

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY
AUTHORITY**

REQUEST FOR PROPOSALS

Ross Cage Hoist Rope Replacement

RFP #2025-24

<u>Project Date Milestones</u>	<u>All times listed in Mountain Time</u>
Registration Deadline for Site Visit:	November 7, 2025, by 1600
Optional Site Visit:	November 12, 2025, 1000 - 1200
Questions Submitted:	November 18, 2025, by 1600
Questions & Answers Posted:	November 21, 2025, by 1600
Proposal Due Date:	December 5, 2025, by 1600
REVISED Proposal Due Date	December 19, 2025 by 1600

1. PURPOSE:

This Request for Proposal (RFP) is issued by the South Dakota Science and Technology Authority (SDSTA) for Maintenance Services to replace the wire rope on the Ross Cage Hoist overwind drum. An individual firm will be selected for a fixed price contract based on the total costs, technical acceptability, and meet the project schedule based on the Scope of Work (SOW). Documents included with this RFP include:

- A. Draft Contract (2025-24)
- B. Draft Construction General Conditions Agreement
- C. Payment and Performance Bond Form
- D. Pre-Qualification ESH Questionnaire
- E. Exhibits
 - a. M26 Socket with Pin
 - b. WireCo mill test certificate, existing rope
 - c. Bridon – Bekaert certificate, new rope
 - d. Ross Headframe floor plan with new concrete floor
 - e. Ross Headframe pictures

2. PROJECT BACKGROUND:

The Sanford Underground Research Facility (SURF) relies on the Ross Shaft to transport people and supplies underground using cage, work deck, or skip style conveyances. The shaft system includes a production hoist (two skips counterbalanced off each other) and a service hoist (man/material conveyance counterbalanced using a counterweight) to support underground operations. The conveyances rely on wire rope and the power of hoists to raise or lower the conveyances within the 5,000 ft deep shaft. The Ross cage hoist is shown in Figure 1 below. The area surrounding the Ross headframe is shown in Figure 2 below. Additional Ross site areas are shown in Exhibits Ed and Ee.

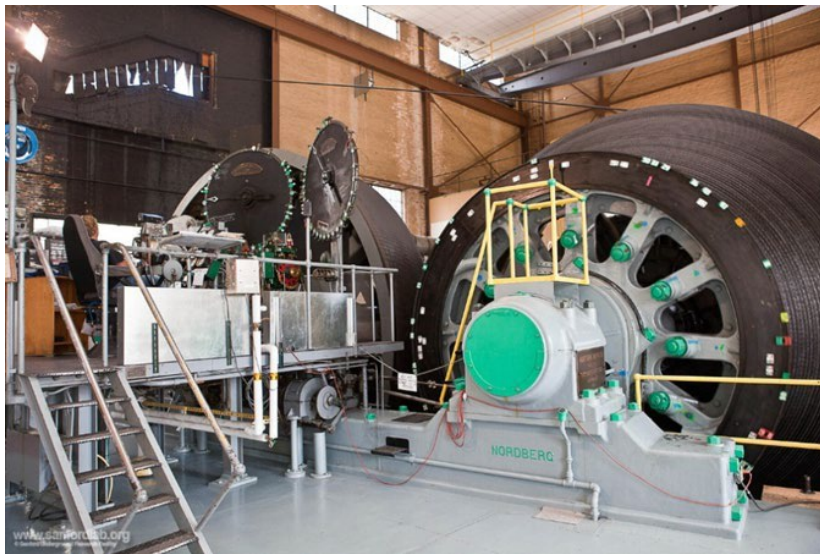


Figure 1, Ross Cage Hoist



Figure 2, Ross Headframe Yard and Surrounding Area

3. EXISTING CONDITIONS:

To prepare for this project, SURF has acquired one spool of 1-5/8" rope (6x30H WRI Minepro Flattened Strand) containing 6,150 ft. This is currently on site, located in the Yates crusher room. There is also an empty wire rope spool to be used for off winding the existing rope for storage and future use.

The detailed breakdown of the vendor's responsibilities is listed in Sections 4 and 5. Proposals for this project must address all these items.

4. SCOPE OF WORK AND REQUIREMENTS:

4.1 Scope of Work

The primary scope of work (SOW) for this project is focused on the removal and installation of a new rope and socket connection on the Ross shaft cage. The vendor will be responsible for completing the following items.

- Removal of 6350 ft of 1-5/8" wire rope (Exhibit Eb) from the cage hoist drum.
 - The vendor shall assume the Ross Shaft crew will chair the cage and remove the rope from the cage thimble connection.
 - SDSTA will provide an empty rope spool to wind the used rope onto for storage.
 - Move spool of used rope to the Yates crusher room for storage.
- Movement of the new spool of 6150 ft of 1-5/8" wire rope (Exhibit Ec) from storage in the Yates crusher room to the Ross work area (approximately 1 mile away).
- Installation of 6150 ft of 1-5/8" wire rope supplied by SDSTA on the cage drum including drum connection.
- Installation of an M26 spelter socket onto the cage rope. Vendor must supply the M26 spelter socket and wire lock epoxy resin and pin. Conforming to NCB Specification 465 (See Exhibit Ea).
- Certification of the M26 spelter socket connection.
 - Must include all quality/verification documents.
- The vendor shall assume the Ross Shaft crew will install the rope back onto the cage connection, unchair the cage and make it available to begin testing.
- Actual rope change work to start at the beginning of the selected Friday day shift, 6:30 A.M.
- Planned completion is to be 5:00 A.M. Monday so that day shift can begin at normal cage times.

4.2 Vendor Timeframe Requirements

Projects that require all or substantial use of the Ross shaft directly impact long term project schedules at SURF. To minimize schedule impacts as much as possible the vendor must:

- Mobilize and set up for this project prior to the start date. Rope change to be completed on any Friday/weekend between February 13 and April 17, 2026. Proposed dates when the work is to be completed need to be submitted and approved by SDSTA.
- Coordinate the setup/staging listed above with the SDSTA project manager so the rope change (or tasks that can't be completed without the hoist) begin on Monday preceding the proposed weekend. This will require the vendor to mobilize and set up on the days preceding the start of the rope change to minimize downtime.

4.3 Rope Tension

SDSTA requests that a minimum rope tension of 5,000 lbs be applied to the hoist ropes during removal and installation. The vendor completing this work is responsible for providing all equipment necessary to meet this requirement. If the vendor feels that greater pretension is needed, they must propose the suggested amount and the reason for the increase in their proposal.

The vendor may use the following information to propose a different rope tension:

Wire rope: One spool of 1-5/8" rope (6x30H WRI Minepro Flattened Strand) containing 6,150 ft.
Minimum Breaking Force = 285,000 lbs

Hoist Drums: Individual cage conical drum with spiral grooves. Both cage and counterweight drums contain their respective quantities of rope on a single layer; the rope doesn't wrap to a second layer at any point.

4.4 Transfer of Records

All records (project reports, meeting notes, data files, project data, original tracings, maps, field sketches, lab reports, test data, design calculations, graphic originals, electronic files, etc.) generated shall be the property of SDSTA and shall be turned over to SDSTA upon completion of the contract or as directed.

All deliverables shall be required to be delivered to SDSTA in hardcopy and electronic (original software and PDF) format. Depending on the size of the electronic deliverables, the vendor may be required to provide and utilize portable hard drive(s) for delivery.

5. SDSTA GENERAL REQUIREMENTS:

SDSTA has several requirements for the work associated with this project that must be met. The project requirements are:

- All workers must attend 1 hour of Surface Orientation safety training if on the property less than 40 hrs.
- All workers must attend a 4-hour General Safety Basic (GSB) training course if on the property more than 40 hrs.

- Vendor will be responsible for submitting all JHA's (Job Hazard Analysis) that will be reviewed by SDSTA prior to the work beginning. All submitted JHA's must be comprehensive of the work that will be performed.
- Vendors must supply SDSTA with a basic project schedule.
- Delivery of all equipment must be coordinated with SDSTA at least 2 weeks prior to arrival.
- Vendor is responsible for transporting all vendor supplied materials and equipment to the Ross headframe and Ross hoist room (or wherever needed).
- Vendor will be responsible for supplying all equipment and materials necessary to remove the old hoist rope and install the new hoist rope and socket (including spooler trucks, tensioner trucks, air tuggers and any ancillary equipment and tools needed to complete these tasks).
- Vendor must coordinate all work with the SDSTA project manager.
- Vendor must work with on-site hoist and shaft operations supervisors, hoist operators and the shaft crew.
- Vendor must supply SDSTA with all product manuals and submittal information including socket test certifications.

6. TECHNICAL EVALUATION CRITERIA:

All submissions for this project will be evaluated based on total costs, technical acceptability based on the items listed below, and meeting the project schedule. Proposals must be broken down into the following level of detail:

- Specialized experience and technical competence in:
 - Removal and installation of large steel hoist rope
 - Installation of rope socket
 - Pull testing of rope socket
- Construction safety practices, procedures, and safety record relating to the scope of work.
- Qualified professional personnel in the following key areas: removal of large diameter, long length hoist rope.
- Past performance on SDSTA, US Department of Energy, State of South Dakota or other contracts with respect to cost control, quality of work, and compliance with performance schedules.

7. SUBMISSION REQUIREMENTS:

Submission Requirement: General

In order to be eligible for contract award, a firm must be registered as a business entity with the South Dakota Secretary of State, the System for Award Management (SAM.gov) and E-Verify (e-verify.gov).

Proposals should be provided in digital format as a pdf file with standard letter size format. There is a 20-page limit for proposals. Proposals must contain the following:

- Primary points of contact for the proposed team.
- Any exceptions to the draft contract, terms and conditions, or other RFP materials.
- Basic project schedule calling out setup time and other major activities. Note that the main rope change phase is to begin on Friday day shift, beginning at 6:30 A.M. and continue until it is complete. The goal is to have the job completed by Monday at 5:00 A.M. so that Monday day shift can start on time.
- List of setup activities that need to take place prior to full hoist turnover for the project beginning.
- Basic layout of equipment placement during rope change and high-level overview of the vendor's approach to complete this SOW.

Submission Requirement: Similar Projects

Describe at least two similar projects that the vendor has installed and commissioned within the past five years. Example projects should be similar and comparable in scope. Examples should note the customer, location, and date of the project.

Submission Requirement: Price

Provide a project pricing breakdown as detailed below.

PRICING:

1.1 Rope socket (including installation and pull testing) \$ _____ **FFP**

Removal of old rope \$ _____ **FFP**

New rope installation \$ _____ **FFP**

Commissioning \$ _____ **FFP**

TOTAL PROPOSAL \$ _____ **FFP**

The offeror's fixed price shall constitute full payment for the work, materials, services, quality control testing, and other items required. Include all applicable federal, state use, sales, and local taxes, duties, permits, bonding, and all the Subcontractor's other obligations related to such work.

Submission Requirement: Site Visit

All offerors can optionally attend an onsite pre-proposal conference and site visit November 12, 2025, from 1000 - 1200 MT at SURF, 630 East Summit Street, Lead South Dakota.

Pre-registration is required. Email draad@sanfordlab.org by close of business November 7, 2025, to receive instructions and driving directions.

8. DELIVERABLES:

Refer to the technical specifications for deliverables required after contract award but before the start of work and during project execution. While not a complete list, key deliverables include:

- Construction Schedule
- Schedule of Prices
- Contractor Daily Reports
- Test Reports
- As Built Drawings – Rope socket

9. PROPOSALS DUE:

Offerors must submit an electronic copy (pdf format) of the proposal no later than 1600 on December 19, 2025, to draad@sanfordlab.org. Late submissions will not be accepted.

Questions are due by 1400 on November 18, 2025.

Questions and Answers will be emailed to all prospective offerors and posted to the sanfordlab.org website by close of business on November 21, 2025.

Proposals must be valid for 60 days. The proposal period may be extended at the discretion of SDSTA based on the quantity and/or complexity of questions. Any notices of extension of time to respond will be distributed to all prospective offerors by SDSTA.

All communications regarding this procurement between RFP release and award shall be directed by email to draad@sanfordlab.org. Communications with other SDSTA staff regarding this procurement in advance of the award are not allowed.