

DRAFT

Minutes
Campus Planning Steering Committee
Room 5120 Grainger Hall
July 14, 2005

Committee Members – Present

Name	Department Represented
Mary Behan	University Committee
Connie Brachmann	Space and Remodeling Policies Committee
John Chadima	Athletics
Alan Fish	Facilities Planning and Management
Evelyn Howell	Arboretum Committee
Robert McMahon	Physical Sciences Division
Cyrena Pondrom	Humanities Division
Ken Potter	Environmental Representative
Terri Reda	University of Wisconsin System
Chris Richards	University of Wisconsin Foundation
Dean Gary Sandefur	Letters & Sciences, Chancellor's Appointee
Provost Peter Spear	Chair, Chancellor's Designee
Mark Wells	Medical School

Committee Members – Absent

* = **Absence indicated in advance**

Dean Elton Aberle	Chancellor's Appointee
Michael Gould	Biological Sciences Division
Sandra Guthrie*	Recreational Sports Committee
Ann Hoyt*	Social Studies Division
Dean Michael Knetter	School of Business, Chancellor's Appointee
Frank Kooistra*	Academic Staff
Anne Lundin	Library Committee
Brian Ohm*	Transportation Board
Brenda Spychalla*	Information Technology Committee
Troy Vosseller*	Associated Students of Madison
Terry Wilkerson	University of Wisconsin Hospital and Clinics

Observers

Teresa Adams	FP&M – Capital Budget
Kristine Anderson	Ayers Associates
Rose Barroilhet	FP&M – Capital Budget
Alan Bessey	FP&M – Planning and Landscape Architecture
Gail Bliss	Div. of State Facilities – Dept. of Administration

Phillip Braithwaite	UW-Madison Budget Planning and Analysis
LaMarr Billups	Chancellor's Office
Gary Brown	FP&M – Planning and Landscape Architecture
Chris Bruhn	Letters & Science Facilities
Sam Calvin	Dept. of Administration – Div. of State Facilities
Dawn B. Crim	Office of the Chancellor
Dave Drummond	FP&M - Safety
Gwen Drury	FP&M – Planning and Landscape Architecture
Dan Dudley	FP&M – Physical Plant/Engineering
Kathi Dwelle	UW Division of Information Technology
Daniel Einstein	FP&M – Physical Plant
Julie Grove	FP&M – Major Projects
Steve Harmon	FP&M – Major Projects
John Harrod	FP&M – Physical Plant
Pete Heaslett	FP&M – Major Projects
Bryan Hoeft	FP&M – Capital Budget
Kathy Kalscheur	Division of State Facilities
Rob Kennedy	FP&M – Planning & Landscape Architecture
Fred Klingbeil	Ayers Associates
Dan Okoli	FP&M – Major Projects/University Architect
David Olegard	Affiliated Engineers, Inc.
Tura Patterson	Affiliated Engineers, Inc.
Doug Rose	FP&M – Space Management
Dwayne Sackman	University Health Services
Eb Schubert	FP&M – Space Management
John M. Smith	UW Division of Information Technology
Jill Statz	FP&M – Planning & Landscape Architecture Intern
Dorothy Steele	FP&M – Business and Staff Services

Provost Peter Spear called the meeting to order at 8:00 am. He reminded us that this is the Campus Planning *Steering* Committee rather than the regular Campus Planning Committee, and asked for approval of May 19 minutes. Minutes were approved as distributed.

Gary Brown and **Luanne Greene** gave an update on the draft plan and talked about the fact that we're entering the writing and graphics phases of the master plan. We'll review the design guidelines and the rollout schedule, then **John Harrod** will cover the utilities master plan progress.

Brown highlighted updates to the plan. The entry to the hospital has changed in that the visitor ramp will be built underground and a garden will be put on top, to give a sense of entry to the hospital. This treatment will make it clear where patients should enter and will provide a nice, welcoming green space. We have finalized the rest of the health sciences area and the west side physical plant service areas. There will likely be a parking ramp on the current Biotron site, with some office space on the first floor. We need a new substation in the far west campus area. It might go southwest of the hospital,

or possibly near the VA Hospital. There will be an expansion of the Natatorium. The College of Agricultural and Life Sciences campus has been a challenge. The building sites have been roughed in, with more density facing Observatory Drive and shorter buildings behind, on Linden Drive. The academic programs have not yet been assigned to buildings in the area. Space place-holders are indicated, rather than specific program assignments.

Greene said that we are going to test some ideas with the Lakeshore Residence Halls, and this may end up reorienting some of the buildings there, to save some mitigation of power line locations that are already in place. There might be a shift in the number of beds or where they are located on the site. At minimum, different building footprints will be tested.

Brown said that we're now getting to the point of working with an illustrator named **Jim Anderson** to envision how large some of the buildings that we're proposing would be. We're thinking that some of the building heights we've proposed for the west campus are a bit too tall. We will reconsider the massing. These massing drawings don't show what the buildings will look like, they are just un-articulated blocks at the moment. **Brown** showed drawings of the massing studies.

Massing for the Wisconsin Institute for Discovery has also been studied, as have the East Campus Pedestrian Mall area and the Chazen Museum area. Another new thought is to locate a major parking structure under the new buildings to be built behind the Medical Sciences Center, at the corner of Charter Street and Linden Drive, allowing us to vacate Lot 34.

Spear asked for an update on the Rennebohm Building. **Brown** said that they would be touring the building with the City of Madison Landmarks Commission, and there may be a vote on August 8 as to whether it should be declared a city landmark. The Rennebohm Foundation doesn't think it should be a landmark. **Fish** said that if the site is approved as a city landmark, we could still make a request to demolish it. The request would then need to be voted on by the City Landmarks Commission.

Brown showed a new aerial photo of the East Campus Pedestrian Mall, taken from over Lake Mendota, focusing on the south campus. He also showed the Wisconsin Institute for Discovery block and how it relates to the Union South block.

Fish said that the State has negotiated to a change order with **Ayers Saint Gross** to keep them under contract for another 3-6 months to help the Wisconsin Unions to rework their master plan. The Union hopes to get the plans into a shape that the students will be excited about, and that the students will choose to approve a funding referendum to pay for improvements to the Union facilities through student fees.

Brown talked about the warehouse space near the Kohl Center and how parking might be affected there. This site really depends on utilities that are underground there.

Brown said that we will ask **Jim Anderson** to render a drawing projecting a new Union South and its relationship to the Wisconsin Institute for Discovery.

Brown then went over the gross square foot (gsf) net gains and losses, shown over the three six-year phases that we are projecting in this plan. 6.3 million gsf is the anticipated net gain over the course of the plan implementation.

Fish said that this estimate really projects the appropriate capacity that we could construct while preserving our open space and transportation systems. It doesn't necessarily mean that we are going to be building all of these things. We were just testing capacity.

Howell pointed out that we should add to this presentation the net amount of open space that is being added or lost. She recommends breaking down the types of open space, so that it's clear to the public just what types of space we intend to produce. **Greene** agreed, and said that this would reinforce the real estate strategy of seeking the highest and best use of each parcel.

Greene then talked about design guidelines. Who are they for? The intended audience is both designers and design reviewers. They have come up with some overarching ideas and have coined two phrases that sum them up: "Traditional Collegiate Campus" and "Urban Collegiate Campus." These phrases refer to the differences between areas north and south of University Avenue. The guidelines can help sort out the types and sizes of buildings that should be sited in either area. The open space and the buildings are to be viewed in concert rather than as separate systems. In the Traditional Collegiate Campus area, open space is composed through quadrangles, courts, gardens and larger green spaces. The Urban Collegiate Campus areas' open space is composed mainly of streetscapes.

Spear asked if that was just the way it is, or whether it's the way we want it to be...or that it has to be. **Greene** said that the quality of the space can be made much better, even if the amount of open space is not the same type of green space one would see in the Traditional Collegiate area. **Spear** said that there is a fair amount of new building proposed in the south campus. This could be terrific. Or, might we want to try to make this a more traditional collegiate area? **Ken Saiki** said that the south campus is an area much more affected by the street grid, and that the street grid is not going to go away. **Greene** said that the capacity we will need is inextricably linked to the density shown in the south campus.

Greene showed a diagram of proposed design-neighborhoods. There will be open space design guidelines. There will be an emphasis on quadrangles, but also smaller courtyards along streets, that will provide quality spaces. The idea is to go beyond just being functional and tip the balance into a collegiate feel in these areas.

Greene showed a matrix that will be filled in with design guidelines for streetscapes and green spaces. It will indicate what types of design should be targeted to particular areas.

Issues of size and type will be tackled next. The sizes of buildings create specific design challenges. The lakefront edge is a very precious resource. The Memorial Union Terrace really reinforces that. Anything built along the lake should be approached very carefully. We want the area to be porous.

Greene showed a diagram which illustrates the medium and large buildings proposed. She showed how there will be a continuous sweep of this scale of buildings, across campus. Right now, the scale of buildings is patchy. She showed another matrix for design guidelines having to do with massing and siting of buildings, specific to different parts of campus. She demonstrated how a designer might use this matrix as they were approaching a new design for the campus. These design matrices will be on the web.

Spear asked about the drawings included with this matrix. When he thinks of guidelines, he thinks of principles. He'd like to talk about the interaction between the principles and the locations. It's broken down by neighborhoods. His question is whether ASG is presenting these matrix drawings as exemplars. If so, **Spear** fears that this will put a crimp on the creativity of future designers. **Greene** said that these are not meant to be proscriptive. The diagrams are meant to point out things that are embedded in the principles. **Spear** pointed out that the design guidelines will be used by the Campus Planning Committee. **Spear** wants to make sure that these are not prescriptive of particular rooflines, etc.

Greene said that **Dan Okoli** has had some good thoughts about design as analogous to academic freedom. **Okoli** said that we do want people to experiment, but to be responsible and contextual. As we get into greater detail, all these things will come out. We do want to keep the design guidelines simple.

Howell wanted to go back to the table of contents. She thinks it's extremely important to have environmental design guidelines separated out and made explicit...even if they are already embedded in our thinking and standards throughout. She thinks that having environmental commitments separately articulated is as important as having them throughout. **Fish** said that one of our articulated planning principles is "The Environmental Campus." We will point it out throughout the report.

Howell asked whether there will be any explanatory information about the *purpose* of a quad and the *purpose* of a courtyard. Giving the purpose explicitly keeps it from just becoming prescriptive. Many of the quads, etc. we have now are just unusable for most of the year. She says we need to concentrate on both the leaves-on and leaves-off times of the year. She recommends that we have drawings showing both.

Next, **John Harrod** began to present the Utilities Master Plan. We've been looking at the campus infrastructure system and how we will support these new structures. We've dealt with the generating of the utilities and distribution as well. We have Affiliated Engineers in the lead of this team, headed up by **Jerry Schuett**. Capital Engineering and Ayers Associates are also on the Utilities Master Plan team. This plan is being done concurrently with the Campus Master Plan.

Harrod started with a summary of existing utilities. Load management is as important as building anything new. These slides will be put on the website.

We have now catalogued where we have steam lines, along with their size and condition. They are all underground. The same goes for water distribution for chilled water, which is very important this time of year. We have mapped out all electrical connections and domestic, sanitary, and storm sewers. They are everywhere underground here. Be careful digging!

We are working to establish utility corridors. We want to put in as much at one time as possible, so that we aren't repeatedly digging up areas the way we repeatedly dug up Henry Mall over the past couple of years. We now know the ages of all of our piping, etc. We are also mapping all of this on GIS, with an electronic database keyed to it.

We also plan to do thermal utility upgrades. The Charter Street steam plant was built in the 1950s. Those original boilers came from the Hudson Motor Company, when it was decommissioned. The Walnut Street plant was constructed later, around the time that the hospital was built. These two are interconnected with steam and chilled water. The West Campus Cogeneration Facility is the newest, and has the capacity to expand built into it.

There are miles and miles of underground ductwork for electrical and signal distribution. We need to acknowledge that our consumption of electricity continues to grow. Substations become important. MG&E is our electric power provider. The power we buy comes into our substations and gets distributed by us.

We are an institution of information, so we have to be ready to support all of the computer uses on campus. Our infrastructure is all relatively new. The conduits that we have installed have been strategically located to make it easier to update the wiring as needed. We are working closely with DoIT on the long range plan.

Spear asked what the percentage of completion is with the **Twenty First Century Telecommunications Upgrade Project**. **Harrod** says probably 40%, but that is off the top of his head.

Harrod said that with regard to water systems, it's important to ensure appropriate water pressure, especially out to Eagle Heights. We have to be concerned with capacity for fire fighting if needed. With sanitary sewers, we work with Madison Metropolitan Sewerage District, and the Village of Shorewood Hills. Our systems do have some age to them, but they are in quite good shape and should last a long time.

Storm sewers are currently a hot topic. How will we manage the storm water on this campus? We know our current infrastructure. We are considering ways to slow the flow of storm water off of campus. We need to make sure that the quality of water that gets to the lakes is good. He showed different sizes of detention ponds that would accommodate a 2-year storm event or a 100-year storm event. We might build cisterns,

or rain gardens, etc. The quality of the water that leaves the campus cannot cause harm to the lakes.

Overall, we are pursuing reliability and redundancy with the Utilities Master Plan. We need to have a backup plan so that utilities can be fed to each building from more than one source. We need to phase out old equipment in order to maximize energy efficiency. We need to maintain flexibility for future technologies. Our utility infrastructure needs to be located where buildings are not going to go sometime in the future. We need to be able to generate energy, and also need to explore alternative energy sources.

We use a lot of energy on this campus. We're looking at improving the operations within the plants. We have been working with the Wisconsin Energy Initiative and have had some good success with it; we've had a good return on investment. Nearly 29 million dollars has been plugged back in to our systems. We've replaced lots of lighting systems and changed to low flow water plumbing. We have minimized energy costs for pumping to support our plumbing.

Spear asked why the recent newspaper article said that our normalized energy costs have gone up. **Harrod** said that the demand on campus has gone up. This increased demand even comes down to the fact that we're expected to do much more frequent air exchanges in buildings now. The state currently has some good standards in place and we are following them. We are using more heat recovery systems, day lighting and photovoltaic technologies. We are following LEED standards, though we haven't pursued the certifications.

Based on our existing experiences and what others are doing in the industry, we are trying to make projections for future utilities load. We're in pretty good shape based on our projected loads and the different phases of the program. We've taken the utilities master plan out 30 years in the future.

In terms of cooling capacity projections, we're fine tuning which buildings are going to happen when. Different buildings have different loads. We've identified a bottleneck with our distribution of chilled water on the east campus. We are going to need to do something about that to prepare for future load.

Substations will be needed for the Wisconsin Institute for Discovery. When the Institute comes in, we will have a switching station taken out. We need to make sure that we have reliability and redundancy.

Environmental issues are critical for us. We know that we have one plant in particular that causes anxiety. Charter Street is a coal-fired plant. We want to explore new technologies on the market that can improve air quality and get cost benefits at the same time, for the Charter Street plant.

The furthest east zone of campus is causing us concern about chilled water capacity. We may need an additional chilling plant on the east campus. Such a plant can be built underground, maybe under a parking lot near the Kohl Center.

Additional substations on campus will need to be built. If we can buy higher voltages from the grid, then transform it ourselves on campus, we could realize savings. If we can put in the new technology boilers, we might be putting in some new electric generators on campus. We could then distribute this energy ourselves and significantly lower fuel costs.

We are thinking about fluidized-bed boilers to replace some of the technology at the Charter Street Plant. We're also exploring thermal storage, in which we would make chilled water or ice overnight and store it under ground. During the day, we can draw on this stored chilled water and distribute it. We're exploring how viable various alternative fuels could be. We might investigate a cooperative wind farm somewhere off campus, hydrogen fuel cells and photovoltaic technologies. We also want to reduce our energy demands by the ways we design our buildings and mechanical systems. Our emphasis would be on not just generating, but also on conserving energy. **Harrod** asked if there were any questions.

Pondrom asked how a new chilling plant would help, if the problem is that pipes are too small. **Harrod** said that it is a distribution issue, but that putting the chilling plant in that area takes pressure off of the pipes because they aren't supplying such a broad area of campus that way.

Fish said that we've created two new tools. All of the networks of infrastructure we have are now on electronic databases. There is also a comprehensive model that we can use to test how much infrastructure will need to be added as load increases in various areas over time. We have been spending almost 2 years getting all of this digitized on GIS. The consultants will give us the software for this modeling.

Behan wanted to discuss the design principles for new buildings. How will the energy usage affect the design principles? **Harrod** said that energy use is now always considered. We even coordinate buildings in groups to maximize efficiency. **Greene** said that we generally will start with the energy use and configuration of labs before we begin the aesthetics.

Fish said that the 1970s oil embargo got some design standards implemented in this state which are some of the most forward in the nation. For example, all the new labs we're building on campus have the labs completely segregated from the support areas, so that we can treat the air separately. The scientists wanted their offices and their students all together in the labs. But, in the end, the energy treatments needed to drive the design.

Brown covered the Campus Master Plan roll-out schedule for fall. He talked about the foldout brochure and the Executive Summary booklet, which will have more details in it. A detailed three-ring binder will be printed, in more limited numbers, for those who will

be referencing the Campus Master Plan on a daily basis. The detailed version of the plan will also be available on CD and on the web.

We will be doing a public presentation on the final product in November and a presentation to the Board of Regents in December. **Brown** asked if there are any questions.

Howell wanted to know how much time the Campus Planning Steering Committee would have to review the text, etc. **Brown** said that some drafts might go out a few weeks ahead of the September meeting. **Spear** said that nobody is proposing to micro-edit, but that the principles should be clearly included so that people would know that they could still give input. **Howell** wants to make sure that there is enough time in case there's something we want to see. **Fish** said that we will take the time to make changes if there is a need for changes.

Spear said that people often won't speak up because they don't want to slow down a process, so we need to make sure that there is enough time. **Howell** wants to make sure that this is not a rubber-stamp committee; it wouldn't be a good way to proceed for faculty governance or joint governance. **Spear** said that this is an entirely legitimate comment. There needs to be time for input.

Reda asked if there is going to be reference to any other guidelines, like demolition guidelines. Will there be cross-references as to how this will be conducted? **Brown** said that there could be a paragraph about this.

Reda asked about the Rennebohm facility. Could it be relocated? **Brown** said that the construction of the building wouldn't allow it to be moved down the street. It is composed of lots of concrete and terrazzo, rather than a wood frame.

Pondrom said that she has heard a lot of stray comments on campus about so much demolition, in light of the budget climate that we're in. We should make it very clear why things are being demolished instead of renovated. The criteria for demolitions need to be very clear to the public.

Spear adjourned the meeting at 9:31 am.