

Office of the State Engineer

523 East Capitol Ave. Pierre, South Dakota 57501

605.773.3466 / http://boa.sd.gov/state-engineer

June 20, 2023

RE: REQUEST FOR STATEMENT OF INTEREST RAS FACILITY, GFP RAS FACILITY AT SDSU GAME, FISH & PARKS BROOKINGS, SOUTH DAKOTA OSE# G2123--61X

The State is looking for firms interested in providing professional Architectural/Engineering services for the project referenced above. The project scope will involve the design, bid and construction for a Recirculatory Aquaculture Systems (RAS) Facility at South Dakota State University in Brookings, South Dakota, OSE# G2123--61X.

The South Dakota Department of Game, Fish and Parks (GFP) is proposing to construct, in collaboration with the Department of Agriculture & Natural Resource Management (DANR) and South Dakota State University (SDSU), an on-campus production fish hatchery. This facility would use only Recirculating Aquaculture Systems (RAS) to rear multiple fish species for eventual stocking into South Dakota public fishing waters. The proposed hatchery would be built on land provided by SDSU. It would be staffed by GFP and operated using the model where a small number of permanent staff oversee part-time and full-time student employees working with fish production and related aquaculture technologies. Student work schedules would be flexible and accommodating to course schedules. The proposed hatchery incorporates Precision Aquaculture technology, such as matching oxygen injection to fish physiological demands and disease modeling, to maximize fish production and rearing efficiencies. While the primary purpose of this proposed hatchery is fish production, opportunities would exist for research that supports fish production and fits within the production schedule. In addition, the inclusion of an educational/visitation component that does not interfere with fish rearing is possible.

Initial proposed specifications:

- Building to include: (Estimated 25,000 sq.ft.)
 - 1. At least three tankrooms (one for coldwater, coolwater, and warmwater fish species), each with its own HVAC system with space for:
 - a. 3, 100-jar walleye egg incubation racks (each its own RAS with biofilters)
 - b. 36, 6'-diameter automatic cleaning (sweep arm) larval rearing tanks for walleye (low light) and bass (likely 3-to-9 RAS systems).
 - c. Four RAS systems with larger (8') rearing tanks for walleye, bass, sunfish, catfish, muskellunge grow out.
 - d. RAS system for coldwater (trout) rearing.
 - e. Two RAS systems with smaller tanks for larval rearing or experimental use.
 - f. RAS systems will use fluidized bed biofilters and match, as much as possible, the technology/configurations currently in use at Cleghorn Hatchery.
 - g. Shop area with overhead door.
 - 2. Feed storage room
 - 3. Laboratory



- 4. Three offices (one for each of the permanent staff and a group office for students)
- 5. Conference room
- 6. Bathrooms with showers
- Electrical Requirements ~ 2000 Amps
- Roof top solar panels
- Emergency Generator (in a separate building)
- Liquid Oxygen Tank (outside of the main building)
- Delivery Space for Large Trucks (for delivery of feed, liquid oxygen, and fuel for emergency generator)

The project shall be designed and ready for bid advertisement by April 2024. The estimated construction budget for the project is \$ 8,000,000.00, but be advised that this number is subject to change.

Firms desiring to be considered for providing professional services for this project should send a statement of interest that outlines qualifications and experience for this project. Statements of Interest should at a minimum include the following:

- 1. Specialized expertise, capabilities, experience in designing similar aquaculture facilities, and technical competence as demonstrated by the team's capabilities, proposed approach, and methodology to meet the project requirements. (35%)
- 2. Resources available to perform the work, including any specialized services, within the specified time limits for the project. (25%)
- 3. Record of past performance of similar type fishery facilities, including price and cost data from similar projects, quality of work, ability to meet schedules, cost control, and contract administration. (15%)
- 4. Availability to project locale. (5%)
- 5. Familiarity with project locale. (5%)
- 6. Proposed project management techniques. (10%)
- 7. Ability and project history in handling special project constraints. (5%)

A technical review committee will review the proposals and select a shortlist of firms. Those firms will then be interviewed by the Building Committee, who will make the final selection. The committee respectfully requests that statements of interest be limited to 25 pages or less. This is not a requirement, merely a request.

Copies of the statement of interest must be submitted by <u>3 PM CT on Thursday</u>, July <u>13</u>, <u>2023</u>. Please send recyclable hard copies and electronic copies (media or e-mail attachment) as quantified to each of the following:

(1 electronic copy)
Todd Baack, Project Engineer
Office of the State Engineer
Joe Foss Building
523 E. Capitol Avenue
Pierre, SD 57501-3182

Phone: 605.280.4360

E-mail: Todd.Baack@state.sd.us

(3 hard copies, 1 electronic copy)
Mike Barnes, Program Manager
Game, Fish & Parks
McNenny State Fish Hatchery
19619 Trout Loop
Spearfish, SD 57783
Phone: 605.645.2750

E-mail: mike.barnes@state.sd.us



Firms wanting additional site/project information should contact the OSE Project Engineer, Todd Baack. To schedule a site visit contact Mike Barnes. Thank you for your interest in this project; we look forward to working with you.

Respectfully,

Stacy Watters, PE State Engineer

CC: Todd Baack, OSE Project Engineer

Mike Barnes, GFP Ryan Tobin, GFP

