



Beneficent Beauty: Refining the UW–Madison Campus

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University Architect



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Campus Design Guide

University of Wisconsin-Madison



An Approach to a Functional and Pleasing Composition



QUESTION



3

What should our campus look and feel like in the near and long term?



GOOD EXAMPLES OF WHAT NOT TO DO



4



McFadden Hall, 1919



GOOD EXAMPLES OF WHAT NOT TO DO



5



McFadden Hall, 1919



After 1960's Renovation



Schear Hall, 1960's Addition



GOOD EXAMPLES OF WHAT NOT TO DO



6



McFadden Hall, 1919



After 1960's Renovation



2008 Renovation



GREAT CAMPUS PLACES



7



Memorial Union Terrace



Memorial Union



Memorial Union Terrace



Memorial Union Interior



Bascom Hill



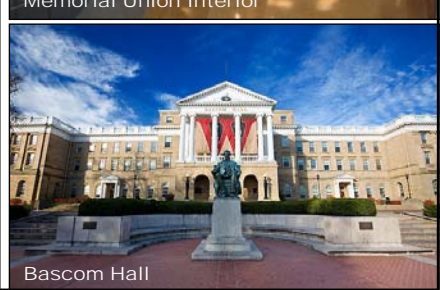
Memorial Union Interior



Bascom Hall



Bascom Hill



Bascom Hall



GREAT CAMPUS PLACES



8



Bascom Hill



Bascom Hall



Memorial Union Terrace



Agricultural Hall



Library Mall



Allen Centennial Gardens



Lakeshore Path



Science Hall and Bascom Hill



School of Education



NOT SO GREAT CAMPUS PLACES



9





NOT SO GREAT CAMPUS PLACES



1
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Van Vleck Plaza



Engineering Research Building



Old Ogg Hall



Van Hise Hall



Humanities Building



Peterson Building



Social Sciences Building



Union South



EDUCATION BUILDING EXAMPLE



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Selected Design Option

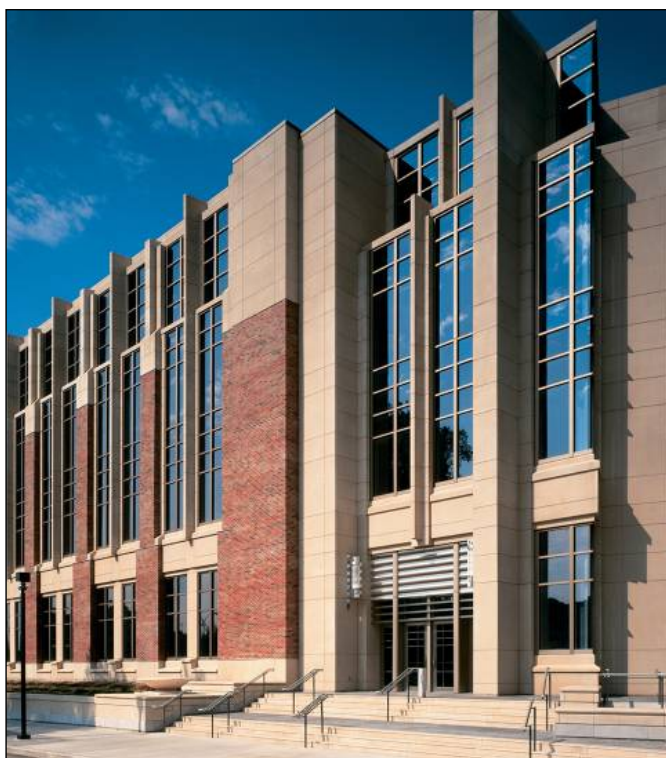




BIOCHEMISTRY I EXAMPLE



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BIOCHEMISTRY II EXAMPLE



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BIOCHEMISTRY I



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BIOCHEMISTRY COMPLEX



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WISCONSIN INSTITUTES FOR DISCOVERY



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WISCONSIN INSTITUTES FOR DISCOVERY



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WISCONSIN INSTITUTES FOR DISCOVERY



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WISCONSIN INSTITUTES FOR DISCOVERY



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WISCONSIN INSTITUTES FOR DISCOVERY



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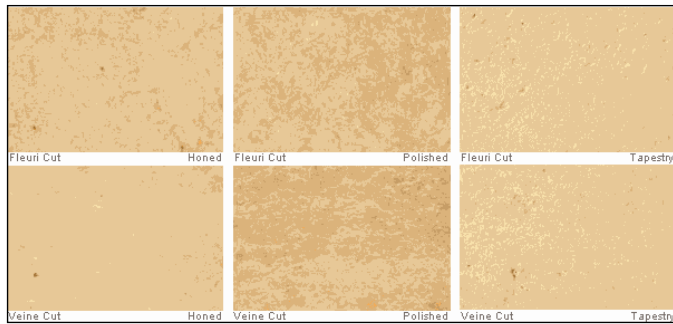




WID – MATERIALS PALETTE



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neutral surface	neutral surface	glazed surface
1.01-0	1.01-1	
2.01-0	2.01-1	
3.01-0	3.01-1	
4.01-0	4.01-1	
5.01-0	5.01-1	
6.01-0	6.01-1	
6.02-0	6.02-1	
7.03-0	7.03-1	
7.04-0	7.04-1	
8.01-0	8.01-1	
9.04-0	9.04-1	



UNION SOUTH PROJECT



2
2





WISCONSIN UNION SOUTH PROJECT



2
3





WISCONSIN UNION SOUTH PROJECT



2
4

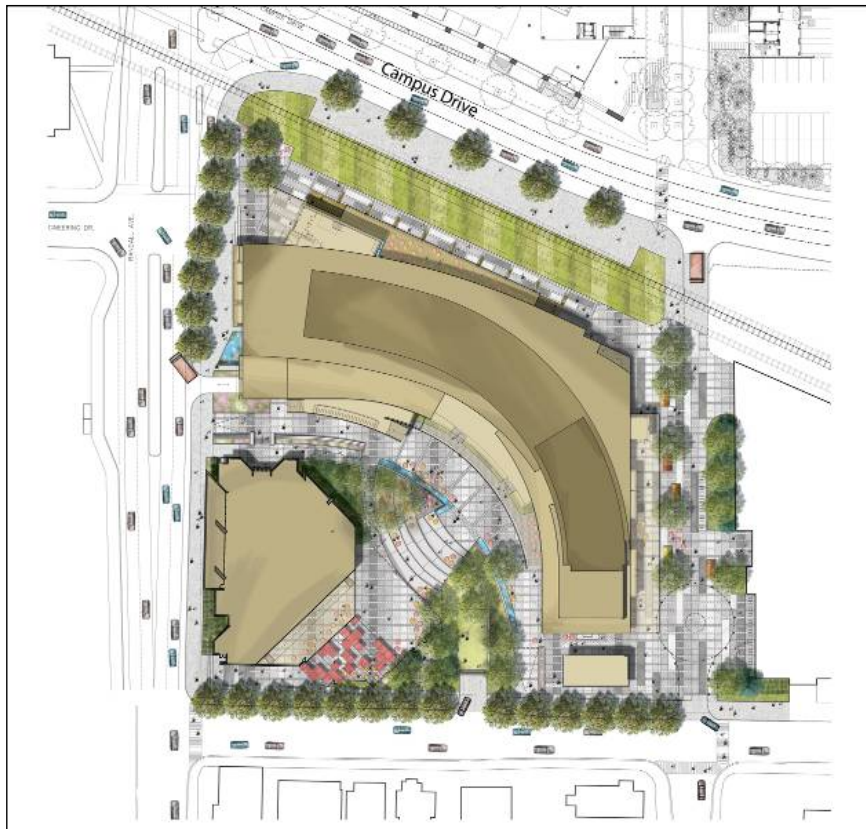




WISCONSIN UNION SOUTH PROJECT



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WISCONSIN UNION SOUTH PROJECT



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WISCONSIN UNION SOUTH PROJECT



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WISCONSIN UNION SOUTH PROJECT



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WISCONSIN UNION SOUTH PROJECT



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WISCONSIN UNION SOUTH PROJECT



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ROAD MAP



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2005 Campus Master Plan

Campus Master Plan Implementation

- Design Review Board
- Design Review Guide
- Hiring a University Architect



PURPOSE



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The purpose of the Campus Design Guidelines is to serve as the framework for fruitful dialogue between designers, the Design Review Board (DRB), the campus community, the UW System, the Division of State Facilities, and other stakeholders as we collectively seek to interpret the intent of the 2005 Campus Master Plan.

The ultimate goal of such an effort is to create a well defined, functional, sustainable, beautiful and coherent campus environment that promotes intellectual and social exchange.



APPROACH



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The campus should be seen as one large and complex composition consisting of many neighborhoods. Each neighborhood, in turn, is a composition made of other compositions such as buildings, open spaces, and other site features. This represents a complex nested arrangement of compositions within compositions from the large scale down to the smallest perceivable details.



2005 CAMPUS MASTER PLAN



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This map shows the campus as a tapestry of spaces, buildings, road networks and other site features.

- | | | |
|--------------------|--|-----------------|
| Existing Buildings | Non-University Buildings | Campus Boundary |
| Proposed Buildings | Joint Proposed Buildings
(Campus and Federal) | |





TRADITIONAL VERSUS URBAN CAMPUS



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The neighborhoods on campus sit within the traditional collegiate and urban campuses.



Traditional Collegiate Campus



Urban Collegiate Campus



CAMPUS DESIGN NEIGHBORHOODS



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These neighborhoods have discrete characteristics which need to be understood and respected.

Neighborhood Characteristics Depend on:

- Scale and Density (or Size and Massing)
- Topography/Landform/Natural Setting
- Urban Fabric/Neighborhood Setting
- History/Age
- Special Function
- Materials



GUIDELINES BY SIZE



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The massing of campus buildings, that is the overall geometry of their perceived forms – footprint, height, and roof form, should demonstrate sensitivity to nearby buildings within their neighborhoods.

Campus buildings can be broken down into various scales depending on its role in the campus and or urban context. Buildings can be:

- Small (5,000 – 40,000 GSF)
 - residential halls, or specialized buildings such as observatories or outdoor classrooms.
- Medium (40,000 – 80,000 GSF)
 - typically the generic academic buildings such as classrooms or small research facilities.
- Large (80,000 – 150,000 gsf)
 - may include heavy research and medical facilities.
- Extra Large (150,000 GSF +)
 - typically include large event facilities for athletics and hospitals.



Elizabeth Waters Hall



Lathrop Hall



Chemistry Building



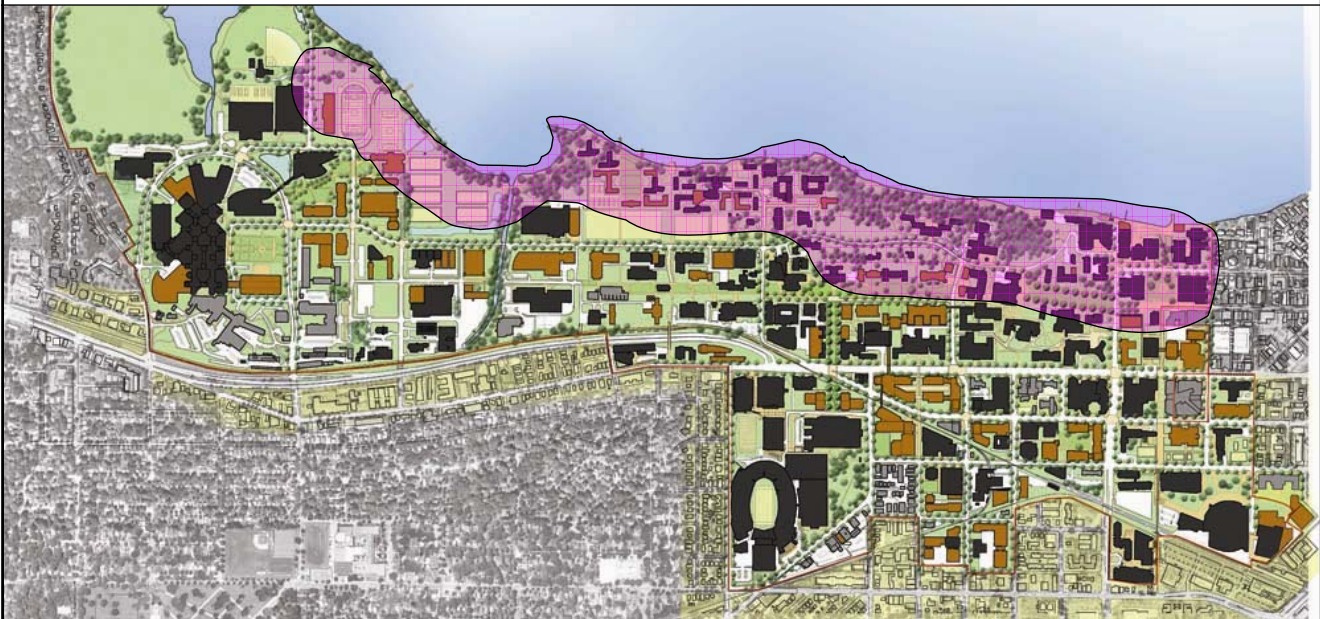
UW Hospital and Clinics



SMALL BUILDINGS



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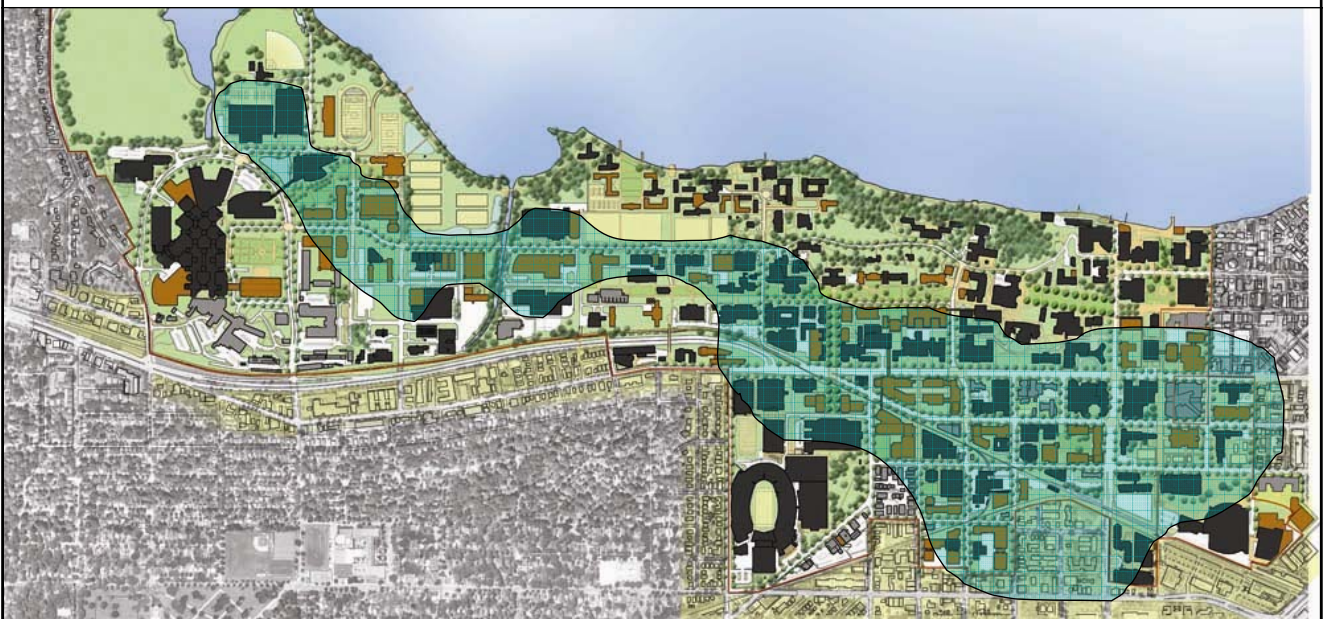




MEDIUM AND LARGE BUILDINGS



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EXTRA LARGE BUILDINGS



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CAPITOL VIEW PRESERVATION



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No portion of any building or structure located within one mile of the center of the State Capitol Building shall exceed the elevation of the base of the base columns of said Capitol Building or 187.2 feet, City datum. This prohibition shall not apply to any flagpoles, communication towers, elevator penthouses, screened air conditioning equipment on existing buildings and chimneys exceeding such elevation, when approved as conditional uses.





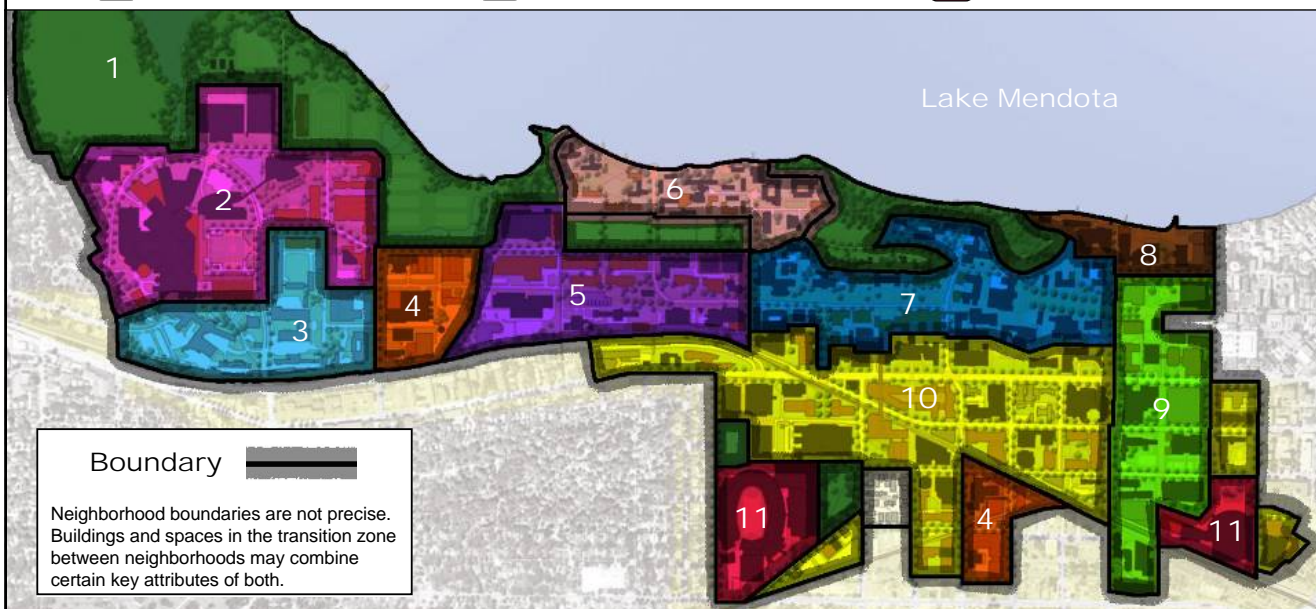
CAMPUS DESIGN NEIGHBORHOODS



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Based on the neighborhood characteristics, we have the following 11 campus design neighborhoods:

- | | | |
|-------------------------------|-------------------------------------|---------------------------|
| 1 Major Open Spaces | 4 Service and Infrastructure | 8 Lakefront |
| 2 Health Sciences | 5 Animal and Plant Sciences | 9 East Campus Mall |
| 3 Federal Neighborhood | 6 Lakeshore Residence | 10 Urban Campus |
| | 7 Historic Campus | 11 Event Centers |





CAMPUS DESIGN NEIGHBORHOODS

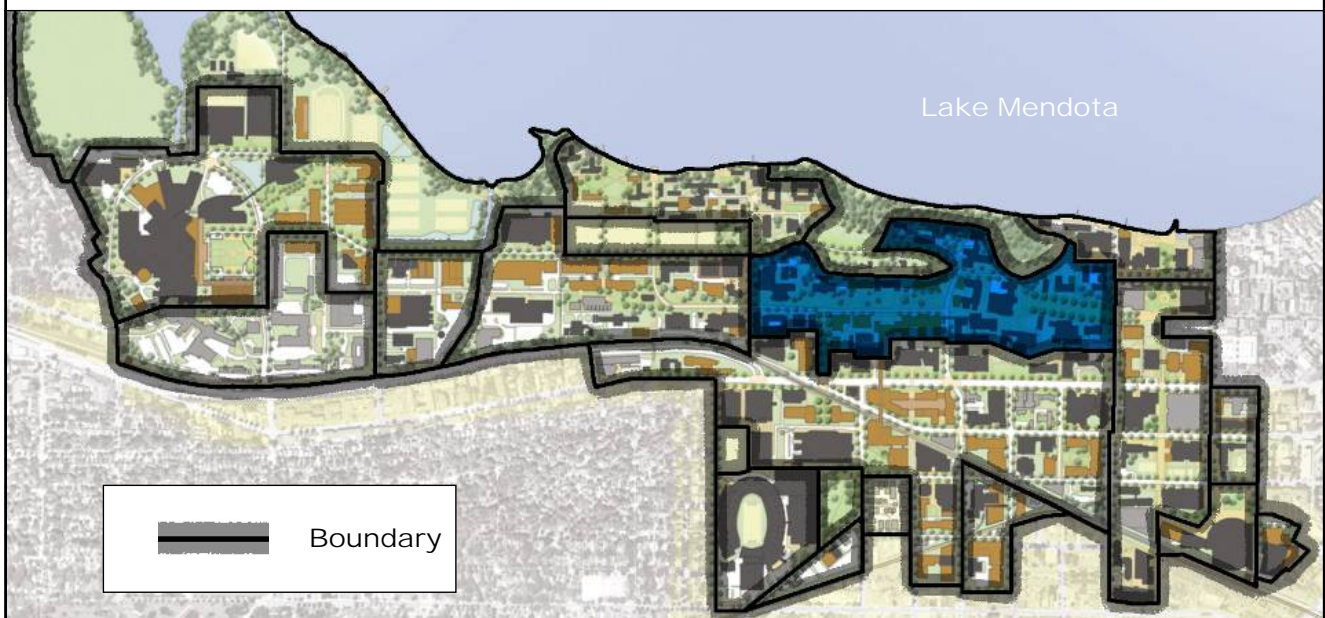


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Example of a Neighborhood Specific Guideline

HISTORIC CAMPUS

University of Wisconsin-Madison





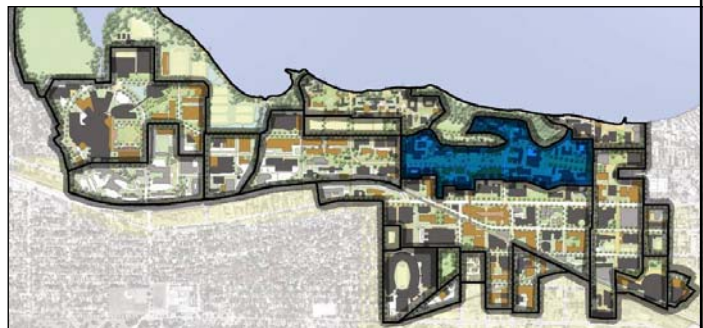
HISTORIC CAMPUS



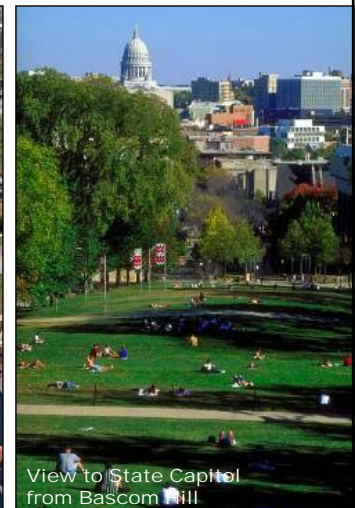
4
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Historic Campus Neighborhood

- An academic center, classrooms, faculty and staff offices. Oldest section of campus.
- Restore sense of scale, open space structure and building massing to more traditional campus relationships.



Aerial View of Bascom Hill



View to State Capitol from Bascom Hill



HISTORIC CAMPUS

Neighborhood Character



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Bascom Hill



Education Building



Aerial View of Bascom Hill



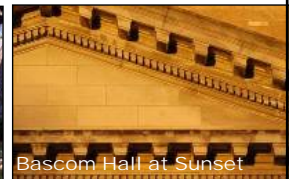
Agricultural Hall



Bascom Hill



Bascom Hill



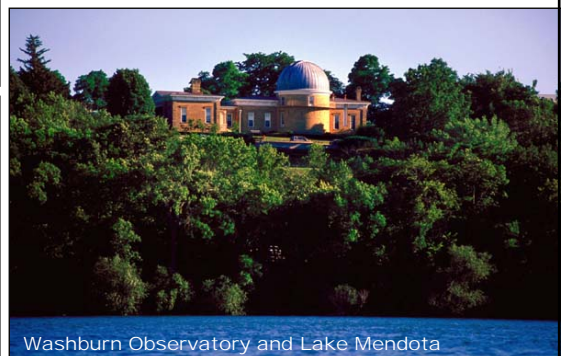
Bascom Hall at Sunset



Bascom Hall



Bascom Hill



Washburn Observatory and Lake Mendota



HISTORIC CAMPUS - EAST

Buildings in the Neighborhood



Key

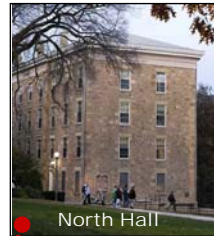
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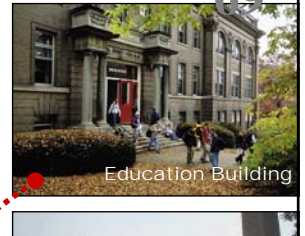
Sewell Social Science Building



Bascom Hall



North Hall



Education Building



Ingraham Hall



Radio Hall



Sterling Hall



Science Hall



Van Vleck Hall



Birge Hall



South Hall



Law Building



Music Hall



HISTORIC CAMPUS - EAST

Open Spaces in the Neighborhood



Key

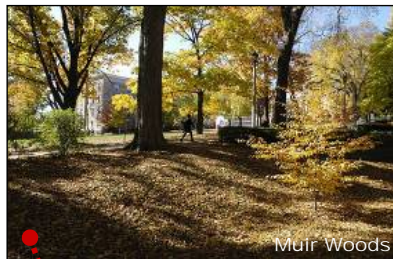
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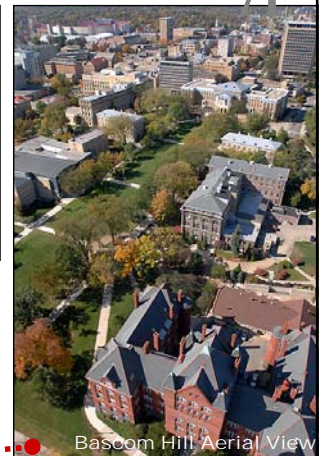
Bascom Hall Portico



Observatory Drive



Muir Woods



Bascom Hill Aerial View



Steps to Van Vleck



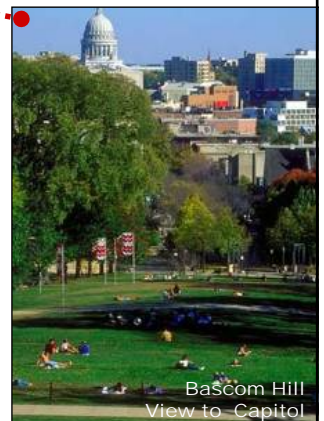
Open Space by Van Vleck Hall



Open Space by Birge Hall



Abraham Lincoln Statue



BaScom Hill
View to Capitol



HISTORIC CAMPUS - EAST

Massing



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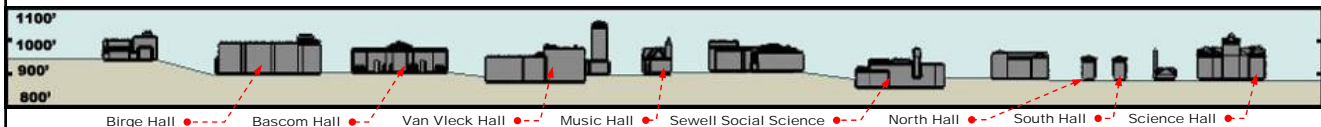
Key

- Existing University Buildings
- Existing Non-University Buildings
- Proposed Buildings

Proposed Building Heights:

- 4 – 6 Floors
- 60 – 90 Feet

Elevation (feet above sea level)



Science Hall



Bascom Hall



Bascom Hall



HISTORIC CAMPUS - EAST

Site Furnishings and Landscape Features

Neighborhood Specific Furnishings



Bascom Hill Path and Park Street Pedestrian Bridge



Sewell Social
Sciences Site
Benches



Music Hall
Lamp



South Hall
Lamp



Abraham Lincoln Statue on Bascom Hill



Bascom Hill
Light Pole



Birge Hall
Light Pole



Bascom Hill
Banner



Van Vleck Hall Pavers



Bascom Hall Pavers



Key

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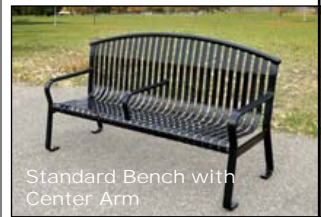
Campus-Wide Standard Furnishings



Standard Table



Standard Bench and
Trash Receptacle



Standard Bench with
Center Arm



Standard Site Lighting



HISTORIC CAMPUS - EAST

Details, Materials, Colors, and Textures



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Materials : Madison Sandstone, Superior Sandstone, Grey and Red Brick, Bedford limestone, Terra Cotta Decoration, Berlin Rhyolite.

Architectural Styles: Beaux Arts, Classical Revival, Richardsonian Romanesque.

Architectural Features:
Bascom Hall portico, Gothic arches in Music Hall, Edged mortar in North and South Hall.



Music Hall Stained Glass



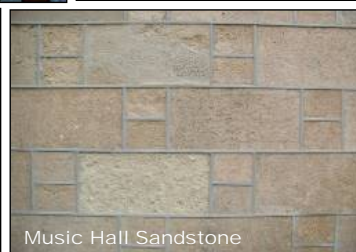
Bascom Hall



Bascom Hall



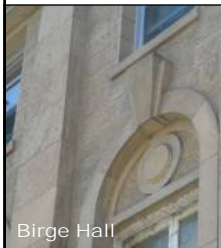
Education Building



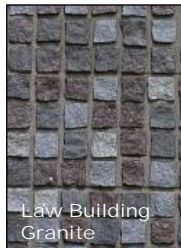
Music Hall Sandstone



Bascom Hall



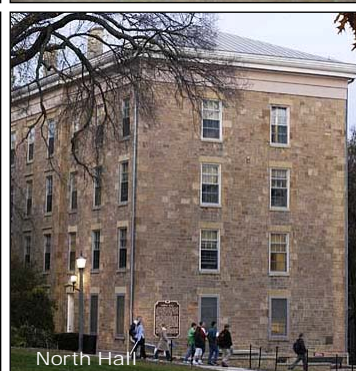
Birge Hall



Law Building
Granite



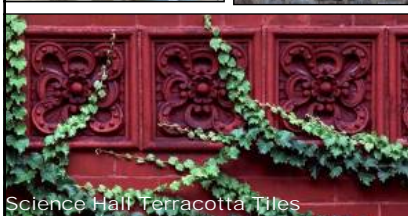
Bascom Hall



North Hall



Science Hall Brick



Science Hall Terracotta Tiles



HISTORIC CAMPUS - WEST

Details, Materials, Colors, and Textures



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Materials: Madison Sandstone, Cream and Dark Reddish Brown Brick, Bedford Limestone, Red Tile Roofing, Precast Concrete Panels.

Architectural Styles: Beaux Arts, Classical Revival, Queen Anne, Modern.

Architectural Features: Ionic columns in Agricultural Hall entrance, Dentilated cornice in Agricultural Engineering, Wood framing in Hiram Smith.



Hiram Smith Hall



Genetics--
Biotechnology Center
Building



Agricultural Hall



Hiram Smith Hall



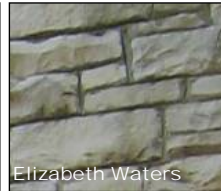
Agricultural Hall



Medical Sciences Center



Genetics--Biotechnology
Center



Elizabeth Waters



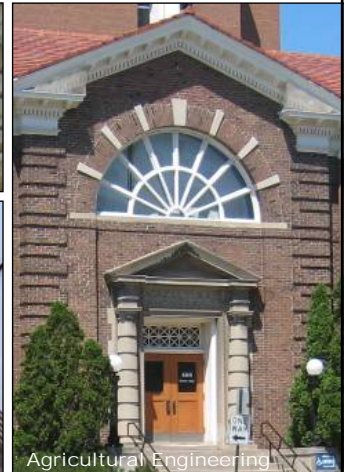
Soils and King Hall



Microbial Sciences
Building



Medical Sciences
Center



Agricultural Engineering



HISTORIC CAMPUS - EAST

Issues and Opportunities



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Issues



Van Vleck Hall Deck Opportunities

Ingram Hall Opportunities





BUILDING DATA INDEX

A - H



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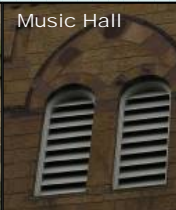


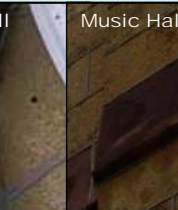
Building Name	Date Constructed	Date Renovated	Architect(s)	Style	Materials	Design Neighborhood
Agricultural Engineering	1907	1968	Arthur Peabody	Georgian Revival	Dark brown paving brick, red tile roof	Historic Campus
Agricultural Hall	1901	1928, 1969	J.T.W. Jennings	Beaux Arts	Brick, bedford limestone, terra cotta, copper metalwork, red tile roof	Historic Campus
Agronomy	1906		Arthur Peabody	Beaux Arts	Dark brown brick, red tile roof	Historic Campus
Bascom Hall	1857	1899, 1906, 1926, 1941, 1964, 1975	William Tinsley	Renaissance Revival	Madison sandstone	Historic Campus
Biochemistry	1912	1938, 1954, 1965, 1984, 1996	Laird & Cret and Arthur Peabody	Beaux Arts	Dark brown paving brick, red tile roof	Historic Campus
Birge Hall	1910	1931, 1948, 1955, 1961, 1980	Arthur Peabody and Jarvis Hunt	Renaissance Revival	Madison sandstone	Historic Campus
Bock Labs	1965	1997	Durrand & Bergquist	Post World War II	Steel, reinforced concrete, cut stone, precast concrete, face brick	Historic Campus
Carillon Tower	1936	1963	Arthur Peabody	Renaissance Revival	Madison rubble stone, turned stone balusters	Historic Campus
Education Building	1899	1910, 1951	J.T.W. Jennings	Beaux Arts	Grey pressed brick with pink mortar, bedford limestone, terra cotta trim	Historic Campus
Elizabeth Waters	1938		Roger Kirchoff		Lannonstone facing, red tile roof	Historic Campus
Genetics	1961		Siberz & Purcell		Precast concrete curtain wall panels, face brick	Historic Campus
Hiram Smith	1891	1901, 1909	Alfred & Clas	Queen Anne	Cream brick, wood framed upper floors, half timber and pebble finish, red tile roof	Historic Campus



MATERIALS INDEX



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Material	Description	Use	Source		
 Madison Sandstone	This local light-colored buff sandstone is the primary material in the historic campus neighborhood.	Facades of historic buildings on Bascom Hill including North Hall, South Hall, Bascom Hall, Music Hall, Birge Hall, and Washburn Observatory	Stephen's Quarry, which was located about two miles west of campus at the present site of Hoyt Park in Madison. Stephen's Quarry closed in 1933 due to lack of stone. After the quarry closed, the campus was forced to find alternatives to the favored Madison sandstone.		
 Bascom Hall	 Birge Hall	 North Hall	 Washburn Observatory	 Bascom Hall	
 Superior Sandstone	This dark-colored red-brown sandstone is used as contrasting trim against Madison sandstone in the historic campus neighborhood.	Trim in Music Hall.	Quarry near Bayfield, Wisconsin by Lake Superior.		
 Music Hall	 Music Hall	 Music Hall	 Music Hall	 Music Hall	 Music Hall



THE DESIGNER'S ROLE



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What is the role of the designer?

The task of the designer is to create a well functioning and sustainable composition that is pleasing, at the detail scale and at the building scale, in a way that is in harmony with the larger urban scale within the neighborhood and campus at large. Buildings and campus places should contribute more, to their neighborhoods and to the larger campus, than their own inherent aesthetic value. In other words, the whole should always be superior to the aggregate of its parts; so that every new project progressively perfects the whole.



PLEASING COMPOSITION



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What makes a composition pleasing?

Whereas the functional and sustainability requirements of buildings and campus places are more easily explained and understood because standards about them exist, it is the notion of achieving a pleasing composition on our campus that needs to be addressed more clearly in this guide.

For the purpose of this guide, the composition is pleasing when it is:

Rich, Balanced, Unified



Lakeshore Path



Bascom Hill



Bascom Hall



Memorial Union Terrace



Agricultural Hall



Library Mall



Allen Centennial Gardens



RICH COMPOSITION

Richness is exhibited by such works on campus that employ diversity of *compositional elements* such as:

- Details
- Patterns
- Textures
- Materials
- Layers of depth and connections
- Contrasts in Light and Shadow
- Transitions
- Colors
- Scales and Proportions
- Solid and Void



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Primary Interior Space
Memorial Union



Exterior Appearance
Memorial Union



Open Space
Allen Centennial Gardens



BALANCED COMPOSITION



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The appropriate placement and use of these *compositional elements*, in space and in two dimensions, creates balance by conveying a sense of visual equilibrium. This requires sound judgment about size relationships, appropriate use of scales and proportions, colors, patterns, textures, contrasts in light and shadow, solid and void, relating interior and exterior, and balancing small parts against larger forms. Although the concept of balance is most readily evident in a symmetrical arrangement, our campus buildings and places are mostly asymmetrical. Therefore, the task of appropriately distributing visual weight presents greater challenge for designers, but also provides opportunities to create more dynamic arrangements that embrace the desirable pattern of activities on our campus.



Microbial Science
Interior Space



Exterior Appearance
Bascom Hall



Open Space
Bascom Hill



UNIFIED COMPOSITION

The composition is unified when it is perceived as a whole. The University of Wisconsin-Madison has neither advocated stylistic consistency nor prescribed particular roof forms, colors or materials throughout its campus; instead it is our expectation that buildings and campus places should be designed to be sensitive to their neighborhood context. Clearly such intimate dialogue between new projects and their context will take account of materials, colors, quality, scale, proportions, massing, and overall character of existing buildings and spaces in the neighborhood. Unity also demands scaling coherence such that there is a perception of an inherent natural scaling factor that pervades the composition, and relates it to the human scale.



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Open Space
East Campus Mall



Exterior Appearance
Agricultural Hall



Primary Interior Space
Microbial Sciences Atrium



SUSTAINABILITY



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"Development is sustainable when it meets the needs of the present without compromising the ability of future generations to meet their needs."

- United Nations World Commission on Environmental Development, 1987



Class of 1918 Marsh



Greene Prairie at the UW Arboretum



D.C. Smith Greenhouse



STRATEGY



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In implementing the 2005 Campus Master Plan, these criteria: richness, balance, and unity, should be applied to the treatment of open spaces, buildings, and primary interior spaces. Open spaces on our campus are deemed as important as the buildings that help to frame them; so they should both be designed in an integrated fashion. In designing the buildings, special attention should be given to the volumetric treatment of exterior architecture as a whole, as well as the architectural treatment of the building facades. Finally, the primary interior spaces should be considered in relation to the exterior architecture, open space, and patterns of movement around the site and campus.

So what architectural style should we employ? What are the heights of buildings? What about colors and materials? Answers to questions such as these are not prescribed; instead the guideline focuses on a process, through dialogue that would lead to answers that are appropriate for our campus. It suffices to say that every project on campus should be acutely sensitive to its immediate and larger contexts, and contribute to a greater sense of coherence, even as it expresses its uniqueness and embodies the spirit of its age.

SUSTAINABLE			
Components Quality	Open Spaces	Building Exterior	Primary Interior Spaces
Richness	●	●	●
Balance	●	●	●
Unity	●	●	●
FUNCTIONAL			



THE DESIGN REVIEW BOARD



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What is the role of the Design Review Board (DRB)?

The Design Review Board Serves essentially as the facilitator of the conversations that must take place in order to accurately interpret the intent of our 2005 Campus Master Plan



EDUCATION BUILDING EXAMPLE



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Existing Education Building



South Elevation on Bascom Hill



North Parking Lot and View to Lake Mendota



North Elevation of Education Building



Proposed Design Options





EDUCATION BUILDING EXAMPLE



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Selected Design Option





EDUCATION BUILDING EXAMPLE



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Selected Design Option





EDUCATION VERSUS LAW BUILDING



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Education Building Versus Law Building Design



Education Building Rendering on Bascom Hill



Law Building on Bascom Hill



CONCLUSION



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CONCLUSION



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Buildings and campus places must function well and adequately meet the needs of users. We must design sustainable facilities so that we can meet our needs without jeopardizing the ability of future generations to meet theirs. It is equally important that the physical learning environment we create be pleasing. Therefore it must be rich, unified and balanced.

The academy is enriched, intellectually and socially, by its embrace of diversity in all its forms; but it is unified by a common purpose centered on its mission. It thrives when it achieves a harmonious balance between unity and diversity. The physical campus should reflect this ideal; so that it not only supports learning but encourages us to learn from it.

In the end, the way that our campus community and visitors experience our campus is very important. They must see it as sublime and functional at the same time. It must also be sustainable and make them feel comfortable. The designers' role is to help create appropriate stage sets for the plays that take place every day in our campus community. These plays, or patterns of events and activities, infuse the campus with energy; therefore buildings and campus places should incorporate *draws* that could support and enhance these patterns. Ultimately, our campus must be a place the campus community and visitors want to be rather than just a place they have to be. When we succeed in transforming our campus within its boundary, then our success will influence similar transformations across the state and beyond. This is the Wisconsin idea!



QUESTIONS



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Questions?

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