



MICHIGAN STATE UNIVERSITY
BOARD OF TRUSTEES
Executive Action Summary

Budget & Finance-Attachment 2

APPROVED
OCTOBER 27, 2023
BOARD OF TRUSTEES
MICHIGAN STATE UNIVERSITY

Committee Name: Budget and Finance

Date: October 27, 2023

Agenda Item: Authorization to Proceed – Dairy Facility – Research and Teaching and Learning

Information

Review

Action

Resolution:

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project titled “Dairy Facility – Research and Teaching and Learning.”

Recommendation:

The Trustee Committee on Budget and Finance recommends that the Board of Trustees authorize the Administration to proceed with the construction of a new and renovated Dairy Cattle Teaching and Research Center with a project budget of \$75 million.

Prior Action by BOT: The Board authorized planning for this project on September 9, 2022.

Responsible Officers: Daniel Bollman, Vice President for Strategic Infrastructure Planning and Facilities
Barbara Kranz, Assistant Provost, Institutional Space Planning and Management

Summary: The project is anticipated to primarily consist of construction of new dairy facilities, leveraging some of the existing infrastructure, in particular the methane digester and repurposing of existing site for expanded feed production capacity. The project supports teaching and learning, research and outreach space including calf barns, feed centers, robotic milking parlor, staff offices, laboratories, classrooms and locker room totalling 219,000 square feet.

The Construction Manager is The Christman Co. The design firm is TowerPinkster. Construction is expected to commence in April 2024 with occupancy expected in fall 2025.

Background Information:

The existing MSU dairy facilities date to the 1960s and have reached the end of their useful life. The 2021 electrical fire that resulted in the loss of the feed barn and silos at the site accelerated the need to address this outdated and at-risk facility. In 2019, the College of Veterinary Medicine accreditation process noted the existing dairy facility was not appropriate for instruction. An interim alternative location was established for this purpose.

The new facility would be located at Bennett and College roads within the East Lansing campus' Agricultural District adjacent to the existing facility.

Source of Funds:

The project would be funded by:

- The state of Michigan appropriation (\$30 million of the \$53 million) authorized by P.A. 166 of 2022
- College of Agriculture and Natural Resources endowment revenues
- Philanthropy
- Advertising and digester gas sales
- College of Veterinary Medicine philanthropy
- may include debt financing

Resource Impact:

The expanded footprint would result in additional building maintenance, custodial and utility costs. However, the project also would retire infrastructure that has exceeded its useful life and requires significant capital renewal. The project will also result in resource needs to support increase in herd size and production (additional land) or purchase of feed and associated staff.



Authorization to Proceed Dairy Cattle Teaching and Research Center

A new Dairy Center would provide a modern teaching and learning and research facility.

REASON FOR PROJECT

Existing MSU dairy facilities date to the 1960s and have reached the end of their useful life. A 2019 accreditation review noted that the existing spaces were not appropriate for instruction and does not meet the needs to perform modern research.



PROJECT BACKGROUND

- The \$75 million project would renovate and expand the south dairy facility so it would comprise 219,000 square feet of space for administrative and agricultural purposes.
- The 2021 electrical fire that resulted in the loss of the feed barn and silos at the site accelerated the need to address this outdated and at-risk facility.

POINTS FOR CONSIDERATION

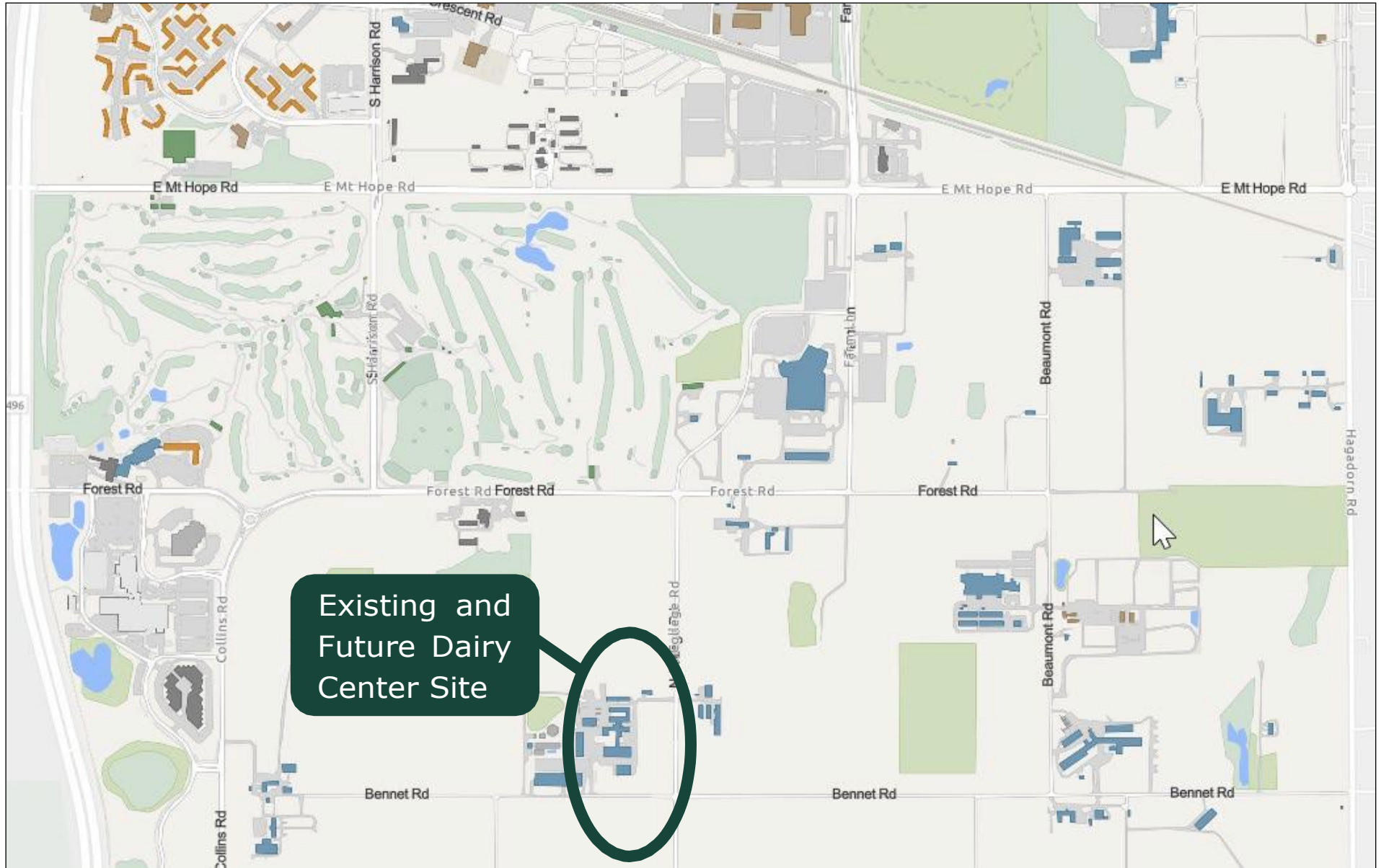
- Without updated facilities, it will become increasingly difficult to attract and retain top scientists and educators in the animal and veterinary sciences and meet the needs of the Michigan dairy industry.
- The new facility would enable MSU to conduct research and teaching in a modern dairy facility that ensures the highest level of animal care and production with robust data-driven science, enhance studies on nutrition, genetics, animal well-being and environmental sustainability, as well as provide capacity to address the backlog of research, which is up to two years on funded projects.
- The Michigan dairy industry ranks first among state agricultural commodities, generating \$24 billion annually, supporting over 110,000 jobs, and accounting for nearly 5% of the state's gross domestic product. MSU supports the industry through research, teaching and learning, outreach and engagement, and training of the next generation of dairy farm employees, managers, consultants, nutritionists, veterinary professionals, clinicians, and veterinary technicians.

FUNDING PLAN

Funding sources include state of Michigan appropriation, revenue from CANR endowment, corporate contributions, advertising revenue, digester gas sales, and philanthropy.

AUTHORIZATION TO PROCEED

Dairy Cattle Teaching and Research Center



Existing and Future Dairy Center Site



AUTHORIZATION TO PROCEED

Dairy Cattle Teaching and Research Center



Conceptual Design

1. New livestock barn with robotic milking parlor
2. New milking parlor with veterinary medical area
3. Administration and classroom building
4. Support buildings – Calf barns and manure/sand separation
5. Biodigester
6. New feed center (existing structures to be demolished)

