
REQUEST FOR BID
Ross Headframe Trolley Beam Strengthening Project
South Dakota Science and Technology Authority
SDSTA Contract # 2025-12
August 8, 2025

The South Dakota Science and Technology Authority (SDSTA) is seeking bids for additional structural steel and welding improvements on three existing trolley beams. All work is located within the Ross Headframe at the Sanford Underground Research Facility (SURF). Documents included in this Request for Bid include:

- A. This Request for Bid
- B. Insurance Requirements
- C. Environment, Safety and Health Requirements
- D. Draft contract
- E. Attachments
 - SDSTA Division 1 Specifications
 - Albertson Engineering Inc drawing package titled: “Ross Headframe Trolley Beam Strengthening”, sheets S001 through S501, 4 sheets.

1.0 Background

SDSTA is a quasi-governmental agency established by the State of South Dakota to operate and manage SURF at the former Homestake Gold mine in Lead, SD. This facility has been rehabilitated and developed to support a variety of scientific experiments, including physics, biology, geology, and others.

The Ross Headframe is equipped with a trolley beam and 7.5 Ton hoist on the west side of the cage compartment. This is utilized for loading/unloading materials and supplies onto rail cars traveling underground. A previous inspection of this trolley beam derated it down to 9600 pounds. This project strengthens the trolley beam and supporting structure to regain the lost capacity. This will allow the hoist to lift up to a new 10T capacity.

Directly to the north of this trolley beam is an identical trolley beam aligned with the counter weight compartment. It will also be strengthened in a similar fashion to increase the capacity to 10T.

On the east side of the shaft is another trolley beam that hasn't been utilized in the past. It runs north-south and is directly east, approximately three feet from an existing active trolley beam. It has been evaluated by Albertson Engineering to be put into service as an 8T trolley beam. This beam will require some minor improvements on the north end connection and support.

2.0 Existing Conditions

The trolley beam and hoist west of the cage compartment are currently operating and used several days a week. The floor in the headframe is cracked concrete with some graveled areas creating some unlevel ground conditions. The contractor needs to be aware of these conditions if they use a JLG style lifting device to complete the work. SDSTA will also be active in both areas, supporting ongoing underground operations. The areas directly below

these trolley beams are very active travel ways to complete SDSTA's work. Coordination for daily work plans will have to be reviewed with the Ross Shaft Superintendent, Mike Johnson. The proposal shall describe how you plan to work above active areas of the headframe and keep people safe below the work area. Work within 6 feet of the shaft will require coordination with SDSTA to develop a plan to protect the shaft opening. This will be required to prevent anything from entering the shaft area.

3.0 Scope

The general scope of work for this contract will include the following: Complete the structural strengthening improvements of three trolley beams at the Ross Headframe. These improvements are more fully detailed in the referenced and attached Albertson Engineering drawings, Ross Headframe Trolley Beam Strengthening.

4.0 Submission Requirements

- 4.1 Describe at least two, similar projects that the Contractor has completed within the past ten years.
- 4.2 Specialized experience and technical competence in:
 - 4.2.1 Structural steel fabrication
 - 4.2.2 Welding
 - 4.2.3 Working at heights
 - 4.2.4 Working in an active SDSTA work area
 - 4.2.5 Working next to an open shaft
- 4.3 AWS certified welders. Provide a list of employees that are AWS certified that will be working on this project.

5.0 Schedule

The activities noted in the Scope section above should commence following the award of the contract. The schedule for completion of this project is negotiable and flexible to accommodate the contractor's availability. The proposed schedule for the project is:

RFB Posted	August 8, 2025
Deadline for Registration for Site Visit.....	August 15, 2025 2:00 pm MT
Mandatory Site Visit.....	August 19, 2025 7:30 - 9:30 am MT
Questions Due:.....	August 21, 2025 4:00 pm MT
Questions & Answers Posted:.....	August 26, 2025 2:00 pm MT
Bid Responses Due	August 29, 2025 2:00 pm MT
Contract Awarded By (Target)	September 4, 2025

Work is to be completed in 45 calendar days from Notice to Proceed, subject to feedback in the proposal.

6.0 Bid Elements

The bid in response to this RFB must contain the following:

- 6.1 A total cost for all work as shown in the attached drawings including profit and overhead.
- 6.2 Include Requirements listed in Section 4.0
- 6.3 Written exception(s) to RFB
- 6.4 Warranty information
- 6.5 Note that any steel product meets the BUY AMERICAN REQUIREMENTS FOR INFRASTRUCTURE PROJECTS.

7.0 Bid Requirements

- 7.1 For your bid to be eligible for consideration, please submit an electronic copy in .pdf format to David Raad at draad@sanfordlab.org.
- 7.2 Questions must be sent in writing by email to David Raad (draad@sanfordlab.org). Answers will be emailed to all prospective proposers and posted to the Sanfordlab.org website. Prospective proposers must coordinate with David Raad regarding attendance at the site visit in Lead, SD.
- 7.3 The bid period may be extended at the discretion of the SDSTA based on the quantity and/or complexity of questions. Any notices of extension of time to respond will be distributed to all prospective proposers.
- 7.4 All communications regarding this procurement between RFB release and contract award shall be directed to David Raad. Communications with other SDSTA staff regarding this procurement in advance of the contract award are not allowed.

8.0 Selection Process

The SDSTA will review all submitted bids for adherence to this request's requirements and capabilities and select the firm providing the Lowest Cost – Technically Acceptable bid.