

THE UNIVERSITY OF MICHIGAN  
REGENTS COMMUNICATION

ACTION REQUEST

Approved by the Regents  
May 20, 2010

Subject: North Campus Chiller Plant Expansion

Action Requested: Approval to Proceed with Project

Background:

The North Campus Chiller Plant (NCCP) was completed in 2005 to provide chilled water to North Campus. The NCCP, when compared with individual building chillers, has resulted in energy savings, reduced operation and maintenance costs, increased redundancy and reliability, and reduced proliferation of cooling towers and the associated noise. In fiscal year 2009, the estimated annual operating cost savings due to the NCCP was approximately \$200,000, with the majority of savings achieved with increased energy performance. We now propose to increase the size of the facility by 8,500 square feet and add two 1,300 ton chillers, increasing the total capacity to 6,500 tons. In addition to the expansion of the NCCP, underground connections will be extended to provide chilled water to the Earl V. Moore Building, Space Research Laboratory, and Naval Architecture and Marine Engineering Building (NAME). The increased overall capacity of the plant will allow the elimination of the existing building chillers at the Francois-Xavier Bagnoud, Electrical Engineering and Computer Science, and George Granger Brown Memorial Laboratories (G. G. Brown) buildings, as well as provide cooling for the planned additions to G. G. Brown and the Michigan Memorial Phoenix Laboratory. The estimated incremental annual operating cost savings will be approximately \$100,000 based on today's cost, with the majority of savings achieved with increased energy performance. In addition, we will replace the steam and condensate interconnection between the Aerospace Propulsion Lab and NAME buildings to eliminate the need for one boiler. The scope of this project includes the architectural, mechanical and electrical work necessary to accomplish these improvements. Although there will be a temporary loss of some adjacent parking spaces during construction, there will be no permanent impact on parking from this project.

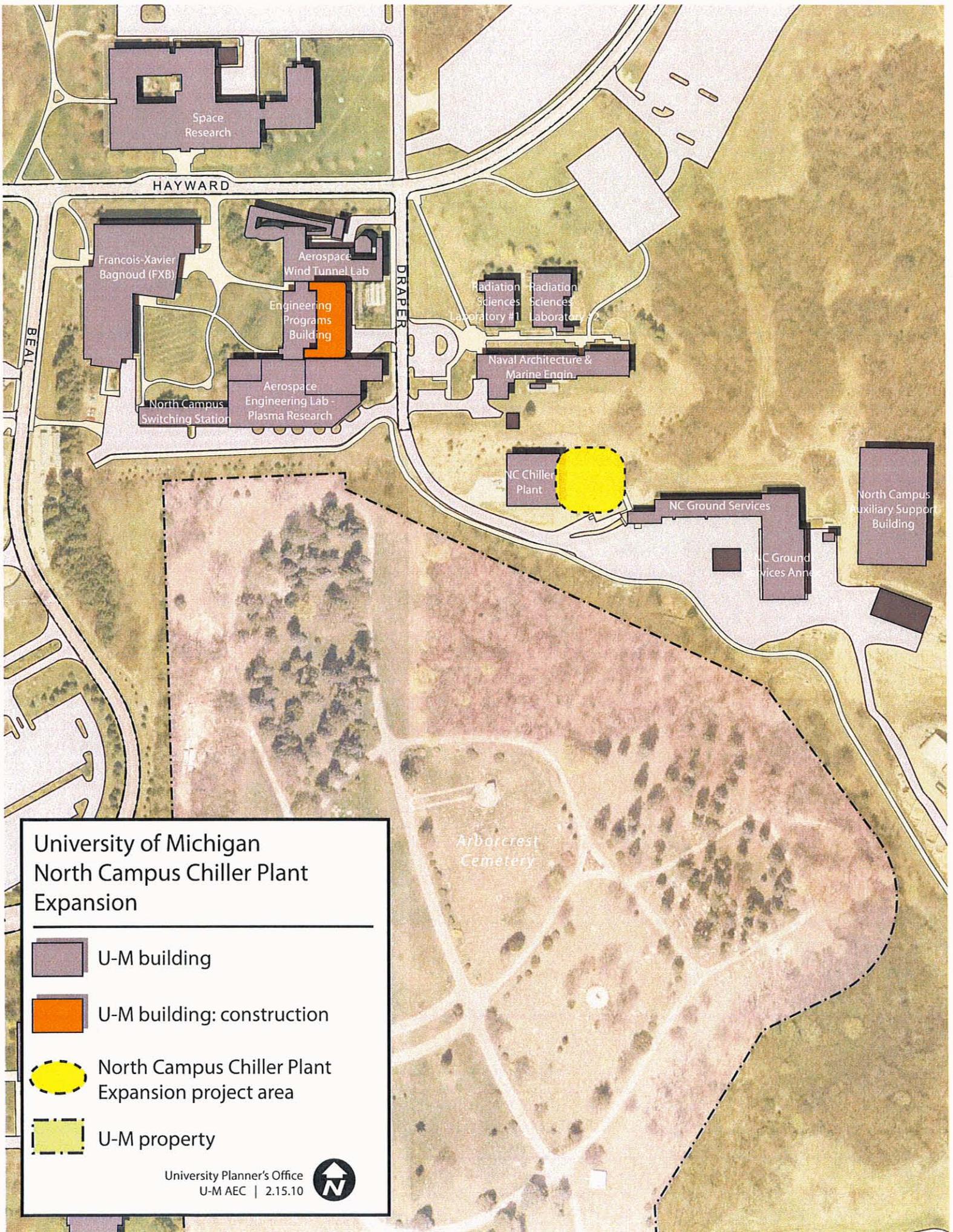
The estimated cost of the project is \$8,700,000. Funding will be provided from Federal American Recovery and Reinvestment Act of 2009 funds via the State of Michigan Fiscal Stabilization Fund Program, General Fund resources, and Utility resources. The construction cash flow may be provided, all or in part, by increasing the commercial paper issuance under the commercial paper program, secured by a pledge of General Revenues, and authorized by the Board of Regents. The University of Michigan Department of Architecture, Engineering and Construction, in collaboration with the architectural and engineering firms of C2AE and S3 Architecture will design the project. Construction is scheduled to be completed in the fall of 2011.

We recommend that the Board of Regents approve the North Campus Chiller Plant Expansion project as described, and authorize issuing the project for bids and awarding construction contracts providing that bids are within the approved budget.

Respectfully submitted,



Timothy P. Slotow  
Executive Vice President and  
Chief Financial Officer



**University of Michigan  
North Campus Chiller Plant  
Expansion**

-  U-M building
-  U-M building: construction
-  North Campus Chiller Plant Expansion project area
-  U-M property



Arborcrest Cemetery

Space Research

HAYWARD

Francois-Xavier Bagnoud (FXB)

Aerospace Wind Tunnel Lab

Engineering Programs Building

North Campus Switching Station

Aerospace Engineering Lab - Plasma Research

DRAPER

Radiation Sciences Laboratory #1  
Radiation Sciences Laboratory #2

Naval Architecture & Marine Engin.

NC Chiller Plant

NC Ground Services

NC Ground Services Annex

North Campus Auxiliary Support Building

BEAL