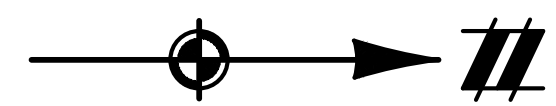
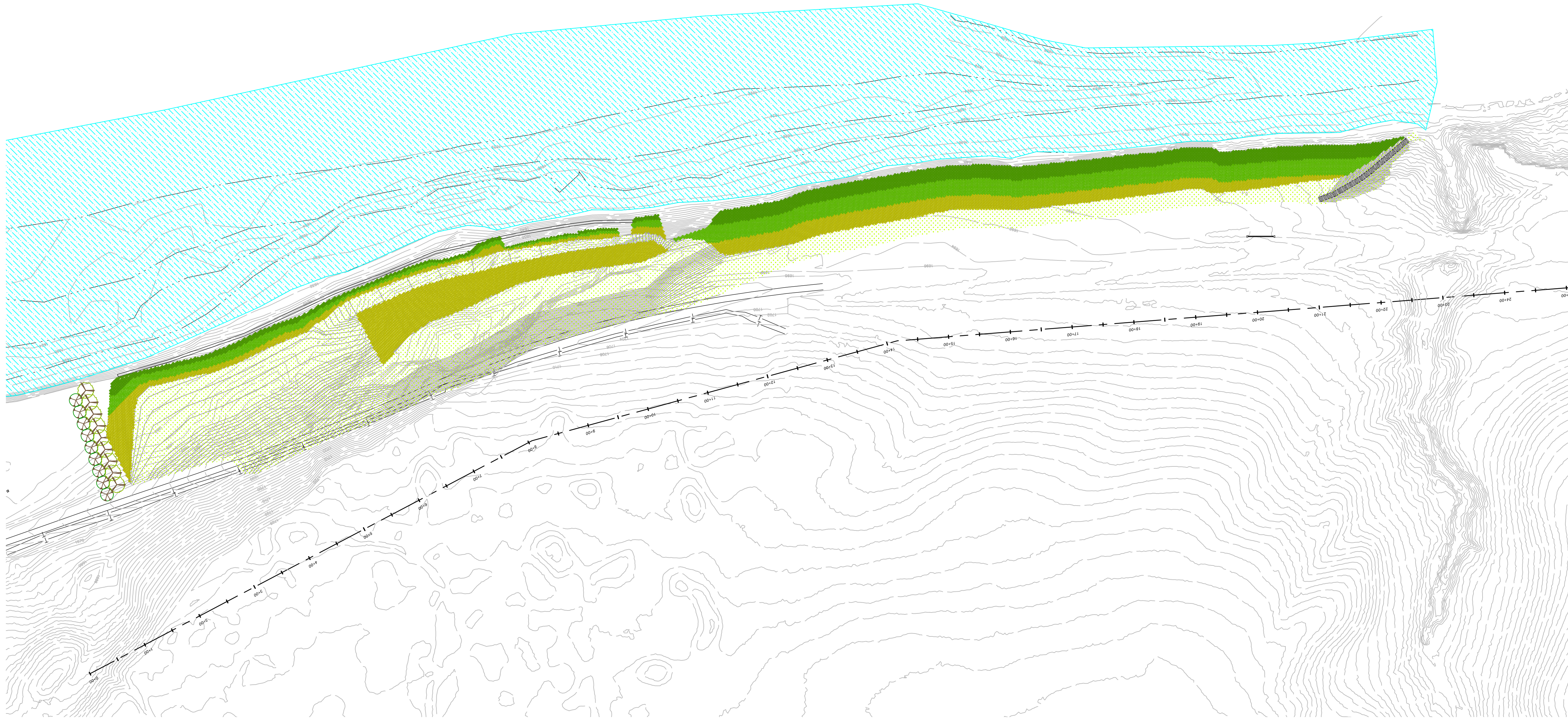
Double Ditch State Historic Site

Project Expense	OHF Request	See (1) Below Applicant's Match Share (Cash)	Applicants Match Share (In-Kind)	Applicants Match Share (Indirect)	Non Matching State General Funds	Total Each Project Expense
Engineering & Design	\$0	\$441,296			\$250,000	\$691,296
Double Ditch Bank Stabilization	\$268,878	\$2,435,079				\$2,703,957
River Access Trail	\$1,121	\$10,155				\$11,276
ADA Access - Walking and Bike Trail - Design and Construction	\$11,933	\$108,067				\$120,000
Trail and River Signage	\$597	\$5,403				\$6,000
In-Kind (Staff Monitoring of Cultural Resources and Signage Work)			\$32,000			\$32,000
Indirect (Unknown-The Applicant Will Absorb all Indirect Administrative Costs)				\$0		\$0
Total	\$282,529	\$3,000,000	\$32,000	\$0	\$250,000	\$3,564,529

	OHF Request	Applicant's Match (Cash and In-kind)	Total
OHF Request	\$282,529		\$282,529
Eligible Cash Match		\$3,000,000	\$3,000,000
Eligible In-kind Match		\$32,000	\$32,000
Total	\$282,529	\$3,032,000	\$3,314,529
Project Percentage	8.5%	91.5%	100.0%

Description of Applicant's Eligible Cash Match Share

(1) \$3,000,000 in eligible matching funds - (Consists of \$2,500,000 from the Disaster Relief Fund and \$500,000 from ND State Parks and Recreation Department. The \$500,000 from the ND State Parks and Recreation Department is from the Resources Trust Fund.)



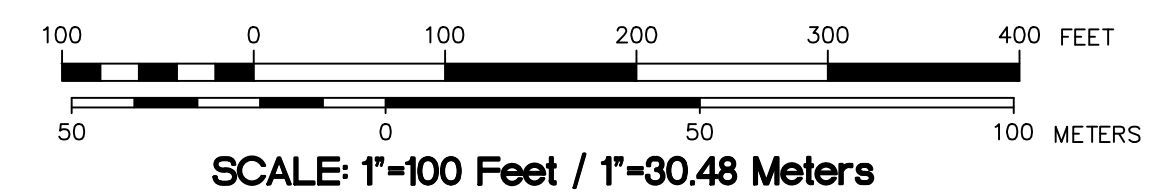
LEGEND

- 600 — EXISTING 1' CONTOURS
- 500 — EXISTING 5' CONTOURS
- — PROPERTY LINE
- — PROPOSED 2' CONTOURS
- — PROPOSED 10' CONTOURS
- SANDBAR WILLOW LIVE STAKE
- REDOSIER DOGWOOD LIVE STAKE
- COTTONWOOD LIVE STAKE
- GRASS & FORBS
- ⊕ COTTONWOOD TREE
- ⊕ HACKBERRY TREE

ESTIMATED QUANTITIES	
SANBAR WILLOW	1,394 E.A.
COTTONWOOD	1,795 E.A.
REDOSIER DOGWOOD	2,714 E.A.
GRASS & FORB AREA	4.00 AC.

NOTES:

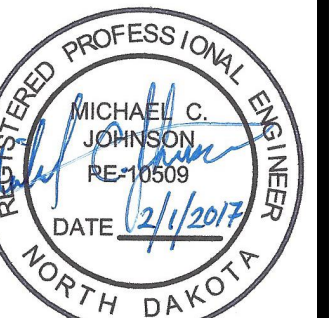
1. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
2. CONTRACTOR SHALL VERIFY ALL LANDSCAPE MATERIAL QUANTITIES AND SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER'S REPRESENTATIVE.
3. NO SUBSTITUTIONS (INCLUDING CULTIVARS) SHALL BE ACCEPTED WITHOUT WRITTEN APPROVAL PER SPECIFICATIONS.
4. NATIVE RIPARIAN TREES AND SHRUBS SHALL BE LAID OUT IN TRIANGULAR PATTERN.
5. INSTALL ALL LIVE STAKES PER NOTES ON SHEET 23 AND SPECIFICATIONS.
6. CONTRACTOR SHALL SEED ALL AREAS DISTURBED DURING CONSTRUCTION AS NOTED ON THE PLANS AND AS SPECIFIED, AND SHALL BE RESPONSIBLE FOR THE EXACT CALCULATION OF THE QUANTITY NECESSARY FOR MAXIMUM COVERAGE. DO NOT SEED LIVE STAKE AREAS.
7. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE.
8. IF DAMAGE OCCURS ON OFF-SITE PROPERTY, CONTRACTOR SHALL RESTORE THE PROPERTY TO ITS ORIGINAL CONDITION.
9. SEE SHEET 23 FOR LIVE STAKE CROSS SECTION DETAILS AND PLANTING RECOMMENDATIONS.
10. ALL B&B TREES SHALL BE TAGGED AND LABELED WITH PLANT NAMES.
11. TURF REINFORCING MAT SHALL BE INSTALLED ACCORDING TO MANUFACTURERS RECOMMENDATIONS.



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

COPYRIGHT © 2017 ATWELL, LLC
NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL, LLC



NATIVE GRASS MIXTURE					
SPECIES	PLS* Pounds/Acre	Percent of Mixture**	Warm or Cool Season	Bunchgrass or Rhizomatous	Minimum Root Depth
Western Wheatgrass (<i>Pascopyrum smithii</i>)	4	21%	Cool	Rhizomatous	20" +
Green Needlegrass*** (<i>Nassella viridula</i>)	4	21%	Cool	Bunchgrass	14" +
Slender Wheatgrass (<i>Elymus trachycaulus</i>) or Canada Wildrye (<i>Elymus Canadensis</i>)	2	10.5%	Cool	Bunchgrass	16" +
Sideoats Grama*** (<i>Bouteloua curtipendula</i>)	2	10.5%	Warm	Rhizomatous	12" +
Switchgrass (<i>Panicum virgatum</i>)	2	10.5%	Warm	Rhizomatous	12" +
Big Bluestem*** (<i>Andropogon gerardii</i>)	2	10.5%	Warm	Bunchgrass, sometimes with short rhizomes	20" +
Little Bluestem*** (<i>Schizachyrium scoparium</i>)	1.5	8	Warm	Bunchgrass, sometimes with short rhizomes	14" +
Blue Grama*** (<i>Bouteloua gracilis</i>)	1.5	8	Warm	Bunchgrass, forming short rhizomes	16" +
Total Seed (min)	19 pounds	100%			

*PLS - Pure Live Seed (based on 50 PLS/sq feet)

** Percent Mixture - Contingent upon soil requirements. Adjust mixture based on NRCS map.

***Chaffy or awned seeds (i.e., bluestems, indiangrass and blue grama) are extremely difficult to plant with a grain drill. It is recommended that a grass drill be used for these types of grasses. Proper agitation is needed to prevent "bridging" of seed in the seedbox, and the feeder mechanism must be capable of metering a uniform flow of seed at the desired rate. Very few grain drills have this capability. Use of debarbed seeds is strongly recommended when considering seeding chaffy or awned seeds in a grain drill.

FORBS	
SPECIES	PLS* Pounds/Acre
Purple Prairie Clover (<i>Dalea purpurea</i>)	1.5
Purple Coneflower (<i>Echinacea purpurea</i>)	1.5
Stiff Goldenrod (<i>Solidago rigida</i>)	0.01

*PLS - Pure Live Seed (Total 3.01 lbs. PLS Forbs per acre)

PROPOSED SPECIES FOR TREE AND SHRUB PLANTING

Botanical Name	Common Name	Plant Material Type
<i>Salix interior</i>	Sandbar Willow	Live Branches
<i>Cornus sericea</i>	Redosier Dogwood	Live Branches
<i>Populus angustifolia</i>	Cottonwood	Live Branches
<i>Populus angustifolia</i>	Cottonwood	3-Gallon
<i>Celtis occidentalis</i>	Hackberry	3-Gallon

*5,903 live stake plantings at an average density of 2.25 live stakes per square yard

SEEDING PERIOD

AFTER AREA GRADING OPERATIONS ARE COMPLETED AND TOPSOILS HAVE BEEN ADDED, RESTORATION AREA SEEDING WILL COMMENCE. IF UNABLE TO SEED BEFORE THE RE-GRADED SOILS BECOME CRUSTED OVER, SOILS MUST BE RE-SCARIFIED OR LIGHTLY CULTIVATED PRIOR TO SEEDING TO ENSURE GOOD SOIL CONTACT.

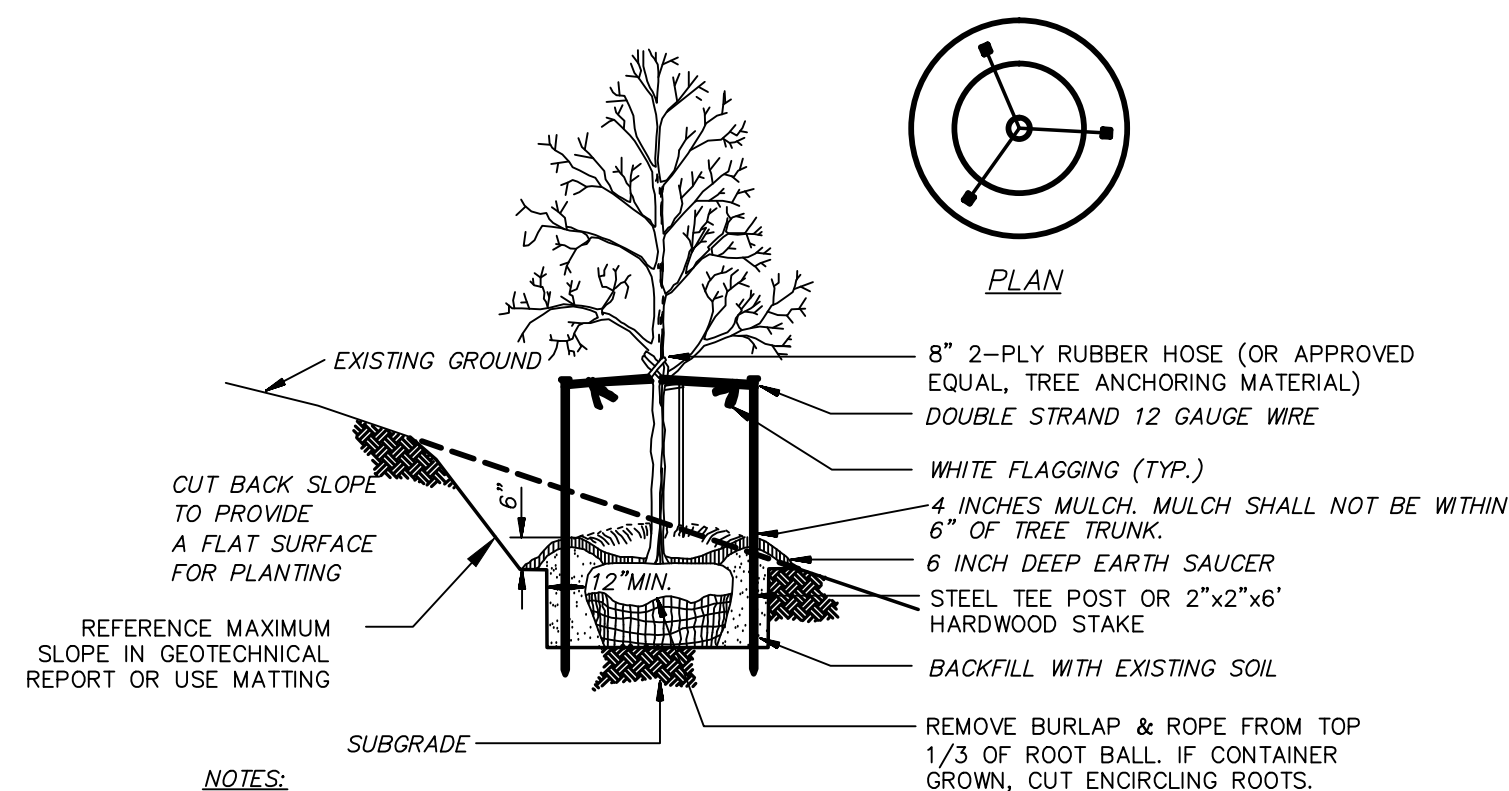
SEEDING SHALL NOT TAKE PLACE WHEN THE GROUND IS FROZEN, WHEN OVERLAYING WATER IS FROZEN, OR WHEN CONDITIONS ARE OTHERWISE UNSATISFACTORY FOR SEEDING. INUNDATED AREAS WILL NOT BE SEEDED.

NOTE:

ACTUAL SEED MIX COMPOSITION AND PLANT MATERIAL SPECIES, NUMBERS, AND LOCATIONS ARE SUBJECT TO CHANGE BASED ON AVAILABILITY AND POST-CONSTRUCTION SITE CONDITIONS. ACTUAL TREE PLANTING SITES WILL BE FLAGGED BY THE CONTRACTOR AND APPROVED BY THE RESTORATION ECOLOGIST BEFORE PLANTING.

PLANTING CONTAINER TREES AND SHRUBS:

- DIG OR AUGER TREE HOLE WIDER THAN ROOT MASS ON THE TREE OR SHRUB. DIG HOLE TO DEPTH SO THE LOCATED TRUNK FLARE, AT THE FIRST ORDER LATERAL ROOT, WILL BE AT FINISHED GRADE.
- PLACE IN PLANTING HOLE SO THAT TRUNK FLARE IS AT FINISHED GRADE AND TREE IS STRAIGHT.
- WITH CLEAN, SHARP PRUNING TOOLS, PRUNE OFF ANY SECONDARY/ADVENTITIOUS, GIRDLING, POTENTIAL GIRDLING ROOTS, AND BROKEN BRANCHES.
- BACKFILL PLANTING HOLE WITH EXISTING UNAMENDED SOIL AND THOROUGHLY WATER.

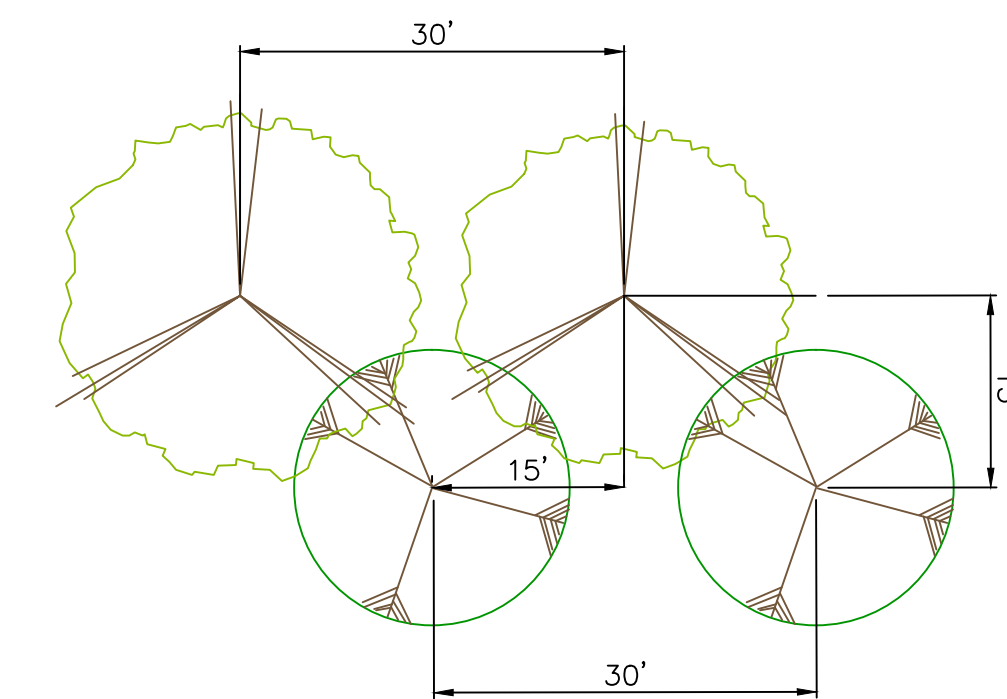


NOTES:

- MULCH MATERIAL SHALL BE SHREDDED HARDWOOD MULCH.
- TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO EXISTING GROUND.
- USE STAKING SYSTEM FOR WIND AND SOIL CONDITIONS.
- REMOVE STAKES ONE YEAR FROM TIME OF PLANTING.

TREE PLANTING ON SLOPE (TYP.)

NO SCALE

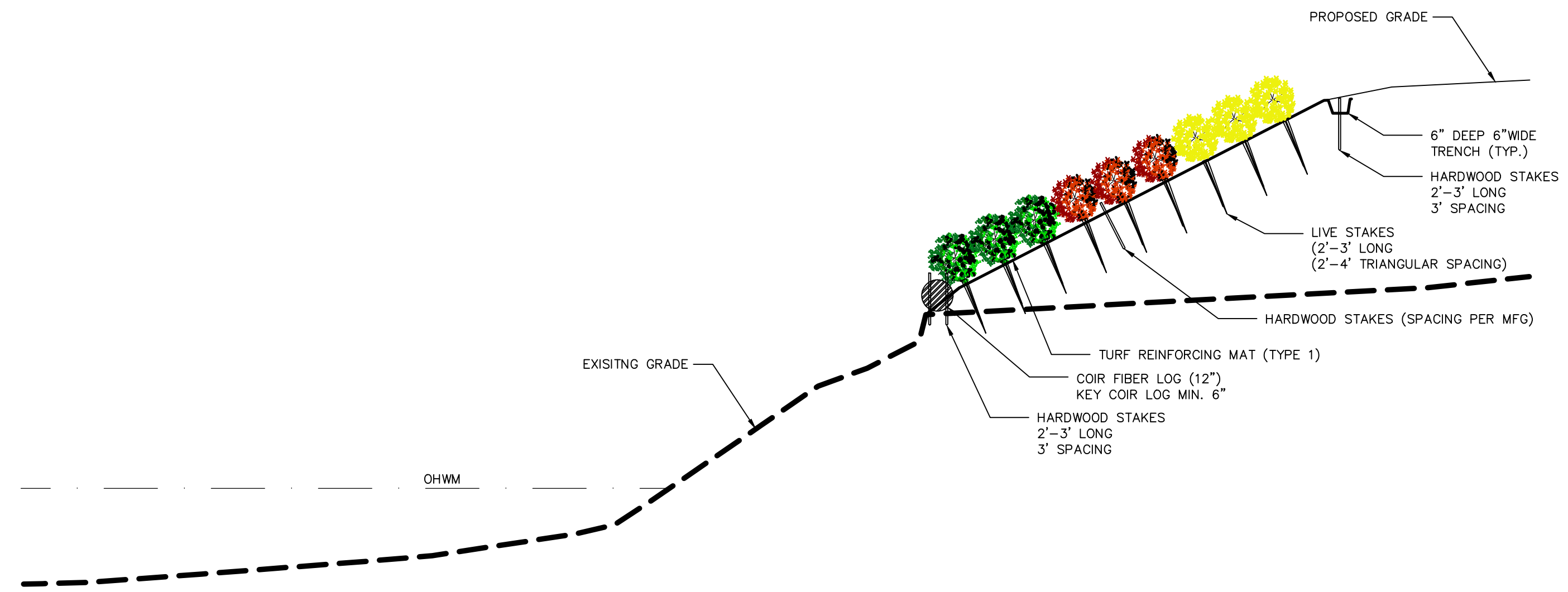


NOTES:

- TREE SPACING SHALL BE AT APPROXIMATELY 20' TO 30' AND STAGGERED AS SHOWN ABOVE.

TREE SPACING (TYP.)

NO SCALE



LIVE STAKE CROSS SECTION (TYP.)

NO SCALE

NOTE:

INSTALL LIVE STAKES NO LATER THAN JUNE 30. SOILS SHALL BE UNFROZEN AND WORKABLE. CUTTINGS SHOULD BE FROM 2-3 YEAR OLD GROWTH GENERALLY 1- TO 2-INCH DIAMETER STEMS AND RANGE FROM 2-3 FT IN LENGTH. CUTTING SHOULD BE HARVESTED DURING DORMANCY OR PURCHASED CLOSE TO THE INSTALLATION DATE AND KEPT MOIST, COOL AND OUT OF DIRECT SUNLIGHT. THE LOWER 1/2 OF THE CUTTINGS SHALL BE PRE-SOAKED IN WATER FOR 24 HOURS PRIOR TO INSTALLATION. INSTALL CUTTINGS ON 2-4 FT TRIANGULAR SPACING AT OR NEAR THE LOW BANKFULL ELEVATION PER DETAIL. IT MAY BE NECESSARY TO CREATE A PILOT HOLE PRIOR TO INSTALLING CUTTING. TAP CUTTING TO A DEPTH OF 2/3 ITS LENGTH USING RUBBER Mallet TO AVOID DAMAGE. CUT ANY DAMAGED PORTION OFF CLEANLY.

Land Development & Real Est
Power & Energy
Infrastructure & Transportation
Environmental & Solid Waste
Water & Natural Resources

ATWELL
866.850.4200 www.atwell-group.com



DETAILS & NOTES
RANGE 81 WEST
TOWNSHIP 140 NORTH
BURLEIGH COUNTY, NORTH DAKOTA

DOUBLE DITCH STATE HISTORICAL SITE
STATE HISTORICAL SOCIETY OF NORTH DAKOTA
612 EAST BOULEVARD AVENUE
BISMARCK, NORTH DAKOTA 58505

DATE 12/23/2016

ISSUED FOR BID

REVISED & ISSUED FOR BID

2/1/2017



SCALE

NTS

DR. MCJ | CH. MCJ

P.M. MCJ

CAD FILE:

15001216-PLANSHEETS

JOB 15001216

SHEET NO.

SHT 23 OF 23