

April 3, 2013

MEMORANDUM

To: Trustee Finance Committee

From: Ronald T. Flinn *RTF*
Vice President for Strategic Infrastructure Planning and Facilities

Subject: **Project Approval - Authorization to Proceed**
Bio Engineering Facility

RECOMMENDATION

BE IT RESOLVED that the Trustee Finance Committee recommends that the Board of Trustees authorize the Administration to proceed with the project entitled Bio Engineering Facility, and that it approve a budget of \$60,800,000. This action is *contingent on approval of an appropriation amendment by the State of Michigan.*



**OFFICE OF THE
EXECUTIVE VICE
PRESIDENT FOR
ADMINISTRATIVE
SERVICES**

Michigan State University
Hannah Administration Building
426 Auditorium Road, Room 412
East Lansing, Michigan
48824

Phone 517.355.5014
Fax 517.353.6772
www.adminsv.msu.edu

BACKGROUND

Capital Outlay:

Michigan Public Act 329 of 2010 provided capital outlay authorization to plan for the "MSU plant science facilities - bioeconomy additions and renovations" which includes the Bio Engineering Facility. Michigan Public Act 192 of 2012 provides capital outlay authorization to make appropriations for planning and construction. The State share of this project is \$30,000,000. This facility is the highest priority project for MSU within the capital outlay process. MSU has requested an amendment to the State's authorization to adjust the scope and budget from a 2-story approximately 67,500 gross square foot facility to a 4-story approximately 130,000 gross square foot facility with a revised budget of \$60,800,000. The State share would not change. The Joint Capital Outlay Subcommittee approved the scope change on March 20, 2013, and it is anticipated that the Legislature will take action on a supplemental bill to amend the authorization by mid-May, 2013.

Program Need:

The construction of the Bio Engineering Facility will provide a unique opportunity to bring together research teams from engineering and biomedical research to promote the development of bio-engineering and engineering health sciences at Michigan State University. These emerging research areas have significant opportunities for increased federal research funding, as well as for technology transfer to the private sector, which can promote the development of a transformational bio-based economy in Michigan.

Collaboration between researchers from different disciplines, ranging from chemical engineering, electrical engineering and mechanical engineering to pharmacology, physiology, and radiology, will be essential in the development of new areas of research such as tissue engineering. The new laboratory space will provide research capacity necessary to support new hires and funded researchers in this emerging area, and allow collaborators from different academic units to be co-located. Faculty from the College of Engineering, College of Human Medicine, and the College of Natural Science will be the primary occupants of the building. Additional benefits will be realized with the placement of the Bio Engineering Facility adjacent to the Clinical Center, Life Sciences, and Radiology buildings.

Description of the Project:

This new Bio Engineering Facility will be located between the Life Science and Clinical Center buildings in the south academic district. This project involves a four-story research laboratory building that is designed to facilitate interdisciplinary research and interaction amongst all occupants/users, and the sharing of specialized research equipment, such as imaging. The building will be physically connected to the existing Clinical Center C-Wing and Life Science B-Wing, with proximity to the Radiology building to facilitate the sharing of core research resources. Initially, two floors will be built-out and two floors will be shelled, providing future research laboratory capacity necessary to support planned research growth. The future build out of the two shelled floors would be funded by the university.

The Architect/Engineer is Integrated Design Solutions. The Construction Manager is Clark Construction Company.

Based on an assessment of the factors stated in the Project Planning and Approval process concerning Project Labor Agreements (PLA), the Vice President for Strategic Infrastructure Planning and Facilities has determined that a PLA would not be required for this project.

Communication Feedback:

The campus community was given opportunities to provide feedback during the planning phase and any concerns have been addressed in the project design.

The Office of Campus Planning and Administration has reviewed this project and found it to be consistent with the Campus Master Plan. The Campus Infrastructure Planning Work Group also supports the recommendation to proceed with the project.

As construction proceeds, the schedule will be reviewed with the campus community.

Project Cost and Timetable:

The budget for this Construction Manager project is \$60,800,000, which is being funded by a combination of State of Michigan Capital Outlay funding and University tax exempt financing with debt repayment from the general fund.

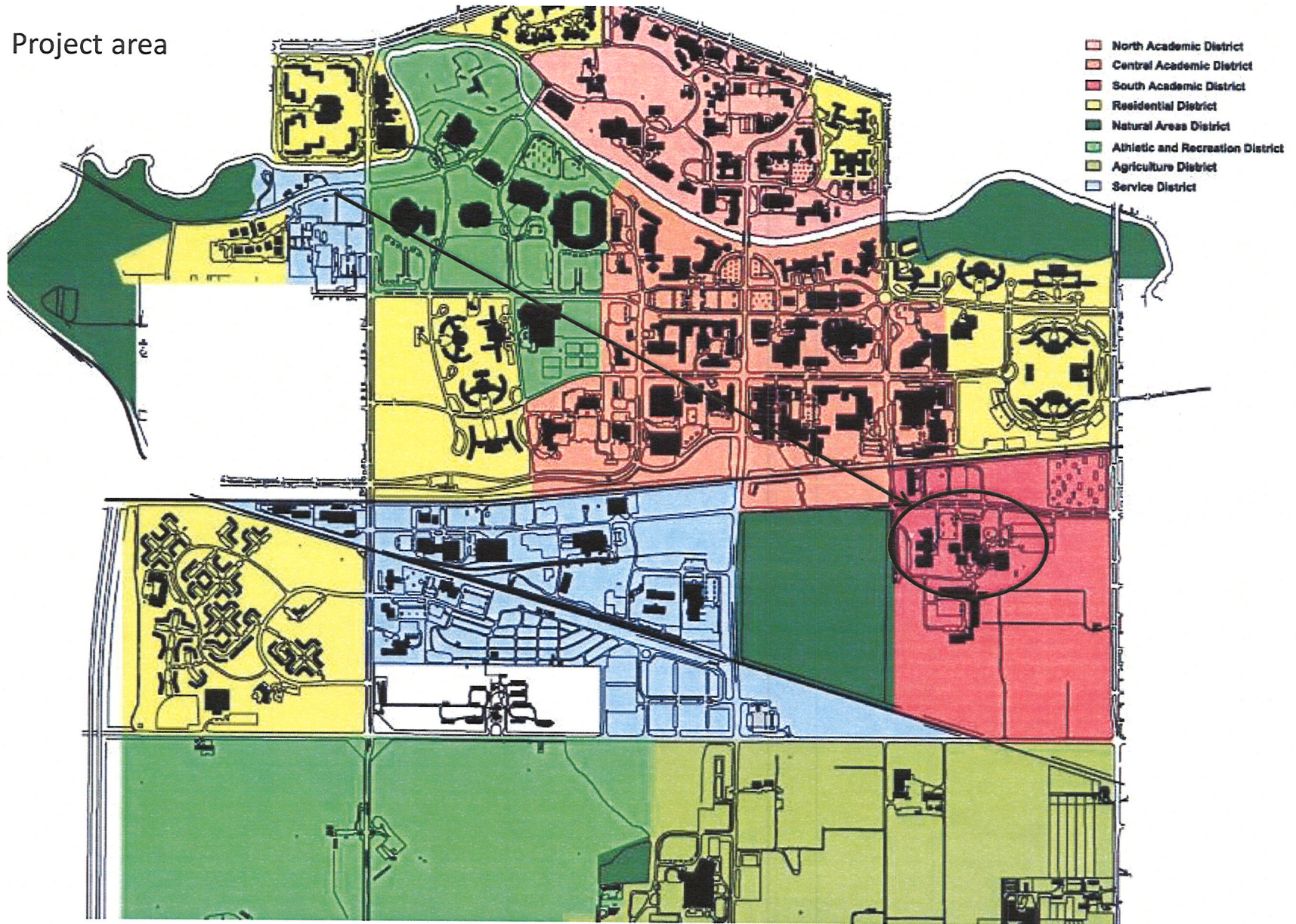
Construction is planned to begin in July 2013, with substantial completion in August 2015, and final completion by November 2015.

cc: R. Flinn, V. Gore, M. Haas, J. Kacos, G. Klein, B. Kranz, B. Latta,
M. McCabe, J. Mumma, R. Nestle, D. Quinney, S. Udpa, L. Adams

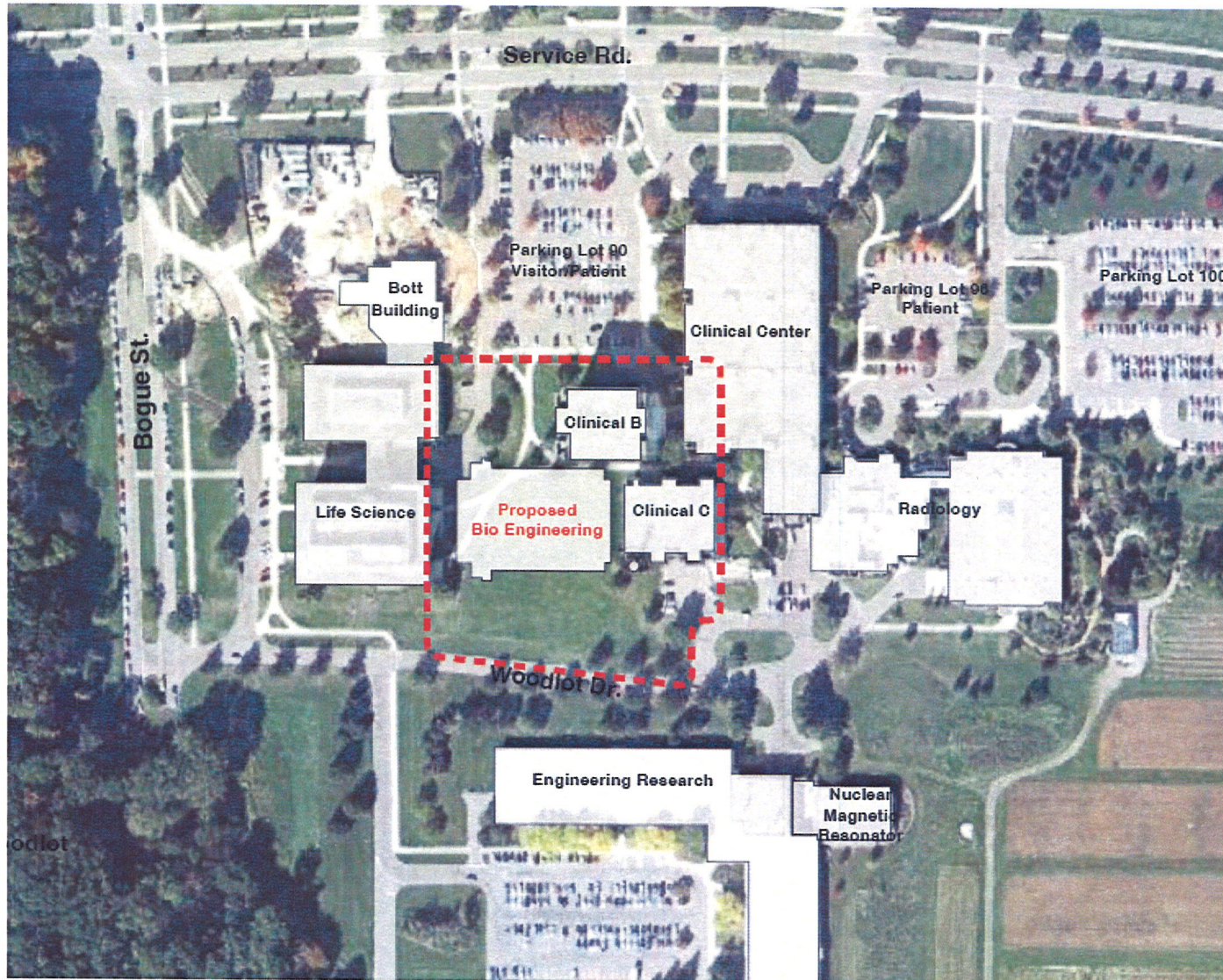
CP11243

Project Approval - Authorization to Proceed Bio Engineering Facility

Project area

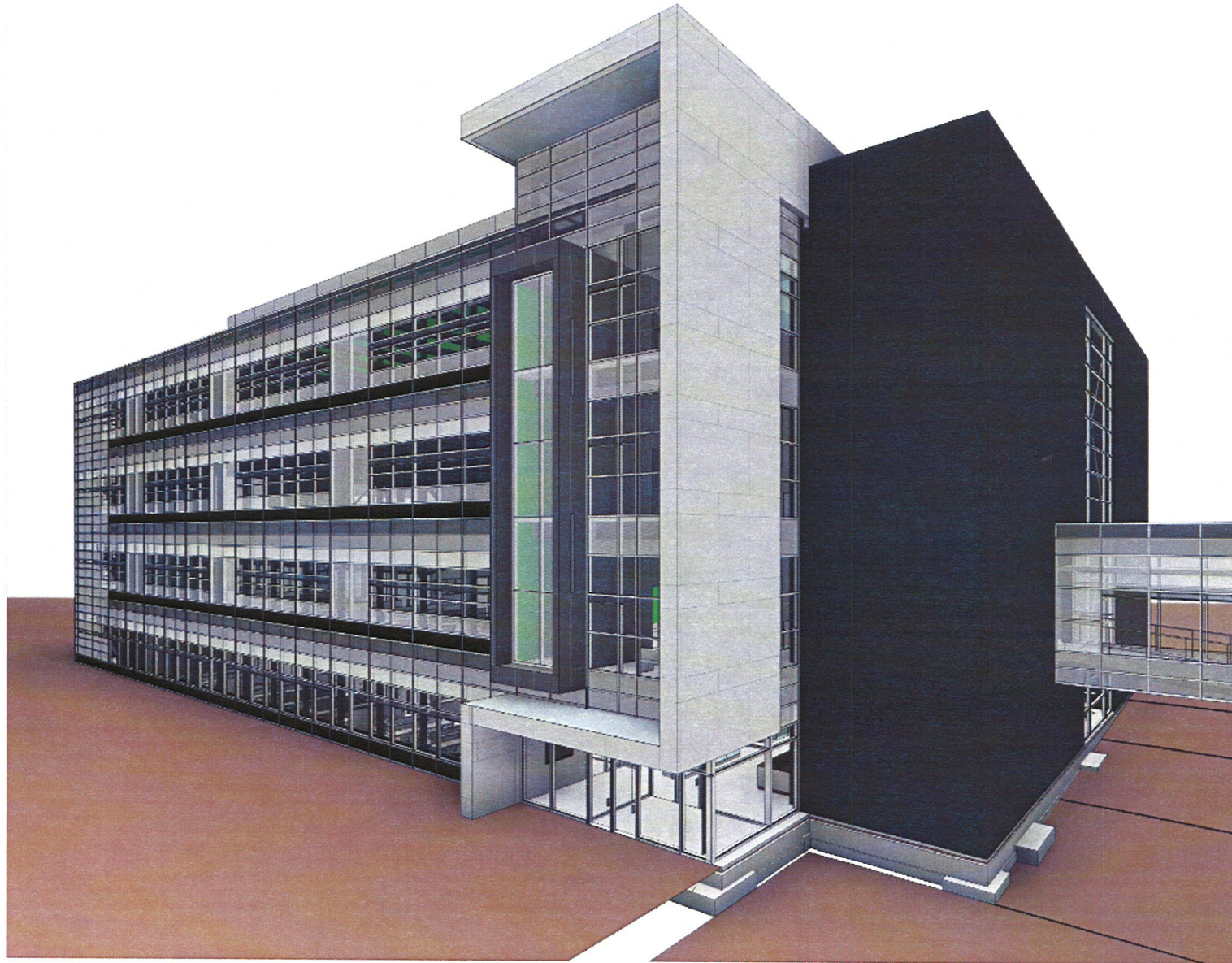


Building location plan



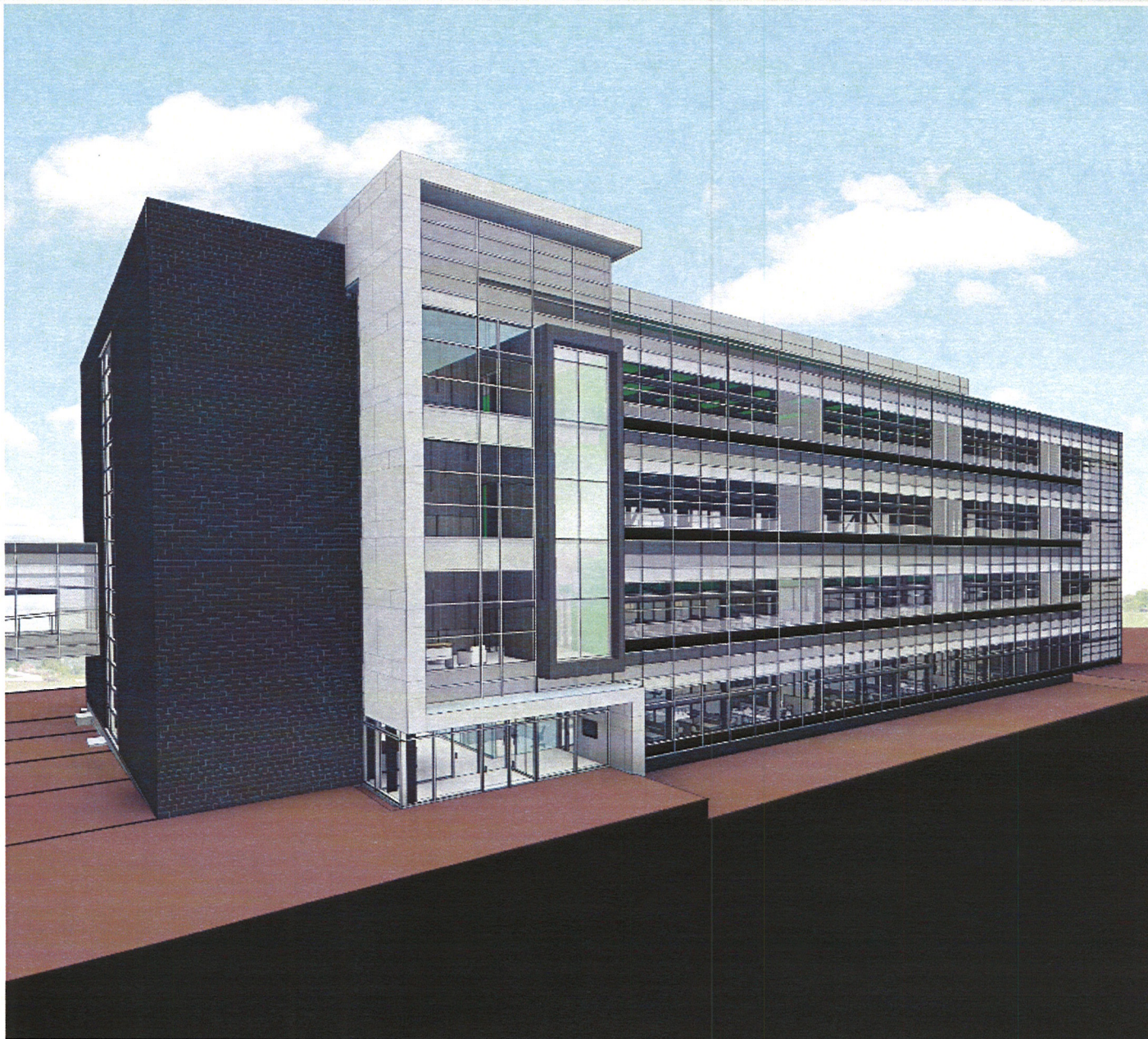
Project Approval - Authorization to Proceed
Bio Engineering Facility

MICHIGAN STATE
UNIVERSITY

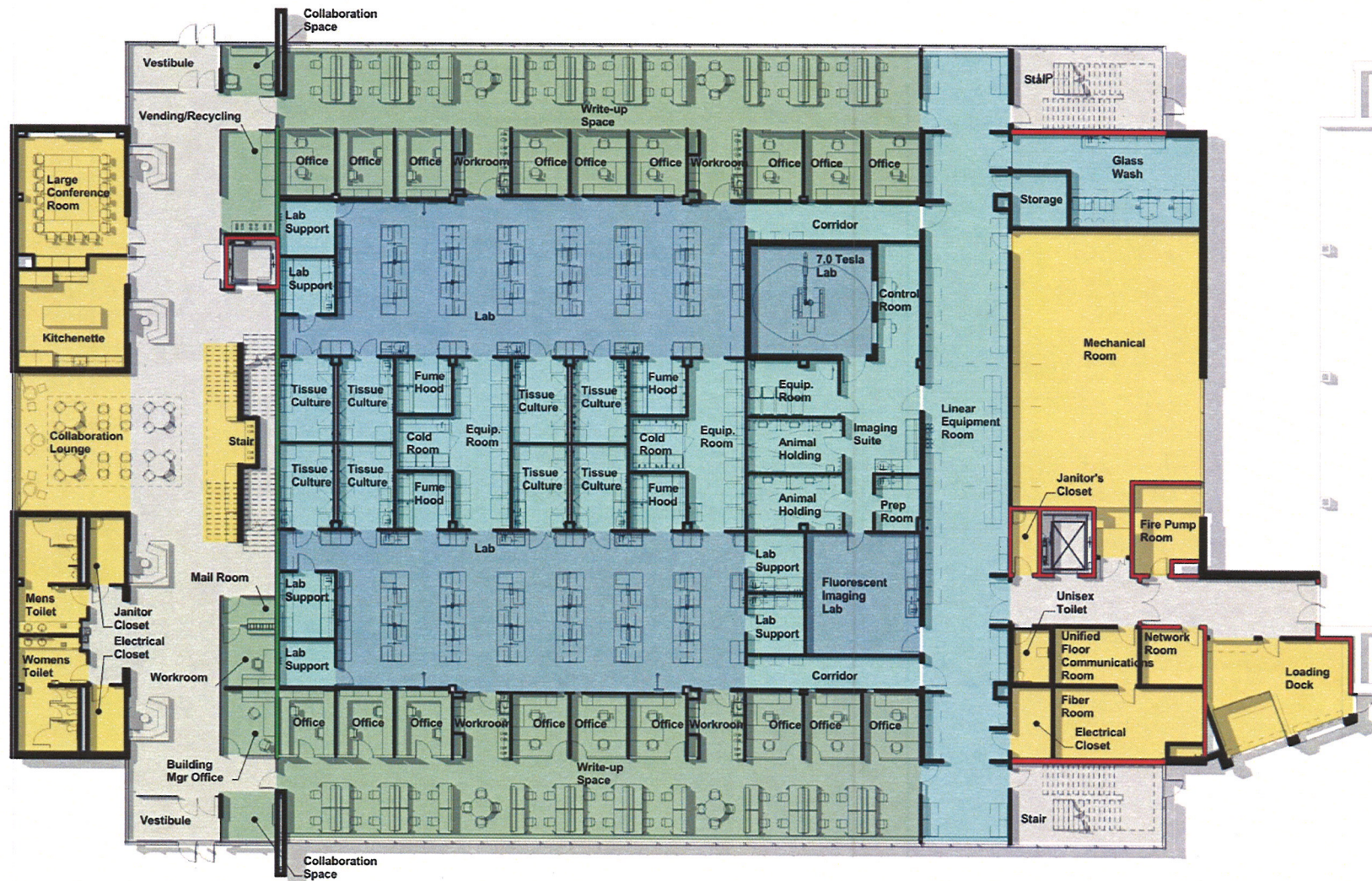


Project Approval - Authorization to Proceed
Bio Engineering Facility

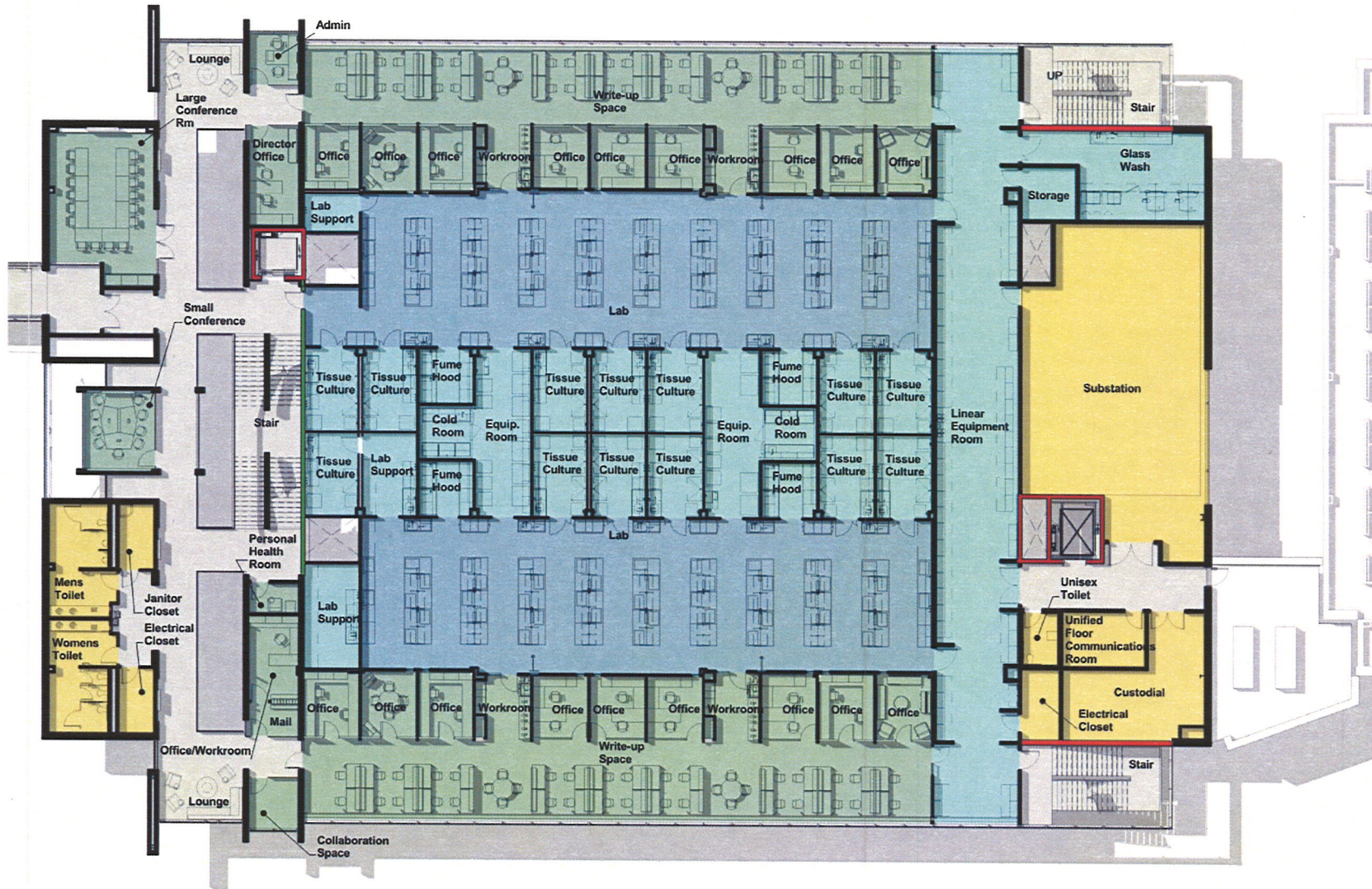
MICHIGAN STATE
UNIVERSITY



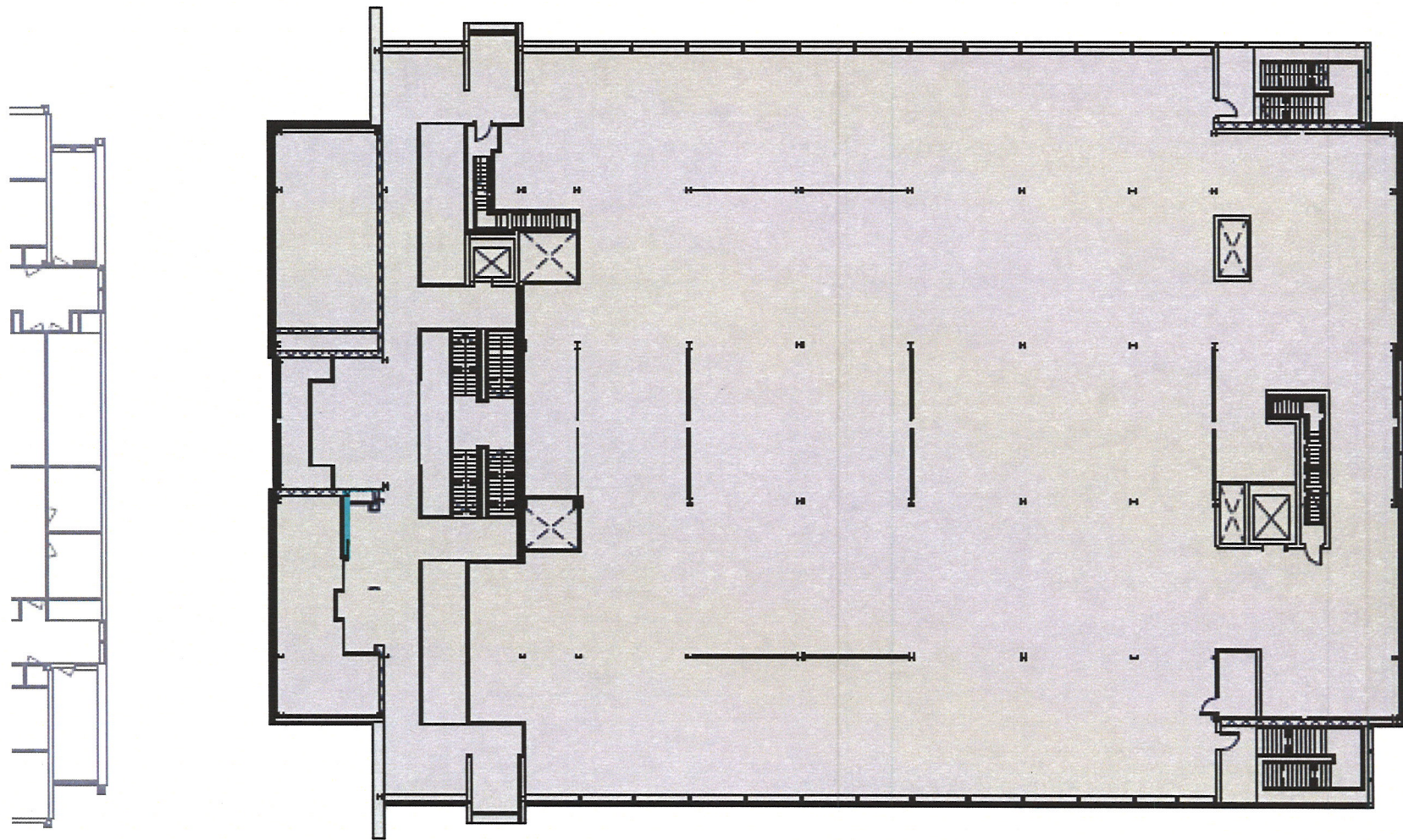
FIRST LEVEL PLAN



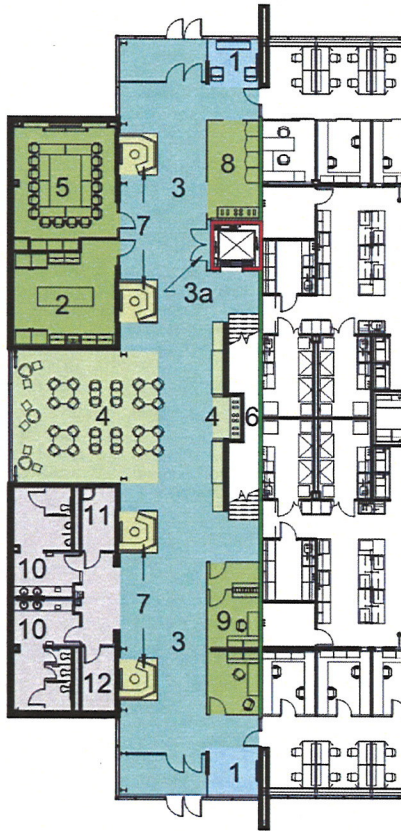
SECOND LEVEL PLAN



Levels three and four
(Shelled for future development)



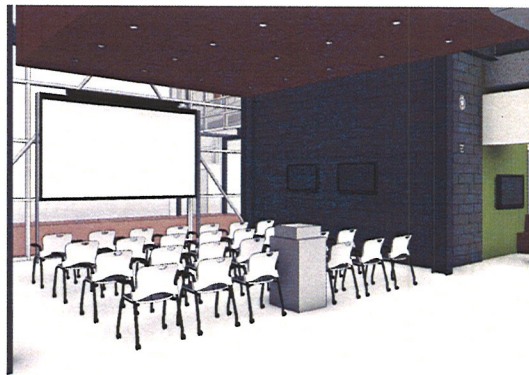
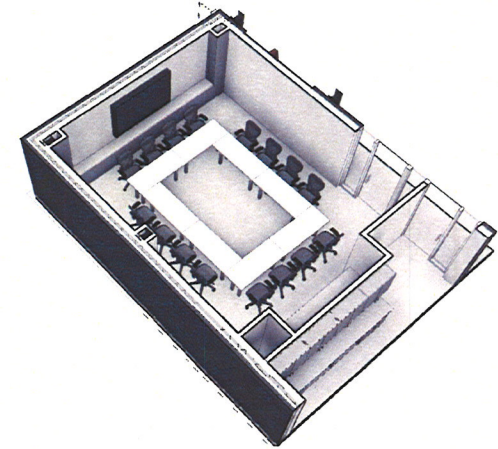
COLLABORATION CORE – AV & FURNITURE INTEGRATION



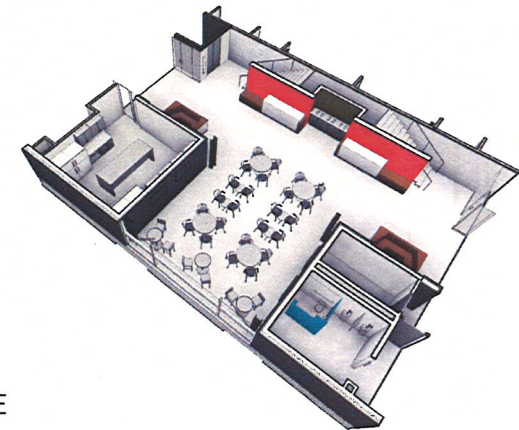
FIRST FLOOR



CONFERENCE ROOM



CAFÉ OVERFLOW/ COLLABORATION LOUNGE



COLLABORATION CORE

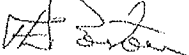


**MICHIGAN STATE
UNIVERSITY**

August 31, 2011

MEMORANDUM

To: Trustee Finance Committee

From: Fred L. Poston 

Subject: **Authorization to Plan
Bio Engineering Facility**



RECOMMENDATION

BE IT RESOLVED that the Trustee Finance Committee recommends that the Board of Trustees authorize the Administration to plan for the project entitled Bio Engineering Facility.

BACKGROUND



OFFICE OF THE
VICE PRESIDENT FOR
FINANCE AND
OPERATIONS

Fred L. Poston
Vice President and
Treasurer

Michigan State University
412 Administration Building
East Lansing, Michigan
48824-1046

Phone 517.355.5014
Fax 517.353.6772
www.vpfo.msu.edu

Capital Outlay:

Michigan Public Act 329 of 2010 provides capital outlay authorization to plan for the "MSU plant science facilities - bioeconomy additions and renovations" which includes the Bio Engineering Facility. The State share of this project is \$30,000,000. This facility is the highest priority project for MSU within the plant science facilities which will be submitted to the state this November as part of the authorization to plan process.

Program Need:

The construction of the Bio Engineering Facility will provide a unique opportunity to bring together research teams from engineering and biomedical research to promote the development of bio-engineering and engineering health sciences at Michigan State University. These emerging research areas have significant opportunities for increased federal research funding, as well as for technology transfer to the private sector, which can promote the development of a transformational bio-based economy in Michigan. Collaboration between researchers from different disciplines, ranging from chemical engineering, electrical engineering and mechanical engineering to pharmacology, physiology, and radiology, will be essential in the development of new areas of research such as tissue engineering. The new laboratory space will provide research capacity to support new hires and funded researchers in this emerging area, and allow collaborators from different academic units to be co-located. Faculty from the College of Engineering, College of Human

Medicine, and the College of Natural Science will be the primary occupants of the building. Additional benefits will be realized if the placement of the Bio Engineering Facility is adjacent to the Clinical Center, Life Sciences, and the Radiology buildings.

General Description of the Project:

The planning of this project is anticipated to include construction of a new bio engineering facility which is anticipated to connect with Life Science and the Clinical Center C-Wing. The facility will maximize research space in an open or modular lab layout with support rooms that house specialized and shared equipment, procedure rooms, offices, and informal gathering space. It would take advantage of core research resources in the adjacent buildings where possible.

The project would be located south of Life Science and Clinical Center in the South Academic District. The location of this project is consistent with the Campus Master Plan and Planning Principles.

Communication Plan:

During the planning phase, the campus community will be given opportunities to provide feedback on the project as it is being designed. Input from the project planning team will be solicited during the design phase.

Preliminary Project Cost Information:

Based on cost experience for similar projects and current pricing information, the preliminary project cost estimate is \$40,000,000. This estimate may change as planning progresses and the project scope is further defined.

The source of funds for this project is expected to be a combination of State of Michigan Capital Outlay funding and tax exempt financing with repayment from the General Fund.

cc: D. Brower, R. Flinn, J. Kacos, G. Klein, B. Kranz, K. Lindahl, M. McCabe,
J. Mumma, R. Nestle, D. Quinney, B. Kranz, R. Patterson, L. Adams