UNIVERSITY OF MINNESOTA
BOARD OF REGENTS
Facilities Committee
Wednesday, July 7, 2010
11:00 a.m – 12:15 p.m.
600 McNamara Alumni Center, West Committee Room

Committee Members
   Steven Hunter, Chair
   Clyde Allen
   Anthony Baraga
   Dallas Bohnsack
   Venora Hung
   Dean Johnson

Student Representatives
   Chelsey Doepner
   Lauren Snively

AGENDA

1. Resolution to Nominate the Northrop Mall District for the National Register of Historic Places - Action - K. O'Brien/O. Miller (pp. 2-5)

2. Real Estate Transaction - Action - K. O'Brien/S. Weinberg (pp. 6-10)
   A. Five-Year Lease for Soudan Underground Laboratory, Soudan Underground Mine State Park, St. Louis County, Minnesota

   A. Wind Turbine, UMore Park, Rosemount, Minnesota
   B. Akerman Hall HVAC Installation and Window Replacement

   A. Center for Magnetic Resonance Research – Equipment, Twin Cities Campus

5. Committee 2010-11 Workplan Discussion - S. Hunter/K. O'Brien (pp. 30-31)


7. Information Items - K. O'Brien (pp. 36-37)
Facilities Committee

July 7, 2010

Agenda Item: Resolution to Nominate the Northrop Mall District to the National Register of Historic Places

☑ review  ☑ review/action  ☑ action  ☐ discussion

Presenters: Vice President Kathleen O’Brien
Orlyn Miller, Director of Planning and Architecture

Purpose:

☑ policy  ☐ background/context  ☑ oversight  ☐ strategic positioning

Seek Board of Regents action on the resolution recommending nomination the Northrop Mall District portion of the Minneapolis East Bank Campus to the National Register of Historic Place.

Outline of Key Points/Policy Issues:

Northrop Mall was designated in 1997 as a Regents Campus Historical District, and listed in 2009 public documents as National Register of Historic Places eligible by Minnesota State Historical Preservation Office.

In compliance with Federal and State legislation, Regents Policies, and University administrative practice, the University of Minnesota treats both National Register of Historic Places listed properties and eligible properties the same.

Placing Northrop Mall District on the National Register of Historic Places will require University resources to prepare required documentation and submittal of an official nomination. Otherwise, listing on the National Register of Historic Places will generally have limited new financial and operational impact as the University already treats this District as required by the National Historic Preservation Act and Minnesota State Law, including capital project specific consultation with the State Historic Preservation Office.

Background Information:

Northrop Mall District portion of the Minneapolis East Bank Campus is considered one of the most intact examples of this type of campus planning remaining in the United States.

The Board of Regents reviewed the proposed resolution in June 2010.

President’s Recommendation for Action:

The president recommends that the Board of Regents adopt the resolution to nominate the Northrop Mall district to the National Register of Historic Places.
REGENTS OF THE UNIVERSITY OF MINNESOTA

RESOLUTION TO NOMINATE THE
NORTHROP MALL DISTRICT PORTION OF THE
MINNEAPOLIS EAST BANK CAMPUS
TO THE NATIONAL REGISTER OF HISTORIC PLACES

WHEREAS, the Northrop Mall District has been designated as a Regents Campus Historical District, is listed in public documents as National Register of Historic Places eligible by Minnesota State Historical Preservation Office, and the University of Minnesota seeks to preserve its heritage by its continuing commitment to preserve its historic buildings and landscapes; and

WHEREAS, preserving the Northrop Mall Historic District on the Minneapolis East Bank Campus is consistent with Guiding Principle #5 in the Twin Cities Campus Master Plan 2009, which states "Steward historic buildings and landscapes"; is consistent with Guiding Principle #7 in the Twin Cities Campus Master Plan 2009, which states "Preserve and enhance natural systems and features", and is consistent with Guiding Principle #11 in the Twin Cities Campus Master Plan 2009, which states "Make the campus environmentally and operationally sustainable"; and

WHEREAS, the University’s historic resources provide the residents of the State with a sense of history and identity and preservation of these historic buildings and landscapes contributes to the image of the campus as an enduring institution and its sense of place; and

WHEREAS, preserving the Northrop Mall Historic District on the Minneapolis East Bank Campus promotes a broad understanding, awareness, enjoyment and continued use of the University’s historic resources as effective stewardship of the University; and

WHEREAS, conserving the Northrop Mall Historic District on the Minneapolis East Bank Campus supports development to preserve, enhance and respect the value of natural systems and features; and
WHEREAS, preserving the Northrop Mall Historic District on the Minneapolis East Bank Campus contributes to the University’s commitment to sustainability, as the greenest building is often already built; and

WHEREAS, identification of this historic area of the Minneapolis campus will clarify and heighten the sense of history and continuity of today’s and tomorrow’s students by increasing awareness of the State’s strong tradition of education, and provide a deeper appreciation of the places in which they study, live, work and play today.

NOW, THEREFORE, BE IT RESOLVED that the Board of Regents recognize the historically significant nature of the Northrop Mall Historic District portion of the Minneapolis East Bank Campus; and

BE IT FURTHER RESOLVED that the Board of Regents approves the filing of the nomination of the Northrop Mall Historic District on the Minneapolis East Bank Campus to the National Register of Historic Places.
Facilities Committee

Agenda Item: Real Estate Transaction

☐ review  ☐ review/action  ☑ action  ☐ discussion

Presenters: Vice President Kathleen O’Brien
Susan Carlson Weinberg, Director of Real Estate

Purpose:

☐ policy  ☐ background/context  ☑ oversight  ☐ strategic positioning

In accordance with Board of Regents Policy: Reservation and Delegation of Authority, review the following real estate transaction:

A. Five-Year Lease for Soudan Underground Laboratory, Soudan Underground Mine State Park, St. Louis County, Minnesota

Outline of Key Points/Policy Issues:

The details of the above lease transaction and its financial impact are described in the transaction information pages immediately following this page.

Background Information:

Board of Regents Policy: Reservation and Delegation of Authority states that “The Board of Regents reserves to itself authority to approve the purchase or sale of real property having a value greater than $250,000 or larger than ten (10) acres” and all “leases of real property, easements and other interests in real property if the initial term amount to be paid by or to the University exceeds $250,000, consistent with Board policies.”


The Board of Regents reviewed this transaction in June, 2010.

President’s Recommendation for Action:

The President recommends approval of the following real estate transactions:

A. Five-Year Lease for Soudan Underground Laboratory, Soudan Underground Mine State Park, St. Louis County, Minnesota
FIVE-YEAR LEASE FOR SOUDAN UNDERGROUND LABORATORY, SOUDAN UNDERGROUND MINE STATE PARK, ST. LOUIS COUNTY (TWIN CITIES CAMPUS)

1. Recommended Action

The President recommends that the appropriate administrative officers receive authorization to execute a five-year lease with a five-year renewal option for use of a portion of the 27th Level of the Soudan Underground Mine and portions of the surface at the Soudan Underground Mine State Park, for the Soudan Underground Laboratory.

2. Description of Leased Premises

The leased premises will consist of a portion of the 27th Level of the Soudan Underground Mine located approximately 2,341 feet beneath the surface and the south bay of the garage building and the chiller site on the surface at the Soudan Underground Mine State Park, St. Louis County.

3. Basis for Request

The University’s use of portions of the Soudan Underground Mine began in 1980 with the construction of a research laboratory in an existing cavity on the 23rd level of the Soudan Underground Mine. The Soudan 2 Detector Lab on the 27th level of the mind was completed in 1986. The MINOS Far Detector excavation on the 27th level of the mine began in 1999. Portions of the surface at the Soudan Underground Mine State Park were added to the leased premises in 1996.

The purpose of the Soudan Underground Laboratory is to explore fundamental questions about the structure of the universe. The Soudan Underground Laboratory currently hosts two large research projects on the 27th level of the mine, MINOS, which investigates elusive and poorly understood particles called neutrinos; and CDMS II, a “dark-matter” experiment which may help explain how galaxies are formed.

The State of Minnesota, Department of Natural Resources, has requested the parties execute a new lease for the underground and surface portions of the Soudan Underground Mine State Park used for the Soudan Underground Laboratory by the Institute of Technology, School of Physics and Astronomy, and its collaborators in the research conducted there, including the Fermi National Accelerator Laboratory (Fermilab).
4. **Details of Transaction**

The replacement lease for the Soudan Underground Laboratory would have an approximate five-year initial term (July 29, 2008 through June 30, 2013) with one five-year option to continue the lease thereafter (potentially through June 30, 2018).

5. **Lease Costs**

The rent to be paid by the University for the use of the leased premises is based on the size of the research projects that use the premises ($22,076.26 per year for a large project, $13,245.76 for a medium project and $4,415.25 for a small project the first year, increasing 2.5% per year thereafter).

The University will also pay the additional costs incurred by the State of Minnesota, Department of Natural Resources, in maintaining and operating the Soudan Underground Mine for the University and/or in assisting the University in construction and/or conducting the University’s research activities in the Soudan Underground Mine State Park, including the mine hoist, utilities, emergency services, equipment purchase and testing, supplies, repair and maintenance, janitorial services, and personnel compensation costs.

The University estimates it will pay the State of Minnesota, Department of Natural Resources, the sum of $228,000 for the first year of the subject lease.

6. **Source of Funds**

The funding source for the subject lease is the U.S. Department of Energy, in the form of a contract the University executes with Fermilab.

7. **Recommendations**

The above-described real estate transaction is appropriate:

Richard H. Pfitzenmayer, III, Vice President and CFO

E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost

Kathleen O’Brien, Vice President for University Services
This map is intended to be used for planning purposes only and should not be relied upon where a survey is required.

Base Data: Real Estate Office
MetroGIS,MNDNR, MNDOT

Soudan Underground Laboratory Lease
Agenda Item: Schematic Plans

- review
- review/action
- action
- discussion

Presenters: Vice President Kathleen O’Brien
Fotis Sotiropoulos, Professor, St. Anthony Falls Laboratory
Associate Vice President Michael Perkins
Associate Vice President Michael Berthelsen

Purpose:

- policy
- background/context
- oversight
- strategic positioning

In accordance with Board of Regents Policy: Reservation and Delegation of Authority, review and take action on the schematic plans for the following projects:

- UMore Park Wind Turbine, Rosemount, Minnesota
- Akerman Hall Heating Ventilation & Air Conditioning System Installation and Window Replacement, Twin Cities Campus

Outline of Key Points/Policy Issues:

The schematic plans will be presented at the committee meeting. The attached project data sheet for each project addresses the basis for request, project scope, cost estimate, funding, and schedule. Maps locating the project on the respective campuses are also attached.

UMore Park Wind Turbine, Rosemount, Minnesota

In January 2010, the University received a wind energy research grant from the Department of Energy to establish a new academic/industrial wind energy research consortium. The funds for this award are provided by the American Recovery and Reinvestment Act of the federal government with the intent to quickly move this project forward for the purpose of economic stimulus. The research goals of this program are guided by the U.S. Department of Energy report – 20% Wind Energy by 2030: Increasing Wind Energy's Contribution to the U.S. Electrical Supply.

This project involves the construction of a wind research site at UMore Park. A 2.5 megawatt wind turbine will be installed at the site along with a 130 meter tall meteorological tower. Once completed, the facility will serve as a national research site for wind power research. The research program targets basic and applied research performed in close collaboration with wind industry partners. The program also involves new educational curricula development for bachelor and master level students in energy-related fields with focus on wind.
Akerman Hall Heating Ventilation & Air Conditioning System Installation and Window Replacement, Twin Cities Campus

Akerman Hall, the home of Aerospace Engineering and Mechanics Department lacks modern heating ventilation and air conditioning systems and the exterior windows are in disrepair and in need of replacement. This project will install a heating ventilation and air conditioning systems in the non-hangar space in Akerman Hall and will replace the exterior windows in the same space. This project will be completed as a continuation of the Akerman Hall Hangar Renovation project, which was approved by the Board of Regents in Fiscal Year 2010.

Background Information:

UMore Park Wind Turbine, Rosemount, Minnesota

Funding for the UMore Park Wind Turbine project was approved by the Board of Regents in June 2010 as a part of the Fiscal Year 2011 Capital Budget.

Akerman Hall Heating Ventilation & Air Conditioning System Installation and Window Replacement, Twin Cities Campus

Funding for the Akerman Hall Heating Ventilation & Air Conditioning System Installation and Window Replacement project was approved by the Board of Regents in June 2010 as a part of the Fiscal Year 2011 Capital Budget.

Funding for the Akerman Hall Hangar Renovation project was approved by the Board of Regents in Fiscal Year 2010 and the schematic plans were approved in December 2009.

President’s Recommendation for Action:

The President recommends approval of:

• schematic plans for the UMore Park Wind Turbine Project, Rosemount, Minnesota and of the appropriate administrative officers proceeding with the award of contract for the development of construction documents and construction, subject to approval of the Environment Assessment by the Department of Energy.

• schematic plans for the Akerman Hall Heating Ventilation & Air Conditioning System Installation and Window Replacement project on the Twin Cities Campus and of the appropriate administrative officers proceeding with the award of contract for the development of construction documents and construction.
1. **Basis for Request:**

In January 2010, UMN received a wind energy research grant from the Department of Energy (DOE) to establish a new academic/industrial wind energy research consortium. Three $8M grants were awarded throughout the US (UMN, UMaine, Illinois Institute of Technology). The funds for this award are provided by the American Recovery and Reinvestment Act of the federal government with intent to quickly move this project forward for the purpose of economic stimulus. The research goals of this program are guided by the U.S. Department of Energy report – *20% Wind Energy by 2030: Increasing wind energy’s contribution to the U.S. Electrical Supply*.

The majority of the UMN project involves construction of wind research site at UMore Park. A 2.5 megawatt turbine will be installed at the site along with a 130-m tall meteorological tower. Once completed, the facility will serve as a national research site for wind power research. The research program targets basic and applied research performed in close collaboration with wind industry partners. The program also involved new educational curricula developed for bachelor and master level students in energy-related fields with focus on wind.

The construction will be completed at the end of 2010 with the research program starting in 2011. The project will involve a range of research projects and collaborations as well as new opportunities for additional renewable energy research, education, and economic development. Examples are provided below:

- Site will allow research and development (R&D) of next generation wind technologies including generators, gear boxes, power converters, blade control systems, monitoring systems and external sensors. These research programs will involve UMN Faculty and students in academic department of civil engineering, mechanics engineering, electrical engineering, and aerospace engineering.
- Collaboration with Original Equipment Manufacturers (OEMs) to further develop wind machines. UMore site provides opportunity to study single wind turbine installation such as Community Wind. OEMs see this site as a much needed facility to test new technology and conduct R&D research.
- Site will be integrated in the new undergraduate and graduate wind energy curriculum that will be developed as part of this effort to provide students with a unique hands-on learning test-bed.
- Collaboration with local technical college will provide training for future Operation and Maintenance personnel.
- Site provides opportunity for public engagement on the topics of energy and sustainability.
- Economic development efforts will accompany Consortium activities and UMore Park activities toward the goals of the UMore Park conceptual plans.

This project is in alignment of the following 2011-2015 Capital Budget Goals:
Ensure student success by:
  • Creating facilities that are directly related to recruiting, educating, supporting, and graduating students
  • Creating facilities that improve learning outcomes
  • Creating facilities that uniquely enhance student satisfaction
Ensure research productivity and impact by:
  • Providing space conducive to the conduct of contemporary research in order to enhance competitiveness
  • Creating flexible spaces that adapt to new science and research trends.
  • Providing research facilities that will allow competitive responses to unique research opportunities aligned with strategic priorities
Fulfill our statewide mission by:
  • Creating specific facilities and spaces needed to achieve unique mission elements on coordinate campuses, research and outreach centers, and field stations.
  • Investing in facilities that leverage unique regional assets
  • Viewing facilities as only one tool in delivering academic programs, and ensuring that additional debt and operating costs do not hinder the success of academic programs.
Protecting public assets and investment by:
  • Implementing concept master plans and advancing the University’s sustainability goals
  • Leveraging facility investment to advance the academic mission and priorities
  • Making infrastructure investments that ensure reliability over the long term, lower energy and operating costs and advance environmental stewardship
Recognize current extraordinary financial realities by:
  • Advancing an overall capital plan that maintains current debt ratings (Moody’s Aa2/S&P AA)
  • Limiting long term leverage/reliance on endowment assets for increased debt capacity
  • Honoring projects that have an identified source of payment for debt costs
  • Leveraging Department of Energy capital funding opportunities in conjunction with University resources to complete critical projects that serve to improve infrastructure and benefit common good
  • Limiting new capital projects that place increased operating cost burdens on units that are in financial stress

2. Scope of Project:

The project includes the following:

  • Construction of the turbine foundation which is a spread footing of approximately 475 cubic yards of concrete and 50 tons of rebar.
  • Installation of a 2.5 megawatt Clipper Liberty Wind Turbine with a hub height of 80 meters (240 feet) and a rotor blade diameter of 96 meters (300 feet).
  • Construct approximately 2,000 linear feet of road.
  • Construct approximately 1.5 mile of electrical line (overhead and underground) to interconnect with Xcel Energy electrical grid.
  • Construct a Rohn 130 meter guyed Meteorological Tower.
3. Master Plan:

Following a strategic planning phase, the Board of Regents affirmed in November 2006 the vision to create a new, sustainable community of 20,000 to 30,000 residents on 5,000 acres of its UMore Park property over the next 30 years. The community will be environmentally, socially and economically sustainable. It will be distinct from other developments through the continuous integration of University strengths in research, education and public engagement. The concept master plan for the community was approved by the Board of Regents in December 2008. With completion of the entitlement process, the first phase residential development tentatively will commence in 2013.

The U.S. Department of Energy-funded wind turbine energy research project is consistent with the concept master plan for the community. Importantly, it is the early anchor that launches energy innovation as the University advances its planning and development of the UMore Park property. The siting of the turbine on the property is the iconic commitment – to the region, the state and beyond – to renewable energy for the new, sustainable community. The cutting-edge research generated through the wind turbine project will spawn additional research and innovation, draw new public and private sector partners, attract energy- and high-tech-based companies to locate in close proximity, create new jobs and add value to the region. The educational components of the project will foster preK-12 learning opportunities, workforce development and customized training, and professional development as well as undergraduate and graduate curriculum development.

4. Environmental Issues:

There are over one thousand large wind turbines installed throughout Minnesota. This project would be one of the few utility-scale turbine project built within the Twin Cities Metropolitan Area. UMore Park is a good location for a turbine due to the fact that the nearest residences are located over 2000 feet away from the preferred site, and there appear to be no major permitting or approval obstacles.

Although utility-scale wind turbines produce clean, renewable energy, they are also large structures that can be visible for long distances, create noise, and can harm birds, bats, and other resources if not sited carefully. In this case, the turbine would be approximately 240-feet tall at the “hub height” and the turbine blades (300-foot diameter) would reach up an additional 150 feet. The total height would therefore be approximately 390 feet from the foundation to the top of the turbine blades. As a result, this wind turbine would be visible from surrounding communities such as the cities of Coates and Rosemount.

Regulatory Overview

The project faces a number of regulatory hurdles. Before the construction funds can be released, the U.S. Department of Energy (DOE) must determine that the project has no potential for significant environmental impacts. To determine this, the Project is currently going through an Environmental Assessment (EA) process. The federal EA will review health and safety (including the potential for contaminated soil), noise, visual impacts, ice throw, shadow flicker, wetlands, birds and bats, threatened and endangered species, archeological and historical building impacts, as well as aviation conflicts and electromagnetic communication interference. State noise standards apply to the project, and state and local agencies, including the Department of Natural Resources, will participate in the federal EA process. The project is subject to federal approvals such as a Federal
Aeronautics Administration (FAA) "No Hazard" determination and a water discharge permit. No formal state permit is required because the project is below the 5-megawatt state permit threshold.

Site Selection

After notification of the DOE selection, Saint Anthony Falls Laboratory and UMore Park staff developed a "constraint map" to assess which areas within UMore Park should be eliminated or avoided because of potential soil contamination, microwave communication paths, threatened or endangered species, airport navigation constraints, as well as setbacks from roads, transmission lines, pipelines. In addition, sites were evaluated based on their proximity to electrical interconnection sites, research needs, and compatibility with long-term UMore Park land use plans. The preferred site was selected based on this analysis.

Specific Environmental and Permitting Issues

Noise - Wind turbines generate audible noise during operation, largely due to the rotating turbine blades. Therefore, state and county regulators normally require setbacks of at least 500 feet from residences, and sometimes up to 1500 feet, to reduce noise problems. In this case, the nearest off-site residence is over one-half mile east of the preferred site—just across Highway 52. Noise modeling indicates that turbine noise may be barely audible at night at times at the nearest residences and nearby businesses; however, noise at nearby residences or other receptors would be well within noise state standards. The site would be all normal regulatory setback requirements.

Visual - The 390-foot high turbine will be visible from the city of Rosemount, the city of Coates, and other nearby areas, and from Highway 52. The federal EA will include photo-realistic visualizations to help evaluate impacts.

Soil Contamination - UMore Park contains ruins of a former ammunition factory called the Gopher Ordinance Works. Some parts of UMore Park have contaminated soil; therefore, the preferred site was selected, in part, on the basis that the turbine and its associated facilities are located outside the perimeter of the former ordinance facility. The contamination investigation completed at the turbine site in May, 2010 indicates that the soil in the area is not contaminated. Therefore; no special soil-handling procedures are necessary at the site during construction.

Archeological and Historic Structures - The preliminary “Phase 1a” review of the proposed turbine area indicates that there is little potential for finding archeological artifacts during construction. However, there are a number of older structures (over 45-years old) within one-mile of the turbine site that may have to be evaluated for historic significance before the DOE can formally determine that the project is in compliance with Section 106 of the National Historic Preservation Act.

Birds and Bats - Wind turbine can harm nesting as well as migratory birds, and have been shown to kill bats in some situations. The avian and bat evaluation completed for this project indicates that the site is not located near enough to wetlands or important flyways to be a concern for migratory birds. In addition, while there are no federally-listed threatened or endangered species reported in the area, there is one state-listed threatened bird species that has been sited within one mile of the site (Loggerhead Shrike). However, the recently completed site survey found no evidence of this species in the project area.
Air Navigation and Communication Interference - The University’s initial site evaluation last summer (July, 2009) indicated no interference problems with air navigation or communication systems at the site. Updated FAA and DOC reviews for the preferred site have been requested, with results expected by mid-July, 2010.

Shadow Flicker and Ice Throw - Large wind turbines will cast a shadow that can “flicker” on certain days and times depending on the time of day and cloud cover. Shadow flicker can be annoying when trying to read or watch television. The residential areas to the north are shielded from this flicker by trees and hills, as are the residences in or near the city of Coates. The residence to the east, across Highway 52, is over one half-mile away. At that distance, light is sufficiently dispersed so that turbine blades no longer produce distinct shadows—although some flicker may be perceptible during sunset on cloudless days.

Also, under unusual circumstances wind turbines can shed accumulated ice. Some turbine manufacturers recommend distances as much as 1.5 times the turbine height (about 600-feet in this case) from occupied structures and roads. The proposed turbine would be located more than this distance from any occupied building or public road.

Runoff and Soil Erosion - The turbine construction and site runoff will be regulated under state National Pollution Discharge Elimination System regulations, which were recently revised and updated. The “best management practices” and other requirements of this permit will minimize the effects of runoff or site erosion. The site is not near any sensitive waterways.

5. Cost Estimate:

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6. Capital Funding:

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<td>Institute of Technology</td>
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7. Capital Budget Approvals:

Funding for this project was approved as a part of the Fiscal Year 2011 Capital Budget approved by the Board of Regents in June 2010.

8. Annual Operating and Maintenance Cost and Source of Revenue:

The long-term operation and maintenance (O&M) of this facility will be provided by personnel of at the St. Anthony Falls Laboratory and/or a 3rd party O&M contractor. This will be funded through external sources. Possible sources include: indirect costs charged to sponsored research conducted at the site, an annual consortium membership fee, and/or revenue from power generation at the site. A turbine supplier will provide training to two University technical staff members and these staff will serve as the O&M team for the turbine and UMore research site.
The 2.5MW turbine has a potential for revenue generation. The terms of the existing DOE grant do not allow revenue generation during the 2 year grant (January 2010 to December 2011). The turbine will be erected in January 2011 and thus has only one year of operation under the current contract with DOE. After December 2011 the University will be able to collect revenue over the remaining life of the turbine. Revenue generated during this time will be directed to O&M of the facility.

9. Time Schedule: (Additional milestone maybe added or substituted if appropriate.)

| Complete Design                        | Summer 2010 |
| Complete Environmental Assessment      | Summer 2010 |
| Establish Construction Guaranteed Price| Summer 2010 |
| Begin construction                     | Fall 2010   |
| Complete construction                  | Winter 2010/2011 |

10. Architect (and/or Engineer, Design / Builder, Construction Manager):

Design/Builder: Ryan Companies US Inc., Minneapolis
Sub-consultant Engineer: Barr Engineering, Minneapolis

Environmental Assessment Consultant: HDR Engineering, Minneapolis, Minnesota

11. Recommendation:

The above described project scope of work, cost, funding, and schedule is appropriate:

\[signature\] 6/24/10
Richard Pfutzenreuter, Vice President and Chief Financial Officer

\[signature\] 6-24-10
E. Thomas Sullivan, Senior Vice President

\[signature\] 6/23/10
Kathleen O'Brien, Vice President for University Services
Figure XX
DRAFT
REGIONAL MAP

University of Minnesota
Wind Energy Research
Consortium Project
Environmental Assessment
Dakota County, MN

Source: MnDOT, Barr, University of Minnesota, MN DNR, HDR.
Akerman Hall – Heating Ventilation & Air Conditioning (HVAC) System Installation & Window Replacement
Twin Cities Campus
Project No. 01-266-09-1477

1. Basis for Request:

Akerman Hall is the home of the Aerospace Engineering and Mechanics Department, which is an academic unit within the Institute of Technology offering students a BS, MS or PhD degree. It is home for approximately 16 faculty members, 110 graduate students, 340 undergraduates, post-doctoral research associates and staff and 8 classrooms.

Most of the interior spaces retain the original 1948 construction and infrastructure. Original mechanical infrastructure is cast iron hot water radiators and piping. During summer months the building is generally too uncomfortable for use and the classrooms are not used. Over the years, in an attempt to support some level of comfort, installation of individual room air conditioners has taxed the electrical circuiting.

As a constantly changing profession, aerospace engineering encounters a wide range of complex problems and technologies requiring teaching, office and education space with modern amenities including air conditioning, proper fresh air ventilation, and controllable year round temperature management.

The exterior windows are original painted steel single pane glazing windows. Most windows are in some sort of disrepair and contain hazardous caulking further complicating consideration for refurbishment. Cast iron decorative reliefs have released from the steel panels that exist between windows. Additionally, the building has been deemed eligible for the National Historical Register through research conducted for the current Akerman Hall Hangar renovation project.

The Akerman Hall Hangar Renovation & Akerman Hall & Mechanical Engineering Life Safety Improvements project includes the installation of an HVAC system and window replacement in the hangar portion of Akerman Hall. This project was approved by the Board of Regents in Fiscal Year 2010 and is currently under construction. This “Phase 2” project extends the HVAC system to the non-hangar portion of Akerman Hall and replacers the windows in the non-hangar portion of Akerman Hall. The upgrade to the electrical service and chilled water capacity required for this Phase 2 project was included in the scope of work for the Akerman Hall Hangar project in anticipation of the Phase 2 project.

2. Scope of Project:

Replace the exterior windows that were not replaced as a part of the Akerman Hall Hangar Renovation project. The same window style will be used as was used for the Hangar project. The building has a total of 77 remaining original windows planned for replacement.

Install a new HVAC system for the non-hangar portion of Akerman Hall. As a result of this project, all areas of the building will be served with a modern heating, ventilation, and air conditioning system. The project will encompass approximately 45,000 square feet on four floors.
The HVAC equipment will be housed in new mechanical penthouses on the roof of the building. The design will carry forward and extend the first mechanical penthouse for equipment serving the hangar now being constructed. Services for the new equipment will be delivered from existing capacities from the chiller/steam plant adjacent to Akerman and Mechanical Engineering Buildings.

3. Environmental Issues:

The University has completed a hazardous material survey of the existing conditions in the building affected by this project. Hazardous materials include miscellaneous pipe insulation, limited lead paint, and window caulking. This material will be removed by the University prior to construction.

4. Cost Estimate:

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5. Capital Funding:

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<td>Office of Classroom Management</td>
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<td>$4,564,314</td>
</tr>
</tbody>
</table>

6. Capital Budget Approval:

The majority of the funding for this project is provided from the 2010 HEAPR Appropriation included in the University Fiscal Year 2011 Capital Budget approved by the Board of Regents in June 2010.

7. Annual Operating and Maintenance Cost and Source of Revenue:

The annual operating and maintenance costs will decrease approximately $14,500 for the building as a result of providing energy efficient windows, removal of the numerous window A/C units, radiant heat units and the install of a centralized HVAC system.

8. Time Schedule:

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Design</td>
<td>July 2010</td>
</tr>
<tr>
<td>Establish Construction Guaranteed Maximum Price</td>
<td>July 2010</td>
</tr>
<tr>
<td>Begin construction</td>
<td>August 2010</td>
</tr>
<tr>
<td>Complete construction</td>
<td>June 2011</td>
</tr>
</tbody>
</table>

9. Design Build Contractor/Architect, Engineers, Consultant Team:
9. Design Build Contractor/Architect, Engineers, Consultant Team:

Design Build Contractor: M.A. Mortenson, Minneapolis
Architect: BWBR Architects, St. Paul
Engineer: Sebesta Blomberg & Associates, Roseville
Historical Consultant: Hess Roise, Minneapolis

10. Recommendation:

The above described project scope of work, cost, funding, and schedule is appropriate:

E. Thomas Sullivan, Senior Vice President for Academic Affairs & Provost

Richard Pfutzenreuter, Vice President and Chief Financial Officer

Kathleen O'Brien, Vice President for University Services
Facilities Committee

July 7, 2010

Agenda Item: Capital Budget Amendment

 □ review  ☒ review/action  □ action  □ discussion

Presenters: Vice President Kathleen O'Brien
Senior Vice President Frank Cerra

Purpose:

□ policy  □ background/context  ☒ oversight  □ strategic positioning

In accordance with Board of Regents Policy: Reservation and Delegation of Authority, review and take action on the Capital Budget Amendment for the following project:

• Amend the Fiscal Year 2011 Capital Budget by $7,721,640 to provide additional funding for the Center for Magnetic Resonance Research Renovation and Expansion, Twin Cities Campus.

Outline of Key Points/Policy Issues:

The attached project data sheet addresses the reason for the budget amendment and the project basis for request, scope of work, cost estimate, funding, and schedule. A map locating the project on the on the campus is also attached.

Center for Magnetic Resonance Research (CMRR) Renovation and Expansion

The CMRR is an interdepartmental and interdisciplinary research laboratory that provides state-of-the-art instrumentation, expertise, and infrastructure to carry out biomedical research utilizing the unique capabilities provided by ultra high-field magnetic resonance imaging and magnetic resonance spectroscopy methodology. The central aim of the research conducted in CMRR is to non-invasively obtain functional, physiological and biochemical information in intact biological systems, and use this capability to probe biological processes in health and disease. This CMRR renovation and expansion project will be the first building in the Biomedical Research Facility Program approved by the 2008 legislature.

CMRR recently received a National Institute of Health grant for the purchase of additional equipment as detailed in the attached project data sheet. Adding this grant funding to the project is the primary reason for this Capital Budget Amendment. In addition other minor budget adjustments have been incorporated.

Background Information:

Review/action is requested at this time as the purchase of this equipment has long lead times. With no Board of Regents meeting in August 2010 the approval of this amendment and the placement of equipment orders would need to wait until after the September 2010 Board meetings.
The capital budget for this project was included as a part of the Fiscal Year 2009 Capital Budget approved by the Board of Regents in June 2008. Schematic plans for the projects were approved by the Board of Regents in March 2009.

**President's Recommendation for Action:**

The President recommends approval of amending the Fiscal Year 2011 Capital Budget by $7,721,640 to provide additional funding for the Center for Magnetic Resonance Research Renovation and Expansion Project located on the Twin Cities Campus.
1. **Basis for Request:**

The Center for Magnetic Resonance Research (CMRR) Renovation and Expansion project includes state of the art equipment and instrumentation for research efforts in magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS). The Center has been awarded a high end instrumentation grant by the National Institutes of Health to be used for additional equipment purchases as follows:

- Increase the size of the whole body 10.5T magnet bore from 83 cm to 88cm which will allow better performance of the system and ultimately better images;
- Purchase electronic console (spectrometer) for the 10.5T magnet;
- Purchase an imaging gradient set specifically designed for higher quality brain imaging;
- Increase the size of the 10.5T magnet amplifier capacity from 1 KW to 2 KW which will increase research flexibility by allowing more types of experiments such as spectroscopy.

2. **Scope of Project:**

The existing 40,800 gross square foot one-story freestanding CMRR is located at 2021 Sixth Street Southeast in the Biomedical Discovery District. The project includes new construction of a two story approximately 63,000 gross square feet addition and renovation of 7,920 square feet. This budget amendment adds the $7,798,106 NIH grant funding to the project budget for the purchase of the items listed above. It also adds $23,534 in departmental funds for upgrades to existing equipment.

3. **Environmental Issues:**

There are no environmental issues associated with this research support equipment amendment.

4. **Cost Estimate:**

<table>
<thead>
<tr>
<th></th>
<th>Approved Budget</th>
<th>Amendment</th>
<th>Revised Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$28,659,500</td>
<td>$439,728</td>
<td>$29,099,228</td>
</tr>
<tr>
<td>Non Construction Cost</td>
<td>8,345,000</td>
<td>-1,082,994</td>
<td>7,262,006</td>
</tr>
<tr>
<td>Imaging Equipment And Shielding</td>
<td>16,842,000</td>
<td>8,364,906</td>
<td>25,206,906</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>$53,846,500</td>
<td>$7,721,640</td>
<td>$61,568,140</td>
</tr>
</tbody>
</table>

5. **Capital Funding:**

<table>
<thead>
<tr>
<th></th>
<th>Approved Budget</th>
<th>Amendment</th>
<th>Revised Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Minnesota Debt</td>
<td>$39,900,000</td>
<td></td>
<td>$39,900,000</td>
</tr>
<tr>
<td>University of Minnesota Debt</td>
<td>13,300,000</td>
<td>-100,000</td>
<td>13,200,000</td>
</tr>
<tr>
<td>University of Minnesota Funds</td>
<td>146,500</td>
<td>23,534</td>
<td>170,034</td>
</tr>
<tr>
<td>National Institute of Health</td>
<td>500,000</td>
<td>7,798,106</td>
<td>8,298,106</td>
</tr>
<tr>
<td>Total Funding</td>
<td>$53,846,500</td>
<td>$7,721,640</td>
<td>$61,568,140</td>
</tr>
</tbody>
</table>
6. Capital Budget Approvals:

- The project is included in the 2009 Capital Budget that was approved by the Board of Regents in June 2008.
- The Schematic Design was approved by the Board of Regents in March 2009.
- Amendment #1 was approved by the Board of Regents in October 2009.

7. Annual Operating and Maintenance Cost and Source of Revenue:

There is no change to the projected annual cost to operate and maintain the facility associated with this amendment.

8. Time Schedule:

<table>
<thead>
<tr>
<th>Complete construction</th>
<th>Fall 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy</td>
<td>Winter 2011</td>
</tr>
</tbody>
</table>

9. Architect / Construction Manager:

RSP Architects  
M A Mortenson Construction

10. Recommendation:

The above described project scope of work, cost, funding, and schedule is appropriate:

Richard Pfutzenreuter, Vice President and Chief Financial Officer  
Frank Cerra, Senior Vice President Health Sciences  
Kathleen O'Brien, Vice President, University Services
Center for Magnetic Resonance Research Renovation, Twin Cities Campus
Facilities Committee

July 7, 2010

Agenda Item: Committee 2010-11 Work Plan Discussion

☐ review ☐ review/action ☐ action ☒ discussion

Presenters: Regent Steven Hunter
Vice President Kathleen O'Brien

Purpose:

☐ policy ☐ background/context ☒ oversight ☐ strategic positioning

According to Board of Regents Policy: Board Operations and Agenda Guidelines, Section II, Subdivision 7: Workplans, “Each year the Board and its committees develop work plans with the advice of the president or delegate.”

This discussion is intended to focus on major issues the committee may wish to address in FY 2010-11.

Outline of Key Points/Policy Issues:

The Facilities Committee oversees the University's physical assets (e.g., land, buildings, infrastructure, and equipment). This committee considers the general adequacy, condition, and use of existing facilities; oversees policy related to physical planning, reviews renewal, replacement, and new construction decisions; and recommends the financing of capital projects.

Specifically, this committee recommends:
  ○ capital budget amendments;
  ○ schematic plans;
  ○ real estate transactions; and
  ○ district and campus master plans.

This committee also:
  ○ reviews semi-annual capital improvement reports; and
  ○ receives miscellaneous facilities management reports and notification of significant issues.

Background Information:

The Board of Regents will discuss work plan issues at its July 2010 retreat.
The Facilities Committee oversees the University’s physical assets (e.g., land, buildings, infrastructure, and equipment). This committee considers the general adequacy, condition, and use of existing facilities; oversees policy related to physical planning, utilities and energy management; reviews renewal, replacement, and new construction decisions; and recommends the financing of capital projects.

Specifically, this committee recommends:
- capital budget amendments;
- schematic plans;
- real estate transactions; and
- district and campus master plans.

The following issues will be considered by the committee in addition to the normal business items:

### Facilities Committee Agenda Items

- **Annual issues to be addressed:**
  - Capital Planning and Project Management Semia-Annual Project Report
  - Facilities Condition Assessment (FCA)
  - Utilities and Energy Management annual report
  - Issues related to: Annual Capital Budget
  - Issues related to: Six-year Capital Plan

- **Additional items for consideration by the Facilities Committee:**
  - Update on Sustainability programs in University operations
  - Biosciences Discovery District/Medical Biosciences Facilities update
  - Public Safety Plans and Operations
  - Emergency Management Program
  - Rochester Downtown Master Plan
  - Space Utilization
  - University Services response to financial challenges – Strategic Business Planning

### Facilities-related Agenda Items for the Full Board

- **Annual issues for Board of Regents action:**
  - Six year Capital Plan
  - Annual Capital Budget
  - State Capital Request

- **Additional issues for Board of Regents action:**
  - Central Corridor Light Rail Transit updates and potential action on agreement with the Met Council

- **Additional items for consideration by the Board:**
  - University Neighborhood Alliance
  - Capital Plan Alignment with Academic Priorities

### Policies:
- Campus Health & Safety
- Campus and Facility Usage
Facilities Committee  

Agenda Item: Consent Report

☐ review  ☑ review/action  ☐ action  ☐ discussion

Presenters: Vice President Kathleen O’Brien

Purpose:

☐ policy  ☐ background/context  ☑ oversight  ☐ strategic positioning

In accordance with Board of Regents Policy: Reservation and Delegation of Authority, review and recommend approval of the following real estate transactions:

A. Agreement with the Venetian Casino Resort, for Medical School/Continuing Medical Education’s 2011 World Symposium, Las Vegas, Nevada, February 13-20, 2011

Outline of Key Points/Policy Issues:

The details of this transaction and the financial impact are described in the transaction information page immediately following this page.

Background Information:

Board of Regents Policy: Reservation and Delegation of Authority states that “The Board of Regents reserves to itself authority to approve the purchase or sale of real property having a value greater than $250,000 or larger than ten (10) acres, and all leases, easements, and other interests in real property with a present value of the gross rent to be paid by or to the University during the initial term in excess of $250,000, consistent with Board policies.”

In accordance with the Board of Regents Calendar, which is included in the Board of Regents Policy: Board Operations and Agenda Guidelines, the “sale or purchase of real property between 10 and 40 acres, or with a value between $250,000 and $500,000” and “leases with a present value between $250,000 and $500,000” are presented for review/action as part of the Facilities Committee Consent Report.

President’s Recommendation for Action:

The President recommends approval of the Consent Report.
AGREEMENT WITH THE VENETIAN CASINO RESORT, FOR MEDICAL SCHOOL/CONTINUING MEDICAL EDUCATION’S 2011 WORLD SYMPOSIUM, LAS VEGAS, NEVADA, FEBRUARY 13-20, 2011

1. Recommended Action

The President recommends that the appropriate administrative officers receive authorization to execute the agreements for the Medical School/Continuing Medical Education’s 2011 WORLD Symposium conference at the Palazzo Resort Hotel Casino, Las Vegas, Nevada, on February 13-20, 2011.

2. Description of Leased Premises

The agreement with the Venetian Casino Resort will cover the conference facilities, function and exhibition space in the Palazzo Resort Hotel Casino; guest rooms (attendees pay their own room charges and incidentals) for approximately 500 attendees in the Venetian Resort Hotel Casino and the Palazzo Resort Hotel Casino; plus food and beverages, for the 2011 WORLD Symposium.

3. Basis for Request

Continuing Medical Education’s annual We’re Organizing Research on Lysosomal Diseases (WORLD) Symposium has been held previously for six years now. The goal of the annual WORLD Symposium is to provide continuing medical education related to Lysosomal diseases, including:

(a) The natural history of Lysosomal diseases;
(b) The latest discoveries and their clinical applicability for basic, translational and clinical researchers, patient advocacy groups, and genetic counselors;
(c) To help researchers and clinicians to better manage and understand diagnostics options for patients with Lysosomal storage diseases; and
(d) To identify areas requiring additional basic and clinical research, public policy and regulatory attentions relating to Lysosomal diseases.

The program for the 2011 WORLD Symposium reflects topic recommendations by the Lysosomal Disease Network (LDN), a group of researchers who discuss the Lysosomal disease; advancements, treatments and research underway to understand the disease; and scientific ways to address the disease.
4. Fees to be Paid

The total cost of the agreement with the Venetian Casino Resort for the 2011 WORLD Symposium is estimated at $339,364; $249,364 for sleeping rooms (attendees pay their own room charges and incidentals) and $90,000 for food and beverages and facility-related costs for the conference, function and exhibition spaces. The Medical School/Continuing Medical Education has purchased cancellation insurance for this event through University’s Risk Management and Insurance Office.

5. Source of Funds

Registration fees by individuals, educational support grants and exhibit/display fees for the 2011 WORLD Symposium will cover the cost of the conference facilities, function and exhibition space, food and beverages for this event. Registrants will pay directly for their guest rooms and incidentals.

6. Recommendations

The above-described real estate transaction is appropriate:

Richard H. Pfotzenreiter, III, Vice President and CFO

Frank B. Cerra, Senior Vice President for Health Sciences

Kathleen O’Brien, Vice President for University Services
Facilities Committee

July 7, 2010

Agenda Item: Information Item

☐ review  ☐ review/action  ☐ action  ☒ discussion

Presenters: Vice President Kathleen O'Brien

Purpose:

☐ policy  ☒ background/context  ☐ oversight  ☐ strategic positioning

Provide the Board of Regents with information on the following item:

1. Sale of Washburn Hall and surrounding 1.985 acres, Old Main Campus (Duluth Campus)

Outline of Key Points/Policy Issues:

SALE OF WASHBURN HALL AND SURROUNDING 1.985 ACRES, OLD MAIN CAMPUS, (DULUTH CAMPUS)

In June, 2008, the Facilities Committee was advised of the University's intent to sell Washburn Hall and the surrounding 1.985 acres on the old main campus in Duluth. The property was subsequently offered for sale to the State of Minnesota, St. Louis County and the City of Duluth, and then to the public in January, 2009 via a request for proposal (RFP) process. Those efforts did not result in an acceptable proposal, and the property remained on the market.

An acceptable purchase proposal was received earlier this year for Washburn Hall, and the sale of the property was completed on May 27, 2010. The property was sold to Modern Vision Media, Inc. of Calabasas, California for the sum of $186,000.

Washburn Hall was constructed in 1907 as a dormitory and consists of approximately 16,000 gross square feet last used by the Duluth Campus for office purposes. The University’s purchase and renovation of the former Chester Park School building provided the opportunity to vacate Washburn Hall and offer the property for sale.

The buyer has advised that Washburn Hall will be renovated and used as a corporate residence, with office space for Modern Vision Media to be rented in downtown Duluth.

Background Information:

Information Items are intended to provide the Board of Regents with information needed for them to perform their oversight responsibilities.