June 24, 2022

MEMORANDUM

To: Committee on Budget and Finance

From: Daniel J. Bollman
Vice President for Strategic Infrastructure Planning and Facilities

Subject: Authorization to Plan
Plant and Environmental Science Building

RECOMMENDATION
The Trustee Committee on Budget and Finance recommends that the Board of Trustees authorize the Administration to plan for new laboratory research space to accommodate current and planned growth in plant and environmental sciences.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled “Plant and Environmental Science Building”

BACKGROUND
MSU has made people’s lives better for 150 years by leveraging its investments and expertise. The MSU 2030 Strategic Plan continues this by investing in excellence in research including addressing the most complex societal problems and challenges of today and tomorrow, creating intersectional research and excellence in teaching, and developing transdisciplinary solutions to challenges brought about by social, economic, political, climate, and environmental changes.

This new building aligns with and supports the investment in excellence in research and is critical for maintaining and enhancing MSU’s strength as a globally recognized leader in plant and environmental science. MSU is home to 11 members of the National Academy of Sciences (NAS), of which 7 are focused on either Plant or Environmental Sciences. NAS members are a key metric in our Association of American Universities membership. MSU maintains high rankings both globally and in the US, with Agriculture and Forestry #10 globally and #5 in the US, Plant and Animal Sciences #7
globally, Agriculture Sciences #22 globally, and Environment/Ecology Sciences #39 globally.

The building will (a) provide new capacity, (b) align modern building infrastructure and space functionality, and (c) support the consolidation of top ranked researchers and students, thereby enabling new synergies and enhancing potential for discovery. It will provide the same quality of research facilities as our competitive institutions and allow us to attract and retain leading scientists, expand research to support Michigan, US and global agriculture, and increase federal funding in high-demand research areas.

**Description of Project:**
The programmatic vision focuses on research at the interface of plants and the environment with a focus on agriculture and ecological resilience; fundamental mechanisms of plant growth, photosynthesis, and evolution and resistance to stress/change. Planning for the building will consider the programmatic needs of research in photosynthesis and plant resilience, regenerative agriculture, and environmental science and ecology.

The building will primarily include wet-bench laboratory research space, support facilities including growth chambers, and collaborative spaces.

The anticipated location is in the central academic district adjacent to the Biomedical and Physical Sciences Building. Proximity to the existing Plant Sciences neighborhood is critical to the collaborative nature of the research, sharing of resources, and operational efficiencies. Site evaluation will account for infrastructure requirements. This project and its planning will set the stage for demolition of the Center for Integrated Plant Systems Building, and future adaptative re-use of the Plant Biology Building for further thematic co-location of programs, thereby reducing capital renewal.

**Communication Plan:**
Input will continue to be solicited from the campus community during the planning phase.

**Preliminary Project Cost Information:**
The planning for this project will incur costs for consultants, designers, and cost estimating. Initial funding will be from Infrastructure Reserve. It is anticipated that funding for the project will be a combination of general fund facilities and administrative costs, philanthropy including sponsorships, and long-term debt financing.

cc: Board of Trustees, S. Stanley, T. Woodruff, N. Beauchamp, M. Woo, M. Zeig,