SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

REQUEST FOR PROPOSALS

Dewatering Pump Package

RFP #2022-07

Questions Submitted:	April 22, 2022 (by 2:00 P.M.)
Questions & Answers Posted:	April 29, 2022
Proposal Due Date:	May 20, 2022 (by 2:00 P.M.)

1. PURPOSE:

This Request for Proposal (RFP) is issued by the South Dakota Science and Technology Authority (SDSTA) for equipment procurement *to replace legacy dewatering pumps needed to remove water inflows from the underground at the Sanford Underground Research Facility (SURF).* An individual supplier will be selected for a fixed price purchase order based on the total of the quantities and unit costs listed on the project bid sheet, and overall supplied information package. Documents included with this RFP include:

A. SDSTA Design Specification Documents: Attachment 1: 2022-07 Pump Specs: *Pump specification that all proposals must meet or exceed to be considered for this RFP*
B. SDSTA Bid Sheet: Attachment 2

2. PROJECT BACKGROUND:

The pumping system at SURF is responsible for removing all the natural water inflows that accumulate through the vast underground workings of the former Homestake Gold Mine. The pumping system removes water from the underground using a deep pool pump and 4 pump rooms. The water is pumped sequentially in "lifts" from the deep pool to pump rooms located at the 5000, 3650, 2450, and 1250 levels and finally to the Waste Water Treatment Plant.

Currently, each pump room contains a pump purchased by Homestake in the 1960's that has been used ever since with the support of periodic rebuilds when possible. These pumps can no longer be purchased creating a dwindling pump supply at SURF. New pumps purchased from this RFP would be vendor supported, eliminating supply concerns.

The SDSTA is actively planning for rebuilding each of these pump rooms with the goal of outfitting each rehabilitated room with a new pump/motor/baseplate package upon completion. The 3650 Pump Room is the first on the list to receive extensive rehabilitation.

3. EXISTING CONDITIONS:

The 3650 Pump Room (Figure 1) will be the first pump room rehabbed as part of a larger recapitalization program and the first to use one of the new pumps procured from this RFP. A photo of the current pump setup is provided to give bidders a general idea of the environment these pumps operate in. This photo is provided for information purposes only. All the piping shown will be reconfigured as part of the rehab.

Figure 1. Existing pump and motor (left) and 3650 pump room (right)

4. SCOPE OF WORK:

The SDSTA will purchase a new pump/motor/baseplate package (Package #1) with an additional pump & motor spare (Spare Package) with this RFP. Package #1 will be installed during the 3650 rehabilitation with the Spare Package providing backup. The SDSTA is also interested in potentially purchasing a 2nd pump/motor/baseplate package (Package #2) that would be used for the future rebuild of another pump room, allowing construction on the next pump room to start sooner.

The scope of work for this project is for Vendors to provide a proposal for dewatering pump/motor package that meets or exceeds the requirements listed in the attached SDSTA dewatering pump specification (Attachment 1). Proposals must also include the items listed in the submission requirements below that help justify the submission. Proposals should be provided for the following equipment and services:

1.1. Pump Package #1
  1.1.1. Pump
  1.1.2. Motor
  1.1.3. Baseplate
1.2. Pump Spare Package
  1.2.1. Pump
  1.2.2. Motor
1.3. (Option) Pump Package #2: (Match Package #1)

1.3.1. Purchased with contract award.
1.3.2. Purchased 6 months after contract award.
1.3.3. Purchased 12 months after contract award.

1.4. (Option) Critical spares list for 1 pump package

New pumps will eventually replace all the legacy pumps within the pump rooms at the SURF. The pump specification (Attachment 1) was developed so the supplied pumps could operate at any of the four SDSTA pump rooms. All pumps purchased for this project must be identical in every way allowing for commonality between pumps reducing the costs of critical spares.

5. TECHNICAL EVALUATION CRITERIA:

A best value selection process will be used to award this contract. The selection criteria are listed below. Selection will be made based on tradeoffs between price and non-price evaluation criteria.

A. The offeror's total project package compared to the technical requirements defined in the attached SDSTA dewatering pump specification document (Attachment 1).
B. Specialized experience and technical competence in:
   - Dewatering pump design/selection
   - Customer support for the supplied pumps
C. Locations relative to SURF including:
   - Company headquarters
   - Nearest branch office
   - Pump manufacturing location
   - Nearest pump rebuild/support center
D. Previous experience supplying, rebuilding, or maintaining pump/motor packages in industrial applications and environments with respect to quality of the supplied product, and customer support

6. SUBMISSION REQUIREMENTS:

A. Submission Requirement: General

Proposals should be provided in digital format as a pdf file with standard letter size format. Note that there is a 30-page limit for proposals. Proposals must contain the following:

- Primary points of contact for the submitted proposal.
- Locations (addresses) of the following:
  - Company headquarters
  - Nearest branch office
  - Pump manufacturing location (for this project)
  - Nearest pump rebuild/support center
- Any exceptions to the RFP materials.

B. Submission Requirement: Similar Projects

Describe at least five similar pump supply projects that the bidder has supplied pumps for and provided after sale services within the past ten years. Example projects should be for pumps

operating at 500hp or greater showcasing the supplied pumps, motors, and after sale services provided (rebuilds, parts, troubleshooting etc.). Examples should note the customer, contact info (name, phone, email), location, and date of the project and extent of the services provided or length of the established relationship.

C. **Submission Requirement: Equipment Spec Sheet & Technical Data**

Provide manufacturer specifications/equipment data sheets that provide enough information to determine the overall size & weight of each major component (pump, motor, baseplate) as well as the overall size and weight of the entire assembled package. Supplied spec sheets shall include:

- Brochure information for the supplied pump package (does not count towards the 30-page limit)
- General arrangement spec sheet of the pump, motor, & baseplate package.
- Pump spec sheet showing general dimensions and specifications
- Motor spec sheet showing general dimensions and specifications
- Baseplate spec sheet showing general dimensions and specifications
- Pump curve showing anticipated operating point
- Motor curve showing anticipated operating point

D. **Submission Requirement: Future Order Control**

The replacement of all legacy pumps at SURF is part of a larger pump room rehabilitation effort that will span multiple years. Additionally, the operation of these pumps is expected to last through numerous rebuilds or new pump purchases when needed. All future pump orders must be compatible (performance wise and mechanically) to the supplied units in this RFP.

Describe how the pump manufacturer will ensure that any future pump orders that may be ordered would match past pump orders in every way, to maintain mechanically similar pumps at all the pump room levels, when orders may be years apart.

E. **Submission Requirement: Quality Control and Testing**

Provide a description of the QC and testing programs used during the manufacturing or rebuilding of pumps to ensure the product meets the operational requirements. QC and testing manuals will not count toward the 30-page limit.

F. **Submission Requirement: Qualifications**

Provide a description of capabilities or industry experience relating to:

- Manufacturing of pump packages
- Services offered relating to pumping systems
- Long term customer support

G. **Submission Requirement: Package Lead Time**

Provide the estimated lead time for the delivery of the complete package in the following format:

- Order Date + XX Weeks

H. **Submission Requirement: Reliability Data**

Provide reliability data in the following format:

- Pump designed lifespan between repairs (mean time to failure)
- Motor designed lifespan between repairs (mean time to failure)

The above estimates should be based on manufacturer's recommendations for the supplied equipment.

I. **Submission Requirement: Price**

Provide a project pricing breakdown as detailed below.

PRICING:

1.1 Pump Package #1 (total) $_____ FFP

Pump for package #1 $_____ FFP

Motor for package #1 $_____ FFP

Baseplate for package #1 $_____ FFP

1.2 Pump Spare Package (total) $_____ FFP

Pump for spare package $_____ FFP

Motor for spare package $_____ FFP

1.3 (Option) Pump Package #3 (Total each line for the 3 items in Package #1):

Purchased with award $_____ FFP

Purchased 6 months after award $_____ FFP

Purchased 12 months after award $_____ FFP

1.4 (Option) Critical spares for pump package #1 (total)$_____ FFP

TOTAL Proposal* (exclude options) **$_____ FFP**

*Proposals shall be valid for 90 days

The offeror's fixed price shall constitute full payment for the work, materials, services, quality control testing, or other items required, and include all applicable federal, state use, sales, and local taxes and delivery to site.

J. **DELIVERABLES:**

Refer to this document and the technical specifications for deliverables required after contract award. While not a complete list, key deliverables include:

- Selected Pump Package
- Quality Control & Testing Programs
- Shop Drawings
- Test Reports
- As Built Drawings (if applicable) or updated spec sheets
- O&M Manuals and Warranties
- Critical spare parts list that includes itemized pricing, availability, and estimated delivery times.
- Training records for all owner training (if selected)
- Copies of training materials developed and used for owner training (if selected)

K. **PROPOSALS DUE:**

Offerors should submit an electronic copy (pdf format) of the proposal **no later than 2:00 P.M. on May 20, 2022**, to bbrack@sanfordlab.org. Late submissions will not be accepted.

Questions are due by 2:00 P.M. on April 22, 2022.

Questions/Answers will be posted to the sanfordlab.org website no later than April 29, 2022.

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 bbrack@sanfordlab.org. Communications with other SDSTA staff regarding this procurement in advance of the award are not allowed.