



WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

CAMPUS MASTER PLAN TECHNICAL DOCUMENT

2015 CAMPUS MASTER PLAN UPDATE

Chancellor's Vision



Welcome to the future of the University of Wisconsin–Madison.

This newly updated Campus Master Plan, *Extending Our History and Embracing our Future*, is a framework that will shape this campus for years to come –the next chapter in a remarkable journey that began 168 years ago in a borrowed classroom with 20 students and a faculty of one.

It is nothing short of extraordinary that UW–Madison has grown into

a center for discovery and innovation, a place that has launched thousands of students into new worlds of learning and opportunity, and a community where top scholars want to work and study.

We help Wisconsin to thrive by working with the state's industries to solve problems and improve productivity, and by nourishing discoveries and innovations that spark new businesses and create good jobs.

The university and affiliated organizations such as UW Hospital add \$15 billion a year to Wisconsin's economy. That's about \$41 million every day.

UW–Madison has grown from a deep commitment to higher education among the people of this great state, and our alumni and friends. We've honored their investment over many years with careful stewardship of our precious resources.

Stewardship is the guiding light of this plan. The focus is not major expansion and growth, but instead a commitment to conservation, preservation, and sustainability. This framework will allow us to create a campus that is greener, more pedestrian-friendly, and more cohesive – a place that balances the many, diverse needs of the people who work and study here.

I want to thank the campus community, our neighbors, and local policymakers for working closely together to create this thoughtful, flexible, forward-looking document.

It's important to note that this is a guide, not a checklist. Implementation of any project will depend upon programmatic need and available funding.

Here are just a few elements of the vision it presents:

- Better integration of our beautiful lakeside setting into the campus;
- New green spaces and courtyards that will tie the main campus area north of University Avenue into the more urban south campus as part of the new Campus Landscape Master Plan;
- Updated facilities that are more flexible for reprogramming;
- Our first-ever stormwater management/green infrastructure plan;
- Reduced facility operating costs and maximized use of renewable energy;
- 2,000 visitor parking spaces to be added over the next 20-30 years; and,
- Re-designed paths that promote and enhance bicycling and walking around campus.

This is a time of transformative change, an exciting moment in our history. Students are applying in record numbers. Our graduation rates are the best they've ever been. Researchers are making life-saving discoveries and changing what we know about the world. We're working hard to build a more welcoming campus community. And we're in the middle of a comprehensive fundraising campaign – the most successful we've ever run.

It has never been more important to define a way forward that reflects our values and our vision for this remarkable place. The Campus Master Plan will guide us in our efforts to design a strong, sustainable future that honors the history, traditions and spirit of one of the world's greatest universities.

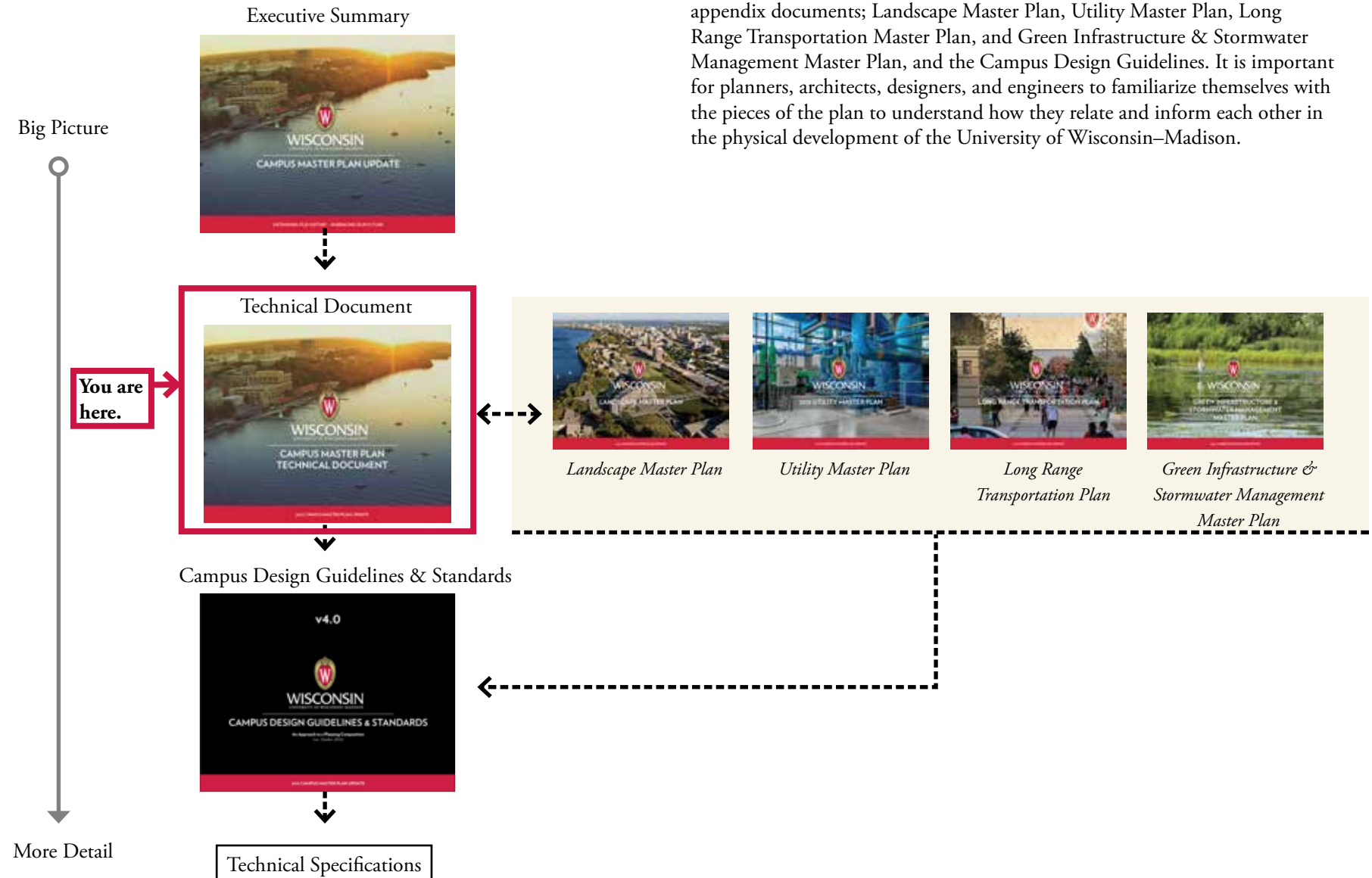
Rebecca M. Blank, Chancellor

September 13, 2016

Table of Contents

1. Summary.....	13	
University Strategic Framework		Stormwater and Green Infrastructure
Master Plan Vision		Pedestrian and Bicycle
Master Plan Vision		Transit and Vehicular Circulation
2015 Campus Master Plan Update Challenge		Parking
Major Initiatives		Campus Utilities
2. Background.....	25	Campus Civil Utilities
Introduction		4. Recommendations.....
Scope of the 2015 Campus Master Plan Update		135
History of Campus Planning at UW–Madison		Introduction to Recommendations
Historical Development of the UW–Madison Campus		Master Plan Goals and Guiding Principles
2005 Campus Master Plan		Campus Development Plan Boundary and Potential Land Acquisitions
“Recreating Ourselves in Place”		Proposed Building Use, Form, and Density
Historic Preservation Planning at UW–Madison		Overall Landscape Plan
Land Holdings		Natural Campus Landscapes
3. Context and Existing Conditions	81	Social Campus Landscapes
Campus Profile		Green Streets
Context within Region and City		Proposed Stormwater Management and Green Infrastructure
Campus Development Plan Boundary		Proposed Image, Identity, and Gateway Enhancements
Existing Zoning Districts		Proposed Pedestrian and Bicycle Circulation
Projects Completed Since 2005 Plan		Proposed Transit and Vehicular Circulation
Campus Planning Districts		Proposed Landscape Summary
Campus Land Use		Campus Wellness
Building Form and Density		Proposed Utility Corridors and Infrastructure Improvements
Landmarks and Historic Sites		5. Phasing
Open Space		219
Tree Canopy		Project Phasing
		Project Sequencing
		6. Acknowledgements.....
		257

Document Composition





2015 Campus Master Plan Executive Summary

A full color 24-page report that summarizes the major goals and guiding principles for the Master Plan. The document includes the Chancellor's vision and the major goals and initiatives for each of the identified focus topics (appendices to the Technical Document). Welcomes and sets the tone for users and viewers of the Master Plan document. It is both a marketing piece for future development and a summary of the master planning process.



2015 Campus Master Plan Technical Document

The unabridged thought and support behind the goals and guiding principles for the Master Plan. This more than 250-page document presents a roadmap for campus development over the next 30-50 years by referencing what has come previously and embracing what the future holds. Together with the Campus Design Guidelines, the Technical Document strives to give physical form to the university's mission, vision, and programs through the effective use of human, environmental and fiscal resources.



UW-Madison Campus Design Guidelines

The site specific framework that has been established to create the ground rules for a fruitful dialogue between planners, architects, engineers, campus community, and city/state authorities. Divided into nine Campus Design Neighborhoods, the goal of the guidelines is to enhance the university's sense of place by creating well-defined, functional, sustainable, beautiful and coherent campus environments that promote intellectual and social exchange.

Appendices:

Landscape Master Plan

Establishes a 'sense of place' where phased growth and future development can occur while maintaining a cohesive environment.

Utility Master Plan:

Confirms status of the 2005 recommendations, acknowledges completed projects, and makes recommendations to meet the 2015 plan revisions.

Long Range Transportation

Plan: Updated from the previous LRTP, the plan is the university's transportation vision and describes baseline conditions, travel behaviors, and trends all modes.

Green Infrastructure & Stormwater Management

Master Plan: A campuswide plan that recommends solutions to meet stormwater management regulations as well as existing campus stormwater policy.

Landscape Master Plan

1. Landscape Master Plan Vision, Goals & Principles.....	21
Vision & Goals	
Guiding Principles	
2. Discovery & Analysis	29
Introduction	
Opportunities & Constraints Plan	
Landscape Framework Plan	
3. Campus Landscape Master Plan	55
Landscape Concept	
Campus Landscape Master Plan	
4. Landscape Design Guidelines.....	61
Landscape Typologies	
Softscape	
Design & Maintenance Guidelines	
5. Key Projects and Focus Areas.....	119
Focus Areas	
Observatory Hill	
N. Charter Street	
University Avenue	
South Quad	
Willow Creek & Linden Drive	
6. Landscape Development Standards	163
Landscape Development Standards	
Paving	
Site Amenities	
Signage	
Transportation	
Development Standards Matrix	
7. Appendices.....	215
Appendix A: Campus Viewsheds	
Appendix B: APPA Standard Levels	
Acknowledgements	

Green Infrastructure & Stormwater Management Master Plan

1. Introduction.....	9
1.1 Introduction	
1.2 Context	
1.3 Goals and Objectives	
2. Regulatory Requirements	19
2.1 Municipal Stormwater Permit	
2.2 Rock River TMDL	
2.3 Relationship to Regional Initiatives (Adaptive Management)	
3. Physical Setting	27
3.1 Existing Land Use and Drainage	
3.2 Natural Features	
3.3 Existing Stormwater Infrastructure	
3.4 Wellhead Protection Areas	
4. Stormwater Analysis	55
4.1 Stormwater Analysis	
4.2 Peak Discharge and Runoff Volume Analysis	
5. Green Infrastructure Master Plan	77
5.1 Summary of Recommendations	
5.2 Stormwater Performance Standards and Policies	
5.3 Multi-Site Green Infrastructure Practices	
5.4 Site-Based Green Infrastructure Practices	
5.5 Opportunities With Future Land Use Changes	
5.6 Opportunities with Utility Improvement Projects	
5.7 Green Infrastructure Practice Impacts	
5.8 Implementation Sequencing of Recommended Practices	
5.9 BMP Inspection and Maintenance Recommendations	
5.10 Abbreviations, Acronyms, and Definitions	
5.11 References and Resources	

Long Range Transportation Plan

Executive Summary.....	7
Introduction	
Existing Conditions	
Transportation Recommendations	
1. Introduction.....	23
Background and Context	
Transportation Improvements Made Since 2005	
2. Transportation Context	27
Existing Conditions Assessment and Analysis	
Current Travel Patterns and Behavior	
Vehicle Access and Circulation	
Walking and Biking Network	
Public Transportation	
Parking on Campus	
3. Transportation Recommendations.....	59
Alternatives Development and Recommendations	
Emphasize Walking and Biking as Primary Forms of Transportation To and Around Campus	
Improve the Service and Efficiency of Transit Operations	
Increase Road Network Connectivity and Efficiency	
Parking Operations and Management	

2015 Utility Master Plan

1. Introduction.....	9
Executive Summary	
Introduction	
Project Improvements List	
2. Steam System	27
Existing Facilities	
Existing Loads	
Projected Future Loads	
Steam Growth Analysis	
Existing Distribution System	
Steam Hydraulic Calculations	
Recommended Steam and Condensate System Project List	
Opportunities to Enhance Energy Efficiency/Operational Flexibility	
3. Chilled Water System	53
Existing Facilities	
Existing Loads	
Projected Future Loads	
Chilled Water Growth Analysis	
Existing Distribution System Piping Materials	
Chilled Water Hydraulic Calculations	
Recommended Chilled Water Project List	
Opportunities to Enhance Energy Efficiency/Operational Flexibility	

4. Electrical Power System75

Existing Facilities Analysis

Existing Loads

Projected Future Loads

Electric Growth Analysis

Existing Distribution System

System Deficiencies and Recommendations

Recommended Electrical System Project List

Opportunities to Enhance Energy Efficiency/Operational Flexibility

5. Renewable Energy 107

Introduction

Benchmarks

Existing Renewable Energy Systems

Renewable Energy Technologies

Renewable Energy Opportunities

Renewable Energy Generation Potential

Campus Design Guidelines

1. Introduction2

2. Document Composition.....10

3. Campus Zoning.....12

4. Campus Design Review Board.....18

5. Building Principles & Guidelines Summary.....22

6. Campus Design Neighborhoods Overview.....30

7. Recreation Neighborhood.....32

8. Health Sciences Neighborhood.....44

9. Federal Neighborhood.....56

10. Near West Neighborhood.....68

11. Lakeshore Neighborhood.....80

12. Historic Campus Neighborhood.....92

13. East Campus Neighborhood.....104

14. South Campus Neighborhood.....116

15. Event Center Neighborhood.....128

List of Figures and Tables

Figure 1-1 2015 Campus Master Plan Illustration.....	19	Construction.....	55
Figure 1-2 Major Building Infrastructure Initiatives.....	20	Figure 2-21 Figure Ground Map, 1980.....	57
Figure 1-3 Major Transportation, Landscape, and Green Infrastructure Initiatives.....	22	Figure 2-22 JJR 1996 Campus Opportunities Plan.....	59
Figure 2-1 Master Planning Process.....	32	Figure 2-23 Figure Ground Map, 2000.....	61
Figure 2-2 Master Planning Process, Campus Planning Steering Committee.....	34	Figure 2-24 Ayers Saint Gross 2005 Campus Master Plan.....	65
Figure 2-3 Master Planning Process, Campus Planning Steering Committee.....	35	Figure 2-25 Archaeological Sites on the Main Campus of the University of Wisconsin–Madison.....	69
Figure 2-4 Map of Four Lakes Mound Sites.....	36	Figure 2-26 2005 Cultural Landscape Resource Project, Fifteen Potentially Significant Sites.....	71
Figure 2-5 Cultural Landscape Project-A0129I.....	37	Figure 2-27 2005 Cultural Landscape Resource Project, Eight Sites Selected for In-Depth Analysis.....	73
Figure 2-6 General Plan for the University of Wisconsin by John Raque, January 1850.....	38	Figure 2-28 University-Managed Properties in Dane County, Major Properties. 75	
Figure 2-7 O.C. Simonds 1906 Plan for the Grounds of the University of Wisconsin.....	39	Figure 2-29 University-Managed Properties in Dane County, Minor Properties. 77	
Figure 2-8 O.C. Simonds 1906 Plan for the Grounds of the University of Wisconsin, Bascom Hill (Detail).....	40	Figure 2-30 Other Non-Contiguous University-Managed Properties.....	79
Figure 2-9 Laird & Cret 1908 General Design of the University of Wisconsin.....	41	Figure 3-1 Student Housing.....	87
Figure 2-10 Laird & Cret 1908 General Design of the University of Wisconsin, Detail.....	42	Figure 3-2 Campus Development Plan Boundary.....	89
Figure 2-11 Laird & Cret 1908 General Design of the University of Wisconsin, Detail showing “liberal arts piazza” near the summit of College Hill.....	43	Figure 3-3 Master Plan and Zoning Overlay.....	90
Figure 2-12 Laird & Cret 1908 General Design of the University of Wisconsin, General Design for Future Development.....	44	Figure 3-4 Master Plan and Zoning Overlay (Detail).....	92
Figure 2-13 Figure Ground Map, 1870.....	46	Figure 3-5 Building Projects Completed Since 2005.....	94
Figure 2-14 Figure Ground Map, 1880.....	47	Figure 3-6 Transportation Improvements Completed Since 2005.....	95
Figure 2-15 Figure Ground Map, 1900.....	48	Figure 3-7 Campus Planning Districts.....	96
Figure 2-16 1941 Design for the Campus (at) the University of Wisconsin– Madison.....	50	Figure 3-8 Existing Building Uses.....	97
Figure 2-17 Figure Ground Map, 1940.....	51	Figure 3-9 Existing Density In 2015.....	98
Figure 2-18 Figure Ground Map, 1954.....	53	Figure 3-10 Campus Pre-Settlement Landscape.....	100
Figure 2-19 Figure Ground Map, 1967.....	54	Figure 3-11 Campus Cultural Landscape.....	101
Figure 2-20 1959 Sketch Plan for the University of Wisconsin, UW Planning & Construction.....	55	Figure 3-12 Open Space Ratios.....	102
		Figure 3-13 Existing Landscape Character.....	103
		Figure 3-14 Existing Tree Canopy.....	104
		Figure 3-15 Campus Relationship to Rock River Watershed.....	106

Figure 3-16 Campus Watersheds.....	107	Figure 4-13 Proposed Maximum Building Heights.....	166
Figure 3-17 Campus Impervious Areas.....	108	Table 4-1 Proposed Building Summary.....	168
Figure 3-18 Campus Impervious Traffic Areas.....	109	Figure 4-14 Landscape Illustrative Plan.....	172
Table 3-1 Impervious and Pervious Areas.....	109	Figure 4-15 Observatory Hill Proposed Section.....	174
Figure 3-19 Source Area Map.....	110	Figure 4-16 Observatory Hill Proposed Plan.....	175
Figure 3-20 Stormwater Best Management Practice Types and Locations.....	111	Figure 4-17 Willow Creek and Linden Drive Plan.....	177
Figure 3-21 Existing Walking and Biking Routes and Identified Challenges.....	113	Figure 4-18 Revitalized Willow Creek Corridor.....	178
Table 3-2 Summary of Gaps in Walking and Biking Connectivity.....	114	Figure 4-19 Lake Access Boardwalk Proposed Section.....	179
Table 3-3 Summary of Locations Where Challenges Exist.....	115	Figure 4-20 Lake Access Boardwalk Proposed Plan.....	179
Figure 3-22 Vehicle Congestion on Campus.....	117	Figure 4-21 Existing Housing Units along N. Brooks Street.....	180
Figure 3-23 Campus Bus Routes.....	119	Figure 4-22 Proposed South Campus Quad.....	182
Figure 3-24 Existing Campus Parking Facilities.....	121	Figure 4-23 South Campus Quad and Revitalized W. Dayton Street.....	183
Figure 3-25 Mid-day Parking Occupancies for Faculty and Staff.....	122	Figure 4-24 Green Street, West Union, Iowa.....	184
Figure 3-26 Mid-day Parking Occupancies for Visitors.....	123	Figure 4-25 Green Street, Normal, Illinois.....	184
Table 3-3 Existing Plant Capacity Summary.....	124	Figure 4-26 Example Green Street Cross Section.....	185
Figure 3-27 Existing Civil Utilities, Far West Campus.....	127	Figure 4-27 Recommended Green Infrastructure Projects.....	187
Figure 3-28 Existing Civil Utilities, West Campus and VA Area.....	129	Figure 4-28 University Avenue Plan View, Typical Intersection.....	189
Figure 3-29 Existing Civil Utilities, Near West Campus.....	131	Figure 4-29 University Avenue Cross Section.....	190
Figure 3-30 Existing Civil Utilities, Central Campus.....	132	Figure 4-30 University Avenue at Henry Mall and Babcock Drive.....	191
Figure 3-31 Existing Civil Utilities, South Campus.....	133	Figure 4-31 N. Charter Street At Linden Drive Pedestrian Bridge.....	193
Figure 4-1 Potential Acquisitions.....	143	Figure 4-32 Pedestrian Bridge Over N. Charter Street and Linden Drive.....	194
Figure 4-2 Proposed Building Uses.....	145	Figure 4-33 Locations of Recommended Intersection Improvements.....	196
Figure 4-3 Floor Area Ratio – Existing and Proposed.....	146	Figure 4-34 Recommended Walking and Biking Improvements.....	197
Figure 4-4 Capacity Density.....	147	Figure 4-35 Proposed Road Additions, Vacations, and Conversions.....	199
Figure 4-5 Far West and West Campus Building Key.....	149	Figure 4-36 Recommended Parking Reductions.....	202
Figure 4-6 Far West And West Campus Illustration.....	151	Figure 4-37 Recommended Parking Additions.....	203
Figure 4-7 Near West Campus Building Key.....	153	Table 4-2 Proposed Landscape Summary.....	204
Figure 4-8 West And Near West Campus Illustration.....	155	Figure 4-38 Proposed Landscape Project Locations.....	206
Figure 4-9 Central Campus Building Key.....	159	Figure 4-39 Projects Supporting Physical Wellness.....	208
Figure 4-10 Central Campus Illustration.....	161	Figure 4-40 Projects Supporting Environmental Wellness.....	209
Figure 4-11 South Campus Building Key.....	163	Figure 4-41 Projects Supporting Spiritual Wellness.....	210
Figure 4-12 South Campus Illustration.....	165	Figure 4-42 Existing Trail Network.....	211

Table 4-2 Estimated Load Growth.....	213
Figure 4-43 Proposed Utility Projects (All Phases).....	214
Table 5-1 Phase 1 – 2017 to 2023 Near Term Improvements.....	220
Figure 5-1 Phase 1 (2017-2023) Proposed Facility Removal.....	221
Figure 5-2 Phase 1 (2017-2023) Proposed Facility Construction.....	223
Table 5-2 Phase 2 – 2023 to 2029 Mid-Term Improvements.....	224
Figure 5-3 Phase 2 (2023-2029) Proposed Facility Removal.....	225
Figure 5-4 Phase 2 (2023-2029) Proposed Facility Construction.....	227
Table 5-3 Phase 3 – 2029 to 2035 Long Term Improvements.....	228
Figure 5-5 Phase 3 (2029-2035) Proposed Facility Removal.....	229
Figure 5-6 Phase 3 (2029-2035) Proposed Facility Construction.....	231
Table 5-4 Phase 4 – 2035+ Future Capacity.....	232
Figure 5-7 Phase 4 (2035+) Proposed Facility Removal.....	233
Figure 5-8 Phase 4 (2035+) Proposed Facility Construction.....	235
Figure 5-9 All Phases Proposed Facility Removal.....	236
Figure 5-10 All Phases Proposed Facility Construction.....	237

Photo Credits

All photos courtesy of UW–Madison University Communications, except:

SmithGroupJJR (second from left)	16
E. Arti Wulandari (rightmost)	16
SmithGroupJJR (leftmost)	17
SmithGroupJJR (second from right)	17
SmithGroupJJR	32
SmithGroupJJR	34
SmithGroupJJR	35
Birmingham, Robert A. “Spirit of Earth. The Effigy Mound Landscape of Madison and the Four Lakes”	36
University of Wisconsin Digital Collections	37
Cultural Landscape Inventory-Bascom Mall	38
University of Wisconsin Digital Collections	39
University of Wisconsin Digital Collections	40
University of Wisconsin Digital Collections	41
University of Wisconsin Digital Collections	42
University of Wisconsin Digital Collections	43
University of Wisconsin Digital Collections	44
UW–Madison FP&M Archives	46
UW–Madison Facilities Planning & Management Archives	47
UW–Madison FP&M Archives	48
University of Wisconsin Digital Collections	50
UW–Madison FP&M Archives	51
UW–Madison FP&M Archives	53
UW–Madison FP&M Archives	54
University of Wisconsin Digital Collections	55
UW–Madison FP&M Archives	57
UW–Madison FP&M Archives	59
UW–Madison FP&M Archives	61
UW–Madison FP&M Archives	65
UW–Madison Facilities Planning & Management Archives	69

UW–Madison FP&M Archives	71
UW–Madison FP&M Archives	73
Google Earth	106
UW–Madison FP&M (upper)	183
SmithGroupJJR (right)	184
Hoerr Schaudt (right)	184
UW–Madison FP&M (upper)	194
SmithGroupJJR	219
SmithGroupJJR	261



1. SUMMARY

University Strategic Framework

Our Vision

The University of Wisconsin–Madison (UW–Madison) will be a model public university in the 21st century, serving as a resource to the public, and working to enhance the quality of life in the state, the nation, and the world.

The university will remain a preeminent center for discovery, learning, and engagement by opening new forms of access to citizens from every background; creating a welcoming, empowered, and inclusive community; and preparing current and future generations to live satisfying, useful, and ethical lives. In partnership with the state and with colleagues around the world, the university's faculty, staff, and students will identify and address many of the state's and the world's most urgent and complex problems.

Guiding Principles

As an institution and as individuals, we are guided by the following principles:

- We promote the highest standards of intellectual inquiry and rigor, in keeping with the university's proven commitment to the "continual sifting and winnowing by which alone the truth can be found."
- We support learning for its own sake, throughout our lives, as a service to the greater good.
- We fiercely defend intellectual freedom and combine it with responsibility and civility so that all who work and live on our campus can question, criticize, teach, learn, create, and grow.
- We observe the highest ethical integrity in everything we do.
- We believe in the importance of working with and learning from those whose backgrounds and views differ from our own.
- We share the belief that neither origin nor economic background should be barriers to participation in the community.
- We are committed to being responsible stewards of our human, intellectual, cultural, financial, and environmental resources.
- We promote the application of research and teaching to issues of importance for the state, the nation, and the world, and we place learning and discovery in the service of political, economic, social, and cultural progress.

Source: For Wisconsin and the World, Campus Strategic Framework 2015-2019



Master Plan Vision

Extending Our History

The 2015 Campus Master Plan Update vision is to capture the best characteristics of our historic campus core, and extend and strengthen them throughout our evolving campus.



The careful balance of Bascom Hill – mixed-use buildings of architectural prominence surrounding and defining a well-designed and active open space.



The comfort and safety of Library Mall and East Campus Mall – easy walking and biking with careful interaction with vehicles.



The activity of the Memorial Union Terrace – indoor and outdoor places for people to gather and exchange ideas with a focus on Lake Mendota.



The preservation of the Lakeshore Nature Preserve – a place of respite for humans and habitat for flora and fauna.

Embracing Our Future

We will continue to recreate ourselves in place, while reducing the impact of the campus and its activities on our environment. The UW–Madison physical campus supports the university as a preeminent center for discovery, learning, and engagement.



As the campus infiltrates and treats not only the water that falls upon it, but also a portion of water from the region, the water of Lakes Mendota and Monona will be cleaner.



As we strengthen our national leadership in those taking transit, carpooling, biking, and walking to campus, we will support the region's growth toward a more balanced and effective transportation system.



As we maximize opportunities for generating and using renewable energy, we will continue to reduce our carbon footprint.



As we meticulously plan and improve our facilities, we will reduce our operating costs and wisely manage the state's physical assets. We will promote our resource stewardship and improve our service delivery, efficiency, and sustainability.

2015 Campus Master Plan Update Challenge

It has been a transformational decade since the 2005 Campus Master Plan. The growth of and change on our 936-acre campus has been swift. Our campus and city skyline changed with the construction of new campus facilities and off-campus student housing towers. Key open space milestones were achieved including the connection and extension of the East Campus Mall and the opening of the cross-campus bicycle “missing link”.

The pace of change slowed with the economic downturn in the late 2000s, which only abated a few years ago. State and university budgets were reduced, and public support for the flagship university declined. Reliance on the philanthropy of private donors, already extraordinarily high, increased. The university is turning increasingly toward the renovation of existing facilities and the reduction of facility operating costs. Yet the physical beauty and function of the campus remains important as it plays a significant role in the attraction and retention of researchers, faculty, staff, and students.

In this fiscal climate, measured and deliberate long-term master planning is more important than ever. The physical campus will continue to change and evolve, though the steps may be smaller and less frequent. Thus, the university needs a strong, guiding, long-term vision that can be achieved incrementally through multiple projects. When the vision is both clear and exciting, both public and private investors are more likely to financially support it.

The 2005 Campus Master Plan focused primarily on the building capacity of the main campus. With easy building sites long gone, how much more could UW–Madison grow within its existing footprint, while still maintaining a comfortable density and its special campus character? Through strategic redevelopment, the 2005 Campus Master Plan proved that UW–Madison can continue to grow and evolve for decades within its existing Campus Development Plan Boundary. No large boundary expansions needed, no satellite campuses required. The 2005 Campus Master Plan was supported by a Long-Range Transportation Plan and a Utility Master Plan.

The 2015 Campus Master Plan Update picks up where the 2005 Campus Master Plan left off. Given the beauty of the campus lakeshore and open spaces, incredulously the campus has never prepared a formal landscape master plan.

As much as the 2005 Campus Master Plan was focused on building siting and density, this update is focused on the spaces between the buildings. It delineates the qualities of the most successful active, passive, and working open spaces, and designates new open spaces in the areas of campus that do not meet the character of the historic core. It restores many of Willow Creek’s biological and ecological functions while offering new opportunities for engagement and interpretation. The Landscape Master Plan connects existing and planned open spaces for all campus users – faculty, staff, students, visitors, and the campus’s flora and fauna.

The Lake Mendota shoreline is the most characteristic component of the UW–Madison campus landscape. From the Memorial Union Terrace to Picnic Point and beyond, campus users enjoy the shoreline throughout the seasons. Yet, with this inheritance comes great responsibility. How the campus and the City of Madison treat the water that flows into the chain of lakes greatly influences lake health. UW–Madison has always been a regional leader in implementing effective stormwater management practices and facilities. The 2015 Campus Master Plan Update includes the university’s most comprehensive campuswide stormwater and green infrastructure master planning. The state’s stormwater requirements are stringent and getting more so, and with the campus’s 4 miles of shoreline, their impacts are tremendous. The minimal objective of the Green Infrastructure & Stormwater Management Master Plan is to meet and exceed these requirements. However, our goal is to become a national leader in how the campus can reduce its negative impacts and contribute to making the water flowing into our lakes cleaner, while also educating campus users of the campus ecosystem.

The 2015 Campus Master Plan Update includes updates to the Transportation and Utility Master Plans. Since 2005, circulation congestion on campus has increased, and UW–Madison has met the challenge through truly exemplary efforts with transportation demand management. This update pushes the university further, improving transportation for all modes. The Utility Master Plan continues to address the campus’s aging utility infrastructure and enables constant building changes, all the while seeking more economical and sustainable methods.



Figure 1-1 2015 Campus Master Plan Illustration

Major Initiatives

Since the construction of North Hall on Bascom Hill in 1851, our Madison campus home has served us very well. For over 160 years, we have grown and changed, requiring new buildings, open spaces, and support spaces. Through strategic renovations, removals, and new construction, we can continue our institutional evolution within our existing campus footprint.

The 2015 Campus Master Plan Update is a comprehensive vision. Through its major initiatives, it seeks to address the campus's most pressing issues and prepares the campus for more decades to come.

The proposed facilities shown in tan are potential redevelopment sites. Some of these buildings are programmed and will be redeveloped in the next few years. Others are very long-term facilities development opportunities.

Major Building Initiatives

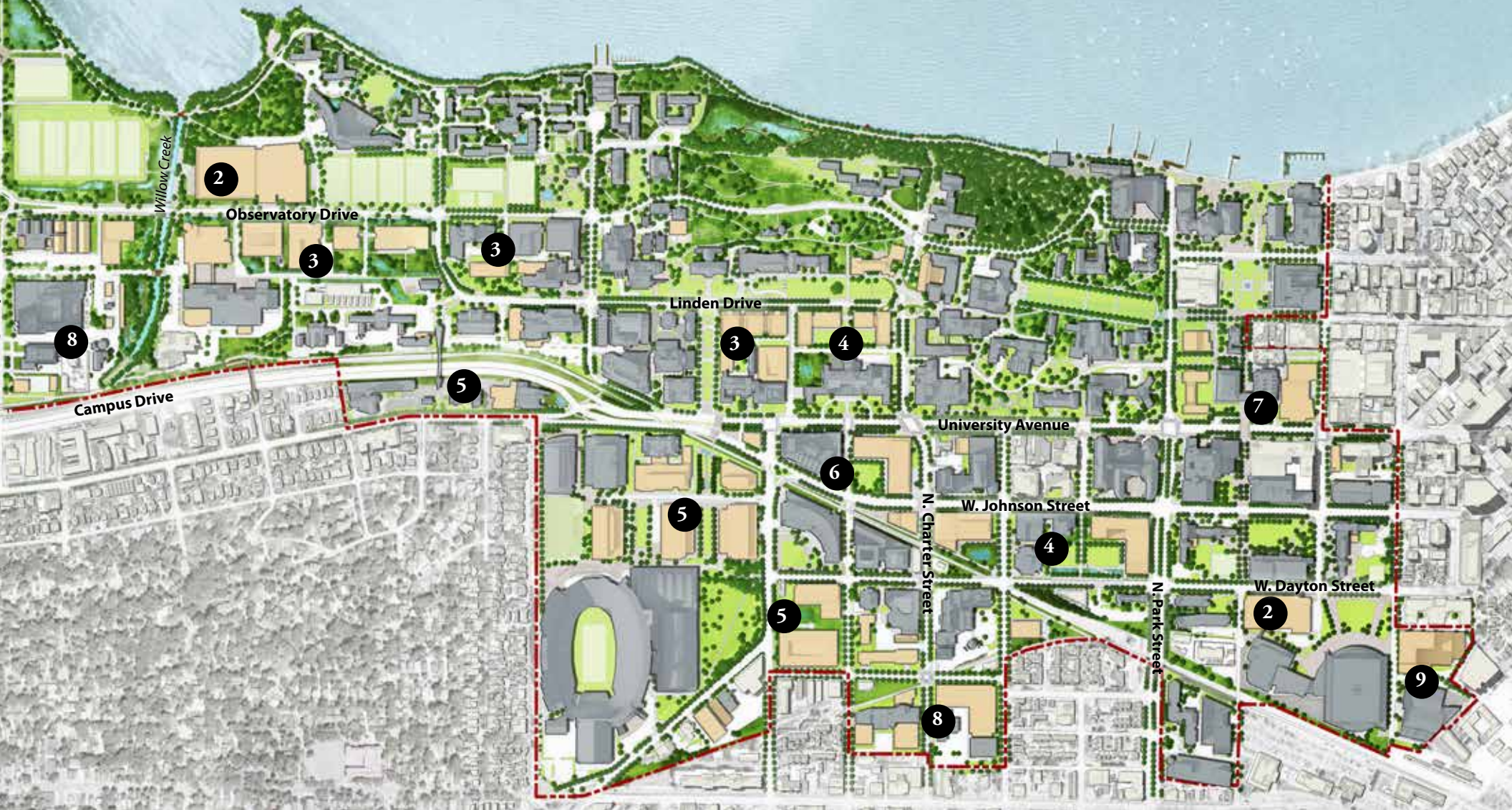
- 1 Health Science Research
- 2 Indoor Recreation
- 3 Agricultural and Life Sciences
- 4 Academic/Research
- 5 Engineering Campus
- 6 Wisconsin Institute of Discovery II
- 7 Music Performance
- 8 Facilities and Grounds
- 9 Visual Arts



Figure 1-2 Major Building Infrastructure Initiatives

- Campus Development Plan Boundary
- Existing Building
- Proposed Building

L A K E M E N D O T A



1. SUMMARY

Major Transportation Initiatives

- 1 Willow Creek Bridge
- 2 Iconic Pedestrian Bridge
- 3 Walnut Street Removal
- 4 University Avenue Transformation
- 5 N. Brooks Street Pedestrian Mall
- 6 N. Charter Street Two-Way Conversion
- 7 Historic to Southern Urban Campus Connection
- 8 New Underground Parking Structure
- 9 New Above Grade Parking Structure

Major Landscape Initiatives

- 1 Naturalized Observatory Hill
- 2 Sewell Social Sciences Stair and Boardwalk
- 3 Southern Urban Campus Quad
- 4 Revitalized Willow Creek
- 5 Henry Mall Extension to Camp Randall Memorial Park
- 6 Health District Lake Mendota Connection
- 7 Open Space Commons at Horse Barn

Major Green Infrastructure Initiatives

- 1 Surface Stormwater Facility
- 2 Sub-Surface Stormwater Facility
- 3 Green Streets
- 4 Recreational Fields Underground Stormwater Treatment



L A K E M E N D O T A





2. BACKGROUND

Introduction

The 2015 Campus Master Plan Update for UW–Madison is intended to provide a guide for managing the efficient and planned future campus growth. The plan provides a framework for growth at the university by designating sites for short-term capital development projects as well as providing a framework for long-term future projects. The 2015 Campus Master Plan Update addresses both the location of buildings as well as the spaces in between them with an emphasis on the campus landscape. By placing equal importance on both building and outdoor space, the plan sets a precedent that ensures the development of a campus will be in harmony with its natural environment, provide much needed new outdoor gathering spaces, provide ample growth for existing and future programs and research, and provide well designed open space connections across campus.

The implementation of this plan will help ensure that the UW–Madison campus develops with the high level of quality associated with the institution and its long-range strategic plan. In light of inevitable changes in programs, priorities, and capital development funding in the future, this plan should be viewed as a flexible document that is a tool and comprehensive guide for directing decisions affecting the 2015 Campus Master Plan Update. As a result, the principles of the plan are equally as important as the specific building and open space recommendations. The established UW System and UW–Madison physical planning principles and the design guidelines included in this master plan should be referred to when design decisions are being made in the future. This plan is not intended to prescribe solutions nor limit creativity, but rather to establish a framework for development which strengthens the identity and physical character of the UW–Madison campus.

Overall Mission, Vision, and Strategic Plan of the University

The primary purpose of UW–Madison is to provide a learning environment in which faculty, staff and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of this and future generations and improve the quality of life for all. The university seeks to help students to develop an understanding and appreciation for the complex cultural and physical worlds in which they live and to realize their highest potential of intellectual, physical and human development.

It also seeks to attract and serve students from diverse social, economic and ethnic backgrounds and to be sensitive and responsive to those groups which have been underserved by higher education.

1. Offer broad and balanced academic programs that are mutually reinforcing and emphasize high quality and creative instruction at the undergraduate, graduate, professional and postgraduate levels.
2. Generate new knowledge through a broad array of scholarly, research and creative endeavors, which provide a foundation for dealing with the immediate and long-range needs of society.
3. Achieve leadership in each discipline; strengthen interdisciplinary studies, and pioneer new fields of learning.
4. Serve society through coordinated statewide outreach programs that meet continuing educational needs in accordance with the university's designated land-grant status.
5. Participate extensively in statewide, national and international programs and encourage others in the University of Wisconsin System, at other educational institutions and in state, national and international organizations to seek benefit from the university's unique educational resources, such as faculty and staff expertise, libraries, archives, museums and research facilities.
6. Strengthen cultural understanding through opportunities to study languages, cultures, the arts and the implications of social, political, economic and technological change and through encouragement of study, research and service off campus and abroad.
7. Maintain a level of excellence and standards in all programs that will give them statewide, national and international significance.
8. Embody, through its policies and programs, respect for, and commitment to, the ideals of a pluralistic, multiracial, open and democratic society.

Revised statement, adopted June 10, 1988, UW

Coordination with the Campus Strategic Framework Plan

The current UW–Madison strategic framework plan, developed by the university in 2015, identifies five strategic priorities and initiatives, including:

1. **Educational Experience:** The Wisconsin Experience describes what's unique about getting a degree from UW–Madison— together, we create and apply learning inside and outside the classroom to make the world a better place. UW–Madison produces graduates who are creative problem solvers, able to integrate empirical analysis and passion, seek out and create new knowledge and technologies, adapt to new situations, and engage as world citizens and leaders.
2. **Research and Scholarship:** Nurture excellence in research, scholarship, and creative activity across all divisions. Optimize the research and scholarship infrastructure of the university. Strengthen our influence in national decision-making around research policy and funding. Engage our interdisciplinary strength to generate creative solutions. Support the continued high level of integration of research and education.
3. **The Wisconsin Idea:** Partner with UW System schools, corporations, communities, and government to bring value to Wisconsin citizens. Promote economic development and job creation through our campus technology-transfer ecosystem, in partnership with the business and entrepreneurial communities. Extend our educational mission to Wisconsin and the world with new technology and partnerships. Leverage our distinctive interdisciplinary strength to address complex problems in the state and the world.
4. **Our People:** Ensure UW–Madison has a workforce that is highly talented, engaged, and diverse by implementing our new personnel/human resource system. Enhance the strength of our campus through diversity and inclusion by implementing the campus Diversity Framework. Ensure our ability to attract and retain talent by making progress toward competitive compensation relative to our peers and market medians. Nurture growth of our people through professional development and performance excellence. Create the best possible environment in which our people can carry out their responsibilities to the university.
5. **Resource Stewardship:** Promote resource stewardship, improve service delivery and efficiency, and ensure administrative capacity. Create a stable and sustainable financial structure through the implementation of a transformed budget model. Identify and pursue new revenue sources aligned with the institution's mission and goals. Promote environmental

sustainability through our own campus operations, integrated with research and education. Transform library structures and technologies to best support research and learning, and to attain campus efficiencies. Sponsor a comprehensive campaign to invest in the future of the university and the students, faculty, and staff who will shape the future of Wisconsin and the world.

Among the world's leading universities, UW–Madison is distinctive in its scale and breadth, the premium we place on our relevance to society, and our commitment to inclusivity in the broadest sense. The combination of these attributes enables us to be fully equipped to address the complex problems facing the modern world.

The strategic framework is designed to chart a course for 2015–2019 that will not only protect our legacy of research, teaching, and public service, but also will encourage new ideas from all corners of the campus and transform our state, nation, and world.

This framework has evolved from a rigorous self-study conducted in 2009 during the university's reaccreditation process. We experienced significant achievements in key priorities that served as the core of our 2009–2014 framework, and that very success convinced us to continue along this path as we begin the next five years. The priorities have been updated to build on our momentum and to take bold steps toward our vision.

Our Vision

UW–Madison will be a model public university in the 21st century, serving as a resource to the public, and working to enhance the quality of life in the state, the nation, and the world.

The university will remain a preeminent center for discovery, learning, and engagement by opening new forms of access to citizens from every background; creating a welcoming, empowered, and inclusive community; and preparing current and future generations to live satisfying, useful, and ethical lives. In partnership with the state and with colleagues around the world, the university's faculty, staff, and students will identify and address many of the state's and the world's most urgent and complex problems.

Our Guiding Principles

As an institution and as individuals, we are guided by the following principles:

- We promote the highest standards of intellectual inquiry and rigor, in keeping with the university's proven commitment to the "continual sifting and winnowing by which alone the truth can be found."
- We support learning for its own sake, throughout our lives, as a service to the greater good.
- We fiercely defend intellectual freedom and combine it with responsibility and civility so that all who work and live on our campus can question, criticize, teach, learn, create, and grow.
- We observe the highest ethical integrity in everything we do.
- We believe in the importance of working with and learning from those whose backgrounds and views differ from our own.
- We share the belief that neither origin nor economic background should be barriers to participation in the community.
- We are committed to being responsible stewards of our human, intellectual, cultural, financial, and environmental resources.
- We promote the application of research and teaching to issues of importance for the state, the nation, and the world, and we place learning and discovery in the service of political, economic, social, and cultural progress.

The current campus physical master planning process aligns closely with the campus mission and strategic plan by creating a framework for upgrading research facilities and the utility infrastructure that serves them. The plan advances learning by planning facilities with life-long learning in mind; utilizing

technology to its best advantage through appropriate facility improvements; and substantially upgrading the buildings that serve the arts and humanities.

The plan reaches out not only to the Madison and Dane County communities, but to the entire Midwest and the world beyond. The plan seeks to improve wayfinding for our many visitors with better graphic wayfinding. It will amplify the Wisconsin Idea by promoting these community connections and making the campus boundaries more transparent and inviting. The plan will enhance academic connections by providing upgraded facilities that are flexible and promote interdisciplinary learning and research.

The master planning process included a broad base group of representatives from across campus. Students, faculty and staff from every department and college have been involved as well as many members of the Madison community. The 2015 Campus Master Plan Update, as well as the Strategic Plan, is a result of shared values among the many campus users and provides a direction to guide future growth.



Campus Overview

Established in 1848, UW–Madison is one of the country’s first land grant universities, currently serving over 43,000 students and 21,600 faculty and staff (data as of Fall 2015). The main campus is comprised of over 936 acres of picturesque grounds along the shores of Lake Mendota, of which 300 acres are defined as the Lakeshore Nature Preserve and are protected from development. The university currently (as of early 2016) has over 22.9 million gross square feet of building space and offers a broad array of undergraduate, graduate, professional, research and advanced academic programs. UW–Madison is the flagship university in the 26-campus University of Wisconsin System (UW System) and is one of the nation’s largest and most productive research institutions in higher education.

UW–Madison’s strength as a research university garnered \$1,142.7 million of extramural awards in 2014-15 with the largest awards (\$901.5 million) coming to research programs. These awards translate into service to the people of Wisconsin, hands-on research opportunities for undergraduates, top tier graduate training programs, news-making discoveries by faculty, staff, and students and economic development for the State of Wisconsin. Additionally, in 2014, there were 417 invention disclosures, 166 US patents issued, and 147 new patent applications filed. Total licensing income for UW–Madison in 2014 was \$43.4 million.

Need for a Campus Master Plan

Approximately every 10 years, the university takes a comprehensive look at its programmatic directions and how its facilities support those programmatic changes. The State of Wisconsin Building Commission, under Sections 13.48(4) and (6) of the Wisconsin Statutes, requires that capital building programs be prepared for each state agency on a regular basis. Specific recommendations and priorities must be established for the next three biennia in what is defined as an agency's "Six-Year Development Plan." Every two years, Facilities Planning & Management staff works directly with all colleges and departments across the university in defining their current and future physical facility issues and determining potential solutions to address those needs. The shared governance Campus Planning Committee oversees the entire process and makes a final recommendation to the Chancellor for inclusion in the on-going capital budget for the State of Wisconsin. The 2015 Campus Master Plan Update for UW–Madison has been prepared to assist in that process for at least the next three, 6-year planning horizons and beyond. The general planning horizon for the document is approximately 25-240 years, with the understanding that the next planned update to the Campus Master Plan would be in 2025.

The 2015 Campus Master Plan Update is also being used to satisfy the City of Madison's Campus-Institutional (C-I) zoning district requirements that includes having an approved campus master plan. That approved plan is required to be updated every 10 years to maintain the C-I district on property it currently owns. As the university acquires privately held land within the Board of Regents approved Campus Development Plan Boundary, university campus planning staff will facilitate a zoning change to that land to bring it in alignment with the current approved campus master plan and within the C-I district. The overall comprehensive campus master plan, showing full development as a capacity plan, is approved by the City of Madison Plan Commission and Common Council as a "neighborhood plan" with the city which guides growth within its approved boundary.

The master planning process is used to accommodate and direct future growth of the campus in a responsible and efficient manner utilizing funding to assure that facilities development supports the institution's mission of teaching, research and outreach. The plan needs to assure that daily decisions are part of a long-term vision, are not short sighted but are optimistic about the future outlook of the campus and its facilities. The plan also needs to continue to raise aspirations as

well as provide positive direction for potential donors interested in investing in the future of the campus.

The current master planning process at UW–Madison also follows Physical Planning Principles that have been adopted by the Board of Regents. Those principles are as follows:

Physical Planning Principals, Board of Regents of the UW System

It is the policy of the Board of Regents that the following principles shall guide the physical planning and development of UW System institutions and stewardship of physical assets controlled by the Board of Regents.

A. *Physical Planning and Development*

1. *Physical development that is planned using an integrated planning model that incorporates programmatic concerns, physical concerns, and financial realities.*
 2. *Involvement of stakeholders that provides a meaningful role for students when student funding and fees are involved.*
 3. *Physical development that is planned within the context of UW System, institutional, and State of Wisconsin planning guidelines, policies, and funding parameters.*
 4. *Cooperative planning with the city and county in which the institution is located.*
 5. *Campus physical environments that promote optimal accessibility for people with disabilities.*
 6. *Comprehensive campus master plans that are periodically updated and address:*
 - a. *Space needs;*
 - b. *Image, identity, and aesthetics;*
 - c. *Multimodal transportation access and circulation;*
 - d. *Parking;*
 - e. *Open space;*
 - f. *Building sites;*
 - g. *Infrastructure and utilities;*
 - h. *Sustainability;*
 - i. *Implementation; and*
 - j. *Health and safety.*
- Physical development is planned in accordance with the campus master plan.*

7. *Planning that includes student enrollment, faculty, and staff projections; applicable space allocation and utilization benchmarks; evidence-based decision-making; and best planning practices.*
8. *Responsiveness to the needs of a diverse student body and the delivery of programs and services that meet those needs.*
9. *Sustainable design through:*
 - a. *Optimal use and reuse of existing facilities;*
 - b. *Minimal construction of new facilities;*
 - c. *Optimal adaptability for future changes;*
 - d. *High-performance and energy-efficient design;*
 - e. *Ease of long-term maintenance and operation; and*
 - f. *Appropriate use of renewable energy.*
10. *Accurate and defensible project programs, budgets, and schedules developed prior to enumeration.*

B. Stewardship of Physical Assets

Appropriate stewardship of physical assets should include:

1. *An institutional commitment to assure sufficient resources, their optimal use, and adequate expertise to care for physical assets.*
2. *An accurate and current geographic information system (GIS) for all Board of Regents-owned land using a common UW System-wide format and minimum level of detail.*
3. *A comprehensive building space management function, an accurate and current space inventory, and a comprehensive space use plan specific to each institution.*
4. *An accurate and current record of the physical condition and maintenance needs of all facilities.*
5. *Proper maintenance of all existing facilities to protect and extend the life of existing investments and ensure that facilities are usable for their intended purposes.*
6. *A commitment to Wisconsin's heritage through preservation of historic buildings and other cultural resources.*

A successful campus master plan needs to be consistent yet flexible and responsive to the needs of its time. It is an important baseline upon which to make day-to-day decisions over a longer period of time and to meet a consistent vision. The development of new facilities, and the preservation, renovation and maintenance of existing facilities, need to assure university and state decision-makers that funds allocated for facilities are in line with the campus mission. As the campus continues to rely on private dollars for more and more of its development, it is also clear that the 2015 Campus Master Plan Update will be used to keep aspirations high and help raise funds for new and exciting endeavors. The campus master plan must continue to always provide an optimistic vision for the future.

Scope of the 2015 Campus Master Plan Update

The 2015 Campus Master Plan Update provides a framework for open space, circulation, land use relationships, and building placement. To achieve UW–Madison’s objectives, the Master Planning team created a flexible framework of land uses, open spaces, and infrastructure. Campus design guidelines ensure each major and minor campus decision is in support of the university’s long-term mission, vision, and values. Implementation recommendations create an ambitious yet reasonable action plan.

The 2015 Campus Master Plan Update is not intended to be so constraining and prescriptive as to stifle creativity, analysis, and judgment. The plan and its graphics are not specific building or site designs and they should not predict design solutions. The design standards within this master plan allow flexibility and imagination while ensuring consistent, sustainable, and quality implementation. It is a baseline that guides project designers while allowing and encouraging creativity.

However, the 2015 Campus Master Plan Update should not be interpreted so loosely as to permit entirely different initiatives and conceptual directions. The goal is to achieve a balance between the 2015 Campus Master Plan Update and the mutual decisions that must be reached throughout each project’s development process. The skillful use of this master plan by university planners, designers, and facility managers will result in a functional, memorable, and sustainable campus.

This capacity plan will direct campus development and reinvestment to meet the university’s needs and trends for decades. Just as this plan is an update and expansion of the 2005 Campus Master Plan, this document should be a living document, periodically re-examined and updated as campus challenges evolve.



Figure 2-1 Master Planning Process

Master Planning Process

Through a forward-thinking, interactive, and inclusive master planning process, UW–Madison staff, faculty, and students defined the campus’s physical future.

Assisted by the Master Planning team, UW–Madison staff, faculty, and students developed the 2015 Campus Master Plan Update through sequential steps. The Master Planning team understood the pressing campus issues, analyzed the campus site and infrastructure, interpreted the university’s mission and sustainable future, and determined how best to meet the designated future needs.

In response to this input and analysis, the campus Master Planning team prepared viable and contrasting alternatives for campus change and growth. Inspired by the opportunities uncovered in these alternatives, staff, faculty, and students crafted a consensus campus concept. The Master Planning team then refined and illustrated this concept and created campus design guidelines and a potential project sequencing plan.

Master planning was inclusive and transparent in all stages. The master planning process was directed by the Campus Planning Steering Committee and advised by four Technical Coordinating Committees and the Executive Leadership team. The master plan commenced by interviewing dozens of campus and community leaders. Scores more faculty, staff, students, and community members participated in workshops, open houses, presentations, and online forms to confirm campus analysis and direct future decisions. The campus repeatedly reached into the community, meeting with adjacent neighborhood leaders and with City of Madison and Village of Shorewood elected officials and staff on and off campus. The university’s website provided access to planning materials for review and an online town hall facilitated concurrent and interactive discussions throughout the master planning process.

As a result of this collaborative process, the 2015 Campus Master Plan Update has widespread understanding and support within all groups on campus and in the community.

Decision-Making Structure

The master planning process had several types of review and participation. Stakeholders included the Executive Leadership team, the Campus Planning Steering Committee, four Technical Coordinating Committees, and a number of campus and community constituency representatives. Each group met with the Master Plan Consultant team to provide input and oversight into: a) the master planning process, b) the development of the plan alternatives, and c) the final results of the plan. Members of those groups are listed in Chapter 6: Acknowledgements.

The official approval process of the 2015 Campus Master Plan Update was via the UW–Madison shared governance Campus Planning Steering Committee, acting as the steering committee for the plan and making a final recommendation to the Chancellor for approval. Presentations were made to the Campus Planning Steering Committee for their input and guidance on the development of the plan. Upon Chancellor approval, Facilities Planning & Management then made informational presentations to the Board of Regents and the State Building Commission. The Master Plan Consultant team also presented the draft recommendations to the Executive Leadership team and Campus Design Review Board for input throughout the process. Facilities Planning & Management staff also presented the plan to the various constituency groups across the campus and to the local community to assure their active participation and input in to the plan. The final draft plan was presented to the City of Madison Plan Commission for approval and formal adoption by the Madison Common Council with recommendations coming from the Joint West and Joint Southeast Campus Area Committees.

Executive Leadership Team

Chaired by the Chancellor, this group met four times with the Master Planning team to establish overall direction, check on the progress of the plan and validate the conclusions developed for the plan prior to its final release.

Campus Planning Steering Committee

Chaired by the Provost, the shared governance steering committee for the master planning process met on a semi-regular basis with the Master Plan Consultant team (approximately eight times over the entire 24-month process) to review draft proposals and provide guidance on the master planning process. This group also reviewed the final master plan and made a recommendation to the Chancellor for approval. For meetings related to the 2015 Campus Master Plan

2. BACKGROUND

Update, the Campus Planning Steering Committee expanded to include invited guests, and individuals comprising a variety of university and city functions.

Campus Design Review Board

Chaired by the University Architect, this group met six times with the Master Planning team to provide input and guidance on specific content and scope of the plan. The Design Review Board also approved the Campus Design Guidelines and supporting documentation.

Technical Coordinating Committee

The Technical Coordinating Committees met on a regular basis with the Master Plan Consultant team (seven times over the 24 month period, with committee leads meeting an additional six times) to analyze planning data, brainstorm solutions, and provide input into the master planning process. This was the main working group for the plan and is the sounding board for technical ideas and draft recommendations for the plan. This group invited other subject experts to join them for individual meeting(s) to provide further detailed information about a particular topic. Recommendations from this group were shared with the Campus Planning Steering Committee for inclusion in the overall master plan to be approved by the Chancellor. The Technical Coordinating Committee met both as a single committee and as specialized subcommittees:

- Administration Technical Coordinating Committee
- Green Infrastructure/Stormwater Technical Coordinating Committee
- Landscape Technical Coordinating Committee
- Transportation Technical Coordinating Committee
- Utility Infrastructure Technical Coordinating Committee

Outreach and Coordination

The Master Planning team met with various campus and community constituency groups throughout the master planning process. These groups were individuals with special concerns who provided detailed level input and feedback into the concepts and ideas proposed in the plan. The partial list of 50+ organizations is listed in Chapter 6: Acknowledgements.



Figure 2-2 Master Planning Process, Campus Planning Steering Committee

Coordination with On-Going Local Planning

The master planning process was integrated with municipal planning and leadership throughout. The mayor of the City of Madison and the president of the Village of Shorewood Hills and their representatives served on the Executive Leadership Committee. City department leaders were invited guests of the Campus Planning Steering Committee. City staff were also members of the Technical Coordinating Committees. The Joint West and Joint Southeast Committees reviewed and commented on the draft plan multiple times. The internal Master Planning team met frequently with City of Madison staff to best understand the political and physical interface between the university and city. In particular, special appreciation is due to the City of Madison, Mayor Paul Soglin, Director of Planning, Community & Economic Development Natalie Erdman, and City of Madison Planning, Zoning, Metro, Traffic Engineering, and Stormwater Engineering staff.

Plan Approval and Future Use

The Chancellor has approved the 2015 Campus Master Plan Update and the Board of Regents has accepted it. The 2015 Campus Master Plan Update will guide the planning and design of campus by university staff and all consultants it hires. The 2015 Campus Master Plan Update will guide the development of the campus, indicating appropriate building and open space uses, parking and transportation improvements, and necessary green infrastructure and utilities upgrades. Design guidelines will shape the design of future buildings, open spaces, and streetscapes.

The 2015 Campus Master Plan Update was reviewed and approved by the City of Madison as part of a rezoning process. The 2015 Campus Master Plan Update is also a recognized City of Madison neighborhood plan. The master plan will guide both university and City of Madison projects within and adjacent to the campus.

The 2015 Campus Master Plan Update should serve as a guide, not a straightjacket, and its specific recommendations should be modified as additional information and needs are discovered. Even as specific recommendations are modified, the revised plans and designs must directly follow and support the Master Plan Goal and Guiding Principles.



Figure 2-3 Master Planning Process, Campus Planning Steering Committee

History of Campus Planning at UW–Madison

Before European settlement, indigenous people built earthen mounds on Bascom Hill, suggesting that it may have served religious or ceremonial purposes. Early residents of Madison used the area as a burial site and hunting ground. It was purchased as the site of the state university in 1849. Since then, Bascom Hill's primary function has been to serve as the core landscape of a sprawling academic community, the symbolic “front door” of the university.

The University of Wisconsin at Madison was established by the Wisconsin legislature within months of the territory becoming a state of the union in May of 1848. By the end of that summer, a chancellor was selected and a governing board of regents were defined. The first campus building, North Hall was completed in September 1851 for a projected enrollment of 256 young men. That first year, the university was comprised of about 30 students, 3 faculty and a janitor. By 1855 North Hall's twin, South Hall had been finished and in 1859 Bascom Hall opened as the “main edifice” for the university and enrollment had increased to over 175 students. By 1892, the university had topped one thousand students and boasted nearly 20 buildings.

Since the first master plan for the University of Wisconsin was prepared in 1850, the concept of a strong relationship between “town and gown” has provided a framework for campus planning. The 1850 Campus Plan, attributed to Architect John Rague and the university's first chancellor, John H. Lathrop, proposed situating the campus on Madison's “second hill,” facing the nearby state capital building which was located on the “first hill.” The hills overlook the City of Madison surrounded by beautiful lakes and natural areas, created by the glaciers some 15,000 years ago. The effigy mound cultural, so prevalent on this campus and throughout the Midwest, also occurred over 1,000 years ago. These relationships have served as a structure for the physical development of the campus landscape we have known for over the last 150 years (see Figure 2-4).

The appellation “College Hill” stems back to Wisconsin's territorial period. During the 1838-39 session of the territorial legislature in Madison, the university's board of visitors appointed a committee to select “a suitable site for the location of the University.” A few months before the legislature had

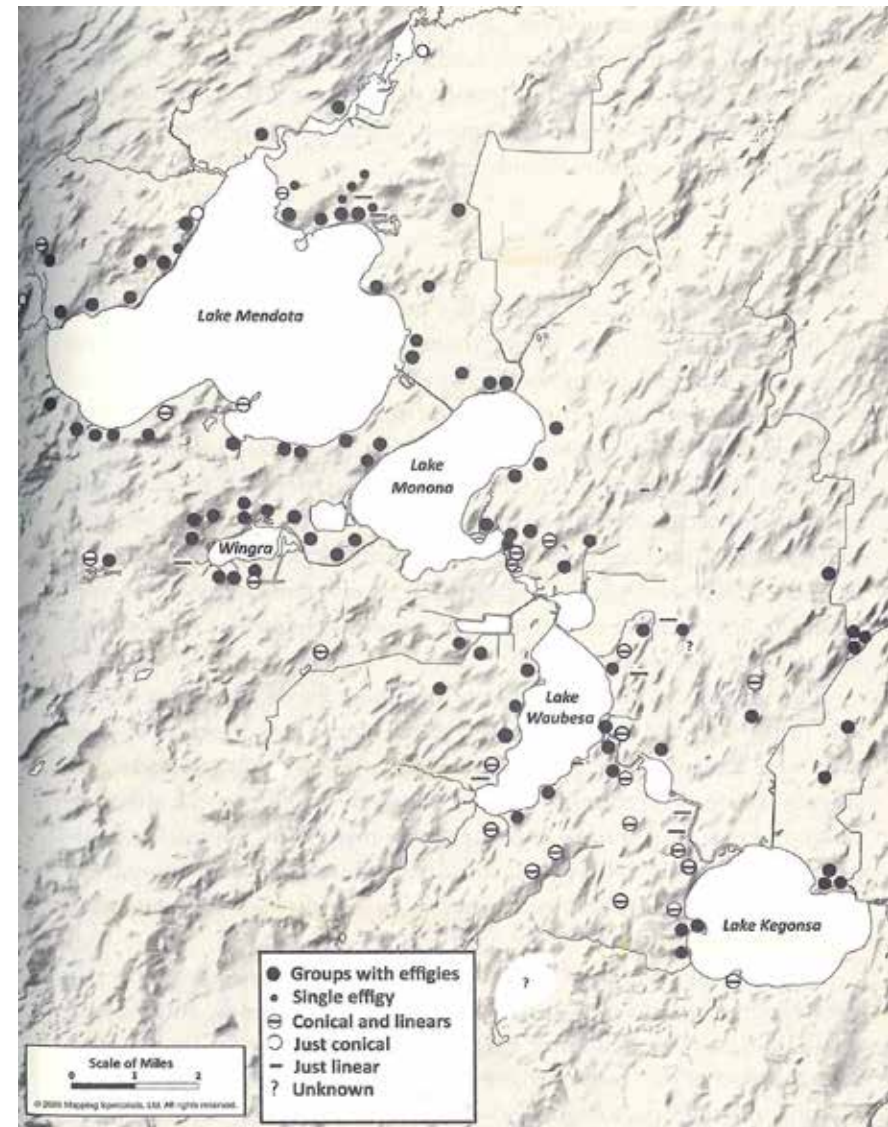


Figure 2-4 Map of Four Lakes Mound Sites

convened, land speculators Josiah Noonan of Madison and Aaron Vanderpoel of New York had offered to donate land for a campus.

Noonan was familiar with local real estate, having worked with the crew that surveyed the shorelines of Lake Wingra and Lake Monona in 1837. Although Noonan himself owned no land in the immediate vicinity of Madison in 1838, he may have approached the board of visitors on behalf of Warren Bryant, another New York speculator who owned all the land in Section 22 (640 acres). Aaron Vanderpoel's tract, in Section 23, was adjacent to Bryant's and comprised nearly 160 acres. It covered the area now bounded by State Street on the north, Mills Street on the west, Regent Street on the south, and Frances Street on the east.

On the northwest, Vanderpoel's tract ended at the top of a glacial drumlin, a spot now near the southeastern corner of Bascom Hall. Vanderpoel's proposed donation thus included only the southeastern slope of the landmark that eventually became known as "College Hill." On December 15, 1838, the board of visitors' site selection committee reported finding "the site proposed by Mr. Noonan and others was the most eligible." Unfortunately, minutes of the visitors' meeting contain no further description of the properties under consideration (see Figure 2-5).

A decade passed before the university's governing board (reconstituted in 1848 as the Board of Regents) took any further action on acquiring a campus site. In the meantime, Madisonians held fast to the notion that the hill one day would become the site of Wisconsin's institution of higher learning, and began calling it (with tongue in cheek, perhaps) "College Hill." Used occasionally as a burial site, the hill remained an untamed "blackberry tangle," over which prairie fires swept unchecked.

In the spring of 1848, Wisconsin achieved statehood, after passage of a state constitution that included a provision for the creation of a state university. That October, the regents appointed a committee to negotiate the purchase of College Hill, portions of which had been acquired by a variety of owners during the territorial period. Vanderpoel's quarter section remained unsold, but the owner was no longer willing to give it away. Through local agents John Catlin and Ezekiel Williamson, Vanderpoel offered to sell his property to the regents for \$15 per acre, on the condition that they buy the entire tract. Unfortunately, the legislature had yet to authorize the sale of the university's land grant, so the regents had no funds with which to negotiate.

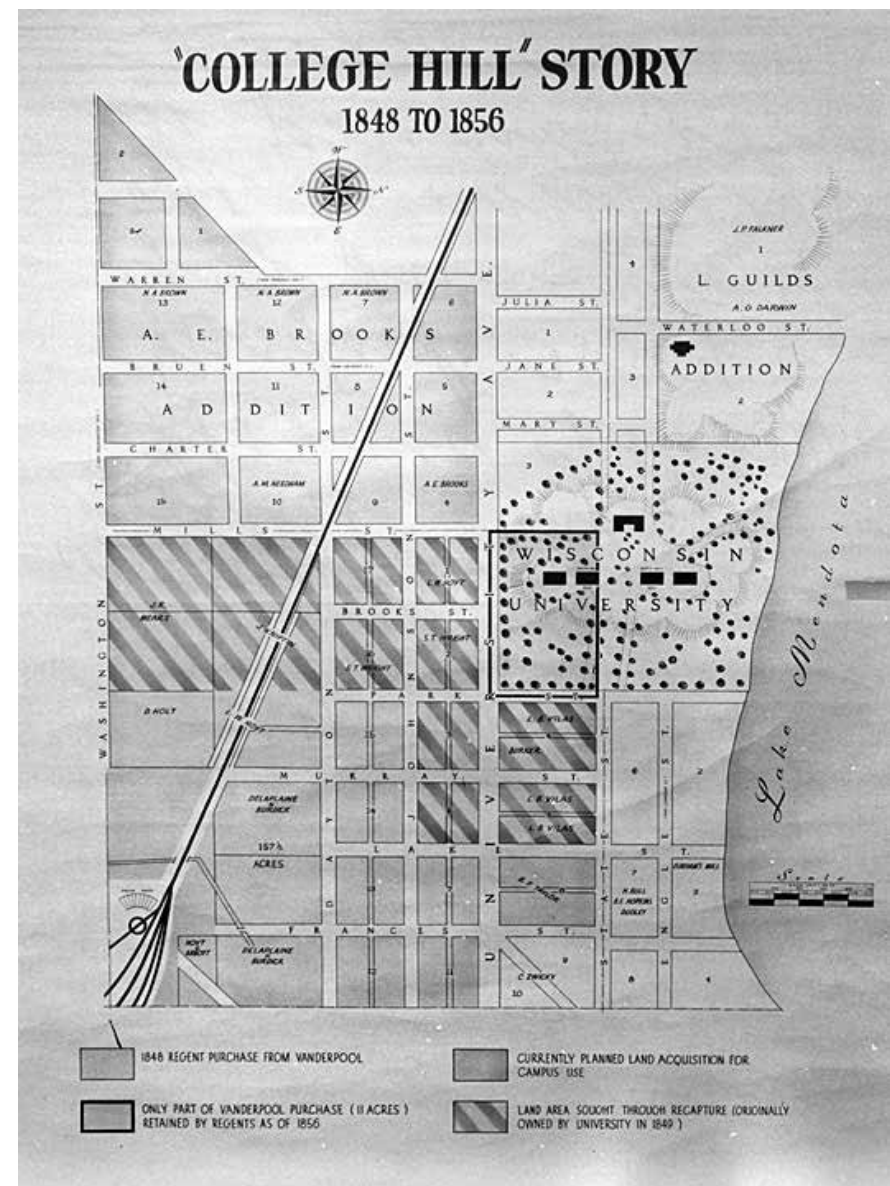


Figure 2-5 Cultural Landscape Project-A0129I

2. BACKGROUND

During their 1848-49 session, legislators passed a joint resolution approving the regents' request to purchase a site. Interestingly, they also approved "the plan of the buildings submitted by said regents." Although the legislature denied the board's request for a \$1,000 loan to cover the first payment on the site, the sale nonetheless went forward. On March 16, 1849, Vanderpoel and his wife, Ellen, deeded their tract to the regents for the sum of \$2,435.36. How the regents managed to fund the Vanderpoel purchase remains unknown. Regent Simeon Mills (1810-1895), then chairman of the legislature's finance committee and one of Madison's most successful real estate dealers, may have stepped forward to help.

A plan for a "main edifice, fronting towards the Capitol" was devised by the regents' building committee in 1850 (see Figure 2-6) and was included with the regents' annual report. The committee, consisting of Chancellor John Lathrop and Regents Mills and Nathaniel Dean, also called for "an avenue, two hundred and forty feet wide... bordered by double rows of trees," extending from the main building to the eastern boundary of the campus (Park Street). The regents originally planned to build four dormitories on the hill, two on each side of the avenue. They also recommended the construction of two carriage ways flanking the dormitory buildings and paralleling the tree-lined avenue.

One of the first general development plans for the University of Wisconsin was by Milwaukee Architect John F. Rague in January 1850 which included his plans for "College Hill." The simple site plan showed a "main edifice" that later would be designed by William Tinsley of Indianapolis, Indiana opening in 1859 as University Hall. It was later named Bascom Hall in June 1920, after John A. Bascom, University President from 1874 to 1887.

The first campus building, North Hall, built in 1851, was also attributed to John F. Rague after the Board of Regents approved the 1850 plan. It was designated as a National Historic Landmark in 1966. Rague designed the Madison sandstone building to be similar to dormitories on University of Michigan campus, in Ann Arbor. The plan included three dormitories but only one other (South Hall) was built in 1855 (see Figure 2-6).

Over time, the campus grew from these first three buildings (North, South and University (as known as Bascom) Halls) on what would become Bascom Hill, to over the present day 300 buildings spanning 936 acres in downtown Madison. Growth of campus facilities were clearly directed by several master planning efforts: some were followed rather closely while others because of political pressures and the necessity of campus growth to meet basic demands, were

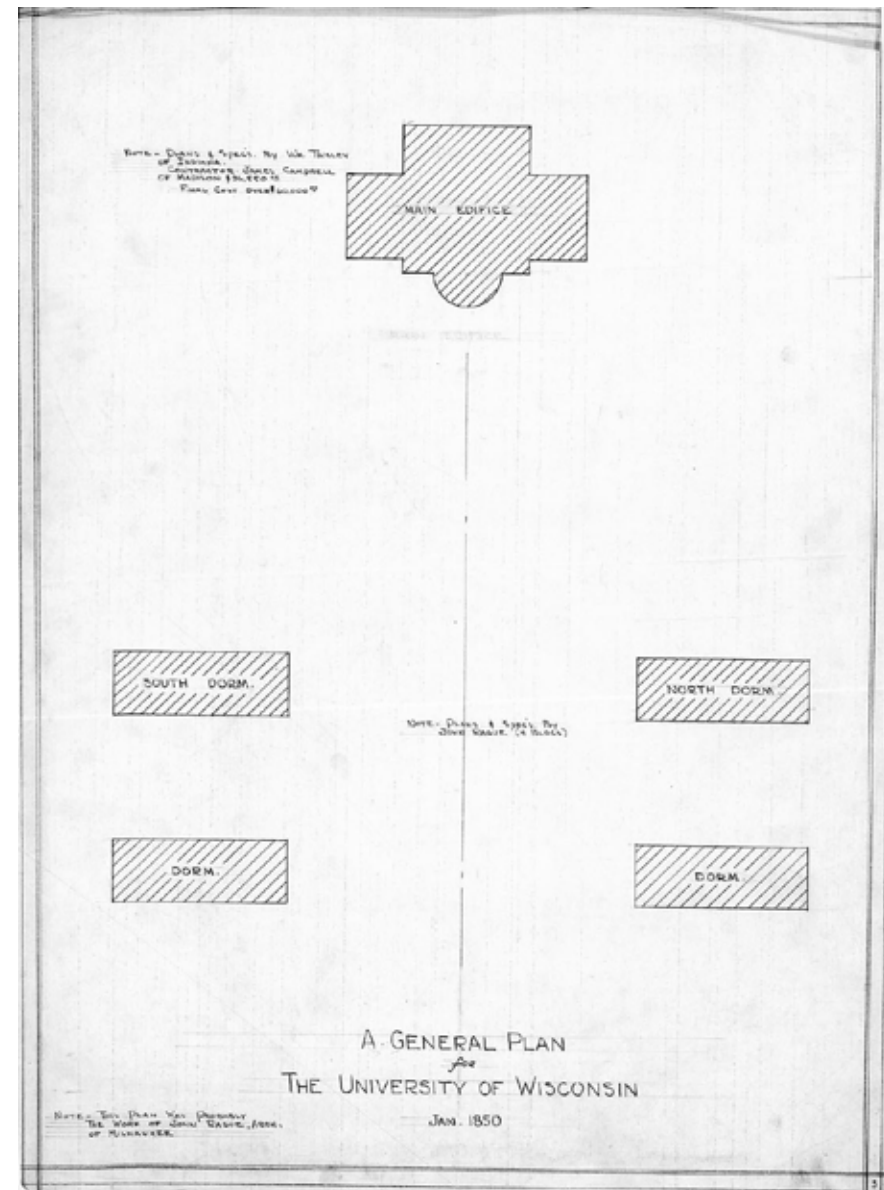


Figure 2-6 General Plan for the University of Wisconsin by John Raque, January 1850



Figure 2-7 O.C. Simonds 1906 Plan for the Grounds of the University of Wisconsin

2. BACKGROUND

basically disregarded. The “college on the hill” met with success early on and enrollment increased steadily as projected by the regents.

Expansion of the university was fairly regular until 1890 to 1900 when a number of new buildings were built and student enrollment doubled. After Charles R. Van Hise assumed the presidency in 1903, a series of planning initiatives began to influence development across campus. In early 1900, Ossian C. Simonds, a prominent Chicago landscape gardener, was hired to consider future development of the campus. He completed his plans in 1906. Simonds was the first to address the entire campus as Rague’s earlier plans focused on the Bascom Hill area before the campus began to expand to the west (see Figure 2-7).

Simonds plan picked up on some of the earlier formal planning concepts but took on a more pastoral and curvilinear layout reflecting his training as a landscape gardener. Simonds plan was curiously devoid of projected major new buildings and more expertly concentrated on the grounds, which he was much more comfortable with pursuing (see Figure 2-8).

In the meantime, President Van Hise was out scouting for much broader based planning and found Arthur Peabody, a supervising architect at the Chicago World’s Columbian Exposition. In 1906, the Board of Regents created an Architectural Commission consisting of then university architect Arthur Peabody, consultant Warren P. Laird, and Laird’s colleague, Paul Philippe Cret, a University of Pennsylvania professor of design. This was to be the first significant, comprehensive campus master plan for the university, eventually being completed in 1908. Laird had actually come to campus in 1903 to provide consulting services on the new Chemistry Building which began a lengthy partnership with he and Peabody.

“The General Design of the University was completed in 1908, after two years of thorough investigation and careful study... the design attempts to forecast and visualize the physical development of the University during the next forty or fifty years... It is aimed to secure harmony of aspect among groups through emphasizing their unity as parts of one great University.... Through forecasting by a general plan the University can develop and maintain a visible unity and that individuality of character which may be epitomized by the word “Wisconsin”.”

– *The Future of Wisconsin, Arthur Peabody, Supervising Architect, Badger Yearbook, 1913.*

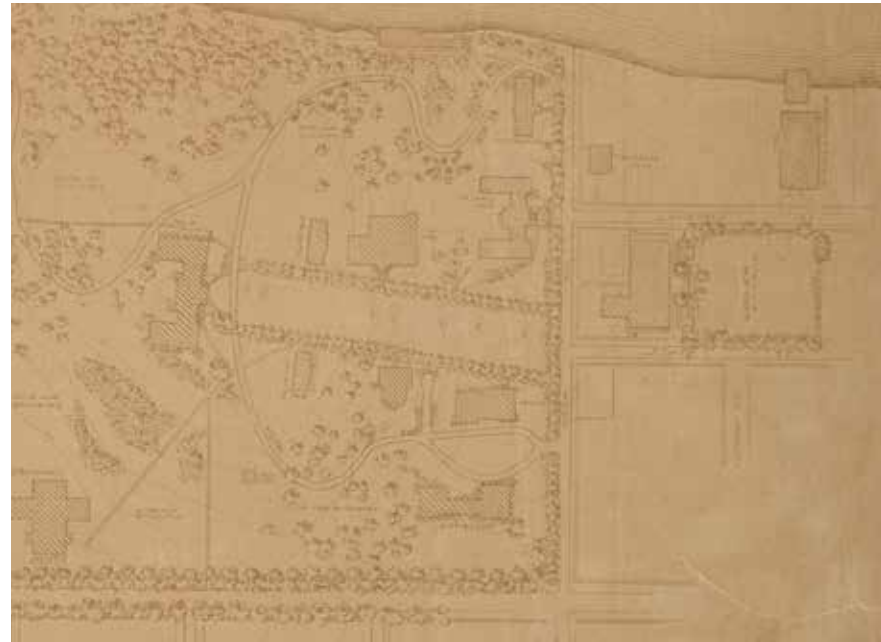


Figure 2-8 O.C. Simonds 1906 Plan for the Grounds of the University of Wisconsin, Bascom Hill (Detail)



UNIVERSITY OF WISCONSIN
GENERAL DESIGN
FOR FUTURE CONSTRUCTIONAL DEVELOPMENT
WARREN POWERS LAMER
PAUL PHILIPPE LUTY
ARTHUR HENNING
ARCHITECTURAL COMMISSION
1908

Figure 2-9 Laird & Cret 1908 General Design of the University of Wisconsin

2. BACKGROUND

Peabody explained the 1908 Campus Plan by saying *“The design attempts to forecast and visualize the physical development of the University during the next forty or fifty years, by laying out in a large ground plan the general form and location of departmental buildings in the logical groups. It is aimed to secure harmony of aspect among the groups through emphasizing their unity as parts of one great University. The plan determines the prevailing architectural style.”* The architectural style being proposed was the Beaux-arts classical revival style made famous by Daniel Burnham’s grand White City at the Chicago Columbian Exposition of 1893 and the subsequent City Beautiful Movement.

The 1908 Campus Plan called for a series of well-defined districts, each with its own character but based on the major academic units they comprised. For example, the “eastern section” would include public functions (library, theatre, and administration) and the liberal arts. The “northern section” would include residence halls and athletics. The University Avenue section, including the south facing slopes and westerly levels, were to include the pure sciences, pre-medical and applied sciences along with agriculture. The “southern section” including Randall Field and contiguous properties to the east would be for general service building, engineering and military science. The “western section” would mainly be comprised of agricultural research fields and general farm fields. Those farm fields, even then, were considered as a potential for “indefinite expansion.” Curiously, mention was made in the plan to note “Future buildings should be held to a careful consonance with the general design by conforming to its plan scheme, producing, in each single group or unit composition, a unity of effect in treatment of mass and line.” Each district would take on its general design character but with a basis of buff toned limestone and yellow/tan brick colors. The districts today still are visible if one looks closely. The buildings of the “old campus” are mainly comprised of the Madison sandstone with metal roofs. Buildings on the agricultural campus are brownish red brick with red tile roofs. Buildings on the engineering campus are of buff brick with flat roofs.

The 1908 Campus Plan also proposed development of the “Greater” and “Lesser” malls, large green spaces framed by classic buildings and forming collegiate quadrangles of space. The “Lesser Mall,” later named Henry Mall after Agricultural Dean William Henry, was developed using the 1903 Agricultural Hall as its figure head and the new Agricultural Science Buildings marching down the west face of the mall creating the classic quadrangle of green space. Jennings had just completed the Engineering Building on Bascom Hill (now known as the Education Building), in 1899 also in the Beaux-Arts style. Home Economics, east of Agricultural Hall, was designed by Arthur Peabody along

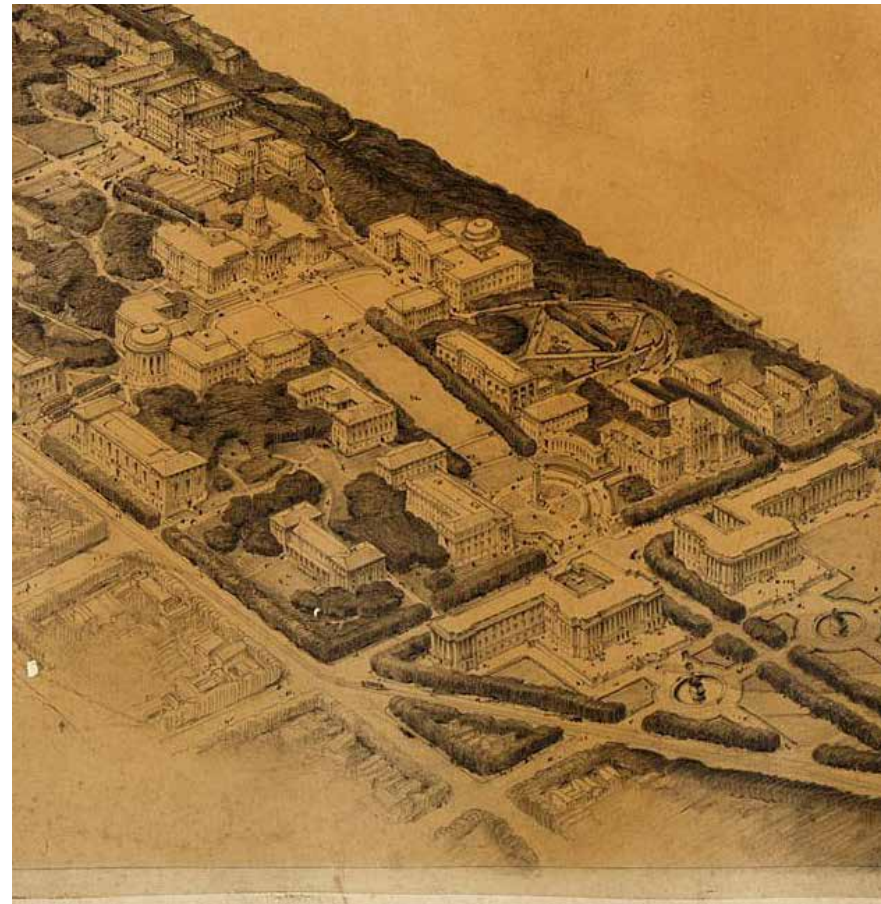


Figure 2-10 Laird & Cret 1908 General Design of the University of Wisconsin, Detail

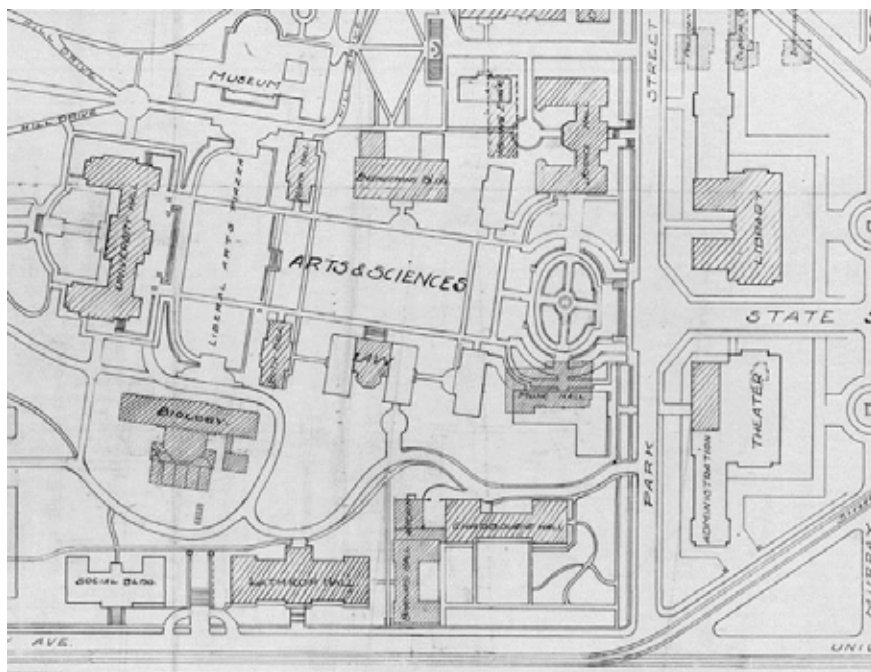


Figure 2-11 Laird & Cret 1908 General Design of the University of Wisconsin, Detail showing “liberal arts piazza” near the summit of College Hill.

with Laird and Cret in 1912. Both Agricultural Hall and Home Economics (now the School of Human Ecology), helped form the basis of the “Greater Mall” stepping back and away from Linden Drive up the green hillside.

Peabody replaced J.T.W Jennings as the university architect in 1905 and went on to design many of the most famous historic buildings on campus today, (see list in next paragraph). Along with the new university president, Charles Van Hise, Peabody instigated one of the largest building programs for the early campus. Van Hise had just begun expounding on the popular “Wisconsin Idea” as “the boundaries of the University are the boundaries of the State” which lives on today at the forefront of every strategic plan for the University of Wisconsin.

Peabody’s work includes the buildings along the west side of Henry Mall, Old Agronomy (as known as Agricultural Journalism, 1906), Agricultural Engineering (1906) – his first two solo works – and Biochemistry (with Laird and Cret in 1912), the old Heating Plant on University Avenue (1907), Birge

Hall (with Jarvis Hunt in 1910), the Service Building (1910), and Horticulture (1910). Laird and Cret designed their own classical style buildings for the campus including the Stock Pavilion (1909) and Lathrop Hall (1909). Peabody teamed with Laird and Cret to develop such classic buildings as Biochemistry on Henry Mall (1912), Barnard Hall (1913), Wisconsin High School (1913), Sterling Hall (1914), and the Soils Annex (1915).

With the departure of Laird and Cret in the late nineteen-teens’, Arthur Peabody went on to complete designs for the Wisconsin General Hospital (c. 1921, now the Medical Sciences Center), Nurses Dormitory (1924), the Van Hise Dormitories (also known as Tripp and Adams Halls, 1925), Service Memorial Institute (1927), Memorial Union (1927), UW Fieldhouse (1929), Mechanical Engineering (1929), and the historic Carillon Tower (1936). No architect or team of architects would have such a profound impact on the design and future growth of the University of Wisconsin campus than Arthur Peabody, Phillippe Paul Cret and William Laird, all based on their classic revival plan of 1908. Peabody continued to serve as the university architect, updating the 1908 Campus Plan in 1927. The work of Laird and Cret, in the early 1900’s, clearly guided development of the campus up through the 1930’s.

Unfortunately, little of the 1908 Laird and Cret plan was ever fully implemented. Henry Mall, including the iconic Agricultural Hall at its apex, is one of the few features that actually came to fruition. Most notably, in the Laird and Cret plan, the majority of campus development was to occur north of University Avenue. Only the Service Building, Heating Plant, a recreation field and three academic buildings were shown south of University Avenue. The grand beaux-arts classic revival Agricultural Hall had been completed in 1903 under the design of then university architect J.T.W. Jennings along with his work on King Hall (1896) and the old Dairy Barn (1897) on the Agriculture campus. Jennings also designed the classic Chamberlin Hall in 1903 (as initially the university’s Chemistry Building, then the School of Pharmacy, and now the new home of the Physics Department).

Since its completion, the 1908 Campus Plan has been looked to for inspiration and encouragement in the development of university buildings and grounds. In 1927, State Architect Arthur Peabody, who worked with Laird and Cret on the 1908 Campus Plan, revised the 1908 plan based on changing needs of the university.

**Figure 2-12 Laird & Cret 1908 General
Design of the University of Wisconsin,
General Design for Future Development**



UNIVERSITY OF WISCONSIN
GENERAL DESIGN
FOR FUTURE CONSTRUCTIONAL DEVELOPMENT

UNIVERSITY OF WISCONSIN, MADISON
ARTHUR H. HARRIS

Historical Development of the UW–Madison Campus

The figure ground maps of the campus on the following pages show historical growth patterns and how the campus grew over time with the accompanying text describing major planning initiatives.

From 1875 through to the 1940's the campus saw a major shift from its humble beginnings as a small land grant college to what would become a large, modern university. Buildings were typically planned and designed to fit an immediate need and a departure from the historic academic village was seen. From 1910 to 1920, many new buildings were dedicated to Agriculture and to the Sciences. The 1920's saw the building of the Wisconsin General Hospital, the Service Memorial Institute for the College of Medicine (now part of what is known as the Medical Sciences Center) and the new Field House was completed. The first men's dormitories were also constructed during this period (Tripp and Adams Halls). In 1927, modifications to the Campus Plan were made which involved placing Intercollegiate Athletics at Camp Randall and the Medical School, as noted above, in the Service Memorial Institute. The original 1908 Campus Plan called for Engineering to be where the hospital and medical school was eventually built. Engineering eventually was placed south of University Avenue, north of Camp Randall. In the 1930's most new buildings were for residential, social and athletic purposes (i.e. the Kronsage Dorms, Elizabeth Waters Residence Hall, the Carillon Tower and completion of the Stadium).

2. BACKGROUND



Figure 2-13 Figure Ground Map, 1870

Building footprints adapted from “A Campus Development Plan for the University of Wisconsin.” Campus roadways adapted from “Experimental Farm and College Grounds Belonging to the University of Wisconsin – 1870.”

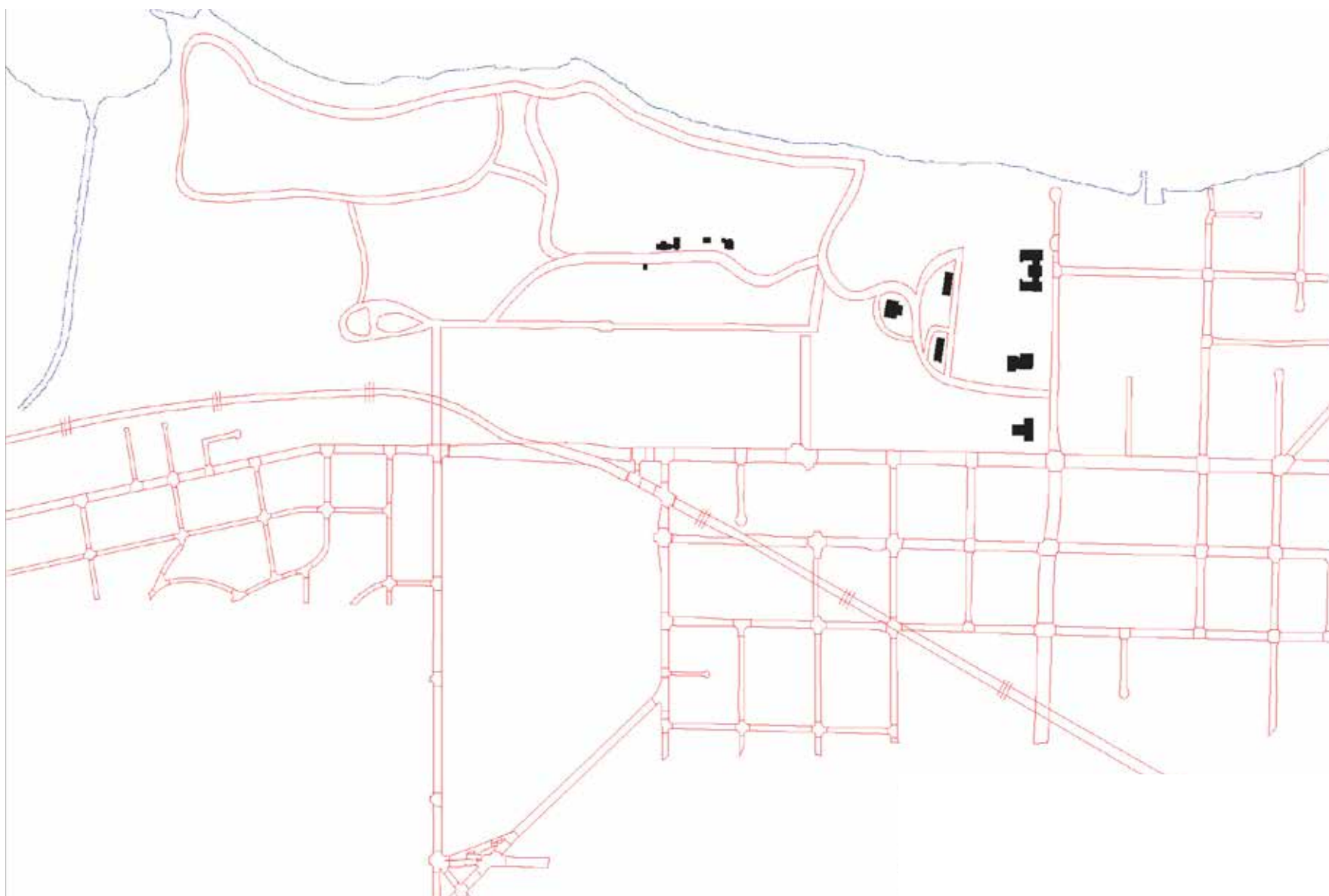


Figure 2-14 Figure Ground Map, 1880

Building footprints adapted from a dated but unlabeled map archived at the University of Wisconsin Division of Facilities Planning and Development. Campus roadways adapted from “Experimental Farm and College Grounds Belonging to the University of Wisconsin – 1870.”

2. BACKGROUND

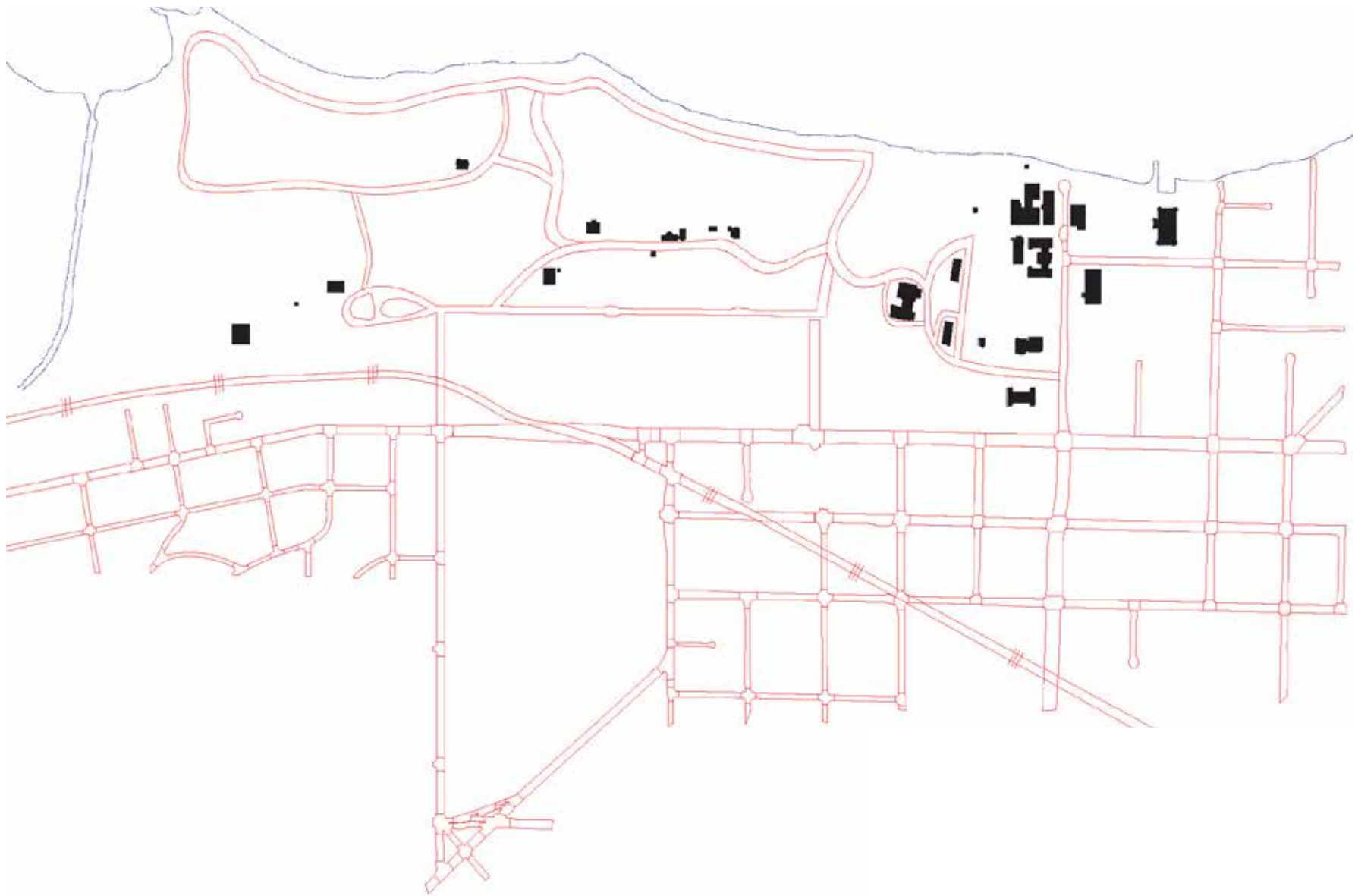


Figure 2-15 Figure Ground Map, 1900

Building footprints adapted from a dated but unlabeled map archived at the University of Wisconsin Division of Facilities Planning and Development. Campus roadways adapted from “Experimental Farm and College Grounds Belonging to the University of Wisconsin – 1870.”

In November 1940, President Clarence A. Dykstra requested the development of a new plan to guide future development and growth for the campus. The objective of the plan was clearly defined to provide a pattern for new growth in such a way that “construction will be guided along lines which will insure continuous direction toward a harmonious unity, embodying both physical and spiritual values.” An extensive building program was being submitted to the Legislature and the leaders of the day suggested that a new plan be developed to help guide the massive undertaking. In 1941, the Wisconsin State Planning Board finalized the development of A Campus Development Plan for the University of Wisconsin.

The 1941 plan’s major recommendations included thoughts that:

- The plan should facilitate the integration of related activities by college
- The unique topographic features of the campus shall be preserved and enhanced
- Ample open spaces should be maintained within the developed areas
- The plan be achieved without significant land acquisition adjacent to the existing campus
- New construction be primarily devoted to the College of Agriculture

No attempt was made to provide for architectural details in the 1941 plan. It was up to the commissioned architect and the university authorities to make decisions with respect to the architecture. The plan was to be flexible and allow for change over time but the broader objectives would be maintained. The planning team suggested the development of a group of individuals to carry out the program, something similar to a City Plan Commission. The “University Plan Commission” was to include regents, alumni, university staff, and state staff as ex-officio members. The charge to the commission would be to review all proposals for construction of new buildings or alterations of old ones. Today, in 2015 we have a Design Review Board, chaired by the university architect, which provides review and input into the development of large capital building projects.

In the 1940’s, growth was seen late in the decade with Babcock Hall and several Physical Plant service buildings being built. The University Houses complex was built in 1948 as was Babcock Hall, and Engineering Hall in 1949. Taylor, Humphrey and Jorns Halls were also built in 1949. In May 1946, the regents requested that the University Plan Commission (also known as Campus Planning Commission and now the shared governance Campus Planning Committee) work with the City of Madison to develop plans for the area of

expansion south of University Avenue and east of N. Park Street. Many months of discussion ensued with the eventual outcome of a master plan approved by the Board of Regents in August 1949. The design basically followed the 1908 Campus Plan but, due to ever increasing enrollments, it indicated an expansion of the university to the south and east.

These historic prior plans served the campus well for over 40 years when, with the baby boom looming in the late 1950’s, the next generation of campus planning began. In 1958, enrollment was just over 16,500 students and projected to grow up to 30,000 or greater by 1970. While the expected enrollment and subsequent growth in faculty and staff was predicted, it was not predicted at the rate at which it actually occurred in the 1960’s and 70’s. By 1970, enrollment stood at nearly 36,000 and a concurrent building boom was in full swing.

In the early 1950’s, several new buildings were added to the campus including the Memorial Library, Stovall Hall, University Health Service, and the Dairy Cattle Center. Ingraham Hall (then the Commerce Building) was built in 1954, as was the Camp Randall Memorial Sports Center (also known as the Shell). In 1955, the campus saw the Bardeen Labs being built, along with the Harvey Street Apartment complex for graduate students approximately 1 mile west of the main campus. In the late 1950’s, more residence halls were added (Holt Commons, Cole Hall, Sullivan Hall in 1957 and the Elm Drive Dorms – Bradley, Goodnight, Friederick, and the associated dining hall facility were all built in 1958) and the beginning phases of the Eagle Heights married student housing complex was started. Poultry Research and the Agricultural Engineering Shop were also added on the Agriculture campus in that year.

In 1959, the Board of Regents adopted a “Sketch Plan for the University of Wisconsin–Madison.” Goals of that plan were “to define succinctly the kind of physical environment deemed most desirable for the various activities of the University” and “to serve as a framework for more detailed site plans for the future development of the campus.” The plan set about several planning principles that strove to utilize the natural beauty of the campus making sure new buildings enhance that setting and that the campus “does not spread unnecessarily.” The functional distribution of activities was important such that related functions would be grouped together in the most efficient manner.

Expansion of existing facilities was planned and sites were reserved for future growth of established departments on campus. Density standards were established for various areas on campus and the concept “to minimize conflict

2. BACKGROUND

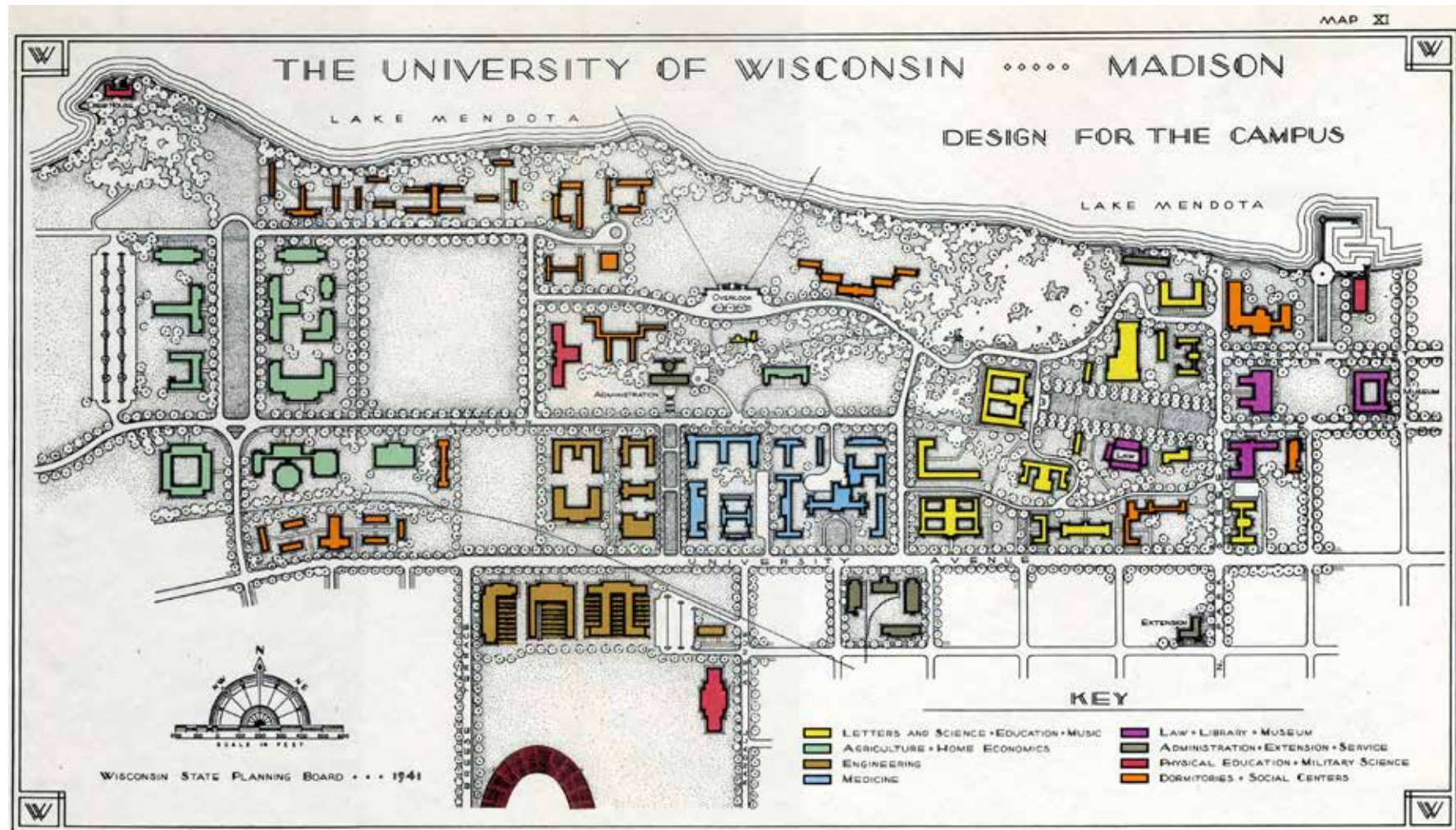


Figure 2-16 1941 Design for the Campus (at) the University of Wisconsin–Madison



Figure 2-17 Figure Ground Map, 1940

Building footprints adapted from a dated but unlabeled map archived at the University of Wisconsin Division of Facilities Planning and Development. Campus roadways estimated from “Plat Plan – West of Breeze (sic) Terrace, University of Wisconsin – Arthur Peabody, 1919” and “The University of Wisconsin Campus – Department of Buildings and Grounds, 1940.”

2. BACKGROUND

between pedestrian and vehicular circulation, to eliminate excess vehicular traffic on campus and to develop separate pedestrian systems” was first introduced. New boundaries for the campus were established by the Board of Regents in anticipation of growth of the campus south of University Avenue. Adequate space for parking was important as was the planning for non-university service facilities. In the 1959 Sketch Plan, they also wanted to “separate University residential housing from academic and research functions” on campus.

The early 1960’s saw a boom in construction with larger buildings being built for the first time on campus. The average size of facilities built since 1960 are over twice the gross square footage of earlier developed facilities. (It is interesting to note that over half of the existing campus buildings were constructed between 1950 and 1979.) The early 1960’s saw the development of: Susan B. David House, Social Sciences Building, Van Vleck Hall, Genetics, and the Limnology Building on Lake Mendota all in 1961; Henry Rust House, Hi Ray Hall, Veterinary Sciences, AW Peterson Building, McArdle Labs, Gym/Natatorium Unit I and II, and UW Extension Services in 1962; the Mifflin Street Warehouse, Russell Labs, Zoology Research Building in 1963; Brodgen Hall, Biotron, Primate Center in 1964; and Daniels Chemistry Building, Bock Labs, Computer Sciences Building, Van Hise Hall and Middleton Medical Library in 1965.

In 1965, plans for enrollment growth were projected to an astounding 40,000 students, a level unprecedented in prior thinking. An intensive space needs study was implemented to look at what it would take to provide facilities for this burgeoning student population. Talk of the need for a second satellite campus, utilizing the Charmany and Reider Farms on the western edge of the city, were being contemplated. Teaching workloads were analyzed and projected space deficits were looming on the horizon. A study of circulation patterns, both vehicular and pedestrian, was started with City of Madison officials. The great building boom of the late 1960’s and early 1970’s was finally beginning to meet the needs of the baby boomers coming to campus. In 1966, the Eagle Heights married student housing was finally completed.

In 1970, a new Campus Development Plan was developed by an internal university staff team that reached out to meet the goal of having a campus population of 40,000 students. Major proposals coming out of that plan included continuing efforts to preserve and upgrade the traditional feel and atmosphere of the original campus north of University Avenue and spreading outward from Bascom Hill. South of University Avenue, the plan called for a fresh approach to integrating campus and community development yet meet

the needs of the ever expanding campus. Growth in on-campus housing was projected and thoughts of adding more residence halls were discussed. The late 1960’s also included a major new development that was in full discussion. The development of a new Medical School teaching hospital on the far west end of campus, just east of University Bay Drive, was coming to fruition. The new Clinical Sciences Center would eventually open in March 1979 with the move of patients from the old hospital complex.

Parking capacity levels were contemplated to have up to 15,000 spaces on campus, again with most of them being in structured parking ramps. The university’s long tradition of preserving its natural areas was also codified and included a suggestion to add the lands of then called “Second Point” (now Frautschi Point) to the 250 acres of already set aside natural areas. Their preservation and protection remained as a major planning goal for the campus. Service and utility areas, then spread across several sites, was to be consolidated in and around the Charter Street Heating Plant and on a site near Walnut Street, the latter being the future home of the Walnut Street Heating Plant constructed to serve the growing West Campus. Removal of the railroad tracks that bisect the campus was also being discussed along with the development of a major vehicular bypass that would handle the large volumes of community wide traffic coming into downtown Madison. The bypass would connect at Highland Avenue on the west and the Gorham-Johnson pair on the east (luckily this never came to pass). The bypass would also act as a city-community redevelopment initiative that would spur integrated development along this large, 200-foot wide transportation corridor. Mass transit was all the rage in the planning circles of the day, with elevated trams, mono rails and duo-rail rapid transit. Funding for such a large scale endeavor would always be an issue.

In 1973, a campus planning workbook for UW–Madison was adopted by the Campus Planning Committee as culmination of the planning efforts started in 1970 by university facilities staff. The 1973 “Madison Campus Development Plan” envisioned a projected enrollment of 35,350 students by 1982 and a maximum enrollment of 42,000 students (as predicted by the Wisconsin Coordinating Council on Higher Education). Enrollment projections were starting to stabilize after the extreme growth in the late 1960’s. Some boundary changes were suggested through joint city-university negotiations. The majority of campus development was again focused around the main Central Campus with additional development starting around the newly opened UW Hospital’s Clinical Sciences Center.

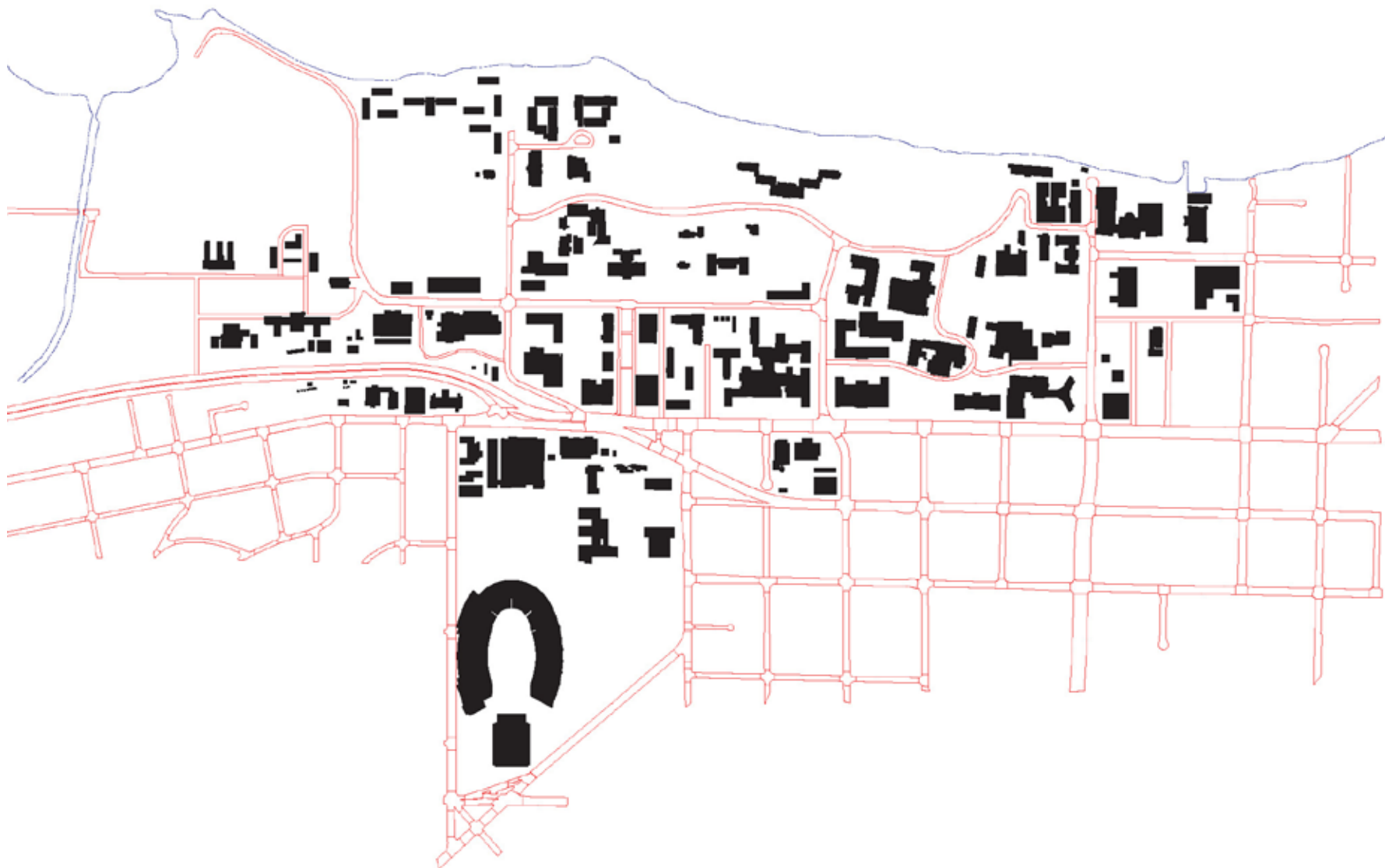


Figure 2-18 Figure Ground Map, 1954

Building footprints adapted from a dated but unlabeled map archived at the University of Wisconsin Division of Facilities Planning and Development. Roadways adapted from “Map and Aerial View of the Wisconsin Campus [1951 or 1952]”, and “University of Wisconsin in Madison (from Lincoln-Mercury Times 1952.”



Figure 2-19 Figure Ground Map, 1967

Both building footprints and roadways adapted from “University of Wisconsin and Madison Water Utility Existing Distribution System, 1967.”

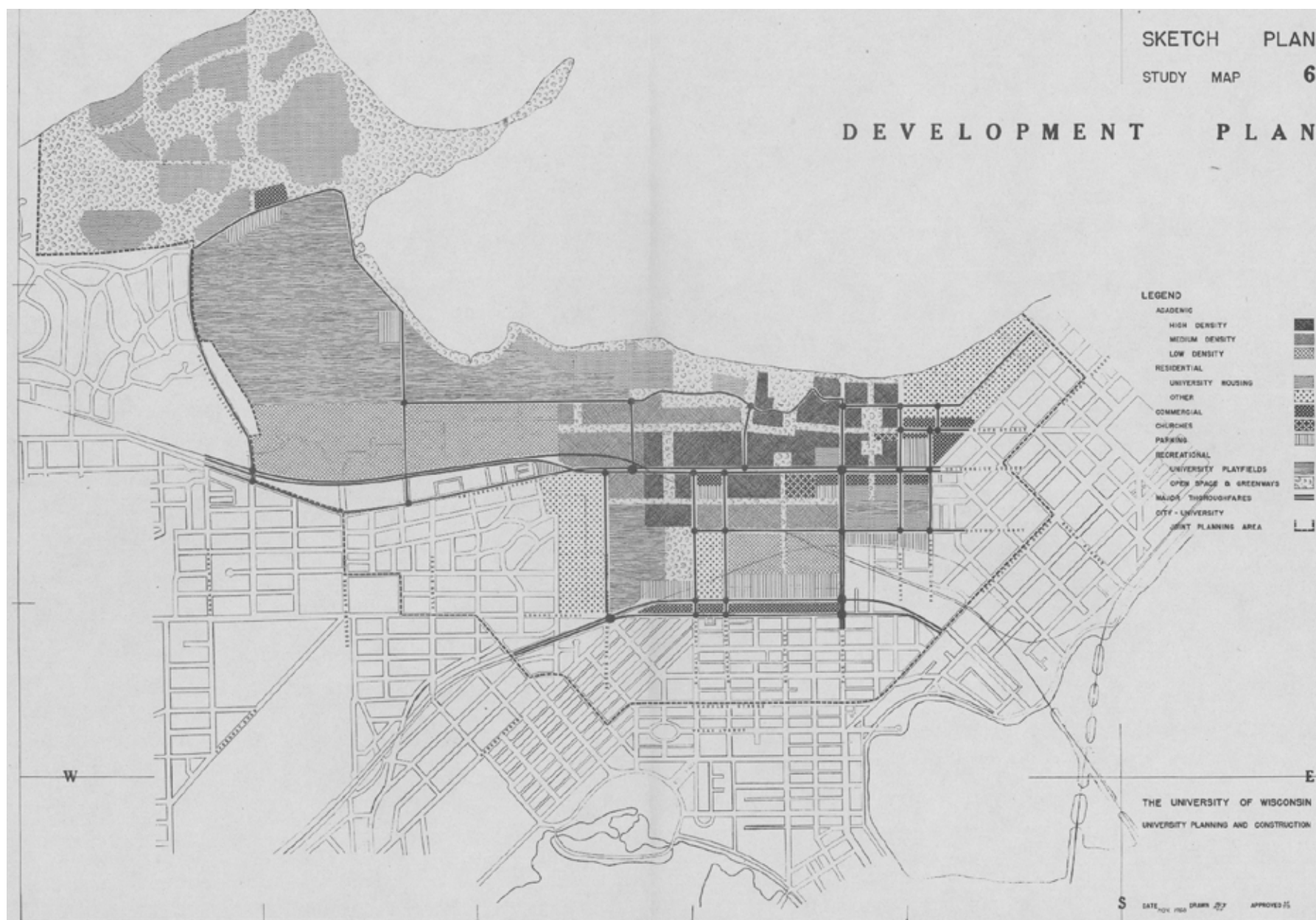


Figure 2-20 1959 Sketch Plan for the University of Wisconsin, UW Planning & Construction

2. BACKGROUND

The extensively detailed 1973 Campus Plan including the following planning efforts:

- Increase density of building in the Central Campus and on the West Campus related to the Medical School and hospital
- Design new buildings and replace obsolete old buildings so as to facilitate use by different departments and programs with a minimal amount of remodeling
- Work toward reducing pedestrian-vehicular conflicts by locating facilities that need extensive vehicular access (Medical Center and Athletic complexes) on the periphery of the campus
- Maintain or increase pedestrian malls, natural areas, recreational land and green spaces across campus; protect from development the natural and park-like areas of John Muir Woods, Picnic Point and Camp Randall
- Incorporate more public art, construct more pedestrian malls and other works of landscape architecture
- Increase on-campus student housing from 7,550 beds to approximately 10,000 beds
- Working with the city and local developers, increase near-campus private student housing
- Increase available parking on campus from 6,800 to 13,500 spaces, creating more structured parking to reduce the number of acres devoted to surface parking from over 62 acres to around 40 acres; locate new parking on the fringe of the campus to reduce congestion and traffic including two large shuttle lots, one on the east and one on the west end of campus (each with 3,000 spaces)
- Close University Avenue from Lake Street on the east to Henry Mall on the west to provide a more pedestrian friendly campus; redirect vehicular traffic to Johnson Street and a proposed four-lane highway system via Dayton Street connecting back up to “old” University Avenue on the west and to Johnson Street on the east
- Improve vehicular circulation around campus and possibly remove/relocate the existing railroad tracks that bisect the campus
- Improve the campus transit system to serve remote parking areas and reduce on-campus vehicular traffic; work with the city to improve the regional and city-wide transit systems
- On the South Campus (south of Dayton Street) continue to work with the city to partner on redevelopment initiatives

Through 1979 and 1980, facilities staff updated the 1973 Campus Plan with a final plan being adopted by the Campus Planning Committee in September 1980. The primary focus of the 1980 Campus Plan centered on the South Campus area for which the City of Madison established a joint planning area with the university in 1979. Those efforts resulted in a land use plan being adopted by the Campus Planning Committee on January 17, 1980 and by the Madison Common Council in April 1980. Major conclusions of that plan and the 1980 Campus Development Plan include:

- Undergraduate enrollments will continue to decline somewhat over the next decade and then begin to increase again with little to no effect on campus facilities; research programs will continue to grow on campus
- The building program for the next decade will focus on remodeling and upgrading existing facilities with selective new space to complement existing programs
- The parking program has stabilized on campus at the existing level of approximately 10,000 spaces
- Considerable emphasis will need to be placed on alternative modes of transportation to and from campus to accommodate user needs
- The university continues its strong commitment to maintaining open space and preserving campus natural areas
- The university will continue to work with the City of Madison and the private sector to resolve issues around the need for more and improved student housing close to campus; first step has been made in the jointly developed land use plan for the South Campus
- The boundaries of the campus will not change dramatically from those approved in 1959; principal modifications will be in the South Campus area and in modest land acquisition to meet programmatic needs

During the fall of 1980, the Campus Planning Committee, the Board of Regents and the State Building Commission adopted the 1980 Campus Development Plan. The major conclusions of that plan stated that enrollment would decline somewhat but would increase again in the mid-1990's. The plan focused on remodeling and upgrading existing facilities while adding selective space to complement existing programs. In order to accommodate the needs of the campus users, considerable emphasis was placed on alternative modes of transportation, including bus, car and van pooling, bicycles and walking. The plan made a strong commitment to maintaining open space and did not make major recommendations in expanding the campus boundary over what was established in the 1959 Campus Plan. Principle boundary modifications since



Figure 2-21 Figure Ground Map, 1980

Building footprints and roadways adapted from University of Wisconsin–Madison Facilities Planning & Management 2007 Base Map, the 1980 University of Wisconsin–Madison Base Map, and “Buildings of the University of Wisconsin” by Jim Feldman.

2. BACKGROUND

that time were in the South Campus area and along the rail corridor where a joint planning area was established with the City of Madison. Modest land acquisition was planned to meet programmatic needs.

In 1982, a Campus Transportation Plan was adopted by the UW–Madison Parking and Transportation Board, the Campus Planning Committee and the Board of Regents of the UW System. The plan, based on several transportation surveys of faculty, staff and students, helped pave the way for future transportation planning initiatives and the campus’ leadership role in defining campus transportation solutions.

In 1984, a series of campus master development plans were completed as part of an overall UW System effort to bring all of the campus master plan up-to-date and define the pressing need of facility improvements to the state legislature. A 2-year, 6-year and 10-year plan were developed, the latter two of which included extensive amounts of information pertinent to the anticipated program directions and corresponding future needs of the campus. All of these documents are available for review in the current offices of Facilities Planning & Management.

These series of plans, outlined in 1984, included the following major themes:

- Undergraduate enrollments were expected to dip somewhat in the 1980’s and begin to stabilize in the 1990’s
- Minor changes in the campus plan boundary in the South Campus area, mainly for housing redevelopment; property acquisition within the boundary continued to occur based upon program needs
- A number of improvements for bicycle and pedestrian enhancements were considered including the development of new bicycle routes and a series of overhead pedestrian bridges connecting much of the lower (east) campus to Bascom Hill
- A comprehensive transportation planning effort was developed with Dane County
- Parking supply was held at a steady state of 9,383 parking spaces for the campus realizing some parking will continue to be moved into parking structures to free up future space for development or new open space.
- Wherever possible, existing buildings would continue to be utilized for programmatic needs; in some instances buildings would need to be removed for better land use, or a replacement for a facility whose operational and on-going maintenance costs were unreasonable
- Preservation of key historic buildings that possess a high degree of

architectural or historical integrity was identified as important to the campus community

- A shortage of research and instructional program space was being seen across campus as well as a shortage of service facilities
- Affordable, private sector student housing in the campus area was seen as an issue forcing many students to reside further away from campus where rents were less expensive
- Emphasis on upgrading and expanding utility systems (electrical, heating and cooling) were being discussed
- Energy conservation was a key component in all facilities planning efforts; stability and reliability of energy sources was seen as a concern

Updates to the 1984 plans were completed in 1986 and 1988 with minor revisions along the way as part of the biennial capital budget process.

The next major campus planning effort occurred in 1996, when Johnson, Johnson & Roy (JJR) was hired to develop a comprehensive campus master plan for UW–Madison, a first for the campus in many years. A new strategic plan had been developed for the campus by then Chancellor David Ward entitled “A Vision for the Future.” This plan identified priorities for the campus including a need to encourage unified interrelationships among the university’s highly specialized activities all while encouraging a common goal of increasing “community” and improving “learning environment” through well planned facilities. Campus facilities must be flexible and adaptable to changing circumstances and be easily changeable programmatically. The new campus physical master plan would provide a solid framework for organizing and enhancing the campus’ physical environment for the next 10-30 years as the university faced the challenges of the future.

The major planning issues discussed include:

- Enrollment will continue to be held stable under Board of Regent Enrollment Management Initiatives at approximately 42,000 students
- The location of the Medical School and other health science related facilities in relation to the hospital on the West Campus
- Visitor reception is needed on the east campus
- Improved pedestrian linkages of the campus north-south and east-west and improve transit service on campus
- Promote non-automotive travel modes to and from campus
- Creation of a new major sports arena on the southeast campus
- Balance development with properly scaled open spaces

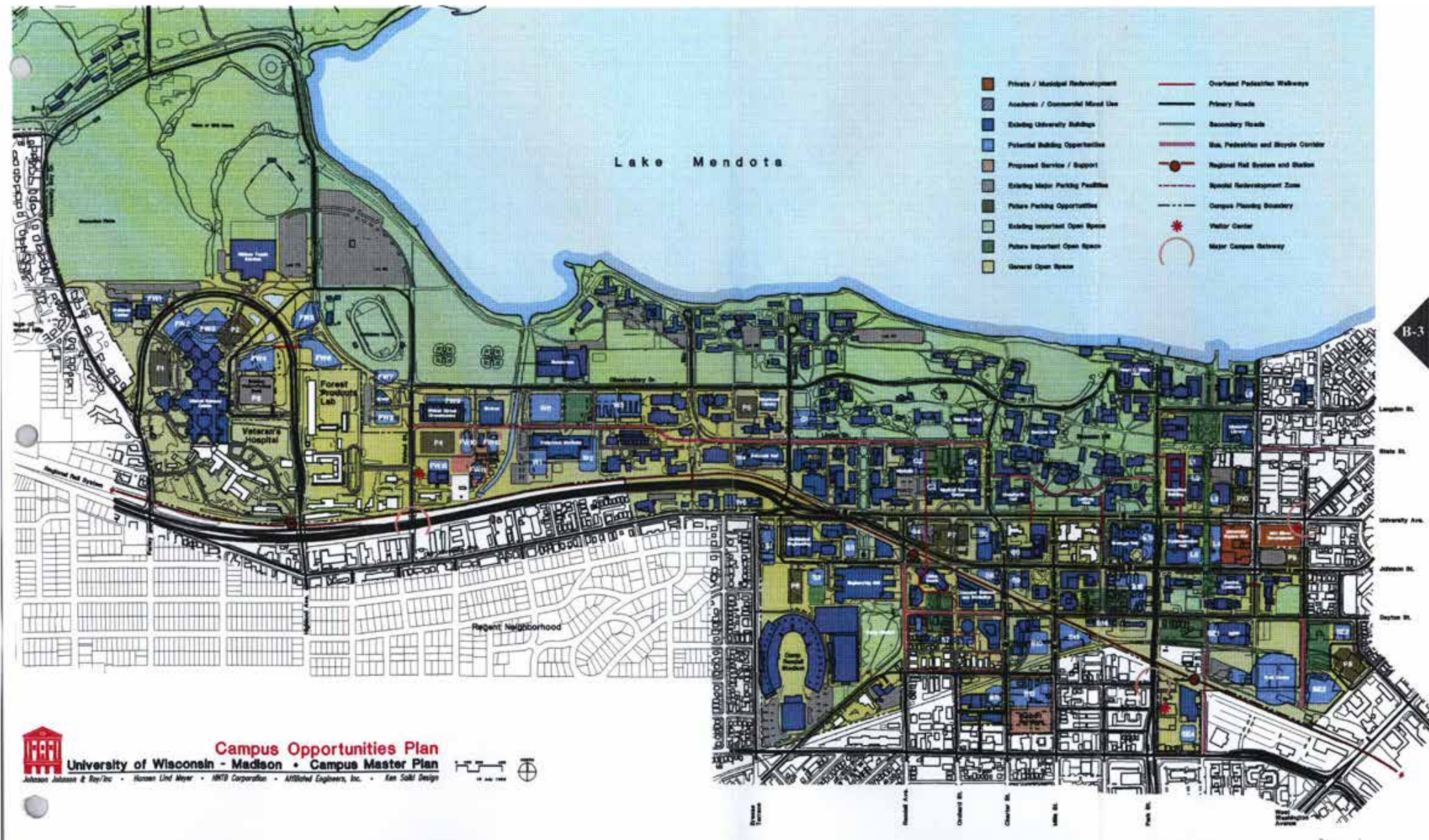


Figure 2-22 JJR 1996 Campus Opportunities Plan

2. BACKGROUND

- Protect and preserve the waterfront, sensitive environmental areas and open spaces
- Eliminate vehicular conflicts and configure roads for efficient traffic flow; roadways were defined as “at capacity” with several upgrades to intersections and roadways planned with the City of Madison
- Locate parking in close relationship to major campus destinations; a deficiency of 2,500 spaces for parking was found on campus
- Build relationships between the campus and surrounding community via improved visual gateways, edges and boundaries, etc.
- Respect adjacent neighborhoods
- Utility capacities were analyzed with 1.5 million gross square feet of chilled water demand and 1.0 million gross square feet of steam demand found

Development was projected to occur mainly on the south, west, and east edges of the campus where it ultimately did occur. The Medical School and School of Pharmacy consolidated into a Health Sciences Campus by moving from the center of campus and the old Medical Science Center out to the West Campus near the UW Hospital. The 17,000-seat Kohl Center was built on the southeast campus to serve major athletic, university events and national tour concerts. The East Campus Mall (also known as Murray Mall as so named in the 1996 plan) is coming to fruition with the redevelopment in 2005 of two new residence halls and an office building on North Park Street. As new building development occurs along the Murray Street corridor, each project is including the development of the north-south pedestrian mall to assure its completion from Regent Street on the south to Lake Mendota on the north. Parking has been increased from approximately 11,000 spaces on campus to 13,000 spaces bringing an increase in visitor parking along with a significant increase in Transportation Demand Management initiatives. The university has become the leader in providing options to single-occupancy vehicle trips to downtown Madison and the university.

From a building opportunity perspective, the 1996 Campus Plan provided 50 new potential building sites across campus with an estimated growth potential of approximately 4.7 million gross square feet. In 1996, the campus had approximately 15.8 million gross square feet in existing buildings. Campus growth since 1986 was at a rate of about 1 million gross square feet per decade. The 1996 Campus Plan therefore suggested a growth rate of approximately 3 million gross square feet would last 30 years. Today (2005), by comparison, the campus is at about 18.5 million gross square feet. Little did they know then that the university would be in store for another era of major new building across the

campus. Over 80% of the recommendations made in the 1996 Campus Plan were actually implemented and are seen today in the development of the many new buildings on the main campus.

From 1996 to 2005, biennial capital building programs continued to be developed that started to implement the 1996 Campus Plan. Each two years, a new Campus Physical Development Plan was updated and submitted as part of the capital budget process through the Campus Planning Committee, the Chancellor's office, UW System Administration, the Board of Regent and eventually on the Department of Administration to help provide support and back ground information on each of the proposed projects in each subsequent capital budget. Enrollment management continued keeping student head count enrollments around 40,000 students. Faculty and staff remained stable as well at approximately 19,000 individuals.

In 1999, through a mandatory self-study as part of the campuswide 10-year reaccreditation process, “Targeting Tomorrow” was published identifying five strategic trends for the university: promote research, advance learning, accelerate internationalization, amplify the Wisconsin Idea, and nurture human resources. The university completed another national reaccreditation process that started in 2008.

In an effort to facilitate approvals for new campus research facilities, especially related to the sciences, several capital funding initiatives were started. In the early 1990's, a new effort began with the State of Wisconsin and the university to joint commit to funding major facility improvement initiatives. These funding initiatives allowed projects to occur on a more streamlined approach and solidified funding over a longer period of time for a number of projects.

The projects included:

- WiStar (1991-93 biennium): This \$150 million program required a 50/50 match of private to state dollars and lasted for 8 years focusing efforts on improving and upgrading biological and basic science facilities.
- HealthStar (1997-99 biennium): This \$210 million program required a 1/3 General Fund Supported Borrowing to 2/3 Gift/Grant/Program Revenue Supported Borrowing split funding that lasted for 6 years focusing on the Medical School and Health Sciences facilities on the West Campus.
- BioStar (2001-03 biennium): This \$317 million program required a 50/50 match of private to state dollars and lasted for 10 years and focused on new biological and interdisciplinary science facilities.



Figure 2-23 Figure Ground Map, 2000

Building footprints and roadways adapted from University of Wisconsin–Madison Facilities Planning & Management 2007 Base Map, and May 1999 Aerial Photograph.

2. BACKGROUND

The 1996 Campus Plan served the campus well into early 2005. Several recommendations were deemed unlikely to be forwarded due to changing campus priorities and planning circumstances beyond the control of the university (namely changing street use patterns and closing city streets south of University Avenue). In all, the 1996 Campus Plan was successful in guiding 10 years of facilities development on the campus.

As in any planning process, the horizon is never ending. It was clear in 2005 that the campus was going to continue to change and evolve, meeting new challenges and providing quality learning environments for future researchers, faculty, students and staff. It was time for a new facilities growth capacity plan for the 936-plus acres of the main UW–Madison campus.

2005 Campus Master Plan

“Recreating Ourselves in Place”

As a result of the regents’ enrollment management efforts, the university’s enrollment was projected to remain at approximately 41,500 students (headcount), well into the future. Continued moderate growth would be seen in faculty and staff related to the university’s research engine, estimated to be approximately 2% per year. The 2005 Campus Master Plan addressed how to responsibly plan for growth without requiring significant land acquisition outside the current development plan boundary approved by the Board of Regents in 1996. It also provided recommendations for a responsible “carrying capacity” of the land, striving to balance the importance of open space to building space within the campus development plan boundary of the campus.

Six major goals were identified as part of the 2005 Campus Master Plan process:

Goal #1 – Sustainability

Protect, enhance and celebrate our lakeside setting. Develop sustainability guidelines using “green” building designs, materials and techniques. Reduce our impact on the land and better manage energy use. Investigate use of alternative fuels for heating plants and fleet vehicles.

Goal #2 – Community, Academic and Research Connections

Promote the Wisconsin Idea by enhancing community connections. Define our borders and enliven streetscapes with more trees and more public gathering places. Make boundaries inviting and transparent. Enhance academic connections by replacing aging buildings, adding research space and improving the quality and quantity of academic facilities. Promote interdisciplinary learning and research with flexible new facilities.

Goal #3 – Student Life

Renew a commitment to student life by renovating, rebuilding or restoring our unions and adding upgraded recreation facilities. Add on-campus housing space and continue to promote learning communities. Create new outdoor spaces for informal student gatherings.

Goal #4 – Buildings and Design Guidelines

Renew campus by removing obsolete buildings that cannot be renovated. Provide buildings with renewable designs and a planned life of at least 100 years. Preserve significant historic buildings. Define existing neighborhoods of design to ensure new buildings fit into their campus context. Develop comprehensive design guidelines to provide architectural coherence.

Goal #5 – Open Space

Protect and enhance existing open spaces and create new gathering areas. Maintain lands in the Lakeshore Nature Preserve as natural areas that support our mission of teaching, research and outreach. Protect and enhance known historic cultural landscapes, quadrangles and courtyards.

Goal #6 – Transportation and Utilities

Provide attractive options to driving alone. Maintain parking capacity. Provide more pedestrian areas, bicycle lanes, connected paths and bicycle commuter facilities. Plan for the future development of commuter rail and streetcars. Provide a reliable utility network to meet current and future demands.

Four major components were identified to be studied in the 2005 Campus Master Plan, including:

- 1. Buildings** – Which buildings should remain and which are nearing the end of their useful life? How much new space will be needed to support growth in the research engine of the campus? How can we decompress current research and teaching facilities to provide the outstanding types of facilities our faculty, staff and students require? What is the responsible building capacity of the currently developed land within the campus boundary? If we do not have enough land to meet our programmatic needs, while protecting important open spaces, will we need to develop a satellite campus outside of downtown Madison?

2. BACKGROUND

2. **Open Space** – What are the important green spaces on campus that need to be protected or enhanced? Can we add more usable open space if we remove buildings or surface parking lots and without purchasing additional land outside our existing approved boundary? Where can we create new courtyards and quadrangles in the more urbanized campus to provide outdoor gathering areas for passive use?
3. **Transportation** – How can we continue to maximize our progressive Transportation Demand Management initiatives and continue to provide sustainable alternatives to driving alone to campus, all while maintaining our current 13,000 parking spaces? How can we have campus users make a positive choice to use an alternative form of transportation to, from and around campus? How can we improve our public transit system on campus and move people quickly and efficiently across campus without using their cars?
4. **Utilities** – What is the capacity of our utility systems to support current and future campus facilities? What utilities require improvements or expansion in order to meet our needs? What about alternative fuel sources and sustainability in our energy use and building design?

For all of these areas, existing components were analyzed; guidelines developed for the future, and sustainability issues were addressed.

At the conclusion of the 2005 Campus Master Plan process, it was confirmed that indeed the campus had plenty of capacity to build up to an additional net 7 million gross square feet without having to significantly change the campus planning boundary or think about a satellite campus, as many universities have across the country. Surface parking lots, some 10% (90+ acres) of the campus land area in 2005, were suggested as the potential space to grow the campus facilities by consolidating surface parking into structured parking garages in key locations were needed most in the fabric of the campus landscape.

Additionally, with a review of the then existing building stock, it was confirmed (and as projected) that many buildings built in the 1960's and 1970's were nearing the end of their useful life and a decision would have to be made on keeping them for renovation, remodeling and re-programming, or remove the buildings for future redevelopment. In the end, a combination of the two was recommended across the campus for buildings that critically needed upgrades.

Since the completion of the 2005 Campus Master Plan, and with the national economic challenges that started in 2008, overall campus construction and new capital projects, has slowed considerably compared to the redevelopment that

occurred between 1996 and 2006. In 2015, the campus has only completed about 35% of the 2005 Campus Master Plan which suggests there is still adequate potential for future growth and redevelopment on the campus without significantly expanding our planning boundary.

In 2009, the City of Madison approved their new municipal zoning code, last updated (created) in 1966. Included in the new form-based code was the development of a new "Campus-Institutional" (C-I) zoning district. With the approval of the new code, UW–Madison has the ability to have a comprehensive campus master plan approved by the city and codified by ordinance. The new C-I district requires the development of an approved campus master plan every 10 years. With the 10-year update in 2015-16 of the 2005 Campus Master Plan, the university is poised to have its first ever Campus Master Plan approved by the City of Madison.



Figure 2-24 Ayers Saint Gross 2005 Campus Master Plan

Historic Preservation Planning at UW–Madison

Registered and Listed Buildings

With this significant historical perspective of the campus and how it developed, comes the need to develop a historic preservation plan for the university. This rich history today is codified in the recognition of two historic districts and 18 buildings listed by themselves on the National Register of Historic Places. Four of these buildings have also reached National Landmark status with the National Park Service. In addition, 45 buildings are currently listed on the Wisconsin Architecture & History Inventory by the Wisconsin Historical Society as having potential historic value to the State of Wisconsin. Some of these are the already noted National Register buildings as listed below.

Per Wisconsin Statute 44.40 the university and State of Wisconsin are required to consider any proposed action that may affect a historic property listed on the inventory or on any locally designated list of historic properties. The university then works cooperatively with the Wisconsin Historical Society to review the project details, mitigate the affect and provide a final determination on if the project creates an adverse effect on the historic building or property.

Buildings on the National Register are listed below followed by the dates they were listed.

National Register Districts

Bascom Hill Historic District (1974)

- North Hall
- South Hall
- Bascom Hall
- Music Hall (aka Assembly Hall and Library Building)
- Science Hall
- State Historical Society Building
- Armory and Gymnasium
- Radio Hall (aka Mining and Metal Engineering and Heating Station)
- Carillon Tower
- Memorial Union

- University Club (needs to be reconsidered as contributing)
- Lake Lab (aka Hydrobiology Lab)
- Water Chemistry (aka Sanitary Engineering and Pumping Station)
- Birge Hall
- Education Building (aka Engineering Hall)
- Humanities Building
- Elvehjem Art Center (aka Chazen Museum of Art)
- Helen C. White Hall
- Limnology Laboratory Building
- Law Building

Henry Mall District (1992)

- Contributing
 - Biochemistry (Agricultural Chemistry)
 - Agronomy (aka Agricultural Journalism)
 - Agriculture Engineering
 - Agriculture Hall
 - Wisconsin High School (removed 1993)
 - Henry Mall
 - Hoard Statue
 - William A. Henry Memorial Boulder
- Non-contributing
 - Stovall State Lab of Hygiene
 - Genetics Building
 - 1956 Wing, Biochemistry
 - 1985 Wing, Biochemistry

Buildings on the National Register of Historic Places (date of listing)

- Agriculture Dean's Residence (1984)
- Agricultural Engineering (1985)
- Agricultural Hall (1985)
- Agricultural Heating Station (1985)
- Camp Randall Memorial Park (1971)
- Biochemistry (aka Agricultural Chemistry Building) (1985)
- Hiram Smith Hall and Annex (1985)
- Lathrop Hall (1985)
- Materials Sciences Building (aka Old US Forest Products Lab) (1985)
- North Hall (1974 and 1977) National Landmark Status (1966)
- Observatory Director's Residence (1985)
- King Hall/Soils (aka Horticulture, Agricultural Physics and Soil Science) (1985)
- Red Gym/Armory (1974) National Landmark Status (1993)
- Science Hall (1993) National Landmark Status (1993)
- Stock Pavilion (1985)
- UW Fieldhouse (1998)
- Washburn Observatory (1985)
- Wisconsin Dairy Barn (2002) National Landmark Status (2005)

Buildings on the Wisconsin Architecture and History Inventory (date surveyed)

All of the above buildings listed on the National Register or in a National Register of Historic Places District (including all contributing and non-contributing buildings)

- Barnard Hall (1974)
- Chadbourne Hall (1973)
- Chamberlin Hall (1974)
- Engineering Research Building (1973)
- Heating Station (aka Old Heating Plant) (1974)
- Home Economics Building (aka School of Human Ecology) (1974)
- Horticulture Hall (1973)
- Mechanical Engineering (1974)
- Primate Center (1985)
- Sea Grant Institute (1973)
- Sellery Hall (1973)
- Service Building (2003)
- Sterling Hall (unknown)
- University Life Saving Station (1997)
- Vilas Hall (1998)
- WARF Building (1974)
- Weeks Hall (aka Geology Building) (1973)
- Wisconsin General Hospital (aka Medical Sciences Center) (1974)

Buildings Eligible for National Register Designation

(As determined by the Wisconsin Historical Society staff)

- Adams Hall
- Animal Science Building
- Barnard Hall
- Biotron Laboratory
- Camp Randall Memorial Sports Center (aka The Shell)
- Carson Gulley Commons
- Cole Hall
- Elizabeth Waters Hall
- Enzyme Institute
- Goodnight Hall
- Horse Barn
- Humphrey Hall
- Ingraham Hall (formerly Commerce Building)
- Institute for Enzyme Research
- Keystone House and Garage (aka 901 University Bay Drive)
- Kronshage Dormitories (Chamberlin, Conover, Gilman, Jones, Kronshage, Mack, Showerman, and Swenson)
- McArdle Cancer Research Building
- McClain Athletic Facility
- Mechanical Engineering Building
- Meiklejohn House
- Middleton Building (former Middleton Medical Library)
- Nancy Nicholas Hall, School of Human Ecology (former Home Economics)
- Nutritional Sciences (former Children's Hospital/Orthopedic Hospital)
- Phillips, Vel Hall
- Service Building Annex (former Old Heating Plant, Central Heating Station)
- Picnic Point Change House/Beach House
- Primate Laboratory and Addition
- Sewell Social Science Building
- Short Course Dormitories (Humphrey and Jorns)
- Slichter Hall
- Steenbock Library
- Sterling Hall
- Teacher Education
- Temin Lakeshore Path
- Tripp Hall

- Van Hise Hall
- Van Vleck Hall
- Vilas Communication Hall
- WARF Office Building

There are also several important archaeological sites on campus which are mapped and inventoried by the Wisconsin Historical Society (see Figure 2-25). Several are on the National Register of Historic Places and others are inventoried and catalogued. Some of those major sites include (with their State Archaeological Site Number and Year Cataloged, if known):

- Willow Drive Mounds (DA-119)
- Picnic Point Grove Mounds (DA-120)
- Picnic Point Mound Group (DA-0121) (2006)
- Stevens (DA-122)
- Unnamed Group (eastern end of Picnic Point) (DA-123)
- Unnamed Group (west lakeshore residence halls and the Natatorium) (DA-124)
- Picnic Point Bay Mounds Group (DA-125)
- University Ridge Mound Group (DA-126)
- Breitenbach (along University Bay Drive, west of the Recreation fields) (DA-128)
- Eagle Heights Group (DA-0130) (2006)
- Eagle Heights Field (DA-413)
- Picnic Point (DA-501)
- Observatory Hill Mound Group (DA-0571) (2006)
- Bascom Hill Mound Group (DA-573)
- North Hall Mounds (DA-819)
- Agricultural Hall Mounds (DA-820)
- South Slope (on Picnic Point) (DA-1168)
- Unnamed (on Picnic Point) (DA-1169)
- Observatory Hill Village (DA-1207)
- Muir Knoll (DA-1208)

Further detailed information is available on all of these sites, including a map with all of the historic sites, in the Campus Planning & Landscape Architecture office of Facilities Planning & Management and on their website.

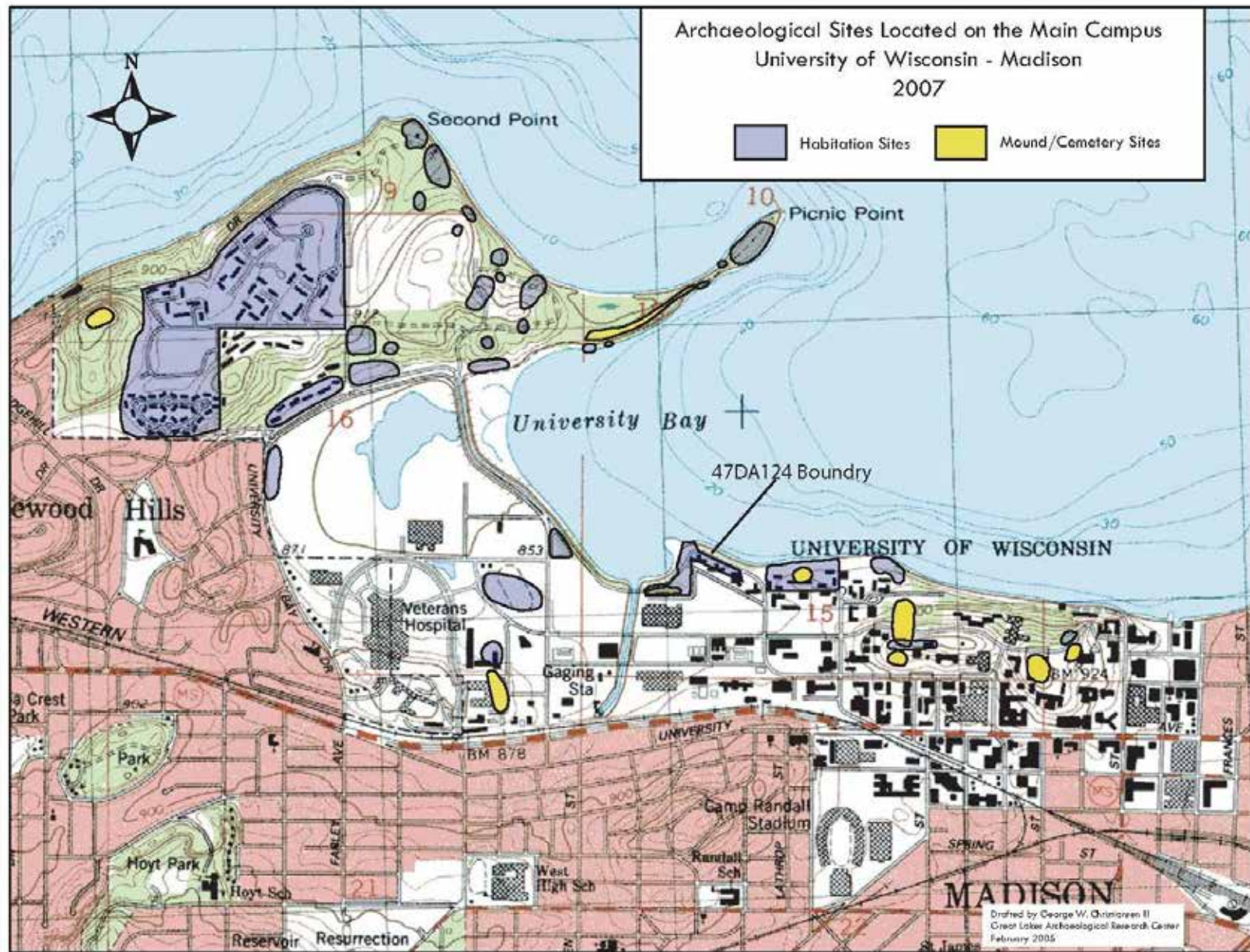


Figure 2-25 Archaeological Sites on the Main Campus of the University of Wisconsin–Madison

Cultural Landscape Resources

In 2005, the university developed a Cultural Landscape Resources Plan as one part of a collaborative project entitled the Cultural Landscape Resource Project. The Cultural Landscape Resource Project developed a base of knowledge and resources to protect the significant cultural landscapes on campus. The Cultural Landscape Resource Project was funded through a grant from the J. Paul Getty Trust and supported by Facilities Planning & Management. The Cultural Landscape Resource Project was developed under the guidance of the Wisconsin Department of Administration, Quinn Evans Architects, faculty and students from the UW–Madison Department of Landscape Architecture and staff of Facilities Planning & Management. Portions have been excerpted from the planning documents developed by that process and included in this comprehensive campus master plan. A complete copy of the analysis and recommendations in the Cultural Landscape Resource Project can be found for reference in the UW–Madison Facilities Planning & Management office or in the UW–Madison Library system.

The cultural landscapes on the UW–Madison campus are places that provide touchstones to the past. Stories related to past activities bring the history of these places to life for people who use, visit, and explore these sites today. The campus today can be compared to a fabric woven of historic and contemporary landscapes that are intertwined. The historic landscapes retain the ability to conjure the past as three-dimensional entities that display a sense of place and contain physical reminders of the activities that occurred. As such, the preservation of historic landscapes takes on the same responsibility as the preservation of historic buildings.

The university is undergoing a period of change that requires updated and new facilities to address the needs of advancing education and research. Since the campus is surrounded by the City of Madison on three sides and Lake Mendota on the fourth, only limited opportunities for expansion of boundaries exist. A major goal of the current master planning effort is for the campus to “recreate itself in place” with the physical planning needs met within the current campus boundaries. Identification of the historic landscapes on campus has played an important role in the master planning process in two ways:

1. It has increased understanding of these landscapes through historical research and analysis and helped to identify the aspects that are most essential for preserving their character and integrity; and,
2. It has identified the characteristics and features that are components of the

historic landscapes providing guidance for planning and design for future development on campus.

The protection of historic landscapes already has taken a step forward by integrating these newly identified resources into the current comprehensive master planning process.

The Cultural Landscape Resource Project, completed in fall 2005, includes a number of documents that are available to provide information about the historic landscapes on campus. A Cultural Landscape Report was developed addressing:

- The historical context for the development of cultural landscapes on campus.
- Archaeological resources on campus (details of the site investigations conducted as part of the project and management recommendations for archaeological resources).
- Individual Cultural Landscape Inventories (CLI) for eight sites: Bascom Mall, Library Mall, John Muir Park, Memorial Union Terrace, Observatory Hill, Henry Mall, the Agricultural Campus, and Camp Randall Memorial Park. The CLIs each include: a historic narrative and graphics documenting the physical development of the site; documentation of existing conditions; evaluation of the significance and integrity of the site; and, landscape preservation recommendations.
- A summary of the reconnaissance survey for additional sites including: Temin Lakeshore Path, Lakeshore Area Residence Halls, Class of 1918 Marsh, Picnic Point, Keystone House, Eagle Heights Community Gardens, and University Houses.

In addition to the Cultural Landscape Report, efforts associated with preparing the Cultural Landscape Resource Project, have included

- Historical image and map gallery website: <http://digital.library.wisc.edu/1711.dl/UW.UWCulturalLand>
- UW–Madison cultural resources website: <http://www2.fpm.wisc.edu/planning/culturalresources>
- Press package with information regarding cultural landscapes
- Walking tour brochure of significant campus landscapes
- Interpretive exhibit posters for the eight sites studied
- A PowerPoint presentation that provides an overview of the Cultural Landscape Resource Project, findings.

(The materials listed above are housed at the office of UW–Madison Campus Planning & Landscape Architecture, Facilities Planning & Management and

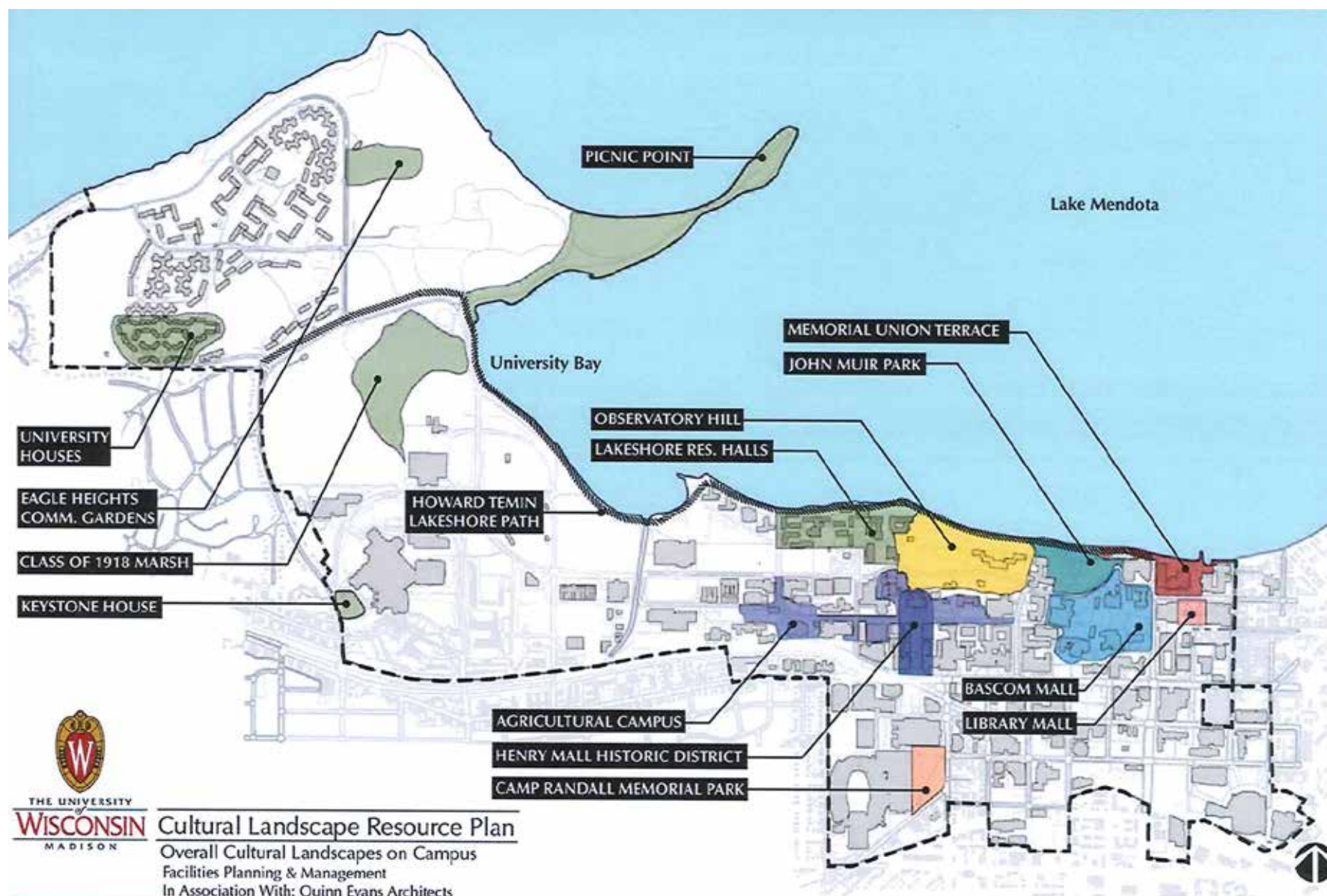


Figure 2-26 2005 Cultural Landscape Resource Project, Fifteen Potentially Significant Sites

2. BACKGROUND

at www.fpm.wisc.edu. Address inquiries to the Campus Planning Director at 608-263-3023.)

The documents address two audiences interested in the cultural landscapes on campus. One is the general public. The other includes the facilities managers, planners, designers, and others involved in the implementation of treatment applications and facilities development on campus. These range from everyday maintenance including mowing, pruning, and building repairs; to restoration, rehabilitation and construction of new buildings and landscapes within the historic site boundaries. The Cultural Landscape Resource Project was a tremendous first attempt to identify, evaluate, and determine appropriate future management for the historic landscapes on campus. An emphasis has been placed on compiling as much information as possible for providing access for future researchers and the general public. The Cultural Landscape Report is a technical document supplying a large amount of information in a simple format. The cultural landscapes and archaeological sites at the UW–Madison campus are tremendously valuable historic resources. The Cultural Landscape Resource Project has also provided a basis for future research and management of these sites.

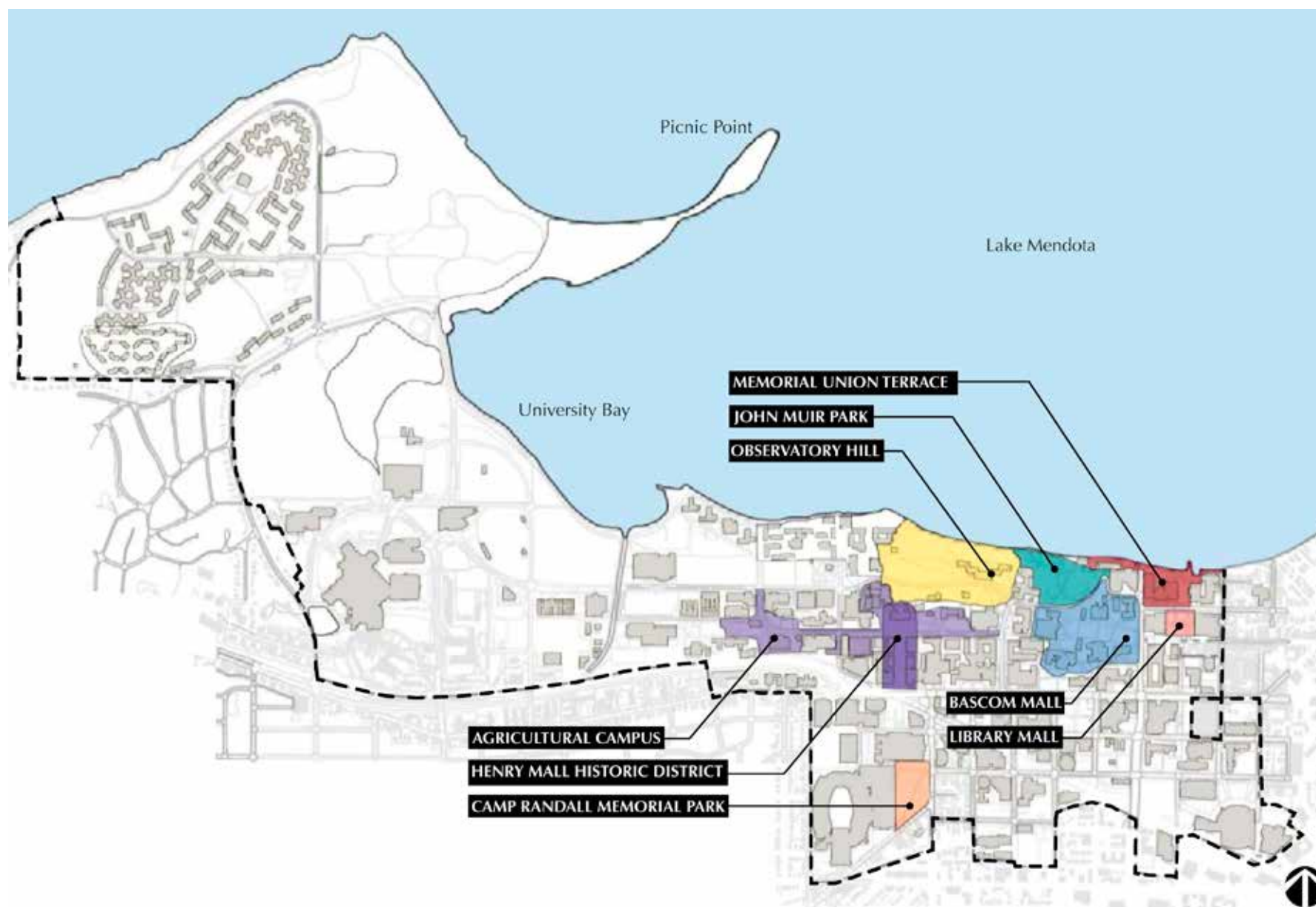


Figure 2-27 2005 Cultural Landscape Resource Project, Eight Sites Selected for In-Depth Analysis

Land Holdings

Main Campus Lands

The UW–Madison main campus currently includes approximately 936 acres within the Campus Development Plan Boundary defined by the Board of Regents with their approval of the 1996 Campus Master Plan. See the Recommendations section for a listing of private parcels within the Campus Development Plan Boundary.

Dane County Properties

UW–Madison manages several properties in Dane County outside the 936-acre main campus in downtown Madison. The major parcels include (as shown in Figure 2-28):

- Arlington Agricultural Research Station (south of Arlington, Wisconsin)
- Kegonsa Research Campus (northwest of Stoughton, Wisconsin)
- University Research Park, East (central Madison, west of the main campus)
- University Research Park, West (far west side of Madison)
- UW Arboretum (central Madison, south of the main campus)
- University Ridge Golf Course (north of Verona, Wisconsin)
- West Madison Agricultural Research Station (far west side of Madison)

Additional smaller, minor properties in Dane County are also currently managed by UW–Madison and include:

- Boltz Prairie (UW Arboretum)
- McKenna Pond
- Harvey Street Apartments (UW Housing)
- Pine Bluff Observatory (UW Astronomy)
- Observatory Woods (UW Arboretum)
- Brittingham House (UW System President's House in The Highlands)
- Olin House (Chancellor's residence in University Heights)
- Knapp House (old governor's mansion on Gilman Street)
- Raywood Road Warehouse (UW Housing)
- Pasque Flower Hill
- O.J. Noer Turf Grass Facility

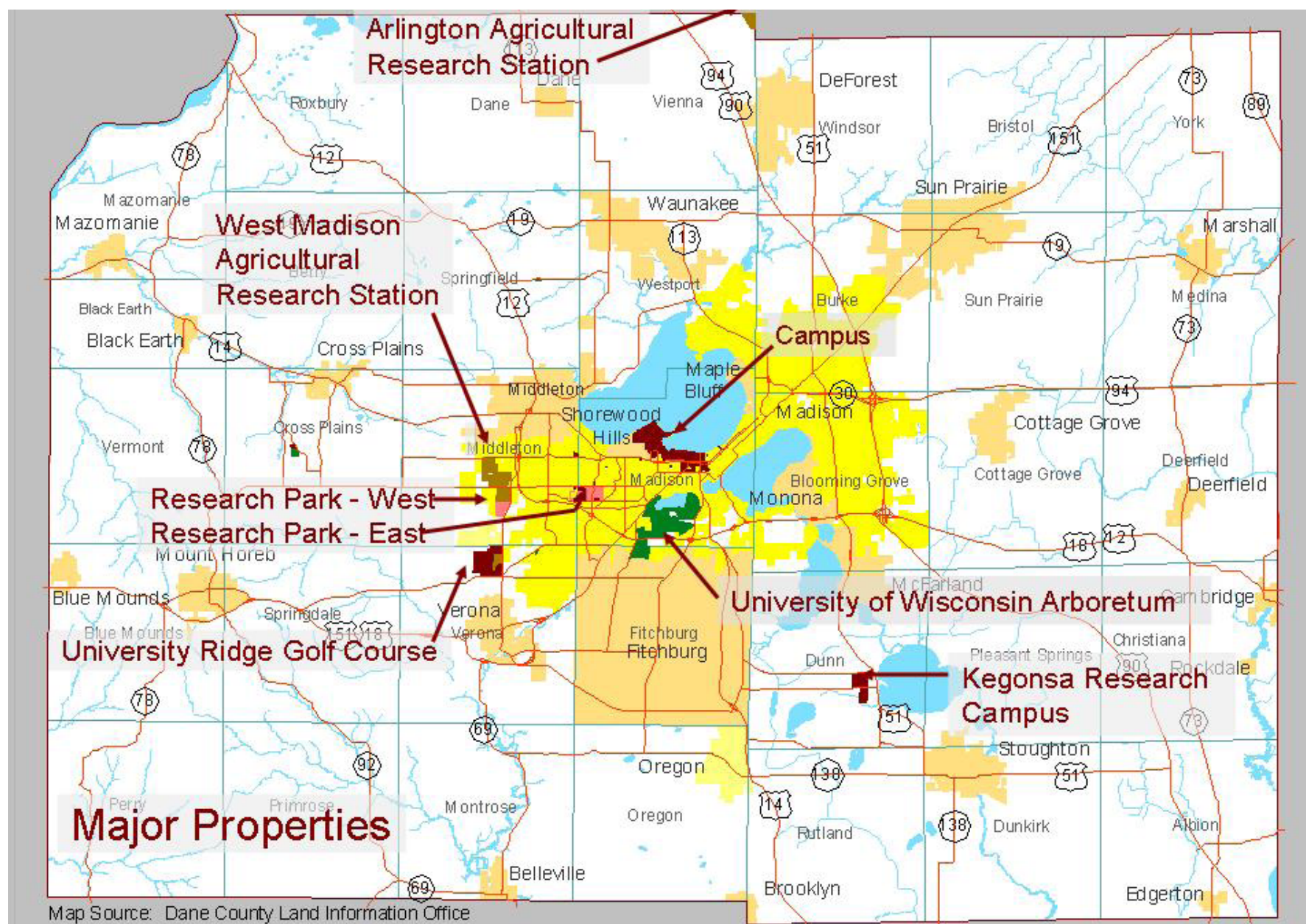


Figure 2-28 University-Managed Properties in Dane County, Major Properties

Other Non-Contiguous Properties

UW–Madison also has management responsibilities for over 29 additional properties outside of the main campus in Madison. Eleven of those sites are managed by the UW Arboretum, including four in Dane County. Eleven additional sites are managed by the College of Agricultural and Life Sciences, including two in Dane County, and eight further sites are managed by other units or departments across campus (see Figure 2-29).

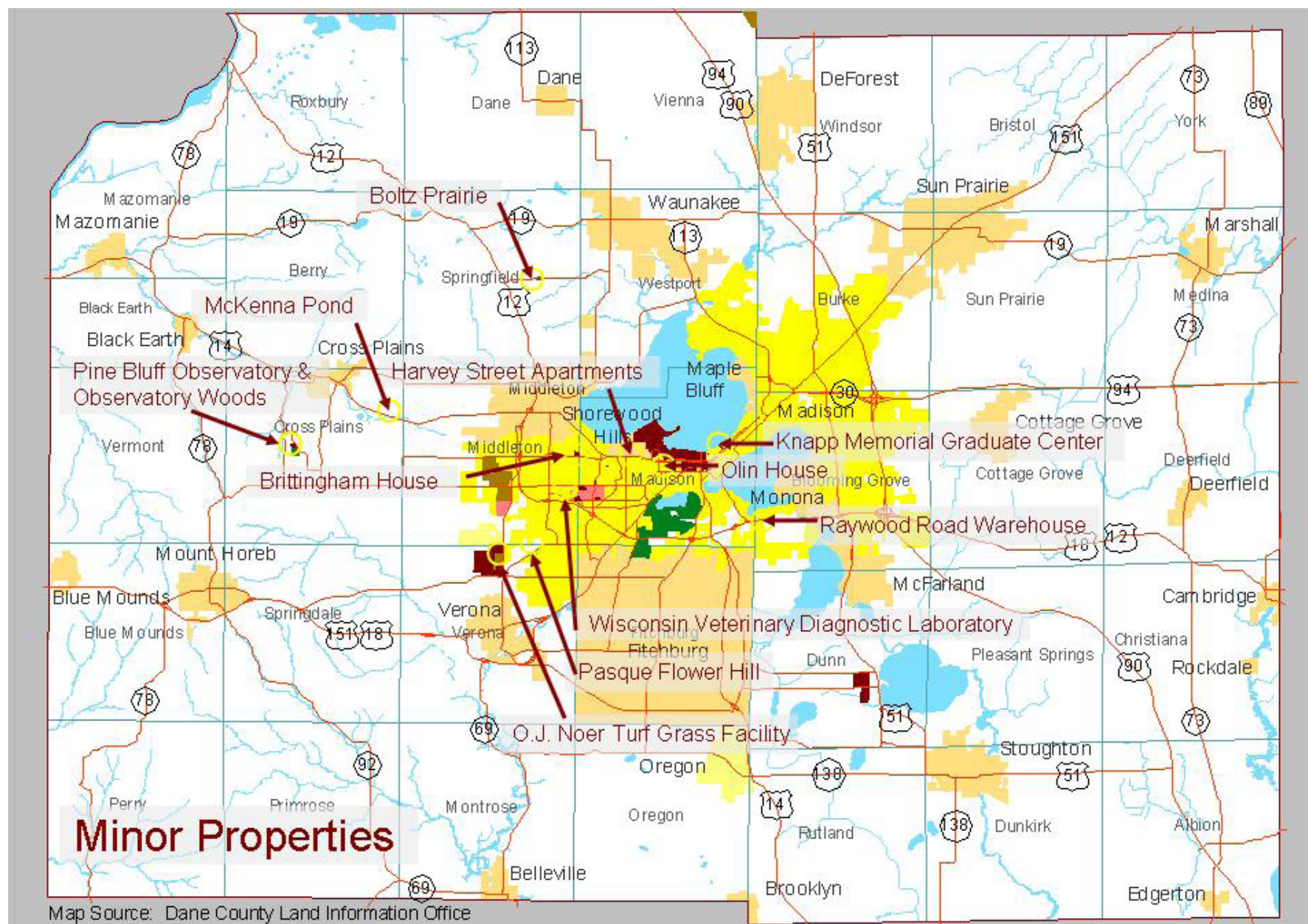


Figure 2-29 University-Managed Properties in Dane County, Minor Properties

2. BACKGROUND

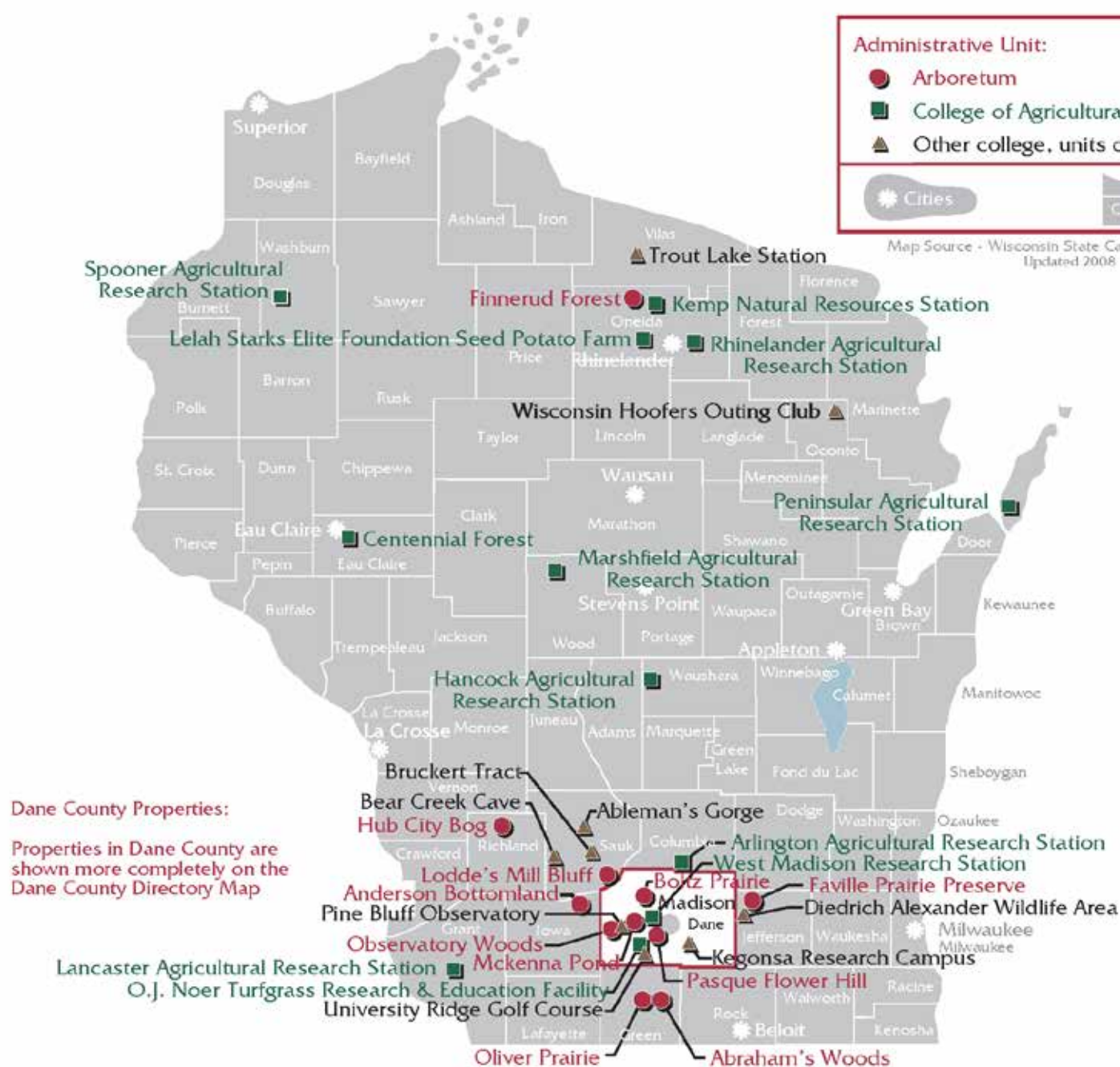


Figure 2-30 Other Non-Contiguous University-Managed Properties



3. CONTEXT AND EXISTING CONDITIONS



Campus Profile

Background and History

Founded in 1848 by a clause in the Wisconsin Constitution that provided for “a State University, at or near the seat of state government,” the UW–Madison has grown to become one of the nation’s largest and most productive institutions of higher learning. Beginning with a class of 17 on February 5, 1849, the university now enrolls more than 42,000 students. UW–Madison offers the only public schools of law, medicine and veterinary medicine in the state and is one of only two state-supported schools to offer doctoral degrees.



Character

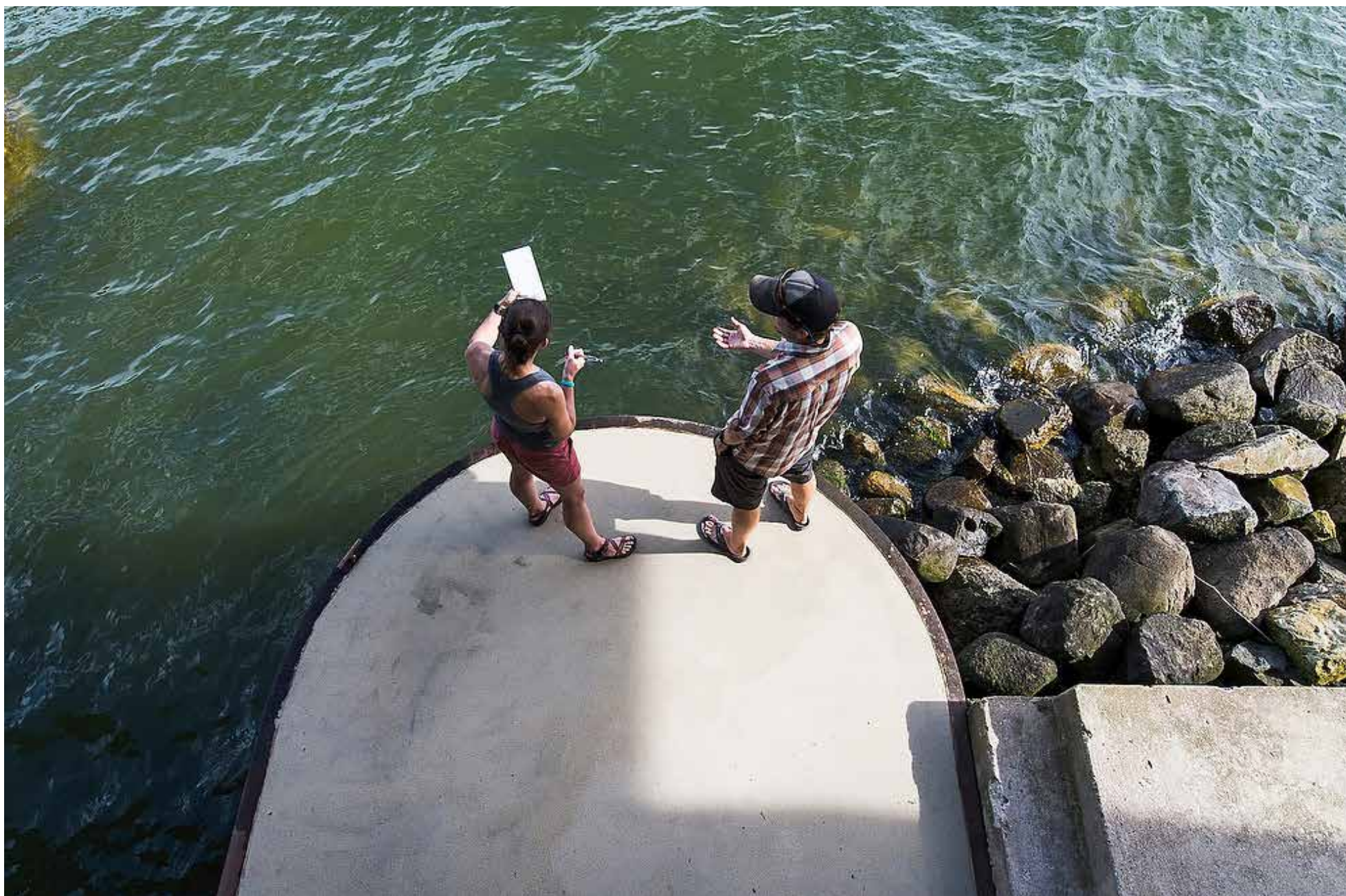
In achievement and prestige, UW–Madison has long been recognized as one of America’s great universities. A public, land-grant institution, UW–Madison offers a complete spectrum of liberal arts studies, professional programs and student activities.

As a land-grant university, UW–Madison maintains a strong research emphasis. Award-winning research spanning the academic disciplines has earned the University a place among the world’s elite institutions of higher education. The flagship school of the UW System, UW–Madison has always sought to return the fruits of teaching and research to Wisconsin residents. In 1904, UW–Madison President Charles Van Hise crystallized the university’s commitment to public service in defining “the Wisconsin Idea,” which mandates that “the beneficent influence of the university [be] available to every home in the state.”

Across all programs, UW–Madison garnered \$1.09 billion of extramural awards in 2010-11 with the largest awards (\$849 million) coming to research programs. These awards translate into service to the people of Wisconsin, hands-on research opportunities for undergraduates, top tier graduate training programs, news-making discoveries by faculty, staff, and students and economic development for the State of Wisconsin. A 2011 economic impact report found that UW–Madison and affiliated organizations and startup companies support 128,146 Wisconsin jobs and generate \$614 million in revenue annually for Wisconsin.

UW–Madison graduates become extraordinary citizens, community members, and national and global leaders. Since the agency was created in 1961, UW–Madison has produced the greatest number of Peace Corps volunteers, second only to the University of California, Berkeley. More leaders of major corporations have graduated from UW–Madison than any other university in the country. We are among the top producers of faculty members who teach at research intensive institutions around the world. Many local, state, and national leaders are our graduates. Something about the UW–Madison experience prepares students to become outstanding leaders who are engaged locally, nationally, and globally. That “something” is the Wisconsin Experience.

Grounded in the hundred-year old Wisconsin Idea and our progressive history, our historical mission has evolved to create an expectation for all faculty, staff, and students to apply in- and out-of classroom learning in ways that have significant and positive impacts on the world. What we do matters, and together we can solve any problem. It is this distinctive Wisconsin Experience that produces graduates who think beyond the conventional wisdom, who are creative problem-solvers who know how to integrate passion with empirical analysis, who know how to seek out, evaluate and create new knowledge and technologies, who can adapt to new situations, and who are engaged citizens of the world.



Context within Region and City

Symbolic and Prominent Location

The university is located in Dane County, less than a mile from the state capitol building. Inland lakes create a narrow isthmus where concentrated development patterns exist within a scenic setting. The campus is well-known for its location along 4 miles of shoreline on Lake Mendota. The City of Madison, with a population of almost a quarter million, is routinely rated as one of the most livable cities in America.

The campus' spectacular lakefront setting is its greatest physical asset. The natural areas, historic landscapes, and public spaces are the places that create astounding first impressions and lasting memories for those who visit, work, and learn at this institution. They are the essence of its physical quality and its greatest hope for the future of the campus' physical environment.

Ancient forces have shaped the campus and its host community. The City of Madison is surrounded by beautiful lakes and natural areas, created by the glaciers some 15,000 years ago. Over 1,000 years ago, the effigy mound culture was prevalent throughout the Midwest and it transformed the topography of many areas of campus. The 1850 Campus Plan, attributed to architect John Rague and the university's first chancellor, John H. Lathrop, proposed situating the campus on Madison's "second hill," facing the nearby state capitol building which was located on the "first hill."

Over time, the campus grew from its first three buildings (North, South, and University (aka Bascom) Halls) on what would become Bascom Hill, to the present day total of 405 buildings spanning 936 acres in downtown Madison.

Shared Resources

The university is intertwined with its host communities of the City of Madison and the Village of Shorewood Hills. Particularly on the south and east campus edges, the university and private uses are blurred.

Student Housing

The university relies on the private housing market to house our students, especially students beyond their first year. On-campus, the university provides:

- Southeast: 4,104 beds
- Lakeshore: 3,465 beds
- Eagle Heights: 1,848 beds

Off-campus, students live throughout the region, but are concentrated in neighborhoods within a short walk, a bicycle ride, or a brief transit ride. Since the 2005 Campus Master Plan, the private real estate market has constructed a significant number of student-focused housing facilities, many of them in higher density towers. These urban developments do not provide on-site open space, resulting in a higher use pressure on existing open spaces on campus and within the city. Considering only the student-focused housing projects constructed or planned between 2008 and 2015:

- East of campus: 4,966 beds
- South of campus: 1,132 beds
- West of campus: 501 beds

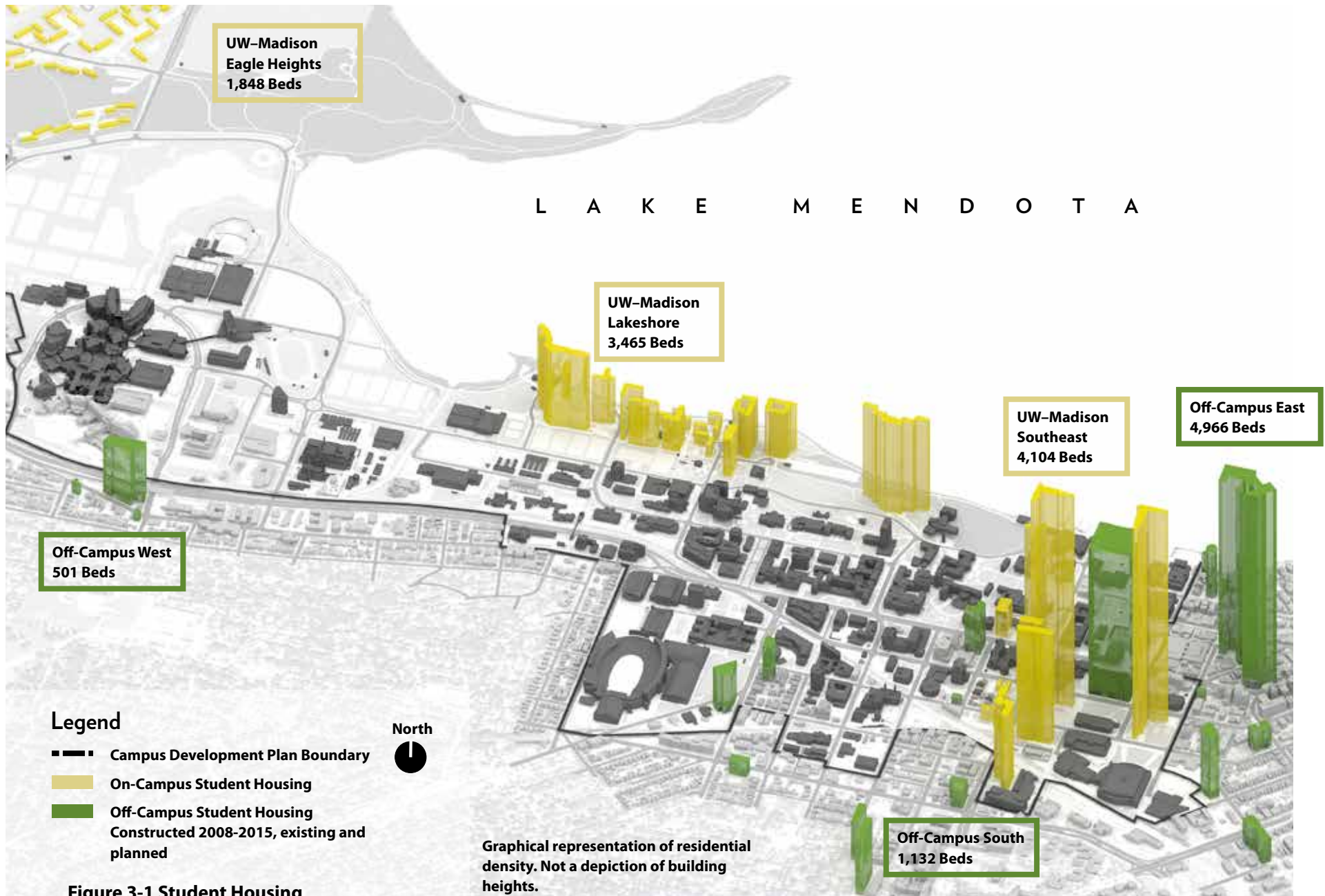


Figure 3-1 Student Housing



Campus Development Plan Boundary

UW–Madison’s main campus currently includes approximately 936 acres within a Campus Development Plan Boundary defined by the Board of Regents.

The last change to the Campus Development Plan Boundary occurred in September 2005 with the inclusion of the University Square redevelopment block bounded by N. Lake Street, University Avenue, W. Johnson Street and N. Murray Street (vacated).

As part of the 2015 Campus Master Plan Update, one minor change to the Campus Development Plan Boundary is recommended in the southeast corner of campus. See Chapter 4: Recommendations for more information.

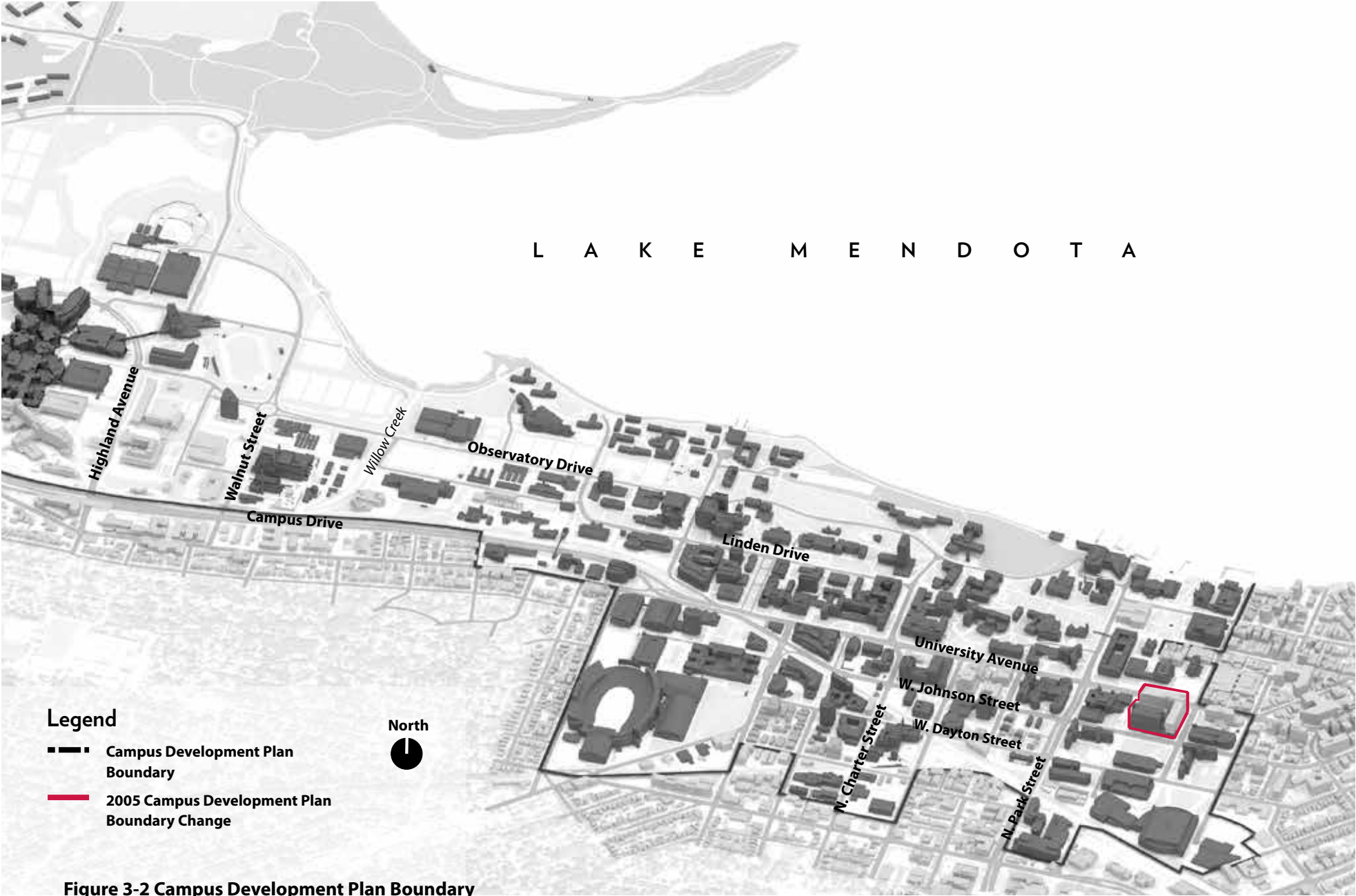


Figure 3-2 Campus Development Plan Boundary

Existing Zoning Districts

The background of Figure 3-3 is the official City of Madison zoning map prepared in 2013. The DASHED black line is the current university extents, known as the Campus Development Plan Boundary. Laid on top, the 'white' boxes indicate the proposed future buildings across campus and how they overlap with the existing zoning. Note where the Campus Development Plan Boundary is identified in the South Campus (south of University Avenue) there are a number of parcels not owned by the university and as such not yet zoned Campus-Institutional (C-I) District. Since this is the only area where this condition occurs, an enlargement graphic (see Figure 3-4) is provided for existing and proposed land use clarity within this area of campus. All non-C-I properties will have to undergo a zoning change before the university can develop these parcels in accordance with the Campus Master Plan.

Zoning Districts

Residential Districts		Employment Districts	
SR-C1	Suburban Residential - Consistent District 1	TE	Traditional Employment District
SR-C2	Suburban Residential - Consistent District 2	SE	Suburban Employment District
SR-C3	Suburban Residential - Consistent District 3	SEC	Suburban Employment Center District
SR-V1	Suburban Residential - Varied District 1	EC	Employment Campus District
SR-V2	Suburban Residential - Varied District 2	IL	Industrial - Limited District
TR-C1	Traditional Residential - Consistent District 1	IG	Industrial - General District
TR-C2	Traditional Residential - Consistent District 2		
TR-C3	Traditional Residential - Consistent District 3		
TR-C4	Traditional Residential - Consistent District 4		
TR-U1	Traditional Residential - Urban District 1		
TR-U2	Traditional Residential - Urban District 2		
TR-V1	Traditional Residential - Varied District 1		
TR-V2	Traditional Residential - Varied District 2		
TR-R	Traditional Residential - Rustic District		
TR-P	Traditional Residential - Planned District		
Commercial and Mixed-Use Districts		Downtown and Urban Districts	
LMX	Limited Mixed Use District	DC	Downtown Core District
NMX	Neighborhood Mixed Use District	UOR	Urban Office Residential District
TSS	Traditional Shopping Street District	UMX	Urban Mixed Use District
MXC	Mixed-Use Center District	DRI	Downtown Residential 1
CC-T	Commercial Corridor - Transitional District	DR2	Downtown Residential 2
CC	Commercial Center District		
Special Districts			
A	Agricultural District		
UA	Urban Agricultural District		
CN	Conservancy District		
PR	Parks and Recreation District		
AP	Airport District		
CI	Campus Institutional District		
PD	Planned Development District		
PMHP	Planned Mobile Home Park District		



Prepared by the City of Madison Planning Division and Zoning Staff | January 2015

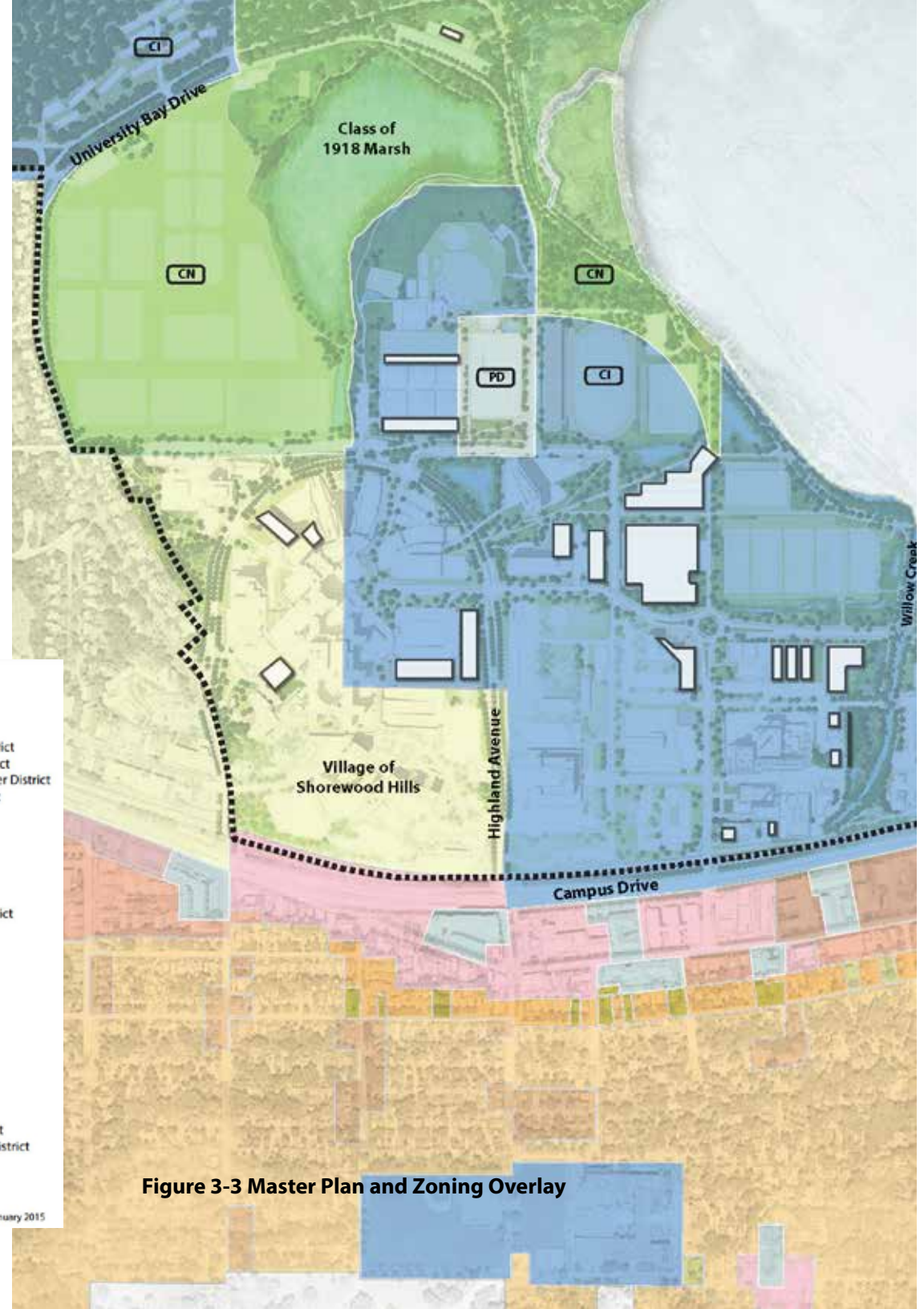
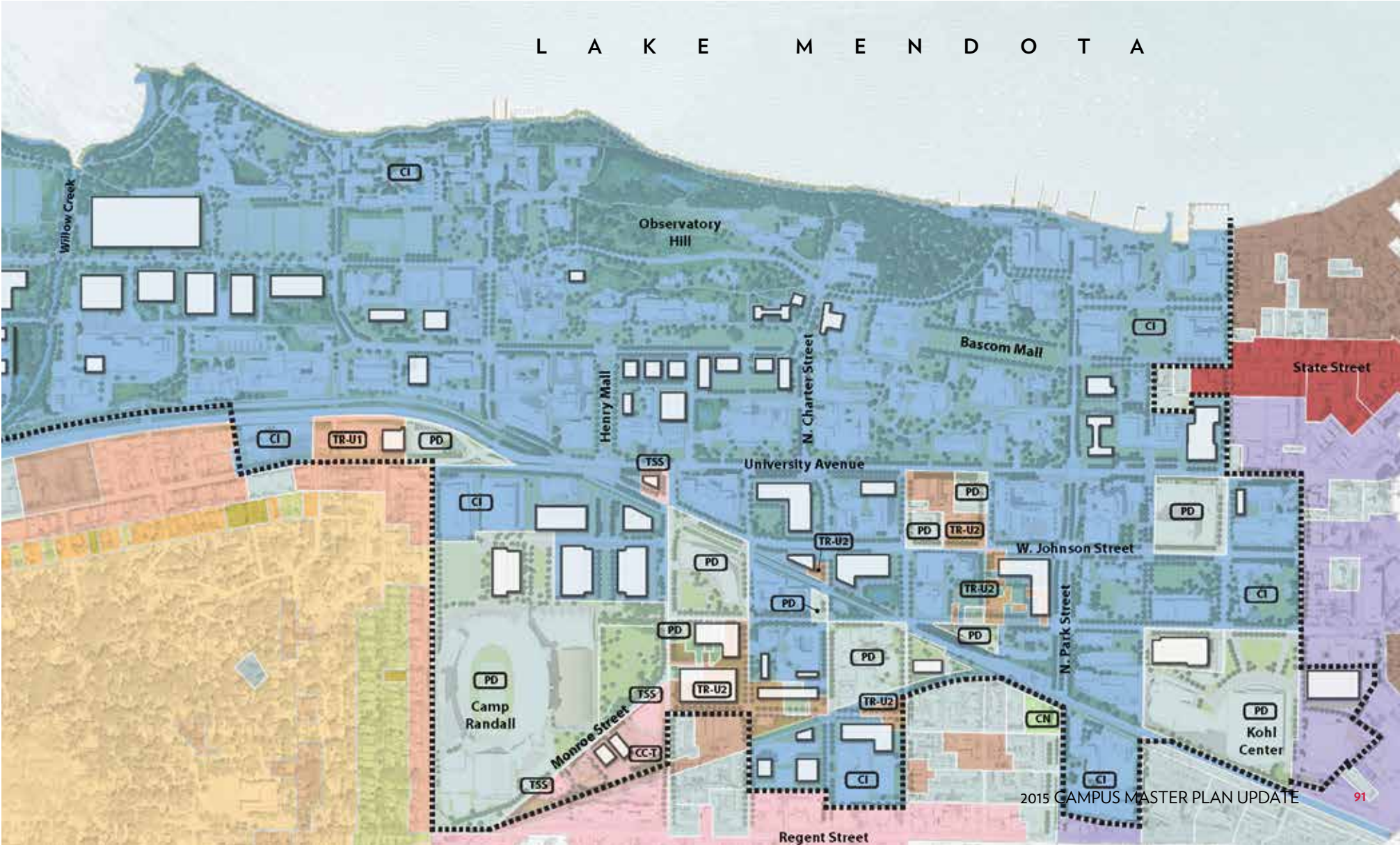


Figure 3-3 Master Plan and Zoning Overlay

L A K E M E N D O T A



3. CONTEXT AND EXISTING CONDITIONS

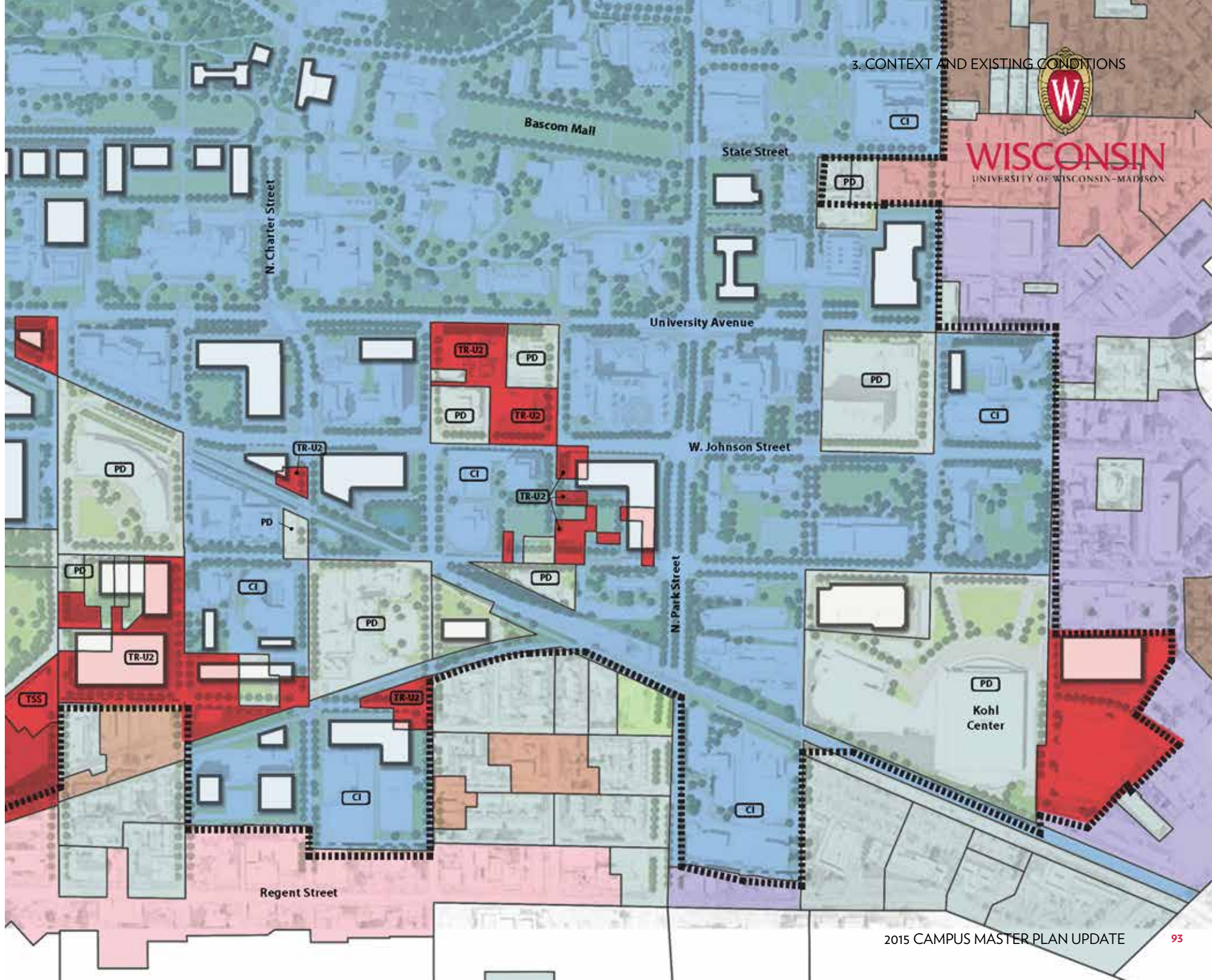
Figure 3-4 identifies the area of campus south of University Avenue where a number of non-university owned parcels exist within the Campus Development Plan Boundary. The 'white' boxes indicate the proposed future buildings across campus and how they overlap with the existing zoning. The 'red' parcels consist of the following zoning districts; TSS, CC-T, TR-U1, TR-U2. The graphic also identifies a number of Planned Development (PD) parcels (formerly Planned Unit Developments) that the university intends to convert to Campus-Institutional (C-I) districts since the conditions have been met and the development reflects the purpose and intent of the larger zoning district. The two exceptions to this would be the Camp Randall and Kohl Center PD. Both of these sites are unique land uses which require specific design standards.



Figure 3-4 Master Plan and Zoning Overlay (Detail)

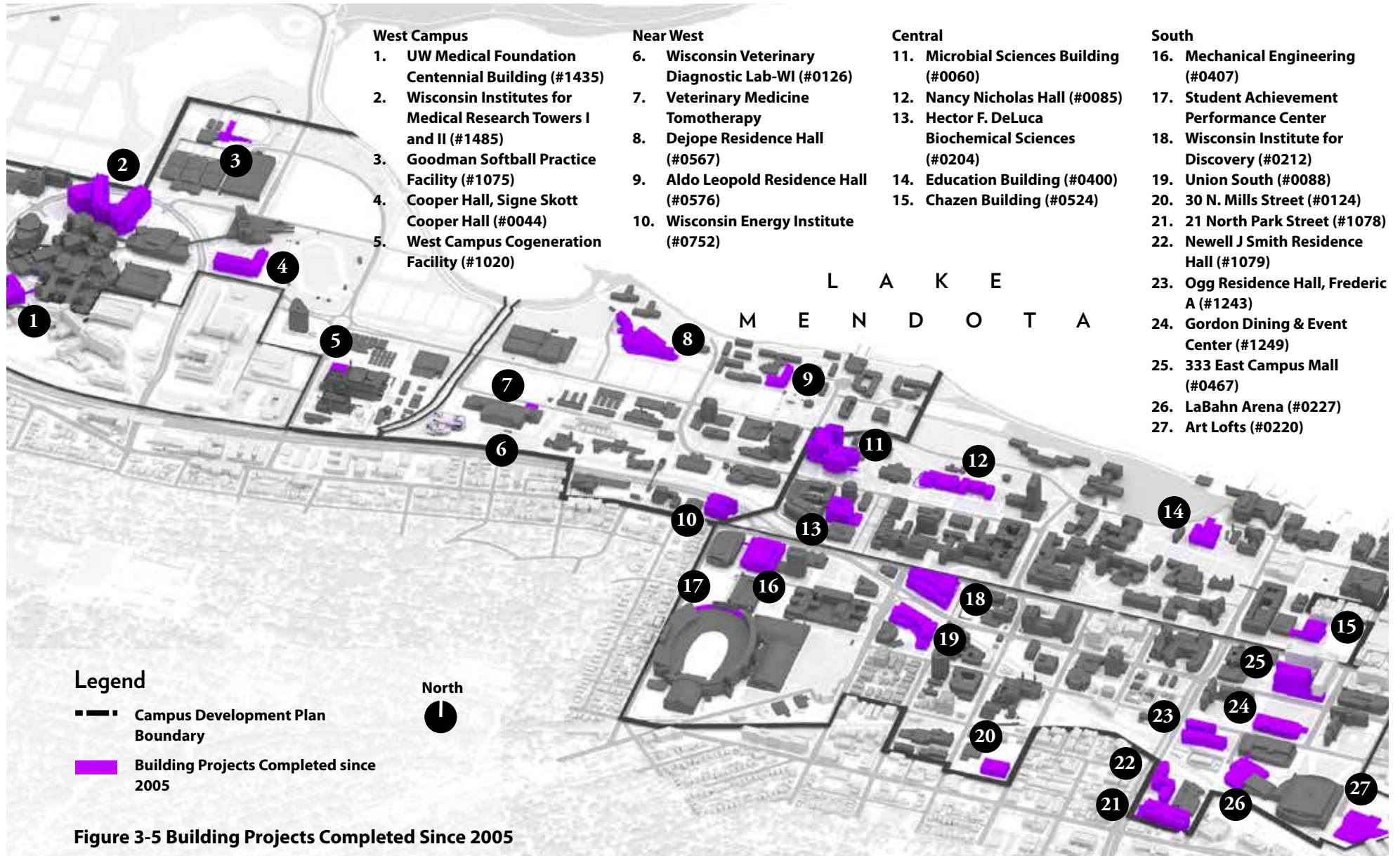


WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON



Projects Completed Since 2005 Plan

The decade after the 2005 Campus Master Plan saw dramatic on-campus changes. New buildings provided over 3,750,000 gross square feet of new academic, research and support spaces. Transportation improvements dramatically connected the campus with the city's bicycle and pedestrian network. These building and transportation projects were sited and designed in support of the 2005 Campus Master Plan.



Legend

Bicycle Improvements

1. Campus Drive Path
2. Extension of Southwest Path ("Missing Link")
3. Bicycle Lands on Walnut Street, south of Observatory Drive
4. Bicycle Lanes, Traffic Calming on Highland Avenue
5. Bicycle Lanes on Observatory Drive
6. Bicycle Lanes on University Bay Drive
7. Bicycle Lanes on Randall Avenue
8. Bicycle Signal Added

Pedestrian Improvements

1. East Campus Mall
2. Signal and Crosswalk on University Avenue at MSC/WID
3. Signal and Crosswalk on University Avenue at East Campus Mall
4. Signal and Crosswalk at Johnson Street at Orchard Street
5. Traffic Calming and Streetscape Improvements on University Avenue at Johnson Street
6. Pedestrian Priority Streetscape on Observatory Drive
7. Sidewalk on east side of Highland Avenue between Campus Drive and Observatory Drive

Roadway Improvements

1. Vacation of Johnson Street (Randall Avenue to Campus Drive)
2. Reconfiguration of Intersection of University Avenue and Campus Drive
3. Extension of Observatory Drive

Parking Improvements

1. CSC Visitor Ramp (Lot 75) Expansion
2. Steenbock Ramp (Lot 36) Expansion
3. Union South Ramp (Lot 80)
4. New Surface Parking Lots (Lots 33 and 45)
5. Surface Parking Lot (Lot 61)
6. Parking Added Under School of Education Green Roof (Lot 10)
7. Parking Added Under School of Human Ecology (Lot 27)

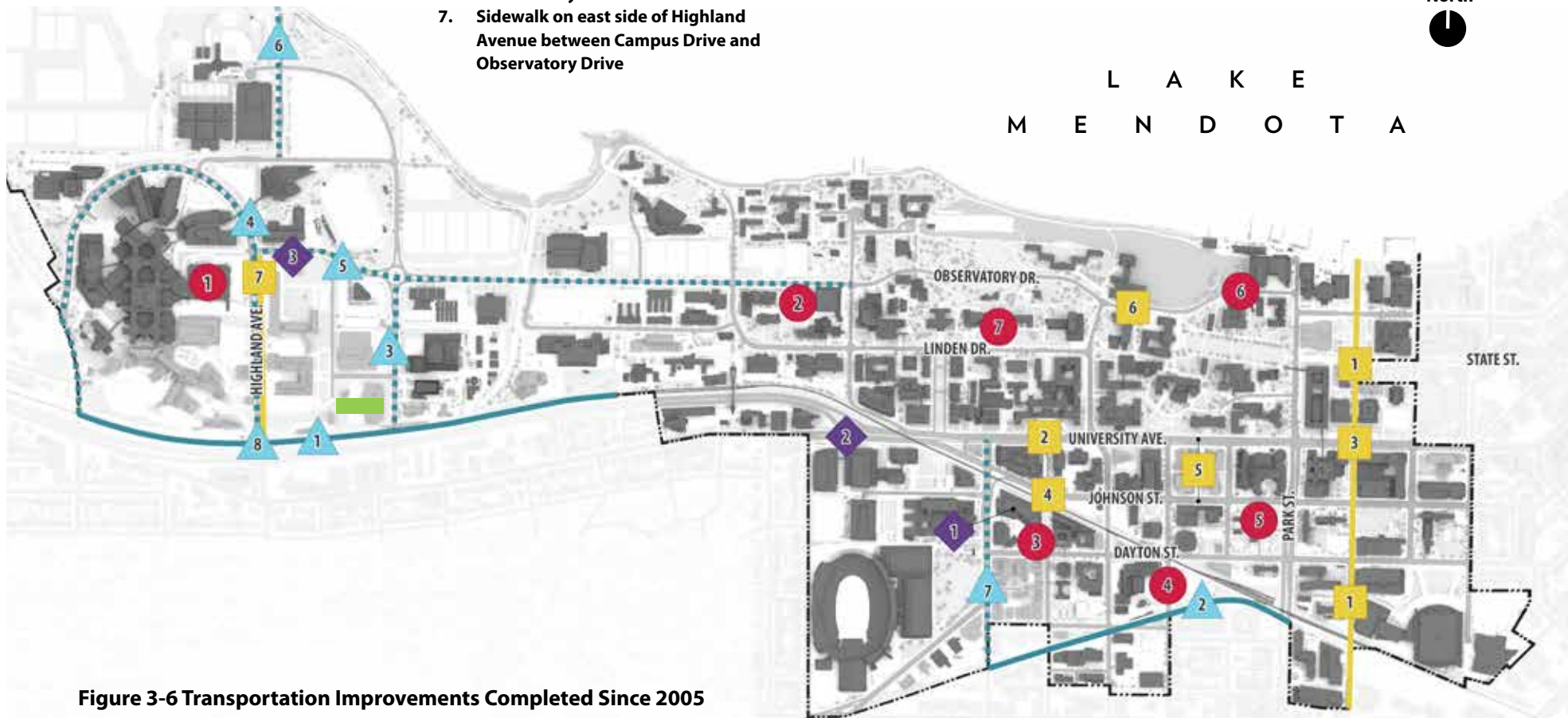


Figure 3-6 Transportation Improvements Completed Since 2005

Campus Planning Districts

The 2015 Campus Master Plan Update divides the campus into five easily recognizable districts, each a collection of several campus neighborhoods.

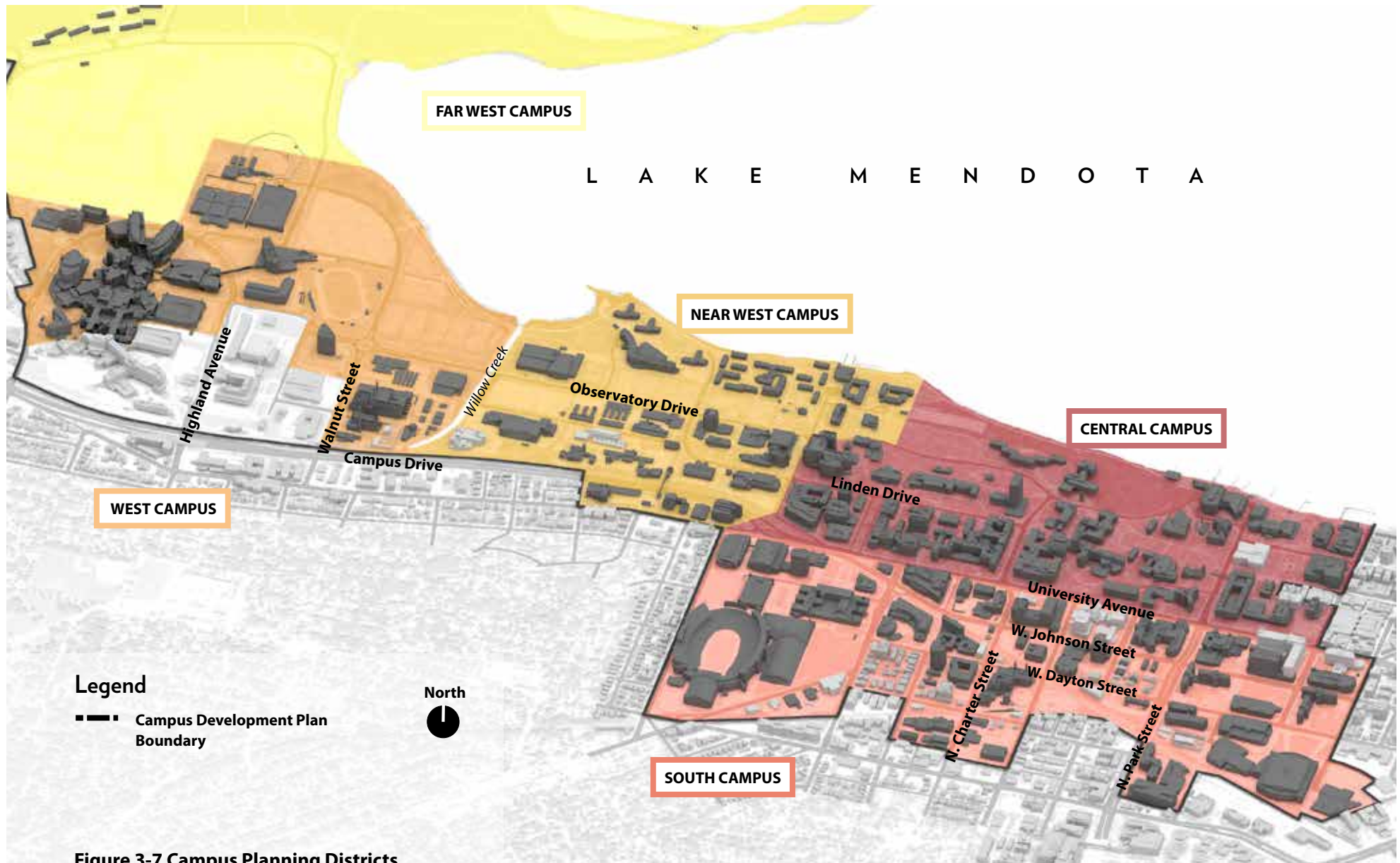
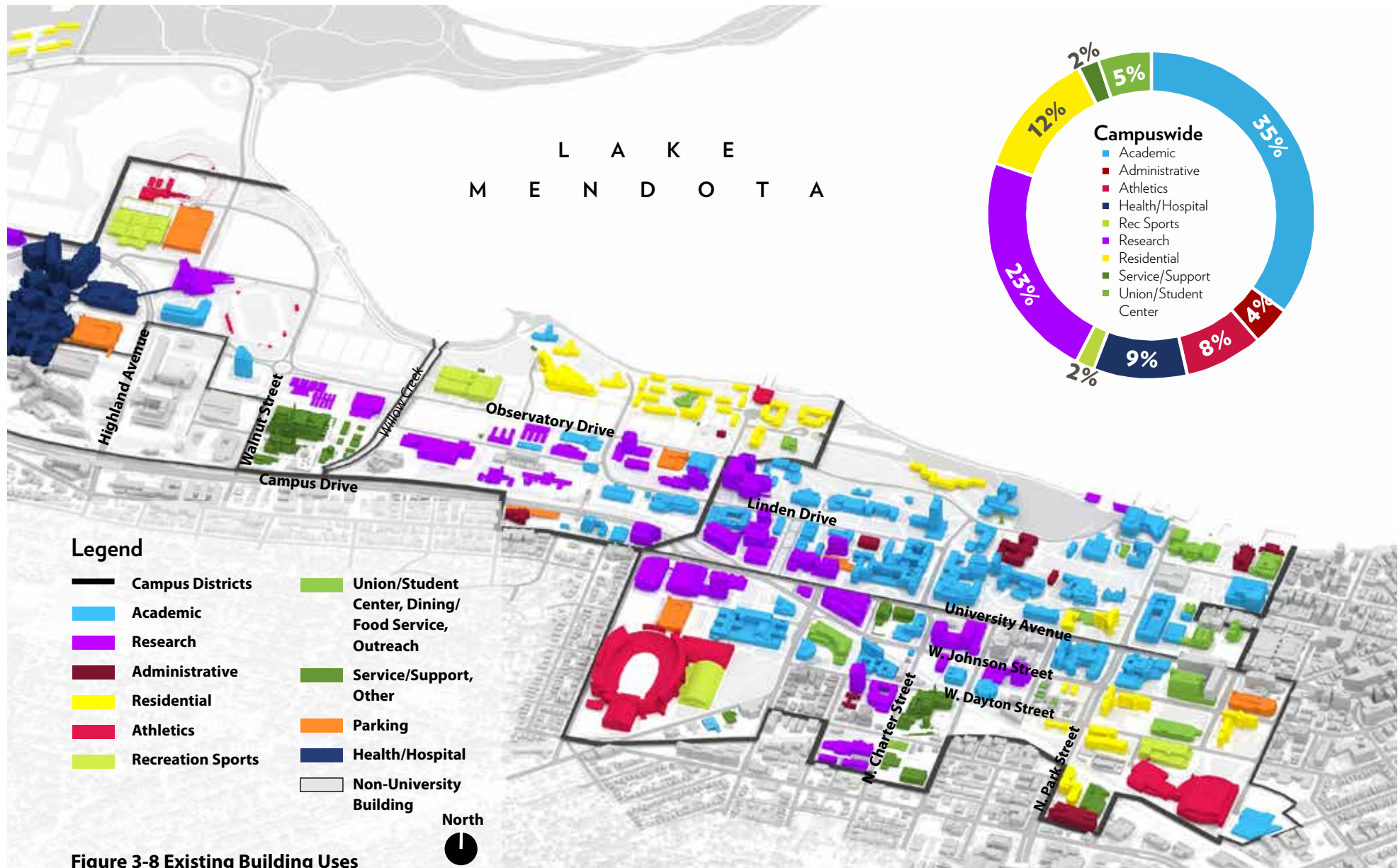


Figure 3-7 Campus Planning Districts

The campus has a clear existing building use pattern. Academic and research uses are concentrated in Central and South Campus, clinical and health research in the West Campus, and agricultural teaching and research in the Near West Campus. There are two distinct student housing neighborhoods in the southeast and along the lakeshore. Athletic venues are in South Campus and in the West Campus.

Campus Land Use



Building Form and Density

The campus planning districts vary considerably in the existing density of buildings. The Central and South Campuses are relatively dense, although differing in open space character. The Far West campus is largely preserved open space and has a low density.

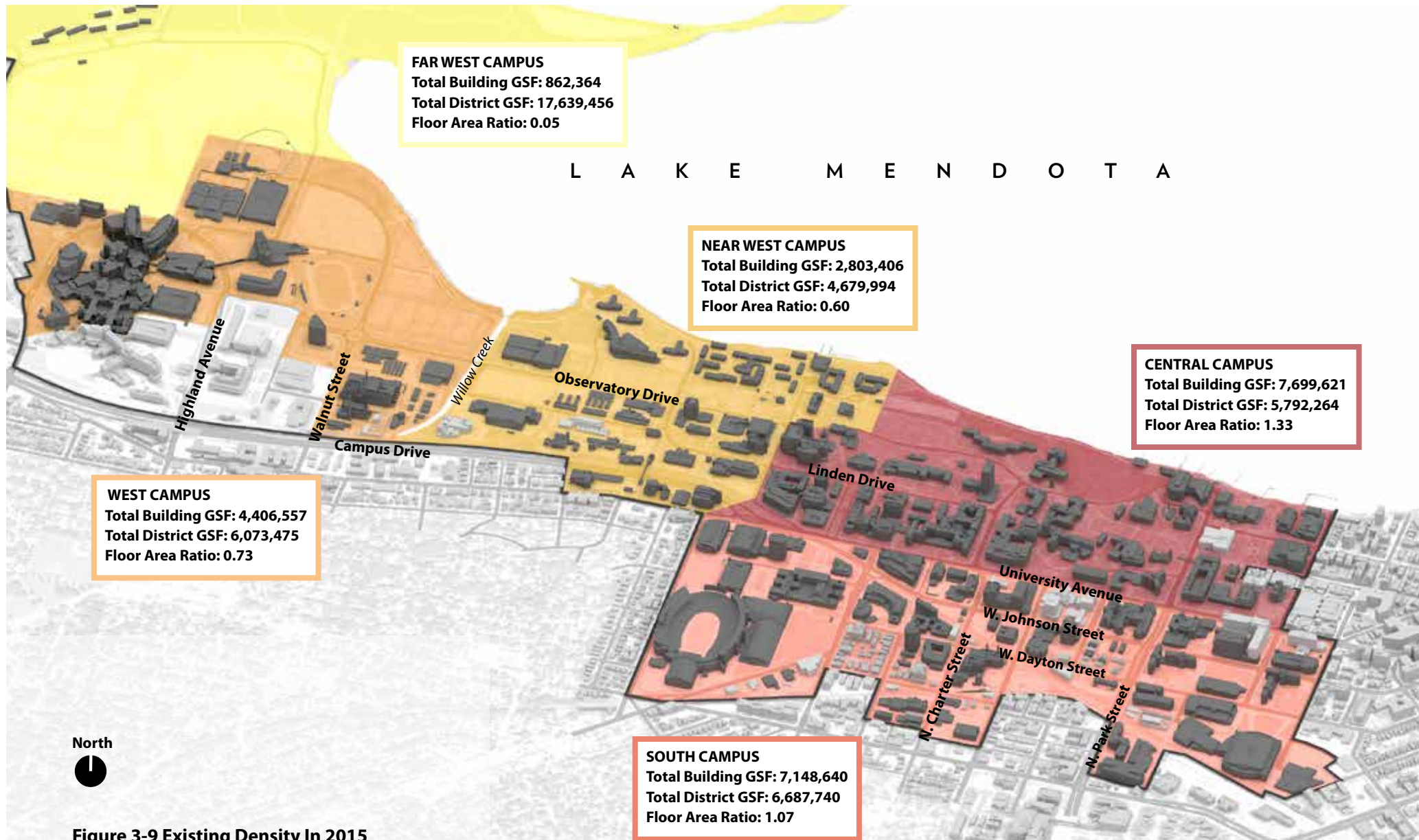
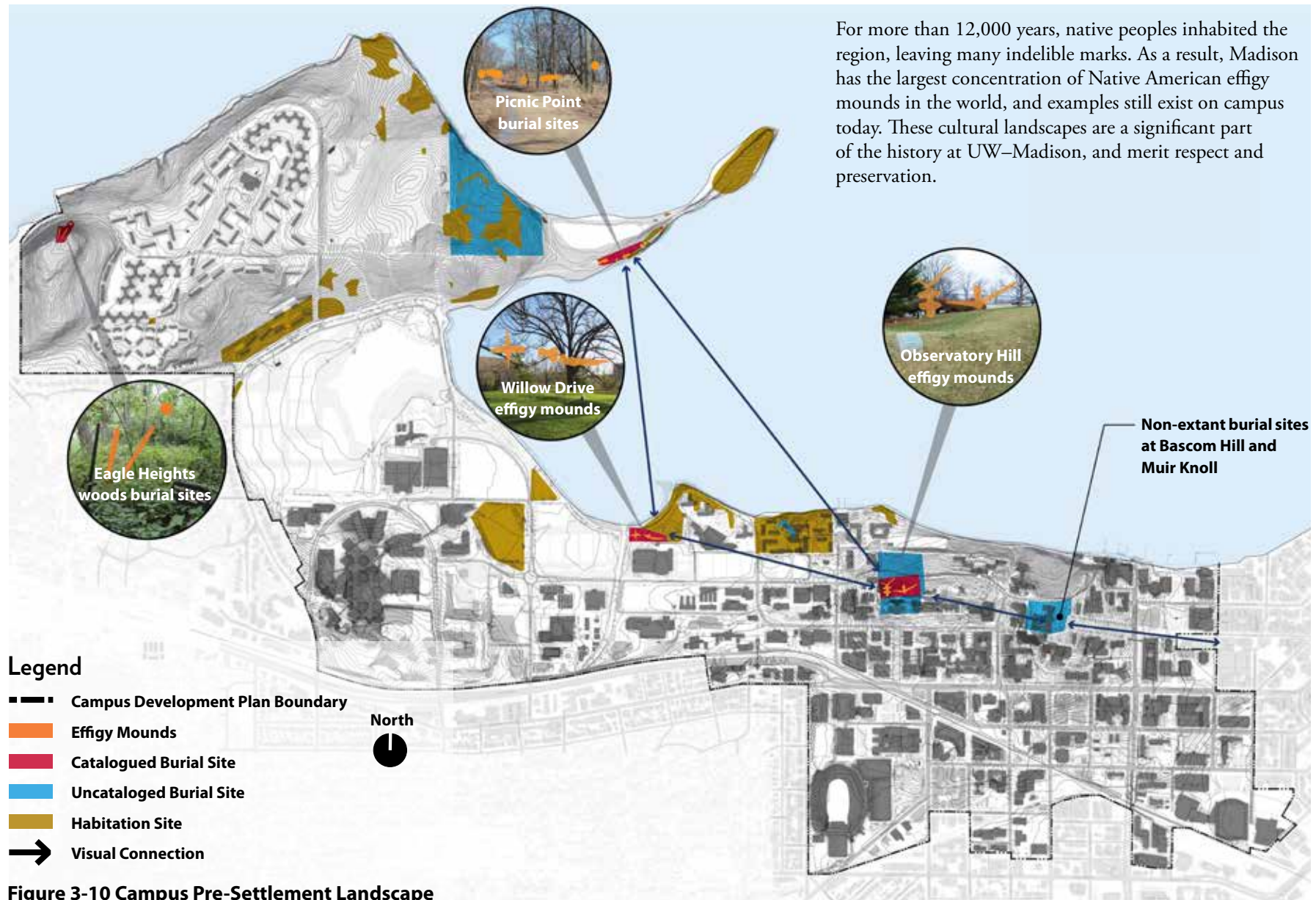


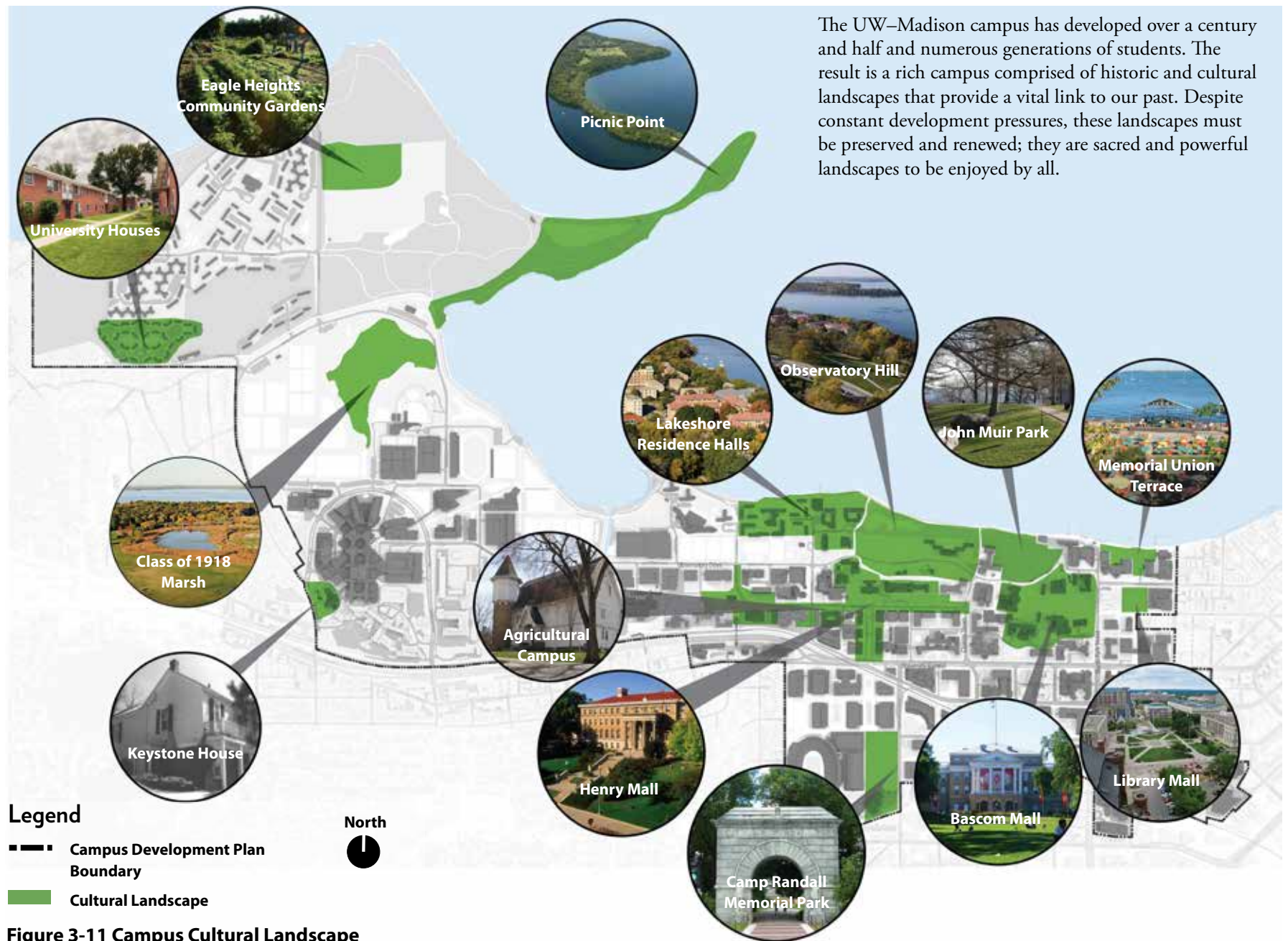
Figure 3-9 Existing Density In 2015

Floor Area Ratio (F.A.R.) is a method measuring density. It is calculated as the sum of the gross floor area (GSF) of all buildings in a district, divided by the size of the district.

To better measure the activity concentration of each district, building GSF and F.A.R. do not include parking structures, Camp Randall, or the Kohl Center.

Landmarks and Historic Sites





Open Space

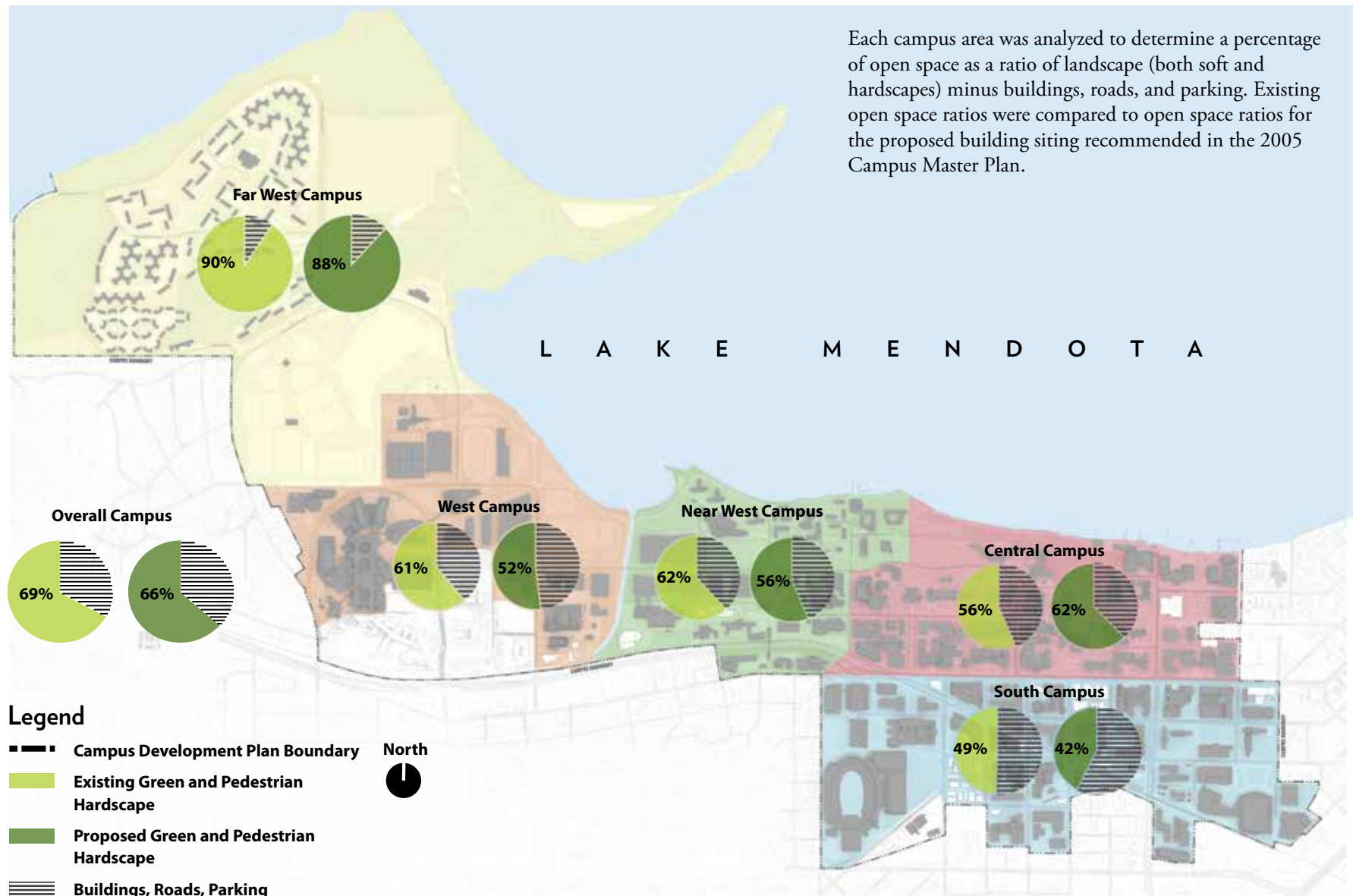


Figure 3-12 Open Space Ratios

The development of campus over time has resulted in a diversity of landscape spaces on campus, each reflective of the values of the students and administration that oversaw their development.

3. CONTEXT AND EXISTING CONDITIONS

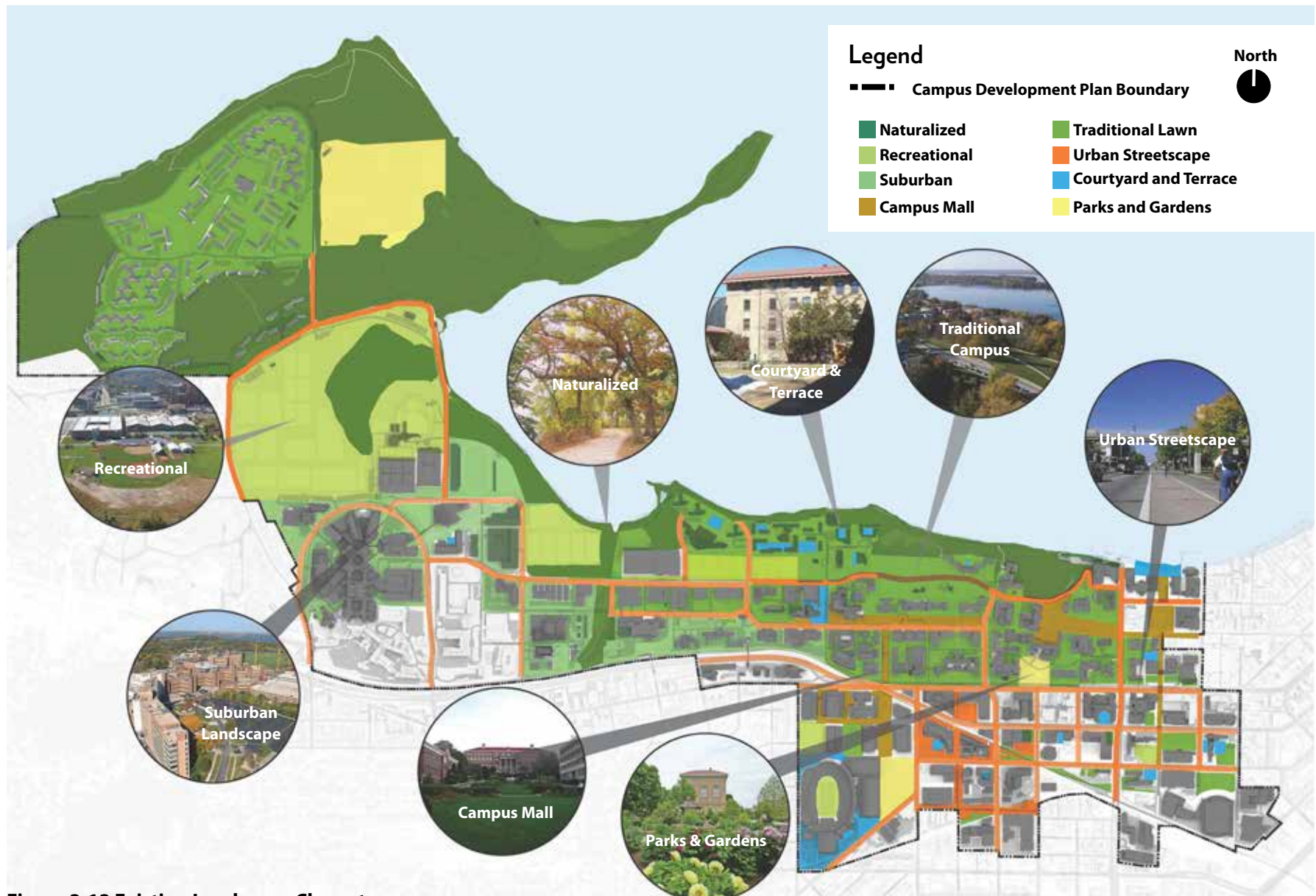


Figure 3-13 Existing Landscape Character

Tree Canopy

The tree canopy contributes directly to the landscape structure of a campus. At the UW–Madison campus, the tree canopy varies greatly throughout, resulting in a disconnection between campus areas. Central Campus is endowed with beautiful mature trees, many of them campus landmarks such as the Euthenics Oak at the School of Human Ecology. The Memorial Union Terrace is also graced with mature White Oaks shading the historic outdoor terrace. Yet on the West Campus, the historic expansion of the agricultural campus and its modern redevelopment have given this area a distinctly different landscape character. The re-establishment of a consistent tree canopy would better unify it with the campus lakeshore and the Central Campus.

Similarly, the lack of street trees makes a distinct separation between the “campus” spaces and the roads intertwined throughout. This is particularly apparent on the South Campus, where streetscapes dominate the campus experience. Here, the addition of street trees would not only help provide landscape structure, but also provide shade, habitat, manage stormwater and buffer pedestrians from traffic.

With 74 documented tree species, the campus has significant species diversity. The canopy is dominated by maple (13%), honey locust (9%), ash (8%), pine (7%), oak (7%) and elm (5%). The grounds department is currently managing the ash tree canopy and their percentages continue to decline, due to the recent activity of the Emerald Ash Borer in Dane County.



Figure 3-14 Existing Tree Canopy



L A K E M E N D O T A

Observatory Drive

Linden Drive

University Avenue

W. Johnson Street

W. Dayton Street

N. Charter Street

N. Park Street

Campus Drive

Walnut Street

Willow Creek

Stormwater and Green Infrastructure

The campus and its host communities drain into the Yahara River, Six Mile Creek, and Rock River watersheds. The Rock River watershed, which includes Lake Mendota, Lake Monona, the UW–Madison campus, and much of the City of Madison, is included on the United States Environmental Protection Agency and Department of Natural Resources list of impaired waters.

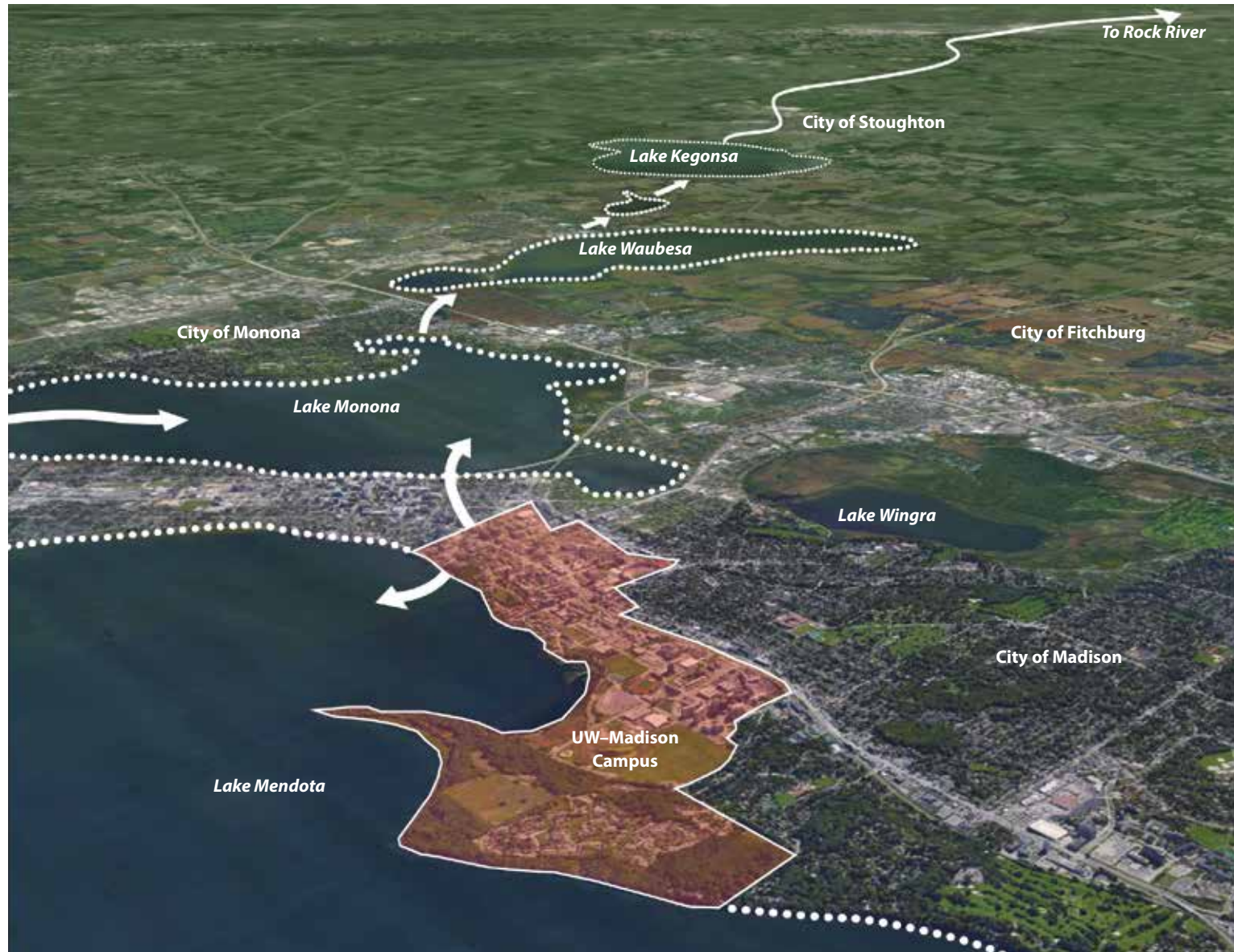


Figure 3-15 Campus Relationship to Rock River Watershed

Approximately 802 acres of campus and public rights-of-way drain to Lake Mendota, and 238 acres to Lake Monona via campus and city-owned storm sewers. Of the area draining to Lake Mendota, approximately 134 acres drains via discharge to Willow Creek.

3. CONTEXT AND EXISTING CONDITIONS

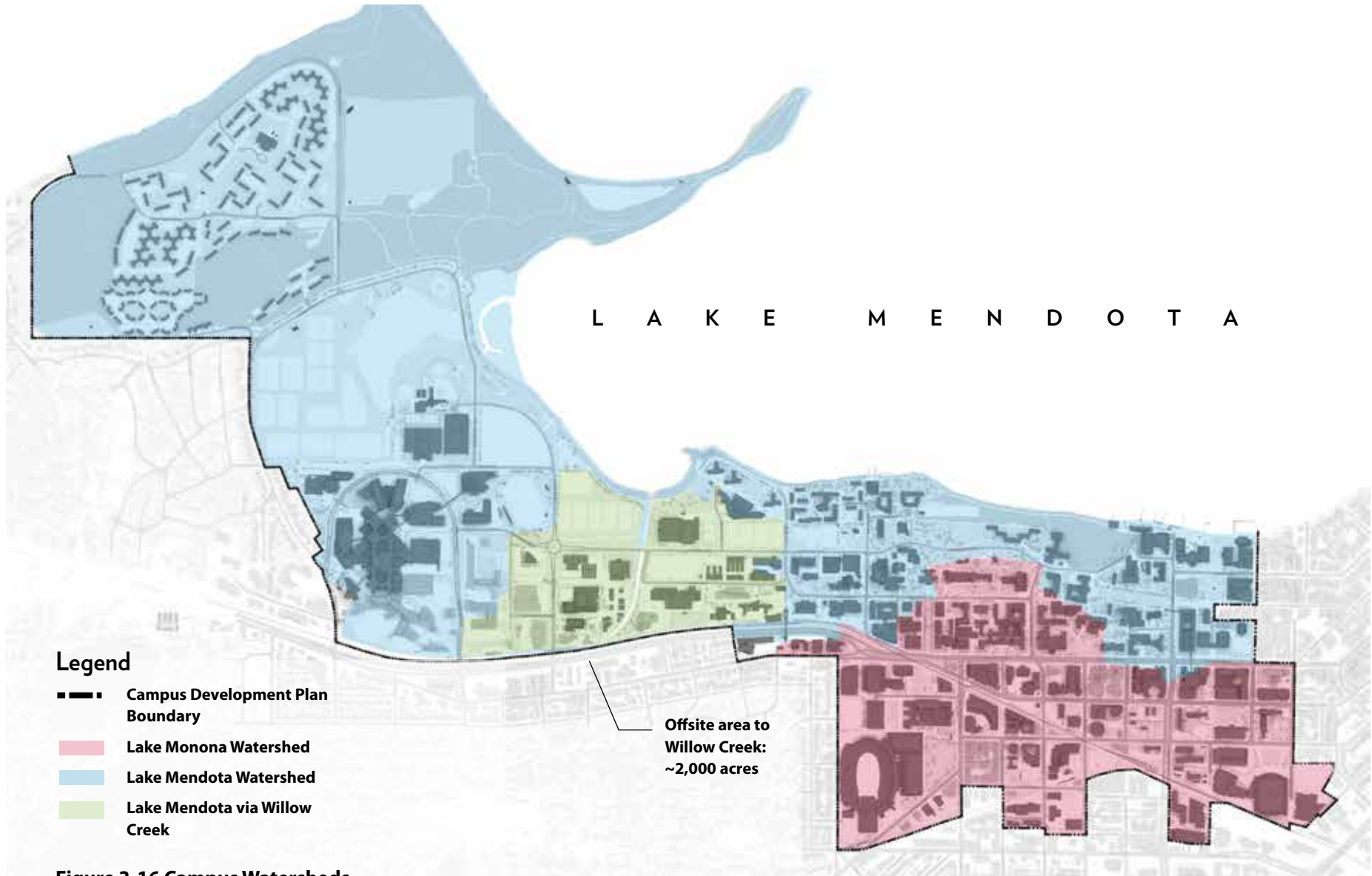


Figure 3-16 Campus Watersheds

Impervious and Pervious Surfaces

Since its founding in 1848, the campus has grown from three buildings located on what would become Bascom Hill to include over 180 acres of building “footprints” supported by over 320 acres of supporting impervious areas such as roadways, parking lots, walkways, plazas, and driveways. Currently, approximately 504 acres of the 1,040 acres of land within the Campus Development Plan Boundary is impervious (approximately 48%). Of the impervious area, it is estimated that approximately 190 acres supports traffic (e.g., streets, parking lots, driveways, etc.) The proportion of area supporting traffic is important because these are typically the highest sources of pollutant loads of the pertinent land uses.

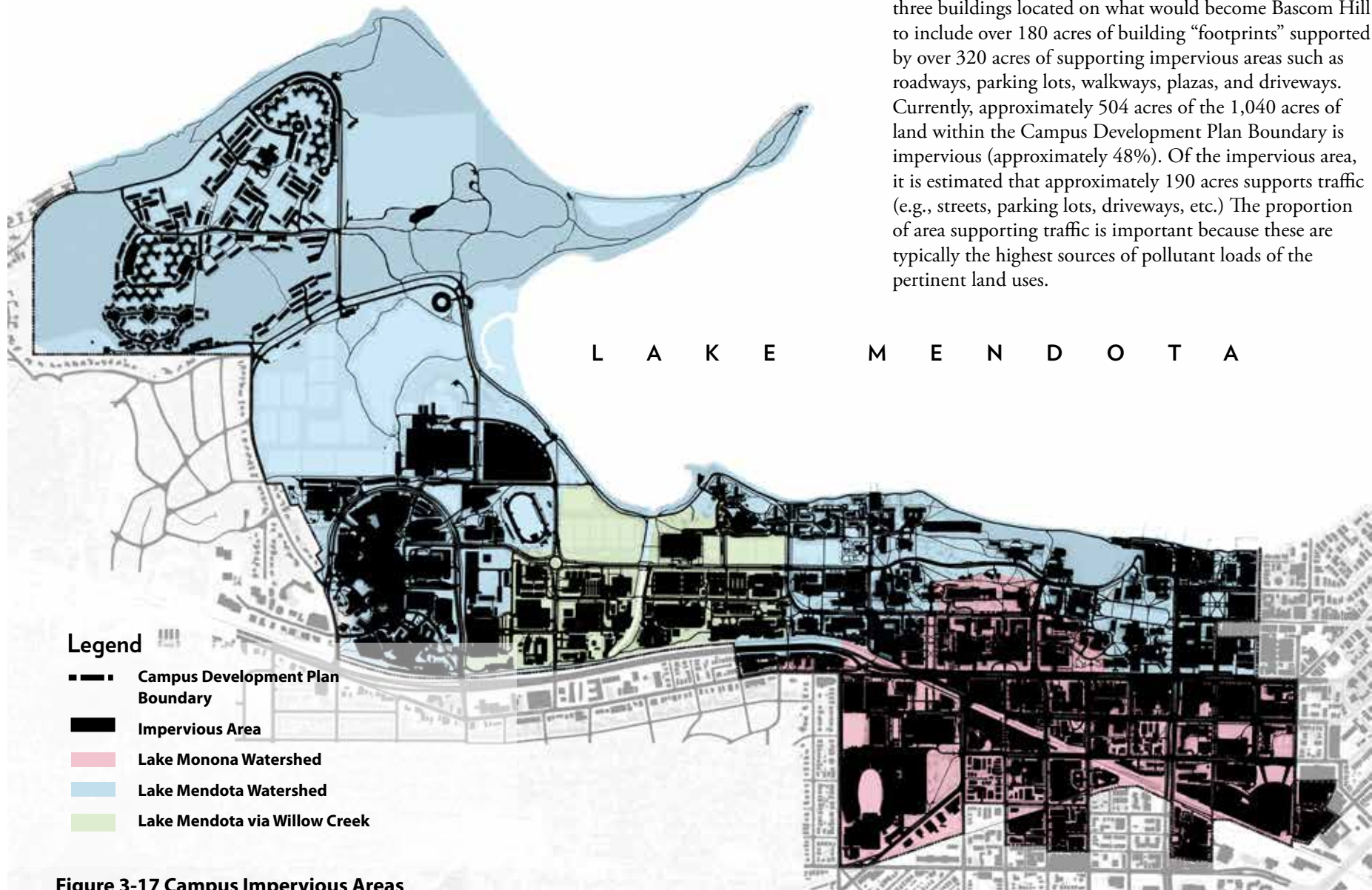
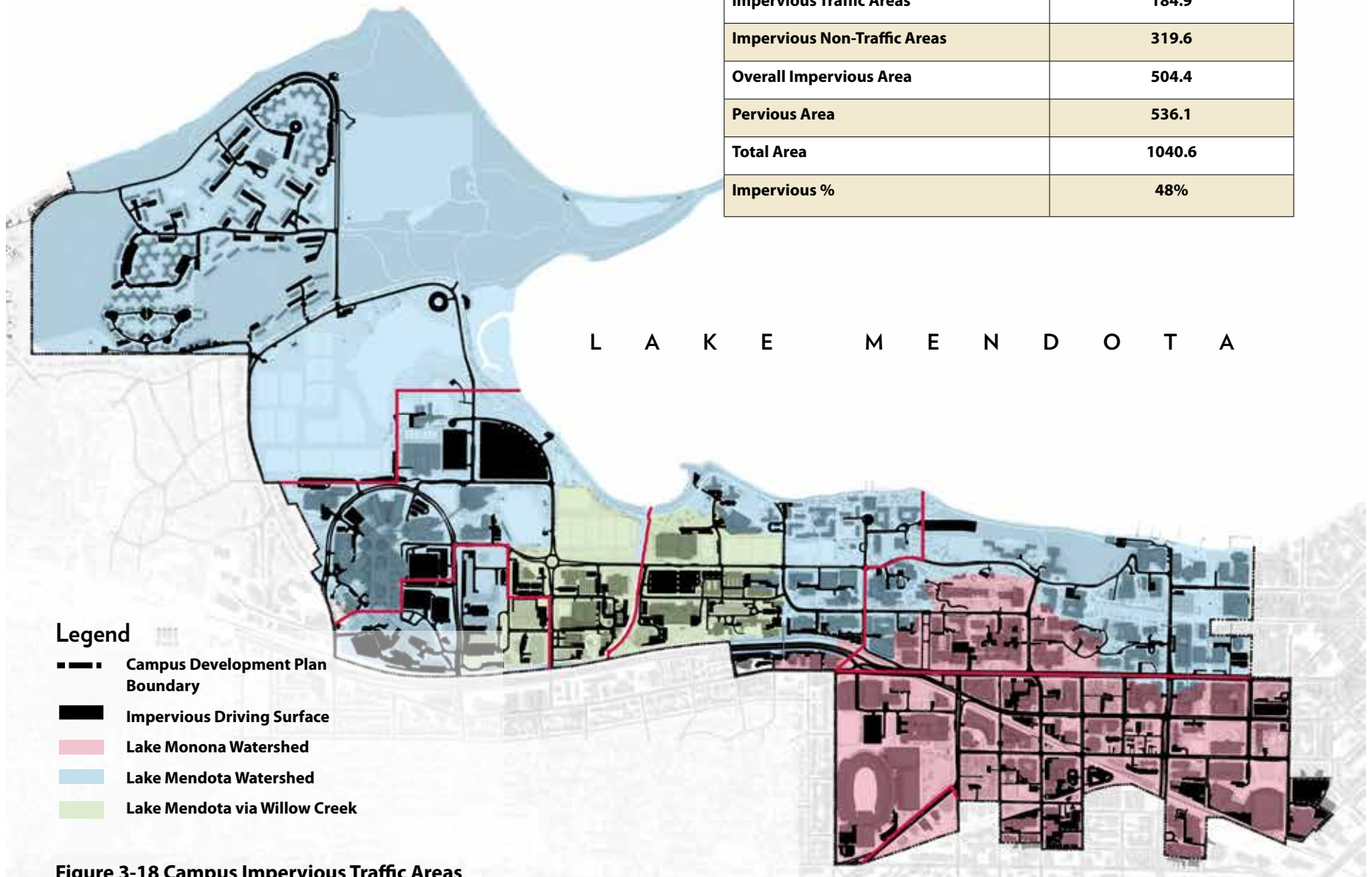


Figure 3-17 Campus Impervious Areas

Table 3-1 Impervious and Pervious Areas

Surface Type	2015 Impervious Area (acres)
Impervious Traffic Areas	184.9
Impervious Non-Traffic Areas	319.6
Overall Impervious Area	504.4
Pervious Area	536.1
Total Area	1040.6
Impervious %	48%

**Figure 3-18 Campus Impervious Traffic Areas**

3. CONTEXT AND EXISTING CONDITIONS

Stormwater and pollutant runoff rates and volumes are dependent on the type and condition of the surface upon which precipitation falls and the type of stormwater conveyance system. Stormwater runoff rates are higher from paved surfaces than from unpaved surfaces due to the limited infiltration capacity of the pavement. Compacted turf lawns also only provide minimal infiltration if not properly managed and maintained.

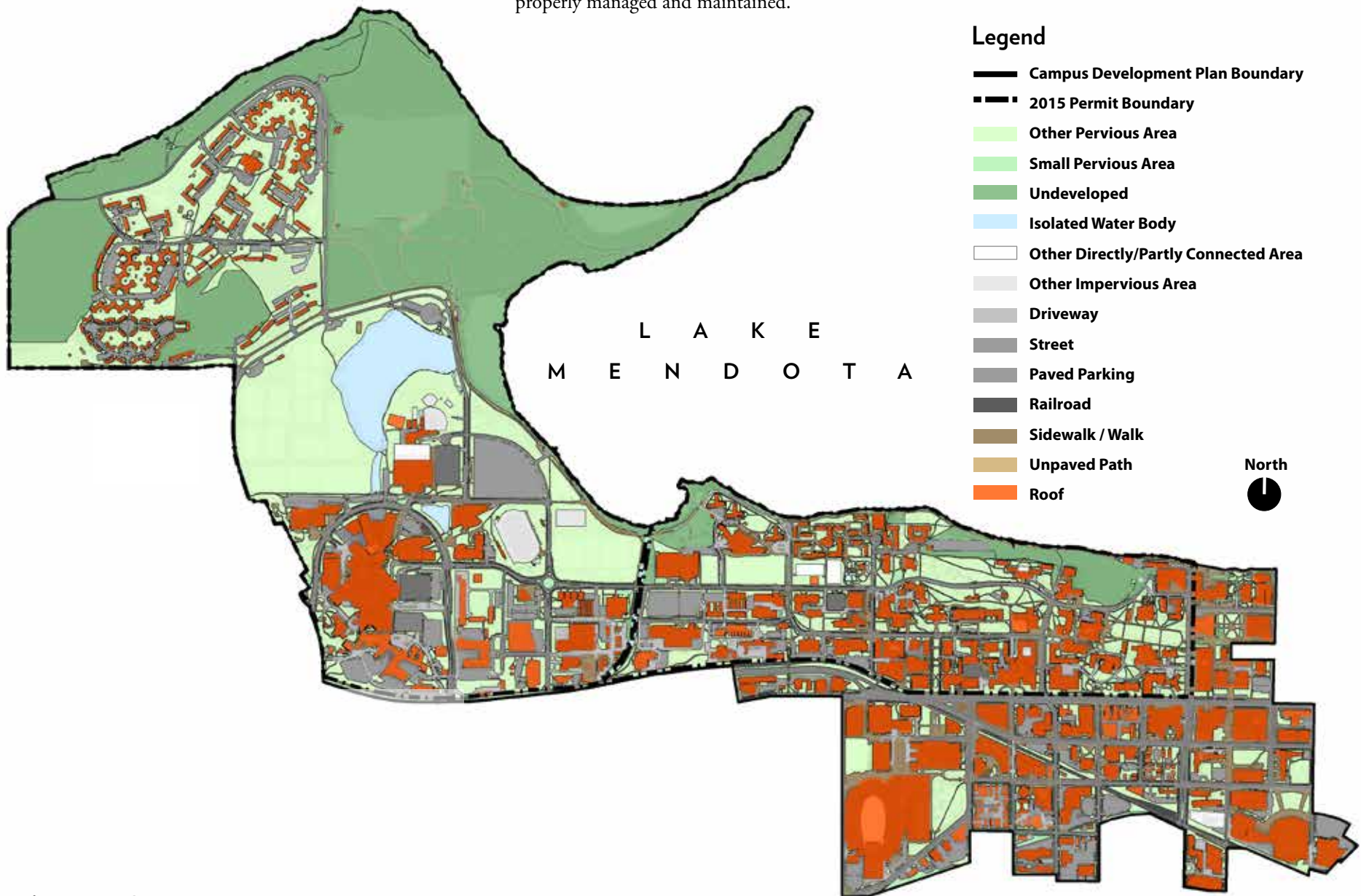


Figure 3-19 Source Area Map

Since completion of the 2008 Stormwater Management Study, dozens of stormwater best management practices have been installed throughout campus. The campus showcases a wide variety of practices such as green roofs, wet detention ponds, biofiltration basins, and pervious pavements. In addition, nonstructural stormwater best practices such as street sweeping, education of facilities staff, and improved “housekeeping” efforts have improved and expanded. WinSLAMM modeling results indicate that these practices capture approximately 53,000 pounds of total suspended solids and 143 pounds of phosphorus annually that would otherwise discharge to adjacent waterways.

3. CONTEXT AND EXISTING CONDITIONS

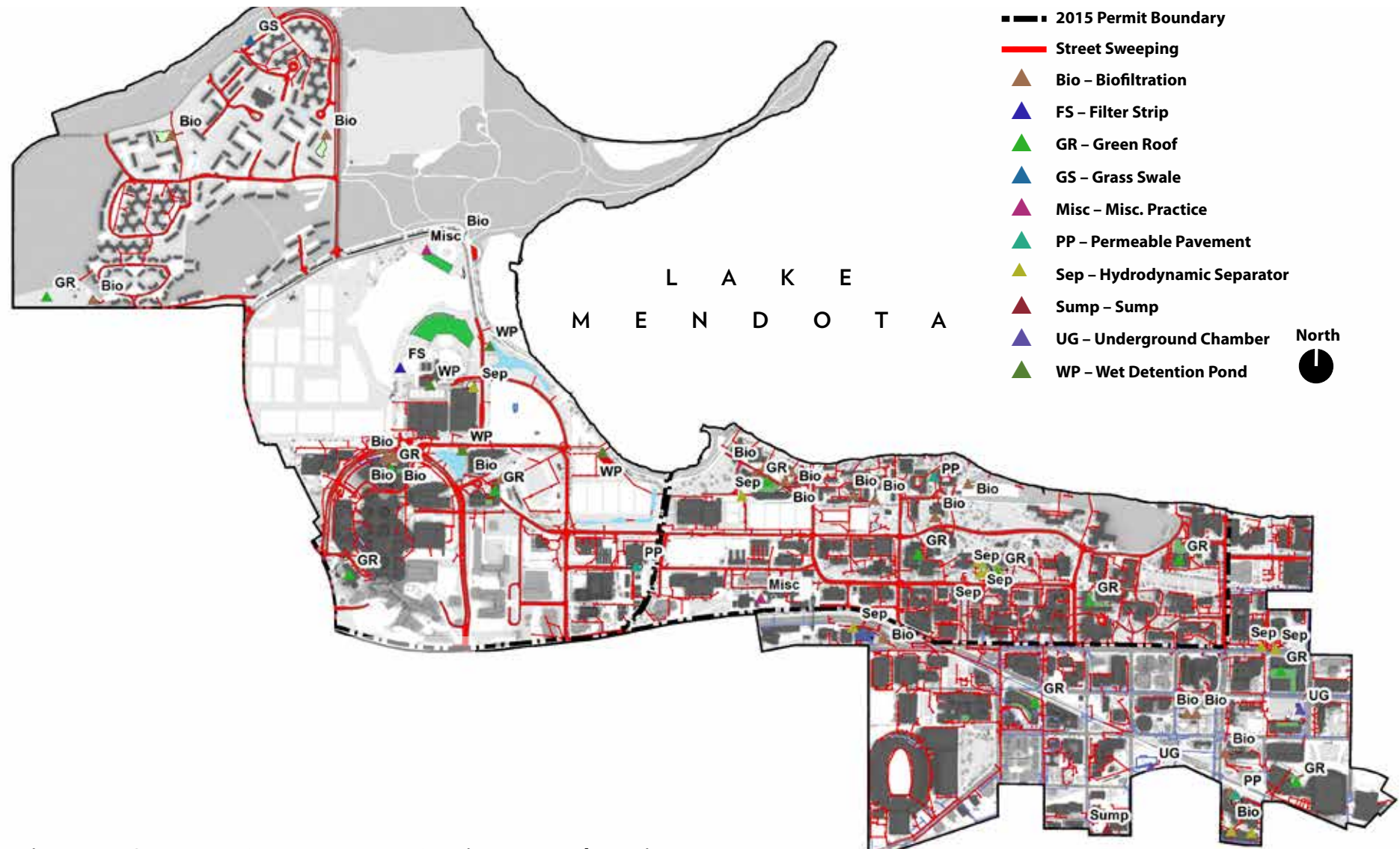


Figure 3-20 Stormwater Best Management Practice Types and Locations

Pedestrian and Bicycle

Walking and biking are the predominant modes of transportation on campus. A grid street system, dense land uses, attractive streetscapes, and comfortable walking and biking facilities carry students, faculty, and staff to classes, work, and appointments on a daily basis. UW–Madison consists of a dense building network interconnected with walking facilities, particularly on the east part of campus. With nearly 22,000 faculty and staff and over 43,000 students on a nearly 1.5 square mile campus, walking continues to be the most accessible and popular form of transportation. See the Long-Range Transportation Plan for a detailed analysis of existing pedestrian and bicycle facilities and services.

This section describes the current assets and challenges with the non-motorized transportation network. The findings presented in this section form the basis of recommendations offered in Chapter 4: Recommendations.

Gaps in Connectivity

For Pedestrians

Paved pedestrian-only pathways represent the primary routes carrying students, faculty, and staff across campus grounds and between buildings. These pathways provide micro-level connections. Paved shared-use facilities such as the Southwest Path and unpaved facilities like the Lakeshore Path serve longer distance and cross-campus connections. Campus destinations are well-connected, with a few exceptions.

Sidewalks exist on the majority of campus streets and carry high volumes of pedestrian traffic on a daily basis. Interior block connecting roads such as Lathrop Drive, Clymer Place, Conklin Place, and Fitch Court do not have sidewalks on either side of the road but have alternate pathways nearby. However, analysis identified Lathrop Drive as being particularly uncomfortable for pedestrians because there is an absence of infrastructure or design elements indicating whether pedestrians or automobiles have priority in this space.

There is a primary gap in pedestrian connectivity on the west side of campus. The eastbound Campus Drive shared-use path ends near the School of Veterinary Medicine. A connection to Babcock Drive and University Avenue to the east would better connect pedestrians and cyclists along this corridor.

Busy arterial roads and railroads act as barriers to pedestrian connectivity on campus because of uncomfortable intersections and the absence of adequate crossing locations. There is limited pedestrian connectivity across Campus Drive and the railroad corridor west of Babcock Drive. The shared-use bridge at the Stock Pavilion (city-owned Alicia Ashman Bridge) as well as Walnut Street and Highland Avenue are the only north-south crossings on campus. There is a ½ mile span near the Veterinary Medicine Building without a crossing of Campus Drive. This is an issue for students and others living in the concentration of residences along University Avenue west of Breese Terrace and south of Campus Drive.

L A K E M E N D O T A

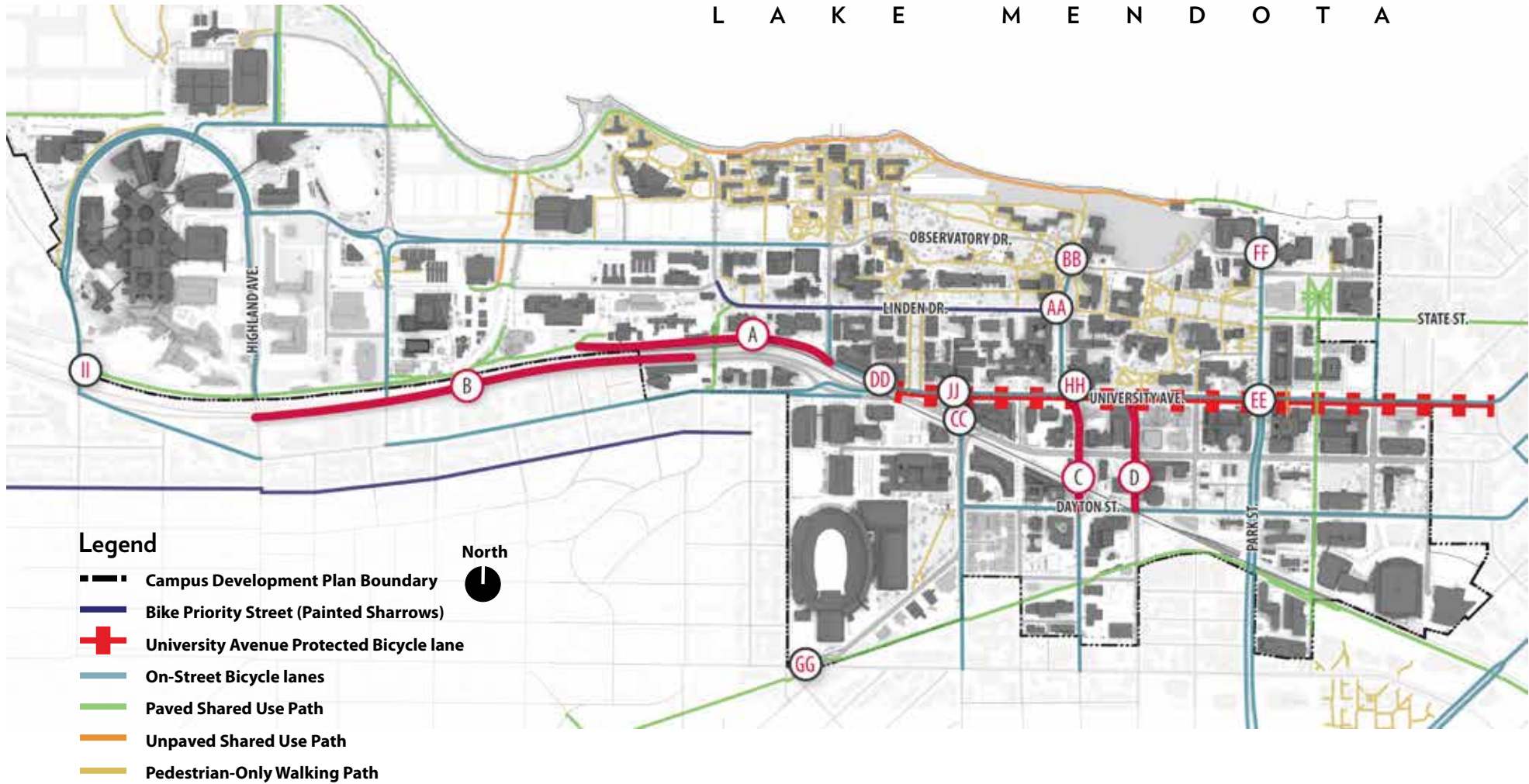






Figure 3-21 Existing Walking and Biking Routes and Identified Challenges

For Cyclists

Corridors without designated bicycle markings or signage discourage cycling, especially where motor vehicle speeds and volumes are high. Adding biking infrastructure in the listed gaps will work to boost cycling, reduce instances of cyclists riding on sidewalks, and promote overall efficiency and safety for all modes of travel.

Critical locations where gaps in walking and bicycle infrastructure reduce campus connectivity are summarized in Table 3-2 (the Route IDs correspond to the map in Figure 3-21).






Table 3-2 Summary of Gaps in Walking and Biking Connectivity

Route ID	Location	Challenge/Need
A 	Campus Drive Path and Linden Drive	Need for connection between end of path at Veterinary Medicine to Babcock Drive and University Avenue to the east
B 	West Campus Connection over Campus Drive	Additional north-south crossing of Campus Drive for pedestrians and cyclists between existing bridge and Walnut Street
C 	N. Charter Street between W. Dayton Street and University Avenue	Primary north-south route connecting north campus with campus and neighborhoods to the south Need for bicycle accommodations on N. Charter Street between W. Dayton Street and University Avenue
D 	N. Mills Street between W. Dayton Street and University Avenue	Primary north-south route, similar to N. Charter Street Need for bicycle accommodations between W. Dayton Street and University Avenue to connect northern parts of campus to the neighborhood area to the south Will have to integrate with on-street parking

Challenging Crossings and Interactions with Other Modes






Pedestrians and cyclists travel in large volumes across streets, railroad crossings, and intersections. Many pedestrians cross streets at mid-block locations or at locations without designated pathways or crossings. Pedestrian and cyclist compliance of walk signals and other control devices is often low. They are often in a hurry to get to class or appointments because of limited time and long travel distances. High volumes of people walking and biking interact regularly with Metro Transit buses, personal automobiles, delivery trucks, service vehicles, and mopeds across campus.

Table 3-3 Summary of Locations Where Challenges Exist

Location ID	Location	Challenge
AA 	N. Charter Street and Linden Drive	High non-motorized volumes; peak 15 minute pedestrian volume from 10:45 – 11:00 a.m. on a Tuesday in April 2015 of 2,199 pedestrians and 95 cyclists Conflicts between modes, major transit delays
BB 	N. Charter Street and Observatory Drive	High non-motorized volumes; peak 15 minute pedestrian volume from 10:45 – 11:00 a.m. on a Tuesday in April 2015 of 1,299 pedestrians and 26 cyclists Conflicts between modes, major transit delays
CC 	Campus Drive and N. Randall Avenue	Skewed intersection, long crossing Various turning movements, high vehicle speeds and volumes Pedestrian, cyclist, and vehicle yielding confusion Railroad crossing
DD 	Campus Drive, University Avenue, and Babcock Drive	Skewed intersection, long crossing Various turning movements, high vehicle speeds and volumes Pedestrian, cyclist, and vehicle yielding confusion Railroad crossing
EE 	N. Park Street and University Avenue	Various turning movements, high vehicle speeds and volumes Pedestrian, cyclist, and vehicle yielding confusion Very high pedestrian and bicycle traffic

Analysis indicated low perceived safety for pedestrians and cyclists at uncontrolled crossings around campus. At these intersections signs or signals indicate that cars must stop and yield to pedestrians using the crossing, but environmental conditions such as low visibility (due to glare or precipitation) can inhibit a driver's ability to recognize a pedestrian in the crosswalk. Furthermore, angled and offset intersections and crossings exist on campus that reduce visibility of pedestrians and cyclists and create long crossing distances.

Table 3-3 Summary of Locations Where Challenges Exist summarizes intersections and crossings identified as critical locations where pedestrian and cyclist interactions with other modes diminishes overall efficiency and safety. The Location IDs correspond to those on the map in Figure 3-21.

Location ID	Location	Challenge
FF 	N. Park Street and Observatory Drive	Highly skewed and offset intersection Transit layover area on west side of Memorial Union All mode turning movements Low pedestrian and bicycle compliance
GG 	Southwest Path, Regent Street, Breese Terrace, Crazy Legs Lane, and Monroe Street	City has worked to address green pavement markings, bike specific signal going westbound, and other measures Highly skewed intersection results in a lot of confusion between all modes and intersection shared-use path
HH 	University Avenue and N. Charter Street	Skewed intersection with difficult crossings for pedestrians and cyclists Modal conflicts, transit delay
II 	University Bay Drive and Campus Drive Path	Cyclists crossing this intersection come into conflict with buses and emergency hospital vehicles
JJ 	University Avenue and N. Randall Avenue	No pedestrian crosswalk at the west leg of the intersection Long crossing with high motor vehicle traffic speeds and volumes

Transit and Vehicular Circulation

Campus Road Network

Campus Drive and University Avenue run east-west through campus and act as the primary arterial “spine” on campus. N. Park Street is the primary north-south campus arterial. A variety of other smaller connectors run north-south including N. Randall Avenue, N. Mills Street, N. Orchard Street, and N. Charter Street. The smaller east-west connectors include Observatory Drive, Linden Drive, and W. Dayton Street. Campus Drive and Observatory Drive provide the only vehicle connections across Willow Creek and to the West Campus.

Traffic Volumes

Traffic volumes on the roads leading into and circulating around campus are varied. The highest vehicular volumes on campus occur at the intersection of Babcock Drive, Campus Drive, and University Avenue with an average daily traffic of 32,050 vehicles. Campus Drive west of this intersection had an average daily traffic of 41,600 vehicles (both 2011) (see Figure 3-20).

Public Transportation

UW–Madison currently contracts with the local transit provider, Metro Transit, to provide transit service to students, faculty, and staff on campus. There are four routes on campus that UW–Madison faculty, staff, and students can ride for free. Metro Transit bus passes for an unlimited number of rides are available for eligible UW faculty and staff for \$24 per year. Those without a pass can ride Metro Transit routes for \$2 per ride.

Existing Service Options

There are a variety of service options that connect to and around the UW–Madison campus.

- **On-Campus Metro Transit Bus Routes:** There are currently 11 routes on campus and 18 additional routes that travel close to campus. Figure 3-23 displays the peak transit service locations provided on campus, as well as transit stops. Currently, there is an average of 16,900 boardings on campus each weekday during the academic year. According to available Metro Transit data, the busiest transit stop on campus is at University Avenue and N. Park Street, with an average of 1,460 daily boardings.
- **Carpool:** The university offers carpool locations for those wishing to decrease their commuting costs by riding with others. Carpools may elect to register for a carpool permit with UW Transportation Services to give them priority in acquiring a parking permit in the parking lot of their choice from a select list of lots across campus.
- **Vanpool:** Vanpools consist of 8-15 employees that travel to work in a State of Wisconsin van. Operating costs are covered by fares. Vanpools are serviced by the Wisconsin State Vanpool Program.
- **Car Sharing**
- **Intercity Buses:** Megabus, Van Galder, and Badger Bus offer intercity bus service from a stop at the Chazen Museum of Art on University Avenue. Buses layover in the northern bus lane at this location. During bus layovers, Metro Transit buses are forced into the adjacent vehicle travel lane, crossing

L A K E M E N D O T A

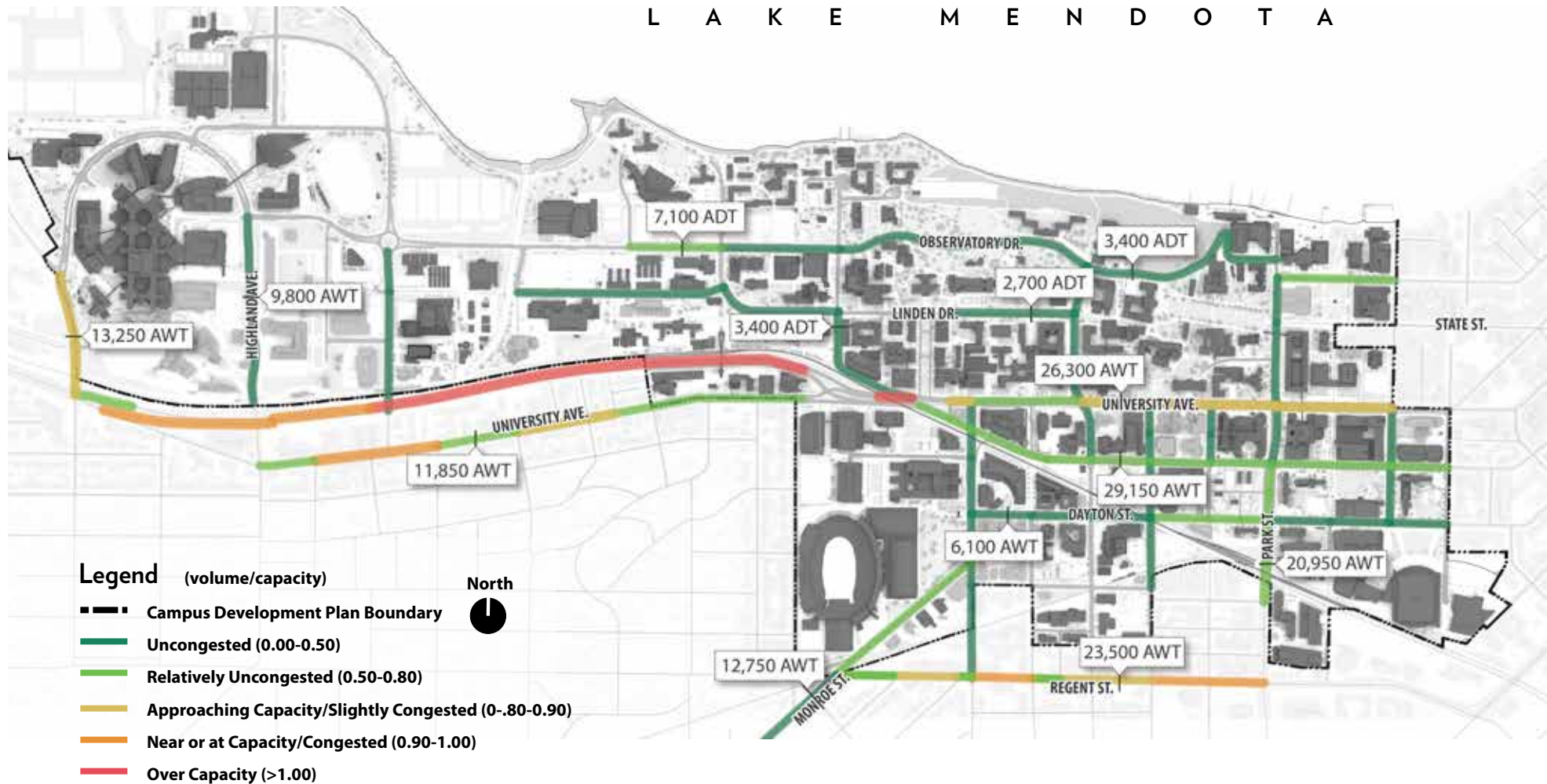


Figure 3-22 Vehicle Congestion on Campus

3. CONTEXT AND EXISTING CONDITIONS

the westbound bicycle lane for access.

- **Park-and-Ride Service:** Metro Transit owns and operates five designated park-and-ride lots with direct transit service to and from campus. Complimentary parking is provided to riders at these locations. The university also has its own park-and-rides, including Lot 200 (served by Routes 6 and 11), Lot 202 (served by a UW–Madison shuttle), and Lot 203 (served by a UW–Madison shuttle). These park-and-rides are serviced by the UW independently of Metro Transit in order to improve commuters' access to campus.

Transit System Analysis

The current transit system works well and those wishing to access campus via a high-occupancy vehicle have several options. Transit is available for those traveling just around the corner as well as those traveling to the other side of campus. Transit service is also available during the peak period, the middle of the day, and the evening.

The transit system analysis presented here builds off of the 2013 Campus Transportation System Evaluation completed by Nelson Nygaard, currently serving as a reference for Transportation Services. There are several areas in need of improvement within the UW–Madison transit system. These include the street network, route structuring, travel time, capacity, and express service. Each of these items is discussed in further detail below.

Street Network Connectivity

The street network throughout campus is a significant limitation to the transit network. There is a lack of connecting roadways and a significant number of one-way streets so transit routes are required to operate in a circuitous and indirect manner. This prohibits bi-directional service, creates inefficiencies, and provides less optimal service. There is an identified wish to explore allowing transit vehicles to operate through the Observatory Drive switchback.

Route Structuring

The structure of the transit routes on campus also is in need of improvement. Currently, there are many routes that operate on the same stretch of roadway, partly due to the geography of campus. This creates route duplication, which in turn causes increased congestion and operational issues.

Furthermore, due to the road network and limited resources several routes operate in a circuitous fashion. This is not optimal for several reasons, but is especially an issue for circulator routes that only operate in one direction. This

has significant travel time implications for those traveling a relatively short distance in the opposite direction of the route.

Finally, some routes on campus currently serve competing purposes. As discussed previously, this is particularly an issue for the current structure of Route 80. This route is currently structured to serve as a connector between the east and west ends of campus and as a circulator. As a result of these contradictory roles, the route is inhibited from performing well in either one. There is a strong desire for a Memorial Union to Union South circulator route that would operate back and forth between these popular destinations.

Travel Time and Delay

Several factors contribute to the issues associated with bus travel time. As discussed previously, the road network and route structures create several travel time limitations. Additionally, there are a large number of pedestrians on campus, which often conflict with bus operations, particularly at intersections such as N. Charter Street and Linden Drive, and N. Park Street and University Avenue. The current bus stop spacing on campus also is a detriment to travel time since buses stop frequently along with slow fare collection and manual rider counting methods contributing to delays. Finally, buses often face increased delay and poor performance during times of inclement weather due to degraded road conditions and high usage.

Capacity Limits

Capacity is a challenge, especially during class change times. This issue causes students to have to wait for the next bus or commute via another mode. As with other issues, capacity is exacerbated during times of inclement weather since buses are delayed and have more passengers per stop than usual. During other times of the year buses are well below capacity. A more demand-responsive set of routes on campus should be examined. Improving the efficiency and reducing the capacity limitations of Route 80 is a high priority on campus.

Limited to No Express Service

Currently there is limited or no express bus service to campus. This results in those taking transit from more remote areas to transfer or experience an indirect, time-consuming trip to campus. There is likely latent transit demand not being captured, since direct service to campus is not available. This is evident based on the substantial amount of “hide-and-ride” activity that occurs in the residential areas near campus. Direct, express transit service for area park-and-rides should be explored as a viable option to reducing on-campus vehicle use and parking demands.

See the Long-Range Transportation Plan for additional analysis.

L A K E M E N D O T A

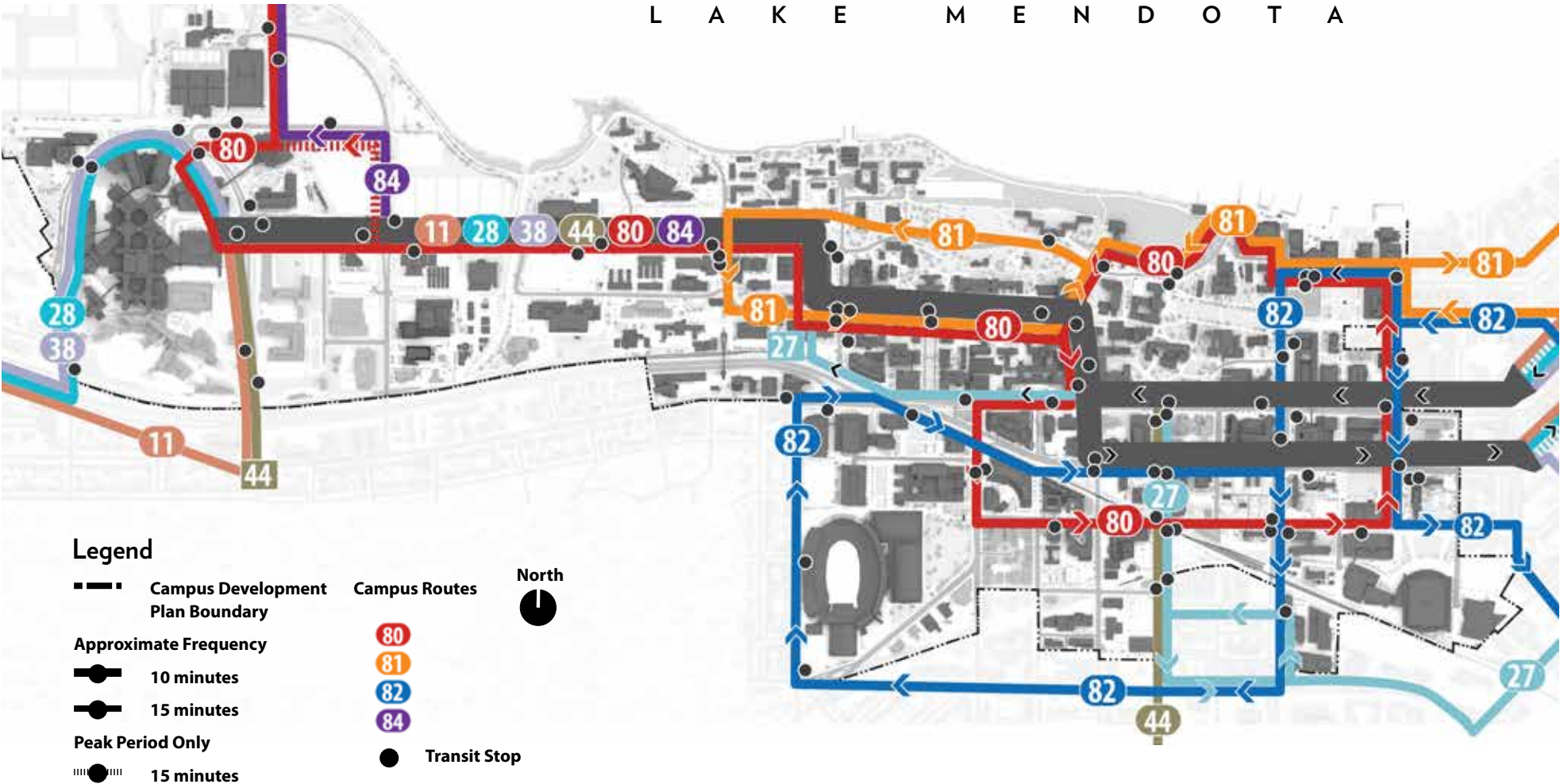


Figure 3-23 Campus Bus Routes

Parking

Existing Inventory

In total, there are approximately 13,000 parking stalls on the UW–Madison campus. These stalls are located in surface lots or in underground and above-ground structures. The inventory includes approximately 9,400 faculty/staff spaces, 1,600 visitor spaces, and 2,000 service/fleet spaces. There are also approximately 350 motorcycle stalls which are not included in the parking inventory total.

A total of 12 structured parking areas are located on campus and are available for visitors. The Transportation Services website displays real-time stall availability per garage in order to assist visitors in planning their parking destination. About half of these garages are located in Central and South Campus, with the remainder in other various locations.

There also are numerous surface parking lots on campus. The hours of availability vary depending on general campus location and the specific lot. Many of the surface lots in the Central and South Campus area are available for use all day, while most lots in the Near West and West Campus area are only open Monday through Friday. Campus development consumes available surface parking which is causing the university to seek replacement parking often in more consolidated (but more expensive) parking structures.

National Leaders in Parking and Transportation Demand Management

UW–Madison has approximately 13,000 parking spaces that serve approximately 22,000 faculty and staff, 8,600 UW Hospital employees, and 43,000 students. This yields a parking ratio of 0.18 parking spaces provided per person. This is the second lowest parking ratio of peer universities in the United States. With limited physical and financial resources, the university focuses on providing a minimal but efficiently managed parking supply to meet the needs of its faculty, staff, employees, visitors, and select students.

UW–Madison is a national leader in providing effective travel demand management and alternative commuting strategies and messaging. The City of Madison provides services and infrastructure that support travel to and around UW–Madison. Alternative commuting options include connected and comfortable walking and biking facilities, Metro Transit bus service, park-and-ride options, and carpool and vanpool programs. These options have allowed UW–Madison to maintain low parking ratios along with an attractive, livable environment on a campus with limited space and constrained parking resources.

Without the current policies in place, traditional land use-based parking calculations would estimate a necessary supply of nearly 24,000 spaces to meet the faculty, staff, employee, and visitor parking demand. If students were permitted to park on campus this demand would increase by as many as 18,000 more parking spaces. In summary, the current supply is about 13,000 parking spaces. Unconstrained demand would be as high as 24,000 parking spaces of demand (or higher if students were allowed to park). Current parking supply is effectively full. The current constrained demand is approximately 13,750 spaces, which includes those that are on the waiting list and those that park at area park-and-ride lots.

L A K E M E N D O T A

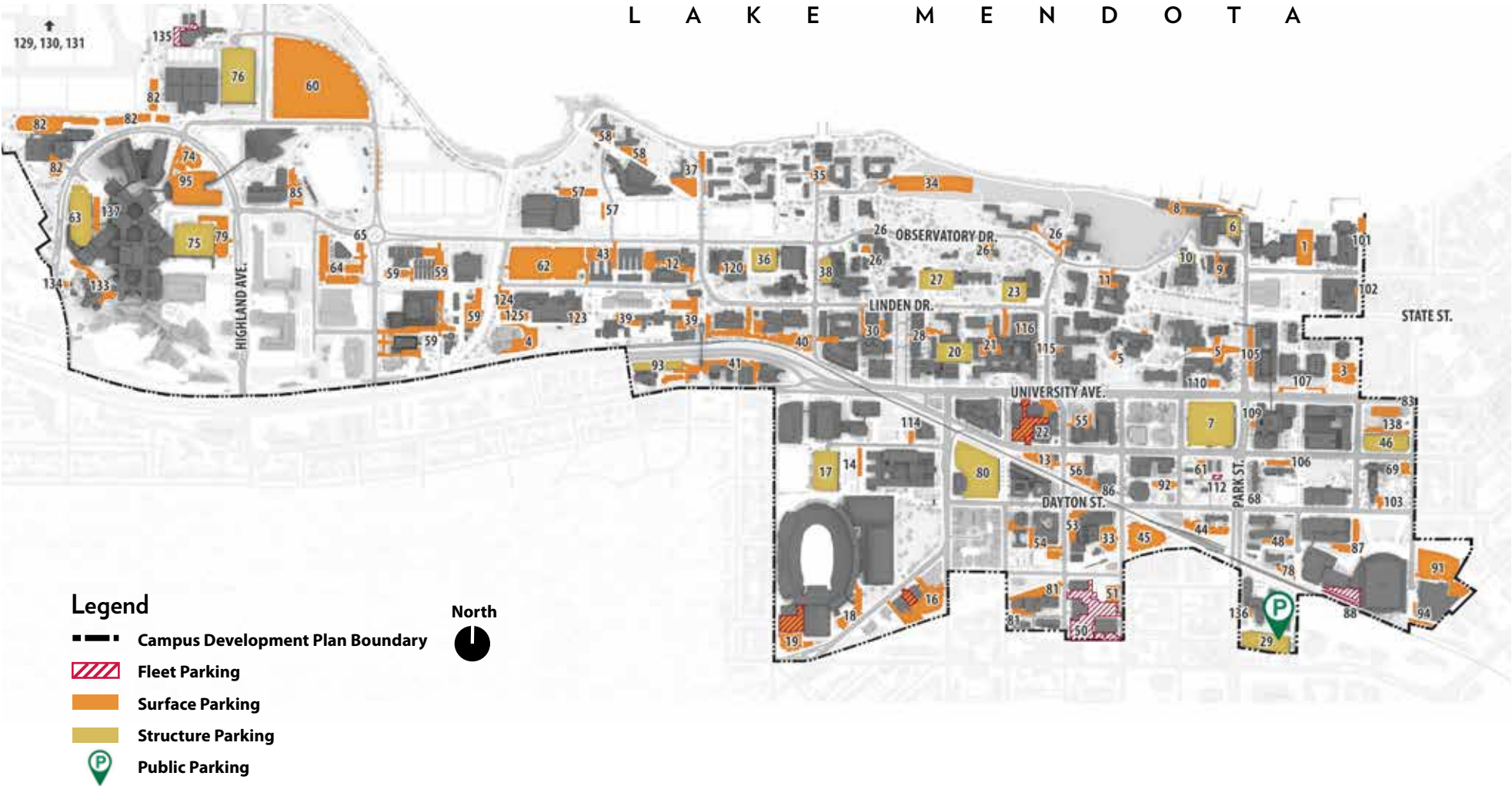


Figure 3-24 Existing Campus Parking Facilities

Occupancy Analysis

An occupancy analysis was conducted to determine the current supply and demand pattern for each user type for all parking lots on campus. Knowledge of these existing parking behaviors helps to identify spatial and temporal opportunities to improve parking efficiency and highlight needs of the system as the university undergoes physical changes across the 20+ year period of the 2015 Campus Master Plan Update.

Overall, campus parking supply is operating between 85-90% full during the peak period—occupancies between 85% and 95% are considered to be effective capacity maximums. This indicates that current observed parking occupancies on campus are at or very near the overall effective capacity. Figures 3-25 and 3-26 display mid-day parking occupancies for faculty and staff, as well as visitors. Lots colored in orange and red are effectively full.

Visitor parking is particularly challenging to find, especially in South and Central Campus. The university tightly controls and manages parking supply on a daily basis to allocate available spaces (including visitor parking spaces), depending on events and other situations which drive demand. Transportation Services is challenged with allocating the correct supply of visitor spaces in the correct locations to meet changing demand, while maintaining permit parking supply. This problem is further exacerbated by consumption of parking supply by ongoing campus building development.

Visitor parking allocations fill up daily and requests exceed available supply. Transportation Services indicates a need of approximately 2,000 additional parking spaces to accommodate increasing visitor parking demand, and to provide flexibility and “swing space” for parking phasing and campus construction.

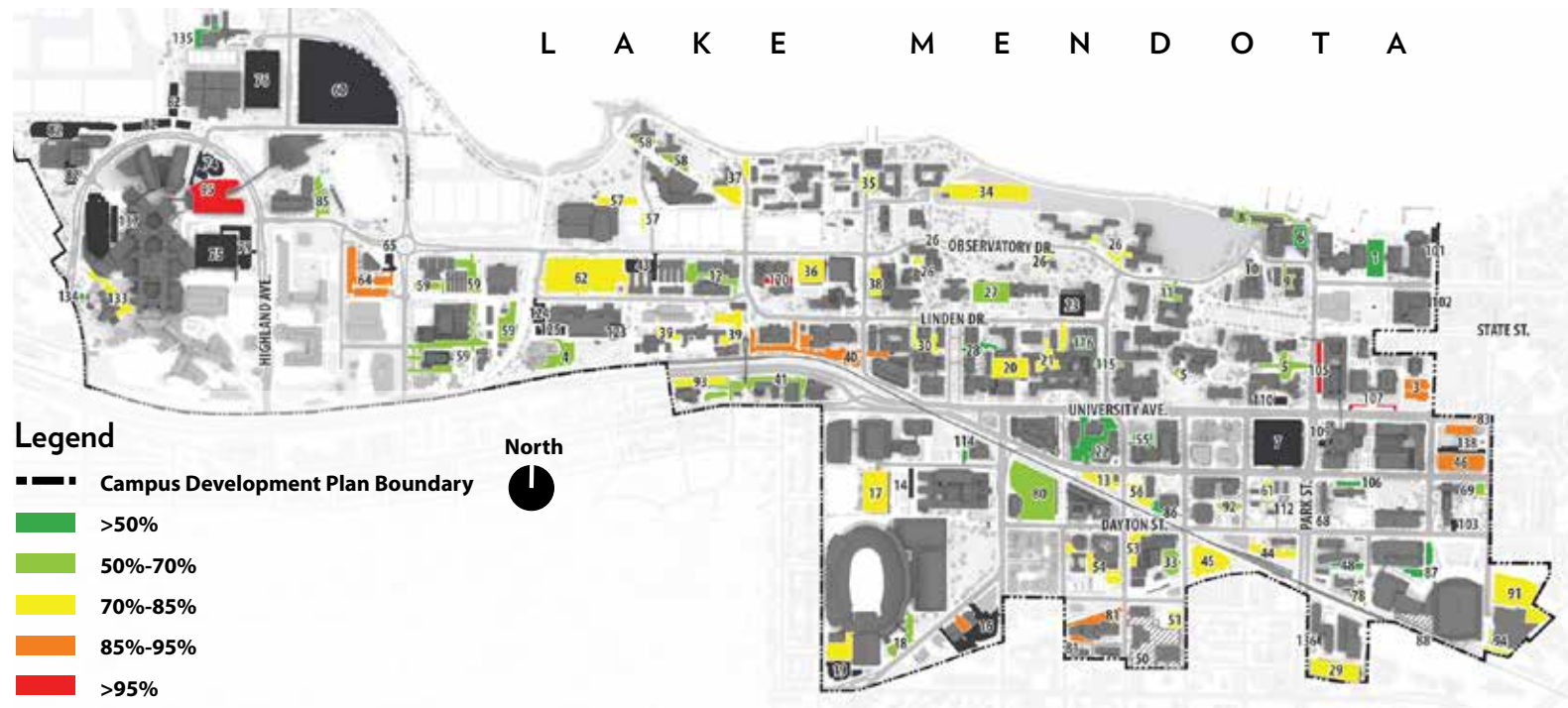


Figure 3-25 Mid-day Parking Occupancies for Faculty and Staff

As a result of limited supply in the desired locations, visitors and other university parkers spend considerable time searching for available parking spaces and usually end up parking in locations far from their destinations. Visitors are less likely to use alternative modes of travel due to lack of knowledge or their inability to access alternatives from where they are traveling.

UW–Madison will never reach an equilibrium in placing an adequate supply of parking directly adjacent to building destinations. In some capacity, parking will always occur in adjacent districts. Parking supply must be continuously evaluated relative to the demand for academic and research building sites.

While current policies and practices nearly halve the amount of parking needed to accommodate a development the size of the campus, any further development will have to be paired with additional transportation demand management strategies or an expansion of the current parking supply to meet increased demand.

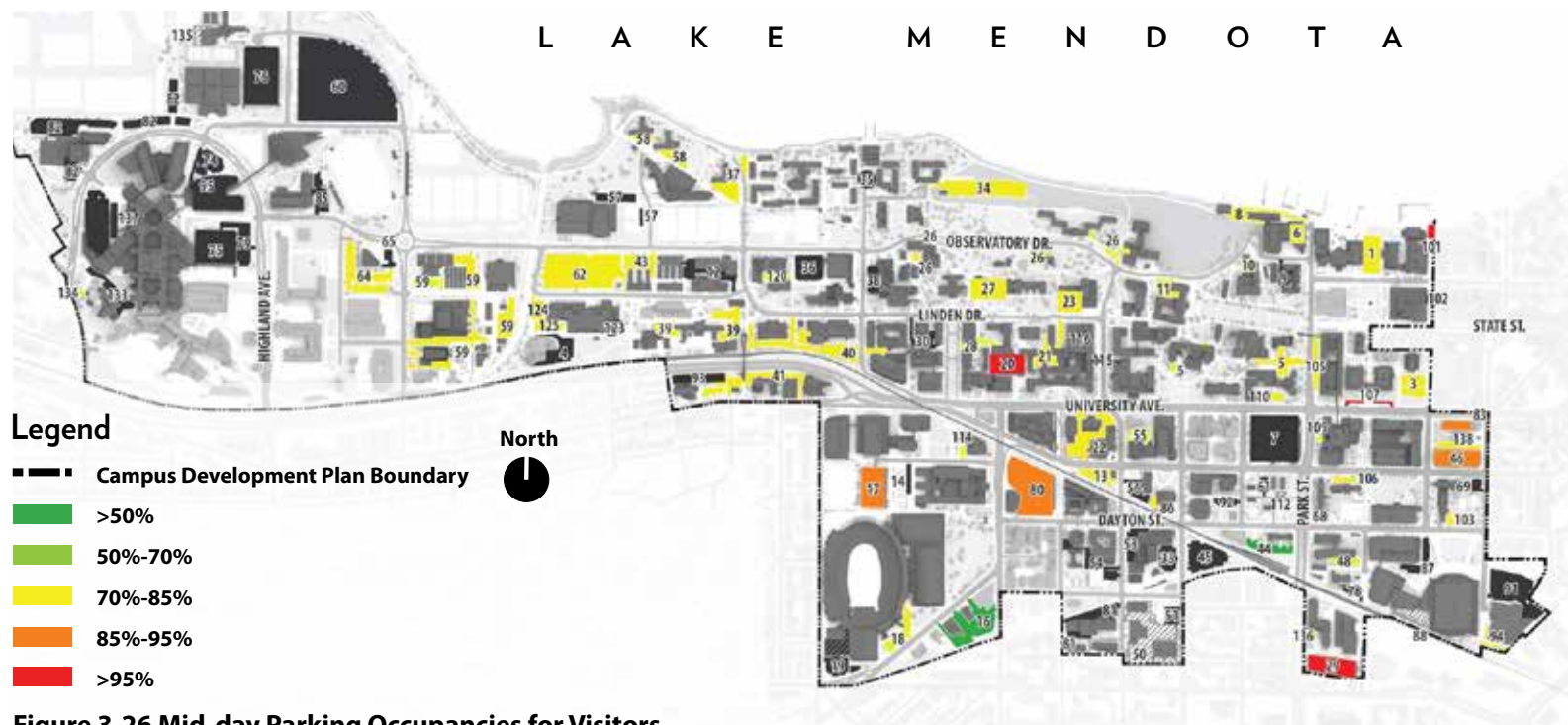


Figure 3-26 Mid-day Parking Occupancies for Visitors

Campus Utilities

Steam, Chilled Water, Electrical Power, and Renewable Energy

The update to the 2005 Utility Master Plan Report includes information regarding the existing utility distribution systems as well as recommendations as to how UW–Madison campus utilities should be modified and expanded to accommodate the proposed ultimate campus build-out.

UW–Madison has a combination of self-generated and utility owned systems that comprise the steam, chilled water, and electrical power services on campus. These utilities are distributed through a network of underground tunnels, box conduits, direct buried piping systems, and manholes/ductbanks for electrical power. In addition to the piping and wiring distribution systems, there are three generation plants for the production of steam, chilled water, and electrical power. The primary plant locations and capacities are summarized in Table 3-3:

There are over 25 miles of steam and condensate piping serving the campus with steam delivered to buildings at 175 pounds per square inch gage (PSIG) or 10 PSIG. Almost every building on campus is connected to the steam system. The majority of the steam distribution piping is in box conduits and walkable tunnels with the remainder as direct buried installations.

The chilled water system consists of approximately 8 miles of piping consisting of a combination of direct buried pre-stressed concrete piping and ductile iron piping or steel piping installed in walkable tunnels.

The primary electrical system serving UW–Madison uses a combination of 4.16 kV and 13.8 kV distribution voltages. Electric power is purchased from MGE at 13.8 kV and transformed on campus where required to the distribution voltage. The power is distributed through a series of underground ductbanks and manholes to transformers at individual buildings.

Table 3-3 Existing Plant Capacity Summary

Plant	Primary Fuel Source	Steam Generation Capacity	Chilled Water Generation Capacity	Electric Generation Capacity
Charter Street Heating Plant	Natural Gas/ Fuel Oil	1,200,000 PPH	25,500 Tons	9.8 MW
Walnut Street Heating Plant	Natural Gas/ Fuel Oil	600,000 PPH	20,200 Tons	None
West Campus Cogeneration Facility¹	Natural Gas/ Fuel Oil	500,000 PPH ²	30,000 Tons Expandable to 50,000 Tons	150 MW

¹ This electrical capacity is owned and operated by MGE. The power production output is not dedicated to serving only the UW–Madison campus or the chiller plant. The chilled water assets and a portion of the “steam island” are owned by UW, but MGE operates and maintains the entire plant under a joint agreement with the UW.

² Includes supplemental firing of the heat recovery steam generator (HRSG) as documented in MGE data.

Campus Civil Utilities

Sanitary Sewers, Storm Sewers, and Domestic Water Mains

Existing Conditions Analysis

The civil utilities scope for the 2015 Campus Master Plan Update was limited as there was a fairly comprehensive planning and analysis effort completed during the 2005 Campus Master Plan. Civil utilities for the purpose of this report are considered to be sanitary sewers, storm sewers, and domestic water mains.

In April and May of 2015, SmithGroupJJR civil engineers met with representatives of the UW–Madison Plumbing Shop and the campus civil engineer to discuss the conditions of the existing civil utilities on campus. The list of issues described in this section is a summary of those conversations and does not constitute any additional field verification or analysis done by the Master Plan Consultant team. Some of the issues described here may have been addressed since the time of our meetings, as some were ongoing or planned projects that had been identified.

A significant number of facilities on campus are served by City of Madison utilities, especially on South Campus. SmithGroupJJR also did a side-by-side comparison of the UW–Madison and city utility records to identify where there were discrepancies in the records. Where there were conflicts of record, we noted the conflict in a spreadsheet and provided that information to Facilities Planning & Management staff. However we did not do any additional investigations to determine the sources of conflict or which records were correct.

During the course of our review of the campus utilities CAD file, we noticed that there were several areas, especially where newer buildings had been recently built, where the utilities had not yet been updated in the campus records. This led to a discussion with Facilities Planning & Management about how the CAD records are updated. The answer was there was no formal process and it is done rather sporadically. Since the CAD records are the primary source for locating utilities in the field (for surveys and emergency field work), the fact that these

records are not well maintained is a source of concern for Facilities Planning & Management staff.

In general, the 2005 Campus Master Plan indicated that the capacity of the campus sanitary sewer system is adequate for the full anticipated build-out of the 2015 Campus Master Plan Update. Water main capacities, especially for fire flow demands, are somewhat limited in areas as identified in the issues list in this section. Storm sewer capacities are generally sufficient on the main part of campus (with exceptions noted below) but are lacking in some areas beyond the control of campus (i.e. city sewers in public right-of-way).

The main issue facing UW–Madison regarding civil utilities is age of infrastructure. In some older parts of campus such as on Bascom Hill or Observatory Hill some of the original services still remain. While the campus records generally indicate the ages of utilities, conditions are often unknown unless there is a problem such as a water main break or sewer back-up. The ages of the utilities were mapped during the 2005 Campus Master Plan based on campus records.

Sanitary Sewer Issues/Projects

- Elm Drive lift station – planned for replacement
- Ramp 76 lift station – being replaced
- Marsh Drive force main – needs to be replaced
- Livestock Labs – lift station issues
- Limnology – lift station inside to be replaced; water/sanitary to building need to be replaced
- Below Alumni Center (Building #0489) – lift station needs replacing
- Lot 62 lift station (at Linden Drive and Easterday Drive) – need to coordinate with Veterinary School expansion to allow for future expansion of lift station
- McClimon Track – currently bathrooms are on septic tank and drain field. Proposed academic/research facilities for the site will require connection of sewer service to the area

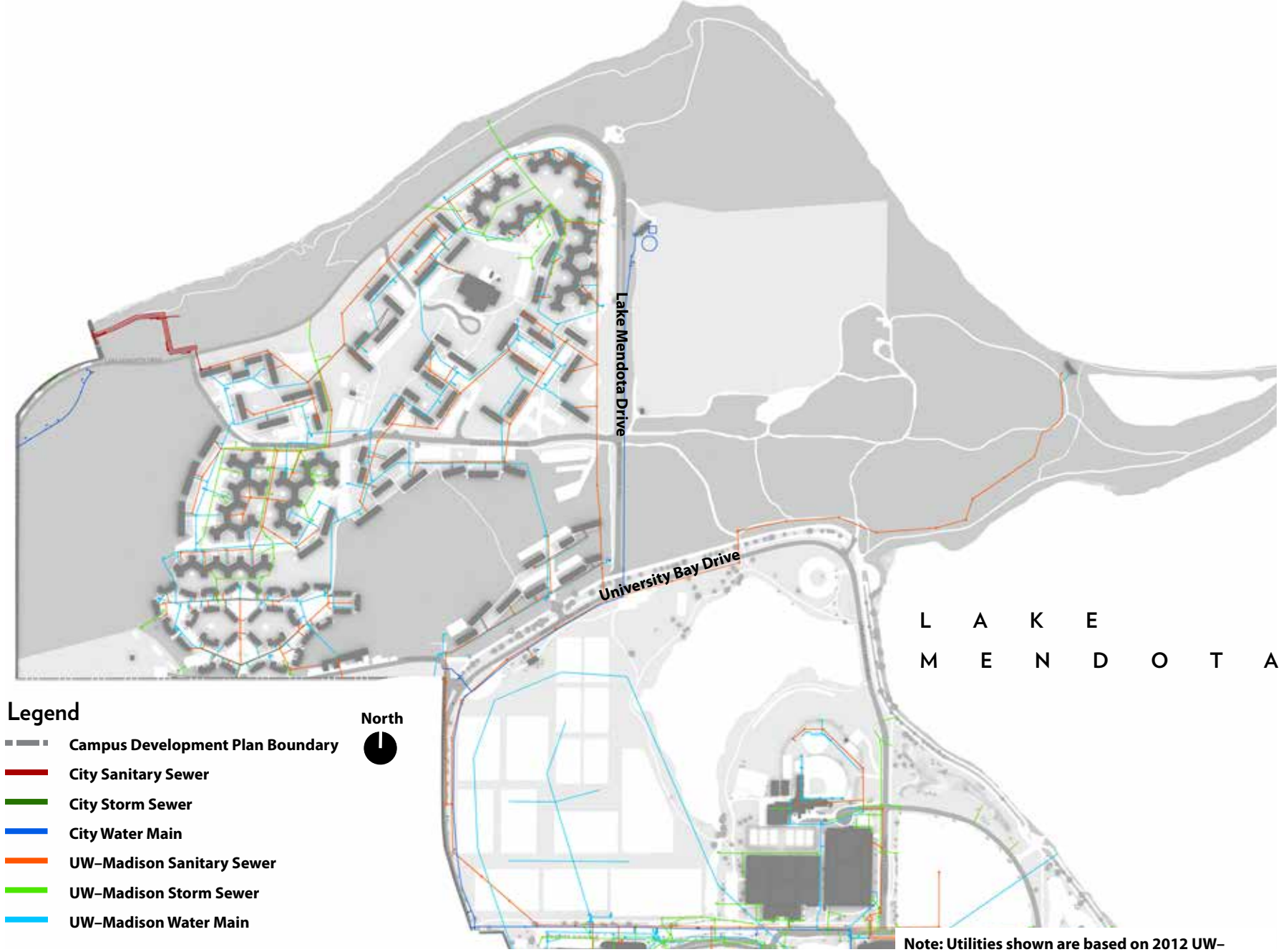


Figure 3-27 Existing Civil Utilities, Far West Campus

3. CONTEXT AND EXISTING CONDITIONS

- Bascom Hill – sanitary sewers going up Bascom Hill are very old and need to be replaced
- Birge Hall – there is a break in the sanitary line serving Birge Hall located 14 feet below the greenhouse. Roof drains currently tie into line and cause backups into Birge Hall. Need to separate storm from sanitary and repair sanitary – possibly using fiberglass lining
- Observatory Drive north of Soils Building – need to replace sanitary manhole – collects several sewers, bad location, unsafe lid
- Barley Malt Laboratory (Federal Building) – building currently not in use – pressure main needs replacement if developed (will revert to UW's), needs sewer and water
- Forest Products Lab – need to find out if there is an agreement for sanitary service (city has asked for mapping)
- Walnut Street near Campus Drive – concrete lined steel force main from lift station to Madison Metropolitan Sewerage District connection needs to be evaluated due to age
- Walnut Street Heating Plant – there is a gravity discharge with a check valve to the force main in Walnut Street that may need to be addressed during Lot 76 lift station project. Possibly put a pump in to make the discharge a force main, or pipe within the plant to make it gravity and send it to the other side of the building
- Keystone House (901 University Bay Drive) – issues with shallow sewer freezing. Need to look at redoing if parking lot is ever expanded
- Marsh Pump House – needs engineering evaluation
- Camp Randall Stadium sewer needs evaluation – have had some backups during half time

Storm Sewer Issues/Projects

- Air Force ROTC Building (1433 Monroe Street) – a large city storm sewer goes under the building (should be addressed at some point)
- Union South – flooding issues on N. Orchard Street side, possibly due to capacity issues in City sewers, possibly due to inlet capacity
- Bock Labs/Agricultural Hall (Lot 30) – flooding issues in parking lot
- Bascom Hill/Education – storm to south of Education Building is old and needs replacing. Storm along Law Building is new
- Nicholas Hall – records for area need updating. Storm sewer discharges into gravel under pervious pavement. Existing storm has inverted sump under steam line crossing – no good storm drainage path in area

- Linden Drive – sump in storm sewer (inverted siphon) under steam – bad idea
- Agriculture Hall – dry well (open bottom cistern) located in front of building with no outlet that collects water from steps. It is not currently causing issues but cannot find bottom so could be considered a deep water injection well.
- Observatory Avenue – needs new storm from Charter Street to Babcock Drive (scheduled to be redone).
- Microbial Sciences – total of eight H-boxes to north of building. H-boxes were several feet off when initially installed so four more boxes with pipes were added. Cleanouts were added later for access to extra boxes (realign and redo when Observatory Avenue work is done)
- Soils Building – need to rebuild manhole north of Soils Building (bad condition)
- Meat and Muscle Lab (old) – parking lot north of old building needs drainage – would like to look into using pervious pavement
- Storm/sanitary crossover near building to be fixed with building project
- Seeds Building (old) – would like to remove abandoned seepage beds south of building, east of Veterinary Medicine
- Randall Avenue – Storm sewers are currently at capacity and may require some kind of detention. Area might be included in engineering campus storm study. Tim Troester (city) has a boundary of area needing peak flow attenuation

Water Main Issues/Projects

- Engineering Drive – full replacement of sewers and water is needed
- Lathrop Drive (from Charter Street to Park Street) – under design by Ayres, to be phased in over 5 years (looking at looping with new main). This project is complex due to the depth, steep hills, and tunnels that are in the way
- Bascom Hill – everything but the new 16 inch water main is very old clay pipes
- Library Mall fountain – questions about how the water is being fed/treated/drain
- Mills Street/Dayton Street area – pressure problems at Education Sciences, Charter Street Heating Plant, Teacher Education and surrounding area (city water mains are dead-ended on Mills Street/Dayton Street and hydrants are bagged), city is aware of the issue but will not fix water main connections until street is scheduled for replacement

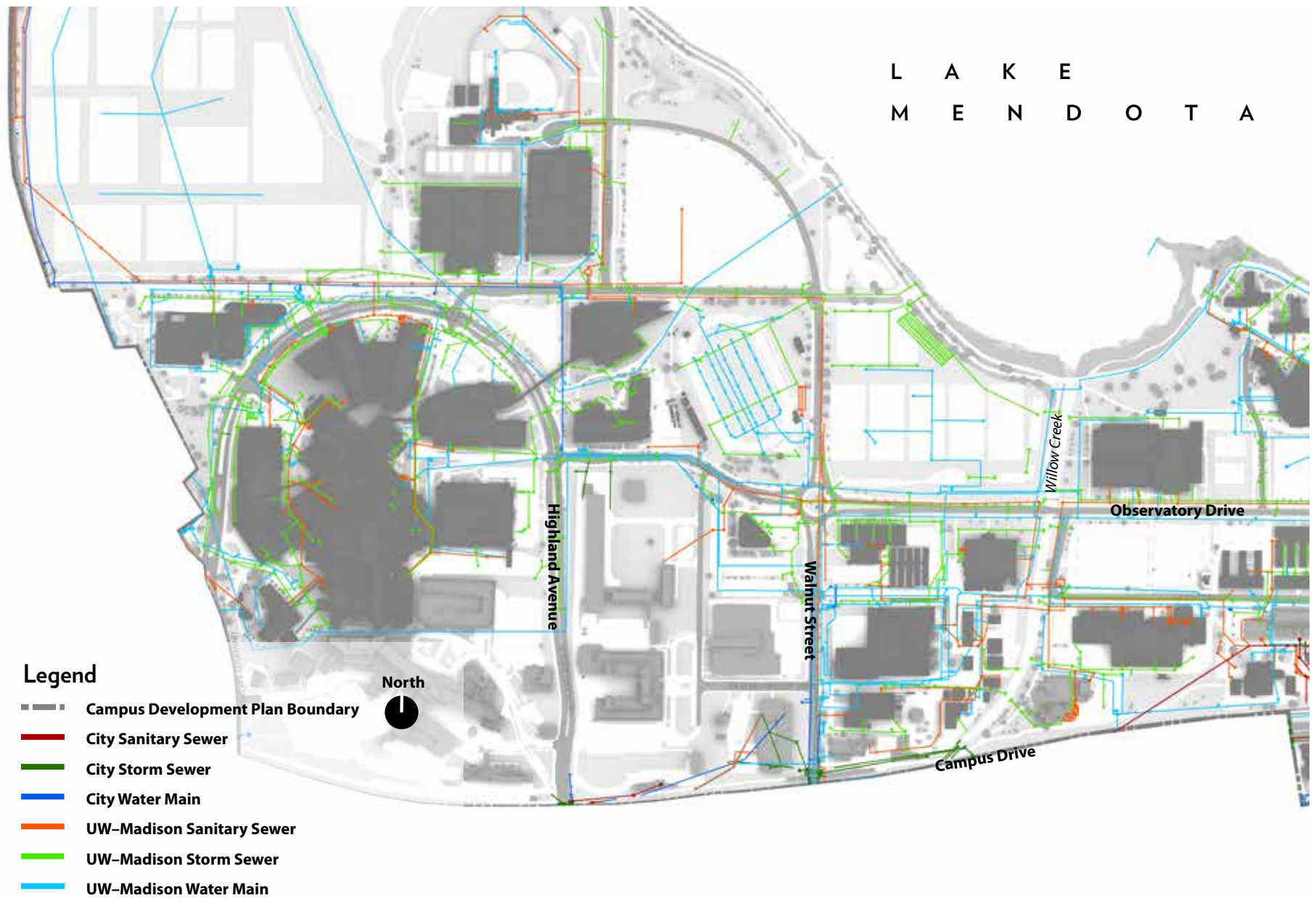


Figure 3-28 Existing Civil Utilities, West Campus and VA Area

Note: Utilities shown are based on 2012 UW-Madison CAD records. Accuracy is not guaranteed.

3. CONTEXT AND EXISTING CONDITIONS

- Lorch Court – project has been designed (water/sewer) but on hold
- Old Medical Sciences Center Complex, Nutritional Science, Middleton – old utilities, lots of concerns
- Linden Drive (from Willow Creek to Livestock Labs) – needs new sewer/ water
- Radio Hall and N. Park Street – portion of old water main left in place between Radio Hall and Park Street/Observatory Avenue corner
- Pyle Center/Red Gym – a new water main is being extended down Langdon Street (by city), dirty water issue should be addressed when a new hydrant is added behind the Red Gym for flushing
- Bascom Hill – 16 inch water main going up Bascom Hill is new. Other lines may be old and in need of replacement
- Nicholas Hall – water line records need updating west of hall
- Veterinary Medicine – university owns water main crossing Campus Drive from meter pit at north end of Paunack Place to Veterinary School. Age of main and current condition is unknown
- Barley Malt Laboratory – building currently not in use. Water main will need to be replaced if site is developed
- American Family Children's Hospital – valve configuration inside of building does not allow for functional two-feed system. Needs to be corrected by Hospital. Director of the Plumbing Shop has had correspondence with the Children's Hospital
- Holt/Conover Lake Shore Residence Hall – large project currently planned to replace sewer and water and may also include addition of utility corridor
- Campus Drive – water main owned by UW–Madison up to meter pit, under Campus Drive at Paunack Place – age of water main unknown

Miscellaneous Utility Issues

- Bradley Hall – 4 inch brine line has broken four times since Dejope Residence Hall was opened
- Livestock Labs – issues with debris getting down in manure pit holding tanks, jamming pumps
- West Recreation Fields (near Waisman Center) – irrigation cross-connection not up to code

L A K E M E N D O T A

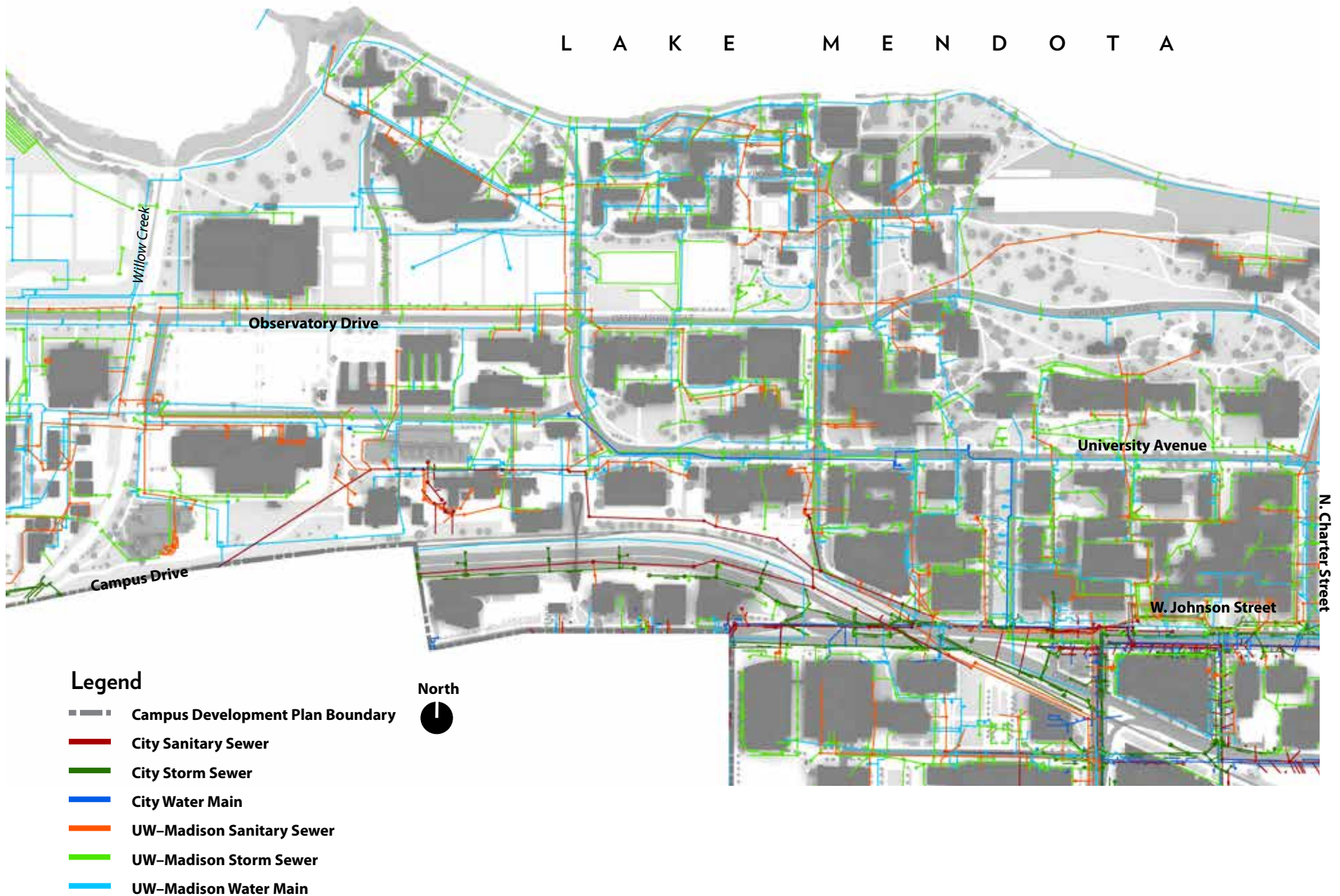


Figure 3-29 Existing Civil Utilities, Near West Campus

Note: Utilities shown are based on 2012 UW-Madison CAD records. Accuracy is not guaranteed.

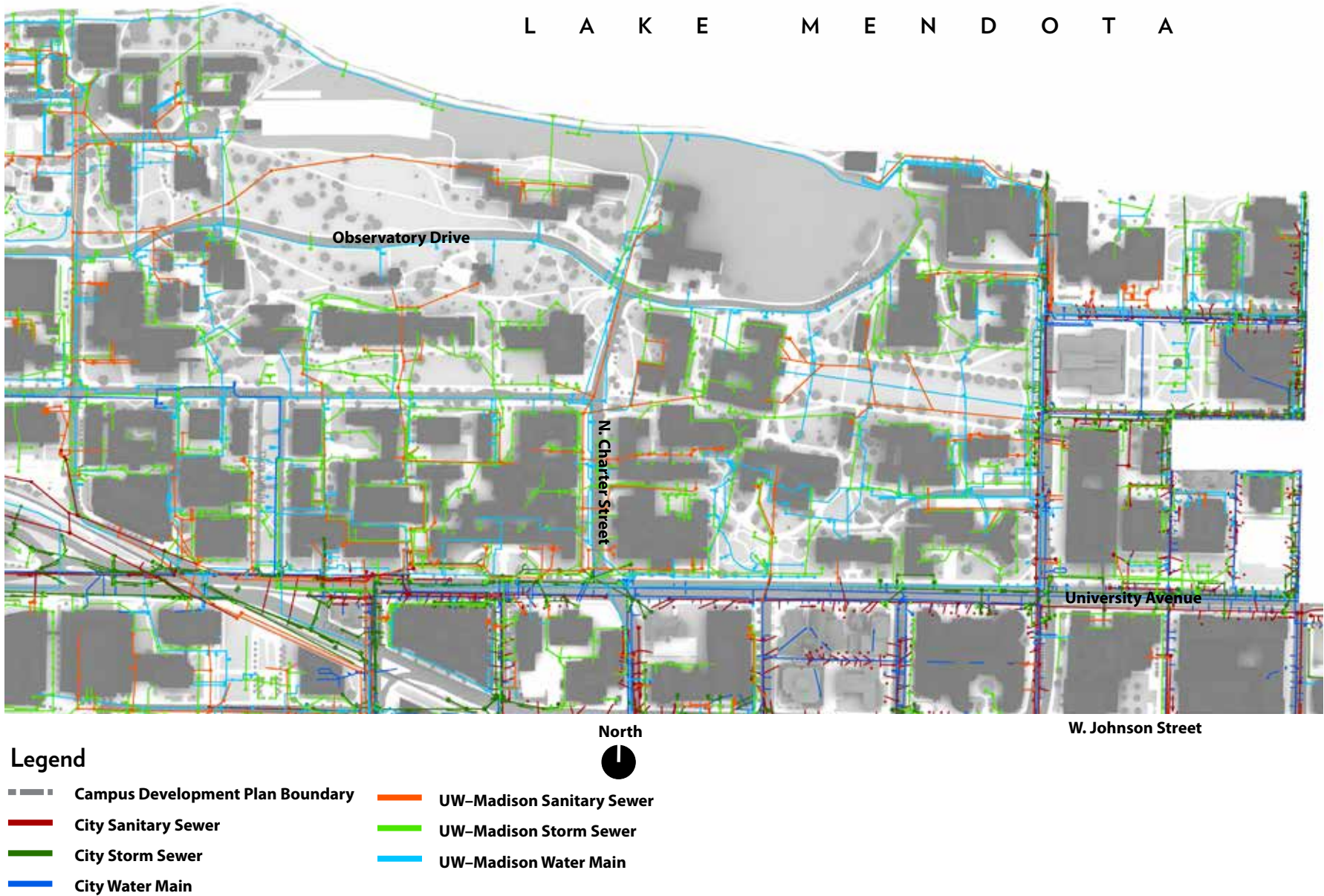


Figure 3-30 Existing Civil Utilities, Central Campus

Note: Utilities shown are based on 2012 UW-Madison CAD records. Accuracy is not guaranteed.

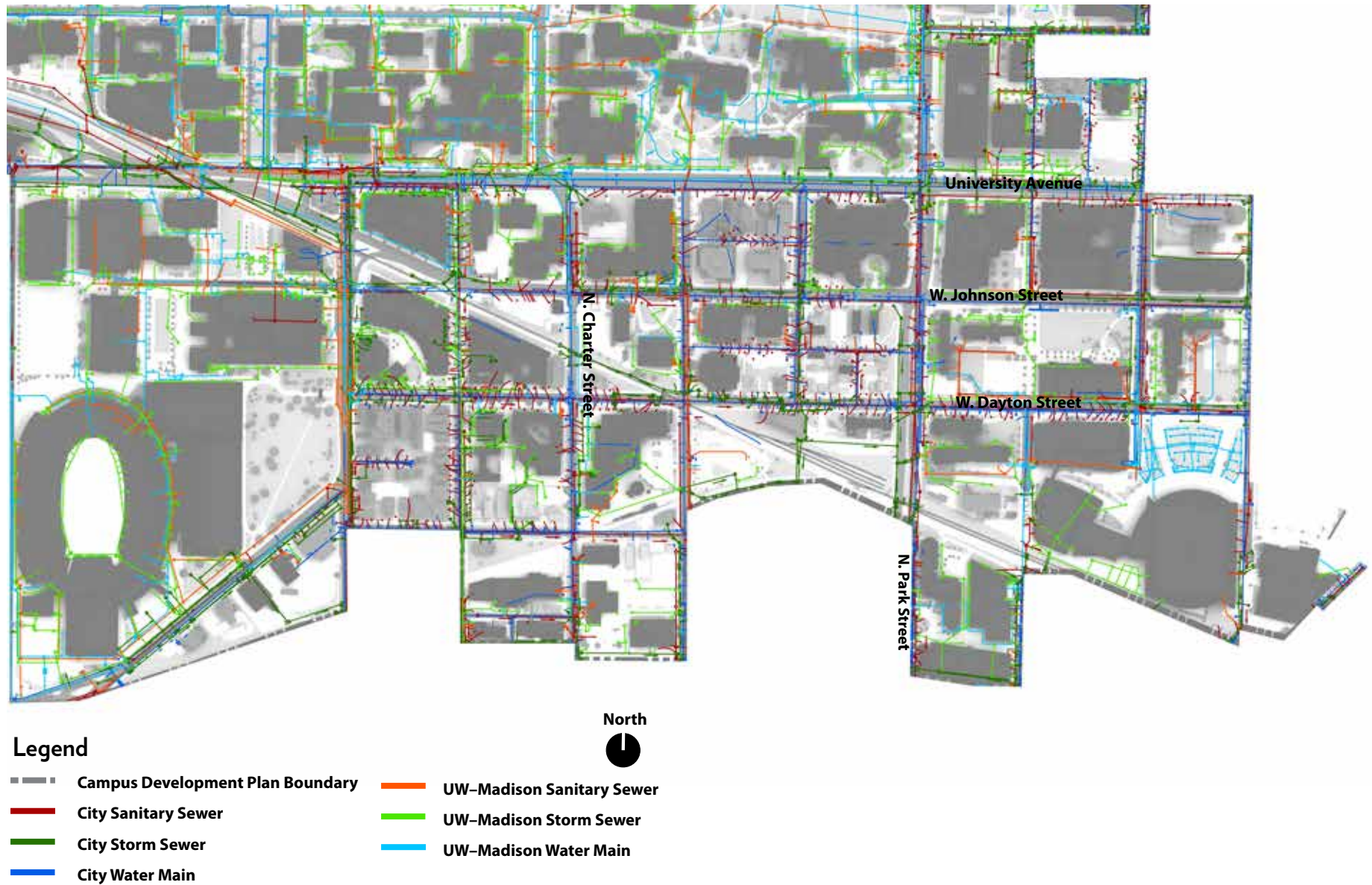
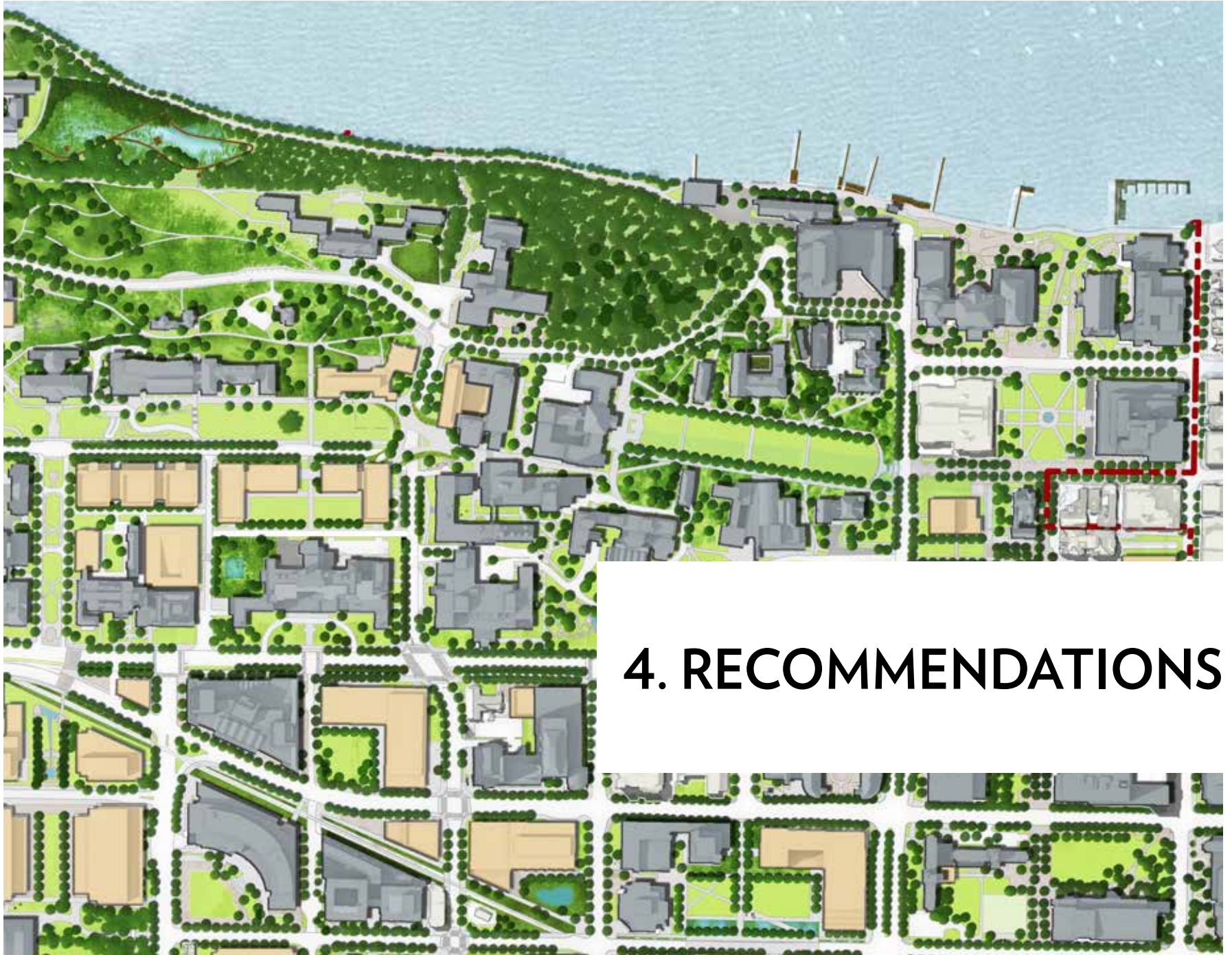


Figure 3-31 Existing Civil Utilities, South Campus

Note: Utilities shown are based on 2012 UW-Madison CAD records. Accuracy is not guaranteed.



4. RECOMMENDATIONS

Introduction to Recommendations

The recommendations are a compilation of the ideas generated throughout the master planning process. This section focuses on the key features of the plan. It should be noted that the 2015 Campus Master Plan Update is a dynamic guide for future development that will change over time. It is not prescriptive and does not include details of specific projects, time lines, or budgets. Project details are developed as part of the university's biennial capital budget and a 6-year capital development plan approved by the Campus Planning Committee every two years.

The 2015 Campus Master Plan Update guides development for the next 20 years and beyond. Growth in our facilities will occur without significant increases in our student population. We will expand our capacity for cutting edge research, replace obsolete and costly to maintain facilities and decompress overcrowded spaces where needed. We need to recreate ourselves in place without expanding our official Campus Development Plan Boundary. To accomplish this, we will increase building density on the West Campus creating a more traditional campus setting for the Health Sciences. We will build more compact structured parking across campus replacing inefficient surface parking in order to open up land for more green space and future building development opportunities.

We will preserve and enhance our culturally significant landscapes and open spaces. We will improve our streets, bicycle paths, sidewalks, and parking facilities to further reduce our demand on the region's streets. We will install stormwater management features that will clean stormwater before it flows into Lakes Mendota and Monona.



Master Plan Goals and Guiding Principles

The master planning process was guided and driven by the master plan goals and guiding principles. The master plan goals of the 2005 Campus Master Plan were updated to reflect the university's 2015 strategic direction and leadership. The goals were expanded to provide additional guidance regarding the campus landscape, open space, and green infrastructure. The Master Plan Consultant team and Campus Planning Steering Committee referred to the goals and principles when considering alternative futures and refining the Master Plan recommendations.

More important than this historical use is the future use of these goals and guiding principles. As all building, parking, landscape, and utility projects are developed and constructed, UW–Madison staff and its consultants should refer to and apply these principles to ensure a consistent and common vision.



1. Support Our Mission

- Support our mission of teaching, research, and outreach by enhancing our physical identity.
- Demonstrate and support the Wisconsin Idea in how we perceive and develop our physical campus.
- Maintain/renovate/replace campus buildings to support a high quality academic and research environment.
- Support and create interdisciplinary academic connections through improved campus facilities and landscapes.
- Support the integration of education, research, and outreach into campus operations with hands-on learning opportunities.
- Leverage the Lakeshore Nature Preserve as natural areas that support our mission of teaching, research, and outreach.



2. Manage Our Resources

- Manage our physical resources as effectively and efficiently as possible.
- Provide buildings with designed flexibilities to meet a planned life of at least 50-100 years or more.
- Demonstrate leadership in environmental sustainability both on- and off-campus.
- Develop and respect sustainable design guidelines to create sustainable facilities.
- Preserve and enhance our environmentally sensitive and culturally important areas by improving, expanding, and monitoring their long-term viability.
- Establish long-range goals to become a future zero-waste campus by 2025.
- Make data-informed decisions regarding infrastructure and building services as the campus evolves.
- Manage and improve our water resources by continuing our water conservation initiatives.
- Construct a reliable utility infrastructure network to meet current and future demands.
- Use Sustainable SITES Initiative® as a guideline for all future development.



3. Make Travel Easy

- Support convenient alternatives to driving by maximizing our Transportation Demand Management initiatives.
- Make it efficient to travel to and move around campus.
- Construct accessible and convenient bicycle/pedestrian facilities that connect users to destinations on campus and beyond.
- Provide an efficient and convenient commuter and circulator transit system, connecting campus destinations and linking campus with the city and surrounding areas.
- Improve our streetscapes, making them more comfortable, safe, and convenient for pedestrians and cyclists.
- Provide the minimal amount of parking needed to meet the needs of the campus and its visitors.



4. Celebrate Our Lakeside Setting

- Protect and celebrate our lakeside setting while reducing our impacts on land and water.
- Leverage our lakefront setting and natural areas in the Lakeshore Nature Preserve.
- Enhance and sustain our campus natural resources for future generations.
- Work with our local partners to continue to improve the water quality of Willow Creek, Lake Mendota, and the entire Yahara Lakes system to meet current and future water quality regulations.



5. Revitalize Outdoor Spaces

- Develop our physical environment so that it communicates our institutional values and strategic priorities.
- Respect and celebrate the history and cultural diversity of the university.
- Promote a clear sense of place by protecting, enhancing, and maintaining our existing quadrangles, courtyards, and streetscapes.
- Explore the need for new outdoor spaces for informal gatherings.
- Protect and enhance our historic buildings, historic districts, and cultural landscape resources.
- Nurture wellness through a broad spectrum of outdoor open spaces and encourage physical activity throughout the seasons.
- Refine and unite our on-campus neighborhoods by revitalizing outdoor gathering spaces and utilizing the campus for experiential learning, health, and wellness.
- Ensure our available land is put to the highest and best use.
- Design buildings and landscapes so that they fit into their campus neighborhood context.
- Develop and respect comprehensive design guidelines to further design coherence.



6. Be Good Neighbors

- Be responsive to our neighbors to assure we are good community partners, maintaining a high quality of life for everyone.
- Create an environment that invites participation by the surrounding community in our educational and entertainment events.
- Welcome visitors to campus with a sense of arrival through defined gateways at major entry points.
- Delineate an identifiable and inviting campus boundary where appropriate.
- Establish efficient and attractive connections across campus and with the surrounding neighborhoods.

Campus Development Plan Boundary and Potential Land Acquisitions

The current master planning process recommends a change to the Campus Development Plan Boundary in the southeast corner of campus. The boundary is recommended to be shifted north to the south side of the Doyle Administration Building to include the entirety of Lot 91.

Private Parcels within the Campus Development Plan Boundary

There are many privately-owned parcels within the Campus Development Plan Boundary (see Figure 4-1).

Not Considered for Acquisition

Within the Campus Development Plan Boundary, certain parcels continue to be held privately. Of those parcels, several are not currently being considered for future acquisition by UW–Madison. Those parcels not considered for future acquisition by the Board of Regents include:

- 816 State Street (Wisconsin Historical Society)
- 433 N. Murray Street (Pres House Apartments site)
- 701 University Avenue (University Square development-condo)
- 108 and 110 N. Murray Street (MGE South Campus Substation)
- 1001 W. Dayton Street (W. Dayton Street private apartments)
- Block bounded by University Avenue, N. Mills Street, W. Johnson Street and N. Brooks Street (including Luther Memorial Church/Lutheran Campus Center, Street Francis House Episcopal Student Center, X01, Grand Central, Porchlight)
- 1127 University Avenue (The Crossing)
- 1423 Monroe Street (private apartments)
- 1435 Monroe Street (UW Credit Union)
- 1437 Monroe Street (City of Madison Fire Department)
- 210 N. Charter Street (private apartments)
- 445 Easterday Lane (Wisconsin Veterinary Diagnostic Lab)
- 112 N. Mills Street (private apartments)

Open for Acquisition

Several parcels are held by the federal government and not currently being considered for acquisition. If at such time the federal government decides to relocate and/or liquidate their property interests in these locations, the university would be interested in acquiring the land under prior agreements with the federal government.

- 2500 Overlook Terrace (William F. Middleton Memorial Veterans Administration Hospital)
- One Gifford Pinchot Drive, (USDA Forest Products Laboratory facilities)
- 502 Walnut Street (Cereal Crops Research Unit)
- 1925 Linden Drive (US Dairy Forage Research Center) (long-term lease)

Desired Acquisition

Within the approved Campus Development Plan Boundary, several private parcels are being considered for future purchase when available from willing sellers. It is the desire of the university to, over time, purchase these parcels for future development. These include parcels not currently owned by the Board of Regents.

- All parcels in the block bounded by N. Randall Avenue, W. Dayton Street, N. Orchard Street, and Spring Street
- All parcels in the 1200 block of Spring Street, both sides of the street
- Parcel at W. Johnson Street and the rail line (1221 W. Johnson Street)
- Parcel at N. Charter Street and the rail line (222 N. Charter Street)
- Parcel on N. Charter Street, north of Capitol Court (26 N. Charter Street)
- Parcels on south side of Spring Street (1101 Spring Street, 1111 Spring Street, 1115 Spring Street)
- Parcels near the corner of N. Brooks Street and W. Dayton Street (1014 W. Dayton Street, 202 N. Brooks Street)
- All parcels in the block bounded by N. Park Street, W. Johnson Street, N. Brooks Street, and W. Dayton Street

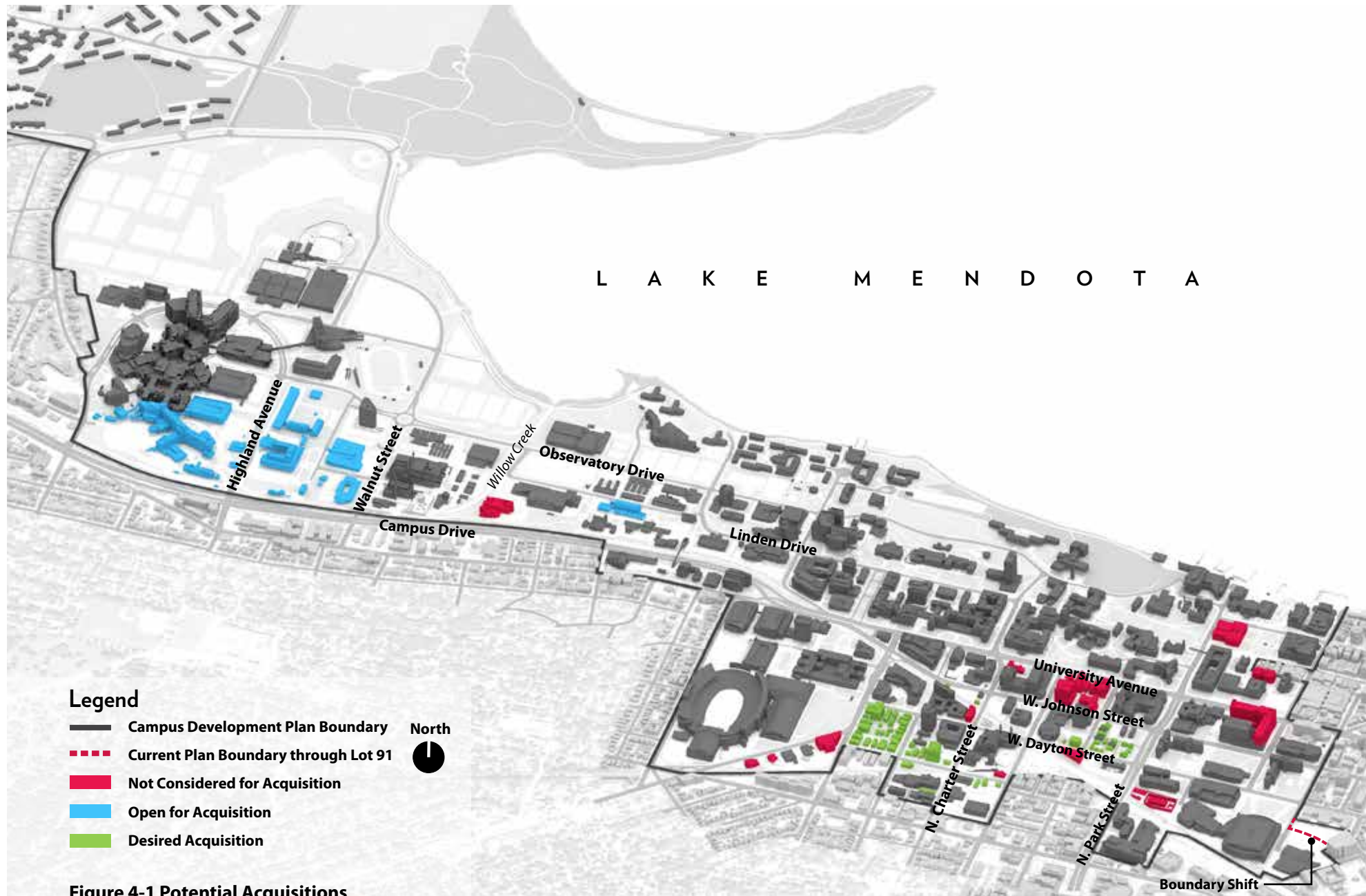


Figure 4-1 Potential Acquisitions



Proposed Building Use, Form, and Density

Building Use

The campus has a clear existing building use pattern and the 2015 Master Plan Update strengthens and extends that pattern. Academic and research uses are concentrated in the Central and South Campus areas, clinical and health teaching and research in the West Campus area, and agricultural teaching and research in the Near West area. There are two distinct student housing neighborhoods, in the southeast and along the lakeshore, each with significant outdoor and indoor recreational facilities. Outdoor recreational fields are located in lower density Near West, West, and Far West Campuses. Athletic venues are in the South Campus and West Campus areas. The most significant building use pattern change proposed in the 2015 Campus Master Plan Update is a relocation and expansion of medical and health related teaching and research from the Central Campus to the West Campus

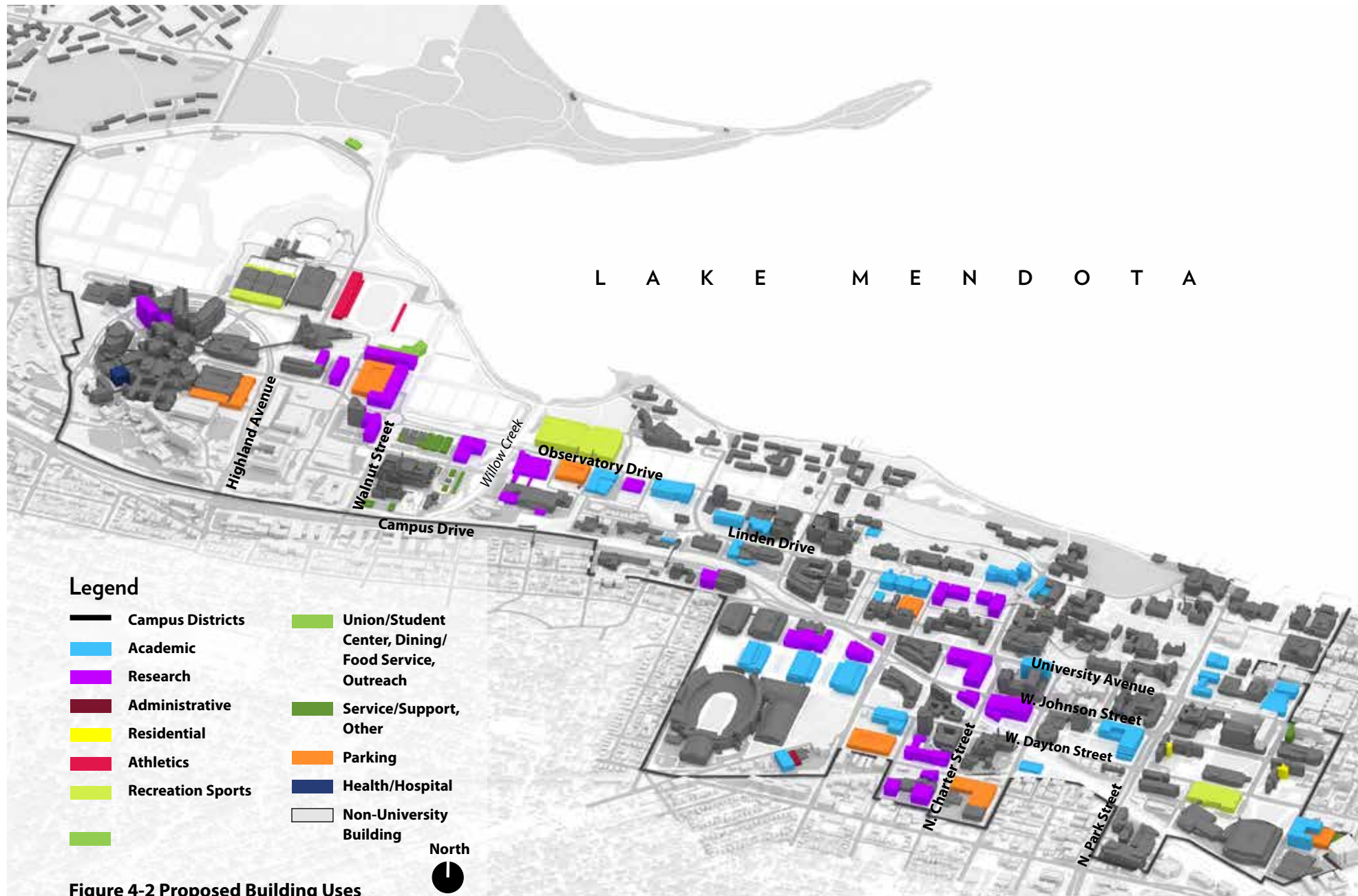


Figure 4-2 Proposed Building Uses

Density

The 2015 Campus Master Plan Update indicates the appropriate location and massing for future buildings. These sites are new construction on existing surface parking lots or removal of existing structures and construction on the same site. These building site opportunities represent the long-term capacity of campus, with a campuswide increase of capacity of over 4,747,000 gross square feet over existing inventory. The university will be able to grow and change for decades within the Campus Development Plan Boundary. The density of the Central Campus and Far West Campus areas will remain largely unchanged, and the density of the West and Near West Campus areas will increase moderately. With over half of the increased capacity, the density of South Campus will increase substantially, overtaking Central Campus as the most building dense area of campus.

Floor Area Ratio (F.A.R.) is a method measuring density. It is calculated as the sum of the floor area (gross square foot, GSF) of all buildings in a district, divided by the size of the district. To better measure the activity concentration of each campus district, the building gross square feet of the floor area ratios of parking structures, Camp Randall, and the Kohl Center are not included in Figures 4-3 and 4-4.

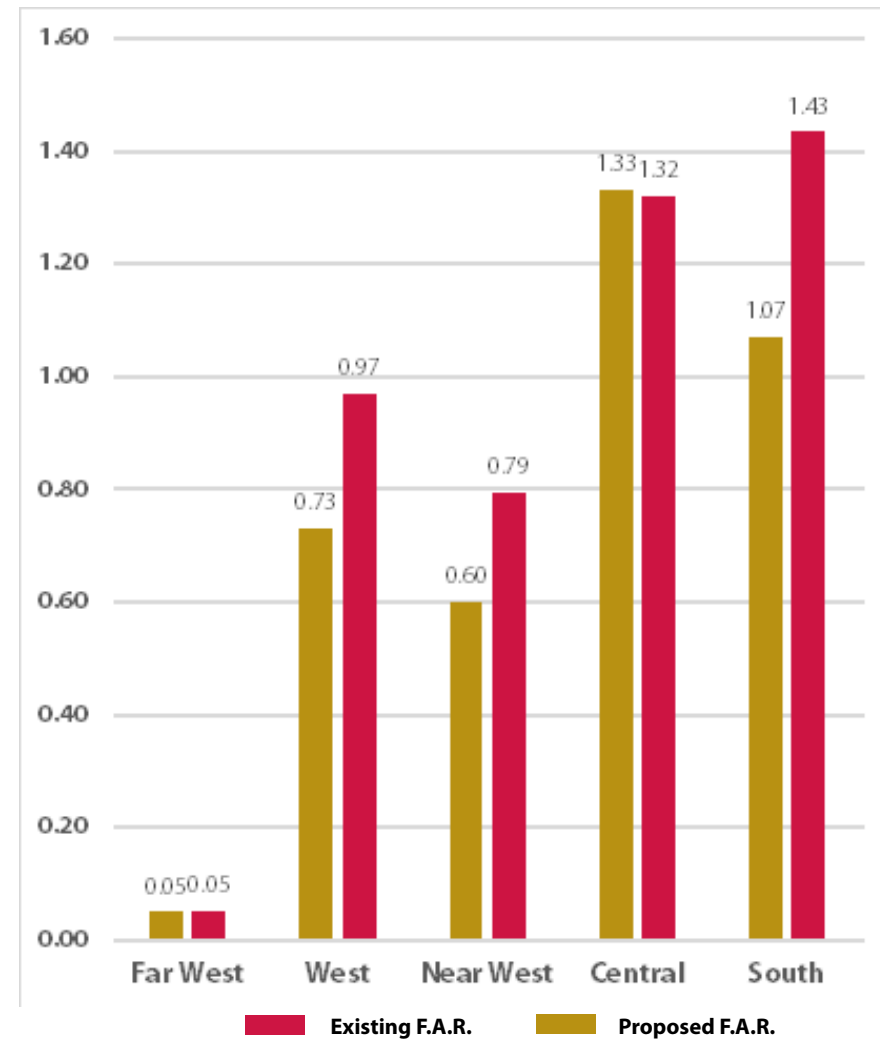
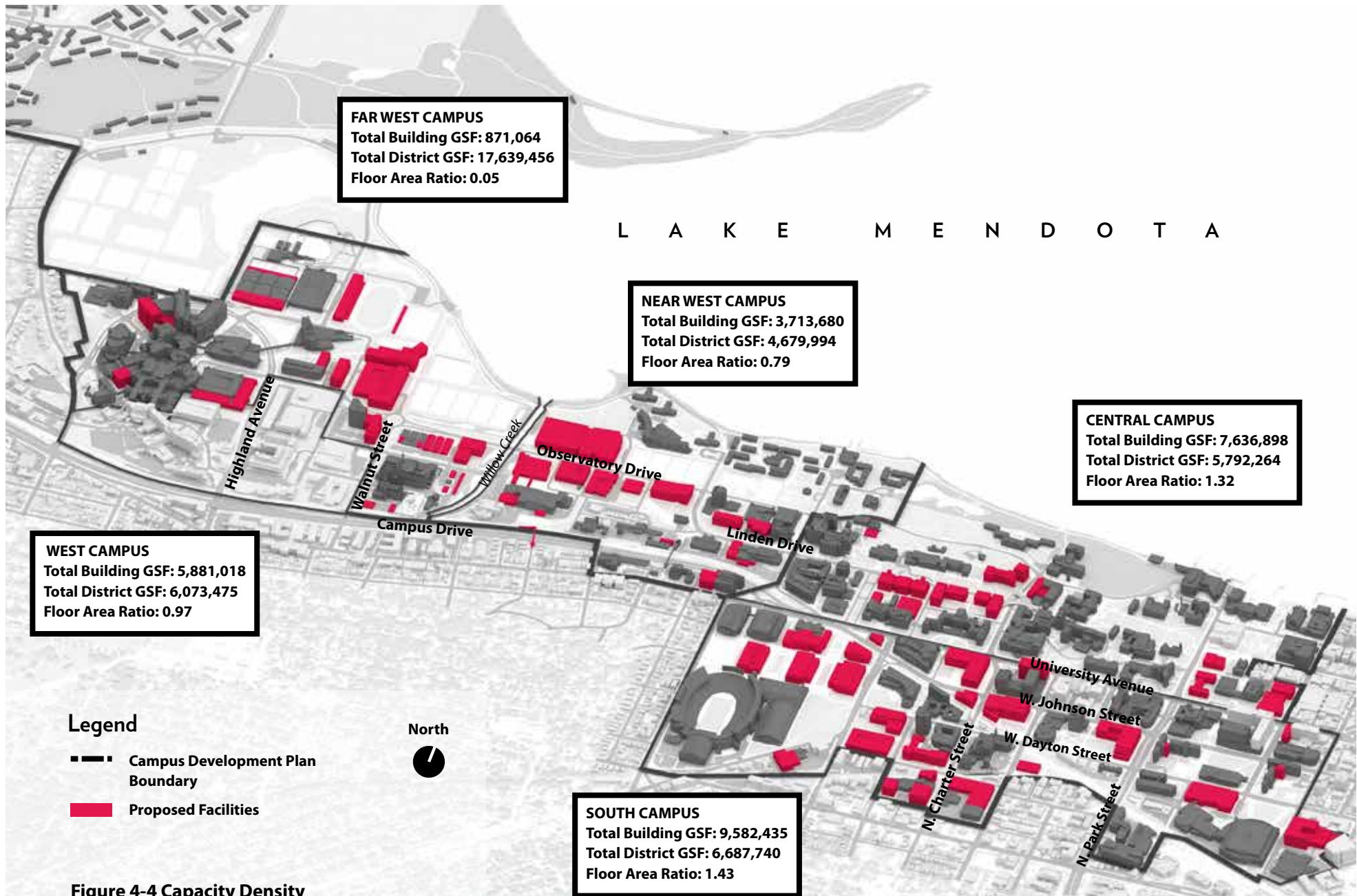


Figure 4-3 Floor Area Ratio – Existing and Proposed



4. RECOMMENDATIONS

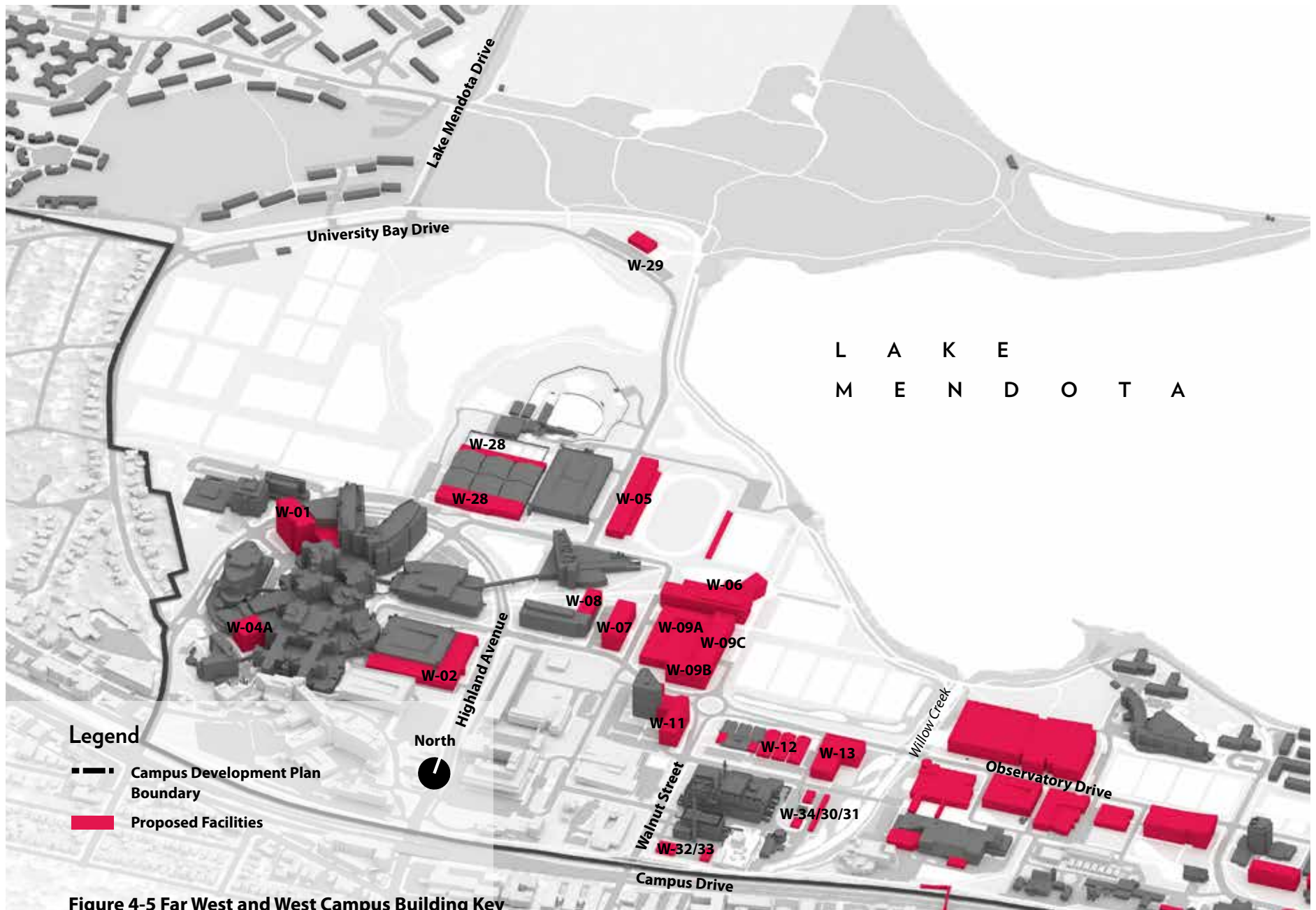
A detailed listing of all major planned buildings follows. In each section, where a new building is proposed, it is referenced to a map by a key location and building number. For example, “W-08” would be a new building on the West Campus or Near West Campus. The numeric numbers are in a simple geographic sequence and does not signify a timeline or sequence as to how the buildings would be built over time.

Far West Campus

The general goals for the Far West Campus district (approximately all land north of UW Hospital, Nielsen Tennis Stadium, and Goodman Softball Complex) are to:

- Maintain existing recreation fields and open space connections
- Maintain existing low-scale residential in Eagle Heights
- Continue strong preservation and management of the Lakeshore Nature Preserve, per the goals and recommendations of the Lakeshore Nature Preserve Master Plan

The 2015 Campus Master Plan Update recommends one new facility, a Preserve Outreach Center (W-29). This facility would welcome visitors, provide maps, educational displays, and interpretive information for the entire, 300-acre Lakeshore Nature Preserve. It could provide an overlook as part of the structure to enhance views across University Bay and toward the Class of 1918 Marsh, year-round restroom facilities, and rationalize parking for cars and bicycles.



West Campus

The general goals for the West Campus district are to:

- Increase building density to provide for potential future growth in the health sciences
- Change the general character of the West Campus from suburban to more of a traditional campus with large buildings organized around quadrangles and green spaces
- Set heights to generally reflect existing buildings in the area
- Preserve and create new viewsheds to Lake Mendota, particularly for the UW Hospital and WARF Building

The primary focus of the West Campus is health sciences services, medical and affiliated education, and research. Other uses include athletic facilities, recreational fields, and supporting parking and service facilities.

The 2015 Campus Master Plan Update continues the migration of the medical school and UW Hospital from its original home in the Central Campus district on University Avenue. As outlined in earlier campus master plans, the university seeks to move medical research and teaching facilities to near the teaching hospital to facilitate a closer bench-to-bed technology transfer. The consolidation of the hospital and medical school on the West Campus continues what was initially envisioned in the original hospital master development plan developed in 1970 by HOK.

Health sciences-related research will continue to grow and expand. Space expansion is likely for the UW Hospital, Medical School, Pharmacy, and Nursing, in addition to swing space necessary for efficient remodeling. Two expansion opportunities remain within the Highland Avenue ring road – the Wisconsin Institutes for Medical Research Phase 3 (W-01) and a reservation of space for an additional hospital module (W-04A).

The USDA Forest Products Lab and the William S. Middleton Veterans Memorial Hospital comprise over 45 acres of land within the Campus Development Plan Boundary and adjacent to the hospital. Expansion into the federal property is currently not possible. These two federal properties are shown to be continuing without significant changes. Both the USDA Forest Products Lab and the Veterans Hospital are consolidating their functions from around Wisconsin and the Midwest to their facilities here in Madison making them even more viable than in the past. Purchasing land from the federal government will be difficult, if not impossible. Potential does exist however for joint

development projects between these two entities and the university. If either entity vacates these locations, the land reverts back to the Board of Regents.

The 2015 Campus Master Plan Update recommends redeveloping and intensifying lands, to the extent allowed by soil conditions, that are now occupied by the McClimon Sports complex and Lot 60.

The 2015 Campus Master Plan Update continues to recommend the relocation of the McClimon Track/Soccer complex to the Lot 60 area to provide a more green pervious surface next to the lake. In order to facilitate this proposal, replacement parking for the cars in Lot 60 would need to be developed first, including a new interior parking structure in the development of expanded Health Science Buildings (W-09A) (1,500 spaces) on the former track location. This, along with the hospital ramp addition (W-02) and potential joint parking at the Veterans Hospital and/or USDA Forest Products Lab, would provide the necessary replacement parking for the loss of the 1,200+ surface spaces at Lot 60.

The new track would provide a fully developed outdoor track complex (W-05) with a competition soccer field in the center. A soccer practice facility would be developed to the east toward the lake, providing infiltration capacity for on-site stormwater needs. Both a separate competition soccer facility and a soccer field incorporated into the track remain options to further investigate.

The recommended relocation of the track complex allows for extensive future development of academic and research facilities for the health sciences. An additional three floors may be added to one wing of Signe Skott Cooper Hall (W-08), and a new 6-story structure may be constructed on Lot 85. A newly created parking structure (W-09A) would be wrapped with potential office spaces (W-09B) and have a proposed academic/research facility to the north (W-09C). Additional health science office-based research space could be created around the base of the existing WARF Building (W-11).

Also in this area, the 2015 Campus Master Plan Update recommends the development of a new mixed-use building that may include meeting rooms, dining, gathering spaces, and possibly academic or office spaces (W-06). As the West Campus redevelops and becomes nearly as dense as the existing South Campus, meeting rooms, food service, and general social space for faculty, staff, students, patients, and visitors is needed on the West Campus. Outdoor terrace seating areas should face and connect to the lake off the northeast corner of the building. A second level terrace would overlook the Soccer complex to the north and the band practice and recreation fields to the east.



Figure 4-6 Far West And West Campus Illustration

4. RECOMMENDATIONS

In the West Campus, fairly large buildings are being planned around new quadrangles of green space. The mixed-use building should be sited to preserve views of Lake Mendota from the UW Hospital and extend an open space corridor from the Health Sciences Learning Center, south of Rennebohm Hall, and north of Signe Skott Cooper Hall and on to Lake Mendota. Preservation areas, Class of 1918 Marsh, existing and recommended stormwater treatment areas, recreation fields, and the Howard Temin Lakeshore Path maintain a connected open space network along Lake Mendota. The open spaces are also outdoor laboratories for the Department of Botany, the Department of Landscape Architecture, and the College of Engineering, as described in the Lakeshore Nature Preserve Master Plan. The linking of open spaces is key to the overall connectedness of the plan for the West Campus and starts to create a more campus-like neighborhood rather than the existing suburban neighborhood character with huge buildings with no formal outdoor spaces.

The existing West Campus Recreation Fields, north of the Waisman Center and northwest of the Nielsen Tennis Stadium, remain as recreation fields in the 2015 Campus Master Plan Update. The large outdoor fields serve an important function for the campus and will continue to do so in the future.

Other proposed facilities include a near-term reconstruction of the Walnut Street Greenhouses (W-12) that will expand greenhouse space and avoid shading from the Walnut Street Cogeneration Plant to the south.

Several areas on campus are set aside in the 2015 Campus Master Plan Update as major service and infrastructure points. The West Campus service area houses the Physical Plant Operations/Grounds Facilities and the West Campus Cogeneration Facility. The 2015 Campus Master Plan Update recommends a long-term redevelopment of the Grounds offices and storage facilities now located along the west bank of Willow Creek. To reduce runoff of stored materials and allow for the creation of wetland and stormwater facilities that will improve the water quality of Willow Creek and Lake Mendota, Grounds facilities will be relocated into new and existing structures. A new office/administration building, controlled temperature storage, and covered vehicle storage facilities will be constructed south of Linden Drive around the existing incinerator. New greenhouse and salt storage facilities will be constructed on the federal Barley and Malt Laboratory site east of Walnut Street and south of the Walnut Street Heating Plant.

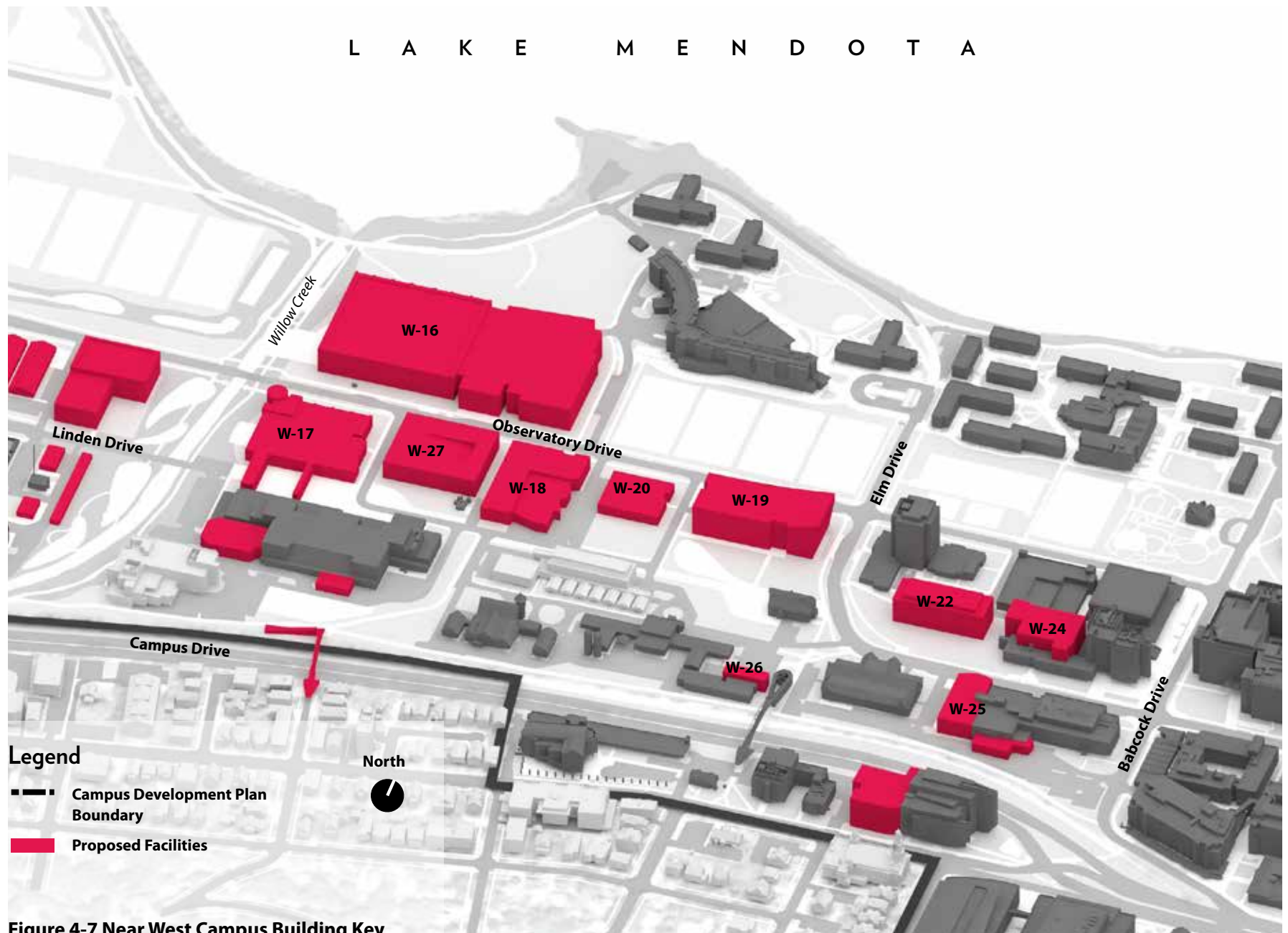


Figure 4-7 Near West Campus Building Key

Near West Campus

The general goals for the Near West Campus district are to:

- Increase building density to provide for potential future growth in agricultural and life sciences
- Replace single-story buildings to better tie the West and Central Campuses together in a more traditional campus setting building
- Improve the Willow Creek corridor and water quality through adjacent site redevelopment and wetland and stormwater facilities
- Capture and treat stormwater along the Linden Drive and Observatory Drive corridors, creating a new campus “green neighborhood”

Near West Campus Design Neighborhood

In the Near West Campus district, a goal is to increase overall density and expand social and working open spaces. Currently the area is a mixture of low or single-story Agricultural Farm Buildings and higher density research and academic facilities. The Near West Campus will not only continue to maintain its land grant Agricultural Buildings but also increase density to allow for new research facilities to be constructed.

A large near-term academic and research facility is a new Veterinary Medicine hospital and research facility (W-17), which will be an expansion of small animal clinical and research programs in the new building and renewal of portions of the existing small and large animal hospitals. The expansion will occur on the site of the existing 410-stall Lot 62, and parking will be replaced in a new 625-stall parking structure (W-27).

The pre-design for the new Veterinary Medicine hospital and research facility requires two at-grade connector hallways between the existing and proposed structures, cutting off Linden Drive. In order to improve the Willow Creek corridor by replacing impermeable driving surfaces with permeable and attractive open spaces, the 2015 Campus Master Plan Update recommends that Easterday Lane be removed. Circulation to the existing small animal drop-off will be accommodated by a reconstruction of the existing pedestrian/utility bridge over Willow Creek into a wider bridge that will accommodate vehicles. Access to the east side of the new Veterinary Medicine Hospital will occur off Linden Drive, and large animal loading and drop-off along the east and south sides of the existing hospital.

Systematic reconstruction of facilities along the south side of Observatory Drive and west of Elm Drive will provide additional space for new and expanded agricultural research facilities. The first project, the Meat Science and Muscle Biology Building (W-18), will replace the existing Meat and Muscle Biology facility. This new 2-story, modern teaching, research, and outreach facility will support the meat industry of the State of Wisconsin. Future sites along the south edge of Observatory Drive are a Poultry and Livestock Laboratory Building (W-20) and Biological Systems Engineering Building (W-19).

These new facilities should be sited along and be serviced by Observatory Drive. Areas south of these new structures should be reserved for an open space corridor between the Horse Barn and Meat Science and Muscle Biology Building. The open space will support the repurposing of the Horse Barn (perhaps as an event space) and provide an appropriate setting for the



Figure 4-8 West And Near West Campus Illustration

4. RECOMMENDATIONS

characteristic agricultural land grant buildings of the Horse Barn and Dairy Cattle Center. The open space should also function as stormwater capture and cleaning, a part of the “green neighborhood” system.

The existing Meat and Muscle Biology facility lies within the railroad right-of-way, and it blocks one of the two remaining missing links of the campus off-street bicycle network. When the existing Meat and Muscle Biology Building is repurposed, the portion of the building in the railroad right-of-way should be studied for removal and any necessary expansion on the north facade (W-26), allowing for the eastward continuation of the commuter path.

To the east of Elm Drive, north of the existing historic Stock Pavilion and north of Linden Drive are sites for a new Plant Sciences Building (W-24) and a Animal Sciences (AHABS) Building (W-22).

Lakeshore Campus Design Neighborhood

With the construction of Dejope Residence Hall and Leopold Hall since the 2005 Campus Master Plan, no expansion of residential beds is planned for the Lakeshore Residences Neighborhood. Incremental renovations and improvements of existing halls will continue, but density will not further increase. Rather, recreational-related projects will improve the desirability of this historic neighborhood. A goal is that the residential neighborhood be organized around major areas of open space and maintain the existing active recreation fields for student enjoyment and active exercise.

The existing Natatorium is undersized, overused, and cannot be renovated effectively. The 2015 Campus Master Plan Update recommends a new recreational facility (W-16) on the same site. The replacement facility will be larger to accommodate increased activity and residents in the Lakeshore Residences Neighborhood and recreational facilities relocated from elsewhere on campus. The scale of the new facility will overwhelm the largely small-scale character of the Lakeshore Residential Neighborhood, so it must be sited and planned carefully. Its height should be no higher than Dejope Residential Hall. A minimum 75-foot setback from Willow Creek will provide active and passive open space that is focused on the creek, and a 25-foot setback from the effigy mounds located north of the site. A new pedestrian bridge should connect the Near West Fields with the Natatorium.

The Near West Fields will soon be upgraded. The existing fields, at approximately 383,140 gross square feet, will be re-graded to create five synthetic turf flag football fields and one championship soccer field. Existing stormwater treatment along the south and east edges of the existing fields will be maintained.

Like the Near West Fields, the Near East Recreation Fields, located on Observatory Drive just west of Elm Drive, are slated to be rebuilt with synthetic turf fields in the Recreational Facility Master Plan. These fields sit at the confluence of several large storm sewers that collect a vast tributary area before discharging to Lake Mendota. Approximately 32 acres of stormwater runoff pass by this site, from as far away as Henry Mall. When reconstructed, the Near East Fields should be constructed above a new underground stormwater detention chamber.

Central Campus

General goals for the Central Campus are:

- Maintain the traditional campus arrangement of buildings around sweeping lawns and quadrangles of open space
- Create a new pedestrian environment along Linden Drive west of N. Charter Street recalling the Greater Mall concept from the 1908 Campus Plan
- Infill with new research/academic facilities where necessary but always in an understanding of the open spaces created with the new spaces
- Maintain and reuse the historic building fabric whenever possible
- Remove buildings from the 1960's and 1970's that have outlived their useful lives and can not be reprogrammed or renovated for a higher and better use

Linden Drive and Henry Mall

The south side of Linden Drive from Henry Mall to N. Charter Street will be completely reconstructed. The 2015 Campus Master Plan Update's siting of the academic/research facilities on the south side of Linden Drive seeks to strengthen the Great Mall concept from the 1908 Campus Plan by Laird and Cret. A consistent street wall on the south side will better define the open space of the Great Mall. Pedestrians will have an urban sidewalk experience on the south side of the road, and an open space path experience close to the north side building entrances. Building sites on the south side of Linden Drive are pushed north to maximize the south-facing open space on their south facades. The inclusion of a new north/south road and an east/west connector to N. Charter Street will break up this "superblock," providing porosity for those pedestrians walking between Central and South Campus. The new road connections will also allow access to the expanded parking facilities in this central block while avoiding the congested Charter Street/Linden Drive intersection.

New academic/research buildings (N-04, N-05A, N-05B, and N-06A) will replace the aging structures along the south side of Linden Drive – Stovall Building, Nutritional Sciences, McArdle Cancer Research Center, Middleton Building, Bradley Memorial Building, Bardeen Medical Laboratories, Medical Sciences, and Service Memorial Institute. A partially underground parking structure (N-06B) with 550 stalls should be located under N-05B and N-06A. Lot 20 will be replaced with a larger and more efficient parking structure (N-05C) with 375 stalls. The parking under N-06B and N-05C will allow the removal of several parking lots in the area including Lot 34 near the lake and street parking along Observatory Drive between N. Charter Street and Babcock

Drive. This new central location for parking allows those that park in the existing lots and typically work in the Central Campus location to park closer to their offices, while allowing restoration of the Observatory Hill landscape.

Across N. Charter Street, an addition on the west side of Ingraham Hall (N-14) with a possible interior occupied space will expand its footprint and capacity.

The plan recommends a future academic facility on the site of Van Hise Hall (N-03A and N-03B). The project could be developed in two phases with one being taller than the other (N-03B) as it goes up the hill to take advantage of the lake views to the north. The tower should not be more than eight stories tall. The building siting should respect the setback from Linden Drive as established in the Great Mall concept from the 1908 Campus Plan by Laird and Cret, as demonstrated by Agricultural Hall and Nancy Nicholas Hall.

The Charter Street/Linden Drive intersection is the most congested on campus. Enormous volumes of pedestrians crossing the intersection in all directions effectively shuts down the intersection for transit, service, and other vehicles during every class change. Transit busses get behind schedule during these times, and then the schedule never recovers. The 2015 Campus Master Plan Update recommends the construction of a grade-separated pedestrian bridge over the Charter Street/Linden Drive intersection. The pedestrian bridge should be constructed and connected to in phases. In all phases, the bridge should connect on the east side of Charter Street to the middle of the west side of Bascom Hill at the Van Vleck Hall lecture hall entrance/exit landing. In the existing conditions, the bridge should connect to the top of the existing Van Hise plinth deck. When Van Hise is removed and N-03A is constructed, the bridge should be extended to the upper-level pedestrian path so that it connects to the existing path south of Nancy Nicholas Hall. When N-06A is constructed, an addition to the bridge should connect to an upper floor of N-06A. Stairs, escalators, and elevators within N-06A should directly and efficiently connect pedestrians back down to Linden Drive. The concern that pedestrian bridges take away from the vitality and street life created by pedestrians using the street level crossings is outweighed by the sheer volume of pedestrians, which will use both the ground-level and pedestrian bridge.

On the east side of Henry Mall, Stovall Hall and Old Genetics should be removed and replaced by new academic/research facilities – Nutritional Sciences (N-04) and a new academic/research facility (N-07). Both buildings should be designed to maintain the massing and scale of the other buildings along Henry Mall and be of a tan brick or limestone color. Henry Mall continues to be the



Figure 4-9 Central Campus Building Key

4. RECOMMENDATIONS

transition line between buildings in the agricultural campus that have red-brown brick colorations and the cream city brick that lies east of Henry Mall.

King Hall Greenhouse expansion is enabled through N-15. All construction and maintenance near King Hall and Agricultural Hall should protect and highlight the Observatory Hill mounds.

Library Mall

The Library Mall area includes the northern section of the East Campus Mall, Chazen Museum, Humanities, and the planned music performance sites. The concept for an east campus pedestrian promenade has been around for many decades as was most recently defined as “Murray Mall” in the 1995 JJR Campus Master Plan. After the current construction of Alumni Park is complete, the north section of what is now known as East Campus Mall will be complete with the renovation of the Library Mall.

The Mosse Humanities Building, built in 1966-1969 and designed by Chicago architect Harry Weese, is recommended to be removed due to extensive physical issues with the facility and inability to reprogram the building efficiently and economically. The programs in the Humanities Building must be moved first, and they will be relocated into multiple new facilities. Music instruction and music performance will be moved to the Hamel Music Center Phases 1 and 2 (N-13B) at the corner of University Avenue and Lake Street, and Phase 3 north of it on Lake Street (N-13C). Art instruction and galleries will be moved to S-16A and other Mosse Humanities Building occupants will be moved to S-13A, both new facilities in South Campus.

After the Mosse Humanities Building is removed, two smaller academic facilities will be constructed on its site (N-11A and N-11B). Under N-11A and N-11B should be constructed as an underground two-level parking structure for approximately 450 cars to accommodate the parking needs of the lakefront. If possible the parking under both building should be designed and constructed for maximum efficiency and capacity. Traffic flow in and out of the new parking facility should be carefully studied, in coordinated with the City of Madison, to minimize congestion at the University Avenue/N. Park Street intersection.



Figure 4-10 Central Campus Illustration

South Campus

General goals for the South Campus district are:

- Maintain and develop the urban campus with higher and more dense buildings (8 to 10 stories tall between University Avenue and W. Dayton Street)
- Improve the pedestrian experience with deeper building setbacks, wider sidewalks, and streetscaping
- Site buildings to create large blocks of south-facing open space
- Maintain the existing street grid network, with the exception of one block of N. Brooks Street
- Design and program W. Dayton Street to be a festival street, related to programming at Union South, Camp Randall, and the Kohl Center
- Consolidate and move Physical Plant Services to the Lot 51 parking lot area
- Provide growth space for additional academic/research facilities by purchasing private parcels within the Campus Development Plan Boundary as they become available

The South Campus will accommodate the greatest share of university growth and change through a significant increase in density and activity. As the most urban area of campus is redeveloped, open spaces and pedestrian spaces are critical to improving the character of this disjointed campus area. This description of future redevelopment generally moves from west to east.

Concurrent with the preparation of the 2015 Campus Master Plan Update, the College of Engineering prepared a college-level facilities master plan that considered space utilization and needs, facility conditions, and the short and long-term vision for the college. The College of Engineering facilities master plan describes a short, mid, long, and extended vision for its facilities. The extended vision, incorporated into the 2015 Campus Master Plan Update, nearly completely reconstructs the southwest academic corner of campus. It is a bold vision that will take decades to implement, but will fundamentally change the effectiveness of the college, the density of South Campus, and the overall capacity of the campus.

The building changes are moderate in the short-term, transformational in the long-term. The Wisconsin Energy Institute will be expanded in the near-term for the College of Engineering (S-21), followed by a replacement for 1410 Engineering Drive (S-02), and then a replacement for the Engineering Research Building (S-01). In the long-term, Lot 17 is removed and replaced by a new Engineering Academic Building (S-23). The parking demand will be

accommodated by a 1,050 space parking structure (S-27) at N. Randall Avenue and Spring Street, removing traffic from the middle of the engineering campus. Engineering Hall will be replaced by two structures (S-24 and S-25), linking two of campuses most important open spaces – Henry Mall and Camp Randall Memorial Park. The Wendt Commons facility will be removed, allowing Union South to connect through open space to Camp Randall Memorial Park and perhaps the underground expansion of Lot 80. The engineering campus will cross N. Randall Avenue, with academics (S-26) as well as parking on the block bound by W. Dayton Street, N. Orchard Street, Spring Street, and N. Randall Street. No change in the Campus Development Plan Boundary is necessary to accommodate this revisioned engineering campus, but the university should purchase properties on the Dayton Street/Orchard Street/Spring Street/Randall Avenue block from willing sellers to accommodate these new facilities.

University Research Park and WARF have recently purchased the building at 1403 University Avenue and established WID@1403, offering co-working, networking, and mentoring opportunities. The 2015 Campus Master Plan Update recommends a new and larger facility on the same site (S-22), to allow the programming to expand.

A Police and Security Facility Addition (S-18), construction scheduled for 2017, will provide private and open office space, conference and training spaces for the department, as well as a secure sally port entrance to the existing detainee unloading area so that officers have a safe area to load and unload detainees into the holding area. A new officer education facility (S-30) will co-locate Aerospace Studies, Naval Science, and Military Science on Monroe Street. Relocating Naval Science enables S-21, and relocating Military Science enables W-20.

The Brogden Psychology Building will need to be removed and Physical Plant services will need to be consolidated and moved to the Lot 51 area to make way for the construction of the second phase of the Wisconsin Institutes of Discovery (S-03B). The Meiklejohn House and Lot 13 will be replaced by an Academic/Research Building (S-28).

To the south, on N. Orchard Street just south of the Atmospheric, Oceanic and Space Sciences Building, is currently the site of two former residence halls, the Rust-Schreiner Hall complex. These buildings, currently used as swing space for a variety of on campus units, will be an academic facility (S-08A). Further development in this block includes a planned museum addition to the Weeks Hall for Geological Sciences (S-08B) and a future academic/research facility along the north side of Spring Street (S-08C). The latter would require



4. RECOMMENDATIONS

the acquisition of several privately owned parcels which the university would pursue on an as-offered basis. No current academic program expansion is driving the need to purchase these properties. They do however remain within the university's long range Campus Development Plan Boundary.

Further south lies the Primate Research facilities which have a planned consolidation and phased expansion of their facilities (S-09A, C and D).

To the east of this block, east of N. Charter Street, is Parking Lots 50 and 51, the 30 N. Mills Street facility, and the campus Fleet and Service Garage. The 2015 Campus Master Plan Update shows further development of this block for Physical Plant services, as outlined in the 1995 and 2005 Campus Master Plans. This development would include a 400-space parking ramp (S-10A). The development could possibly include small private retail space(s) on the first floor as well as some meter parking on the first floor of the parking garage for public use. Public parking in this garage could remove on-street parking from N. Charter Street, enabling for conversion of N. Charter Street to a two-way green street. The 2015 Campus Master Plan Update recommends an Academic Building on the Lot 45 site (S-11A), and that parking demand could also be accommodated in S-10A.

The 2015 Campus Master Plan Update recommends the total redevelopment of the Noland Hall and Zoology Research Building block (S-07) to replace these two buildings. They were built in 1972 and 1963 respectfully and both have outlasted their useful lives.

The Chemistry Instructional Addition (S-29) will be a 9-story tower that will address the Chemistry instructional program's anticipated space needs. The new tower will be constructed first, followed by the remodeling of the existing building.

The 2015 Campus Master Plan Update recommends an L-shaped Academic/ Research Building (S-13A), fronting on N. Park Street and W. Johnson Street. A substantial new south-facing South Campus open space should be created, framed by S-13A, Educational Sciences, and Teacher Education. N. Brooks Street between W. Dayton Street and W. Johnson Street should be closed to unify the open space and facilitate pedestrian movements. The open space is located in a low portion of South Campus and should feature stormwater treatment facilities. The open space design and programming should support W. Dayton Street festival street programming. The open space will be a roof garden above an underground parking structure (S-13) with approximately 350 parking spaces that should be constructed under S-13A and the open space. The

university should continue to purchase the remaining privately owned parcels in this block.

The Fluno Center was designed to accommodate an addition (S-20).

The 2013 Recreational Sports Master Plan recommends the removal of the existing Southeast Recreational Facility (SERF) and reconstruction of a larger and re-programmed facility (S-32) on the same site. The building will serve the residents of the southeast residence hall neighborhood. It will be dedicated to Recreational Sports, other than sharing a 50-meter competition pool and separate diving well with the Division of Intercollegiate Athletics.

North of the Art Lofts on Lot 91, the 2015 Campus Master Plan Update recommends a mixed-use academic, parking, and utility facility. The Academic Building (S-16A) will be a major expansion of art instruction space in the southeast corner of campus, allowing for continued off loading of programs in the Mosse Humanities Building. A 375-space above-ground parking structure (S-16C) will replace Lot 91 and provide additional parking for Kohl Center events. Adjacent and perhaps integrated with the parking structure should be a new east campus chiller plant. The first floor of S-16A and S-16C should be open and elevated to provide access to a regional electrical line that is buried under Lot 91. The height of the building should be at or below the 10-story limit required by the City of Madison Downtown Plan, and siting and design should be coordinated with the 2-story 1939 Art Moderne Doyle Administration Building and the 10-story 2016 Uncommon residential tower. The existing Campus Development Plan Boundary passes diagonally through Lot 91; the 2015 Campus Master Plan Update recommends adjusting the Campus Development Plan Boundary to include the entire Lot 91 and planned site for S-16A and S-16C.



Figure 4-12 South Campus Illustration

Building Heights






Figure 4-13 indicates the proposed maximum building heights within the Campus Development Plan Boundary. The heights are shown in the context of the following three plans:

- University Avenue Corridor Plan (bounded by:)
 - Adopted May 6, 2014 #32635
- Regent Street – South Campus Neighborhood Plan (bounded by:)
 - Adopted July 1, 2009 #09234
- City of Madison Downtown Plan (bounded by:)
 - Adopted July 17, 2012 #24468

Building heights for the UW–Madison campus are shown as a range between 15-17 feet floor to floor heights, depending on the ultimate program of the facility. Although an adopted plan may indicate a maximum 12-story building, the master plan graphic reflects a 10-story building to match the overall height desired for the area. Not all buildings will be built to the heights indicated, they are assigned more to define potential physical form of the campus and limit heights where views and or adjacencies dictate. Generally the primary arterials of University Avenue and W. Johnson Street are proposed to have taller buildings, while heights decrease as one transitions to the neighborhoods and Lake Mendota.

Maximum building heights shall be for the entire physical structure of the building and include roof peaks, dormers, utility enclosures, photovoltaic arrays, etc. Building communication antennas and supporting infrastructure may exceed these heights per City of Madison ordinance requirements.

NOTES:

1. Colors relate to building heights.
2. Where discrepancies arise between adopted plans, most current plan takes precedent.
3.  Numbers indicate UW-Madison 2015 Campus Master Plan proposed maximum building heights. Floor quantities indicated equate to 15-17' floor to floor heights.
4.  Indicate proposed HIGHER maximum heights than approved plans.
5.  Indicate proposed LOWER maximum heights than approved plans.
6. "+2" Additional floors approved for exceptional design/LEED.
7. ¹ Zoned Conservancy District, buildings not anticipated
8. ² Viewshed agreement, any proposed buildings require additional approval.

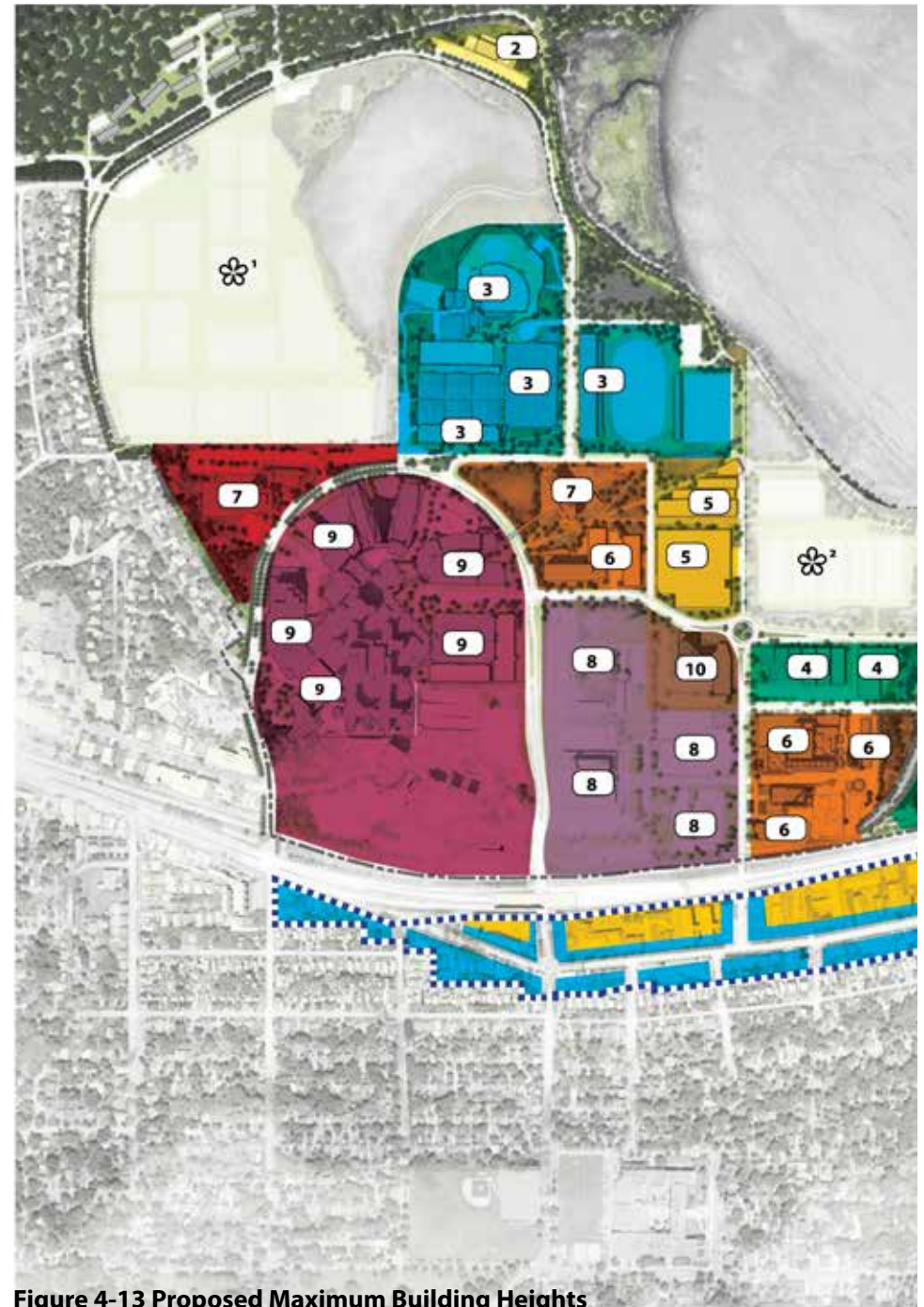
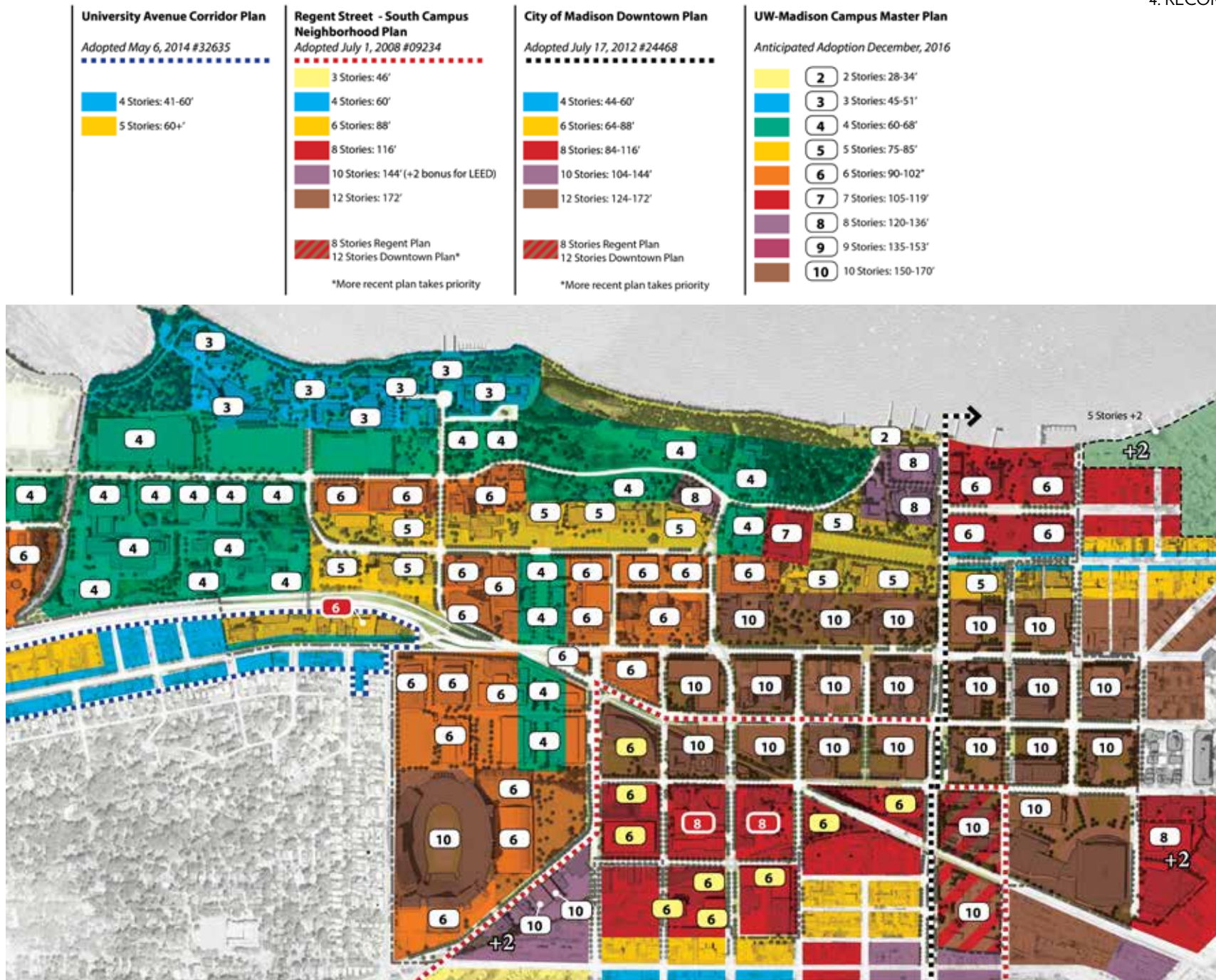


Figure 4-13 Proposed Maximum Building Heights

4. RECOMMENDATIONS



Proposed Building Summary

Table 4-1 Proposed Building Summary is a summary of all proposed building sites.

Table 4-1 Proposed Building Summary

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
Far West							
	W-29	Preserve Outreach Center	Service/Support	1	8,700	–	2023-2029
West							
	W-01	Wisconsin Institutes for Medical Research Phase 3	Health/Hospital	7	308,000	–	2029-2035
	W-02	Parking Structure (Hospital Ramp Addition)	Parking	3	323,900	1,225	2017-2023
	W-04A	Health Sciences Expansion	Health/Hospital	7	60,500	–	2035+
	W-05	McClimon Track/Soccer Grandstand	Athletics	3	78,000	–	2035+
	W-06	Social/Dining/Meeting Rooms/Health Sciences	Union/Student Center	5.5	126,800	–	2035+
	W-07	Health Sciences Research	Research	6	121,938	–	2035+
	W-08	Cooper Hall Addition	Academic	3	30,000	–	2035+
	W-09A	Parking Structure	Parking	6	504,000	1,500	2035+
	W-09B	Health Sciences Research	Research	5	233,250	–	2035+
	W-09C	Health Sciences Research	Research	5.5	231,000	–	2035+
	W-11	WARF Addition	Research	6	192,000	–	2035+
	W-12	Walnut Greenhouse II	Research	1	24,000	–	2017-2023
	W-13	Health Sciences Research	Research	5	164,185	–	2035+
	W-28	Nielsen Tennis Stadium Expansion	Athletics	2	47,075	–	2023-2029
	W-34	Grounds Office/Administration	Service/Support	1	3,000	–	2035+
	W-30	Grounds Storage A – Controlled Temp	Service/Support	1	3,000	–	2035+
	W-31	Grounds Storage B – Covered	Service/Support	1	–	–	2035+
	W-32	Grounds Greenhouse	Service/Support	1	6,000	–	2035+
	W-33	Grounds Storage C – Salt	Service/Support	1	3,500	–	2035+

Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
Near West							
	W-16	Gymnasium-Natatorium Replacement	Rec Sports	5	470,900	–	2017-2023
	W-17	Veterinary Medicine Expansion	Research	2	138,911	–	2017-2023
	W-18	Meat Science and Muscle Biology Lab	Academic/ Research	2	228,000	–	2017-2023
	W-19	Biological Systems Engineering	Academic/ Research	6	246,000	–	2035+
	W-20	Poultry & Livestock Lab Building	Academic/ Research	2	52,965	–	2029-2035
	W-22	Animal Sciences (AHABS)	Academic/ Research	5	85,000	–	2035+
	W-24	Plant Sciences	Academic/ Research	5	100,000	–	2035+
	W-25	Babcock Hall Center for Dairy Research Addition	Academic/ Research	3	31,300	–	2017-2023
	W-27	Parking Structure (Lot 62 Site)	Parking	5	198,000	625	2017-2023
Central							
	N-03A	Academic/Research (Van Hise site)	Academic/ Research	6	114,000	–	2035+
	N-03B	Academic/Research (Van Hise site)	Academic/ Research	8	48,000	–	2035+
	N-04	Academic/Research (Stovall Site)	Academic/ Research	6	82,200	–	2029-2035
	N-05A	Academic/Research (Nutritional Sciences site)	Academic/ Research	6	180,000	–	2035+
	N-05B	Academic/Research (Middleton site)	Academic/ Research	6	165,000	–	2035+
	N-05C	Parking Structure (Lot 20 Site)	Parking	5	144,000	375	2029-2035

4. RECOMMENDATIONS

Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
	N-06A	Academic/Research (SMI Bardeen Med Sciences site)	Academic/Research	6	144,000	–	2029-2035
	N-06B	Parking Structure (Under N-05B & N-06A)	Parking	2	194,400	550	2029-2035
	N-07	Academic/Research (445 Henry site)	Academic/Research	3	30,000	–	2035+
	N-11A	Academic/Research (Mosse site north)	Academic/Research	4	84,000	–	2029-2035
	N-11B	Parking Structure (Under N-11A and N-12A)	Parking	2	162,000	450	2029-2035
	N-12A	Academic/Research (Mosse site south)	Academic/Research	5	135,000	–	2029-2035
	N-13B	Hamel Music Center P1&2	Academic	3	135,000	–	2017-2023
	N-13C	Music Phase 3	Academic	5	75,000	–	2029-2035
	N-14	Ingraham Hall Additions	Academic	4	56,000	–	2017-2023
	N-15	King Hall Greenhouse	Research	1	7,500	–	2035+
South							
	S-01	Engineering Research Building Replacement	Academic/Research	6	271,667	–	2029-2035
	S-02	Engineering Drive 1410 – Replacement	Academic/Research	6	169,091	–	2023-2029
	S-03B	Wisconsin Institute for Discovery, Phase 2	Research	6	392,000	–	2029-2035
	S-07	Zoology Research and Noland Hall	Academic/Research	8	419,888	–	2035+
	S-08A	Academic/Research	Academic/Research	2	22,000	–	2029-2035
	S-08B	Weeks Hall Addition	Research	1	5,000	–	2035+
	S-08C	Academic/Research (Spring St)	Academic/Research	6	150,000	–	2035+
	S-09A	Primate Center & Harlow Expansion	Research	6	48,822	–	2035+

Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
	S-09C	Primate Center & Harlow Expansion	Research	6	60,000	–	2035+
	S-09D	Primate Center & Harlow Expansion	Research	6	96,000	–	2035+
	S-10A	Parking Structure (Physical Plant)	Parking	4	148,800	400	2035+
	S-11A	Academic/Research (Lot 45 Site)	Academic/ Research	2	30,000	–	2035+
	S-13	Parking Structure (Under S-13A)	Parking	2	129,600	350	2017-2023
	S-13A	Academic/Research (Johnson/Park)	Academic/ Research	6	348,000	–	2017-2023
	S-16A	Art Building	Academic/ Research	3	162,000	–	2035+
	S-16C	Parking Structure	Parking	2	108,000	375	2035+
	S-18	Police Addition	Academic	2	24,840	–	2017-2023
	S-20	Fluno Addition	Other	6	43,200	–	2035+
	S-21	College of Engineering Research Building	Research	7	156,364	–	2017-2023
	S-22	University Research Park (Lorch St)	Other	4	34,000	–	2035+
	S-23	New Engineering	Academic/ Research	5	204,000	–	2035+
	S-24	New Engineering	Academic/ Research	5	236,583	–	2035+
	S-25	New Engineering	Academic/ Research	5	274,986	–	2035+
	S-26	New Engineering	Academic/ Research	5	169,506	–	2035+
	S-27	Parking Structure (Engineering)	Parking	6	345,600	1,050	2035+
	S-28	Academic/Research (Meiklejohn Site)	Academic/ Research	5	84,470	–	2029-2035
	S-29	Chemistry Bldg Expansion	Academic/ Research	9	173,169	–	2017-2023
	S-30	Officer Education Facility	Academic	4	65,000	–	2017-2023
	S-31	Southeast Recreational Facility	Rec Sports	4	253,000	–	2017-2023

Overall Landscape Plan

The overall campus plan is the summation of planning and design by an interdisciplinary team, in collaboration with Facilities Planning & Management staff and university stakeholders.

The plan is conceptual, illustrating campuswide improvements based upon the principles established and the landscape concepts presented above. This plan is not a final destination, but a guiding illustration that envisions what campus could look like.

Recommended Improvements:

- 1 A revitalized Willow Creek corridor
- 2 A dedicated campus arrival for the School of Veterinary Medicine
- 3 New Near West Commons open space, adaptively re-purposing the historic Horse Barn
- 4 Expanded naturalized and working landscapes on Observatory Hill
- 5 An iconic pedestrian bridge at the intersection of N. Charter Street and Linden Drive
- 6 A boardwalk to safely traverse the steep slope behind Sewell Social Sciences Building
- 7 The creation of new campus open spaces through the redevelopment of the Medical Sciences and Humanities
- 8 Improved visitor gateway experience along University Avenue and W. Johnson Street
- 9 Green Street initiatives along N. Charter and W. Dayton Streets
- 10 A new South Campus quad at Educational Sciences



Figure 4-14 Landscape Illustrative Plan

L A K E M E N D O T A



Natural Campus Landscapes

Observatory Hill

Observatory Hill is a sacred, historic landscape. It is one of the few remaining large open spaces in Central Campus and its view of Lake Mendota and Picnic Point are treasured by all.

Even before the campus located Washburn Observatory on the apex of the drumlin, this landscape was utilized for thousands of years. Native Americans built effigy mounds atop the hill which visually connected to mound groups at Willow Drive, Picnic Point and across Lake Mendota. Centuries later, the university terraced the hill and built an orchard; the remnants are still visible. Today, the landscape has become a pass-through space that has lost much of its prominence. Beyond winter sledding, the hillside gets little active and dedicated use.

Observatory Hill is a landscape steeped in history worthy of preservation. Despite its revered status, opportunities exist to revitalize this open space, strengthening its connection to the lake while providing both restorative and didactic environments for students and staff.

Recommendations

- Relocate Lot 34 and on-street parking along Observatory Drive to improve the view to Lake Mendota. Provide temporary parking for visitors to access the lookout and Elizabeth Waters Residence Hall.
- In place of Lot 34, construct a naturalized wetland feature to manage stormwater from Observatory Hill and Tripp Hall. Incorporate boardwalks for strolling, teaching, research and accessing the water. Seating nooks for social gathering or quiet reflection will help students and visitors reengage with this landscape.
- Convert traditional lawn areas to a designed oak savanna ecosystem with large copses of oak trees and short-grass prairie plants. This naturalistic landscape will require less frequent maintenance, provide wildlife habitat, and act as a teaching landscape. A more appropriately sized lawn will be retained adjacent to Elizabeth Waters Residence Hall as open space.
- Reroute and improve the connections for ridgeline pathways south of the effigy mounds and restore the mound landscape to short-grass prairie per the Indian Mound Management Policy (May 2011) in consultation with Facilities Planning & Management staff.



Figure 4-15 Observatory Hill Proposed Section



Figure 4-16 Observatory Hill Proposed Plan

Linden Drive and Willow Creek

The agricultural campus started as a series of experimental farming plots and open spaces. Today, it has expanded, matured, and developed into a modern research campus, losing much of its original agrarian character. It has turned its back on Willow Creek, an urban creek that is the only tributary to Lake Mendota on campus.

The character of Willow Creek has changed substantially since the establishment of the agricultural campus. What once was a meandering creek with natural hydrologic flows, it is now channelized and receives stormwater discharge from nearly 1,400 acres of urban development upstream. The creek is at the level of Lake Mendota, experiences extreme fluctuations in flow and is depositing significant amounts of sediment into University Bay, creating sand bars and further altering the hydrologic conditions and lake limnology.

As this district of campus is poised for redevelopment, incredible opportunity exists to create a new campus vernacular of working landscapes and a revitalized creek, rooted in the agricultural and natural history of the area.

Recommendations – Willow Creek

- Restore the riparian zone by providing an expanded vegetative buffer to manage non-point source pollution and stabilize the steps. The removal of Easterday Lane will provide much needed green space for rain gardens to manage stormwater, cleansing and slowly releasing it to Willow Creek.
- Construct wetlands to manage stormwater and provide habitat. Perched wetlands along the west side of the creek will intercept stormwater runoff from the grounds service yard prior to it entering the creek. Provide boardwalks with interpretive signage to educate visitors.
- Provide a multi-use pathway connecting the Campus Drive Bike Path to the Howard Temin Lakeshore Path.
- Activate Willow Creek with linear terraces stepping down to the water's edge, allowing students to engage with and access the creek. Create outdoor terraces providing direct access from the Veterinary Medicine north building expansion and new Natatorium.

Recommendations – Linden Drive

- Create working landscapes such as rain gardens throughout the agricultural campus to sustainably manage stormwater and brand the Near West Campus as the “Green District.” Link the features hydrologically conveying rain water west toward Willow Creek.
- Create a dedicated School of Veterinary Medicine entry sequence along Linden Drive, converting Easterday Lane to green space.
- Create a Near West Commons at the Horse Barn, restoring the historic open space that was the western terminus of the Linden Mall. Adaptively re-purpose the Horse Barn, providing programming to activate the anchor building of the new space. Provide a terrace west of the Horse Barn that reinterprets the footprint of the original animal pens. Maintain the visual connection to the Dairy Barn.

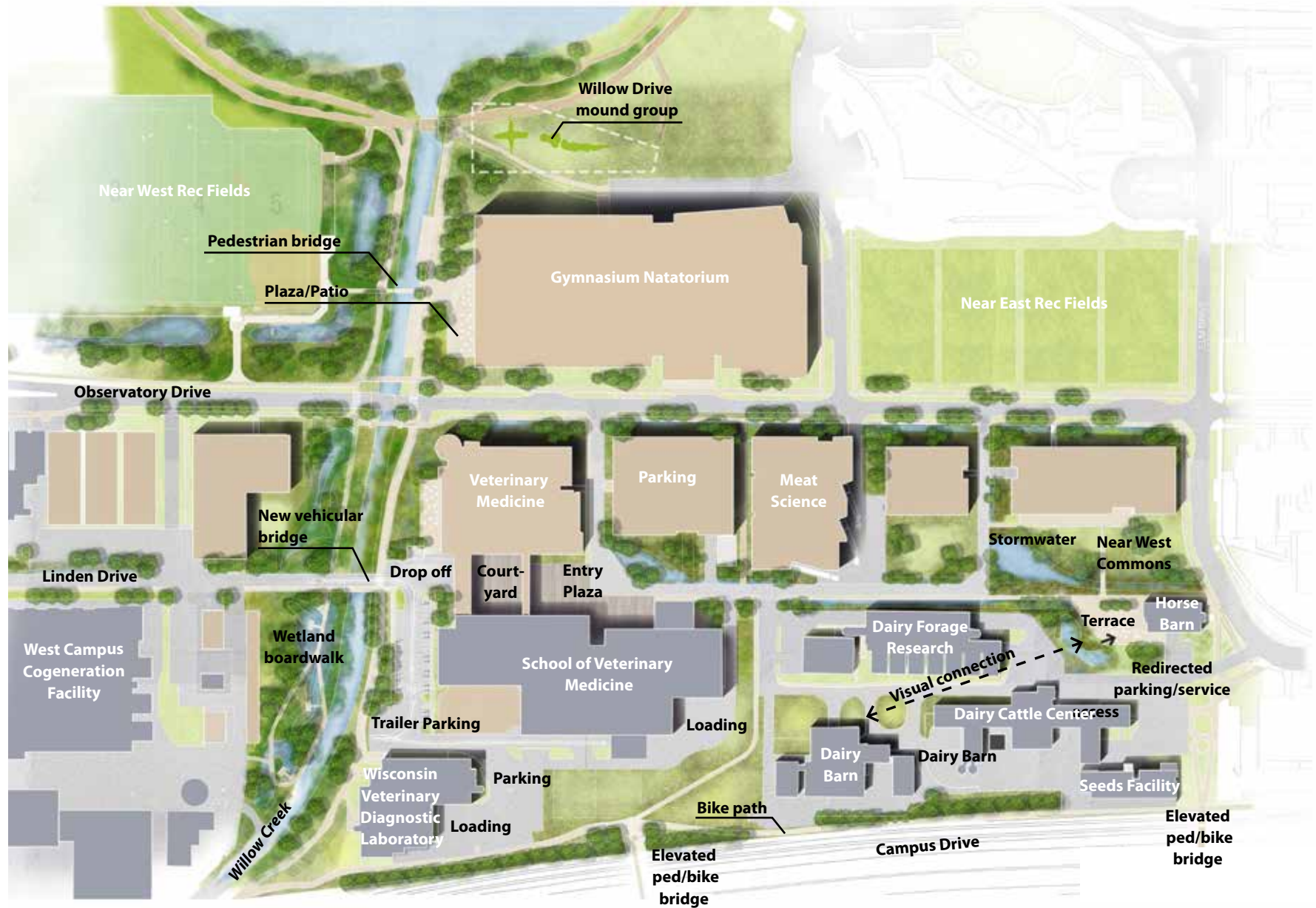


Figure 4-17 Willow Creek and Linden Drive Plan

4. RECOMMENDATIONS



**Existing – Looking North on
Observatory Drive**



Figure 4-18 Revitalized Willow Creek Corridor

N. Charter Street at Sewell Social Sciences

The north terminus of N. Charter Street is an opportunity to connect the busiest intersections on campus with natural serenity of the lakeshore. The pathway to the lakefront has great potential, the walk within the forested canopy is serene and provides a sense of mystery on the trip down to the water. Due to the slope, the existing path becomes steep and dangerous during the winter. It also channels stormwater flowing from the parking area, resulting in excessive soil erosion along the slopes.

Recommendations

- Demarcate the pedestrian spaces and reinforce the crossings. Visually connect N. Charter Street with the trailhead to the lakefront path. Clearly mark signage to make crossings easier and safer for pedestrians.
- Construct a boardwalk that navigates the steep slopes safely, without further disturbing the ecosystem. Re-route stormwater from the upper slope to avoid rill and gully erosion.
- Use materials of long-lasting durability and low-maintenance, such as steel with slip-resistant metal gratings.
- Create a new overlook that terminates the axis with secluded views of Lake Mendota. Link the vernacular of the boardwalks and overlooks to create a seamless experience.
- The creation of the boardwalk would result in reduced bicycle accessibility to the Howard Temin Lakeshore Path, forcing cyclists to enter further west at the Lakeshore Residence Halls or east at N. Park Street



Figure 4-19 Lake Access Boardwalk Proposed Section

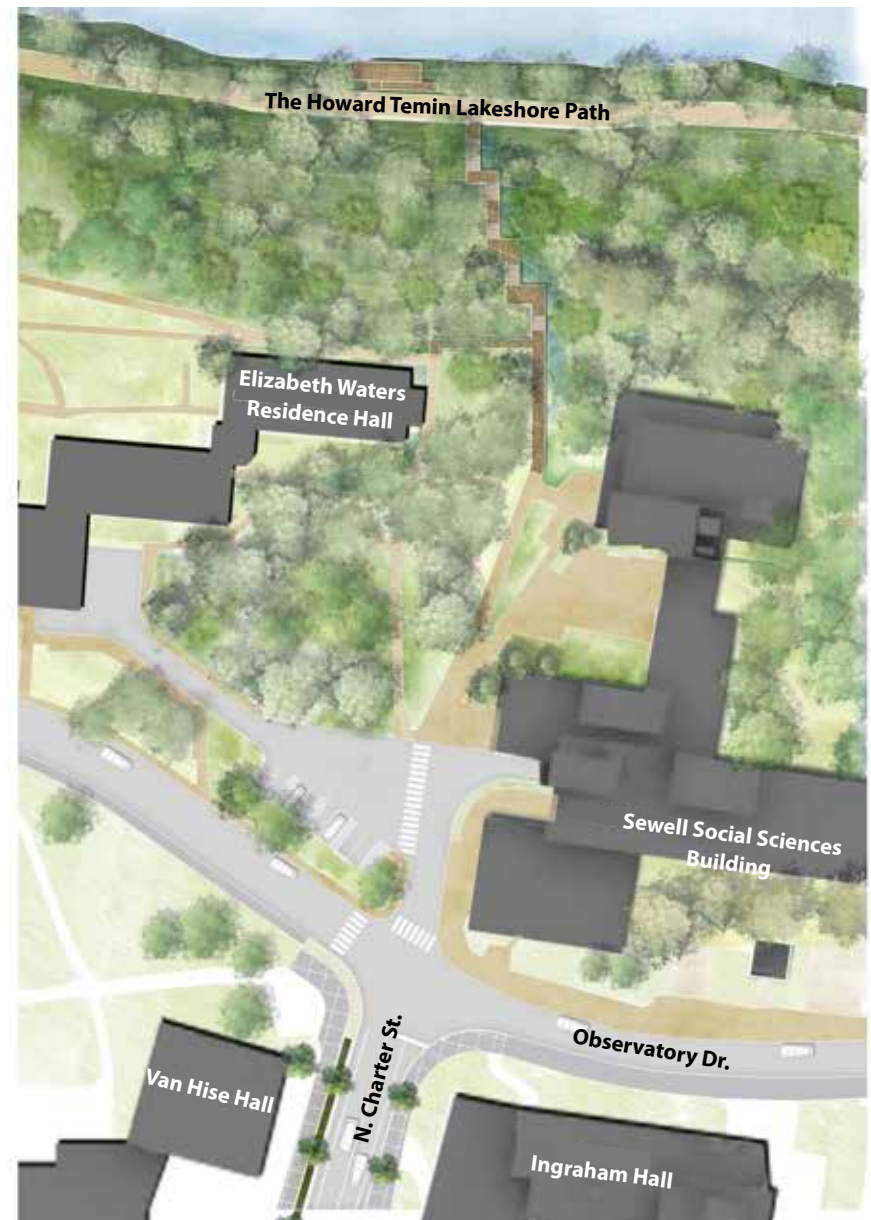


Figure 4-20 Lake Access Boardwalk Proposed Plan

Social Campus Landscapes

South Campus Quad

The 2015 Campus Master Plan Update proposes the creation of a new quad space on South Campus. The space lies between N. Park Street and N. Mills Street, and is bordered by W. Johnson Street and W. Dayton Street to the south.

This new quad addresses the vital need for open space in the South Campus. Beyond general use space, it provides an outdoor room that will help define a sense of place for this district. The quad opens up to the south, which will warm the space in spring and fall, and help block the winter winds.

The quad will be enclosed by Education Sciences and a new academic program building to the east. With the closure of N. Brooks Street between W. Johnson Street and W. Dayton Street, the space will be reinforced as a pedestrian corridor.

The plaza will be a key node along the W. Dayton Street athletics corridor that links Camp Randall with the Kohl Center. The flexible space will provide additional game day programming for students and alumni alike.



Figure 4-21 Existing Housing Units along N. Brooks Street

Recommendations:

- Create a ‘quad’ of civic scale and character. The simple design will withstand heavy pedestrian traffic. The layout makes programming the space flexible for large and small events. Large lawn panels lined with trees will be reminiscent of larger campus malls and provide a soft, collegiate feel for informal social gatherings. Diagonal paths cut through the space along desire lines between entries and exits. Trees wrap the space and define the rooms, providing a human scale to the surrounding architecture (see Figure 4-22).
- Reinforce north-south pedestrian movement by creating a tree-lined pedestrian mall. The axis will create a pleasant corridor defining the rooms within the quad, while terminating the viewshed on the historic campus to the north.
- Introduce green infrastructure to manage stormwater on site. The site propitiously coincides with a low point in the terrain and intercepts the storm sewer line in the Brooks Street right-of-way, making it an ideal location for an urban stormwater feature to illustrate green infrastructure on campus. The rain garden ponds replace traditional fountains, providing the noise mitigation and calming effects while treating and managing the sites stormwater.
- A terrace connecting to the west facade of the new academic building provides space to have outdoor classes, socialize with friends or study exam material. This corner gathering space is off the main axis to avoid blocking traffic, while engaging the building and providing a space for groups to congregate.
- Redevelop Dayton Street as a “green street” pilot project. As with N. Charter Street, implement the design guidelines outlined in the streetscape typologies to give W. Dayton Street a clear landscape identity linking Camp Randall Memorial Park, Union South, the South Quad and the Kohl Center along one unified “athletic” streetscape experience.
- Provide pedestrian scale lighting to animate the area at all times of the day, particularly during the short days of the winter months.
- Design the quad lawn such that it can endure significant usage, for example through the incorporation of fiber reinforced soils.

4. RECOMMENDATIONS



Figure 4-22 Proposed South Campus Quad



Existing – Looking east on W. Dayton Street at N. Brooks Street



Figure 4-23 South Campus Quad and Revitalized W. Dayton Street

Green Streets

Some of the highest concentrations of polluted runoff in urban areas comes from streets and the UW–Madison campus is no exception. With surface parking lots becoming increasingly more rare, the primary source of sediment loading from campus will be streets, roads, and driveways. Green Streets are an effective approach to managing runoff from high-pollutant load areas while offering aesthetic and educational value. Essentially green practices are integrated into the streetscape whether they be rain garden planters, permeable pavements, or suspended pavement root enhancement systems (like Silva Cells) which allow urban street trees to grow to their full potential and provide stormwater detention and treatment as well.



Figure 4-24 Green Street, West Union, Iowa



Figure 4-25 Green Street, Normal, Illinois

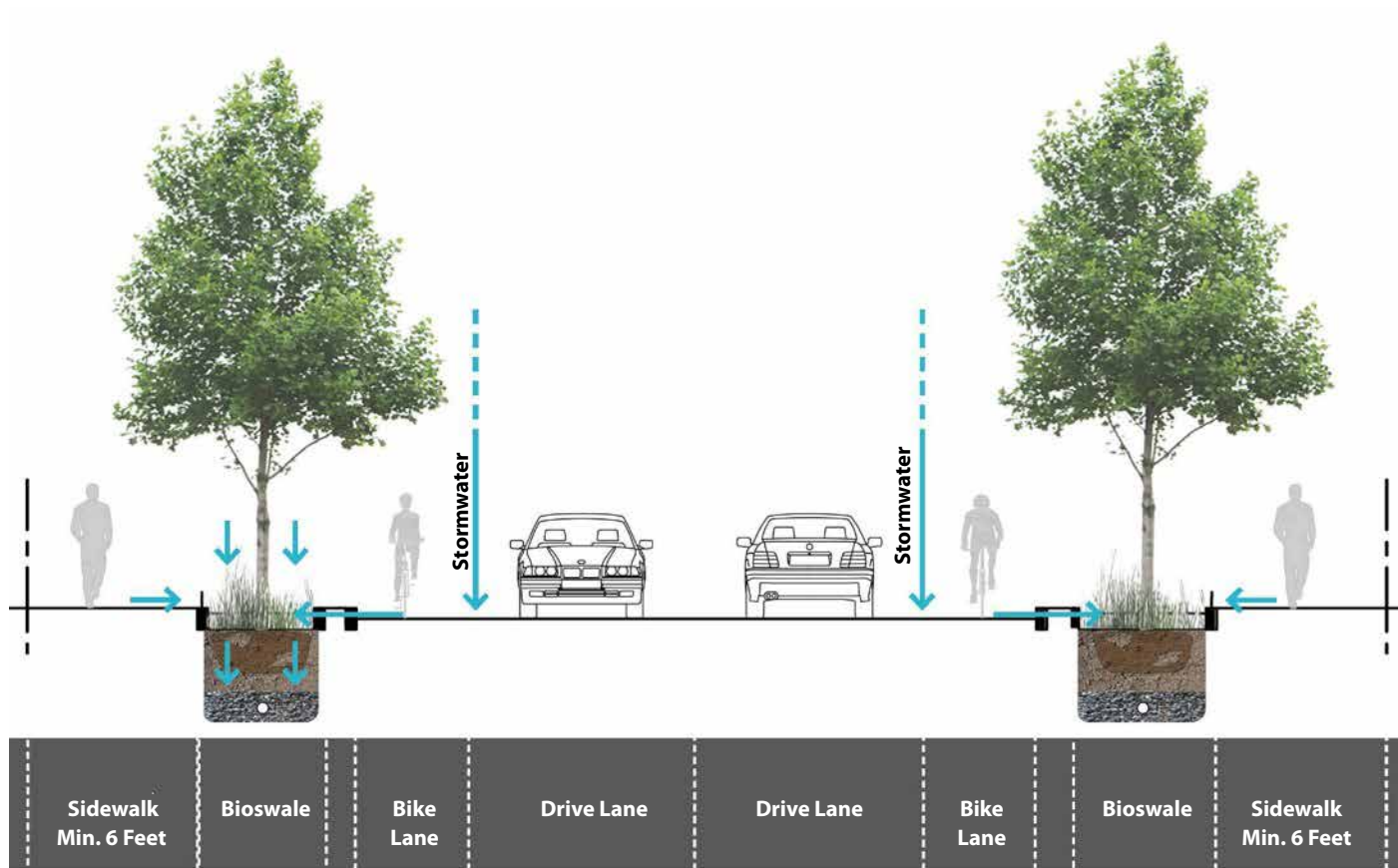


Figure 4-26 Example Green Street Cross Section

Proposed Stormwater Management and Green Infrastructure

UW–Madison is already a leader in sustainable stormwater practices, having implemented dozens of progressive practices from green roofs to wetlands throughout the 936-acre campus. However, increased sustainability awareness by students, faculty, staff, and the general public, as well as a more stringent regulatory climate, offer opportunities for UW–Madison to step up and be even more aggressive in greening its facilities. The 2015 Campus Master Plan Update offers both opportunities for enhancing green infrastructure and challenges as the campus continues to densify and space for stormwater management is balanced with other programmatic needs.

Within the context of green infrastructure and stormwater management planning, the primary goal of the UW–Madison Campus Stormwater Management Plan is to identify green infrastructure opportunities so that they can be appropriately budgeted and accommodated during site planning. A secondary goal is to identify and quantify possible impacts (both positive and negative) of proposed building, open space, parking, and roadway changes on stormwater runoff so that appropriate land use decisions can be made or measures incorporated to address potential adverse impacts.

Through this master planning process, there were three primary goals identified for green infrastructure on campus:

- Implement stormwater practices and policies that contribute to a healthy Yahara Lakes system.
- Integrate research and learning into the campus stormwater management approach.
- Connect campus stormwater management to the wider Yahara Lakes watershed community.

Recommendations to achieve these goals fall under a multi-tiered approach. First, practices were identified which could be implemented in areas where a large multi-site runoff tributary could be collected and treated to maximum benefits for every dollar spent. Second, a menu of site-specific best management practices and the outcomes they are intended to achieve (such as volume reduction, total suspended solids capture, groundwater recharge, etc.) are

described which should be implemented as redevelopment occurs block by block based on an overall subwatershed plan. Third, campus stormwater standards should be updated to ensure that all new redevelopment projects on campus are contributing in a positive way towards overall sustainability and green infrastructure goals. Fourth, we encourage the continuation of good housekeeping practices on campus including street sweeping, snow and leaf litter collection, and diversion and isolation of waste areas to keep runoff from campus as clean as possible.

The above recommendations are all physical modifications or policy adoptions that will help UW–Madison maintain a strong leadership role in green infrastructure and work towards permit requirements and other sustainability goals such as ecological awareness of the community and serving as a living laboratory. In addition, UW–Madison is participating in water quality initiatives outside of campus which contribute to a healthy watershed. Adaptive Management in the Yahara Lakes watershed is a program that includes dozens of municipalities and other governmental agencies to target urban and non-urban sources of sediment and phosphorus in the watershed. The long-term goal is to achieve water quality standards in the Yahara Lakes for fishable and swimmable lakes, which will ultimately benefit the university as a major landholder along Lake Mendota.

A significant amount of technical analysis went into studying the existing campus conditions and charting a course for the future of green infrastructure on campus. The companion document Green Infrastructure & Stormwater Management Master Plan contains the technical background and detailed recommendations regarding green infrastructure and stormwater management on campus.

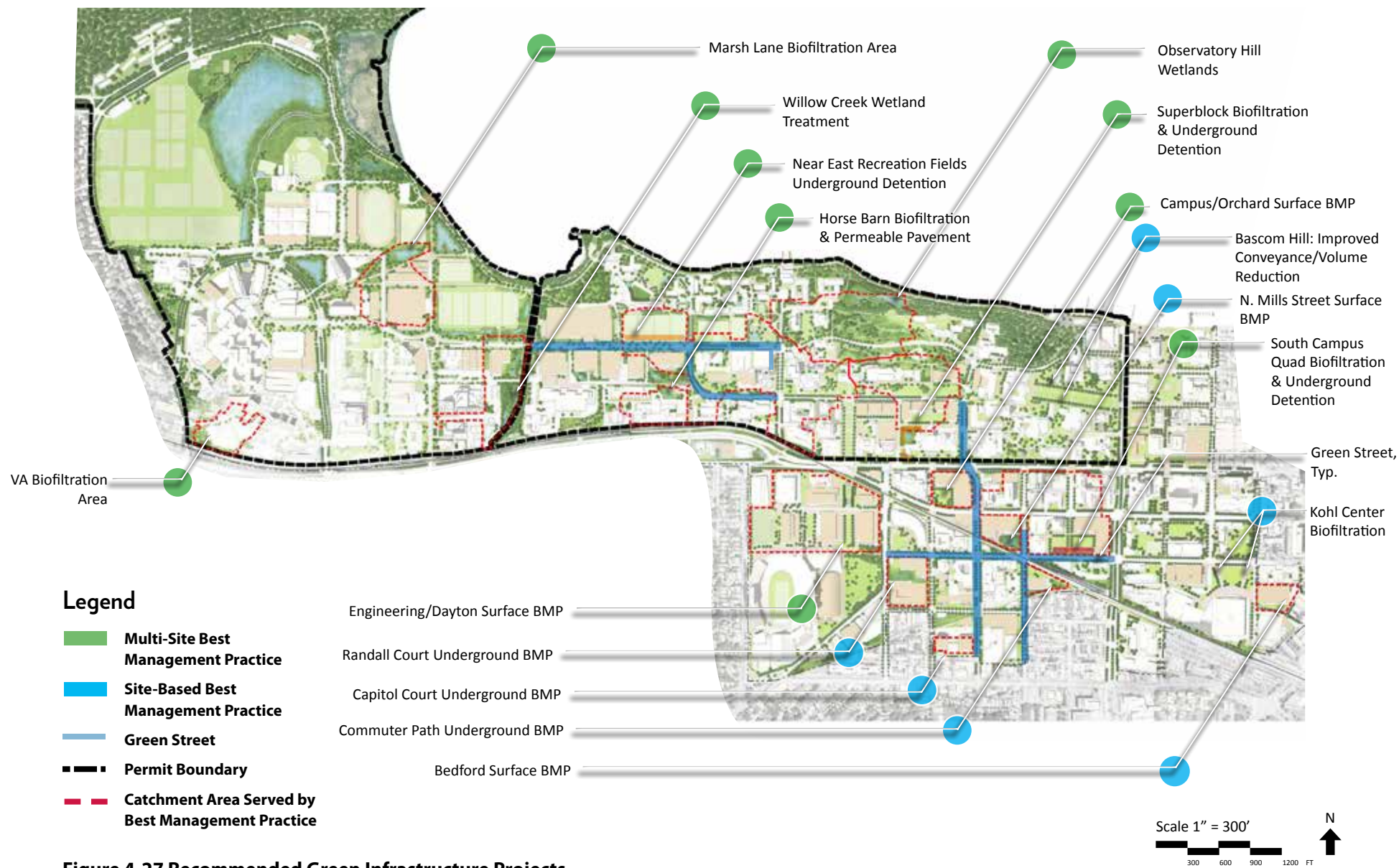


Figure 4-27 Recommended Green Infrastructure Projects

Proposed Image, Identity, and Gateway Enhancements

University Avenue is the front door to the UW–Madison campus. Approximately 32,000 average daily traffic (ADT) cars travel westbound through campus via this route daily. With three travel lanes, a bus lane, bicycle lane and protected contraflow bicycle lane, its expanse is intimidating. The avenue has grown over the decades to improve the connection across the isthmus, but it has also had a tremendous effect on the campus. The wide open street acts like a wall effectively dividing an otherwise unified campus. Yet because of its traffic width and volume, University Avenue represents a tremendous opportunity to make visitors' first impression of the campus inspiring; presenting a welcoming, positive image of a world-class university.

Though the landscape assessment presented in this section pertains to the particular site conditions of University Avenue, many of the recommendations may be extrapolated to the improvement of other gateway streets throughout the UW–Madison campus. Streets such as W. Johnson Street, N. Park Street, and Highland Avenue represent opportunities to project the UW–Madison brand through landscape. Contiguous urban tree canopies, robust understory planting and available site amenities are universal approaches to improving gateway streetscapes across campus.

Recommendations

The following recommendations were developed through interdisciplinary collaboration with Facilities Planning & Management. They are synergistic solutions to improving the landscape, traffic and stormwater challenges along University Avenue today.

Combined Cycle Track

Combine the existing bicycle lanes into a two-way cycle track on the south side. This will consolidate cyclists protecting them from vehicular traffic (see Figure 4-28). For an in-depth analysis and review of the benefits of the combined cycle track and its relationship to the greater Madison regional bicycle path network, refer to the Long Range Transportation Plan.

Combining the bicycle lanes together on the south side creates efficiencies in the road cross section, allowing for the addition of a median planter between the cycle track and vehicular traffic (see Figure 4-29). This planter will be up to 12-feet in width, but will vary in size depending upon the width of the right-of-way and will taper to accommodate left turn maneuvers at N. Lake Street, N. Park Street, N. Charter Street, and N. Randall Avenue. It should be raised 6-18 inches in height to provide visual buffering of cars while mitigating the accumulation of roadway salt in the planter.

The addition of the planter will be transformative to University Avenue and its benefits numerous. It protects cyclists and breaks up the roadway profile, thus slowing traffic and improving the aesthetic appearance of campus; it will form a barrier discouraging non-designated pedestrian crossing, negating the need for the “staple” guardrails; and the reduction of hardscape combined with the addition of shade trees will reduce the heat-island effect while improving pedestrian comfort.



Figure 4-28 University Avenue Plan View, Typical Intersection

Planting

- Plant shade trees 30 feet on center to provide a contiguous urban tree canopy (see Figure 4-29). This tree canopy will form the landscape structure unifying the University Avenue corridor while binding the Central and South Campuses.
- Plant large caliper shade trees that respond to the scale of University Avenue to provide immediate impact. Refer to the streetscape typologies for guidelines on tree diversity and soil volumes. Always strive for continuous soil volumes via soil trenches and combined street grates where space is not available for planters.
- Gateway understory planting should be simple yet robust massing of understory shrub and perennial plantings that will read well even at vehicular speeds.

Site Amenities

Provide a cohesive suite of site furnishings to unify the visual experience and enhance the walkability of the University Avenue corridor. Add campus banners along the corridor to announce the arrival to campus.

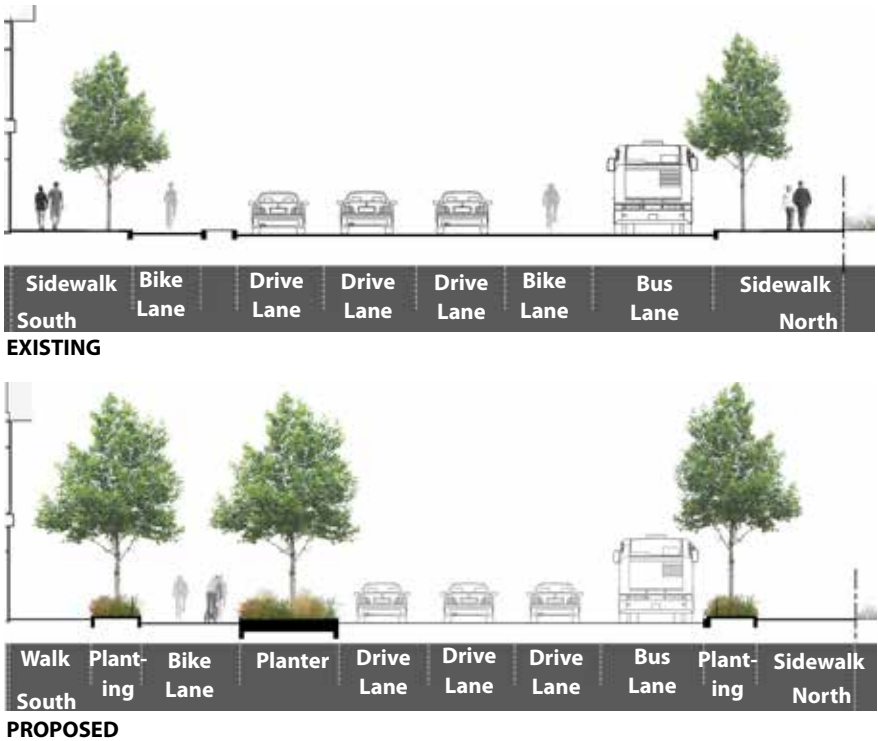


Figure 4-29 University Avenue Cross Section

Henry Mall to Camp Randall Memorial Park

- Preserve the view from Agricultural Hall through the engineering campus and terminating on Camp Randall Memorial Park. Trees located within the viewshed should frame and enhance the view while site furnishings should be sited along the perimeter to avoid interfering with the primary view.
- Establish a campus gateway at the Lorch Street triangle. A gateway will announce the formal entry into campus from the west.
- Improve the pedestrian crossing at Henry Mall. An enlarged crossing from Henry Mall to the engineering campus is vital. An island refuge in the center enhances pedestrian safety.
- Provide a vertical barrier in the landscape median to prevent non-designated crossing between the Biochemistry Building and Materials Science Building. Design the vertical barrier in accordance with the landscape development standards for iron fencing on campus. The barrier should not extend into the Henry Mall viewshed.
- Where the landscape median becomes limited in width, provide simple masses of grasses and perennials that tie visually to the landscape treatment further west at the intersection of University Avenue and Campus Drive. Do not plan tall grasses or vegetation within the Henry Mall viewshed.

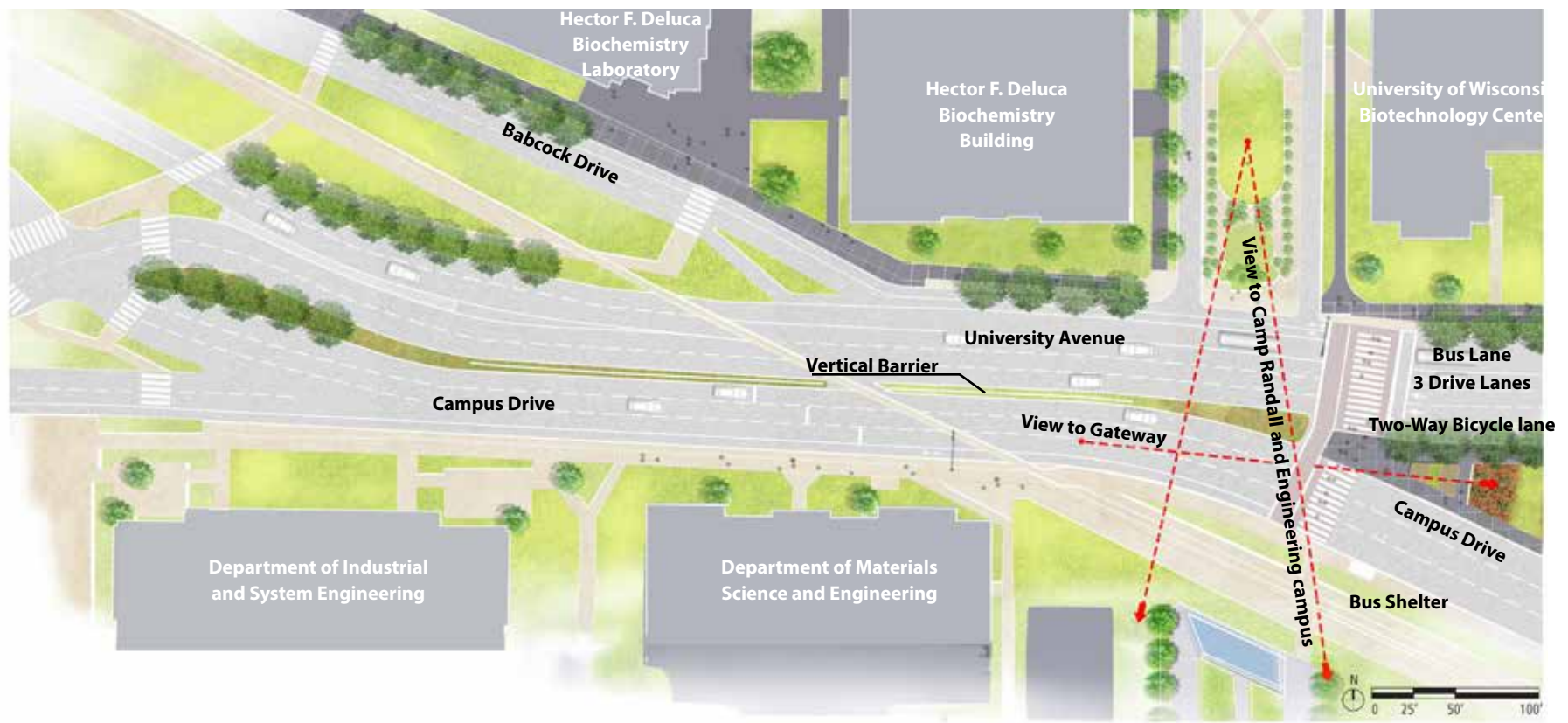


Figure 4-30 University Avenue at Henry Mall and Babcock Drive

Proposed Pedestrian and Bicycle Circulation

Walking and biking are fundamental and widespread forms of transportation on campus throughout the year, and the university places a high priority on providing connected and comfortable facilities for pedestrians and cyclists. Moving forward, the following should be priorities for enhancing the campus walking and biking experience:

N. Charter Street and Linden Drive

Intersections recommended for improvement were identified based on input from UW–Madison and city staff and the public. The highest priority intersection is N. Charter Street and Linden Drive. This intersection is at the center of campus with several primary academic and research locations in the area, including Van Hise, Human Ecology, Van Vleck, Bascom Hall, Sterling Hall, and others.

People, mopeds, buses, bicycles, and cars all converge at this intersection. During class change, pedestrian volumes rival pedestrian traffic on the streets of New York City. This causes delays in the transit system, which ripple through the remaining day's schedule. At peak class change times, Metro Transit buses and motor vehicles experience delay at this location waiting for the large numbers of pedestrians and cyclists to clear the intersection. This delay has a lasting effect on the overall performance of the Metro Transit routes traveling through this area.

Coupled with steep topography from Bascom and Observatory Hills, this intersection creates extremely challenging conditions. The university should take advantage of the steep topography and construct a pedestrian plaza/bridge over the intersection. This separated level would capitalize on existing topography and tie into upper levels of future buildings to be built/redeveloped in this area.

Grade separation would provide a continuous connection for pedestrians from the entrance of Van Vleck to the future building in the southwest corner of the intersection as well as the upper plinth of Van Hise (and any new building on the site) and the sidewalk parallel to Linden Drive connecting west to Human Ecology. Removing pedestrians from the street level will reduce intersection

transit delay. Motor vehicles, transit users, and cyclists would travel at the existing street level. By linking into future new and redeveloped buildings at the intersection, the vertical circulation would be made primarily through the buildings. Street access would be provided along the east side of N. Charter Street to and from the grade separated area.

Recommendations

- Build a pedestrian bridge that establishes a new primary pedestrian level connecting from Van Vleck to Van Hise. To be successful, the bridge must feel like the natural choice for students. Using the unique topography, the bridge crossing will be easier than current pathways. Separating pedestrians from vehicular traffic will alleviate traffic congestion, mitigate multimodal conflicts, and improve pedestrian experience.
- Build an iconic bridge. The bridge will be at the eastern terminus of the Linden “Greater” Mall and therefore is a tremendous opportunity to create an architectural icon. Unlike a particular building that only a small portion of the campus may use, this bridge will be used by a large campus cross section.
- Create a destination through the incorporation of planting and seating. The bridge creates a new opportunity that currently does not exist, to create space that accommodates the traffic flow while providing flex space for people to congregate. The bridge will conceptually extend the Linden Mall up toward Bascom Hill connecting two spaces that were previously divided. The bridge design should be such as not to hinder both anticipated and unanticipated programming.
- Provide an open and airy structure. The bridge should incorporate skylights and openings to provide adequate daylight to travelers below. Lighting should be incorporated for safety and to highlight architectural features.

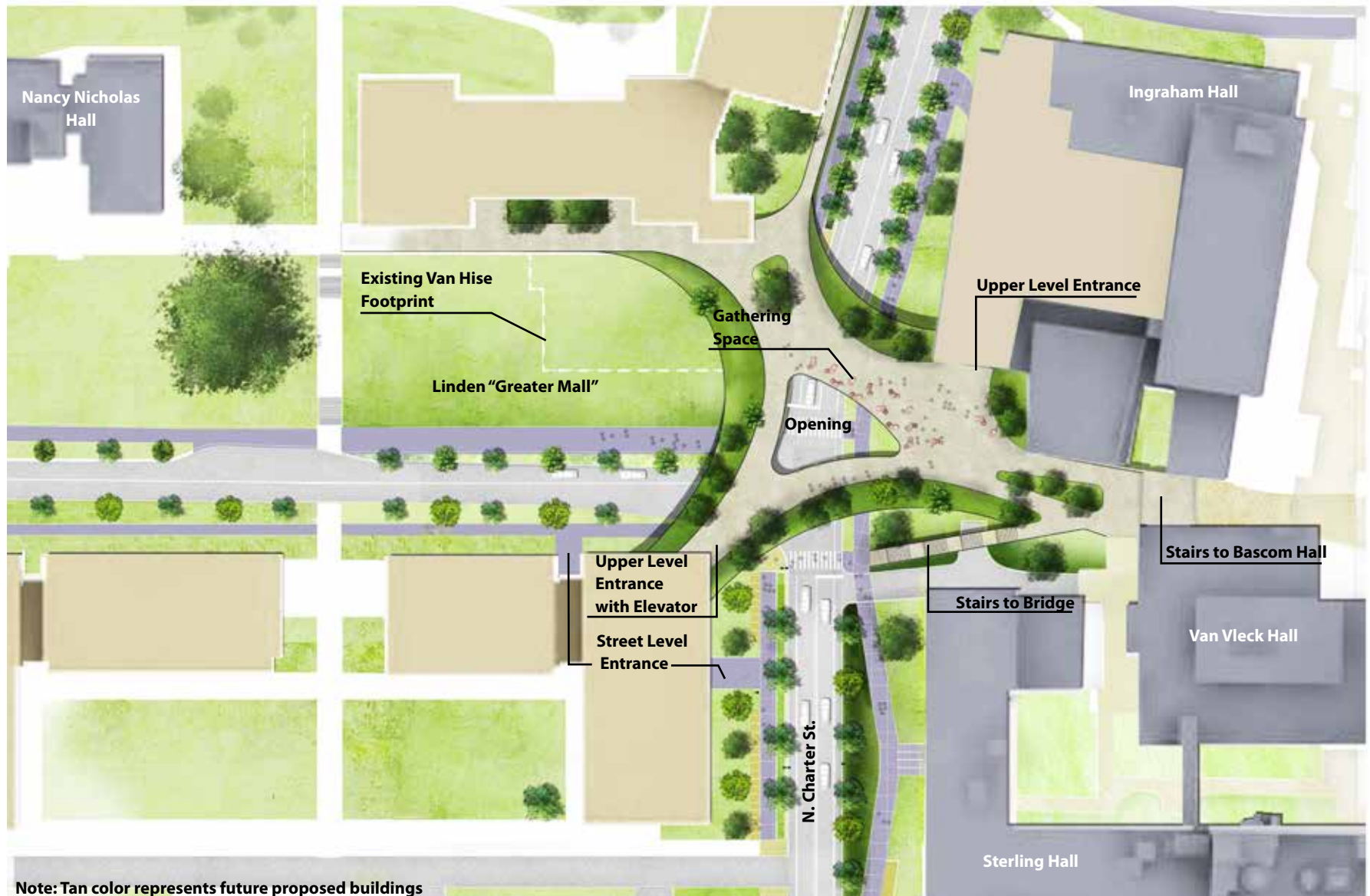


Figure 4-31 N. Charter Street At Linden Drive Pedestrian Bridge

4. RECOMMENDATIONS



Existing – Looking north on N. Charter Street



Figure 4-32 Pedestrian Bridge Over N. Charter Street and Linden Drive

Other Intersections

Additional intersections are identified in Figure 4-33 with blue circles. High volumes of pedestrians and cyclists travel through these intersections and around campus every day, and the comfort and connectivity of their travel should be continuously promoted and improved. Each of these intersections has its own unique challenges caused by intersection geometry. These include motor vehicle speed, volume, and turning movements, intersection visibility, pedestrian and cyclist volumes, and other factors.

Pedestrians and cyclists should be offered a direct, convenient, and highly visible shortest path crossing at these intersections. Non-motorized crossings should be given an adequate signal phase time and intersections with high-volumes of pedestrians and cyclists should include a protected pedestrian-only (and in some cases a bicycle-specific/bicycle-only) signal phase to facilitate crossings.

Other potential improvements to be applied to these intersections include:

- Pedestrian-leading intervals
- Curb extensions/bump-outs
- Median pedestrian refuge islands
- High-visibility continental crosswalks
- Bike boxes
- Green paint demarcating the path of bicycles through the intersection

Gaps in the Campus Walking and Biking Network

The 2015 Campus Master Plan Update recommends completing the identified gaps in the campus biking network to intra-campus travel, as well as commuting to and from campus. Figure 4-34 displays the recommended walking and biking connections to address known gaps. This plan recommends the following improvements to the overall connectivity of non-motorized travel:

- Install pedestrian routes through redeveloped area around existing Lot 60 in West Campus.
- Develop off-street shared-use path along the east side of Willow Creek.
- Construct off-street shared-use path along Campus Drive connecting Campus Drive Bike Path to Babcock Drive. This requires the partial or complete removal of the existing Meat Science and Muscle Biology Laboratory that currently encroaches on the railroad right-of-way. This plan proposes redevelopment of this building, which will allow for path extension.
- Install a two-cycle track on the south-side of University Avenue.
- Convert N. Charter Street from W. Dayton Street to Regent Street from one-way to two-way and add on-street bicycle lanes in each direction.
- Install on-street bicycle facilities on N. Mills Street.
- Increase pedestrian connectivity with pedestrian-only walking routes on the West Campus, across the N. Charter Street/Linden Drive intersection, and through the reconfigured central block area south of Linden Drive and west of N. Charter Street.
- Convert N. Brooks Street to a pedestrian mall between W. Dayton Street and W. Johnson Street and pedestrian routes through the redeveloped block bounded by W. Dayton Street, W. Johnson Street, N. Park Street, and N. Mills Street.
- Create grade separation linking the west side of Bascom Hill with Van Hise and the upper sidewalk north of and parallel to Linden Drive.

4. RECOMMENDATIONS

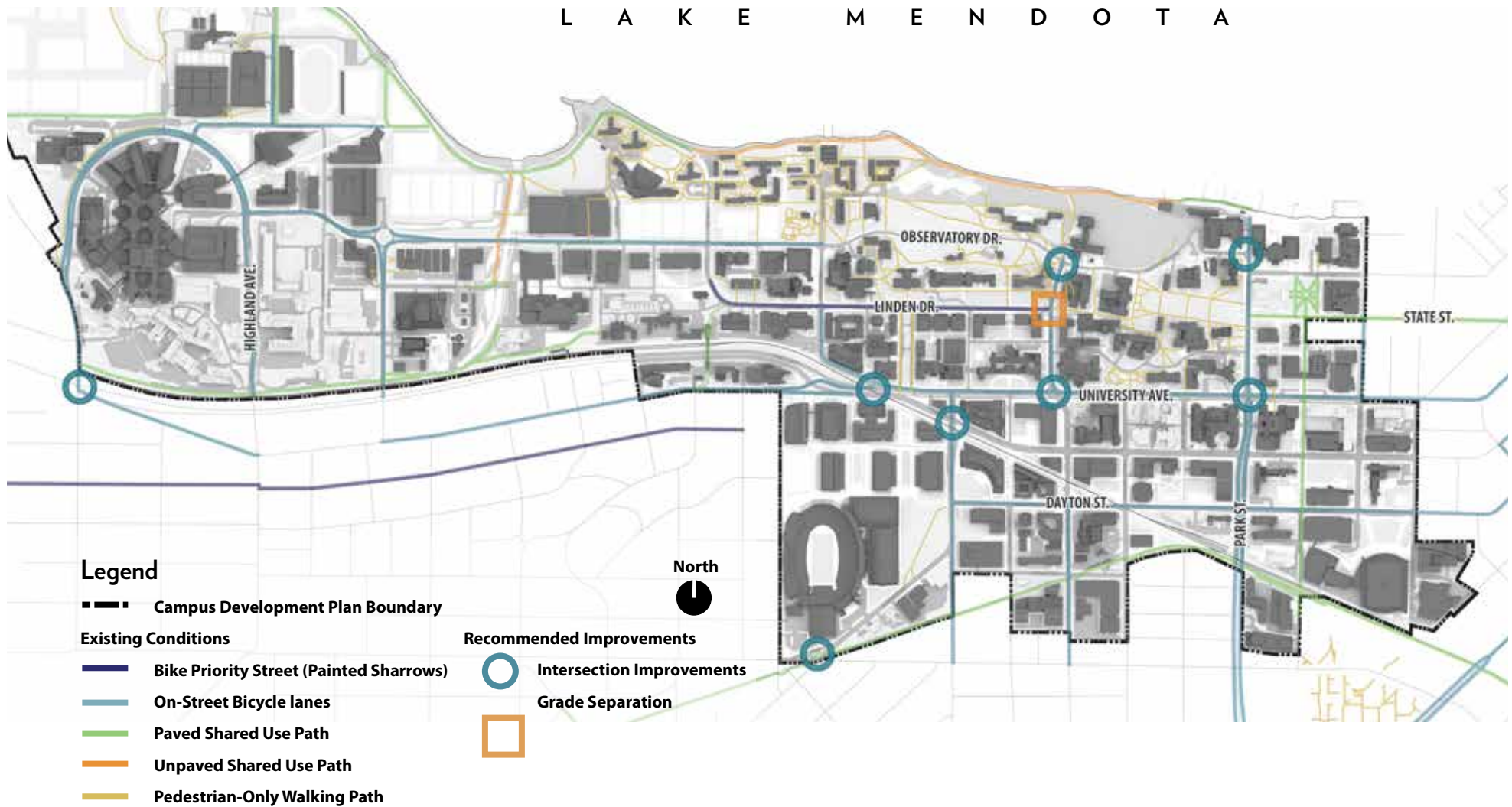


Figure 4-33 Locations of Recommended Intersection Improvements

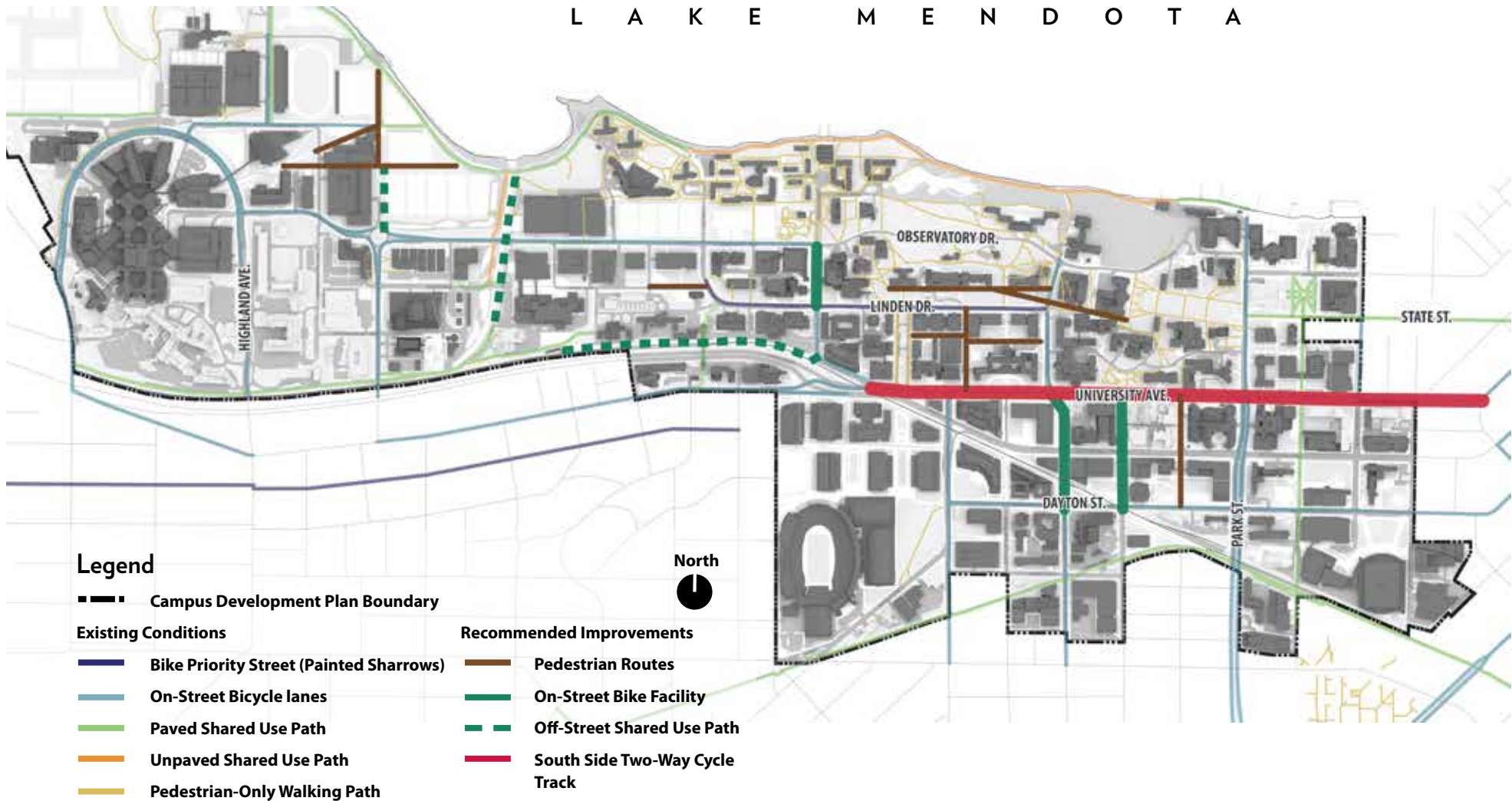


Figure 4-34 Recommended Walking and Biking Improvements

Proposed Transit and Vehicular Circulation

Motor Vehicle Access and Circulation

Facilitating motor vehicle connectivity to and around campus is essential to the long-term vitality of the campus, particularly as buildings and parking are removed, added, and redeveloped. Thousands of faculty, staff, employees, visitors, freight, and service vehicles travel to and around campus each day. As shown in Figure 4-35, the following modifications to the road network will promote access and circulation in response to proposed land use changes:

- Vacate parts of Marsh Drive, Willow Drive, and Walnut Street; install a new north-south road from Marsh Drive to Observatory Drive to accommodate planned land uses.
- Vacate Easterday Lane and add an east-west connection across Willow Creek.
- Install new north-south access drive from University Avenue to Linden Drive, west of N. Charter Street.
- Install new east-west parallel access road south of Linden Drive, west of N. Charter Street.
- Install a protected left turn phase for N. Charter Street southbound vehicles turning left on to W. Johnson Street.
- Convert N. Brooks Street from W. Johnson Street to W. Dayton Street, into pedestrian mall/shared emergency drive.
- Convert N. Charter Street from W. Dayton Street to Regent Street, from one-way to two-way and add on-street bicycle lanes in each direction.

Vacate Easterday Lane and Add Willow Creek Crossing

In conjunction with the construction of the expansion of Veterinary Medicine, it is recommended that Easterday Lane between Linden Drive and Observatory Drive be vacated. This street does not serve significant transportation purposes and its vacation enables site and stormwater planning opportunities. Vacation of Easterday Lane creates options for engaging Willow Creek as a functional space. This plan also recommends an extension of Linden Drive across Willow Creek south of and parallel to Observatory Drive. These new connections provide access to the current and proposed veterinary medicine buildings, and provide additional emergency access over Willow Creek in the event other routes become impassable.

Manage Building Development and Added Parking Capacity in the Central Campus

Install New Access Drives

Building and parking additions and reductions are planned in the Central Campus between University Avenue and Linden Drive, and N. Charter Street and Henry Mall. In conjunction with these changes, this plan recommends two access roads to be created:

- Parallel to and west of N. Charter Street between Linden Drive and University Avenue
- From N. Charter Street west into the block, parallel to Linden Drive

These access roads will provide vehicular access from inside the block into the proposed buildings and added parking in this location. The roads also will provide increased fine-grain pedestrian and bicycle connectivity through this area. Pedestrians will be prioritized along with motor vehicles accessing parking and loading docks along these access roads. Cyclists will be encouraged to remain on Linden Drive. Transit routes will remain on Linden Drive and N. Charter Street as this is where peak transit demand is in Central Campus.

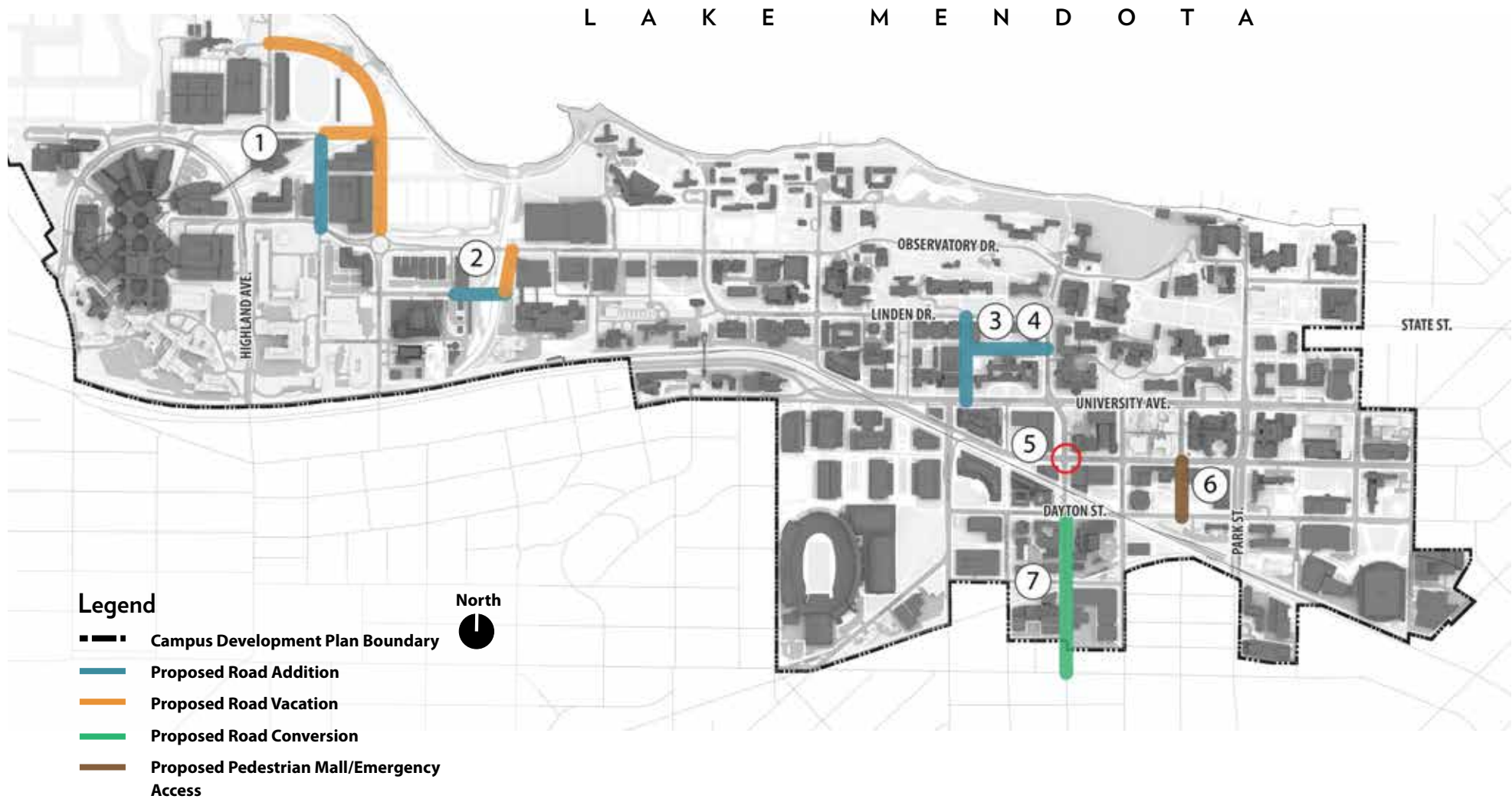


Figure 4-35 Proposed Road Additions, Vacations, and Conversions

Accommodate Additional Traffic

Additional building square footage and parking capacity in the Central Campus will bring added traffic on N. Charter Street and University Avenue. Much of the traffic from the development in this area will desire to turn left onto W. Johnson Street from southbound N. Charter Street. This plan recommends a short, protected, leading left turn phase from southbound N. Charter Street to eastbound W. Johnson Street. This would be in addition to the current permissive left turn phase. A protected left turn phase will provide additional capacity for turning movements without negatively affecting the intersection of Park Street and W. Johnson Street (the key intersection in the area).

Convert N. Brooks Street from W. Johnson Street to W. Dayton Street into Pedestrian Mall/Shared Emergency Drive

In conjunction with future building redevelopment at this block, this plan recommends converting N. Brooks Street from W. Johnson Street to W. Dayton Street into a pedestrian mall/shared emergency access drive.

Convert N. Charter Street from W. Dayton Street to Regent Street

This plan recommends converting N. Charter Street from W. Dayton Street to Regent Street from a northbound one-way street (with a southbound contra-flow bicycle lane and on-street parking) to a two-way with minimum 5-foot bicycle lanes in each direction. This recommendation serves to establish N. Charter Street an attractive multimodal gateway from South Campus and provides a connection through the center of campus all the way to Lake Mendota. These modifications require removal of on-street parking from the east side of N. Charter Street. There is sufficient nearby public street and university parking to make up for removal of parking along N. Charter Street.

Parking Operations and Management

The effective operation and management of parking at UW–Madison is paramount to the long-term success of the university and quality of life on campus. The university strives to continue to be a national leader in parking management, the provision of low parking ratios, and a comprehensive and complementary set of alternative commuter solutions. The university also recognizes the importance of providing available and accessible parking spaces for campus visitors and employees.

Future Parking Needs

Future parking needs were modeled under the planned future campus land use scenario. Approximately 900,000 square feet of new programmable building space is planned for West Campus compared to the existing condition. Additional parking supply is recommended for all campus districts to meet demand. Analysis indicates an overall future campus parking deficit of just 18 faculty/staff parking spaces as a result of the development programmed in the 2015 Campus Master Plan Update. Analysis was used to modify and finalize the proposed land use development and redevelopment build-out scenario.

Recommendations

This plan presents several recommendations for the university to effectively and efficiently provide and manage parking in conjunction with this Master Plan's proposed campus development and redevelopment.

- Continue to be leaders in transportation demand management (TDM) and alternative commuter solutions.
- Maintain parking ratios for faculty and staff. Work to shift UW Hospital employee parking demand off campus.
- Strategically add parking supply in conjunction with planned land use changes to continue to provide enough available and convenient parking to support the university's academic, research, and outreach missions.
- Add approximately 2,000 parking spaces over the next 20-40 years for visitors and provide swing space to accommodate parking phasing and construction.

Where possible, remove surface parking lots and consolidate parking supply into centrally located parking structures to allow for green space and campus development, increase parking efficiency, and improve water quality by reducing the amount of impermeable surfaces on campus.

Recommended Parking Additions and Reductions

This plan recommends the addition of approximately 2,000 parking spaces for visitors and to provide swing space over the next 20-40 years. Additional parking is needed to serve development phasing. New parking needs to be built before current parking lots are taken off line to accommodate the future building projects. In addition to providing construction swing space, the additional parking spaces will serve our campus visitors. Visitor parking demand is typically during off-peak hours. Roadways in West Campus and across campus are sized to meet peak demand levels. No significant traffic impacts on local roads during peak or off-peak periods are anticipated due to the recommended increase in visitor parking supply.

This plan recommends an addition of 6,380 and removal of 4,320 parking spaces, for a net increase of 2,060 parking spaces over the next 20-40 years to accommodate the planned build-out. Recommended parking additions and reductions are depicted in Figure 4-36 and Figure 4-37. Additions and reductions result in the following increases by district:

- West Campus: +689 spaces
- Near West Campus: +81 spaces
- Central Campus: +675 spaces
- South Campus: +615 spaces

Parking spaces will be consistently monitored to assure the campus is not overbuilding its parking supply based on current and future parking demands. With the continual improvements in public transit options and latest technologies in autonomous vehicles, it is clear that transportation to, from, and within campus will continue to evolve.

4. RECOMMENDATIONS

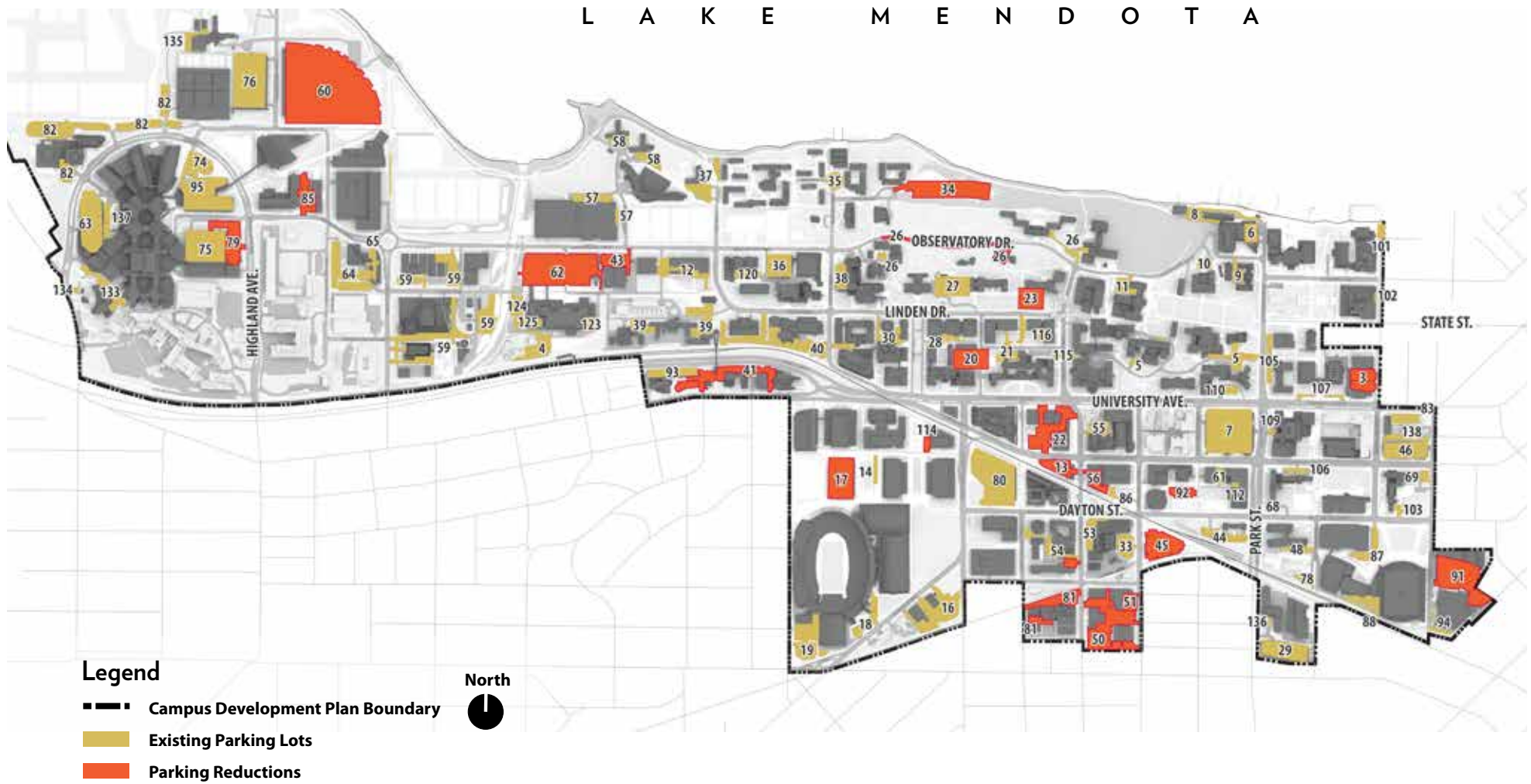


Figure 4-36 Recommended Parking Reductions

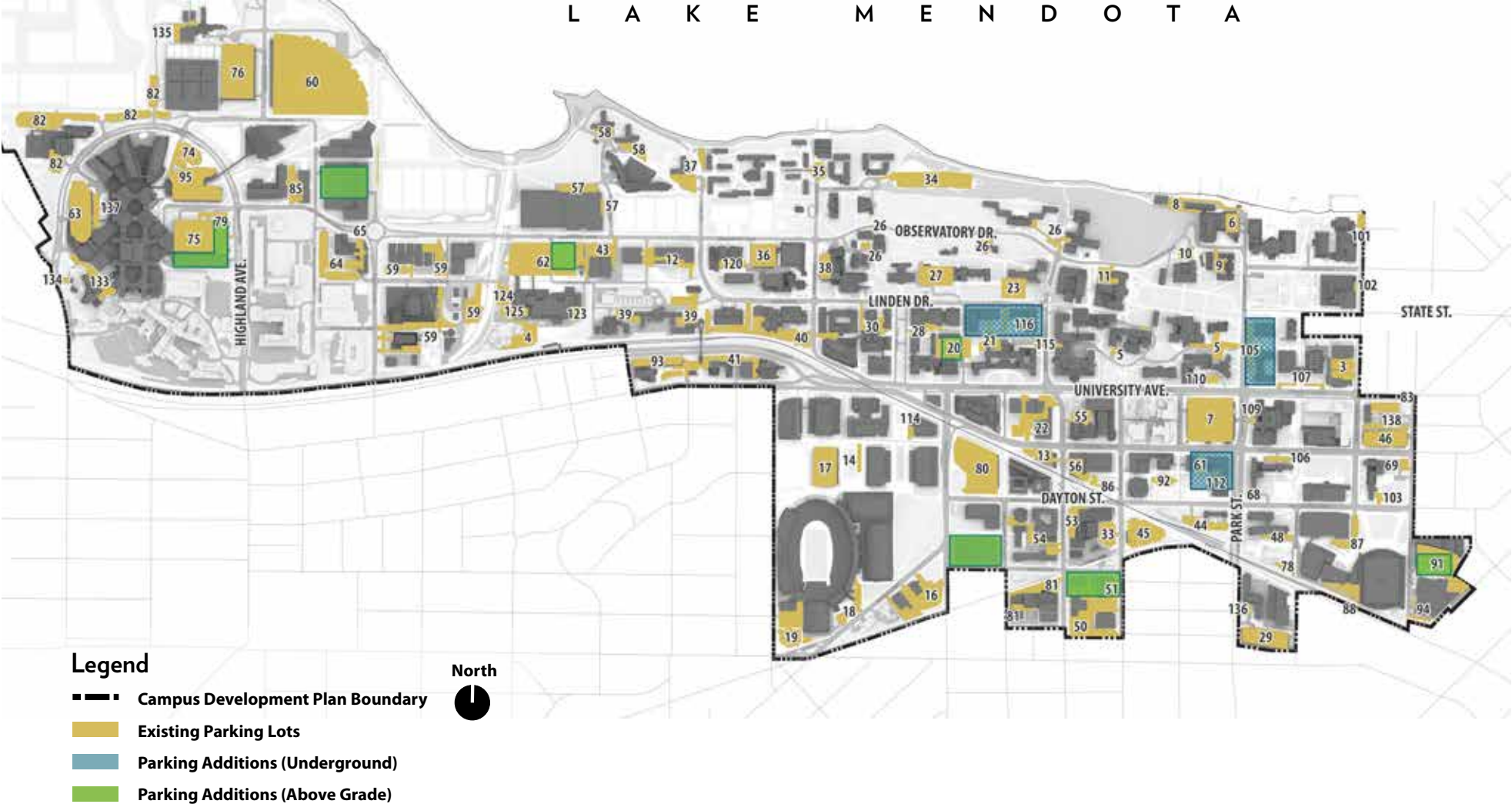


Figure 4-37 Recommended Parking Additions

Proposed Landscape Summary

Table 4-2 Proposed Landscape Summary

Map Reference ¹	Category of Open Space Use	Location Description	New ²	Comments	Phase
OS-W-01	Courts/Quads/Gardens	Pharmacy East Quad		Green space directly east of Pharmacy, connect to West Union	4
OS-W-02	Natural Areas	1918 Marsh Improvements		Shoreline, walking path, landscape improvements	2
OS-W-03	Courts/Quads/Gardens	West Union North Green	*	Includes stormwater management component	4
OS-W-04	Courts/Quads/Gardens	West Union Terrace	*	Area immediately surrounding the Union West Building	4
OS-W-05	Pedestrian Mall	Walnut Street Pedestrian Mall		Enhanced streetscape	4
OS-W-06	Natural Areas	Picnic Point Entry Improvements		Alignment, signage, landscape improvements	2
OS-W-07A	Natural Areas	Willow Creek Improvements-South	*	Between Linden Drive and Campus Drive	2
OS-W-07B	Natural Areas	Willow Creek Improvements-Middle	*	Between Observatory Drive and Linden Drive	1
OS-W-07C	Natural Areas	Willow Creek Improvements-North	*	Between Lake and Observatory Drive	4
OS-W-08	Streetscape	Linden Drive between Willow Creek and Elm Dr.	*	Stormwater management, green streets	3
OS-W-09	Courts/Quads/Gardens	Horse Barn Stormwater Facility	*	Restore greenspace around Horse Barn	4
OS-W-10	Recreation	Near East Recreation Fields/Stormwater	*	Underground stormwater facility	1
OS-W-11	Courts/Quads/Gardens	Westside Terrace and Plaza	*	Area adjacent to west side of new Natatorium	1
OS-N-01	Streetscape	Observatory Drive Streetscape	*	Part of Utility Upgrade projects, remove parallel parking/pull-out addition. Between Babcock and Charter.	4
OS-N-02	Courts/Quads/Gardens	Tripp/Adams Hall Courtyards	*	Restoration	2
OS-N-03	Streetscape	Linden Drive Pedestrian Enhancements		Enhanced pedestrian zone	3
OS-N-04	Natural Areas	Removal and Redevelopment of Lot 34		Stormwater, education, research facility	3
OS-N-05	General Openspace	Observatory Hill Landscape Restoration		Reduced lawn conversion, tree thinning/planting	3
OS-N-06	General Openspace	Pedestrian Land Bridge	*	Over intersection of Charter and Linden	3
OS-N-07	General Openspace	N. Charter Street Lake Terminus Path	*	Transition down slope	1
OS-N-08	Streetscape	Observatory Drive Pedestrian Improvements		At Bascom/Social Science/Ingraham area	1
OS-N-09	Court/Quads/Gardens	Super Block Roof Deck	*	Area around N-06A site	3
1. Format: Open Space - Planning District - ID#					
2. New Recommendation, relative to 2005 Campus Master Plan					

Table 4-2 Proposed Landscape Summary, continued

Map Reference ¹	Category of Open Space Use	Location Description	New ²	Comments	Phase
OS-N-10	Stormwater	Underground Treatment Stormwater Facility	*	Green infrastructure, superblock adjacent to Medical Sciences	3
OS-N-11	General Openspace	Bascom Hill Stormwater Landscape	*	Reduce lawn, implement green infrastructure	2
OS-N-12	Courts/Quads/Gardens	Library Mall (State Street to Langdon Street)		Redevelopment of Library Mall	2
OS-N-13	Courts/Quads/Gardens	Humanities Site Mall	*	Connecting East Campus Mall to N. Park Street (Lathrop)	3
OS-N-14	Streetscape	Campus Gateway Entry Sign	*	At Campus Drive/University Avenue center median	2
OS-S-01	Courts/Quads/Gardens	Engineering Campus Mall	*	Connection between Engineering. Mall and Camp Randall Park	4
OS-S-02	Recreation	Camp Randall North Practice Field	*	Minor addition	1
OS-S-03	Courts/Quads/Gardens	Union South Quadrangle & Open Space		Removal of Wendt Library (relocate)	4
OS-S-04	Courts/Quads/Gardens	Block South of Union South	*	Stormwater component	4
OS-S-05	Courts/Quads/Gardens	Campus/Orchard Surface Stormwater Facility	*	WID II, South Open Space	3
OS-S-06	Courts/Quads/Gardens	N. Mills Surface Stormwater Facility	*	Nolan Zoology Block Quadrangle	4
OS-S-07A	Streetscape	Dayton Street Green Infrastructure-Randall to Charter	*	Green street	1,2,3,4
OS-S-07B	Streetscape	Dayton Street Green Infrastructure-Charter to Park	*	Green street	1,2,3,4
OS-S-07C	Streetscape	Dayton Street Green Infrastructure-Park to Francis	*	Green street	1,2,3,4
OS-S-08	General Openspace	Witte Hall Yard	*	Open space improvements, stormwater	1
OS-S-09	General Openspace	Sellery Hall Yard	*	Open space improvements, stormwater	2
OS-S-10	Courts/Quads/Gardens	Grainger Hall Courtyard Redevelopment		Redo existing	2
OS-S-11	Streetscape	University Avenue Streetscape Enhancements		Incoordination with City/State/Fed's	4
OS-S-12	General Openspace	Railroad R/W Landscape Enhancement	*	Lessen visual impact of this corridor	2
OS-S-13	General Openspace	Art Building open space & sculpture garden		Art Building development	4
OS-S-14	Streetscape	Campus Gateway Entry Sign		At 21 N. Park Street island	3
OS-S-15	Courts/Quads/Gardens	South Campus Quad	*	Area north of W. Dayton Street, Brooks St. Ped Mall	2
1. Format: Open Space - Planning District - ID#					
2. New Recommendation, relative to 2005 Campus Master Plan					

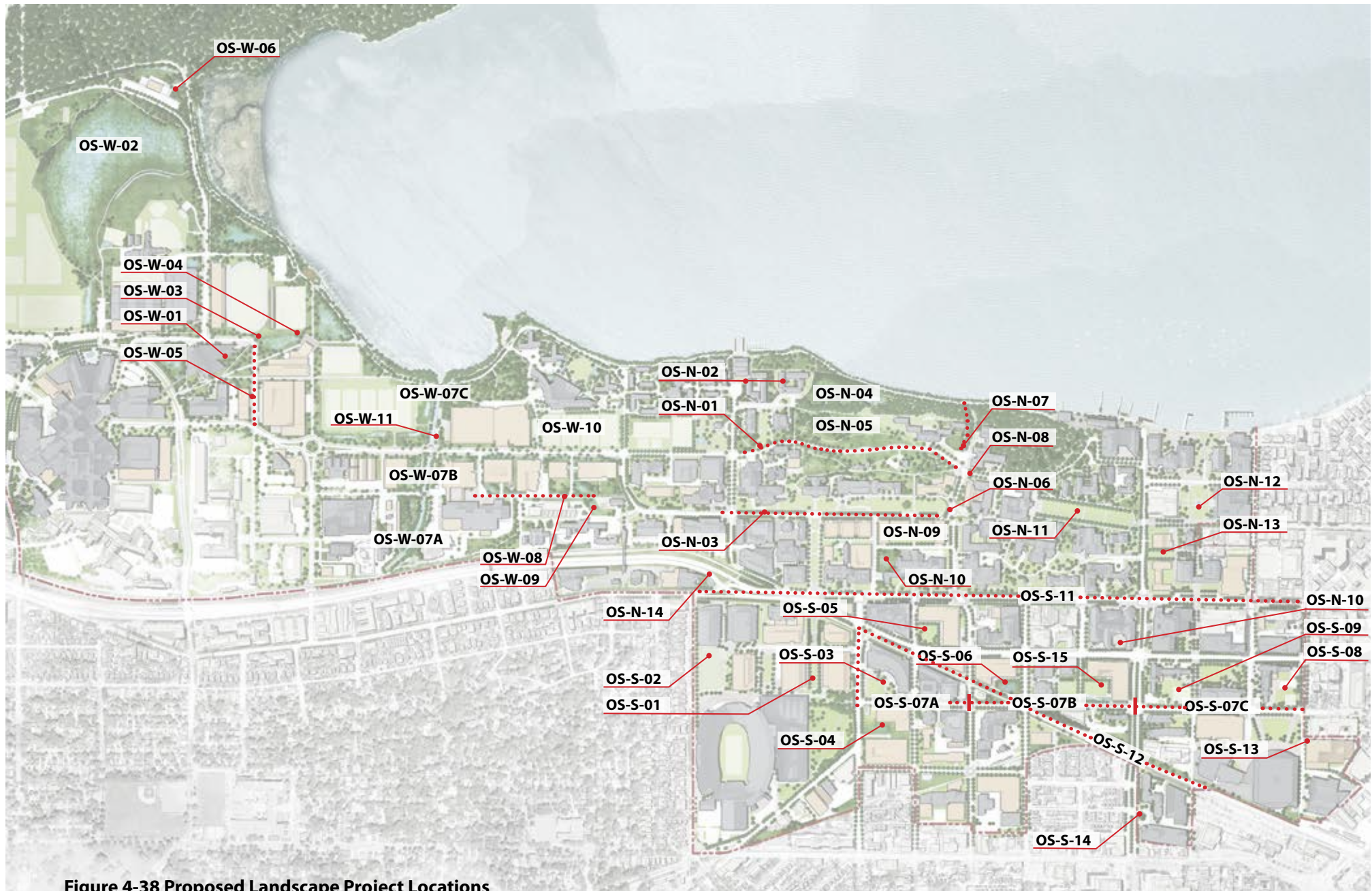


Figure 4-38 Proposed Landscape Project Locations

The 2015 Campus Master Plan Update directly supports a culture a wellness on campus. Although wellness is a broad term that can have a different meaning to each individual, the university through its UWell initiative has defined it as an active process of becoming aware and making active choices toward a successful way of being. This definition is based off of seven interacting dimensions of health and wellness:

- Physical wellness
- Emotional wellness
- Spiritual wellness
- Community wellness
- Work-school wellness
- Financial wellness
- Environmental wellness

An integrated web of programs, services, and the physical campus environment support wellness for students, faculty, and staff. The master planning process considered the existing campus and how it supports the multiple dimensions of wellness. This plan's recommendations supports campus wellness initiatives through the physical development of projects. More, better, and connected open spaces will encourage physical activity, social gathering, and spiritual connection. A stronger multimodal transportation system will enable better physical activity, lower transportation costs, and improve the environment. Wellness initiatives and activities that the 2015 Campus Master Plan Update supports includes:

- Campus farmers market
- Safewalk
- Lighting program for after hours pedestrian movement
- Trail connectivity for walking meetings, student/faculty/staff health
- Preservation and enhancement of our natural areas for access and restorative qualities
- Recreational sports fields
- Preservation of our natural and cultural resources
- Public art

- Performance spaces, terraces, plazas, patios
- Botanical Garden and Allen Centennial Garden
- Eagle Heights community gardens
- Commuter Solutions Program
- Edible landscapes policy (currently in development)
- Access and proximity to Lake Mendota

Analysis and recommendation maps were prepared for all seven dimensions of health and wellness. This section includes the dimensions that are most greatly impacted by improvements to the physical campus – physical, environmental, and spiritual – and the existing walking trails. The Long Range Transportation Plan will increase the connectivity of walking paths through new and better multimodal connections.

4. RECOMMENDATIONS

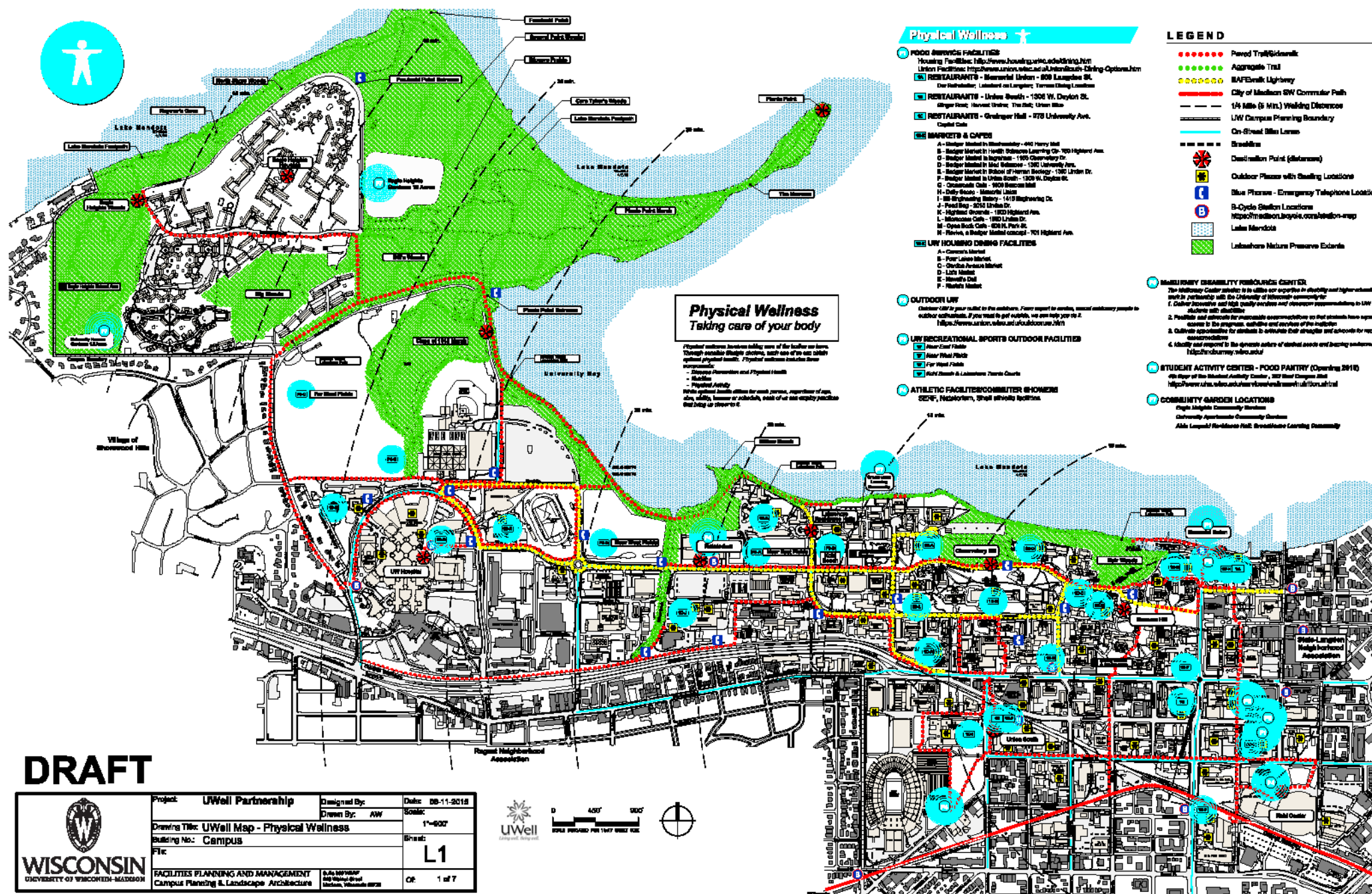


Figure 4-39 Projects Supporting Physical Wellness

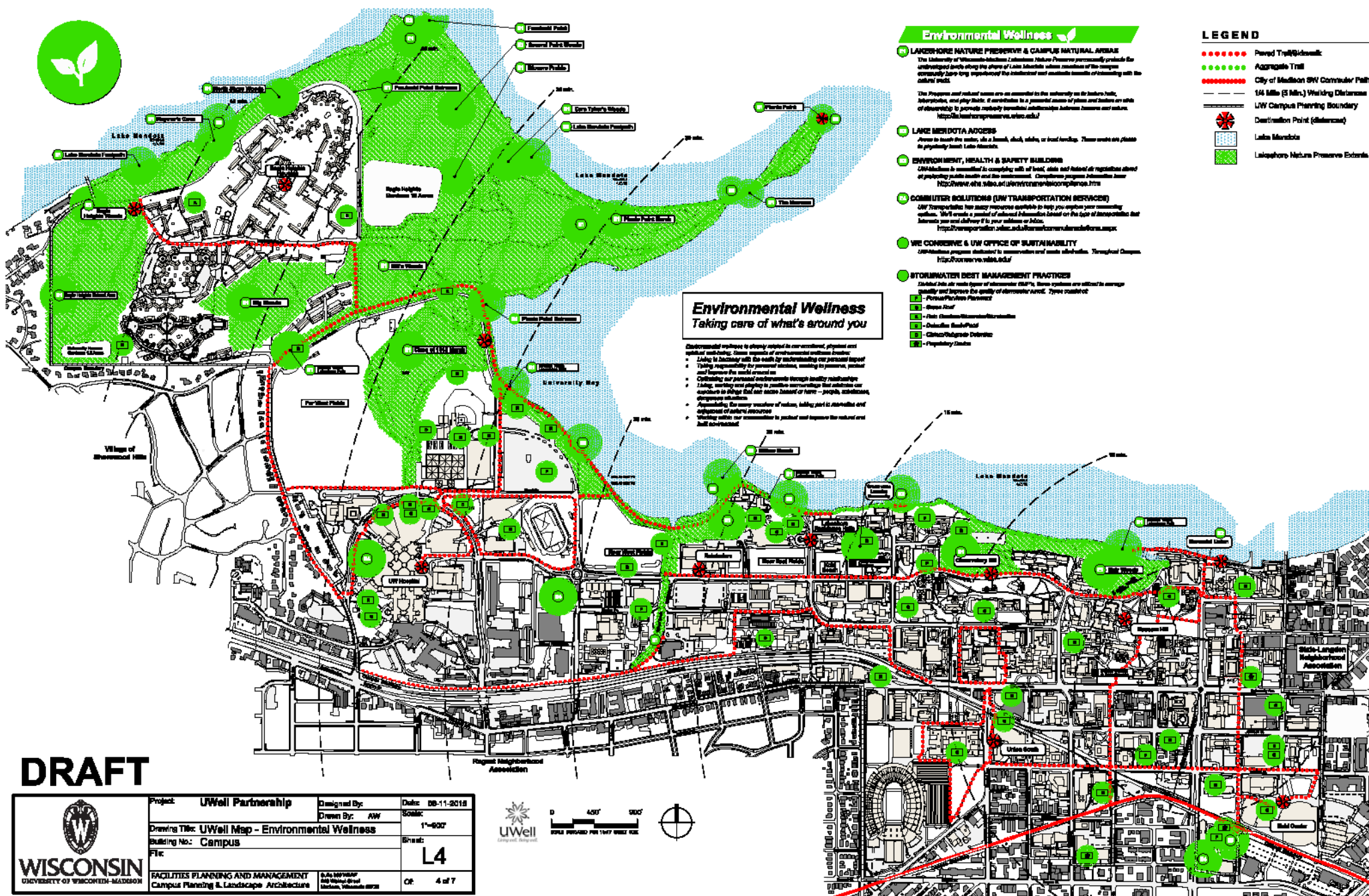


Figure 4-40 Projects Supporting Environmental Wellness

4. RECOMMENDATIONS

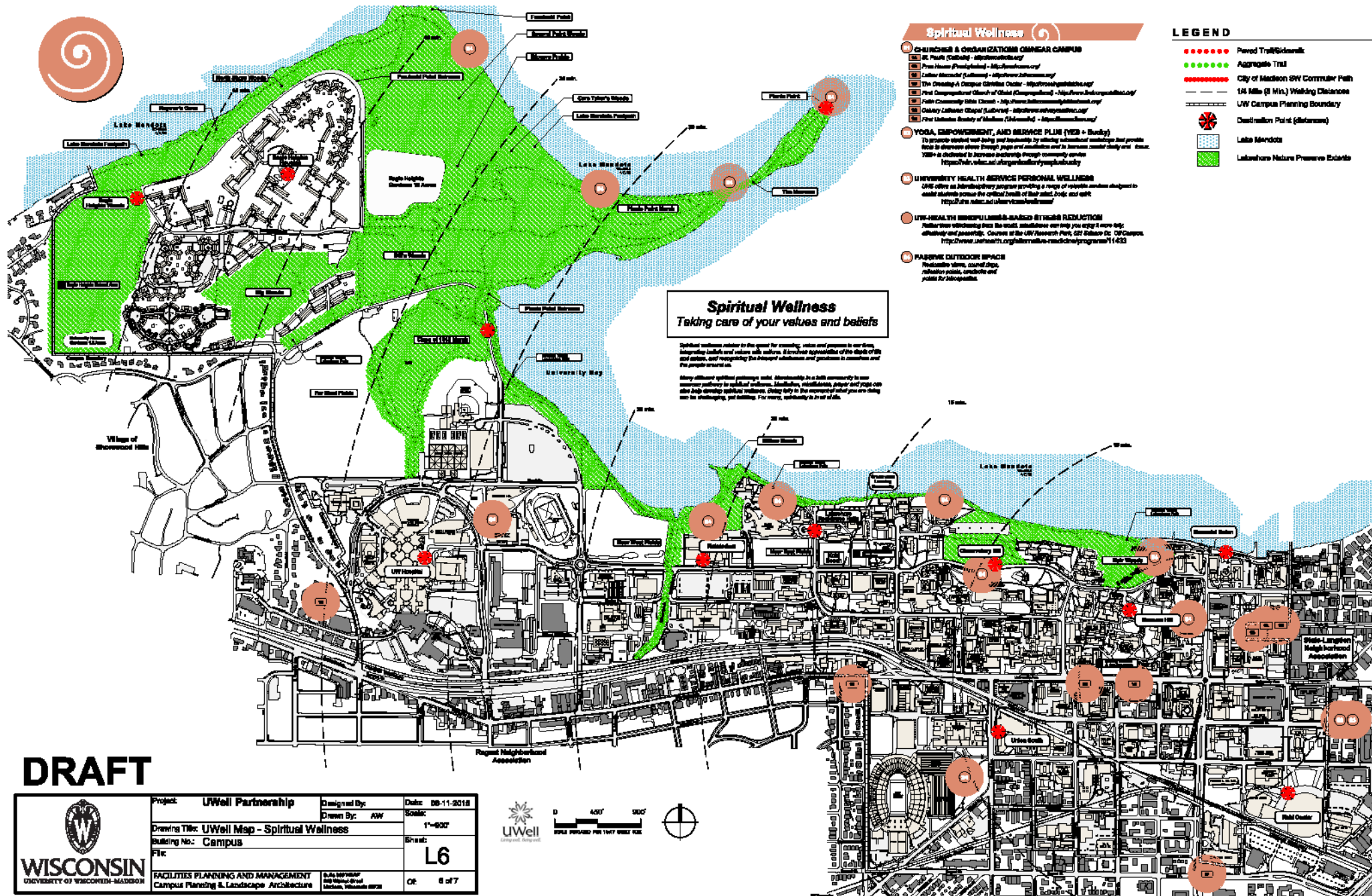


Figure 4-41 Projects Supporting Spiritual Wellness

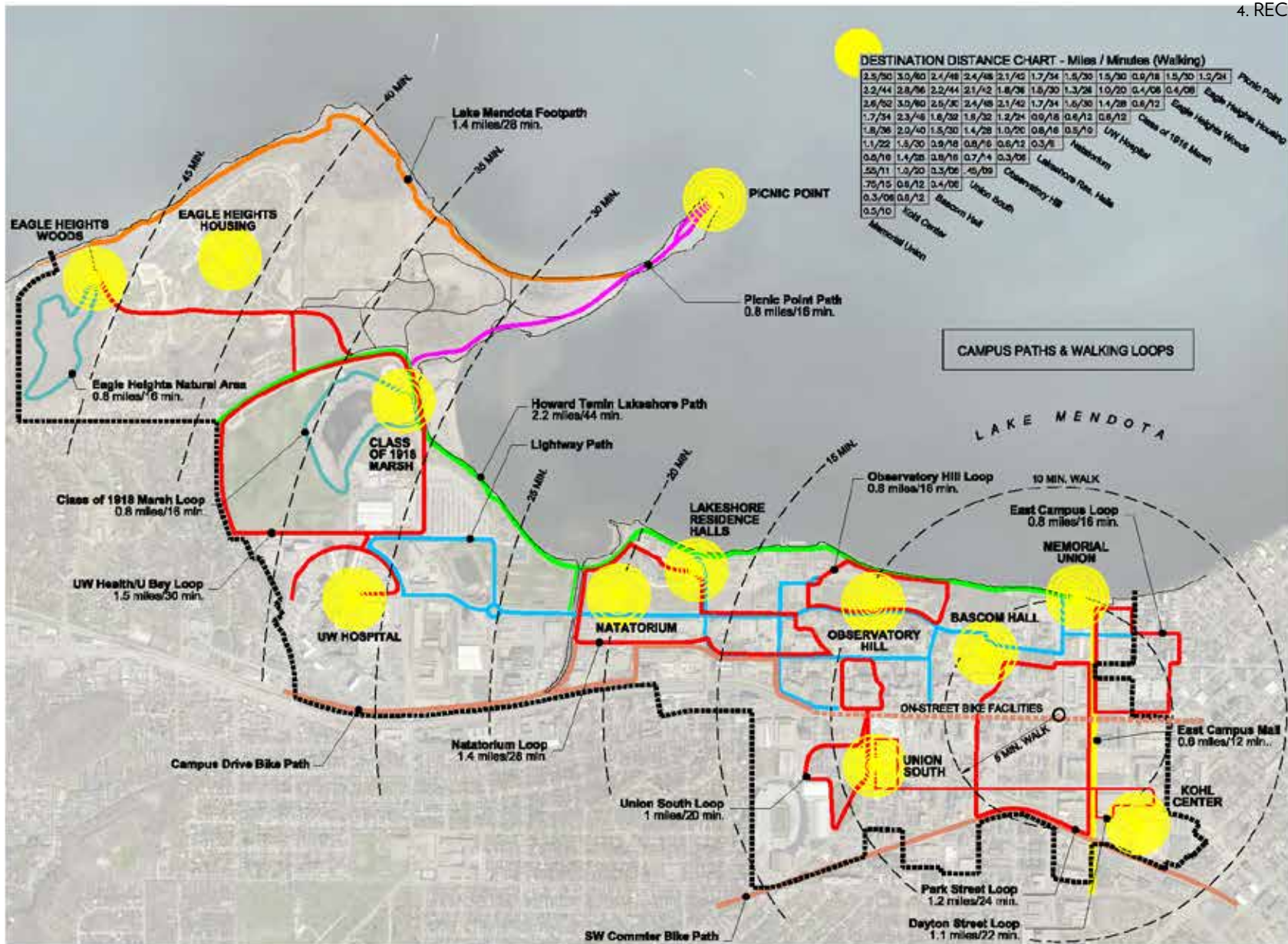


Figure 4-42 Existing Trail Network

Proposed Utility Corridors and Infrastructure Improvements

Steam, Chilled Water, Electrical, Telecommunications

Existing System Upgrades

There are a number of existing utility system upgrades recommended to improve reliability and system operation. These deficiencies involve some renewal and replacement of old, aging distribution piping as well as correction of current system shortcomings. There are a substantial number of early phase projects required to support the new building growth and minimize any re-excavation of streets for future phased work. A brief listing of some of these items includes:

- Replace steam infrastructure along University Avenue from Henry Mall to Orchard Street.
- Upgrade the steam infrastructure along Charter Street from Johnson Street to University Avenue.
- Replace steam and electrical power infrastructure to the Lakeshore Residence Halls between Kronshage House and the Porter Boat House.
- Replace/upgrade steam and electrical power infrastructure along Elm Drive and Linden Drive from Observatory Drive to Babcock Drive.
- Relocate steam and chilled water infrastructure from underneath the future footprint of the Ingraham Hall addition.
- Upgrade the steam and electrical power infrastructure on Dayton Street from Charter Street to Park Street.
- Replace/upgrade the steam, chilled water and electrical power infrastructure on Lathrop Drive and Bascom Hill.
- Replace steam infrastructure from Helen C. White Library to Limnology.
- Replace steam infrastructure along Charter Street from University Avenue to Lathrop Drive.
- Replace steam and chilled water infrastructure along Linden Drive to accommodate new pedestrian corridor connections to Veterinary Medicine addition. Replace chilled water lateral piping to the Livestock Laboratory.
- Replace steam infrastructure along Willow Drive west of DeJope Residence

Hall.

- Replace steam infrastructure along Johnson Street and Mills Street to Educational Sciences.
- Replace/extend steam and chilled water infrastructure to Enzyme Institute.
- Replace steam infrastructure near Agricultural Hall and Agricultural Bulletin.

Utility Load Impact of Master Plan

The planned campus expansion will significantly increase the demand on the utility infrastructure systems. The net campus increase in building area at ultimate build-out is estimated to be over 5,145,500 gross square feet which impacts the utility infrastructure. The current peak loads and projected loads at ultimate build-out are as shown in the Table 4-2.

Proposed Utility Expansion

The increased utility demands on campus imposed by the net increase in building square footage require several major utility system improvements. This will involve expanding existing utility plants and substations and expansion of the utility distribution systems. The major efforts are as described below:

- Addition of heavy tie-feeders between campus substations to improve reliability and provided redundancy.
- Addition of 5,000 tons to the West Campus Cogeneration Facility to increase the chilled water production output from 30,000 tons to 35,000 tons.
- Construction of major utility distribution system extensions to serve the campus growth.

In addition to system expansions, several options for increasing efficiency and improving system reliability will be considered. These options are:

- Construction of new far east and far west substations on campus to improve system reliability and provide operational flexibility.
- Construction of a new 6,000 ton chilled water plant on the east end of

campus to provide operational flexibility and efficiency.

- Construction of a chilled water thermal energy storage system. The use of thermal storage will allow generation and storage of chilled water during non-peak hours for use during peak hours, helping to level the load on the electrical consumption on campus and reduce energy costs
- Providing back pressure steam turbine generators in larger buildings to act in parallel with pressure reducing stations as the primary method of reducing steam pressures in buildings

In addition to the above improvements, the university remains committed to investigating and expanding the existing use of renewable energy sources and sustainable design and the following options should be considered:

- Incorporate renewable energy into campus design and purchase “green power” or renewable energy from the electrical grid:
 - Wind power (purchased off-site through utility provider)
 - Photovoltaics
 - Solar thermal hot water
 - Transpired solar collectors
- Increase efficiency usage of non-renewable energy:
 - Use of back pressure steam turbine generators at larger buildings to generate electricity
 - Use of a chilled water thermal energy storage system to produce chilled water more efficiently via lower temperature condenser water

The recommended utility improvements are shown in Figure 4-38.

Table 4-2 Estimated Load Growth

Service	Estimated Current (2015) Peak Load	Projected Ultimate Build-out Load	Current Firm Production Capacity
Steam/ Condensate	830,000 PPH	983,000 PPH	2,300,000 PPH / 2,000,000 PPH
Chilled Water	56,360 Tons	68,722 Tons	67,200 Tons / 75,700 Tons
Electric Power	74,600 KVA	136,000 KVA	NA

4. RECOMMENDATIONS

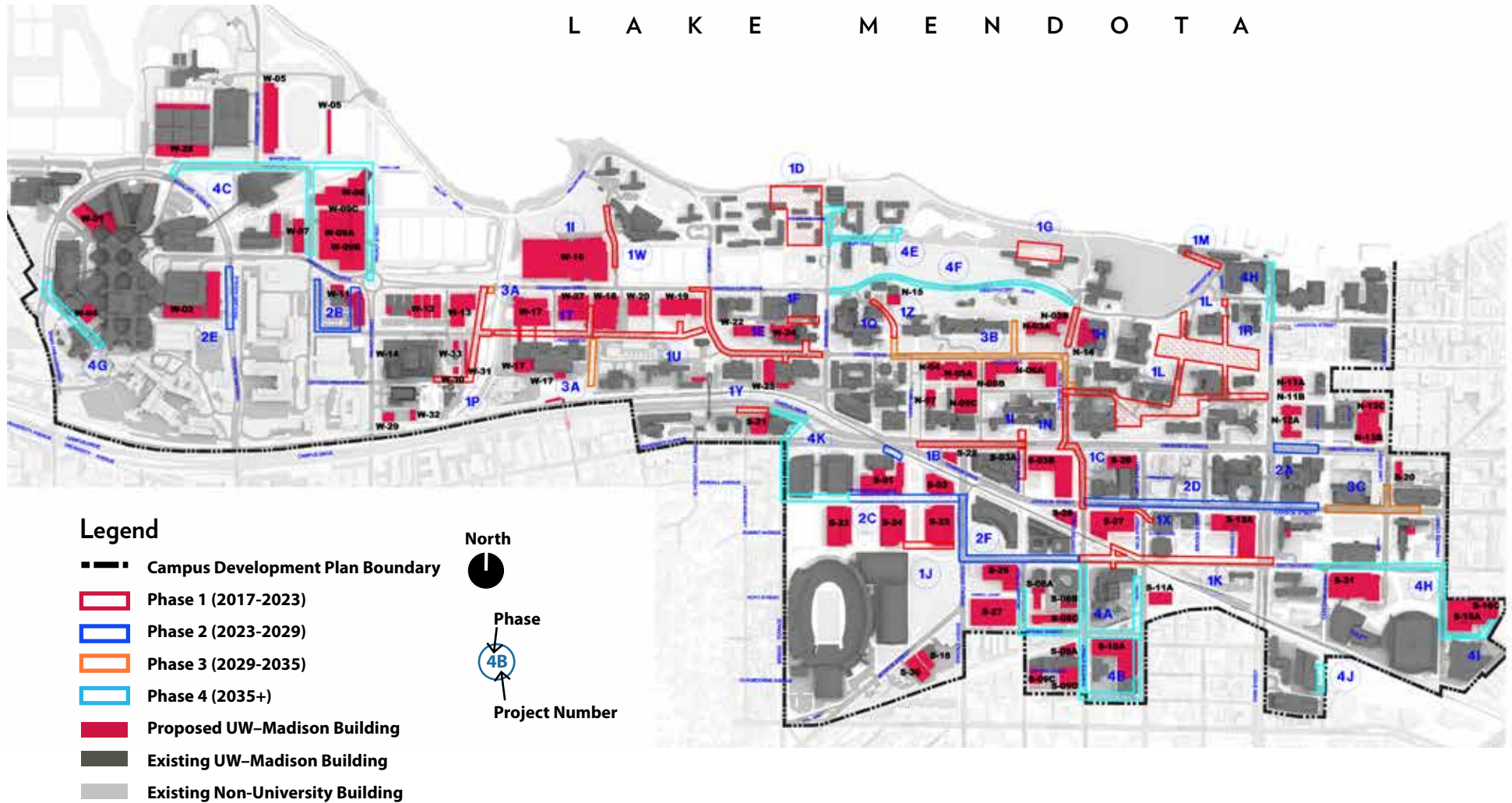


Figure 4-43 Proposed Utility Projects (All Phases)

Sanitary Sewers, Storm Sewers, and Domestic Water Mains

Based on discussions with Facilities Planning & Management/Plumbing Shop staff and an analysis of campus records, the 2015 Campus Master Plan Update makes the following recommendations:

- Civil utilities (sanitary, storm and water), especially in the older parts of campus, should be replaced where there are large utility projects for steam or chilled water or street reconstruction projects in the vicinity. Plumbing Shop staff indicated that they are not always informed when these projects are in planning, and sometimes the civil utilities are overlooked or not budgeted for replacement during these types of projects. Anytime an older building is renovated the age and condition of the utilities serving the building should be reviewed and replacements made where necessary.
- Civil utility CAD records should be systematically updated using the record drawings or as-builts as soon as a project is completed. There should be a formal process in place at Facilities Planning & Management to maintain these records and to occasionally spot verify in the field that records have been accurately maintained. Too much critical infrastructure information is stored in the heads of one or two people and not properly documented. The CAD files should also be cross-checked with city mapping staff to identify discrepancies and rectify records.
- American Children's Family Hospital dual feed – plumbing shop director Marcella Otter indicated that discussions were underway with the hospital to rectify the condition, but given the sensitive nature of the work done in this building it is critical that there be two redundant domestic/fire protection water services to the Children's Hospital (as of May 2015 this was not resolved).
- Regular conversations with the city should be ongoing related to fire protection concerns on campus, especially where there are known outages in city water mains or bagged hydrants near campus buildings. This is an issue of life and safety and should include the Madison Water Utility, City Engineering and the Fire Department as well as Facilities Planning & Management staff.
- Water quality concerns should be identified and prioritized in budgets to prevent potable water contamination. Dead-end mains must be flushed regularly but Plumbing Shop staff has the best knowledge of where these issues may occur on campus. The presence of any remaining lead pipes on campus should be identified and prioritized for replacement.

2005 Campus Master Plan Recommendations

In addition, there are projects that were recommended as part of the 2005 Campus Master Plan which have not yet been addressed and should be evaluated by Facilities Planning & Management staff. For more details, reference the 2005 Campus Master Plan.

Storm Sewers

All stormwater and storm sewer improvement projects should be considered in conjunction with the Green Infrastructure & Stormwater Management Master Plan.

- SS-R-12-P1 – Elizabeth Waters Storm 1G – “Evaluate and replace storm drainage on the north side of Elizabeth Waters Hall due to the age and reliability of the existing drainage system. Perform remediation and make appropriate restoration improvements in Muir Woods north of Elizabeth Waters Hall”
- SS-R-11-P1 – South Campus Distribution Loop 1J – “Replace 500’ of storm sewer along the south side of Engineering Hall”
- SS-S-15-P1 – North Campus Distribution Loop/Bascom Hill Area 1L – “BMP includes the use of infiltration trenches along the walkways crossing Bascom Hill”
- SS-S-13-P1 – North Campus Distribution Loop/Bascom Hill Area 1L – “A storm sewer system analysis is required to determine the true nature of the flooding at project location. A site-grading plan should be completed for the area to ensure proper flow of water into sewers and away from the theater roof”
- SS-S-13-P3 – North Campus Distribution Loop/Bascom Hill Area 1L
- SS-X-03-P4 – West Campus Distribution Loop 4C – “Extend storm sewer 500’ south along the unnamed street from Walnut Street to service proposed buildings W6, W9c, and W8 along the east side of the unnamed street. Stormwater will be conveyed north to Walnut Street where a connection will be established to the mainline”
- SS-X-04-P4 – West Campus Distribution Loop 4D – “Extend storm sewer from existing at the corner of Walnut Street, south and west 400’ to serve W6, W9c and W9a”

4. RECOMMENDATIONS

Sanitary Sewers

- SAN-R-15-P1 – North Campus Distribution Loop/Bascom Hill Area 1L – “Evaluate sanitary sewer mains and services in the Bascom Hill area for replacement consideration. Sanitary mains throughout the Bascom Hill area are dated pre-1930 and should be scheduled for replacement”
- SAN-X-03-P4 – West Campus Distribution Loop 4D – “Extend 10” sanitary sewer 300’ west in Walnut Street and 300’ south in unnamed street to service proposed buildings W6, W9c, and W8. The extension will start at the Rennebohm Hall and stop at the extent of proposed building construction along unnamed street south of Walnut Street.”

Domestic Water

- WTR-R-07-P1 – Linden Drive Distribution Loop 1E – “Replace 800’ of redundant water main from Babcock Drive and Linden Drive west in Linden to the point where Linden turns to the north”
- WTR-R-08-P1 – Russell Labs Distribution Loop 1F – “Install 200’ of water main from the dead end on the south side of Steenbock Library east to the UW–Madison main in Babcock”
- WTR-R-14-P1 – North Campus Distribution Loop/Bascom Hill Area 1L – “Replace water services to all buildings in this area”
- WTR-R-15-P1 – North Campus Distribution Loop/Bascom Hill Area 1L – “Replace redundant mains north of Lathrop Hall”
- WTR-R-13-P3 – North Campus Distribution Loop/Bascom Hill Area 1L – “Replace redundant water mains in the courtyard between Sterling Hall, Van Vleck Hall, Chamberlin Hall and Birge Hall”
- WTR-X-03-P4 – West Campus Distribution Loop 4D – “Extend water main 1700’ from extended Observatory Drive north in unnamed street to Walnut Street, west along Walnut to Highland and connect to existing main in Highland”





5. PHASING

Project Phasing

In order for a master plan to be successful, it must be appropriately phased and implemented over time. To assist with this process, the following initial draft phasing breakdown has been developed. Note that the proposed project opportunities listed are not a definitive comprehensive list of projects in any priority order and in no way suggests that these projects will be approved as part of the standard capital budget process with the State of Wisconsin. Each project will need to be reviewed and prioritized within the context of the 6-year capital plan and within a 2-year biennial capital budget. Projects are strictly initiated first by programmatic need and second by funding availability. Some projects may move between phases as funding becomes available. Some may move more quickly and others may move more slowly.

Tables 5-1 through 5-4 list building projects. See the following supporting master plans for descriptions of other recommended projects:

- Landscape Master Plan
- Green Infrastructure & Stormwater Management Master Plan
- Long Range Transportation Plan
- Utility Master Plan

Parking structures (above and below ground) are not included in building space subtotals.

Table 5-1 Phase 1 – 2017 to 2023 Near Term Improvements

Proposed Removal			
	ID	Name	GSF
West	0122	Greenhouse-Walnut Street	47,007
	0091	Linden Drive 1645	3,210
Near West	0119	Seeds Building	17,744
	0129	University Avenue 1610	24,589
	0031	Gymnasium-Natatorium	249,579
	0103	Linden Drive 1910	11,267
South	0028	Southeast Recreational Facility	191,254
	1095	Monroe Street 1433	12,515
	0578	Davis Residence Hall, Susan B	11,967
	0577	Bayliss Co-Op, Zoe	11,603
	0788	Brooks Street N 209	5,363
	1082	Bernard Court 206	3,734
	1060	Brooks Street N 215-217	3,733
Total Building Space Removed			593,565

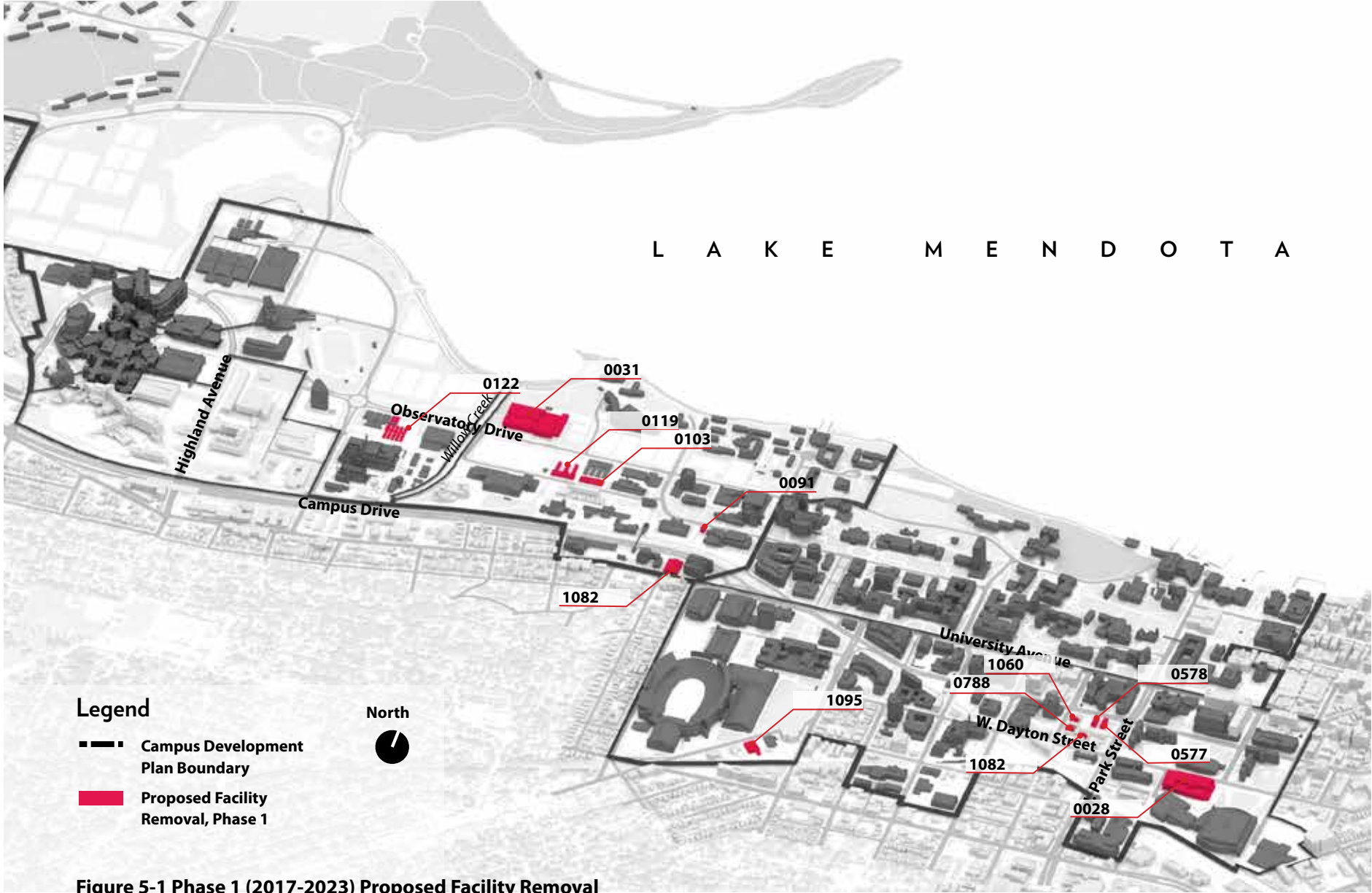


Figure 5-1 Phase 1 (2017-2023) Proposed Facility Removal

Table 5-1 Phase 1 – 2017 to 2023 Near Term Improvements, continued

Proposed Construction			
	ID	Name	GSF
West	W-12	Walnut Greenhouse II*	24,000
	W-16	Gymnasium-Natatorium Replacement	470,900
Near West	W-17	Veterinary Medicine Expansion	138,911
	W-18	Meat Science and Muscle Biology Lab*	228,000
	W-25	Babcock Hall Center for Dairy Research Addition*	31,300
Central	N-13B	Hamel Music Center P1&2*	135,000
	N-14	Ingraham Hall Additions	56,000
South	S-13A	Academic/Research (Johnson/Park)*	348,000
	S-18	Police Addition*	24,840
	S-21	College of Engineering Research Building	156,364
	S-29	Chemistry Building Expansion*	173,169
	S-30	Officer Education Facility*	65,000
	S-31	Southeast Recreational Facility*	253,000
Total Building Space Gained			2,104,484
	W-02	Parking Structure (Hospital Ramp Addition)*	323,900
	W-27	Parking Structure (Lot 62 Site)*	198,000
	S-13	Parking Structure (Under S-13A)*	129,600

* Project currently in planning, design, or construction as of August 2016.

Phase 1 – 2017 to 2023 Near Term Improvements

Total Building Space Removed	593,565
Total Building Space Gained	2,104,484
Phase 1 Total Net Change	1,510,919

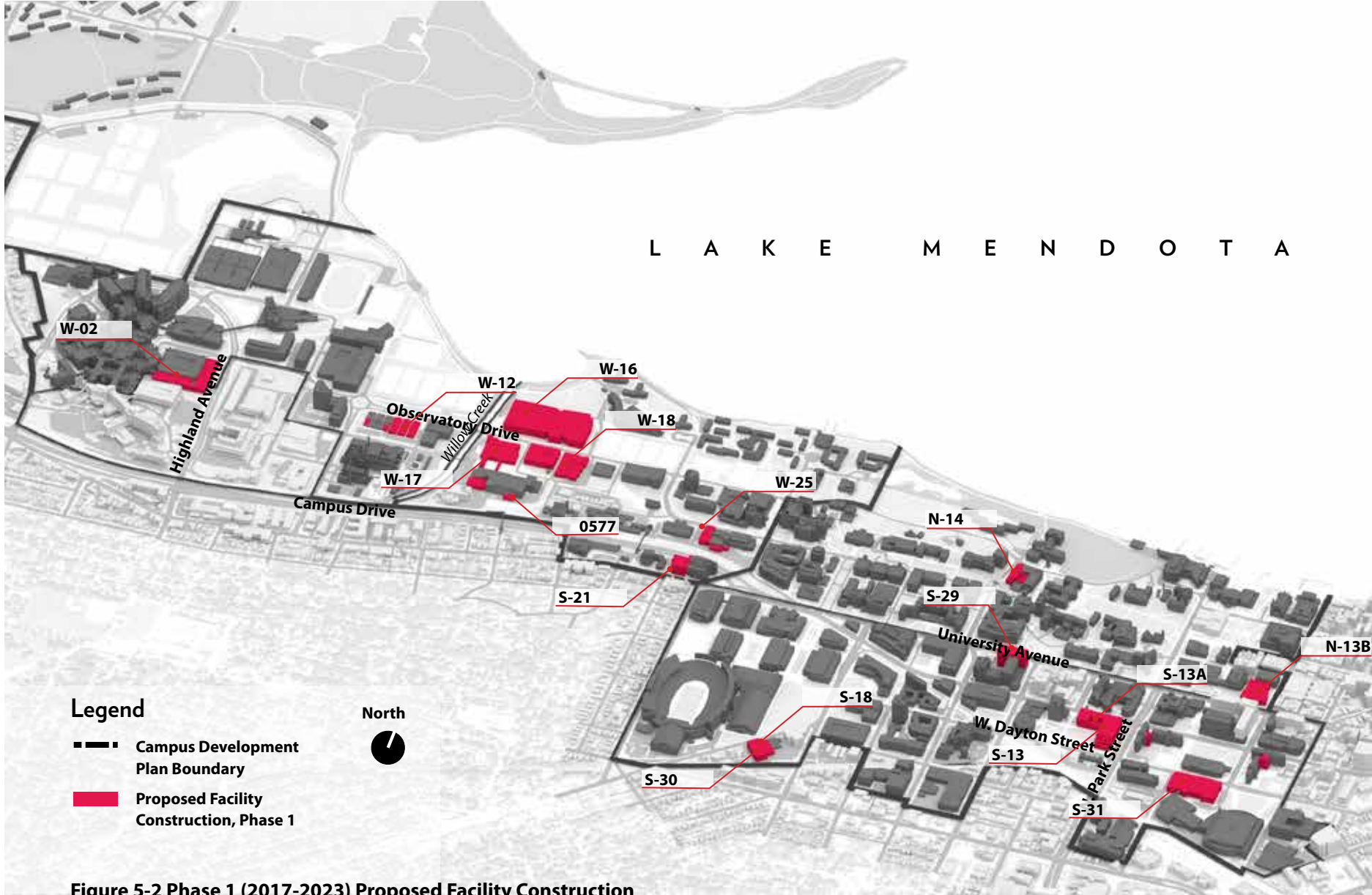


Table 5-2 Phase 2 – 2023 to 2029 Mid-Term Improvements

Proposed Removal			
	ID	Name	GSF
Near West	0116	Schuman Shelter, Carl	960
Central	0476	Stovall Building, William D-Hygiene Lab	80,939
South	0470	Psychology Building, Brogden	115,071
	0486	Engineering Drive 1410	63,561
	0530	Service Building	51,066
	0534	Service Building Annex	38,356
Total Building Space Removed			349,953

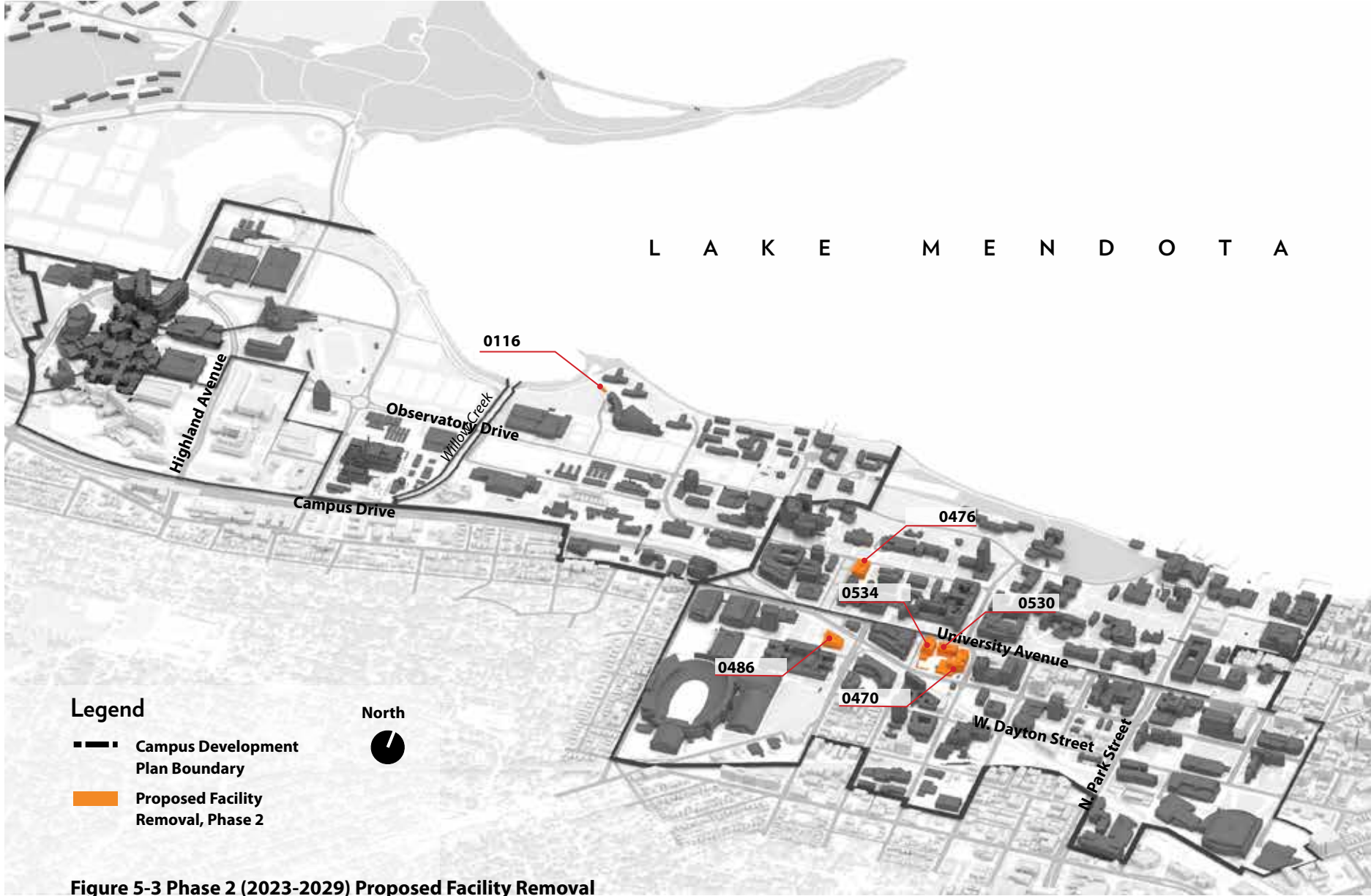


Figure 5-3 Phase 2 (2023-2029) Proposed Facility Removal

Table 5-2 Phase 2 – 2023 to 2029 Mid-Term Improvements (continued)

Proposed Construction			
	ID	Name	GSF
Far West	W-29	Preserve Outreach Center	8,700
West	W-28	Nielsen Tennis Stadium Expansion	47,075
South	S-02	Engineering Drive 1410 – Replacement	169,091
Total Building Space Gained			224,866

Phase 2 – 2023 to 2029 Mid-Term Improvements

Total Building Space Removed	349,953
Total Building Space Gained	224,866
Phase 2 Total Net Change	(125,087)

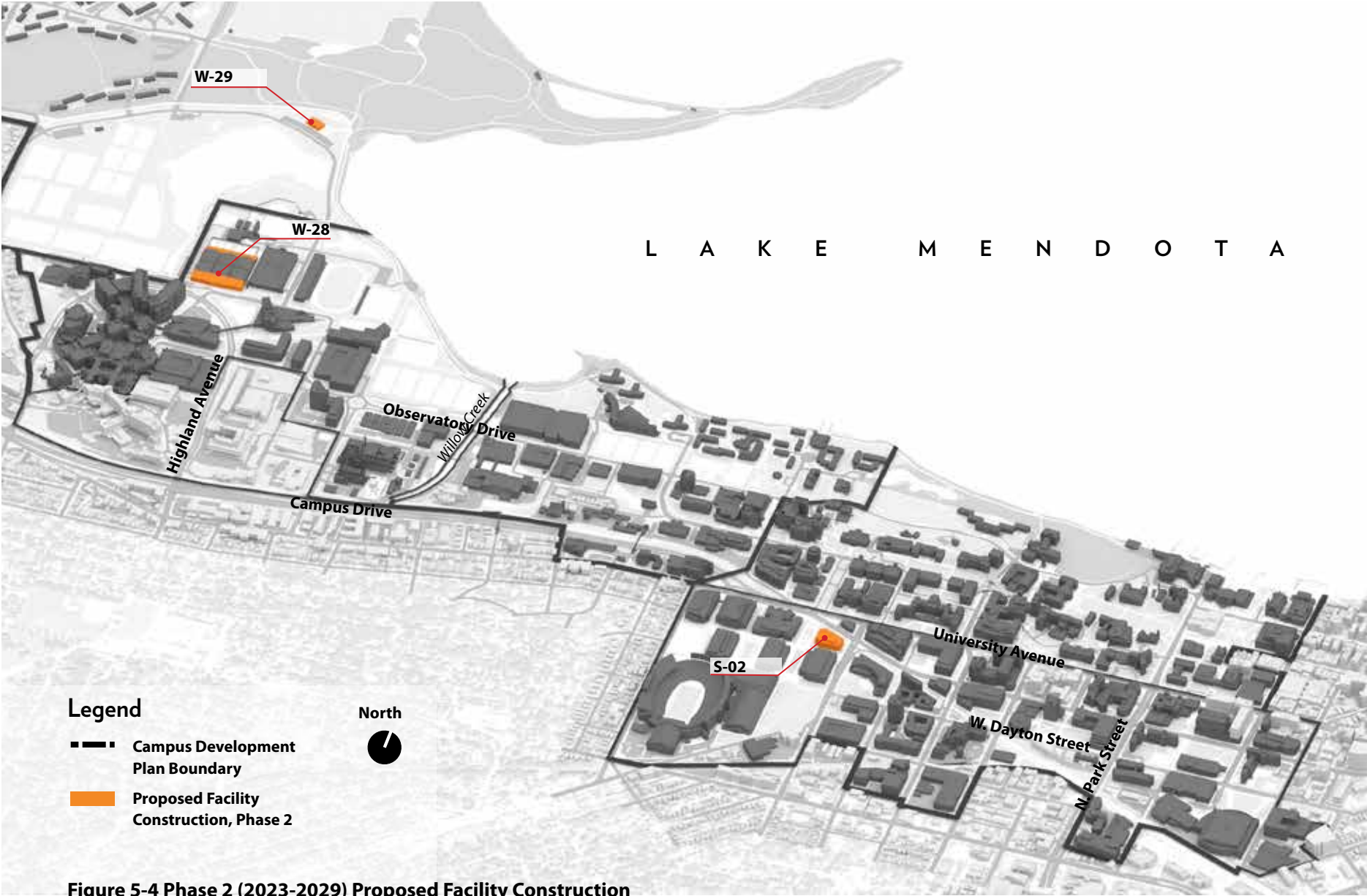


Figure 5-4 Phase 2 (2023-2029) Proposed Facility Construction

Table 5-3 Phase 3 – 2029 to 2035 Long Term Improvements

Proposed Removal			
	ID	Name	GSF
Near West	0110	Poultry Research Laboratory	24,013
	0115	Livestock Laboratory	35,267
Central	0500	Extension Building	76,318
	0452	Bradley Memorial Building	20,598
	0455	Middleton Building, William S	45,217
	0469	Humanities Building, Mosse, George L	333,363
	0451A	Service Memorial Institute	122,474
	0451B	Bardeen Medical Laboratories	69,344
	0451C	Medical Sciences	72,499
	0468	McArdle Building	96,657
South	0762	Engineering Research Building	157,510
	0158	Rust, Henry & Schreiner, David Hall	21,142
	0035	Meiklejohn House	5,955
Total Building Space Removed			1,080,357

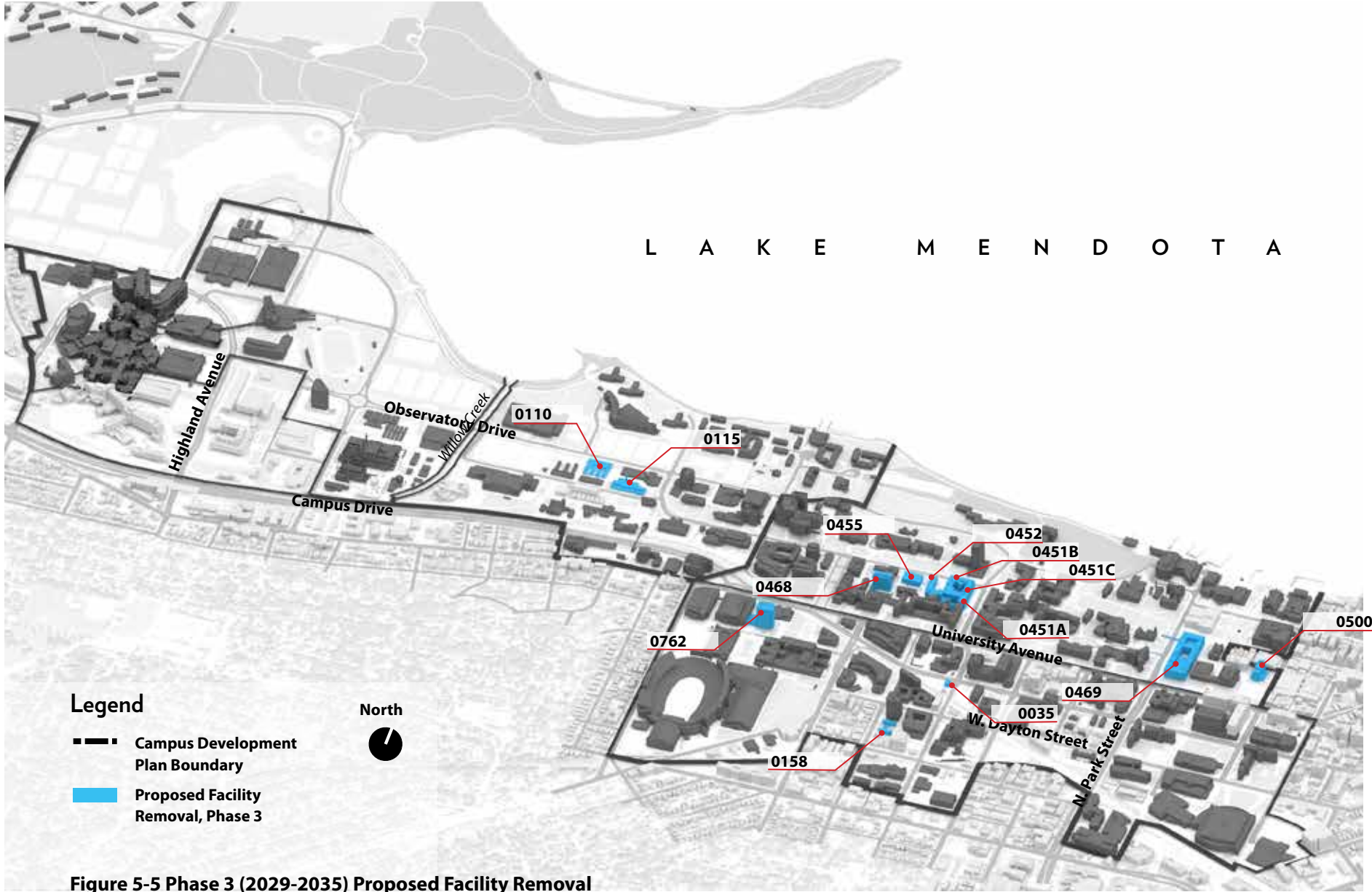


Table 5-3 Phase 3 – 2029 to 2035 Long Term Improvements, continued

Proposed Construction			
	ID	Name	GSF
Near West	W-20	Poultry & Livestock Lab Building	52,965
	W-01	Wisconsin Institutes for Medical Research Phase 3	308,000
Central	N-04	Academic/Research (Stovall Site)	82,200
	N-06A	Academic/Research (SMI Bardeen Med Sciences site)	144,000
	N-11A	Academic/Research (Mosse site north)	84,000
	N-12A	Academic/Research (Mosse site south)	135,000
	N-13C	Music Phase 3	75,000
South	S-01	Engineering Research Building Replacement	271,667
	S-03B	Wisconsin Institute for Discovery, Phase 2	392,000
	S-08A	Academic/Research	22,000
	S-28	Academic/Research (Meiklejohn Site)	84,470
Total Building Space Gained			1,651,302
	N-05C	Parking Structure (Lot 20 Site)	144,000
	N-06B	Parking Structure (Under N-05B & N-06A)	194,400
	N-11B	Parking Structure (Under N-11A and N-12A)	162,000

Phase 3 – 2029 to 2035 Long Term Improvements

Total Building Space Removed	1,080,357
Total Building Space Gained	1,605,302
Phase 3 Total Net Change	570,945

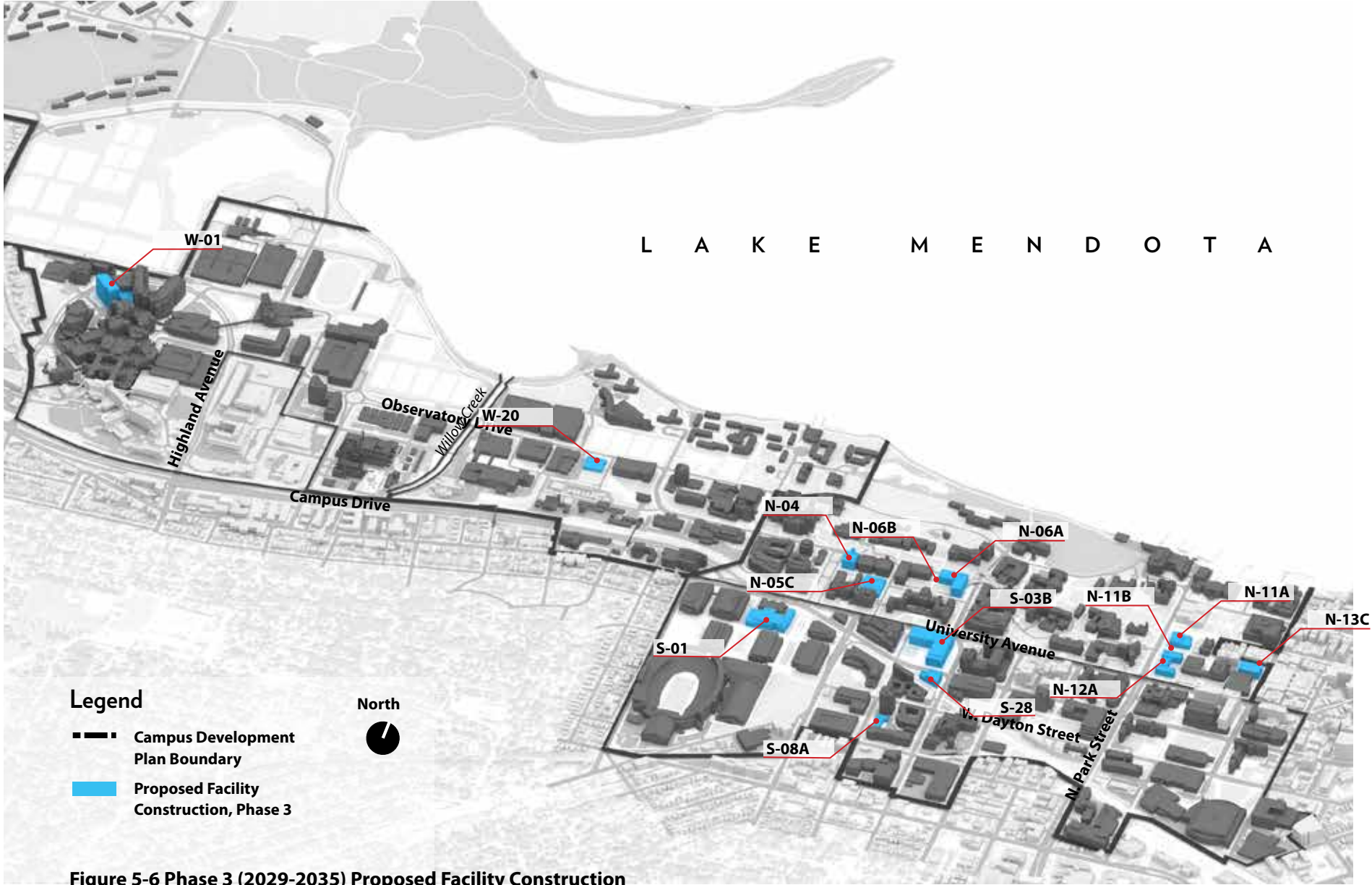


Figure 5-6 Phase 3 (2029-2035) Proposed Facility Construction

Table 5-4 Phase 4 – 2035+ Future Capacity

Proposed Removal			
	ID	Name	GSF
West	0045	Biotron Laboratory	106,907
	0089	Barley and Malt Lab	16,900
	0108	Herrick Drive 505	1,139
	0109	Herrick Drive 509	2,048
	0125	Physical Plant-Grounds Storage	2,560
	0128	Linden Drive 2115	8,756
	0173	McClimon Track Ticket Booth	60
	0222	Herrick Drive 525 – Electrical Storage	3,630
	0223	Physical Plant-Grounds Storage 2	480
	0465	Linden Drive 2105	1,860
	1020	McClimon Track Shelter-South	120
	1021	McClimon Track Shelter-North	120
	1022	McClimon Track Restrooms	–
	1023	McClimon Track Concession Stand	–
	1024	McClimon Track Storage	–
	0094	Biomedical Sciences Laboratories, Hanson, Robert P	43,519
	0099	Agricultural Engineering Laboratory	32,654
	0123	Meat Science and Muscle Biology Lab	30,190

Proposed Removal			
	ID	Name	GSF
Central	0074A	King Hall (Greenhouse Only)	21,478
	0102	Henry Mall 445	54,750
	0449	Nutritional Sciences	56,502
	0453	School of Social Work Building	41,344
	0482	Van Hise Hall	226,940
South	0408	Engineering Hall	464,768
	0402	Noland Zoology Building, Lowell E	92,818
	0404	Wendt Commons, Kurt F	74,459
	0401	Zoology Research Building	44,256
	0527	Harlow Primate Lab	36,944
	0526	Primate Center, Wisconsin	31,606
	0504	Charter St N 45	22,110
Total Building Space Removed			1,418,918

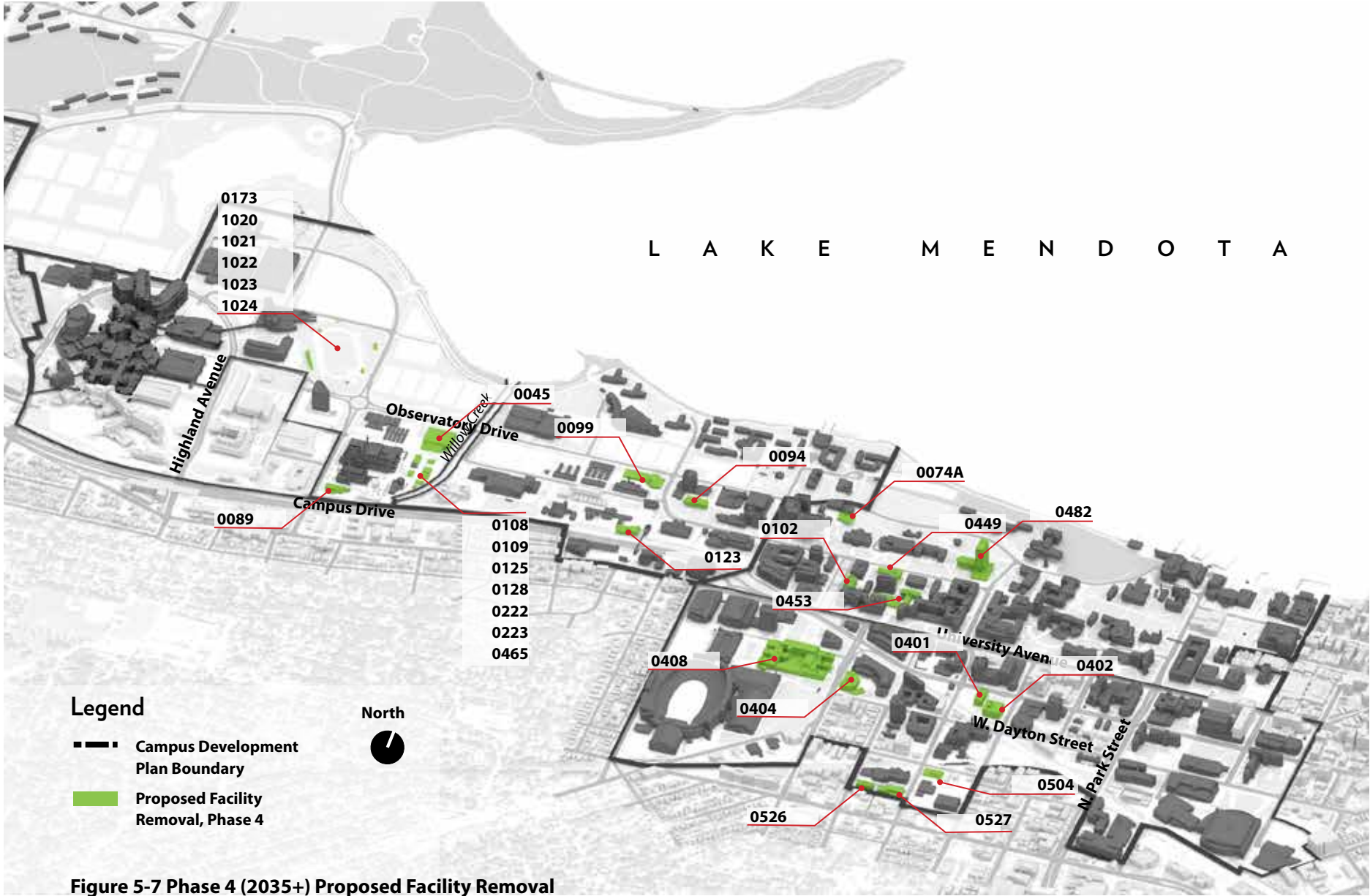


Table 5-4 Phase 4 – 2035+ Future Capacity, continued

Proposed Construction			
	ID	Name	GSF
West	W-04A	Health Sciences Expansion	60,500
	W-05	McClimon Track/Soccer Grandstand	78,000
	W-06	Social/Dining/Meeting Rooms/Health Sciences	126,800
	W-07	Health Sciences Research	121,938
	W-08	Cooper Hall Addition	30,000
	W-09B	Health Sciences Research	233,250
	W-09C	Health Sciences Research	231,000
	W-11	WARF Addition	192,000
	W-13	Health Sciences Research	164,185
	W-30	Grounds Storage A – Controlled Temp	3,000
	W-31	Grounds Storage B – Covered	–
	W-32	Grounds Greenhouse	6,000
	W-33	Grounds Storage C – Salt	3,500
	W-34	Grounds Office/Administration	3,000
	W-19	Biological Systems Engineering	246,000
	W-22	Animal Sciences (AHABS)	85,000
	W-24	Plant Sciences	100,000
	N-03A	Academic/Research (Van Hise site)	114,000
	N-03B	Academic/Research (Van Hise site)	48,000
Central	N-05A	Academic/Research (Nutritional Sciences site)	180,000
	N-05B	Academic/Research (Middleton site)	165,000
	N-07	Academic/Research (445 Henry site)	30,000
	N-15	King Hall Greenhouse	7,500

Proposed Construction			
	ID	Name	GSF
South	S-07	Zoology Research and Noland Hall	419,888
	S-08B	Weeks Hall Addition	5,000
	S-08C	Academic/Research (Spring St)	150,000
	S-09A	Primate Center & Harlow Expansion	48,822
	S-09C	Primate Center & Harlow Expansion	60,000
	S-09D	Primate Center & Harlow Expansion	96,000
	S-11A	Academic/Research (Lot 45 Site)	30,000
	S-16A	Art Building	162,000
	S-20	Fluno Addition	43,200
	S-22	University Research Park (Lorch St)	34,000
	S-23	New Engineering	204,000
	S-24	New Engineering	236,583
	S-25	New Engineering	274,986
	S-26	New Engineering	169,506
	Total Building Space Gained		5,269,058
	W-09A	Parking Structure	504,000
	S-10A	Parking Structure (Physical Plant)	148,800
	S-16C	Parking Structure	108,000
	S-27	Parking Structure (Engineering)	345,600

Phase 4 – 2035+ Future Capacity

Total Building Space Removed	1,418,918
Total Building Space Gained	4,162,658
Phase 4 Total Net Change	2,743,740



5. PHASING

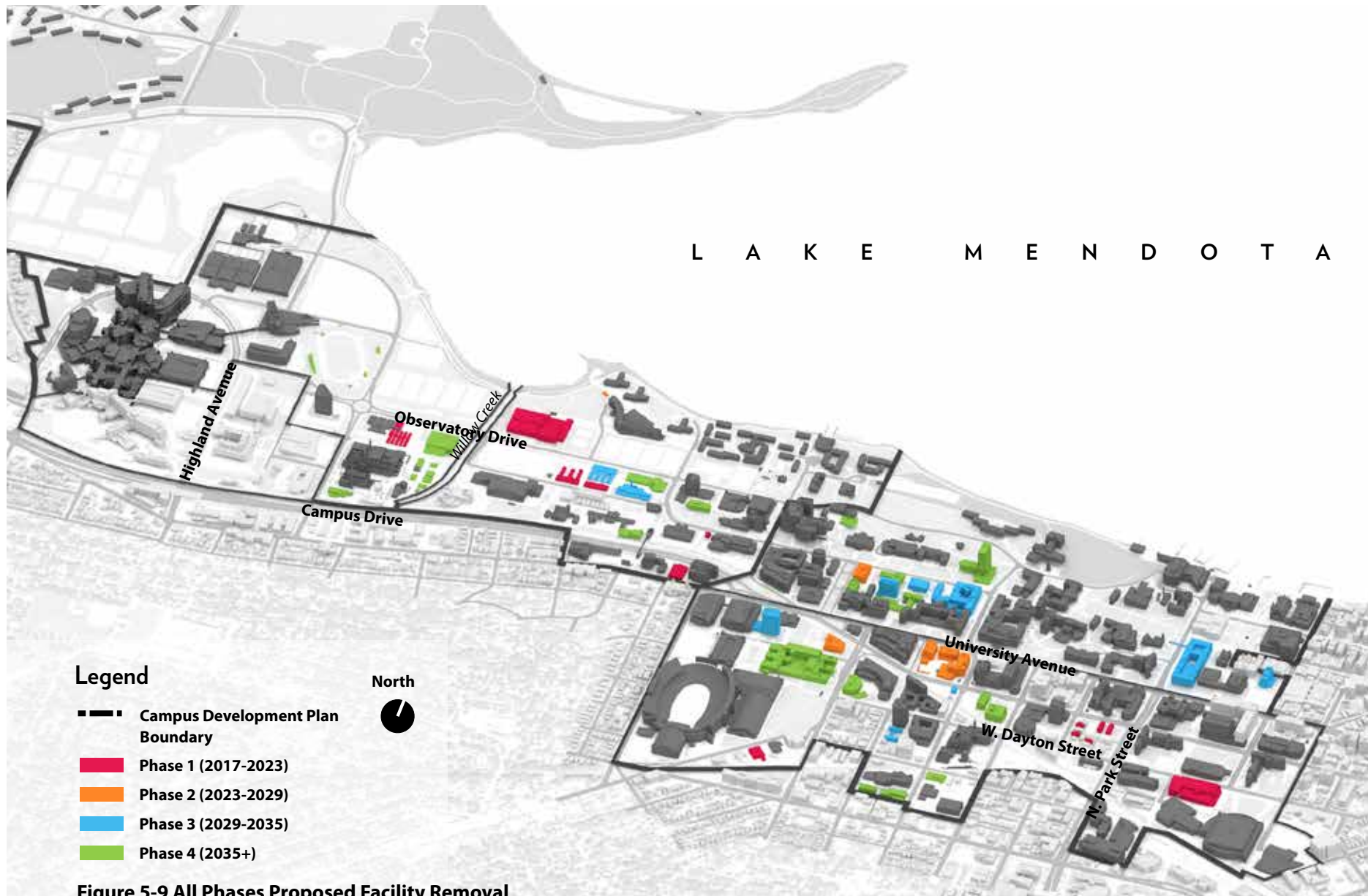


Figure 5-9 All Phases Proposed Facility Removal



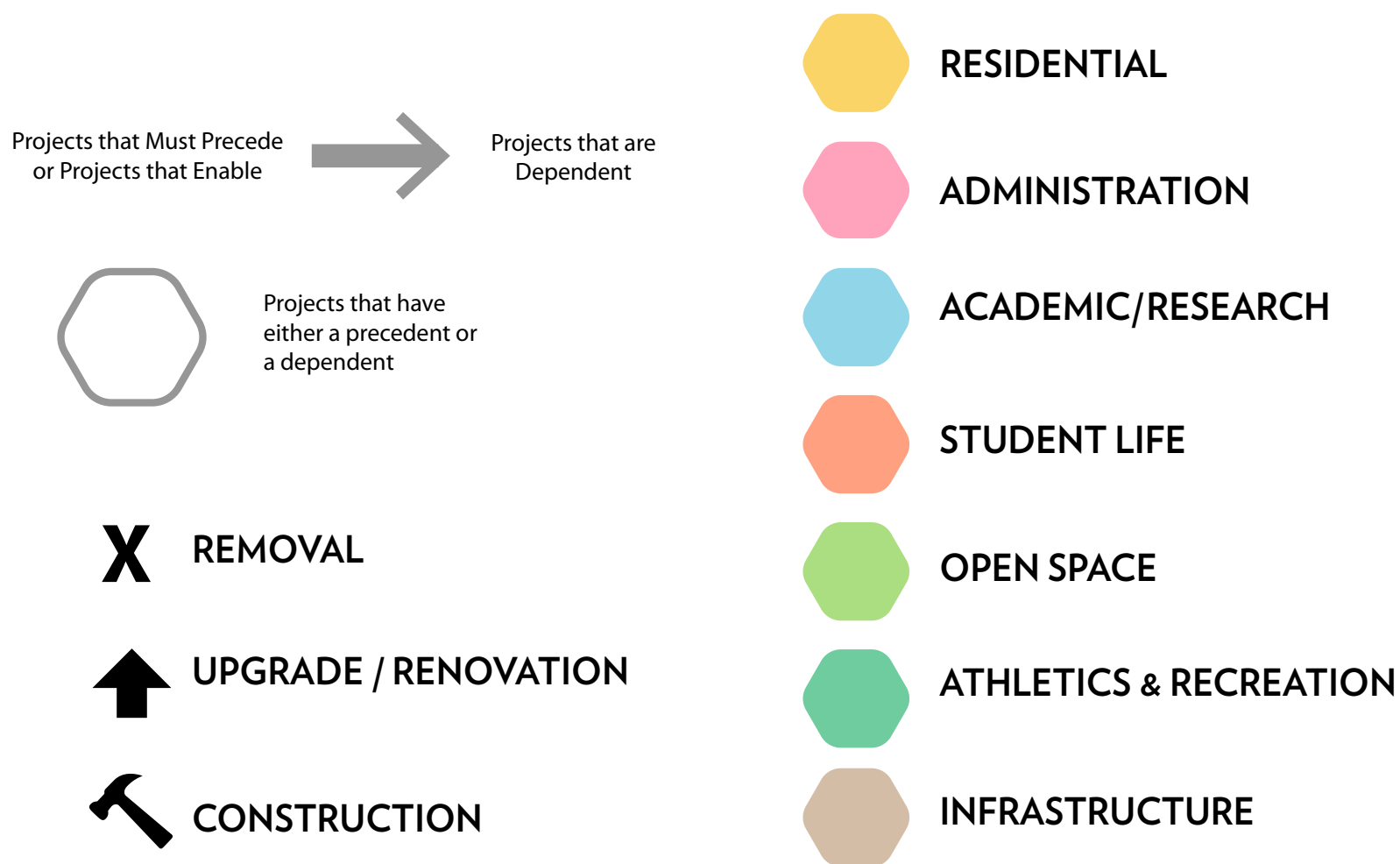
Figure 5-10 All Phases Proposed Facility Construction

Project Sequencing

One element to understand project phasing is project sequencing – which projects must precede or follow other projects. For example, sites must be made available before new construction can occur, programs must be moved before a repurposing or removal, and building projects must occur before related site and parking improvements.

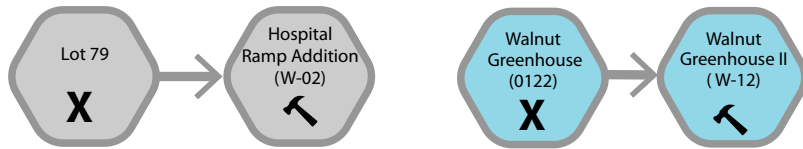
Approximate phasing is indicated, however projects will move forward only after a demonstrated programmatic need is established and sufficient funding is available.

Land acquisition and demolition of private buildings is not included in these sequencing diagrams.

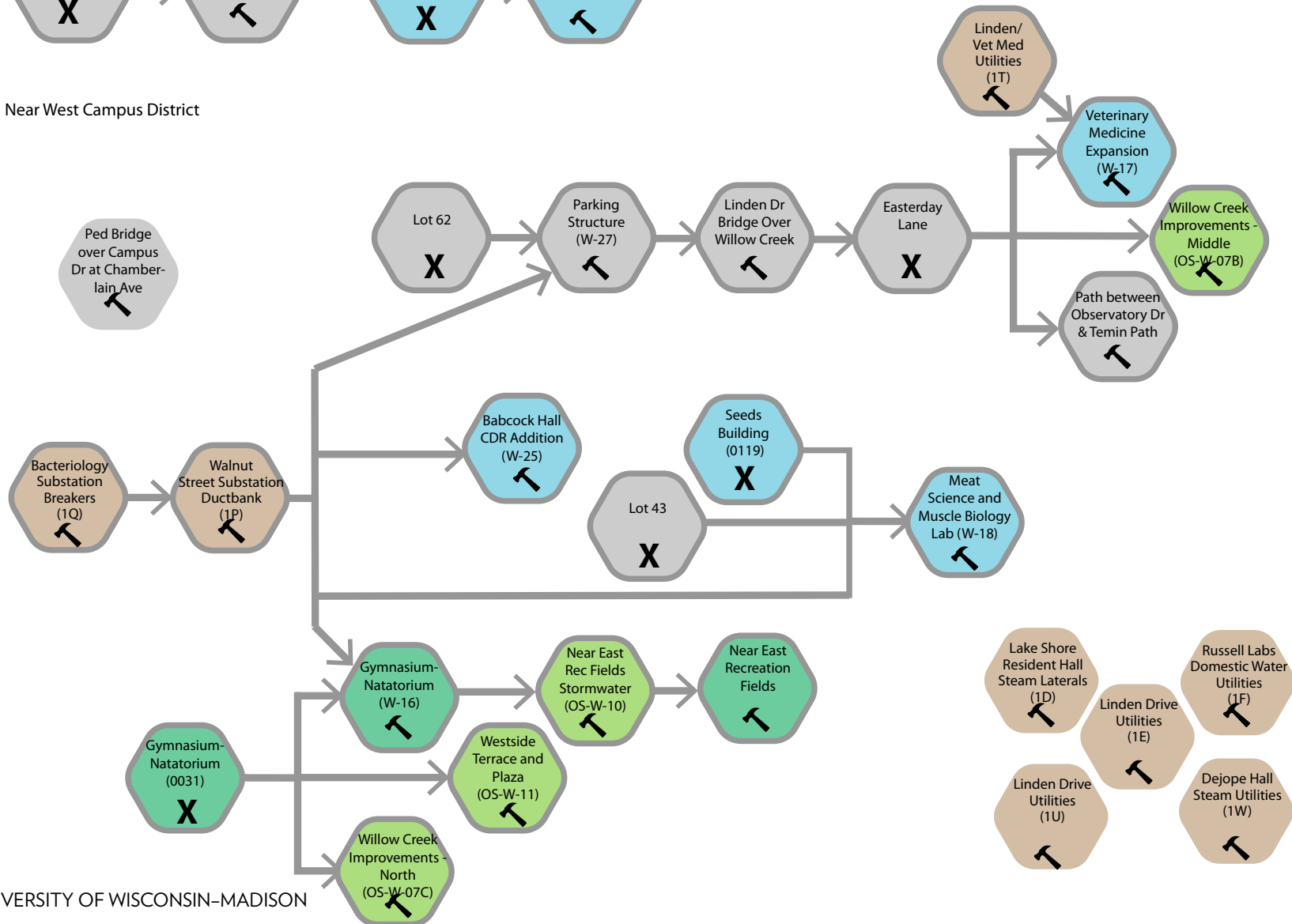


Phase 1 (2017 to 2023) – West and Near West Campus

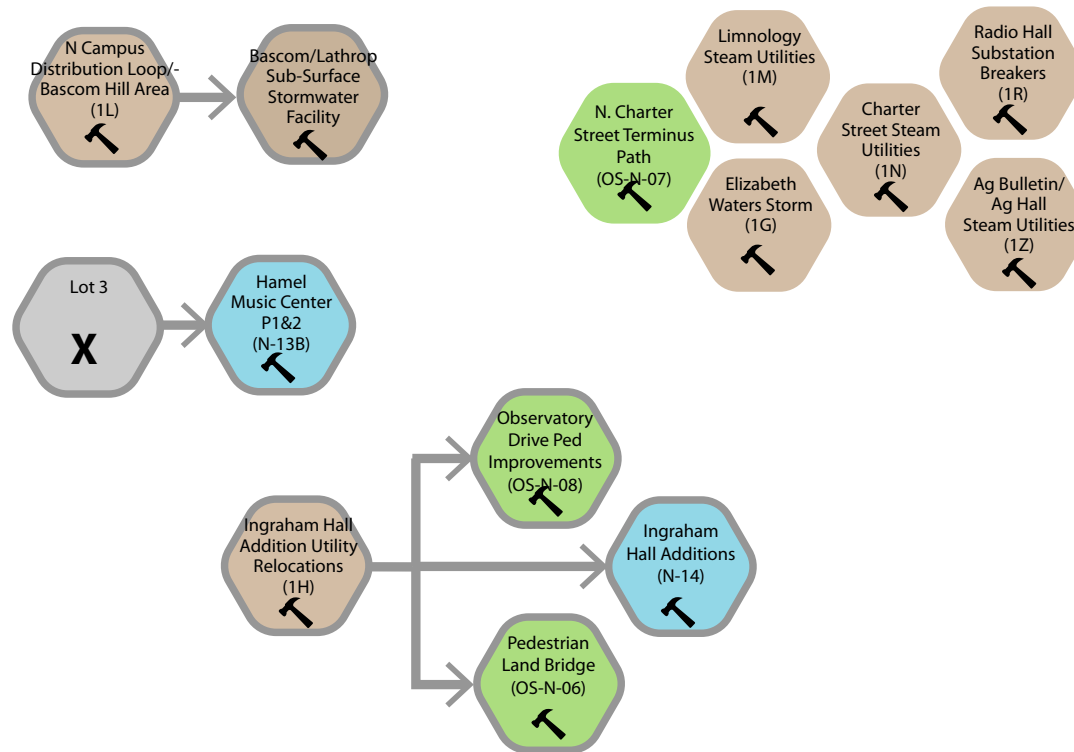
West Campus District



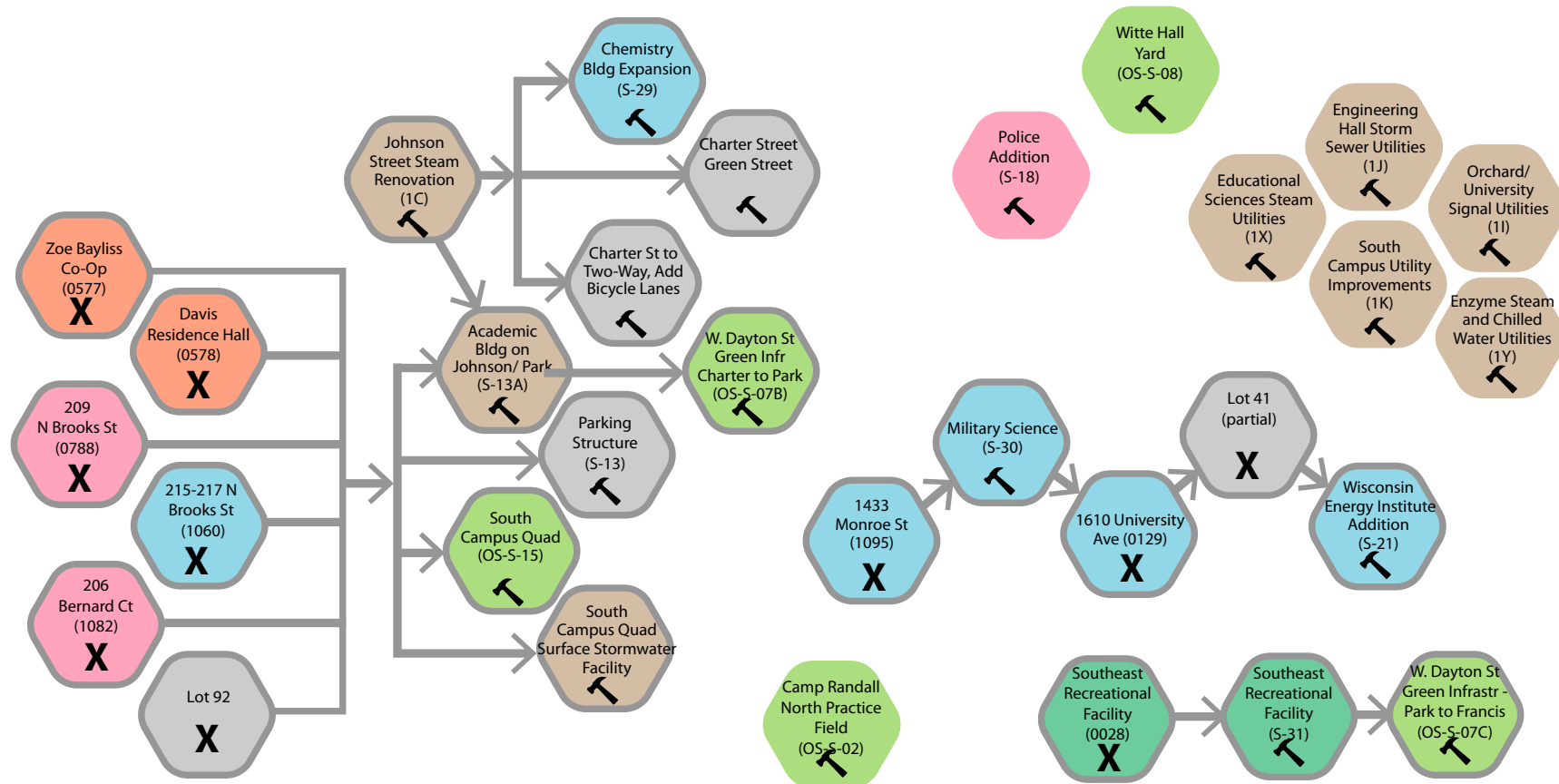
Near West Campus District



Phase 1 (2017 to 2023) – Central Campus

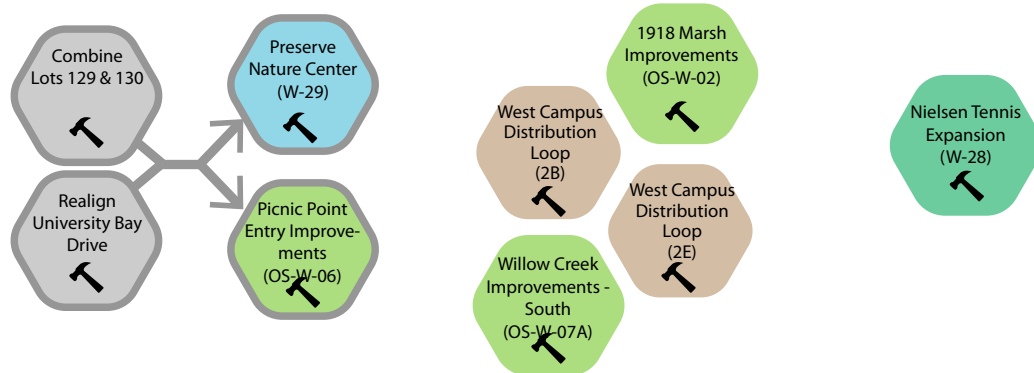


Phase 1 (2017 to 2023) – South Campus



Phase 2 (2023 to 2029) – Far West, Near West, and Central Campus

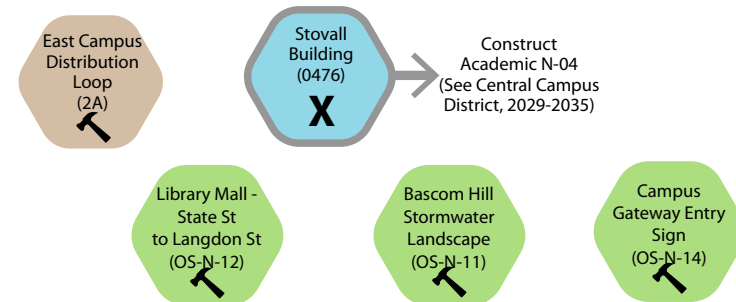
Far West & West Campus District



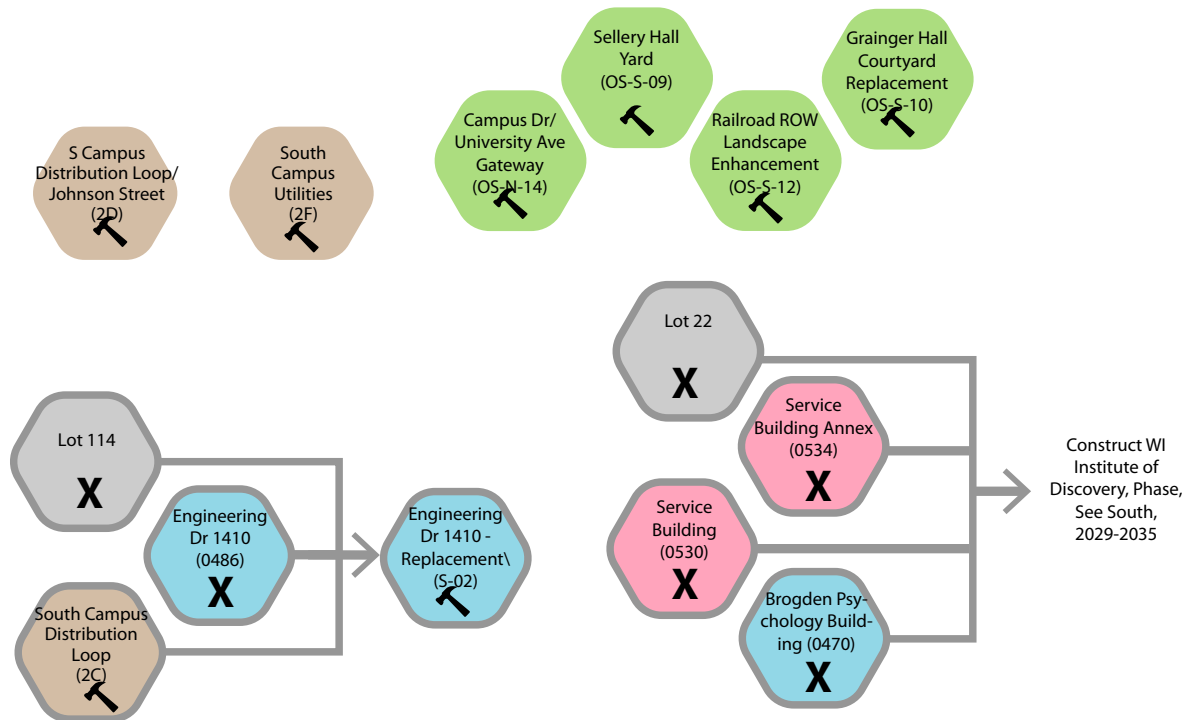
Near West Campus District



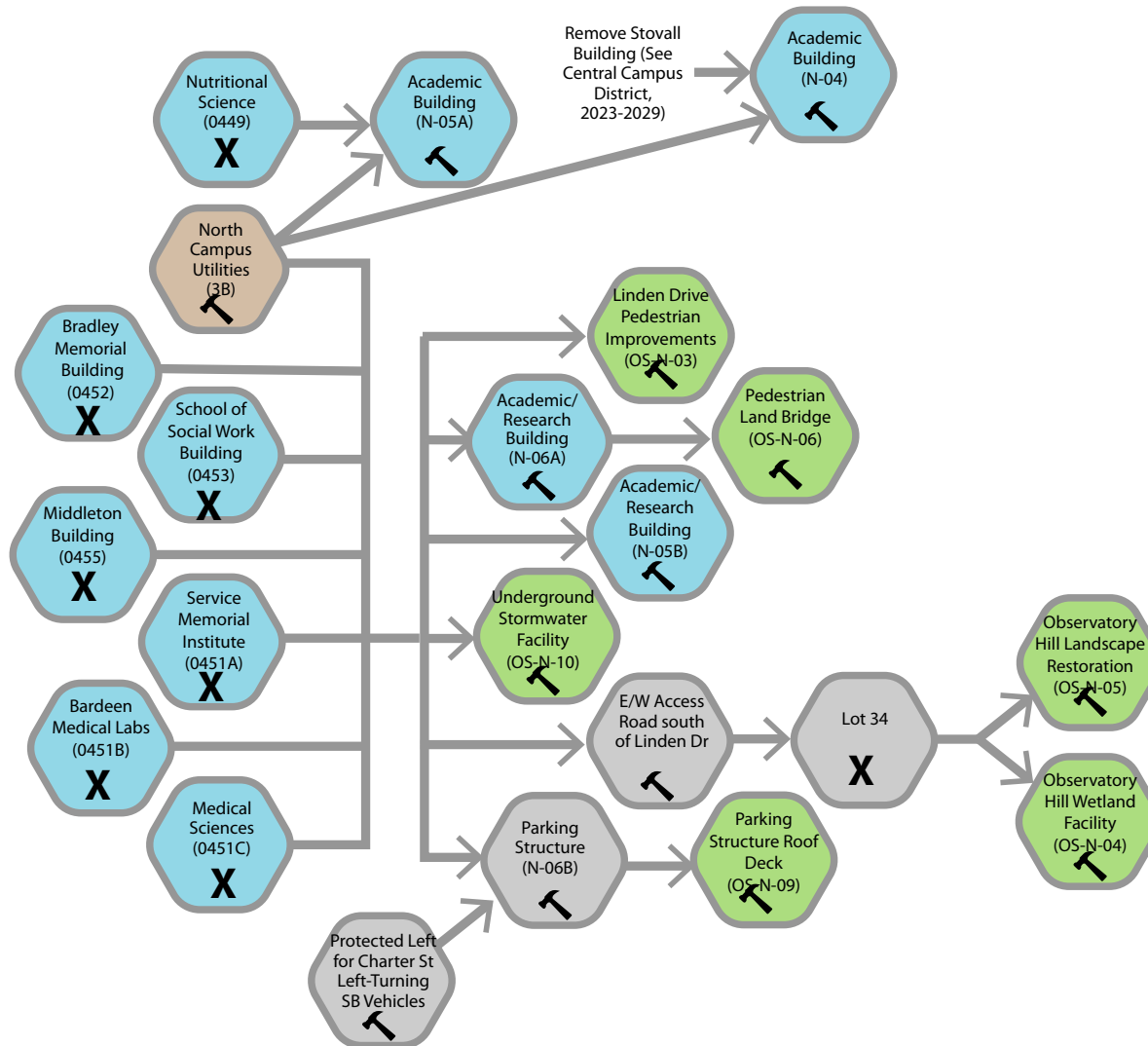
Central Campus District



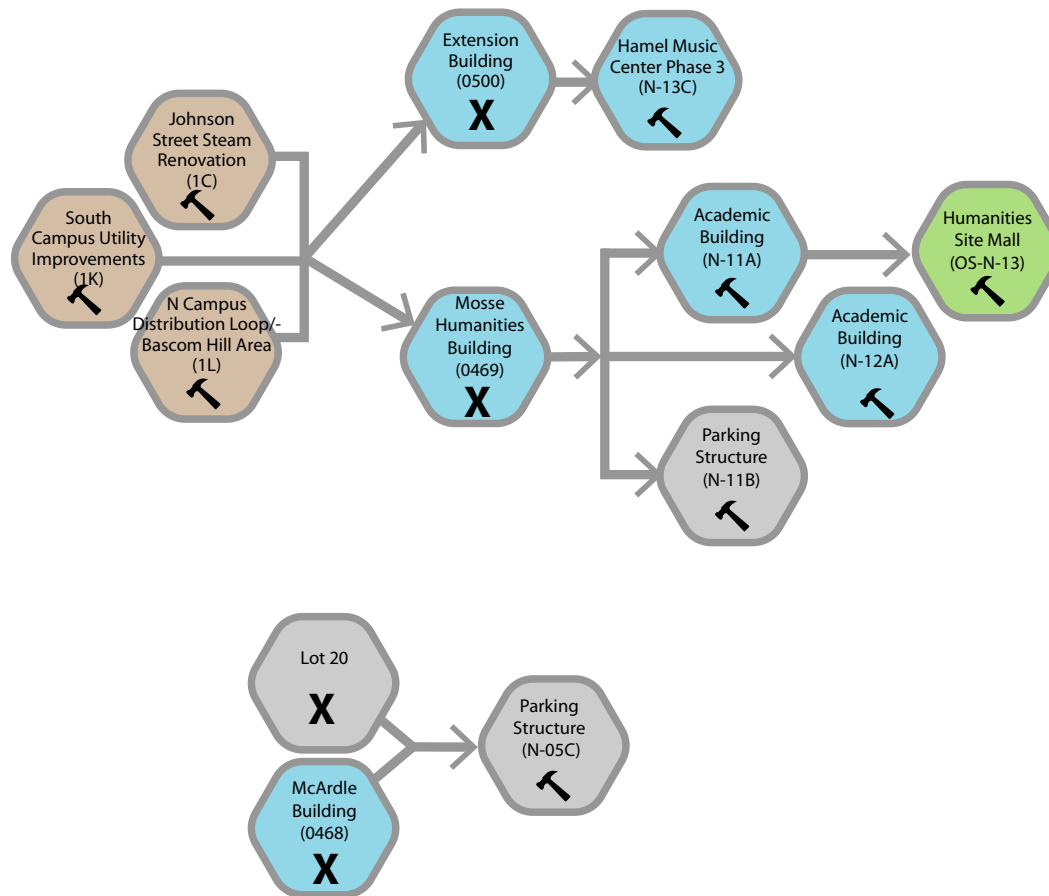
Phase 2 (2023 to 2029) – South Campus



Phase 3 (2029-2035) – Central Campus



Phase 3 (2029-2035) – Central Campus, continued

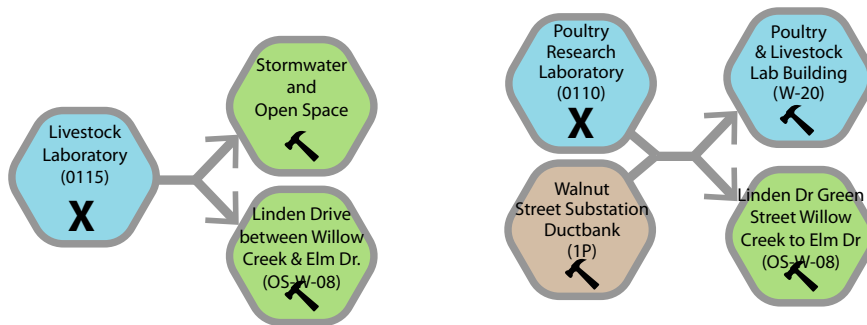


Phase 3 (2029-2035) – West and Near West Campus

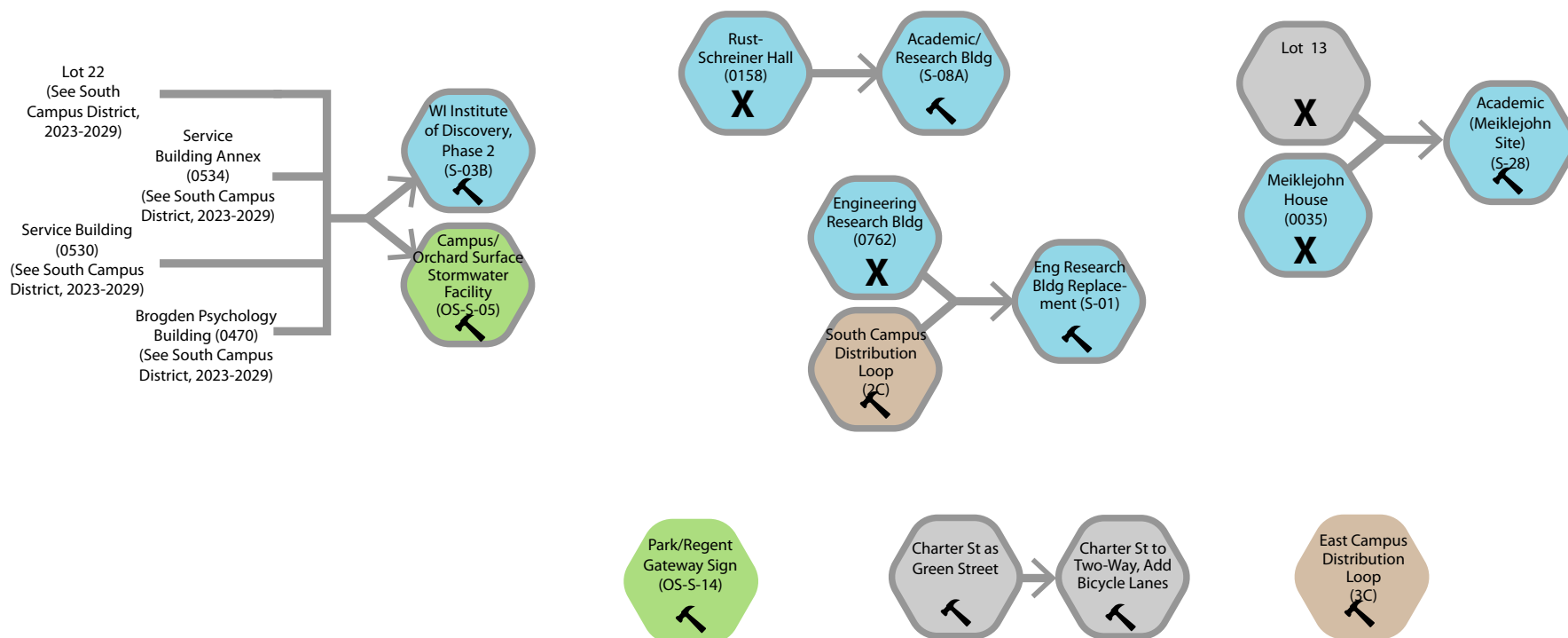
West Campus District



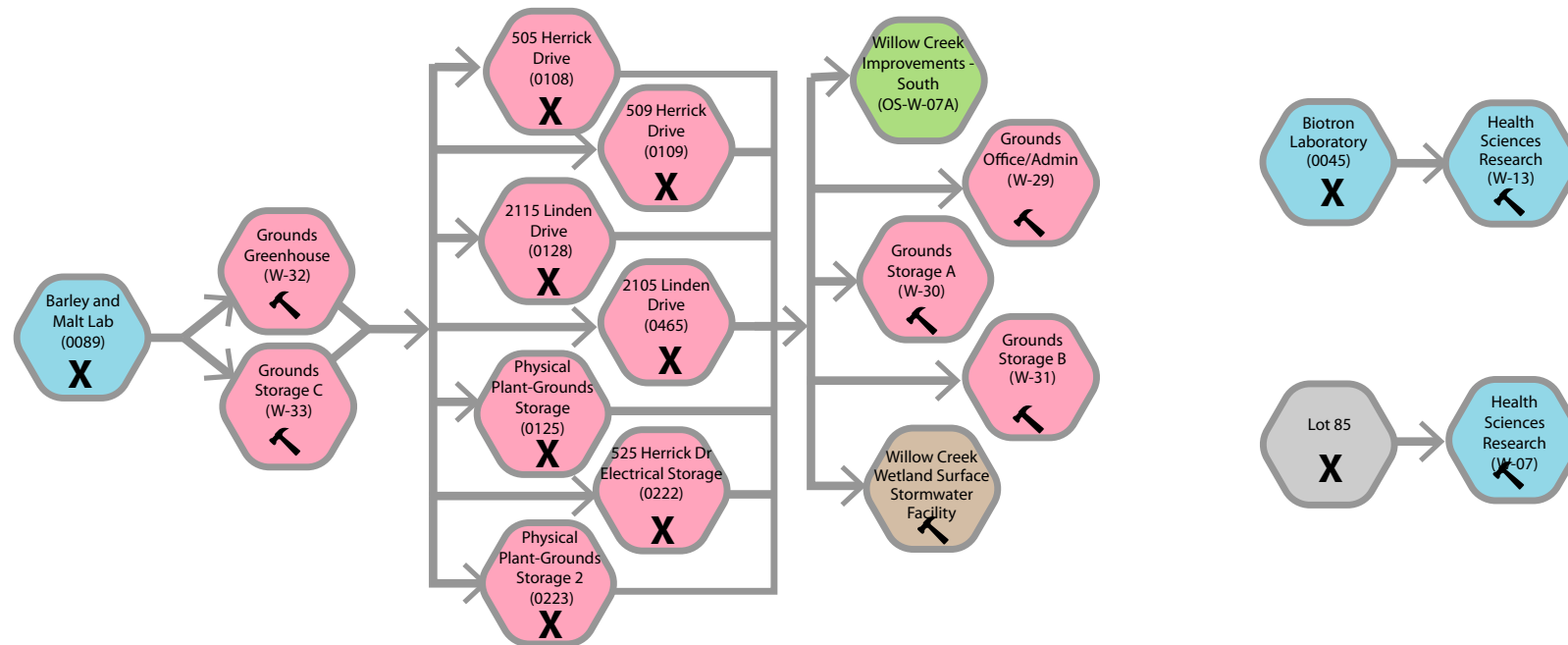
Near West Campus District



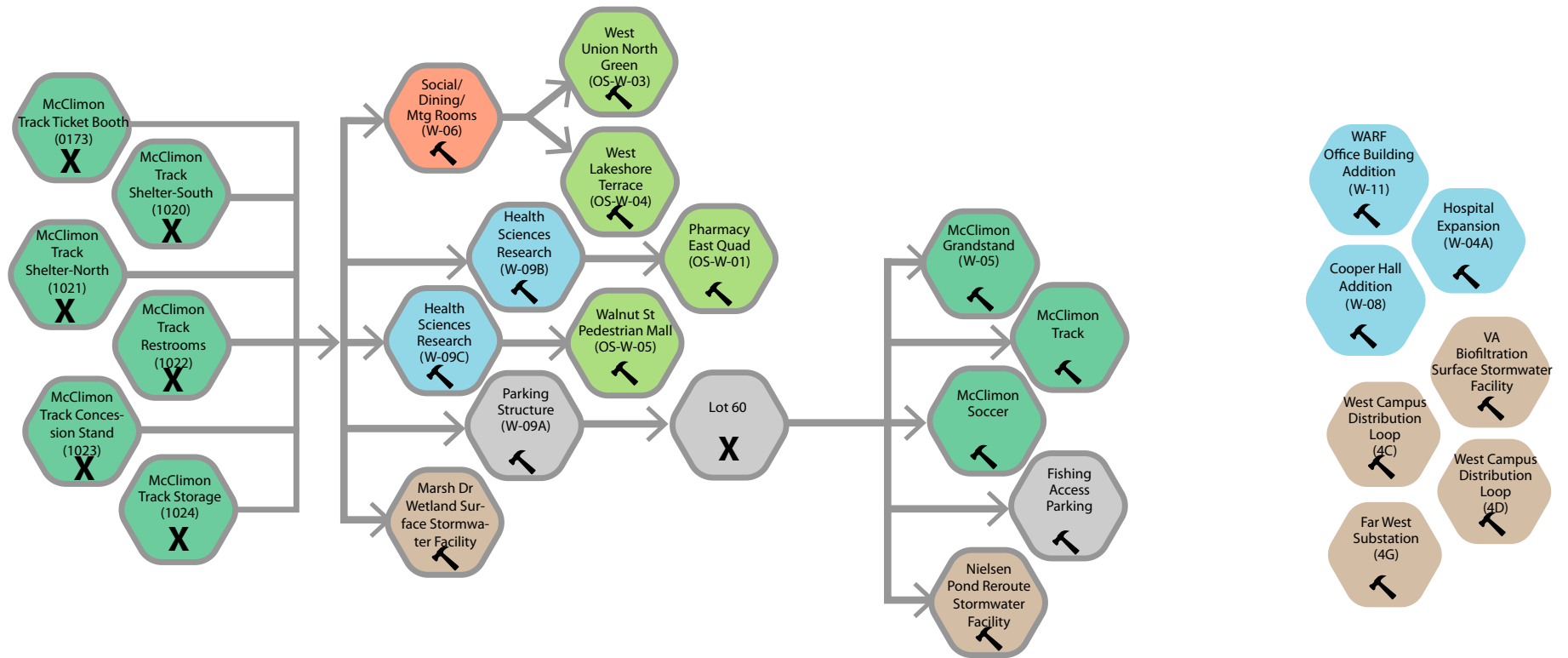
Phase 3 (2029-2035) – South Campus



Phase 4 (2035+) – West Campus

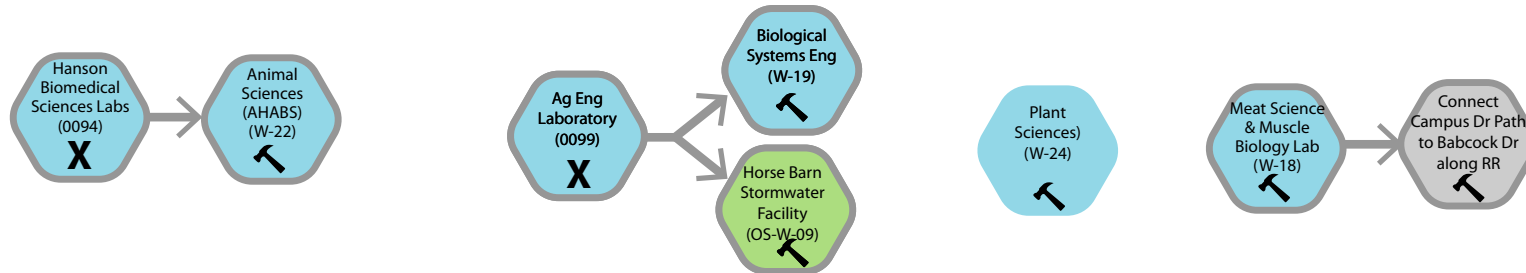


Phase 4 (2035+) – West Campus, continued

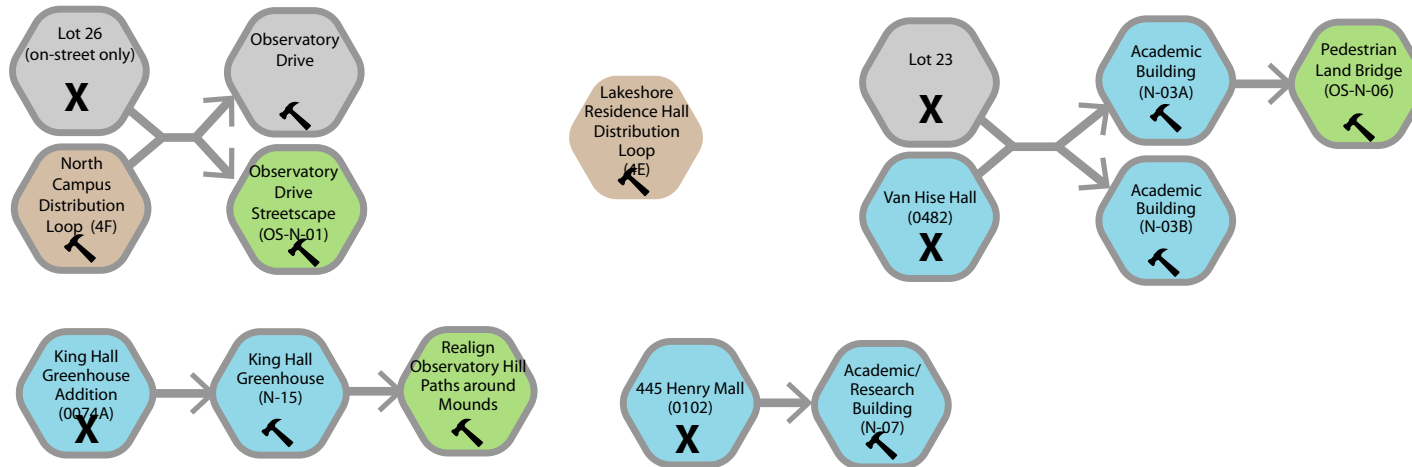


Phase 4 (2035+) – Near West Campus and Central Campus

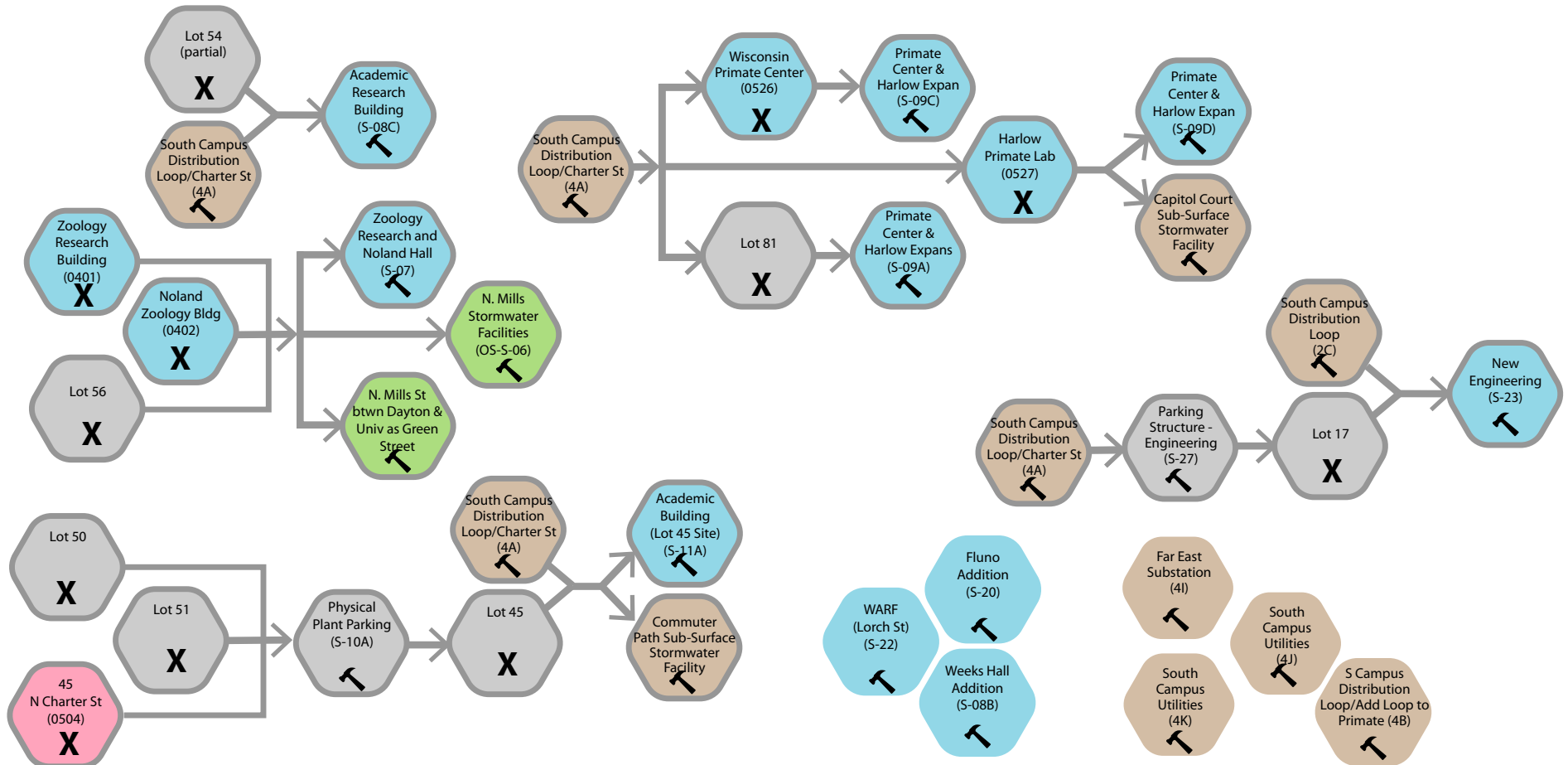
Near West Campus District



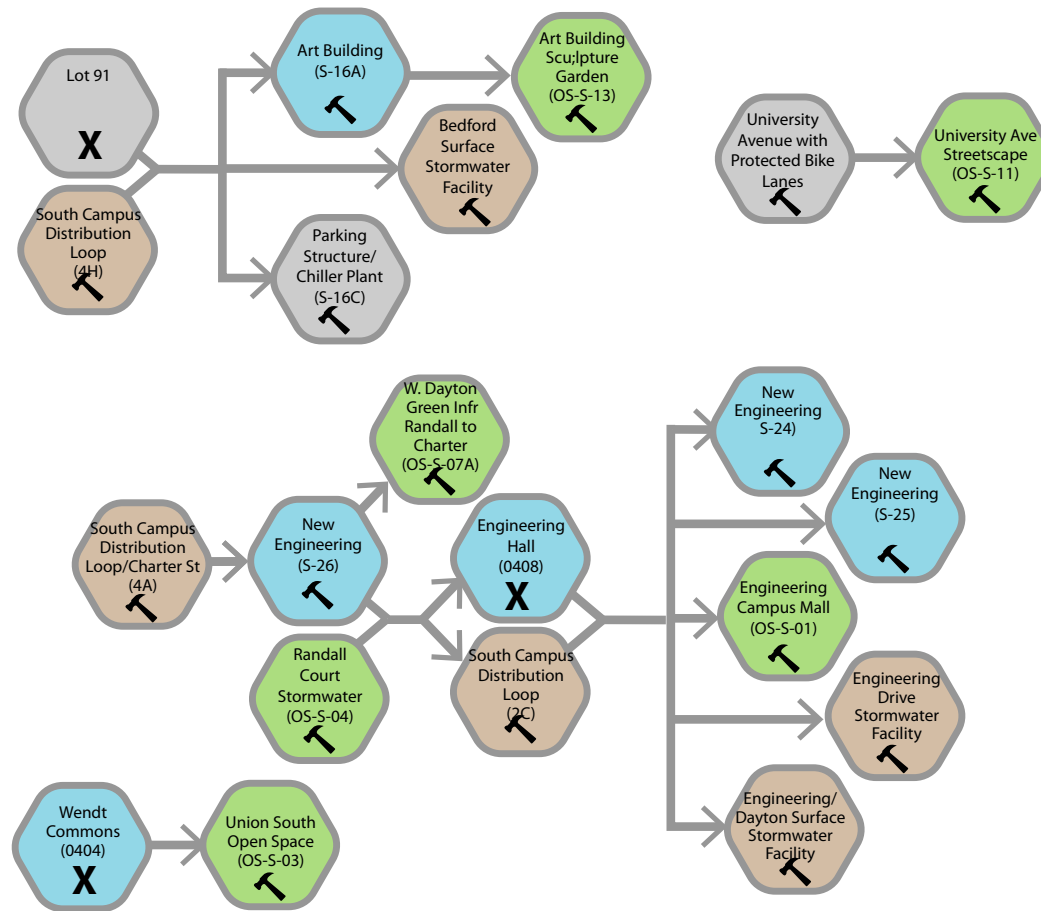
Central Campus District



Phase 4 (2035+) – South Campus



Phase 4 (2035+) – South Campus, continued





6. ACKNOWLEDGEMENTS

Acknowledgements

The 2015 Campus Master Plan Update master planning internal core group would like to thank the scores of people from the university and city communities who devoted time and effort to work with us in developing the 2015 Campus Master Plan Update; their efforts will enhance the university for years to come.

This work was done under the auspices of the Vice Chancellor for Finance and Administration (VCFA), Darrel Bazzell/Michael Lehman, Laurent Heller, and their office. Special thanks go to Bill Elvey, Associate Vice Chancellor of FP&M/Leadership, Gary Brown, Director of Campus Planning & Landscape Architect/Project Manager. Additional appreciation goes to the Campus Planning & Landscape Architecture, Capital Planning & Development, and Space Management Office divisions. Thank you to University Communications for your timely reviews and branding efforts. We would especially like to thank Aaron Williams, Assistant Campus Planner, for his work in coordinating all the many meetings, taking notes, and facilitating the review process.

Appreciation to the City of Madison, Mayor Paul Soglin, Director of Planning, Community & Economic Development Natalie Erdman, City of Madison Planning, Zoning, Metro, Traffic Engineering, and Stormwater Engineering staff – for their assistance in understanding the political and physical interface between the university and city.

Executive Leadership Team

- Rebecca Blank – Chancellor
- Sarah Mangelsdorf – Provost
- Darrell Bazzell – Vice Chancellor for Finance & Administration
- Michael Lehman – Interim Vice Chancellor for Finance & Administration
- Laurent Heller – Vice Chancellor for Finance & Administration
- Charles Hoslet – Vice Chancellor for University Relations
- Bill Elvey – Associate Vice Chancellor, FP&M
- Paul Soglin – Mayor, City of Madison
- Natalie Erdman – City of Madison, Director of Planning & Community & Economic Development
- Mark Sundquist – President, Village of Shorewood Hills
- Karl Frantz – Administrator, Village of Shorewood Hills

Campus Planning Steering Committee

- Sarah Mangelsdorf – Provost (Committee Chair)
- Teresa Adams – Staff, FP&M Capital Planning & Development
- Marwa Bassiouni – Academic Staff Representative
- Seth Blair – Professor, University Committee
- Gary Brown – Director, FP&M Campus Planning & Landscape Architecture
- Chris Bruhn – Assistant Dean, College of Letters & Sciences
- Derrick Buisch – Professor, Humanities
- Thomas Chitwood – ASM student representative
- Aaron Crandall – Research Administrator, Academic Staff Representative
- David Drake – Associate Professor, UW Arboretum representative
- Bill Elvey – Associate Vice Chancellor, FP&M
- Gail Geiger – University Representative, Committee on Women
- Aris Georgiades – Professor, School of Education
- Pamela Herd – Committee on Women
- Shawn Kaeppler – Professor, Biological Sciences
- Jim LaGro – Professor, Department of Urban & Regional Planning
- David Marcouiller – Professor, Urban and Regional Planning
- Jesse Markow – Researcher, Recreational Sports Board
- Trina McMahon – Professor, Environmental representative
- Melanie Meyer, ASM Student Representative (alternate)
- Linda Oakley – Professor, University Committee
- Michael Pflieger – Assistant Dean, Information Technology Committee
- Gary Pine – Classified Staff Representative
- Lance Raney – Facilities, Wisconsin Union
- Ian Robertson – Dean, College of Engineering
- James Schauer – Professor, Physical Sciences
- Karl Scholz – Dean, College of Letters & Sciences
- Petra Schroeder – Space and Remodeling Policies Committee
- Kyle Schroekenthaler – ASM student representative
- James Skinner – Professor, University Committee Representative
- Bill Tracy – Professor, Campus Transportation Committee
- Katharyn Vandenbosh – Dean, College of Agricultural and Life Sciences
- David Weimer – Professor, Social Sciences
- Mark Wells – Space and Remodeling Policies Committee

Campus Planning Steering Committee Invited Guests

- Lori Berquam – Dean of Students
- Deborah Biggs – Associate Dean, School of medicine & Public Health
- Brian Bridges – Captain, UW–Madison Police Department
- Paul Broadhead – Assistant Director, Wisconsin Union
- Katharine Cornwell – Director, City of Madison Planning Department (3/26/15-6/1/15)
- Luis Fernandez – Director, General Services, UW Extension
- Mike Grady – Planning Coordinator, UW Health
- Mark Guthier – Director, Wisconsin Unions
- John Hahn – Policy Analyst, State of WI DOA Division of Facilities Development
- Mike Hanson – Engineering, State of WI DOA Division of Facilities Development
- Ann Hayes – Project Manager/Interior Designer, FP&M Capital Planning & Development
- John Horn – Director, UW–Madison Recreational Sports
- Andy Howick – Director, UW Health
- Eden Inoway-Ronnie – Assistant, Provost Office
- Kathy Kalscheur – Project Manager, State of WI DOA Division of Facilities Development
- Jason King – Associate Director, UW–Madison Athletics
- Jeff Kosloski – Architect, UW System (5/30/14-3/26/15)
- Kari Knutsen – UW–Madison University Communications
- Stu LaRose – Project Manager/Architect, FP&M Capital Planning & Development
- John Lind – Lieutenant, UW–Madison Police Department
- Bruce Maas – Director & CIO, UW–Madison Information Technology (DoIT)
- Scott McKinney – Director, UW Foundation/Wisconsin Alumni Association
- Jocelyn Milner – Director, University Academic Planning
- Everett Mitchell – Representative, Chancellor's Office
- Jeff Novak – Director, UW–Madison Housing
- Sue Riseling – Chief, UW–Madison Police Department
- Doug Sabatke – Assistant Dean, College of Letters & Sciences
- Kari Sasso – Assistant Chief, UW–Madison Police Department
- Karen Soley – Captain, UW–Madison Police Department

6. ACKNOWLEDGEMENTS

- Kate Sullivan – Senior Institutional Planner, UW-Extension
- Top Tantivivat – Facility Access Specialist, FP&M Campus Planning & Landscape Architecture
- Margaret Tennessen – Deputy, FP&M Office of the Associate Vice Chancellor
- Kim Todd – FP&M Space Management Office
- Ralph Turner – Vice President, Facilities & Support Services, UW Hospital
- Bill Vanderbloemen – Supervisor, UW–Madison Police Department
- Sarah Van Orman – Director, University Health Services
- Mike Warren – Associate Director, UW–Madison Recreational Sports
- Mark Wells – Assistant Dean, School of Medicine & Public Health
- Cathy Weiss – Senior Architect, UW-System
- Steve Wildeck – Vice Chancellor, UW Colleges/Extension
- Tom Wise – FP&M Space Management Office

Campus Design Review Board

- Dan Okoli, University Architect, Director, FP&M Capital Planning & Development (Committee Chair)
- Samuel Pete Anderson, Architect (2007-Present)
- Annette Wilkus, Landscape Architect (2013-Present)
- Phil Certain, Emeritus Dean of Letters and Science (2014-Present)
- Fiske Crowell, Architect (2016-Present)
- Gary Brown, Director, FP&M Campus Planning & Landscape Architecture
- Bill Elvey, Associate Vice Chancellor, FP&M
- Susan Weiler, Landscape Architect (1983-2011)
- Peter Schaudt, Landscape Architect (2011-2013)
- Art Hove, Campus Community Representative (2007-2013)

Technical Coordinating Committee

The Technical Coordinating Committee met both as a single committee and as specialized subcommittees.

• Administration Technical Coordinating Committee

- Gary Brown – Director, FP&M Campus Planning & Landscape Architecture (Committee Chair)
- Bill Elvey – Associate Vice Chancellor FP&M
- Daniel Okoli – University Architect, Director, FP&M Capital Planning & Development
- Robert Lampka – Executive Director, FP&M Physical Plant
- Patrick Kass – Director, FP&M Transportation Services
- Lisa Pearson – Project Manager, State of WI DOA Division of Facilities Development (1/1/16-completion)
- Alex Roe – Associate Vice President UW-System, Capital Planning & Budget
- Beth Reid – Project Manager, State of WI DOA Division of Facilities Development (6/1/15-12/31/15)
- Daniel Stephens – Project Manager, State of WI DOA Division of Facilities Development (5/30/14-5/31/15)
- Doug Rose – Director, FP&M Space Management Office (5/30/14-2/28/16)
- Chris Gluesing – UW System Administration (5/30/14-2/28/15)

• Green Infrastructure/Stormwater Technical Coordinating Committee

- Matt Collins – Civil Engineer, FP&M Capital Planning & Development (Committee Chair)
- Rhonda James – Senior Landscape Architect, FP&M Campus Planning & Landscape Architecture (Committee Chair)
- Jim LaGro, Professor, UW–Madison Department of Urban & Regional Planning
- David Liebl, Faculty Associate, UW–Madison Department of Engineering Professional Development
- Marcella Otter –Plumbing Shop, FP&M Physical Plant
- Ken Potter, Professor, UW–Madison Dept. of Civil & Environmental Engineering (3/26/15-2/28/16)
- Anita Thompson – Associate Professor, UW–Madison Department of Biological Systems Engineering

- Marisa Trapp – Environmental Compliance Specialist, FP&M Environment, Health & Safety
- Aaron Williams – Asst. Campus Planner, FP&M Campus Planning & Landscape Architecture
- **Landscape and Open Space Technical Coordinating Committee**
 - Gary Brown – Director, FP&M Campus Planning & Landscape Architecture (Committee Chair)
 - Kris Ackerbauer, Director, FP&M Physical Plant Services
 - Ellen Agnew, Building & Grounds Superintendent, FP&M Environmental Services-Grounds
 - Jonathan Bronk – Landscape Architect, FP&M Campus Planning & Landscape Architecture
 - Sam Dennis, Associate Professor, UW–Madison Department of Landscape Architecture
 - Julie Grove – AE Supervisor, FP&M Capital Planning & Development
 - John Harrington, Professor, UW–Madison Department of Landscape Architecture
 - Jeanette Kowalik, University Health Service Wellness Program
 - Harmony Makovec, Building & Grounds, FP&M Environmental Services-Grounds
 - Lisa Pearson – Project Manager, State of WI DOA Division of Facilities Development
- **Transportation and Parking Technical Coordinating Committee**
 - Rob Kennedy – Transportation Planner, FP&M Transportation Services (Committee Chair)
 - Drew Beck – City of Madison Metro Transit
 - Kate Christopherson – City of Madison Transportation Planning
 - Patrick Kass – Director, FP&M Transportation Services
 - Scott Langer – City of Madison Traffic Engineering (3/26/15-2/28/16)
 - David Marcouiller – Professor, UW–Madison Department of Urban & Regional Planning (3/26/15-6/1/15)
 - Casey Newman – Associate Director, FP&M Transportation Services (3/26/15-3/31/16)
 - David Noyce – Professor, Civil & Environmental Engineering
 - Yang Tao – City of Madison Traffic Engineering (3/1/16-completion)
 - David Trowbridge – City of Madison Transportation Planning
 - Ben Zellers – City of Madison Transportation Planning
- **Utility Infrastructure Technical Coordinating Committee**
 - Jeff Pollei – Utilities Engineer, FP&M Physical Plant (Committee Chair)
 - Dan Dudley – Engineering Group, FP&M Physical Plant
 - Pete Heaslett – AE Supervisor, FP&M Capital Planning & Development
 - John Krogman – Chief Operating Officer, DoIT
 - Kurt Johnson – Electric Shop, FP&M Physical Plant
 - Robert Lamma – Executive Director, FP&M Physical Plant
 - Neil Mack – Project Manager, DoIT
 - Randy Mattison – Senior Mechanical Engineer, UW-System
 - Rick Werre – Engineering Group, FP&M Physical Plant



Campus & Community Constituent Groups

- Academic Staff Executive Committee (representing the Academic Staff Assembly)
- Associated Students of Madison (ASM), Sustainability & Shared Governance Committees
- Capitol Neighborhoods, Inc.
- Campus Transportation Committee
- City of Madison Mayoral Leadership Team
- City of Madison Planning Department
- City of Madison Stormwater Management
- City of Madison Traffic Engineering
- City of Madison Metro Transit
- City of Madison Plan Commission
- City of Madison Urban Design Commission
- City of Madison Pedestrian, Bicycle Motor vehicle Commission
- Clean Lakes Alliance – James Tye, Executive Director
- Downtown Madison, Inc. – Susan Schmitz, President
- Dudgeon-Monroe Neighborhood Association
- Executive Leadership Team
- Forest Products Laboratory
- FP&M Physical Plant, Grounds & Custodial Services – Kris Ackerbauer, Director
- FP&M Environment Health & Safety – Paul Umbeck, Director
- FP&M Physical Plant – Faramarz Vakili, Associate Director
- General Student population (forum or town hall meetings)
- Greenbush Neighborhood Association
- Health Sciences Council
- Historical and Cultural Campus Landscapes Work Group – Daniel Einstein
- Joint South East Campus Area Committee – Aaron Crandall, Chair
- Joint West Campus Area Committee – Rob Kennedy & Doug Carlson, Co-Chairs
- Lakeshore Nature Preserve Committee – Laura Wyatt, Program Manager
- Madison Metropolitan School District
- Monona Bay Neighborhood Association
- Regent Neighborhood Association
- Spring/Fall Facility Managers Meetings
- Sunset Village Neighborhood Association
- University Committee (representing the Faculty Senate)
- University Health Services – Sarah Van Orman, Director
- University Staff Executive Committee (representing University Staff)
- University Staff Congress
- UW–Madison & City of Madison Joint Public Works Committee
- UW–Madison Athletics – Jason King, Senior Associate AD
- UW–Madison Campus Designers
- UW–Madison Facility Access & McBurney
- UW Foundation – Mike Knetter, Director
- UW Hospital & Clinics – Ralph Turner, Vice President
- UW–Madison Landscape Architecture Department
- UW–Madison Office of Sustainability
- UW–Madison Police Department
- UW–Madison Recreational Sports – John Horn, Director
- UW–Madison University Communications – John Lucas, Associate Vice Chancellor
- UWell Council – Emily Borenitsch, Coordinator
- Veterans Administration Hospital
- Vilas Neighborhood Association
- Village of Shorewood Hills
- WARF Board of Directors
- Wisconsin Alumni Association (WAA) – Paula Bonner, Director
- Wisconsin Historical Society – Chip Brown, Conservator
- Wisconsin Unions – Mike Guthier, Director

Internal Core Group

An internal group of state and university facilities staff worked directly on the project with the consultants, coordinating all meetings and facilitating development of the entire project.

- Gary Brown* – Director, FP&M Campus Planning & Landscape Architecture
- Matt Collins – Civil Engineer, FP&M Capital Planning & Development
- Bill Elvey – Associate Vice Chancellor, FP&M
- Julie Grove – AE Supervisor, FP&M Capital Planning & Development
- Pete Heaslett – AE Supervisor, FP&M Capital Planning & Development
- Rhonda James* – Senior Landscape Architect, FP&M Campus Planning & Landscape Architecture
- Patrick Kass – Director, FP&M Transportation Services
- Rob Kennedy – Transportation Planner, FP&M Transportation Services
- Daniel Okoli – University Architect & Director, FP&M Capital Planning & Development
- Lisa Pearson – Project Manager, State of WI DOA Division of Facilities Development (1/1/16-completion)
- Jeff Pollei –Utilities Engineer, FP&M Physical Plant Engineering Group
- Doug Rose – Director, FP&M Space Management Office (5/30/14-2/28/16)
- Beth Reid – Project Manager, State of WI DOA Division of Facilities Development (6/1/15-12/31/15)
- Alex Roe – Associate Vice Chancellor UW-System, Capital Planning & Budget
- Daniel Stephens – Project Manager, State of WI DOA Division of Facilities Development (5/30/14-5/31/15)
- Aaron Williams – Asst. Campus Planner, FP&M Campus Planning & Landscape Architecture

Master Plan Consultant Team

The team of private consultants that developed and prepared the 2015 Campus Master Plan Update with UW–Madison.

- SmithGroupJJR
- Hoerr Schaudt
- Kimley-Horn
- Affiliated Engineers, Inc.



WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON