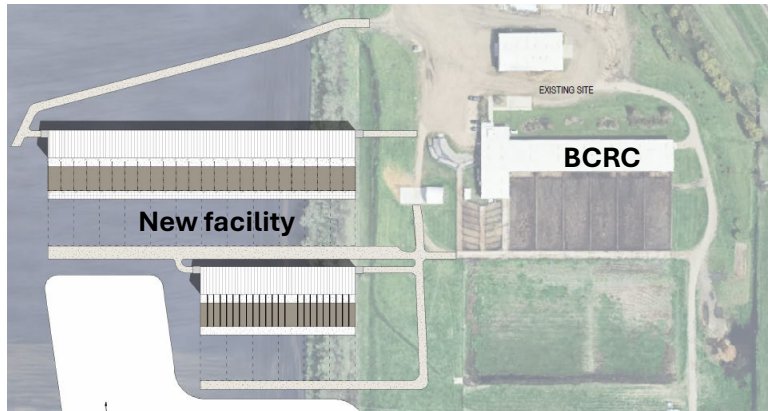


## **CAPITAL PROJECT REQUEST**

### **Beef Cattle Research Complex addition**

A critical need for the beef cattle research program at NDSU is the development and evaluation of livestock management tools, including emerging precision technologies:

- 1) Large-scale research facility is proposed to be added to the Beef Cattle Research Complex at Main Station in Fargo.



- 2) Scientists in the Department of Animal Sciences secured 6 USDA NIFA grants since 2021 and several commodity's funded projects. While this success is commendable, it has strained our facilities.
- 3) Expansion of the facilities is needed:
  - a) To maintain competitiveness with granting agencies
  - b) To recruit and retain faculty
  - c) To develop a stronger workforce.

### **Development of a Precision Management Dairy Unit**

The need for a new heifer barn and the implementation of robotic milkers at the North Dakota State University (NDSU) Dairy Barn is both timely and essential to support continued research, herd health, and operational efficiency.

- 1) A dedicated heifer barn is critical to the overall function of the dairy.
- 2) Improved pen design and layout to install robots will enhance safety in milk barn.
- 3) Robotic milking helps reduce labor needs and allow 15% increase in milk production.
- 4) An automated feeding system for dairy calves would:
  1. Reduce labor on feeding tasks
  2. Monitor individual milk intake, number of visits rewarded and unrewarded, as well as rate of milk intake.

