Special Planning Issues

ENVIRONMENTAL IMPACT / WEPA

In accordance with the Wisconsin Environmental Policy Act (WEPA), each of the major elements within this master plan will require at minimum a Type II, Environmental Impact Assessment including the new buildings on existing building sites, building additions and for the upgrades to the existing outdoor fields. This requirement ensures that all environmental impacts that may have fiscal impact can be raised during the WEPA process and that they will be addressed in the project budget estimate. The last public meeting shall occur and major issues resolved before State Building Commission authority to construct. The entire WEPA process must be completed soon after that but no later than prior to bid solicitation.

DEMOLITION

Natatorium will be completely demolished to allow for a new building to be constructed in it's current location. The SERF will be mostly demolished, as the current plan calls for the pool and its associated mechanicals and deck to be retained, with a new facility to be built around it. The fields will also need to be excavated and regraded to allow for synthetic and natural turf fields.

Every effort will be made to recycle and re-purpose significant amounts of the buildings materials to reduce the impact of building demolition on local landfills.

CULTURAL RESOURCES

Native American cultural resources in the UW-Madison Lakeshore Nature Preserve area range from archaeological sites dating back 12,000 years to present-day sites that continue to be important places of spiritual practice.

Ancient Native American burial mound sites are scattered across campus but are primarily located within the Lakeshore Nature Preserve. This collection of sacred sites includes several unique effigy-type burial mounds. Indeed, the UW-Madison campus has management responsibility for more effigy mounds than any other university in the world.

View of Effigy Mound (Photo courtesy of UW Campus Photo Library)

The area just north of the Natatorium site is identified as an "Ancient Campsite/Village" whose boundaries were established for the Archaeological Site Inventory (ASI), by the Wisconsin Historical Society. Just east of Willow Creek, north of the existing Natatorium facility are four mounds. The group includes three effigy forms (a goose, water spirit, and an unnamed type) and a small conical form. The goose mound is readily visible from the Lakeshore Path. These mounds have been delineated and are not to be disturbed by development.

SUSTAINABLE / HIGH-PERFORMANCE DESIGN

The State of Wisconsin - Division of Facilities Development (DFD) recognizes the economic, environmental and human health and performance benefits of high-performance "green" buildings. High-performance buildings are designed, constructed and operated to maximize energy savings, limit their detrimental effects on the environment and improve the health and comfort of occupants and users. DFD expects the A/E team to follow an integrated "whole building" design process and to be proficient with the use of life cycle cost analysis to make design decisions which support these values.

At this time, specific performance measures are not mandated, but DFD encourages the A/E team to become familiar with a building design rating system, such as US Green Building Council's LEED system, and to incorporate these energy-efficient, environmentally-responsible design principles to the maximum extent possible within program and budget.

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System™ is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. It is suggested by the design committee that LEED Guidelines should be used as a conceptual framework and guideline for the project. Early in the project the Owner should work with the architectural/engineering team to identify project specific sustainable

design goals and conceptual standards. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for:

Sustainable Site Development

Alternative transportation and pedestrian routes

Storm water management (quantity and quality)

Urban heat island reduction

Native and adaptive vegetation

Water Savings

Water efficiency options (low-flow fixtures, etc)

Energy Efficiency

Target energy efficiency is 20%-30% lower than code minimums (includes cool daylighting, high performance glazing, and other options)

Material Selection

Locally sourced materials within 500 miles of project

Recycled content

Durable, long-lasting

Indoor Environmental Quality (IEQ)

Includes enhanced indoor air quality, access to daylight and views, etc.

The State of Wisconsin has Energy Issues and Policies. The following reports, guidelines, etc. should be followed and addressed in the development of design for this project:

DFD Project Energy Use Policy

This policy is intended to reduce the use of fossil fuels in state owned Facilities without adversely affecting program operations. Building users, managers, physical plant staff and designers share the responsibility for achieving this goal.

DFD Project Energy Design Guidelines

This guideline is intended to reduce the use of fossil fuels in state owned Facilities without adversely affecting program operations. Recognizing that the greatest cost of owning state Facilities over their lifetime is the cost of energy to heat, cool, light and operate them, DFD expects the design of every project to:

Achieve the highest energy efficiency and lowest energy consumption that life cycle costing will justify

Incorporate the most energy-efficient materials, products, equipment and systems consistent with program and budget;

Incorporate renewable energy technologies at the earliest possible stages of design whenever they are technically and economically feasible;

Consider the impact on the utility infrastructure of the existing building/institution.

DFD Lighting Design Guidelines

The Electrical Design Guidelines discuss guidelines for indoor and outdoor lighting systems to be used in state owned buildings and facilities.

Energy Use in State-Owned Facilities

Fiscal Year 2006: This report presents the total energy consumption for the largest State of Wisconsin owned and operated Facilities. These facilities account for the majority of energy consumed in buildings owned by the State of Wisconsin.

ZONING/ DNR

All sites have very specific zoning requirements. The City of Madison Zoning Ordinances along with the University of Wisconsin – Madison planning staff should be consulted on these projects before preliminary planning and approval from the Joint West Campus Area Committee and the City of Madison Plan Commission.

Natatorium

The Nat site is currently zoned CI, Campus Institutional and "college/university" buildings are considered a "permitted use" if 3 stories or under 68 feet tall. This project will require a presentation to and approval from the Joint West Campus Area Committee.
Other standards for development in this district require that the principal structure have a:

- Setbacks - per campus master plan or zero
- The DNR has shoreline setback requirements of 75' from the navigable waterways of Lake Mendota and Willow Creek.
- Campus FP&M has specified a 60'-65' height limit

SERF

The entire block of the SERF is zoned PD – Planned Development. With the new facility we are proposing for the SERF, it should be anticipated that the City would want to see the proposals and run it through both the Urban Design Commission and the City Plan Commission. This project will require a major alteration to an existing Planned Development and require a presentation to the Joint Southeast Campus Area Committee and the City of Madison Plan Commission.

Other standards for development in this district require that the principal structure have a:

- Height: Structures within a mile of the State Capital fall under the Capital View Height Preservation Ordinance and are limited to 187.2 feet.
- Setbacks: per approved plan
- CSM 10494 created the parcel

Nielsen Tennis Stadium

Nielsen, like the Natatorium, is zoned CI, Campus Institutional. The project would also require a presentation to and approval from the Joint West Campus Area Committee. Setbacks are per campus master plan or zero.

University Bay/Far West Fields

U-Bay fields are zoned CN (Conservancy). Outdoor recreational fields are considered a conditional use with a Conservancy district and will therefore require review by the Joint West Campus Area Committee and the City of Madison Plan Commission. Setbacks are:

- Front - 30'
- Side - 80'
- Rear - 100'

MASTER PLAN CONSIDERATIONS

Natatorium

Roads
There should be little or no change to Observatory Drive as a result of this facility's expansion and renovation. The bus drop-off location may need to be relocated to not impede with the new entry location.

Paths
The sidewalk on the north side of Observatory Drive will remain. No part of this expansion/renovation project will affect the Howard Temin Lakeshore Path.

Play fields
The play fields to the east and west of the Natatorium are included in this master plan. Refer to the conceptual design section for more information.

Adjacent development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area. There are substantial academic building plans and a new above grade parking structure planned on the south side of Observatory Drive.

SERF

Roads
Any work done to the SERF would not substantially affect the adjacent roads. The bus drop-off may need to be relocated to not impede with the new entry location.

Paths
No part of this master plan should affect the existing paths around the SERF.

Parking
There is no street parking in this area. There should be little to no change to the existing parking on the east and south of the facility. There is no dedicated parking lot for visitors.

Adjacent Development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area.

Nielsen Tennis Stadium

Roads
There should be no change to Marsh Drive as a result of this facility's expansion and renovation.

Paths
No part of this expansion/renovation project will affect the existing paths in the area.

Adjacent development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area.

CIVIL AND STORM WATER MANAGEMENT

Please refer to the Civil Narrative included in the Appendix for more information relating to

existing civil conditions and storm water management recommendations for each project site.

SYNTHETIC TURF

Please refer to the Synthetic Turf Environmental Response document included in the Appendix for more information relating to environmental impacts and historical concerns relating to the use of synthetic turf.