



# Environment and Natural Resources Trust Fund

2024 Request for Proposal

## General Information

**Proposal ID:** 2024-183

**Proposal Title:** Carlton County Remonument

## Project Manager Information

**Name:** Benjamin Anderson

**Organization:** Carlton County

**Office Telephone:** (218) 485-4811

**Email:** banderson@straightlinesurveying.com

## Project Basic Information

**Project Summary:** Restore and certify monuments of the Public Land Survey System. Collect geodetic coordinate values in order to improve foundational Geographic Information System (GIS) data.

**Funds Requested:** \$292,000

**Proposed Project Completion:** June 30, 2026

**LCCMR Funding Category:** Foundational Natural Resource Data and Information (A)

## Project Location

**What is the best scale for describing where your work will take place?**

Region(s): NE

**What is the best scale to describe the area impacted by your work?**

Region(s): NE

**When will the work impact occur?**

During the Project

## Narrative

### **Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

The Public Land Survey (PLS) was performed in Minnesota from 1847 to 1905. Most of these PLS corners were originally wooden posts. The Government Land Office (GLO) originally set these corners and gave the power of maintaining them to the State. The State gave that responsibility to the Counties. Less than 50% of the PLS corners in Carlton County have been certified with less than 1% of them having geodetic coordinates determined.

These corners affect every land owner in the state. PLS monuments are necessary to accurately depict land ownership and interest in real property, which has impacts on land transfers, parcel subdivisions, property taxation, hunting and mineral rights and granting of easements. The environmental or land tie to this proposal is clear in that all resources, their use and delineation, require some description related to the corners of the PLSS. With the loss of one ¼ section corner every parcel of land within two sections are affected, the loss of one section corner has the same adverse effect in four sections.

### **What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

Restore and certify various corners of the PLS in Townships 46 through 49, Ranges 15 through 21 West of the 4th Principal Meridian all with Carlton County. By certifying and collecting highly accurate geodetic coordinates on these monuments, we will preserve their position and also allow them to be utilized in GIS datasets to improve the accuracy of related GIS data. All of the current certified corners in Carlton County do not have highly accurate geodetic values available to the public for their locations. This project will assist with obtaining those values allowing the additional information to be used by Carlton County GIS and the public.

### **What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

The MN DNR to assist with management of State Parks, State Forests, and Carlton County Land to mark timber harvests. This will provide highly accurate geodetic information on existing monuments and remonument ones not in place to assist with information for both the public and private entities in the future.

## Activities and Milestones

### Activity 1: Records Research

**Activity Budget:** \$46,000

**Activity Description:**

PLSS Remonumentation requires extensive research prior to commencing with field work. The surveyor will collect various records and compile them into preliminary corner certificates in order to determine search areas and complete preliminary analysis. By thoroughly examining the records, the prudent surveyor can be confident that the proper location of the corner has been monumented.

**Activity Milestones:**

Description	Approximate Completion Date
Preliminary Research	November 30, 2024
Preliminary Corner Certificates	March 31, 2025

### Activity 2: Field Search and Monumentation

**Activity Budget:** \$89,000

**Activity Description:**

A thorough field search for corner evidence and final monumentation of the PLSS position. The goal is to find the position of the original monument that the GLO surveyor set.

Field reconnaissance of the area using the record research data of the Public Land Survey methods is necessary in order to narrow the search area for exploring the area for evidence. Much reconnaissance can be completed utilizing GIS maps and imagery overlays, but it cannot replace a site visit. Checks to nearby natural feature calls or other known information can often reveal alternate positions to consider in the field.

A retracement survey is made in order to locate existing monuments, occupation lines, possible corner locations and natural feature calls from PLSS field notes and historical corner positions which were identified in the research process.

**Activity Milestones:**

Description	Approximate Completion Date
Verify Known Corners	March 31, 2025
Initial Search for Unknown Corners	November 30, 2025
Final Determination and Monumentation	March 31, 2026

### Activity 3: Corner Certification

**Activity Budget:** \$27,000

**Activity Description:**

A Certificate of Location shall be prepared and filed for each PLSS corner recovered and/or monumented according to Minnesota Statutes 381.12. This certificate shall be a complete document relating to the location, monumentation, perpetuation and history of a corner. The certificates will be recorded in the Carlton County Records office.

**Activity Milestones:**

Description	Approximate Completion Date
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**Activity 4: Obtain High Accurate Geodetic Values on Existing Certified Monuments**

**Activity Budget:** \$130,000

**Activity Description:**

Current certified corners in Carlton County do not have high accurate geodetic values with the exception of approximately 10 corners. Highly accurate geodetic values on corners are used to update GIS systems, assist private and public entities in monument locations, and provide the location of the monument if it becomes destroyed for any reason assisting with the location in the future.

**Activity Milestones:**

Description	Approximate Completion Date
Obtain High Accurate Geodetic Corners on Existing Monuments	June 30, 2026

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**

Once certified and recorded, the corner positions will be added to the Carlton County GIS database and other foundational data will be able to be updated. Any funding needed for long term maintenance of the corners will be provided by Carlton County. In the future, Carlton County intends to request additional funds through the LCCMR to restore PLS corners in other areas of the county.

## Project Manager and Organization Qualifications

**Project Manager Name:** Benjamin Anderson

**Job Title:** County Surveyor

**Provide description of the project manager's qualifications to manage the proposed project.**

Carlton County Surveyor responsible for all PLS monuments and histories throughout the county.

**Organization:** Carlton County

**Organization Description:**

Carlton County

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
County Surveyor		Project Manager			0%	0.2		\$53,000
Survey Crew Chief		Data Collection and Compilation			0%	0.2		\$156,000
Survey Technician		Project Support with Field and Office Review			0%	0.2		\$80,000
							<b>Sub Total</b>	<b>\$289,000</b>
<b>Contracts and Services</b>								
							<b>Sub Total</b>	-
<b>Equipment, Tools, and Supplies</b>								
	Tools and Supplies	Survey Monuments and Signs	Permanent Markers and Signs on Each Corner					\$3,000
							<b>Sub Total</b>	<b>\$3,000</b>
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
							<b>Sub Total</b>	-
<b>Travel Outside Minnesota</b>								

							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
							<b>Sub Total</b>	-
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$292,000</b>

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

## Attachments

### Required Attachments

#### *Visual Component*

File: [d2cd1f43-177.pdf](#)

#### *Alternate Text for Visual Component*

All the currently Certified Corners in Carlton County. Approximately 1300 Certified out of the approximate 2800 total. Less than 10 of them having High Accurate Geodetic Locations....

#### *Board Resolution or Letter*

Title	File
Carlton County Resolution No. 23-025	<a href="#">17281d55-b89.pdf</a>

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Does your project have potential for royalties, copyrights, patents, or sale of products and assets?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

Yes, Carlton County

**Does your project include the design, construction, or renovation of a building, trail, campground, or other capital asset costing \$10,000 or more?**

No

**Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services, as defined in Minnesota Statutes section 299C.61 Subd.7?**

No