



Environment and Natural Resources Trust Fund

2021 Request for Proposal

General Information

Proposal ID: 2021-038

Proposal Title: Ely Trezona Trail / Pioneer Mine Site Restoration

Project Manager Information

Name: Harold Langowski

Organization: City of Ely

Office Telephone: (218) 226-5474

Email: elyod@ely.mn.us

Project Basic Information

Project Summary: This project seeks funding for the restoration of a failing retaining wall at Ely's Pioneer Mine Recreational Site located on the popular Trezona Trail.

Funds Requested: \$185,000

Proposed Project Completion: 2022-08-31

LCCMR Funding Category: Small Projects (H)

Secondary Category: Land Acquisition for Habitat and Recreation (G)

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 and In the Future

Narrative

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

The Pioneer Mine operated on the north side of Ely from 1889 until 1967. During that time, it produced a record breaking 41,112,587 tons of ore or 40% of the Vermilion Range's entire output. When the mine closed in 1967, and the water was no longer pumped from the mine levels below ground, the earth collapsed forming what is locally referred to as 'Miners Lake'. Since 1977, the City has owned the site and with the support of a local non-profit, the Ely Arts and Heritage Center, maintains it as an art, history, and recreation area.

This project will repair a critical component of the site, the retaining wall. The wall supports the iconic headframe, shaft-house and water-tower sitting above it. It stands next to and over the popular Trezona Trail and the Miners' Dry Community building. Adjacent to the trail, is the road leading to the boat access and fishing dock located on the lake below. Should the wall fail, the structures, the trail, and road would likely be damaged or destroyed. The lake could be impacted. This project urgently seeks funding to repair/restore the wall.

What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.

The retaining wall consists of precast concrete elements that are stacked and interlocked forming a wall that retains approximately 22 feet of unbalanced fill. The majority of the concrete elements are severely deteriorated as a result of water penetration and the rusting of the reinforcement components. In the recent 2019 condition assessment study of the mine site, the retaining wall was identified to be in poor condition and an item requiring high priority attention.

The construction design work is currently underway led by the architectural firm MacDonald and Mack and the structural engineering firm, Mattson MacDonald and Young. These two organizations are developing the detail for the proposed solution, due this year (2020).

This LCCMR request, should it be approved, will fund the implementation of that solution in 2021, which will include structural enhancements, the creation and repair of the concrete ties, and material disposal and cleanup. The solution will also include native landscaping work and minor usability improvements at the site.

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 outcome of this request will be the continuation of the site as a recreational area, protecting it from the disturbance that wall failure would cause.

The project site is reclaimed mine-land. The natural re-growth of native plants is recent and valuable in stabilizing and preventing erosion. Project work will focus on securing the structure that protects the vegetated areas and maintains the site's plant and soil conditions.

The work will also be valuable in stabilizing the slope leading to the lake, thereby reducing erosion.

Lastly, access to the fishing pier, boat-access, and the Trezona Trail will be protected.

Activities and Milestones

Activity 1: Retaining Wall Repair

Activity Budget: \$177,000

Activity Description:

This activity encompasses the actual physical work to reinforce and repair the Pioneer Mine Retaining Wall. This will include the installation and testing of the reinforcement solution, the creation and installation of the precast concrete ties, the removal of waste materials, and the site preparation and cleanup. The details of this work will be documented in the construction design documents currently being developed.

The result of the activity will be the protection of the land, water and habitat in the area near the mine site, thereby maintaining access and use of the recreational features of the site, including the fishing pier, the boat landing, the walking trail and the mine structures.

Activity Milestones:

Description	Completion Date
Selection of the Construction Firm	2021-07-31
Start Construction	2021-08-31
Schedule Work	2021-08-31
Review of Construction Design Documents	2021-08-31
Complete Construction	2021-10-31
Follow-up/Clean-up/Miscellaneous	2021-11-30

Activity 2: Site Improvements

Activity Budget: \$8,000

Activity Description:

This activity will include the work to develop and protect land with high recreational value. This work will include the planning and implementation of natural landscaping around the retaining wall and extending along the Trezona Trail. The restoration of native plants enhances the outdoor experience for people on the trail while connecting them with the outdoors. Additionally, it will prevent erosion on the site. Due to the proximity of the mine site assets, it will also enhance the experience of those using the community building and art center as well as those accessing the boat landing and fishing pier. Seating will also be included.

The result of this activity will be a more natural and pleasing site for the many people who access it. Additionally, the plantings will prevent erosion providing long term stability to the area.

Activity Milestones:

Description	Completion Date
Select the Landscaping Business	2021-07-31
Schedule the Work	2021-08-31
Develop the Landscaping Plan	2021-08-31
Begin Planting	2022-05-31
Complete Landscaping	2022-06-30
Follow-up/Clean-up/Miscellaneous	2022-08-31

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
John Seliga	Ely Arts and Heritage Center	The organization manages the Pioneer Mine Site, owned by city.	No

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 be funded?

Since 1977, when the City took possession of the property, the site has received enthusiastic support from the City and Ely Community. With this commitment, funding has been found via private fund raising as well as from government entities including the IRRRB, the Minnesota DNR and the Minnesota DoT. The community will continue to work to maintain this very special asset of the City of Ely. Most recently, the City commissioned a condition assessment study of the Pioneer Mine Site. This study has provided the roadmap for the community to approach future care and maintenance.

Project Manager and Organization Qualifications

Project Manager Name: Harold Langowski

Job Title: Ely City Clerk, Treasurer, and Operations Director

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

Harold has experience as a project manager and civil engineer which he gained working for the JPJ Engineering Firm - a construction engineering company with offices in Hibbing and Duluth Minnesota. In 2008, Harold accepted his position with the City of Ely where he has managed large grants, and large construction projects as well as providing leadership for the city treasury and administration functions. Recent successful projects that Harold has overseen include the renovation of Ely's City Hall building, the construction of Ely's library building, the construction of the Semer's Park Open Air pavilion, the paving of Central Avenue, 7th Avenue and 17th Avenue, to name a few. Harold can provide the skills and judgement to shepherd this project to completion.

In this effort Harold will be assisted by city staff as well the commission members committed to the project. Casey Velcheff, deputy city clerk, can be reached at 218-226-5449. Celia Domich, commission member, can be reached at 218-235-8851.

Organization: City of Ely

Organization Description:

The City of Ely is a municipal corporation administered by a plan of government known as a weak-mayor strong council plan. All powers, not otherwise established by the state or by the charter, rest with the mayor and council.

Ely, located in northeastern Minnesota, in St Louis County, has a population of approximately 3400 residents within the city limits and serves an additional 2800 in the surrounding area.

The City has long been a tourism destination causing its population to grow significantly during the summer months when snowbirds and other visitors come to experience its small-town charm. Ely is a walking city and its downtown is lined with outfitters, restaurants, art shops and other small businesses.

But Ely has more than a charming downtown. It provides the gateway to the stunning Boundary Waters Canoe area and offers many attractions. A short list of attractions includes the International Wolf Center, The North American Bear Center, and several small museums including the the Pioneer Mine Site Museum. The City offers a lakeside park and a popular walking and ski trail - the Trezona Trail which is located completely within the city, but provides a convenient woodland experience to residents and visitors.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
							Sub Total	-
Contracts and Services								
Construction Firm (to be selected)	Professional or Technical Service Contract	The construction firm will work with the architects and engineers who developed the construction design and implement the design plan as prescribed. They will provide management, equipment, and manpower to complete the work. They will also remove and dispose of any excess materials resulting from demolition and/or construction.				0		\$163,000
MacDonald and Mack Architects	Professional or Technical Service Contract	This is the firm that developed the construction design documents for the project. There will be a small cost required to provided payment for their work in transitioning and overseeing the project during the construction phase.				0		\$14,000
Landscaping Firm (to be determined)	Professional or Technical Service Contract	This organization will provide the plan and execution for the landscaping work for the project, focusing on native plants that will prevent erosion and flourish with minimal stewardship.				-		\$8,000
							Sub Total	\$185,000
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								

							Sub Total	-
Travel In Minnesota								
							Sub Total	-
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
							Sub Total	-
Other Expenses								
							Sub Total	-
							Grand Total	\$185,000

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	-

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
030-0500-00215 Ely Pioneer Mine Site	St. Louis	The site is important as a recreational area, historic site and tourist attraction.	Restoration	9	-	-	Public		In progress
				-	-	-			
Totals				9	0	-			

Restoration

1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.

The City of Ely owns the property that will be affected by this project.

2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.

This work is primarily preventative. The restoration of the retaining wall will prevent destruction of the surrounding area and structures, should the wall fail. The City of Ely maintains all relevant documentation in their systems as required by state law.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources “Native Vegetation Establishment and Enhancement Guidelines” in order to ensure ecological integrity and pollinator enhancement.

We will use the pollinator habitat and forest/woodlands guidance for site preparation, planting and maintenance guidance during the landscaping portion of the project. In particular, we will consult the Minnesota Native Plant Community Classification document during the plant selection.

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.

As described above in Long-Term Implementation and Funding section, the community and the city will work together to maintain the Pioneer Mine Site. Additionally, the southern most portion of the Trezona Trail connects with the Mesabi Trail which has broader reach and provides additional support from the County and State. The Community and the City will continue to support the site via joint public-private efforts.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

The City will reach out to the Conservation Corps of Minnesota for the landscaping portion of the project to determine opportunities for participation. In the past the City has worked with the Northern Bedrock Conservation Corp on several projects including a park restoration and a cemetery restoration.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

The City, the architectural firm MacDonald and Mack, and the landscaping firm will provide over site during and at the completion of the project. The City will review results three years later as follow-up.

Attachments

Required Attachments

Map

File: [01beeb89-461.pdf](#)

Alternate Text for Map

This map represents the location of the Pioneer Mine site within the City of Ely. A site map is also included below in the Optional Attachment section. The site map shows the placement of all the components on the site including the retaining wall, the Miners' Dry Building, the Trezona Trail, the boat landing and so forth. I have also included photographs including a picture of the retaining wall in 2017 and a more current picture from 2019. These photos provide visual support for the urgency of the project. .

Board Resolution or Letter

Title	File
PIONEER MINE CITY RESOLUTION - 2020-012	4cb83451-dde.pdf

Optional Attachments

Support Letter or Other

Title	File
PIONEER MINE MAP - SITE MAP - 2020	2d088019-ea6.pdf
PIONEER MINE PIX - COVER PHOTO	1cc56afe-5af.docx
PIONEER MINE PIX - 2017 RETAINING WALL	da783e3a-586.docx
PIONEER MINE PIX - 2019 RETAINING WALL	e23cd659-38b.docx
PIONEER MINE SUPPORT - ELY CHAMBER OF COMMERCE	5b1b6186-79d.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

Yes: Restoration,

Does your project have patent, royalties, or revenue potential?

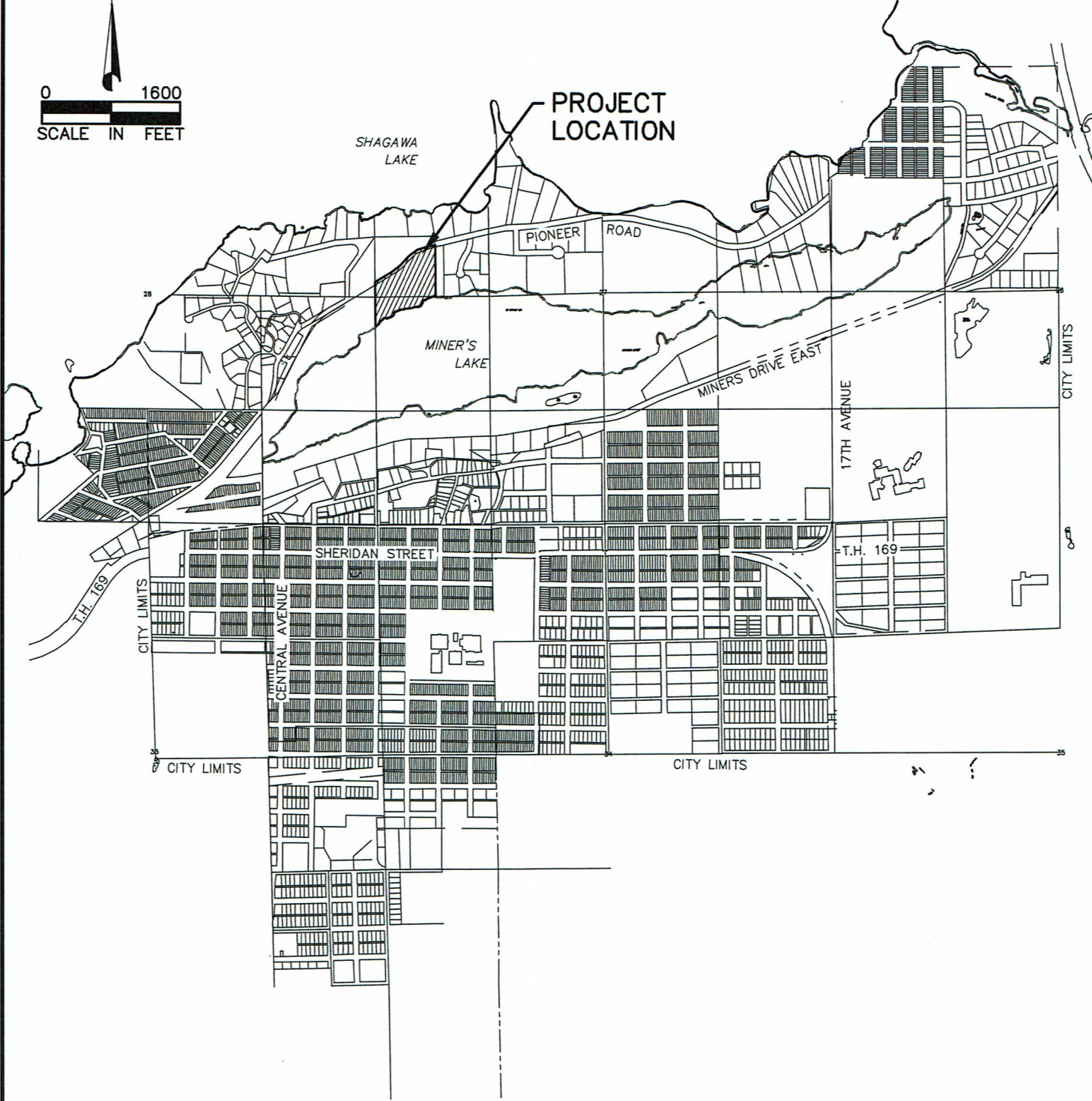
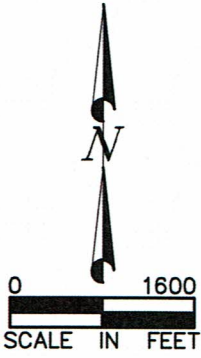
No

Does your project include research?

No

Does the organization have a fiscal agent for this project?

No



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DECEMBER 2017



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PO Box 656
Hibbing, MN 55746
(218) 262-5528
www.jpjeng.com

PIONEER MINE LOCATION MAP

ELY, MINNESOTA

PROJECT NUMBER

SHEET NUMBER