



## CHALLENGE

NORTH CAROLINA STATE UNIVERSITY WANTED TO ADD A RETAIL AND EDUCATIONAL CREAMERY ASSOCIATED WITH ITS AGRICULTURAL OUTREACH PROGRAM.

## SERVICES

- Architecture
- Cost Estimating
- Site Civil Design
- Site Planning

## NC STATE LAKE WHEELER ROAD CREAMERY STUDY

North Carolina State University's (NC State's) Lake Wheeler Road Field Laboratory is home to nearly 1,500 acres of teaching, research, and extension requests made by NC State faculty. The laboratory is home to numerous animal- and plant-related units for the university's agricultural program.

To further encourage education and engagement, NC State sought out to plan and build an educational creamery on its Lake Wheeler Road facility. The site is located within their dairy complex and is anticipated to provide educational outreach and distribution modeling for the NC State University owned "Howling Cow" ice cream brand.

## LAKE WHEELER ROAD CREAMERY CAFÉ AND EDUCATION CENTER.

This creamery is envisioned as not only a major community engagement gateway for the University and the College of Agriculture and Life Sciences to connect the public to agriculture and food systems, but also an agriculture destination point for North Carolina.

The planned 4,500-square-foot facility will accommodate school-age dairy tour groups as well as a retail sales outlet for dairy products. In addition, this facility will house the administrative offices, exterior and interior tour group gathering spaces, indoor restaurant seating, loading, and food preparation areas.

The operation will include educational and merchandising components available to neighboring partners. Site planning services will include on-site storm water management, septic system, well water

treatment, truck delivery/loading areas, school bus parking, public parking, and outdoor gathering for tour groups.

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## PLANNING FOR THE FUTURE

ms consultants provided site planning, architecture, preliminary civil engineering, and cost estimating for NC State's Lake Wheeler Road Creamery.

Work included:

- Establishing the programmatic needs for a stand-alone creamery café and agriculture education center by identifying future space requirements, adjacencies, customer flow & merchandising placement, and estimated building size.
- Reviewing the site for the optimal facility location by analyzing the adjacency to the dairy buildings and pasture. The recommended location will be developed to address site access, circulation plans, biosafety boundaries (identification of physical separation and barriers needed to protect the animals), and environmental impacts (such as ground water detention and impervious surface area).
- Developing an order-of-magnitude cost estimate for the new building and site.