

PROGRAM STATEMENT & PRE-DESIGN STUDY



STUDENT CENTER

UNIVERSITY OF WISCONSIN - LA CROSSE

La Crosse, Wisconsin

DSF Project No. 11A2A

Prepared By:

Kindness Architecture + Planning
Milwaukee, Wisconsin

June 28, 2012

Agency Representative (UW-La Crosse): _____ Date: _____

Institutional Representative (UWSA): _____ Date: _____

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Project Approach Summary

In August of 2011, Kindness Architecture + Planning (Ka+p), along with HSR Associates, Robert Rippe Associates, JJR, Henemann Engineering, and the Concord Group were commissioned by the Division of State Facilities (DSF) to provide the building program and pre-design services for the UW-La Crosse proposed new Student Center. Additionally, the A/E team was asked to provide a facility overview of the existing Cartwright Center (Student Center), the existing Whitney Center (Resident Dining), and an overview of the existing proposed site for the new Student Center. (These reports are included in the attached appendix.)

The A/E Teams process was laid out in 5 steps:

1. Information Gathering, Project Process Orientation, and Project Kickoff
2. Existing Site and Facilities Overview, Food Service Analysis
3. Wish List Creation and Vision Tours
4. Detailed Program Space Tabulation
5. Concept Pre-Design Massing, Site Test Fit and Stacking Diagrams

Process Overview

Step 1 & 2

Site Visit One

September 1, 2011

- Interviewed staff and toured Cartwright Center and Whitney Center with an emphasis on Food Service to gain an understanding of existing conditions of proposed site.

Site Visit Two

September 9, 2011

- Steering Committee meeting
- Presentations of initial observations
- Overview of programming and pre-design process
- Evaluation/Discussion – Pros/Cons of Resident Dining remaining in the Whitney Center or being included in the new Student Center

Site Visit Three

September 15, 2011

- Presentation of order of magnitude costs/schedule for Cartwright upgrades, Whitney remodel, and consolidation of Resident Dining into new Student Center
- Preparation, strategy and organization of stakeholders for two day visioning sessions
- Decision was made to keep resident dining in the Whitney Center.

Step 3

Vision Tour One

October 7, 2011

- Conducted tours of UW-Whitewater’s Connor Center and UW-Madison’s Union South (Observations included in Appendix)

Site Visit Four
October 17, 2011

- Results from University Centers *Union Survey*, conducted between September 29 - October 14, received. The survey centered on whether the campus should renovate or build a new student center. The results were used as a baseline to formulate questions used in the programming sessions. A full copy of the results can be made available upon request.

October 19/20, 2011

- Stakeholder/Department visioning sessions – Ka+p, HSR and RRA met with 18 different user groups over two days to generate more than 2500 ideas/thoughts to be considered as part of the new Student Center.
Included in this process were:
 - Gaining an understanding of what makes UW-La Crosse unique culturally; as an educational institution and its physical environment
 - The pros and cons of the existing Cartwright Center
 - What functions, spaces, events, programs should be considered to be included in the ideal new Student Center (Wish List)

Vision Tour Two
October 28, 2011

- Conducted tours of the following Minnesota Student Centers:
 - Bethel University
 - St. Olaf College
 - University of St. Thomas(Observations included in Appendix)

Step 4

Site Visit 5
November 3, 2011

- Presentation of wish list – collected data, trending, and organization of projected user groups
- Presentation: Summary of Findings from Vision Tours #1 & #2
- Overview of campus on-line survey
- Kickoff for detailed programming sessions with user groups
- Start Draft program space tabulation

Site Visit 6
November 10, 2011

- Continue meeting with user groups to refine/prioritize program spaces
- Develop program space tabulation summary

Site Visit 7
November 17, 2011

- Using the Draft Program Space as a framework for discussion, interview user groups for technology, data, special equipment, furniture, sustainability, mechanical, electrical,

and plumbing requirements.

November 29, 2011

- UWL launched “UW-La Crosse Student Center (official)” Facebook page to inform students of the student center progress.

Site Visit 8

December 1, 2011

- Continued refinement of the program spaces and project goals/priorities based upon order of magnitude project costs

Step 5

Site Visit 9

December 8, 2011

- Presentation of updated project budget
- Discussion regarding further refinement of program spaces and breakdown of project budget costs
- Presentation of concept test fit of project site with program spaces, building stacking diagrams
- Discussion of site and building relationships

Phone Conference

December 13, 2011

- Total project budget of \$55 Million brought in alignment with program statement

Draft Report

December 21, 2011

- Program Statement and Pre Design Study submitted for DSF, Agency, and Campus Review

Phase II

January 11, 2012

- DSF review meeting in Madison

Site Visit 10

January 26, 2012

- Review DSF, Agency, and Campus comments on first draft
- Presentation of refined concept
- Program and budget refinements
“Add-in” Program areas prioritization vote
Review Site program
- Pre-design massing and stacking diagrams
- Sustainability discussions including evaluation of:
Goals
Green Roof
Geothermal
- Discussion - Additional Services to further concept design and produce exterior and interior renderings for the student vote

January 31, 2012

- Phone Conference with Campus/DSF: Review conceptual design exterior

February 2, 2012

- Phone Conference with Campus/DSF: Review conceptual design interior

February 9, 2012

- Phone Conference with Campus/DSF: Review conceptual design for interior/exterior

March 22, 2012

- Phone Conference with Campus/DSF
- Finalization of Draft Program and Pre-Design review comments
- Finalization of Pre-Design project budget

Student Vote April 10, 2012

Final Draft Review April 25, 2012

Site Visit 11

April 27, 2012

- Final Draft Review of open issues

May 10, 2012

- UWL Review Comments

May 24, 2012

- DSF Review Comments

June 6, 2012

- Print Ready Draft Review

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University of Wisconsin – La Crosse

Joe Gow
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Vice Chancellor for Administration & Finance

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Panhellenic Council/Interfraternity Council

Kelli Ponce

Racquet

Nick Nicklaus

Residence Life Staff

Rob Schneider

Chris Dziekan

Resident Hall Association Council & New Student Orientation

Bob Hoar

Undergraduate Research

Rob Hamann

University Centers Custodial Staff

1. Executive Summary

1.1. General Project Scope and Description

The new Student Center Building outlined in this report is the result of a collaborative effort between the State of Wisconsin Department of Administration – Division of State Facilities, University of Wisconsin System Administration, The University of Wisconsin – La Crosse, and the Kindness architecture + planning lead A/E team. This report’s primary goal is to provide a detailed Program Statement and Pre-Design Study for the design and construction of a new centrally located, multi-story facility that is 105,772 ASF/ 161,439 GSF, which will house: Retail food and dining services, student and staff offices, a recreation area, Coffee House, an Entertainment Cafe’, multi-purpose meeting and performance spaces, general meeting rooms, Student Center administration and organizational space/services, a bookstore, and other retail space.

The total project cost will be \$55 million in escalated dollars (7/2014 BID Date for the new Student Center), which is inclusive of the demolition of the existing Cartwright Center at \$1,876,000. It is anticipated that the Cartwright Center will remain in use until the completion of the student center in the Fall of 2016. It is further anticipated that the Cartwright Center bidding would take place in January 2017 and work will be completed by Fall 2017.

1.2. Summarized Space Tabulation

The following are the Space Tabulations of the building program. Table 1.2.1 is the summary of program by space type including the circulation factor and gross square footage (GSF). Table 1.2.2 is the detailed program summary. The tabulation includes the total assignable square footage (ASF) of the program based on the 11/29/11 Steering Committee meeting. The totals include all space considerations prior to the initial review of the construction costs.

“Priority 1” items represent the final program approved by the Steering Committee on December 8, 2011.

“Priority 2” items represent areas that were eliminated but are desired to be added back into the building program during the future schematic design phase, should the project budget allow.

“Priority 3” items represent areas that were eliminated by the Steering Committee on December 1, 2011.

Priority 2 and 3 items were reviewed by the Steering Committee after the submission of the 12/21/11 and further evaluated during a prioritization session on January 26, 2012. Priority 3 items are shown for reference only and are not desired to be part of the base program. The Priority 2 areas were defined as “add-in” program areas to be incorporated back into the base program as the budget may allow. These items are included in the Space Program Summary below and are prioritized in the desired order of including them back into the program. The spaces have not been discussed in detail and a future programming session will need to occur if they are to be included.

EXECUTIVE SUMMARY

Table 1.2.1 Summarized Space Tabulation

PROGRAM SUMMARY					
ITEM NO.	DESCRIPTION	ASF PRIORITY 1	CIRCULATION FACTOR (%)	ASF TOTAL	% of ASF TOTAL
1.0	STUDENT CENTERS ADMINISTRATION & SERVICES				
1.1	Dining Services	910	1.15	1,047	
1.2	I.D. Cards	390	1.15	449	
1.3	University Reservations & Event Support	960	1.15	1,104	
1.4	Administration Staff	970	1.15	1,116	
1.5	Financial Offices	390	1.15	449	
1.6	Activities and Organizations	720	1.15	828	
1.8	Custodial	1,500	1	1,500	
1.0 SUBTOTAL		5,840		6,491	6.14%
2.0	STUDENT ORGANIZATIONS, GOVERNANCE, PROGRAMMING & SERVICES				
2.0A	Dedicated Storage	3,000	1	3,000	
2.1	Sorority/Fraternity	500	1.15	575	
2.2	Campus Activities Board	800	1.15	920	
2.3	Veteran's Offices	320	1.15	368	
2.4	Diversity (Multi-Cultural)	1,480	1.15	1,702	
2.5	Student Org Shared Spaces	3,650	1	3,650	
2.6	Pride Center	540	1.15	621	
2.7	Student Association (Senate)	1,090	1.15	1,254	
2.8	Campus Paper (The Racquet)	1,000	1.15	1,150	
2.9	Leadership Involvement	150	1.15	173	
2.10	Graduate Assistant Offices	240	1	240	
2.0 SUBTOTAL		12,770		13,652	12.91%
3.0	MEETING & PROGRAM	30,390	1	30,390	
3.0 SUBTOTAL				30,390	28.73%
4.0	DINING SERVICES				
4.1	Kitchen Support (Receiving)	3,110	1	3,110	
4.2	Back of House	1,650	1	1,650	
4.3	Sanitation	1,470	1	1,470	
4.4	Offices	400	1.15	460	
4.5A	Coffee/Smoothie Serving Area	700	1.33	931	
4.5B	Walk-in Cooler	64	1.33	85	
4.5C	Storage	100	1.33	133	
4.5D	Support	200	1.33	266	
4.5E	Seating, 50 w/ some soft	1,000	1	1,000	
4.6A	Service & Production	500	1.33	665	
4.6B	Back of house	200	1	200	
4.6C	Dry Storage	100	1	100	
4.6D	Cooler	80	1	80	
4.6E	Freezer	100	1	100	
4.6F	Ware Washing	180	1	180	
4.6G	Office 2: secure, includes cash counting	120	1.15	138	
4.7	Retail Market Place	2,300	1.35	3,105	
4.8	Private Dining	850	1	850	
4.9	Dining	6,800	1	6,800	
4.10	Locker Rooms	820	1	820	
4.11	Catering	1,796	1	1,796	
4.0 SUBTOTAL		22,540		23,939	22.63%

EXECUTIVE SUMMARY

PROGRAM SUMMARY					
ITEM NO.	DESCRIPTION	ASF PRIORITY 1	CIRCULATION FACTOR (%)	ASF TOTAL	% of ASF TOTAL
5.0	BOOKSTORE	16,000	1	16,000	
5.0 SUBTOTAL		16,000		16,000	15.13%
6.0	RETAIL	1,300	1	1,300	
6.0 SUBTOTAL		1,300		1,300	1.23%
7.0	RECREATION	6,000	1	6,000	
7.0 SUBTOTAL		6,000		6,000	5.67%
8.0	LOBBY & ENTRANCE	2,500	1	2,500	
8.0 SUBTOTAL		2,500		2,500	2.36%
9.0	LOUNGES	5,500	1	5,500	
9.0 SUBTOTAL		5,500		5,500	5.20%
		102,840	SUBTOTAL ASF	105,772	
			65% EFFICIENCY	57,306	
			TOTAL GSF	161,439	100.00%
65% EFFICIENCY - SAMPLES OF NON-ASSIGNABLE SF					
	Circulation, Structure, Toilet Rooms, Storage, Janitorial Closets			36,125	
10.0	BUILDING SERVICES (Non-assignable)			4,950	
	MECHANICAL & PLUMBING				
	Penthouse			11,000	
	Steam Room			1,125	
	Back up Broiler			960	
	Heater Recovery			660	
	ELECTRICAL				
	Electrical Primary			450	
	Generator Room			300	
	Emergency Power Distribution			200	
	Electrical Room (2/Floor @ 9X12)			648	
	Main Telecom Room (MTR)			168	
	Telecom Room (TR) 2/Floor @ 12X10			720	
65% EFFICIENCY TOTAL				57,306	

PRIORITY 2: ADD-IN PROGRAM				ASF*	ORDER OF ADD-IN
11.0	BASEMENT (Non-assignable)			13,000	1
12.0	MULTI-CULTURAL STUDENT SERVICES AND CAMPUS CLIMATE			4,000	2
1.0 & 2.0	1.0 STUDENT CENTERS AND 2.0 STUDENT ORGANIZATION			1,600	3
3.0	THEATER			2,240	4
13.0	STUDENT LIFE OFFICES			3,750	5
	ADDITIONAL RECREATION			3,000	6
ADDITIONAL PROGRAM TOTAL				27,590	

* Does not include circulation factor

EXECUTIVE SUMMARY

1.3 Budget Summary

Table 1.3.1 Construction - Phase 1: Student Center

General Construction/Fees	18,830,100
LEED Certification	307,000
Plumbing	1,683,700
Fire Protection	407,600
HVAC	4,705,200
Electrical	5,006,200
Demolition/Repair	62,300
Building Automation/EMS	w/ HVAC
Construction Testing	Incl
Telecommunications	w/ Electrical
Site / Utility Extensions	758,900
Foodservice	2,690,000
Design Contingency (7%)	2,412,000
Construction Subtotal	\$ 36,863,000
Escalation ^A	\$ 3,686,000
Total Construction Cost	\$ 40,549,000
Project Contingency (10%)	\$ 4,055,000
Subtotal New Student Center	\$ 44,604,000

See 9.2.3 (Lines 3-9 and 14,16)
See 9.2.3 (Line 15)
See 9.2.3 (Line 11)
See 9.2.3 (Line 12)
See 9.2.3 (Line 10)
See 9.2.3 (Line 13)
See 9.2.3 (Line 1)

See 9.2.3 (Line 2)
See 9.1.2 (Item 7, detail)
See 9.1.2 (Design Contingency)

See 9.1.2 (Escalation Factor)

See 9.1.2 (Project Contingency)
Total Construction + Escalation + Contingency

Construction - Phase 2: Cartwright Demolition & Site Prep

Demolition	\$ 687,800
Abatement	\$ 427,800
Site Prep	\$ 119,600
Design Contingency (4%)	\$ 49,000
Construction Subtotal	\$ 1,284,000
Escalation ^B	\$ 282,000
Total Construction Cost	\$ 1,566,000
Project Contingency (10%)	\$ 157,000
Subtotal Cartwright	\$ 1,723,000

See 9.2.2 (Line 1)
See 9.1.3 (Item 2)
See 9.2.2 (Line 2)
See 9.1.3 (Design Contingency)

See 9.1.2 (Escalation Factor)

See 9.1.3 (Project Contingency)
Total Construction + Escalation + Contingency

Design - Phase 1: Student Center

A/E Fees - Student Center	\$ 2,838,500
Other Consultant Fees ^C	\$ 459,000
Commissioning Consultant	Incl Above
DSF Management Fee (4%)	\$ 1,784,000
Reimbursables	\$ 113,500
Geotechnical Investigation	Incl Above
Site Survey	Incl Above
Plan Review Fees	Incl Above
Design SubTotal:	\$ 5,195,000

See 9.1.2
See 9.1.2

See 9.1.2
See 9.1.2

Design - Phase 2: Cartwright Demolition & Site Prep

A/E Fees - Cartwright Demo/Site	\$ 47,100
Other Consultant Fees ^D	\$ 35,000
DSF Management Fee (4%)	\$ 69,000
Reimbursables	\$ 1,900
Geotechnical Investigation	N/A
Site Survey	Incl Above
Plan Review Fees	Incl Above
Design SubTotal:	\$ 153,000

See 9.1.3
See 9.1.3
See 9.1.3
See 9.1.3

Equipment

Moveable Furniture OFOI	\$ 3,325,000
Audio/Visual	Incl Above
Telecommunication Equipment	Incl Above
Special Equipment OFOI	Incl Above
Communications Equip. OFOI	Incl Above
Systems Office Furn. OFOI	Incl Above
Computer Equipment OFOI	N/A
Signage OFOI	Incl Above
Subtotal:	\$ 3,325,000

See 9.1.2 (Item 7)

Percent for Art .25% (.0025)	0
Land Purchase	0
TOTAL PROJECT COST	\$ 55,000,000
GSF:	161,439
Construction Cost/GSF	\$ 253
Total Project Cost/GSF	\$ 341

Footnotes

- A Escalation factor is 1.10%, based on July 2014 bid date.
- B Escalation factor is 1.22%, based on January 2017 bid date.
- C Other consultant fees include LEED Certification, System Furnitures and EIS/EIA Consultant
- D Other consultant fees include Abatement Consultant.

Note: Refer to Section 9.1 for detail.

EXECUTIVE SUMMARY

1.4 Schedule Summary

PRE-DESIGN ACTIVITIES

Begin Pre-Design.....	September 2011
Draft Program Statement and Pre-Design Study Complete.....	December 2011
Student Referendum.....	April 2012
Final Program Statement and Pre Design Study Complete.....	June 2012

DESIGN AND CONSTRUCTION

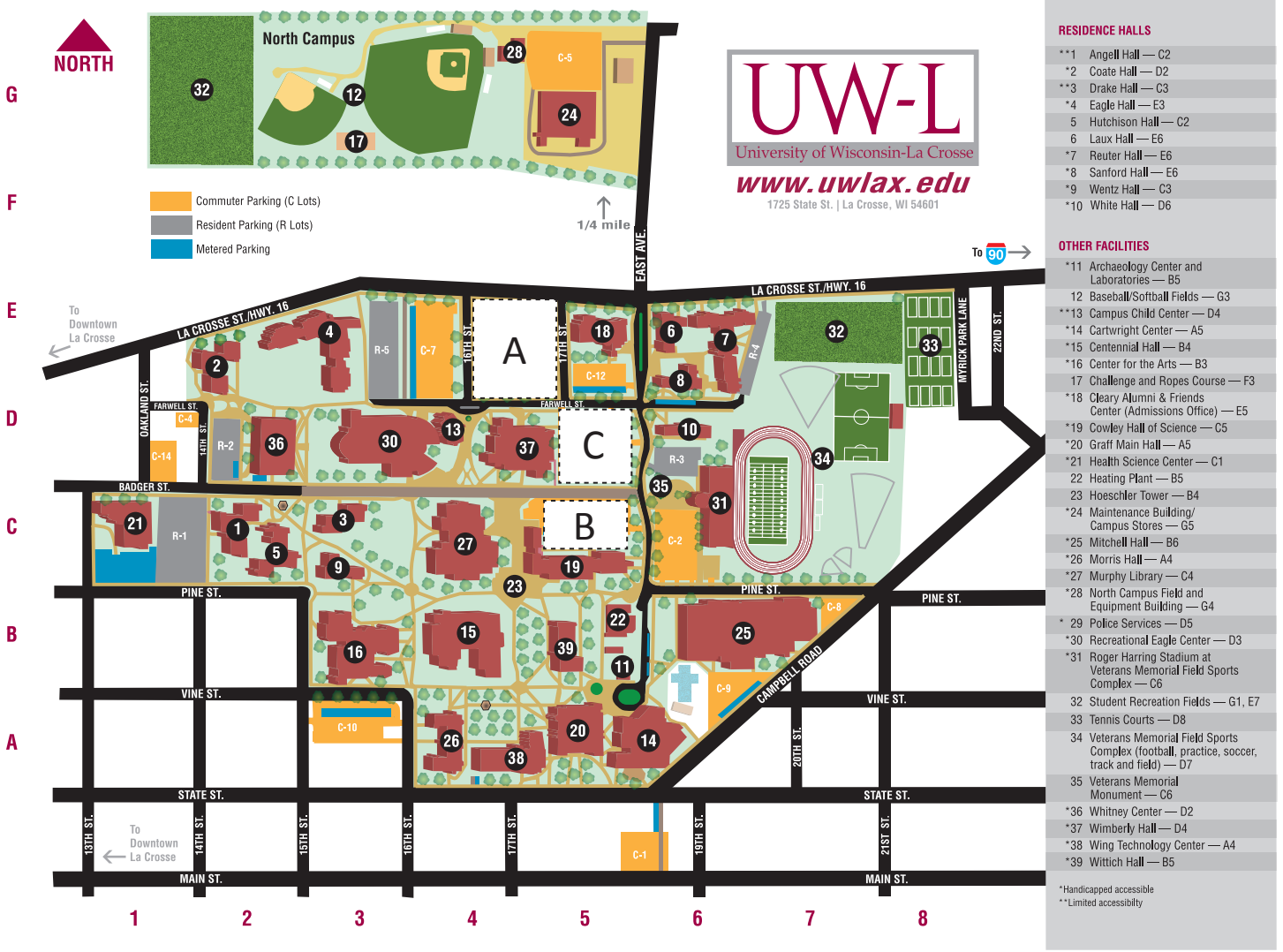
Phase 1: Student Center

Description	Date	Duration
BOR Approval 13/15 Capital Budget	Aug 2012	Milestone
Contract for A/E Services	Nov 2012 – Feb 2013	4 Months
Preliminary Design	Mar – July 2013	5 Months
Project Enumeration 13/15 Capital Budget	July 2013	Milestone
Design Development & 35% Review	Aug – Oct 2013	3 Months
Approval to Construct by BOR/SBC (Single Prime Waiver)	Oct 2013	Milestone
Final Design & 100% Review	Nov 2013 – April 2014	6 Months
Bidding and Contracting	May – July 2014	3 Months
Construction	Aug 2014 – May 2016	22 Months
Occupancy	June – July 2016	2 Months

Phase 2: Cartwright Center

Preliminary Design & 35% Review	Oct 2015 - Feb 2016	5 Months
Final Design & 100% Review	March – June 2016	4 Months
Bidding and Contracting	July – Sept 2016	3 Months
Construction (Existing Building Demolition & Landscaping)	Oct 2016 – March 2017	6 Months
Occupancy	May 2017	Milestone

1.5 Institution Site Plan



- A. 10J2S POLICE STATION/PARKING
- B. 09J2H COWLEY HALL
- C. 11A2A PROJECT SITE

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2. General Problem Statement

GENERAL PROBLEM STATEMENT

2.1 General Description, History, Context and Nature of Problem

The existing Student Center Facility, the Cartwright Center, is comprised of an original building constructed in 1957, with two subsequent additions constructed in 1964 and 1985, totaling 139,000 GSF. There have not been any significant interior renovations, with the exception of cosmetic updates to the food service areas. Over time the campus population has grown and the existing Student Center Facility no longer serves the student population and campus community well. The following are some of the more significant deficiencies with the existing Student Center.

The Student Center is located at the far southeastern edge of the campus. This location places the Student Union activities at what is now considered the 'back door' of campus, opposite the main entrance (East Avenue & La Crosse Street), far from general student residential populations, and not central to the academic core.

The facility does not have any street presence, identity nor parking in close proximity. This limits its use for community/public events.

There is no room on site for building expansion/addition.

Although this facility is arguably the most publicly accessed building on campus, it is not ADA compliant. Accessibility into and through the building is severely limited due to elevation changes between the original building and the two additions, along with floor elevations not matching the elevations of entrances at grade. Additionally, the building elevator is too small to comply with ADA.

The Bookstore and Textbook Rental areas are undersized and not conveniently accessible. During peak textbook rental periods, this area is overcrowded and inefficient causing significant delays in processing transactions.

The Kitchen and Dining areas function poorly and are undersized for the present on-campus daily population of 9,000 - 9,500. Most of the equipment is original to the building and has far exceeded its anticipated life expectancy. The current building provides seating for 350 diners and there is demand to accommodate at least 450. The present main serving area is crowded and serving approximately 900 at lunch. Anticipated capacity should accommodate 1,200 customers at lunch.

The large Meeting/Performance Venue (Valhalla) is outdated, undersized, and awkwardly proportioned, diminishing its functionality. The venue does not have adequate infrastructure to support desired events. As a result, the Cartwright Center is turning away event opportunities or accommodating them in other larger, but less desirable, campus facilities or off campus altogether. A larger multi-function Meeting/Event space with appropriate infrastructure is needed.

There is not adequate Student Organization Space. Space provided currently is scattered in multiple locations. UW-La Crosse's student population is extremely active and a new space is needed to properly accommodate this important campus function. At present, there are 180 recognized student organizations and that number has remained strong for quite some time. The campus anticipates that this student representation will continue well into the future. Panhellenic, Intrafraternity, Campus Activities Board, Diversity/Multi-Cultural, Pride Center, Student Association, and The Racquet all need added space along with shared conference and graphics areas.

The Campus Services Office area is too small and does not function well. Additional office space is needed for Dining Services, Scheduling/Reservations/Event Support, Activities & Organizations, and Graduate Assistants.

The mechanical, electrical, and plumbing infrastructure would need complete renovation/upgrade should any major architectural remodeling take place.

GENERAL PROBLEM STATEMENT

The student vote took place on April 10, 2012 per University by-laws and the referendum passed (Yes: 1,772/No: 242). Below is an excerpt referendum language. The full document can be found in Appendix E.

“Since Cartwright Center was built in 1958, the building has endured a variety of renovations, repairs, and remodeling. Due to the current state of disrepair of plumbing, heating/air conditioning, and technological systems as well as the lack of a sprinkler system, the center must either be repaired, or rebuilt to ensure the safety and well-being of our campus community. Over the last 6 months, UW-La Crosse faculty, staff, and student leadership have been working with engineers, architects, and local experts to review and assess the needs of a campus student center. The steering committee has determined both the approximate cost of infrastructure repairs to Cartwright Center, and that for a new structure. Students from many groups on campus were deeply engaged in the process to determine what is needed in a student center during the next 50 years. The review resulted in the following information:

New Student Center Facility Proposal-Construction 2014-15, open July 2016 (\$55 million in total cost)

- *Facility approximately 25% larger*
- *LEED certified silver, approaching gold*
- *Universal accessibility*
- *Latest technology*
- *Expanded dining options*
- *Larger multipurpose space for banquets, speakers, and concerts*
- *Program space with an entertainment/dance club atmosphere*
- *Expanded student lounge spaces*
- *Outdoor programming space*
- *New Recreation spaces*
- *30 years until system updates and/or repairs*

Cartwright Center Repair Proposal-Construction 2014-15, open July 2016 (\$32 million in total cost)

- *Facility could be closed for 18-24 months; no programming space or dining would be available.*
- *Heating and air conditioning repairs would be completed.*
- *Plumbing repairs would be completed.*
- *A sprinkler system would be added.*
- *Other safety code issues would be addressed.*
- *Accessibility concerns would be addressed.*
- *15 years until system updates and/or repairs required.*

This project would be funded primarily from student segregated fees. Revenue from dining, the bookstore, and textbook service is under consideration to help decrease the student cost of a new facility.”

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3. Existing Operations

3.1 Occupant/User Activities and Functional Categories

Cartwright Center currently houses Student Centers Administration and Services, Student Organizations, Governance, Programming and Services, University Reservations and Event Support, retail dining services including a coffee/smoothie shop, grille, retail bookstore, textbook rental and meeting and program spaces.

3.1.1 Employees/Staffing

The Student Centers Administration and Services has 23 full time staff. Below are the staff positions per office type or suite.

Leadership

- Director
- Associate Director
- Assistant Director
- Student Services Coordinator-University Reservations
- Production & Technical Operations Coordinator-University Reservations
- Coordinator of Programs
- Program Adviser- Pride Center

Graduate Assistants

- Leadership & Involvement
- Campus Activities Board
- Graphics
- Leadership & Involvement
- Student Association
- Pride Center
- Dining Service & Sustainability
- Campus Activities Board
- Sorority & Fraternity Life

Support Staff

- Financial Specialist-Administration
- University Services Program Association-Administration
- University Services Associate-Administration
- Financial Specialist-ID/Card Office
- Office Associate-Reservations

Custodial/Maintenance Services - Cartwright

- Custodial Supervisor
- Lead Custodian
- Day shift Custodian
- (4) Second shift custodian
- Weekend shift custodian
- Mechanic
- Electrician

University Centers Student Employees

University Centers employs approximately 75-80 student employees each year. The names of the individuals may change each semester based on length of employment and graduation rates. The number of students employed in each University Centers unit during fall typically include:

- Leadership & Involvement – 5 student employees
- Building Managers – 10 student employees
- Information Counter – 10 student employees
- Valhalla Set-Up Crew – 12 student employees
- Event Support Services – 8 student employees
- University Reservations – 6 student employees
- Custodial Services – 5 student employees
- Administrative Office – 4 student employees
- Graphics – 6 student employees
- Pride Center – 3 student employees
- Diversity Center – 1 student employee
- Meal Plan/Card Office – 6 student employees

Bookstore/Textbook Services

- Store Manager
- Course Materials Manager
- Team Lead Floor Operations
- Team Lead General Merchandise
- 14 Part-Time Sales Associates

During peak times, an additional 15 temporary part time associates are hired (names vary by semester). A maximum of 25 associates are employed at a given time during peak hours and a maximum of 8 associates are employed during a regular semester day.

Dining Service Company

Management Offices

- Campus Director
- Building Director
- Office Manager
- Dietitian
- Marketing Director
- Catering Director
- Chef
- Retail Manager-Cellar

Dining Services - Cyber Café

- 2 full-time associates
- 11 part-time associates

Dining Services - Trattoria

- 2 full-time associates
- 18 part-time associates

Dining Services - Galley

- 12 full-time associates
- 5 part-time associates

Dining Services - Cellar

- 4 full-time associates
- 27 part-time associates

3.1.2 Utilization – Rooms and Hours of Use

Cartwright Center hours vary depending on time of year. Normal hours of operation are:

Sunday	11:00am	MIDNIGHT
Monday – Friday	7:00am	MIDNIGHT
Saturday	9:00am	MIDNIGHT

Within the building hours, food service hours vary. The Galley operates for breakfast and lunch whereas Trattoria is open for dinner. Both are closed on the weekend. The Cellar has late evening hours and is only open on the weekends. The Cyber Café is open early in the morning and later in the evening. The café closes early on Friday and is not open on the weekends. These hours adjust during semester breaks and during exams. The building hours of operation is also adjusted to reflect the time of year. A full listing of the hours can be found in the Appendix.

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4. Existing Physical Conditions

4.0 Analysis of Existing Physical Conditions

Executive Summary

Kindness Architecture + Planning, Inc. (Ka+p) was contracted by the Wisconsin Department of Administration to provide an existing overview of Cartwright Center facility in August of 2011. The overarching goal of this effort is to identify issues and document existing conditions of the building at the time of this report. The assessments in general are compared to current building standards and codes.

Cartwright is a concrete building originally built in 1958 and is the current student center of the campus. There have been several additions and alterations over the years. However there has not been any major interior renovation. The most recent addition occurred in 1984.

Over time, the campus has grown and the Cartwright Center no longer serves the student population well. The building is now located at the “back door” of the campus and is not readily identifiable or accessible. The building is landlocked and additions are not possible. Should a major renovation take place, the building systems would need to be renovated and upgrades to accessibility would be required to meet current building codes. This would be true whether the building remains as the student center or if it is repurposed.

As part of the evaluation, an opinion of probable costs to renovate Cartwright Center was developed (see attached Exhibit D). The construction costs are approximately \$13.8 million to renovate Cartwright in 2011 dollars. This cost includes exterior window replacement, accessibility features such as railings, toilet rooms and passenger elevator, and new and/or upgraded mechanical, electrical, fire protection and plumbing systems. However, it does not include any architectural remodeling, reconfiguration, or upgrading of any finishes. Each room or function is assumed to remain as is, with no technology upgrades.

Commissioning of Work

The design team met with campus administrators, staff and maintenance on September 1, 2011. (Please see Exhibit B for list of attendees). The team conducted interviews with staff and toured Cartwright food service areas. The campus also provided existing drawings and maintenance reports for this overview.

4.1 Site/Existing Conditions

Location, Proximity, Campus Neighborhood Context & Access

Cartwright is located at the southeast corner of campus. This location places the student union activities far from the general student residential populations located at the northwest and northeast corners of campus. In addition this location is not central to the academic core of campus. Students using the facility are generally traveling out of their way. This facility is also heavily used for events open to the public. Street presence and identity is nearly non-existent creating way-finding issues while the lack of parking and direct vehicular access is a challenge for patrons attending events.

ADA access to the facility is very challenging. The only readily available accessible entrance is at the East Avenue drop-off on the north of the building. An elevator is required to negotiate the split levels of the building immediately upon entering.

Service for the facility is accommodated via two (2) loading docks along Campbell Road. They are split between an upper dock and a lower dock each serving separate levels of the building. The lower dock is subject to occasional flooding resulting from City storm infrastructure surcharging in Campbell Road during large rain events. Access to these docks is less than ideal and requires trucks to back in off of Campbell Road.

Cartwright has no good fire department access other than off of Campbell Road, but the fire department has not cited any specific deficiencies with respect to apparatus access and fire fighting access. There are no live sprinkler systems within the building other than a deluge system at the stage and localized Ansul units within the kitchen.

EXISTING PHYSICAL CONDITIONS

Input from the 2005 Campus Master Planning process identified a need for a strong north-south vehicular route through campus. Cartwright impedes this route. The Master Plan also identified a need to provide additional parking for the facility (or new facility) to better accommodate public events.

4.1.2 Civil Utilities

Water

Water service is provided by a single 3-inch cast iron lateral from State Street (3" is based on Campus provided base data however during the information gathering discussion it was stated that this connection may be a 4" galvanized pipe. This may have been upgraded from a 3" to 4" at some point but is uncertain as to the exact size). The lateral appears to be the original from the 1957 building. It does not appear any new connections were added with subsequent remodeling projects or additions. There are no known issues with lateral other than it may not be sized to accommodate any major fire suppression upgrade within the building. Any building upgrades may require pressure testing of the City mains and lateral and plumbing engineering demand analysis to determine condition and capacity.

Storm

The existing building has multiple storm connections for roof drainage. The main storm sewer serving the building (18" per 1957 and 1985 plans) runs below the building from State St. north to East Avenue under the floor of the southern bar of the original 1957 building. Roof drains tie directly to this storm main within the building footprint. Subsequent building additions have added new connections north of the building outside the building footprint.

There are a few issues to note. There are a couple of drains collecting site runoff that bring site drainage under the building.

The lower loading dock site drain connects to the roof and storm drainage of the building running below the building floor. Another site drain along the west also connects to storm drainage running below the building floor.

The City storm infrastructure occasionally experiences load beyond its capacity and the Campus is at the downstream end of the run for a large portion of the City. Areas of Campus are known for potential flooding and surcharging and Campbell Road has been identified as one such location. As a result, facility staff periodically sand bag the lower loading dock to prevent building flooding resulting from the surcharging.

Although repurposing or renovation of Cartwright is not believed to create any adverse impact or increased load on storm drainage, the renovation would not in all likelihood alleviate any issues in present conditions. Building renovation projects could present opportunities to improve the infrastructure serving the building in addition to correcting areas where site drains flow back into the building plumbing.

Sanitary

Two sanitary lines serve Cartwright. One line connects via the south face of Cartwright and drains to the grease trap for the building before connecting to a manhole in State Street. The second line exits the northeast area of the building. This line runs parallel to the building to a manhole southeast of the upper loading dock where the line turns southwest and drains to the same manhole in State Street the other building line connects to. Both lines are thought to be original from the 1957 construction. The northeast line failed a few years ago due to blockages. The blockages were removed but the line was not replaced.

It was suggested that the grease trap servicing the building may not be accommodating the building needs and coupled with highs and lows in the lateral from freeze/thaw and settling over time may lead to periodic buildup and stoppages as seen a few years ago. The services are thought to be sufficient other than the grease trap size and internal drain routing (ensuring all grease capturing drains pass through a grease trap). Repurposing or renovation of the building may require further assessment of proposed loads, available capacity and a more detailed inspection and analysis of existing pipes and manholes.

EXISTING PHYSICAL CONDITIONS

Gas

Gas appears to be served on the northeast building façade as well as off of State Street. Actual routing of the gas line off of State Street is unclear but viable as there is a gas main within the street. Routing to the northeast connection is also unclear. This connection could extend to Campbell Road, but is unlikely as there is not a gas line within Campbell shown on the campus records. The more likely routing is from the north via East Avenue. Gas service is thought to be sufficient based on current building loads. Repurposing or renovation of the building may require further assessment of proposed loads and available capacity.

4.2 Building /Systems

4.2.1 Architectural Systems

Exterior

According to the Campus, two thirds of the roof for Cartwright has been replaced with EPDM membrane roofing. The roof over the Valhalla area has the original built up roofing (the roof was not visually inspected by the design team.) The building is in need of exterior re-caulking and sealants around the windows. The masonry is in good condition and does not require tuckpointing. The windows are mostly single pane glass and, according to the campus, are leaking. No major window replacement has taken place with the exception of the State Street curtain wall system. However, this system also has issues with water infiltration.

Interior

The interior of Cartwright has not been remodeled since the building was built with the exception of the food service areas. Portions of the facility were updated as part of the 1984 renovation. Additionally, the Lacrosse Room was repurposed, including the removal of the bowling lanes. These areas have been updated with new finishes over the years (see the Food Service section for more information.) The existing ceilings and chases inhibit access for mechanical, plumbing and electrical repairs, and hence, any repair work is both disruptive and costly. The short floor to floor height creates significant issues with remodeling for cabling, ductwork and lighting due to lack of space.

The stairways do not have any ventilation and are experiencing high levels of humidity/moisture leading to concerns of mold, either as being present or developing. A number of areas in the building are experiencing peeling paint, especially on the east side in the addition (i.e. Meeting Room 326), which can be indicative of moisture and/or humidity. The freight elevator experiences numerous service calls, does not meet accessibility standards and is in need of replacement. The "gypcrete" form liners that were left in place in basement level over the former bowling alley have been falling to the floor. Repair efforts are ongoing to control the decay and according to the campus, the material does not contain asbestos.

Another drawback to the facility is its layout. From the Campus side, the main access to Cartwright is through the backdoor which provides no visibility into the building and is not clearly marked as an entrance. The building layout is confusing. Upon entering there is a half level up to the information desk and many room numbers are not sequential. There are long diagonal and circuitous corridors, few points of orientation and many segmented areas.

Accessibility

Cartwright has a number of accessibility issues. The toilet rooms would not meet current code requirement standards, the doors do not have lever handles and elevator controls do not meet accessible reaches. The exit stairs and convenience stair handrails do not meet code requirements and the exit stairs do not have areas of rescue assistance. Horns and strobes are not present in the fire alarm system. Any remodeling of these areas would require meeting the present code. The single elevator is not centrally located, making it difficult to navigate the building's multiple levels, and its controls will need to be upgraded.

EXISTING PHYSICAL CONDITIONS

Life Safety

Cartwright's fire alarm system would not meet current code requirements and has not been updated since the early 1980's. The building currently does not have fire protection with the exception of the deluge system at the stage curtain in Valhalla and the "Ansul" system in the kitchen at the hoods. The hose cabinets located in the stairways are no longer in service.

The present generator only has capacity for emergency egress lights, a number of pumps and fire alarm system. Areas for deliveries and fire/emergency access are an issue because of limited access around the site.

Asbestos

To be provided by the UW-La Crosse Campus as a separate report.

4.2.2 Mechanical Systems

Plumbing/Fire Protection

The underground sanitary sewer laterals are failing and some sections have been replaced. The grease interceptor is overloaded, and it is suspected that grease is passing through. Cartwright has only a 4" water service; the size will need to be increased if a sprinkler system is added. Most fixtures are original to the building, which means each fixture has a high volume water use. It is felt that low flow fixtures would be detrimental to solids evacuation and cause plugs in the sanitary system.

The water piping is failing and many patches or repairs have been made. A project to replace the piping was cancelled due to the upcoming Union pre-design project. Access to plumbing is very poor due to drywall ceilings and congestion above the ceilings. Storm water backs up into building and at loading dock due to city storm system's inability to handle heavy rainfall. The domestic water heating is via a steam to hot water, shell and tube heat exchanger, which is not dual wall, for entire building. The building consumes a great deal of salt in the softeners and this usage is more than can be explained.

Stairwells have hose cabinets, however the hoses were removed at the request of the fire department and the standpipes are not relied upon for fire fighting.

HVAC

The existing systems are generally original to the year the building and addition was built, in particular the air handling systems. One AHU is variable volume with inlet vanes; the others are constant volume/reheat type.

Two AHU's contain water cooled compressors. Most chilled water coils are failing and have had numerous repairs, primarily from freezing and erosion. Fans for these units are fixed as they fail.

The existing systems provide poor control due to issues such as:

- o Old pneumatic controls, which are failing.
- o Poor zoning or zoning control
- o Change of space usage. Systems were reconfigured without proper zoning or ducted returns.
- o System design is not suitable for today's demands.

All temperature controls are pneumatic with some DDC monitoring/reporting capabilities. Pneumatic piping system has leaks; the source of the leaks cannot be found. The air compressor has failed; parts have been replaced and it runs continuously. South side unit ventilators, which were added in the 1990's provide poor comfort. The control dampers are failing and are not reliable. There are frequent freeze-stat tripping occurrences.

The building has many exhaust fans, however it is short of make-up air. It is felt that outdoor air introduction to the building is insufficient. The current control strategy discontinues air handling unit economizer cycle whenever campus chilled water is present. There are also many balancing issues. The variable air volume terminal units are failing and air bladders are drying out.

EXISTING PHYSICAL CONDITIONS

Asbestos is present on piping systems, primarily at the fittings. Ductwork from AHU-5 is run across the roof.

Steam traps are failing as evidenced by the steam blow-by seen at the condensate receiver. The valves are failing and cannot be relied upon to close when required for maintenance. The building contains an old 750 ton, R-11 Trane centrifugal chiller that is currently only used as backup. Stairwell unit heaters were disconnected and not reconnected during a remodeling project which now causes cold stairwell temperatures.

4.2.3 Electrical Systems

The building's electrical service (transformers and switchgear) are in good condition (new in 1984).

Distribution capacity is a problem in many areas of the building. Most branch panels are full or nearly full. Some panels still contain old "pushmatic" type breakers. Most of the lighting was upgraded approximately 15 years ago as a lighting efficiency project to T-8 lamps. Some fixtures have been replaced as areas were remodeled. Stage lighting is old and parts cannot be obtained.

Wiring in the older parts of the building is failing. Hot spots have been found with burnt wiring. There is a 50 KW generator that serves egress lighting, some condensate pumps, and the fire alarm system. The fire alarm system was added at the time of one of the additions. It is not addressable and parts are becoming hard to obtain.

Very difficult to extend additional electrical capacity needs to areas of the building due to very tight (and sometimes inaccessible) ceiling spaces.

Data cabling is run in less than ideal methods due to tight ceiling space and inaccessible ceilings. Some wiring has been abandoned in place.

4.2.4 Food Service Systems

General Programming Information

Many things have changed on the UW – La Crosse campus since the Cartwright Center was constructed. Many of these changes result in the need for additional space. Volume is the most significant factor in determining the space requirements and the most obvious change to campus is the increase in students, faculty and staff. There will also be an increase in the capture rates when the new building is opened. This increase in numbers means more seating and more storage. The current building seating accommodates 350 diners and the new building program can accommodate at least 450. The current main serving area is crowded serving approximately 900 at lunch. It is anticipated that the new facility will need to accommodate 1,200 customers at the noon meal. The Cartwright Center, and campus in general, has also experienced an increase in event usage ranging from catered community events to on-campus summer camps and conferences. This results in significantly increased demands for storage and adds to the need for set-up and staging space. Campus dining in general has adapted to the demands for more variety and a more retail-like experience by adding more menu concepts and using more fresh ingredients. The added menu concepts can be somewhat accommodated by the main serving area but places like the Red Mango, which offer coffee and smoothies also give diners a different destination. The use of more fresh ingredients means more refrigerated storage for fresh meats and produce. The increase in variety in general results in the need for more overall storage. There is also more demand for grab and go and convenience store items. Paper products and prepackaged foods are very bulky and require an additional increase in storage space. To accommodate both the increase in volume and the increase in variety, the dining services department is recommended to increase staff. This results in a need for increased office, locker and rest room space to accommodate them.

Food Service

With limited exceptions, the food service spaces in the current facility may need to consider a complete renovation and significant expansion to meet present and future needs of the food service department and expectations of their customers. The equipment in this facility will require replacement in the near future due to the age and use.

EXISTING PHYSICAL CONDITIONS

The existing kitchen has seen limited change since it was constructed. The storage spaces are not adequate to meet the demands of the current retail and catering operations on campus. The dry storage area, freezer and catering storage are about half the required capacity. The main serving area and offices are also considerably smaller than required. The main retail serving area is very dated in appearance, does not include adequate fresh menu options to meet current customer expectations and does not provide good customer traffic flow. Much of the equipment in these areas is original to the building, has far exceeded its anticipated life expectancy and should be replaced with new, more energy efficient equipment. However, there are a few somewhat expensive items which have recently been replaced. These items which have an adequate life expectancy to reuse include the dishmachine and a blast chiller. However, when the project moves forward into design, it is important that a thorough evaluation of the condition of all major equipment be conducted.

The Red Mango coffee and smoothie venue presents a much more current and contemporary appearance. The equipment in this area includes several items which will not be in good enough condition to reuse at the time this facility is replaced. Therefore, cost estimates include replacement of these items.

The Cellar includes adequate production space but significantly lacks storage and support areas. High temperature cooking equipment of the type used in this area does not have a long useable life and will require replacement in the renovated or new facility

EXISTING PHYSICAL CONDITIONS

4.2.5 Existing Program Evaluation

LEGEND

- LOUNGES (3,350sf all floors)
- MEETING & PROGRAM (28,635sf all floors)
- DINING SERVICES (21,944sf all floors)
- STUDENT ORG. GOVERNANCE, PROGRAMING & SERVICES (9,326sf all floors)
- BOOKSTORE (14,646sf all floors)
- STUDENT CENTERS ADMINISTRATION & SERVICES (7,135sf all floors)

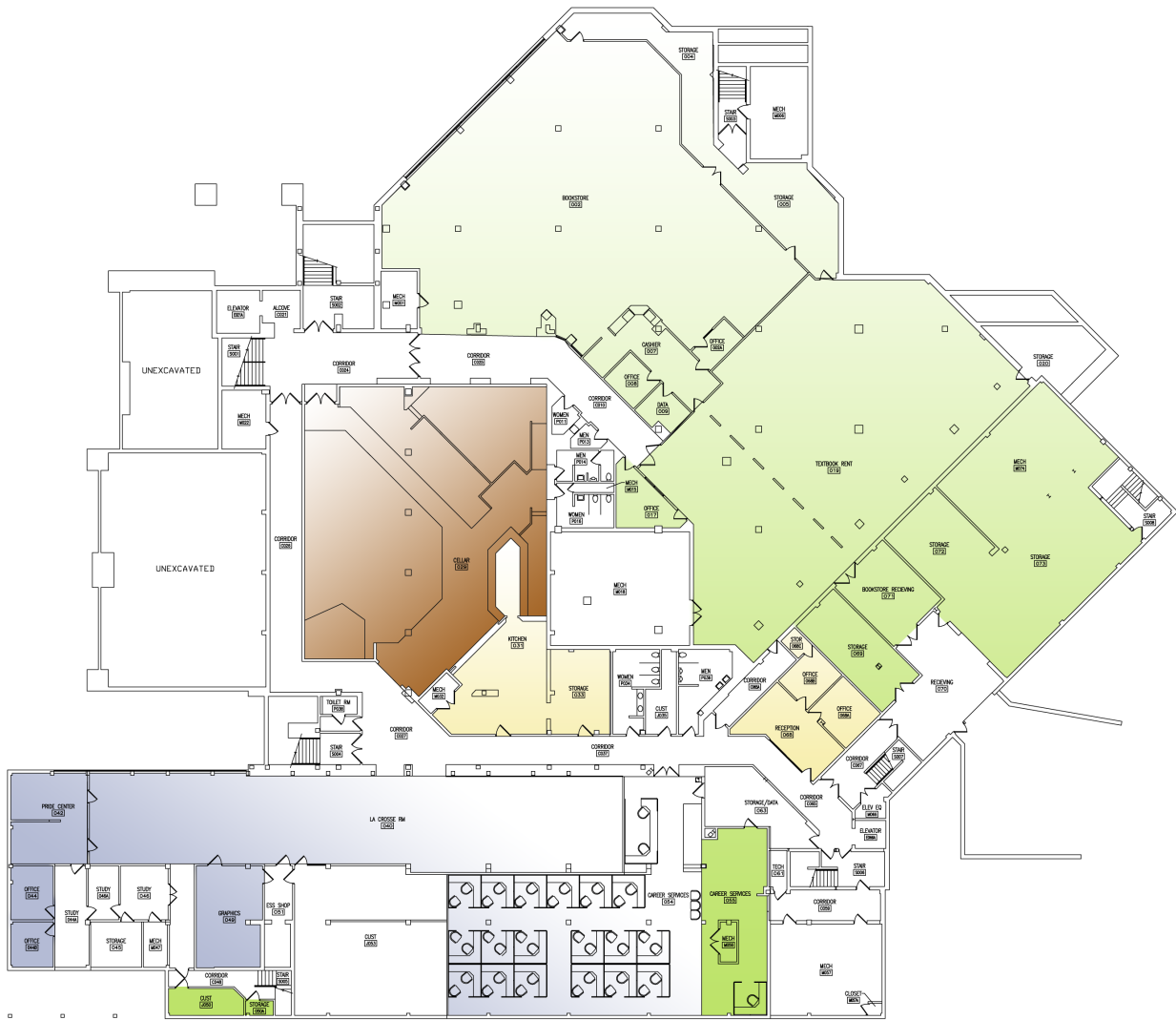


FIGURE 4.2.5.1
CARTWRIGHT CENTER BASEMENT FLOOR

EXISTING PHYSICAL CONDITIONS

LEGEND

- LOUNGES (3,350sf all floors)
- MEETING & PROGRAM (28,635sf all floors)
- DINING SERVICES (21,944sf all floors)
- STUDENT ORG. GOVERNANCE, PROGRAMING & SERVICES (9,326sf all floors)
- BOOKSTORE (14,646sf all floors)
- STUDENT CENTERS ADMINISTRATION & SERVICES (7,135sf all floors)

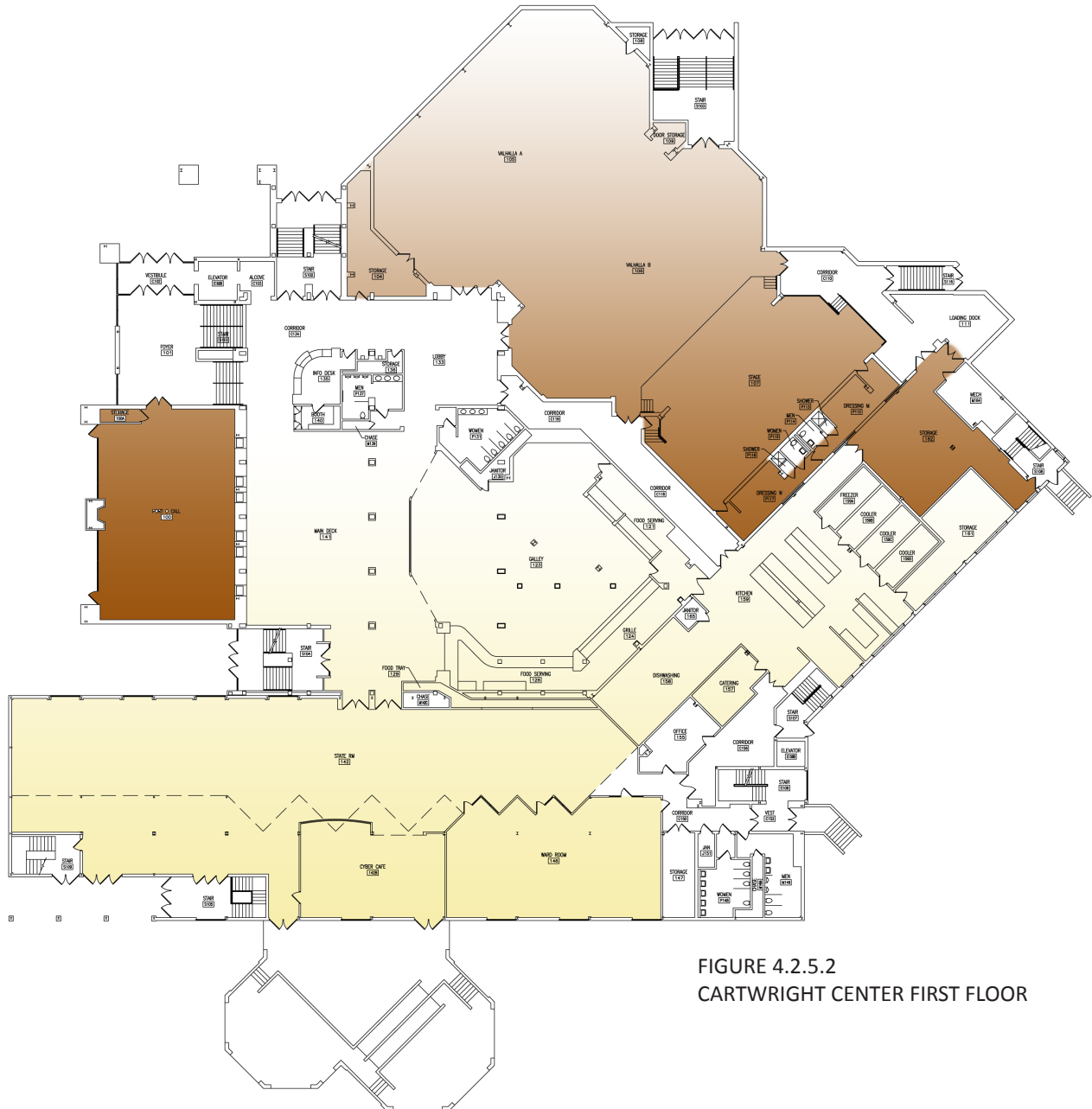


FIGURE 4.2.5.2
CARTWRIGHT CENTER FIRST FLOOR

EXISTING PHYSICAL CONDITIONS

LEGEND

- LOUNGES (3,350sf all floors)
- MEETING & PROGRAM (28,635sf all floors)
- DINING SERVICES (21,944sf all floors)
- STUDENT ORG. GOVERNANCE, PROGRAMING & SERVICES (9,326sf all floors)
- BOOKSTORE (14,646sf all floors)
- STUDENT CENTERS ADMINISTRATION & SERVICES (7,135sf all floors)



FIGURE 4.2.5.3
CARTWRIGHT CENTER SECOND FLOOR

EXISTING PHYSICAL CONDITIONS

LEGEND

- LOUNGES (3,350sf all floors)
- MEETING & PROGRAM (28,635sf all floors)
- DINING SERVICES (21,944sf all floors)
- STUDENT ORG. GOVERNANCE, PROGRAMING & SERVICES (9,326sf all floors)
- BOOKSTORE (14,646sf all floors)
- STUDENT CENTERS ADMINISTRATION & SERVICES (7,135sf all floors)

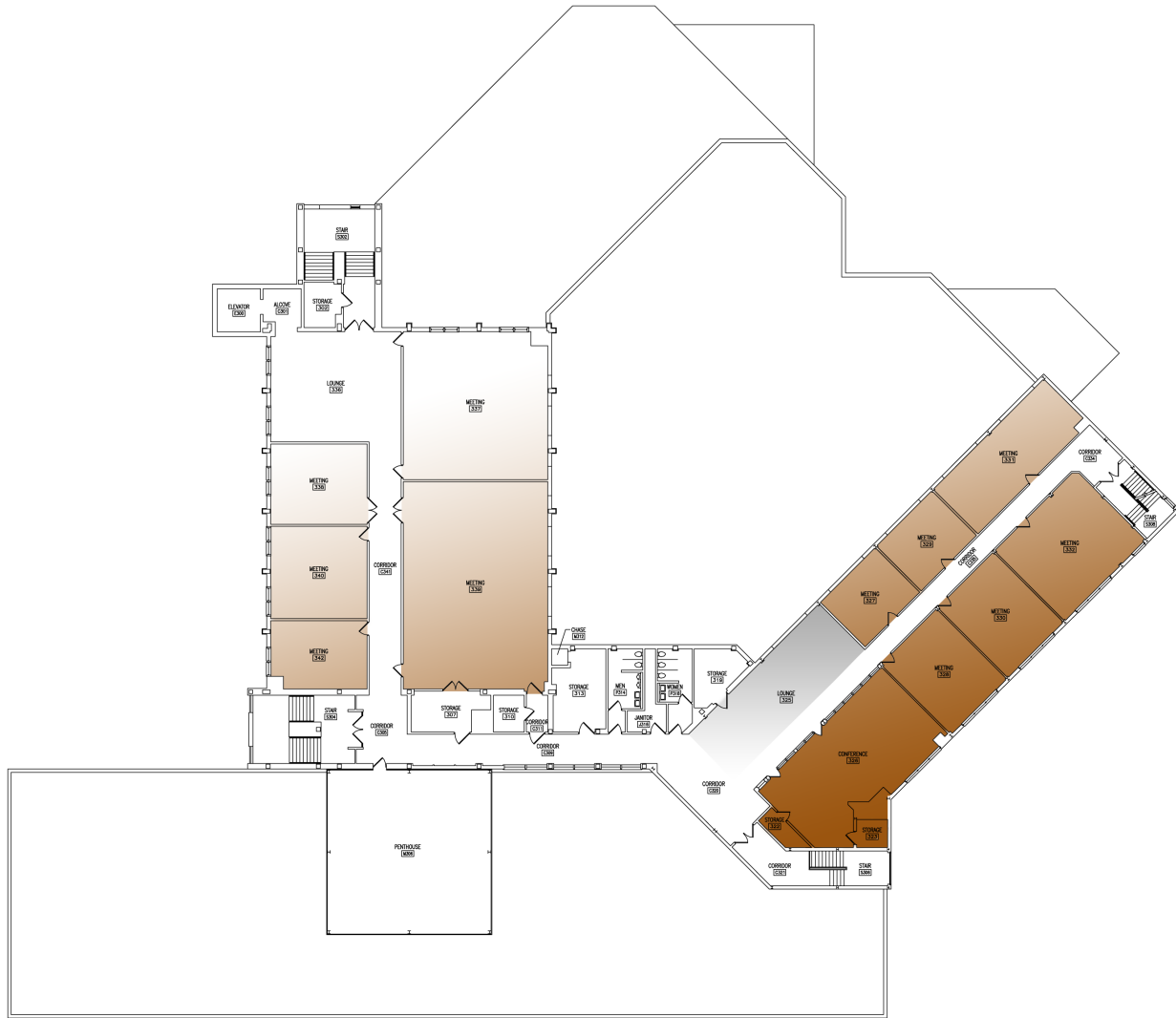


FIGURE 4.2.5.4
CARTWRIGHT CENTER THIRD FLOOR

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5. Changes and Projections

CHANGES AND PROJECTIONS

5.1. Space Tabulation of Existing and Proposed Spaces

ASSIGNABLE			EXISTING	PROPOSED	DIFFERENCE (+/-)
Room No	Item No	Room/Space Name or Current Function	Total ASF	Total ASF	
1.0 STUDENT CENTERS ADMINISTRATION & SERVICES					
50	-	Custodial (Storage)	122	-	
0223C	-	Office (ID Camera)	112	-	
0050A	1.0	Storage	25	-	
55	1.1 A-H	Career Services/Vacant	689	910	
0223A	1.2 A	Financial Specialist	124	120	
0211A	1.2 B	Office (Assoc Director)	151	120	
0223B	1.2 C	Office (Grad Asst)	124	50	
223	1.3 D-H / 1.2 D	Reception Area	1,180	460	
225	1.3 A	Reservations Coordinator	113	120	
224	1.3 B	Work Room	113	120	
0223D	1.3 C	Events Support Tech	112	120	
0223E	1.3 I	Custodial Supervisor	112	120	
210	1.4 A	Dir Student Center	174	150	
218	1.4 B	University Services Program Assoc.	96	120	
220	1.4 C	Mail File Room	233	200	
0222A	1.4 D	Lounge	175	200	
212	1.4 E / 1.5 A, C	Clerical Office/Reception	865	540	
217	1.5 B	Financial Specialist	96	150	
219	1.5 B	Vault	49	w/ 1.5B	
213	1.6 A	Asst. Director Office	144	120	
214	1.6 B	Program Advisor	128	240	
0211B	1.6 C	Associate	95	120	
215	1.6 D	Grad Asst. Office	128	360	
245	1.8	Storage (Equipment & AV)	255	-	
53	1.8 A & C	Custodial (Breakroom)	1,377	1,150	
51	1.8 B	ESS Workshop	168	350	
1.0 STUDENT CENTERS ADMINISTRATION & SERVICES					
SUBTOTAL			6,960	5,840	(1,120)
2.0 STUDENT ORGANIZATIONS, GOVERNANCE, PROGRAMMING & SERVICES					
230	-	Commuter Lounge	229	-	
0044B	2.9 A	Program Advisor	119	150	
54	2.0	Career Services/Vacant	2,677	3,000	
228	2.1 A-B	Fraternity & Sorority Life	188	500	
233	2.2 A	Campus Activities Board	190	800	
44	2.3 A-B	Grad Asst. Office	142	320	
40	2.4 A-B/ 2.5 A, B, D	La Crosse Room (Diversity)	3,201	4,530	

CHANGES AND PROJECTIONS

ASSIGNABLE			EXISTING	PROPOSED	DIFFERENCE (+/-)
Room No	Item No	Room/Space Name or Current Function	Total ASF	Total ASF	
49	2.5 C	Graphics	407	400	
221	2.5 E	Food Bank/Leadership & Involvement Center	152	200	
216	2.5 E	Food Bank/Leadership & Involvement Center	132	-	
42	2.6 A-D	Pride Center	424	540	
236	2.7 A-E	Student Assoc/Off Campus Housing Office	210	1,090	
234	2.7 A-E	Office (Student Assoc)	208	-	
235	2.7 A-E	Office (Student Assoc)	601	-	
222	2.10	Grad Asst. Office	175	240	
231	2.8 A-D	Racquet	232	1,000	
232	2.8 A-D	Racquet	214	-	
2.0 STUDENT ORGANIZATIONS, GOVERNANCE, PROGRAMMING & SERVICES SUBTOTAL			9,501	12,770	3,269
3.0 MEETING & PROGRAM					
147	3.0	Storage	206	-	
162	3.2 F	Stage Storage	1,013	-	
245	3.0	AV Storage	76	-	
256	3.0	Storage	149	-	
257	3.0	Meeting Room	667	2,800	
258	3.0	Meeting Room	292	-	
259	3.3 B	Meeting Room	1,164	1,130	
260	3.0	Meeting Room	291	-	
263	3.0	Meeting Room	494	-	
322	3.0	Storage	55	-	
323	3.0	Storage	54	-	
327	3.0	Meeting Room	303	-	
328	3.0	Meeting Room	483	-	
329	3.0	Meeting Room	307	-	
330	3.3 E	Meeting Room	483	960	
331	3.0	Meeting Room	606	-	
332	3.0	Meeting Room	703	-	
340	3.0	Meeting Room	551	-	
342	3.0	Meeting Room	398	-	
337	3.3 C	Meeting Room	1,311	1,300	
339	3.3 D	Meeting Room	1,861	2,000	
100	3.3 F	Port of Call Lounge*	2,113	2,000	
100A	3.0	Storage	39	-	
104	3.0	Storage	373	-	
29	3.1 A-E*	Cellar	3,644	4,170	
105	3.2 A	Valhalla A	4,043	12,050	
106	3.2 B	Valhalla B	3,250	with 3.2A	
107	3.2 C	Stage	2,306	2,000	

CHANGES AND PROJECTIONS

ASSIGNABLE			EXISTING	PROPOSED	DIFFERENCE (+/-)
Room No	Item No	Room/Space Name or Current Function	Total ASF	Total ASF	
108	3.2 F	Storage	45	500	
109	3.2 F	Storage	60	-	
112	3.2 D	Men's Dressing	247	120	
113	3.2 E	Men's Shower	19	120	
114	3.2 D	Restroom	31	120	
117	3.2 E	Women's Dressing	257	120	
202	3.2 F-G	Control Room	553	1,000	
203	3.2 F-G	Catwalk	206	-	
3.0 MEETING & PROGRAM SUBTOTAL			28,653	30,390	1,737
4.0 DINING SERVICES					
62	4.0	Cellar Manager	135	-	
62	4.0	Marking Manager	96	-	
68	4.0	Reception Area	293	-	
0068C	4.1 A-E	Storage	29	with 4.1	
161	4.1 A-E & J-K	Food Service Storage	482	1,710	
0159A	4.1 F	Freezers	123	700	
0158B	4.1 G	Cooler	123	300	
0158C	4.1 H	Cooler	123	200	
0158D	4.1 I	Cooler	123	200	
	4.10 A-D	Locker Rooms	-	820	
159	4.2 A-C	Kitchen	1,826	1,650	
157	4.2 B	Catering	218	1,796	
158	4.3 A-E	Dishwashing	684	1,470	
0068A	4.4 A	Director's Office	161	120	
0068B	4.4 B-D	Office	125	280	
0142B	4.5 A-E	Cyber Café	983	2,064	
31	4.6 A-G	Cellar Kitchen	933	1,280	
124	4.7 A-H	Grille	367	with 4.7	
126	4.7 A-H	Food Serving	416	with 4.7	
129	4.7 A-H	Food Trays	123	with 4.7	
121	4.7 A-H	Foodservice	421	with 4.7	
123	4.7 A-H	Galley	2,788	2,300	
146	4.8 A*	Ward Room (Mtg & Program)	1,847	850	
33	4.9 A	Dining	319	6,800	
142	4.9 A	State Room (Dining)	6,297	-	
141	4.9 A	Main Deck	3,140	-	
4.0 DINING SERVICES SUBTOTAL			21,944	22,540	596
5.0 BOOKSTORE					
69	5.0	Storage	397	-	
71	5.0	Bookstore Ship/Rcv'g	350	-	
72	5.0	Storage	400	-	
73	5.0	Storage	1,205	-	
2	5.0 A	Bookstore	5,186	7,000	

CHANGES AND PROJECTIONS

ASSIGNABLE			EXISTING	PROPOSED	DIFFERENCE (+/-)
Room No	Item No	Room/Space Name or Current Function	Total ASF	Total ASF	
0002A	5.0	Bookstore Office	78	-	
4	5.0	Bookstore Storage	452	-	
5	5.0	Bookstore Storage	580	-	
7	5.0	Cashier	362	-	
8	5.0	Office	100	-	
9	5.0	Data	90	-	
17	5.0	Office	183	-	
19	5.0 B	Textbook Rental	4,965	9,000	
20	5.0	Storage	298	-	
5.0 BOOKSTORE SUBTOTAL			14,646	16,000	1,354
8.0 LOBBY					
140	8.0	Info Booth	78	2,500	
8.0 LOBBY SUBTOTAL			78	2,500	2,422
9.0 LOUNGES					
336	9.0 A	Lounge	890	2,000	
325	9.0 B	Lounge	943	1,000	
246	9.0 C	TV/Reading Area	663	1,000	
0044A	9.0 D	Study	205	250	
45	9.0 D	Storage	144	250	
46	9.0 D	Study	160	250	
0046A	9.0 E	Study	102	250	
0245A	9.0 E	Vending	243	500	
9.0 LOUNGES SUBTOTAL			3,350	5,500	2,150
6.0 RETAIL			0	1,300	
7.0 RECREATION			0	6,000	
% INCREASE					
TOTAL SF COMPARISON*			85,132	102,840	21%

* Totals do not include non-assignable square footage or circulation factors.

CHANGES AND PROJECTIONS

5.2. New Programs/Growth

The Cellar currently hosts small bands, comedy performers, and acoustic performers. The new “Entertainment Cafe” would offer larger/regional bands and late night programs in addition to the types of programs that are currently offered.

The Multipurpose Room will allow the University to:

- Host our Distinguished Lecture Series event, which is currently held at the REC;
- Host larger bands, which are currently held at the REC;
- Expand ethnic and International dinners, which currently are as large as they can be due to attendance restrictions;
- Expand the number and types of receptions and dinners. We will be able to expand the banquet size and frequency of these types of events because of increased potential for seating;
- Increase our potential for larger campus events and conferences.

5.3. Planned Utilization of Space

The University anticipates the hours will remain the same, except for the “Entertainment Café” hours. This area will be open until 2:00 a.m. on Thursdays, Fridays, and Saturdays during the academic year.

6. Space Description

6.1 Space Type Narrative (All Major Categories of Space)

6.1.1 Student Center Administration and Services

- Coordinates all administrative functions within the facility.
- Serves as a one-stop office for student assistance.
- Increases communication between sub-units by consolidation of offices.
- Provides increased problem solving opportunities for students.
- Provides space for University Center’s Administrative office staff.
- Provides space for Dining Services office staff.
- Provides space for the ID Card office staff.
- Provides space for the University Reservations and Centers Scheduling office staff.
- Provides space for Custodial Supervisor office.

<u>Area or Space</u>	<u>Description</u>
Administrative Office/University Centers Cartwright	Provides coordination of unit activities, budget development, strategic planning, and supervision of programs and services. Provides coordination, support, and financial assistance to student organization members and the campus community. This area currently holds offices for the Director, Associate Director, Assistant Director, Program Director, Financial Specialist, Office Associate, University Services Program Associate, and two graduate assistants. Students are assisted with publicity needs, appointments, fundraising efforts, cash box requests for student organizations, etc. Additionally, this area includes the vault and the mail room/work room.
Custodial Services Supervision	Maintains building cleaning schedules and set-up needs throughout the Cartwright Center.
Dining Service Coordination (currently managed by Chartwells)	Includes offices for the dining service director, catering manager, marketing coordinator, Cellar managers, and office manager.
Meal Plan/ID Card Office	Assists students with meal plan sign ups/questions, obtaining ID cards, and purchasing campus cash.
Programming Coordination	Includes office for program advisor for the Campus Activities Board.
University Reservations/Event Support	These offices reserve campus rooms and audiovisual equipment for non-class activities; includes scheduling functions for Cartwright Center and other buildings. This area invoices for room rentals when appropriate.

6.1.2 Student Organizations, Governance, Programming, and Services

- Offices for primary student organizations, including Student Association, Campus Activities Board (Programming Board), Fraternity Sorority Life organizations, multicultural student organizations, Veterans, Pride Center, and the Student newspaper.
- Informal space for student organizations to interact.
- Graphics area for development of publicity material.
- Computers for organization use.

SPACE DESCRIPTION

- Central location for primary student organizations on campus.
- Allows for increased interactions between members of these key organizations.
- Social space to promote communication between organization members.
- Work space for publicity creation and event planning. Provides space to study, eat, rest, socialize, meet, plan, and host events.
- Readily identifiable separate entrance.
- Large storage area for archives, seasonal and organization ritual materials.

<u>Area or Space</u>	<u>Description</u>
Campus Activities Board (CAB)	CAB facilitates programming efforts for the campus community, providing social, educational, cultural, and entertaining programs and events.
Diversity Center & Pride Center	The Pride Center and Safe Space serve the lesbian, gay, bisexual transgender, intersex, queer, questioning, asexual community and their allies. The Diversity Center provides a safe space for multicultural and diversity organizations. Students use these spaces to study, eat, rest, socialize, meet, plan, and host events.
Fraternity and Sorority Life	This area supports the sorority and fraternity organizations on campus, providing a work area and meeting space.
Graphics	This area is designed to accommodate publicity and promotional needs of student organizations. Services include design assistance, photocopies, lamination, faxing, and scanning images.
Leadership & Involvement Center	This Center assists students in finding involvement and volunteering opportunities on and off campus. It also aids students in developing knowledge and awareness skills to enhance participation on campus and within the community.
Racquet	The student newspaper informs the university community of issues and events and creates a forum for student opinions and achievements.
Student Association	This is the primary governing body of the UW-La Crosse student body. These offices provide space to study, eat, rest, socialize, meet, and plan.

6.1.3 Meeting & Program

6.1.3.1 Entertainment Café Space

- A dining location for pizza, wings, and other student friendly entrées
- Assortment of beverages served
- A program space for local and regional bands, comedians, etc.
- A late-night programming space

- Space to feel like a night club
- Two-story height space
- Cool, yet comfortable – a true student hang-out alternative to going off campus

6.1.3.2 Multi-Purpose Space

- Space flexible for large banquets, up to 600-700. Current capacity in Cartwright is approximately 475 and is inadequate.
- Space for International student banquet, multicultural banquets, and programs
- Space for community banquets, such as Mrs. Oktoberfest, The Women’s Fund, Boy Scouts and Girl Scouts.
- Space for concerts for the Music Department groups (Jazz band, concert choir, etc.)
- Potential space for wedding receptions, in accordance with university policy
- Flexible space to allow for a variety of events to occur
- Two-story height space

6.1.3.3 Meeting Rooms

- Variety of sizes to accommodate meetings by student organizations. (UW-La Crosse has approximately 180 active student organizations.)
- Meeting space for university events such as freshmen registration and orientation
- Meeting rooms for summer camps and conferences

6.1.3.4 Senate Chambers

- Primary meeting room for student governance chamber
- Fine (formal) meeting room for other university meetings
- Easily accessible and along a primary route
- Preferably identifiable from exterior

6.1.4 Dining Services

6.1.4.1 Retail Market Place

- Dining areas for cash and block plan students
- Overall overflow in areas for dining students
- Will include a food court for multiple dining options
- The dining areas should be integrated off main floor circulation.
- Contiguous with exterior dining opportunities

6.1.4.2 Coffee House

- Separate coffee shop with increased interaction
- Cyber Cafe or similar concept for smoothies and other ice cream /frozen yogurt products
- Central location on the main level with proximity to outdoor seating
- This area will serve as an acoustic performance space.

6.1.4.3 Catering

- Special meals for campus and community organizations

6.1.5 Bookstore

6.1.5.1 Retail

- Includes some textbooks and workbooks for students
- Class Supplies
- Soft goods and university signature items
- Convenience store items

6.1.5.2 Textbook Rental

- Textbooks for undergraduate courses

6.1.6 Recreation

- Billiards and other recreation games
- Opportunities to relax and interact

6.1.7 Information Center

- Welcome center for the building
- Information available on events and meetings within the facility

6.1.8 Lounges

- The student center serves as the “living room” on campus.
- Study areas for all types of study
- Promote interaction between students

Architectural Interior Concept Renderings



FIGURE 6.1.2 View of Student Organizations Entrance/Lounges



FIGURE 6.1.3 View of Entertainment Cafe'



FIGURE 6.1.4 View of the Main Lounge/Coffee House

SPACE DESCRIPTION

6.2 Program Space Tabulation Detail

Table 6.2.1 Program Space Tabulation Detail

ITEM NO	PROGRAM BY ROOM TYPE	QTY	SPACE CRITERIA			TOTAL ASF	PRIORITY 1	PRIORITY 3
			CAPACITY	SIZE (SF/OCC)	UNIT ASF (SF/RM)			
1.0	STUDENT CENTERS ADMINISTRATION & SERVICES							
1.1	Dining Services							
A	Reception Area/Counter	1	3	20	100	100	100	
B	Office 2: Campus Director	1	1		120	120	120	
C	Office 2: Marketing Director	1	1		120	120	120	
D	Office 2: Dietitian	1	1		120	120	120	
E	Office 3: Office Support	1	1		80	80	80	
F	Cash Counting Room	1	2		120	120	120	
G	Work Room	1	1		150	150	150	
H	Office 4: Student Interns Work Area	1	2	50	100	100	100	
-	Conference Room	1	6	20	150	150	0	150
1.2	I.D. Cards							
A	Office 2: Card Office Manager	1	1		120	120	120	
B	Office 2: Associate Director	1	1		120	120	120	
C	Office 4: Grad Student	1	1		50	50	50	
D	Service Counter	1	3	30	100	100	100	
1.3	University Reservations & Event Support							
A	Office 2: Reservation Coordinator	1	1		120	120	120	
B	Office 2: Event Support Coordinator	1	1		120	120	120	
C	Office 3: Support Staff	1	1		80	80	80	
D	Service Counter	1	3	30	100	100	100	
E	Office 3: Event Support	1	1		80	80	80	
F	Office 2: ID Card Office	1			120	120	120	
G	Reception Area	1	3	20	100	100	100	
H	Office 2: Catering	1	1		120	120	120	
I	Office 2: Custodial Supervisor	1	1		120	120	120	
1.4	Administration Staff							
A	Office 1: Director	1	1		150	150	150	
B	Office 2: Administrative Assistant	1	1		120	120	120	
C	Workroom/Mail	1			200	200	200	
D	Breakroom	1	6	20	200	200	200	
E	Waiting Area	1	6	20	300	300	300	
-	Conference Room	1	12	20	240	240	0	240
1.5	Financial Offices							
A	Office 2: Financial Coordinator	1	1		120	120	120	
B	Office 1: Office with Vault/Storage	1	1		150	150	150	
C	Office 2: Ticket Sales	1	1		120	120	120	
-	Office 2: Business Manager	1			120	120		120
1.6	Activities and Organizations							
A	Office 2: Assistant Director	1	1		120	120	120	
B	Office 2: Program Advisor	2	1		120	240	120	120
C	Activities	1	2		120	120	120	
D	Office 2/Shared: Grad Students	3	2	60	120	360	360	
1.7	Graduate Assistant Offices (Moved to 2.10)							
A	Office 2: Assistant offices	-	-	-	-	-	-	
1.8	Custodial							
A	Breakroom	1	10		700	700	450	250
B	Work/Repair Room	1			350	350	350	
C	Exterior Equipment Storage	1			700	700	700	
SUBTOTAL STUDENT CENTERS ADMINISTRATION		42				6,720	5,840	880

SPACE DESCRIPTION

ITEM NO	PROGRAM BY ROOM TYPE	QTY	SPACE CRITERIA			TOTAL ASF	PRIORITY 1	PRIORITY 3	
			CAPACITY	SIZE (SF/OCC)	UNIT ASF (SF/RM)				
2.0 STUDENT ORGANIZATIONS, GOVERNANCE, PROGRAMMING & SERVICES									
A	Dedicated Storage	1			3,000	3,000	3,000		
2.1	Sorority/Fraternity								
A	Open Office: Panhellenic	1	4		250	250	250		
B	Open Office: Intrafraternity Council	1	4		250	250	250		
-	Storage	1			700	700		700	
2.2	Campus Activities Board								
A	Open Office	1	5		800	800	800		
-	Storage	1			120	120		120	
2.3	Veteran's Offices								
A	Office 2:	1	1		120	120	120		
B	Open Office/Lounge	1	1		200	200	200		
2.4	Diversity (Multi-Cultural)								
A	Office 2:	4	1		120	480	480		
B	Open Office	1			1,000	1,000	1,000		
-	Storage	1			1,000	1,000		1,000	
2.5	Student Org Shared Spaces								
A	Conference Area	1	6	25	150	150	150		
B	Conference Room	1	12	25	400	400	300	100	
C	Graphics work area	1	8	50	500	500	500		
D	Shared Lounge	1	100	25	2,500	2,500	2,500		
E	Food Pantry	1			200	200	200		
-	Children's Area	1			100	100		100	
-	Breakroom with Kitchen	1			300	300		300	
-	Computer Area	1			100	100		100	
-	Printing Station	1			40	40		40	
2.6	Pride Center								
A	Library	1			100	100	100		
B	Office 2:	2			120	240	240		
C	Office 3:	1			80	80	80		
D	Office 2: De-Stress Room	1			120	120	120		
-	Lockable Storage	1			50	50		50	
-	Private Work Area	1			100	100		100	
2.7	Student Association (Senate)								
A	Reception area (Visitors)	1	2	25	50	50	50		
B	Backpack Storage	1			50	50	50		
C	Office 1: Shared	1	2		150	150	150		
D	Conference Room	1	10	20	200	200	200		
E	Open Office	1	8		640	640	640		
2.8	Campus Paper (The Racquet)								
A	Open Office - Large	1	12	50	640	640	640		
B	Open Office - Small	1	3	50	180	180	180		
C	Presentation area	1	5	20	100	100	100		
D	Interview Room	1			80	80	80		
-	Breakroom with Kitchen	1			150	150		150	
2.9	Leadership Involvement								
A	Office 2:	1	2		150	150	150		
2.10	Graduate Assistant Offices								
A	Office 2: Assistant offices	2	1		120	240	240		
SUBTOTAL STUDENT ORGANIZATIONS						42	15,530	12,770	2,760
3.0 MEETING & PROGRAM									
3.1	Entertainment Café								
A	Raised Platform	1			400	400	400		
B	Seating/Dance Floor	1	300	9	2,700	2,700	2,700		
C	Sound Equipment/DJ	1			150	150	150		
D	Green Room	1			120	120	120		
E	Storage	1			800	800	800		
3.2	Multi-Purpose Space								
A	Multi-Purpose Space	1	1250	9	11,250	11,250	11,250		
B	Prefunction	1			800	800	800		
C	Stage	1			2,000	2,000	2,000		
D	Green Room	2			120	240	240		
E	Toilet Room	2			120	240	240		
F	Equipment Storage	1			500	500	500		
G	Furniture Storage	1			1,000	1,000	1,000		

SPACE DESCRIPTION

ITEM NO	PROGRAM BY ROOM TYPE	QTY	SPACE CRITERIA			TOTAL ASF	PRIORITY 1	PRIORITY 3
			CAPACITY	SIZE (SF/OCC)	UNIT ASF (SF/RM)			
3.3	Meeting Rooms							
A	Meeting Room 1: See Diagram	3	30	20	700	2,100	2,100	
B	Meeting Room 2: Permanent Setup	1	48	20	1,130	1,130	1,130	
C	Meeting Room 3: Setup Varies	1	65	20	1,300	1,300	1,300	
D	Meeting Room 4: Setup Varies	1	100	20	2,000	2,000	2,000	
E	Meeting Room 5: Permanent Setup	2	48	20	480	960	960	
F	Meeting Room 6: Senate Chamber	1	50	40	2,000	2,000	2,000	
G	Meeting Room 7: Small, Permanent Setup	1	400	34	400	400	400	
H	Meeting Room 8: Small, Permanent Setup	1	300	30	300	300	300	
-	Meeting Rooms							
-	Theater	1	200		2,000	2,000		2,000
-	Projection Booth	1			240	240		240
-	Study Rooms							
-	Reservable Study Room	1	10		360	360		360
-	Semi Private Study Room	1			360	360		360
-	Informal Study Area	1			210	210		210
-	Tutor Rooms	1			320	320		320
SUBTOTAL MEETING & PROGRAM		31				33,880	30,390	3,490
4.0	DINING SERVICES							
4.1	Kitchen Support (Receiving)							
A	Receiving & Returnables Staging	1			200	200	200	
B	CO2 Storage	1			150	150	150	
C	Grease Tank & Pump	1			50	50	50	
D	Dry Storage	1			700	700	700	
E	Paper Storage	1			350	350	350	
F	Bulk Freezer Storage	1			700	700	700	
G	Meat & Dairy Storage	1			300	300	300	
H	Produce Refrigerator	1			200	200	200	
I	Catering Refrigerator - Walk-in	1			200	200	200	
J	Catering General Storage	1			180	180	180	
K	Catering Secure Storage	1			80	80	80	
4.2	Back of House							
A	Cold Food Prep Area	1			350	350	350	
B	Catering Workcenter/Off-site Staging	1			600	600	600	
C	Hot Food Production	1			700	700	700	
4.3	Sanitation							
A	Dishwashing	1			800	800	800	
B	Pot & Pan Washing	1			250	250	250	
C	Mop Closet w/ Storage	1			150	150	150	
D	Chemical Room	1			120	120	120	
E	Pot & Pan Storage	1			150	150	150	
4.4	Offices							
A	Office 2: Building Manager	1			120	120	120	
B	Office 3: Executive Chef	1			80	80	80	
C	Office 3: Retail Manager	1			80	80	80	
D	Cash Counting Room	1			120	120	120	
4.5	Coffee House							
A	Coffee/Smoothie Serving Area	1			700	700	700	
B	Walk-in Cooler	1			64	64	64	
C	Storage	1			100	100	100	
D	Support	1			200	200	200	
E	Seating, 50 w/ some soft	1	50	20	1,000	1,000	1,000	
4.6	Entertainment Cafe Support Area							
A	Service & Production	1			500	500	500	
B	Back of house	1			200	200	200	
C	Dry Storage	1			100	100	100	
D	Cooler	1			80	80	80	
E	Freezer	1			100	100	100	
F	Ware Washing	1			180	180	180	
G	Office 2: secure, includes cash counting	1			120	120	120	
4.7	Retail Market Place							
A	International	1			200	200	200	
B	Pasta	1			200	200	200	
C	Deli, Soups, Salads	1			200	200	200	
D	Breakfast All Day	1			200	200	200	
E	Grab-n-Go with Bakery	1			550	550	550	
F	Grill	1			300	300	300	

SPACE DESCRIPTION

ITEM NO	PROGRAM BY ROOM TYPE	QTY	SPACE CRITERIA			TOTAL ASF	PRIORITY 1	PRIORITY 3
			CAPACITY	SIZE (SF/OCC)	UNIT ASF (SF/RM)			
G	Mexican	1			250	250	250	
H	Potential National Concept	1			400	400	400	
-	Chef's Stage/Chef's Suite	1			200	200		200
-	Tapa	1			200	200		200
4.8	Private Dining							
A	Seating	1	50	17	850	850	850	
4.9	Dining							
A	Seating	1	400	17	6,800	6,800	6,800	
4.10	Locker Rooms							
A	Student Locker Area	1	20	5	100	100	100	
B	Full-time Employee Locker Area	1	40	5	250	250	250	
C	Uniform Storage	1			150	150	150	
D	Toilet Rooms	1			320	320	320	
4.11	Catering							
A	Plating/Staging	1			1,200	1,200	1,200	
B	Mop Sink	1			80	80	80	
C	Storage	1			300	300	300	
D	Service Cabinets	1			36	36	36	
E	Seasonal Storage	1			180	180	180	
-	Food Market							
-	Grab-n-Go Freezer/Refrigerator	1			400	400		400
-	Merchandizing	1			400	400		400
-	Cashier/Condiments	1			200	200		200
SUBTOTAL DINING SERVICES		59			23,940	22,540	1,400	
5.0 BOOKSTORE								
A	Retail	1			7,000	7,000	7,000	
B	Textbook Rental	1			9,000	10,000	9,000	1,000
SUBTOTAL BOOKSTORE		2			17,000	16,000	1,000	
6.0 RETAIL								
A	Bank	1			1,000	1,000	1,000	
B	Tenant Space - White box	1				1,200	300	900
SUBTOTAL RETAIL		2			2,200	1,300	900	
7.0 RECREATION								
A	Laser Tag	1			3,000	3,000	3,000	
B	Video Game Area	1			300	300	300	
C	Billiards	1			1,000	1,000	1,000	
D	Ping Pong	1			700	750	700	50
E	Miscellaneous Gaming	1			600	600	600	
F	Lounge	1			400	400	400	
-	Bowling Lanes	1			6,100	6,100		6,100
-	Backpack Storage	1			100	100		100
SUBTOTAL RECREATION		8			12,250	6,000	6,250	
8.0 LOBBY & ENTRANCE								
A	Information Center, Counter	1			250	250	250	
B	Queuing Space	1			150	150	150	
C	Secure Storage	1			100	100	100	
D	Main "Atrium" type space	1			2,000	2,000	2,000	
SUBTOTAL LOBBY		4			2,500	2,500	0	
9.0 LOUNGES								
A	Main Lounge	1			2,000	2,000	2,000	
B	Medium Quiet Lounge	1			1,000	1,000	1,000	
C	Medium Active Lounge	1			1,000	1,000	1,000	
D	Small Quiet Lounge	3			250	750	750	
E	Small Active Lounge	3			250	750	750	
-	Pocket Lounge	1			1,125	1,125		1,125
-	Commuter Lounge	1			500	500		500
SUBTOTAL LOUNGES		11			7,125	5,500	1,625	

SPACE DESCRIPTION

ITEM NO	PROGRAM BY ROOM TYPE	QTY	SPACE CRITERIA			TOTAL ASF	PRIORITY 1	PRIORITY 3
			CAPACITY	SIZE (SF/OCC)	UNIT ASF (SF/RM)			
10.0	BUILDING SERVICES (Non-assignable)							
A	Pallet/Boxes Storage	1			700	700		
B	Catering Room	1			350	350		
C	Pallet Jack Storage	1			200	200		
D	Shipping Desk	1			120	120		
E	Catering Van - Dock	1			200	200		
F	Receiving	1			1,000	1,000		
G	Interior Parking - Electrical Truck	1			200	200		
H	Repair Shop	1			150	150		
I	Janitorial Storage	7			40	280		
J	Family Restroom	1			80	80		
K	Gender Neutral Bathroom	3			70	210		
L	Custodial Support							
L.1	General Storage	1			120	120		
L.2	Cleaning	1			120	120		
L.3	Equipment Room	1			500	500		
L.4	Receiving	1			100	100		
M	Multi Purpose Support							
M.1	Custodial	1			120	120		
M.2	General Storage	1			500	500		
SUBTOTAL BUILDING SERVICES		20				4,950		

SPACE DESCRIPTION

6.3 Adjacency Matrices

Table 6.3.1 - Program Adjacencies

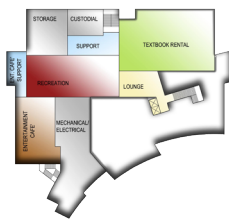
Department Number		1	1	2	3	3	3	4	4	4	4	5	5	6	7	8	9	9
Department Number	KEY	Student Centers Admin	Custodial	Student Organizations	Multi-Purpose Room	General Meeting Rooms	Senate Chamber	Entertainment Café	Retail Market Dining	Coffee House	Private Dining	Bookstore Retail	Bookstore Text Rental	Retail (Bank/White Box)	Recreation	Lobby/Information	Main Lounge	Other Lounges
	M = Mandatory I = Important Blank = Unimportant X = Undesirable																	
1	Campus Services			I				X					X		X			I
1	Custodial																	
2	Student Organizations					I	I	X				X	X		X	I	I	I
3	Multi-Purpose Room					I		X							X			I
3	General Meeting Rooms						I	X	X			X	X		X			I
3	Senate Chamber							X	X			X	X		X			I
4	Entertainment Café										X				M			I
4	Retail Market Dining									I	I		X			I	I	I
4	Coffee House											X		I		I	I	I
4	Private Dining											X	X		X			
5	Bookstore Retail												M	I		I		
5	Bookstore Text Rental																	
6	Retail (Bank/White Box)															I		
7	Recreation																	I
8	Lobby/Information																I	
9	Main Lounge																	
9	Other Lounges																	

SPACE DESCRIPTION

Table 6.3.2 - Stacking Adjacencies

Department Number	1	1	2	3	3	3	4	4	4	4	5	5	6	7	8	9	9
	Student Centers Admin	Custodial	Student Organizations	Multi-Purpose Room	General Meeting Rooms	Senate Chamber	Entertainment Café	Retail Market Dining	Coffee House	Private Dining	Bookstore Retail	Bookstore/ Text Rental	Retail (Bank/White Box)	Recreation	Lobby/Information	Main Lounge	Other Lounges
Third Floor	I		I	X	I		X	X	X	X	X	X	X	X	X	X	I
Second Floor	I		I	M	I	I	X	X	X	X	X	X	X	X	X	I	I
First Floor	X	I	I	X	X	I	X	M	M	M	M	X	M	X	M	I	I
Basement	X	I	X	X	X	X	M	X	X	X	X	M	X	M	X	X	I

KEY
 M = Mandatory
 I = Important
 Blank = Unimportant
 X = Undesirable



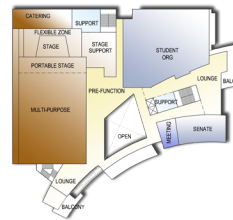
BASEMENT

- Basement Program**
- Textbook Rental
 - Recreation
 - Entertainment Café
 - Custodial
 - Lounge



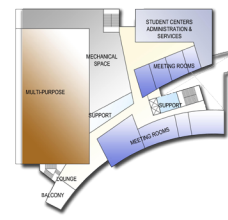
FIRST FLOOR

- First Floor Program**
- Retail Market/Dining
 - Building Services
 - Bookstore Retail
 - Coffee House
 - Lounges



SECOND FLOOR

- Second Floor Program**
- Multi-Purpose
 - Catering
 - Student Org
 - Student Senate
 - Lounge
 - Meeting Rooms



THIRD FLOOR

- Third Floor Program**
- Campus Services
 - Meeting Rooms
 - Lounge

Table 6.3.3

1.0 STUDENT CENTERS ADMINISTRATION & SERVICES

Department Number		1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8		
Department Number	KEY M = Mandatory I = Important Blank = Unimportant X = Undesirable	Dining Services									
		I.D. Cards									
		Univ. Reserv. & Event Support									
		Administrative Staff									
		Financial Offices									
		Activities and Organizations									
		Graduate Assistant Offices									
		Custodial Supervisor									

See Spatial Relationships Diagram Figure 6.4.1

Table 6.3.4

2.0 STUDENT ORGANIZATIONS, GOVERNANCE, PROGRAMMING & SERVICES

Department Number		2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	
Department Number	KEY M = Mandatory I = Important Blank = Unimportant X = Undesirable	Sorority/Fraternity									
		Campus Activities Board									
		Veteran's Offices									
		Diversity (Multi-Cultural)									
		Student Org Shared Spaces (Lounge)									
		Pride Center									
		Student Association (Senate)									
		Campus Paper (The Racquet)									
		Leadership Involvement									

See Spatial Relationships Diagram Figure 6.4.6

Table 6.3.5

3.0 MEETING AND PROGRAM

Department Number	3.1	3.2	3.2 F/G	4.11		
KEY M = Mandatory I = Important Blank = Unimportant X = Undesirable	Entertainment Café	Multi-Purpose Space	Storage (Furniture & Equipment)	Catering	Service Corridor	
3.1	Entertainment Café					
3.2		Multi-Purpose Space				
3.2F/G			Storage (Furniture & Equipment)			
4.11				Catering		
					Service Corridor	

Refer to Plan Diagrams Figures 6.4.6 - 6.4.11

Table 6.3.6

4.0 DINING SERVICES

Department Number	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	4.10	4.11	
KEY M = Mandatory I = Important Blank = Unimportant X = Undesirable	Kitchen Support (Receiving)	Back of House	Sanitation	Offices	Coffee House	Entertainment Café Support Area	Retail Market Place	Private Dining	Dining	Locker Rooms	Catering	
4.1	Kitchen Support (Receiving)	M						I			M	
4.2		Back of House		M						M		
4.3			Sanitation									
4.4				Offices								
4.5					Coffee House							
4.6						Entertainment Café Support Area						
4.7							Retail Market Place					
4.8								Private Dining				
4.9									Dining			
4.10										Locker Rooms		
4.11											Catering	

Table 6.3.7

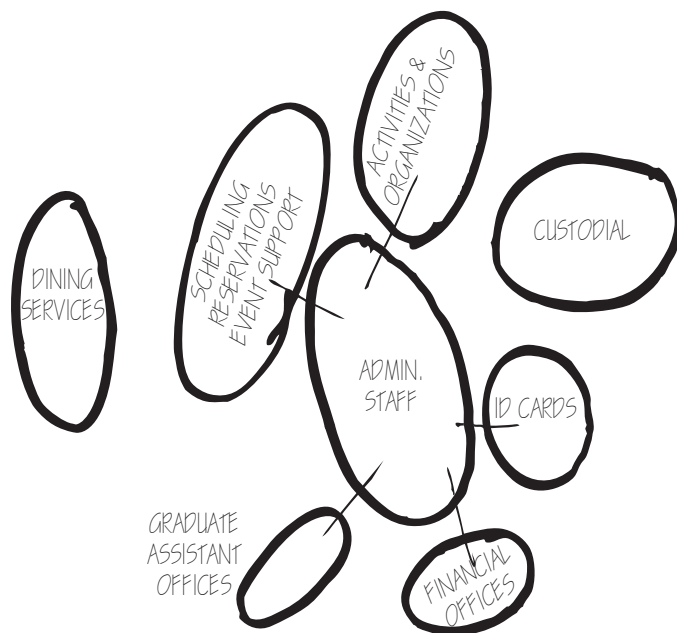
4.7 RETAIL MARKET PLACE MATRIX

Department Number		4.7A	4.7B	4.7C	4.7D	4.7E	4.7F	4.7G	4.7H
Department Number	<p>KEY M = Mandatory I = Important Blank = Unimportant X = Undesirable</p>	International	Pasta	Deli, Soups, Salads	Breakfast All Day	Grab-n-Go w/Bakery	Grill	Mexican	Potential Nat'l Concept Space
	4.7A	International							
	4.7B	Pasta							
	4.7C	Deli, Soups, Salads							
	4.7D	Breakfast All Day							
	4.7E	Grab-n-Go w/Bakery							
	4.7F	Grill							
	4.7G	Mexican							
	4.7H	Potential Nat'l Concept Space							

See Spatial Relationships Diagram Figure 6.4.17

6.4 Graphic Analysis of Spaces

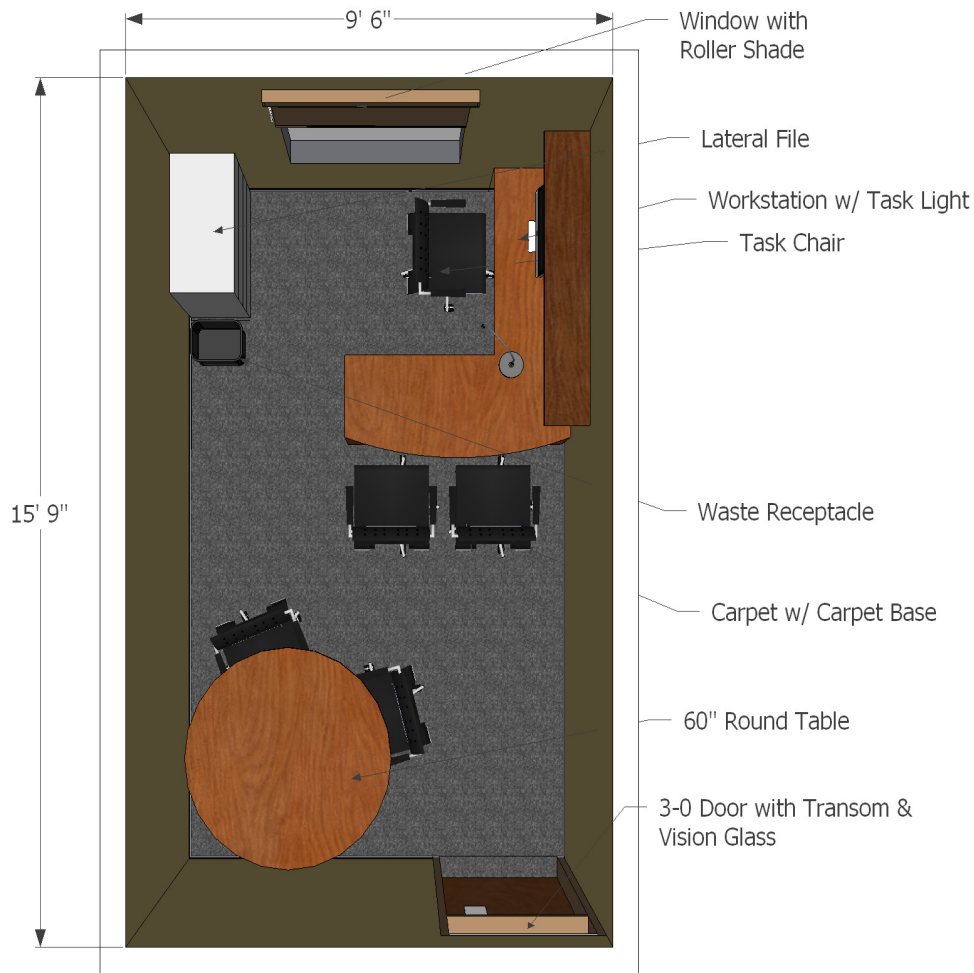
6.4.1 Student Centers Administration & Services



Spatial Relationships

SPACE DESCRIPTION

6.4.2 Office 1 (150 SF)



Office 1
150 SF

Office 1: A private office with fully enclosed walls with its own door intended for a director.

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

SPACE DESCRIPTION

6.4.2 Office 2 (120 SF)

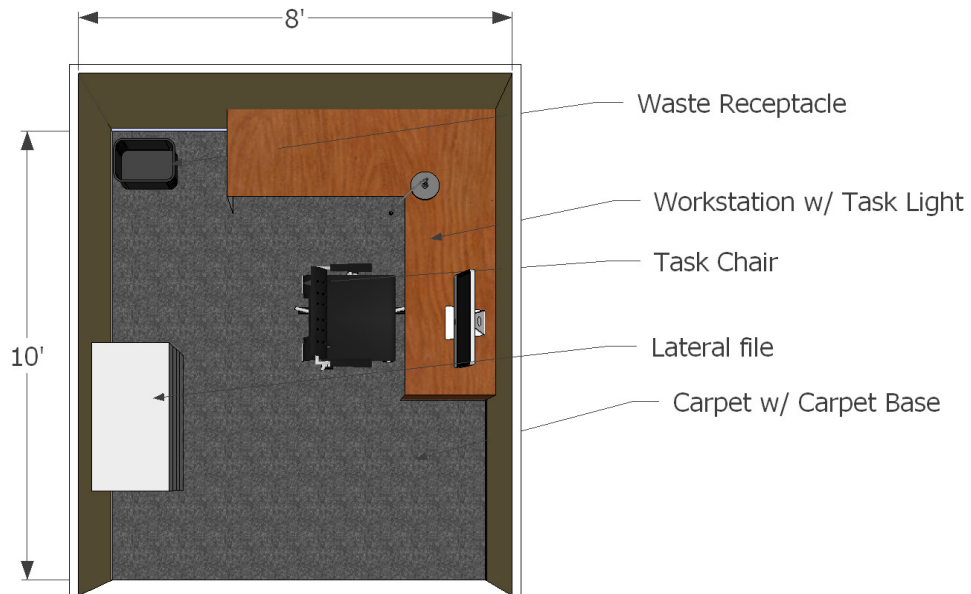


Office 2
120 SF

Office 2: A private office with fully enclosed walls with its own door intended for persons in a supervisory role, department head, manager or personnel in need of a private workspace.

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.4 Office 3 (80 SF)

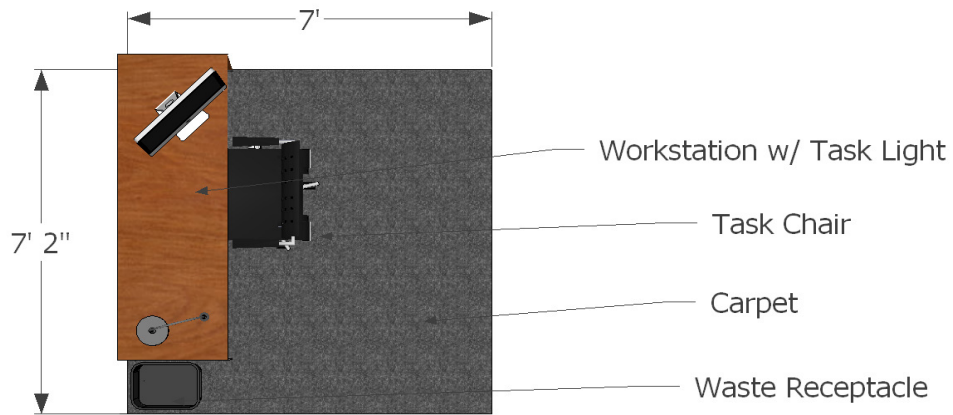


Office 3
80 SF

Office 3: A semi-private work space with system furniture or low partition walls. Intended for student employees, or support office roles.

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.5 Office 4 (50 SF)

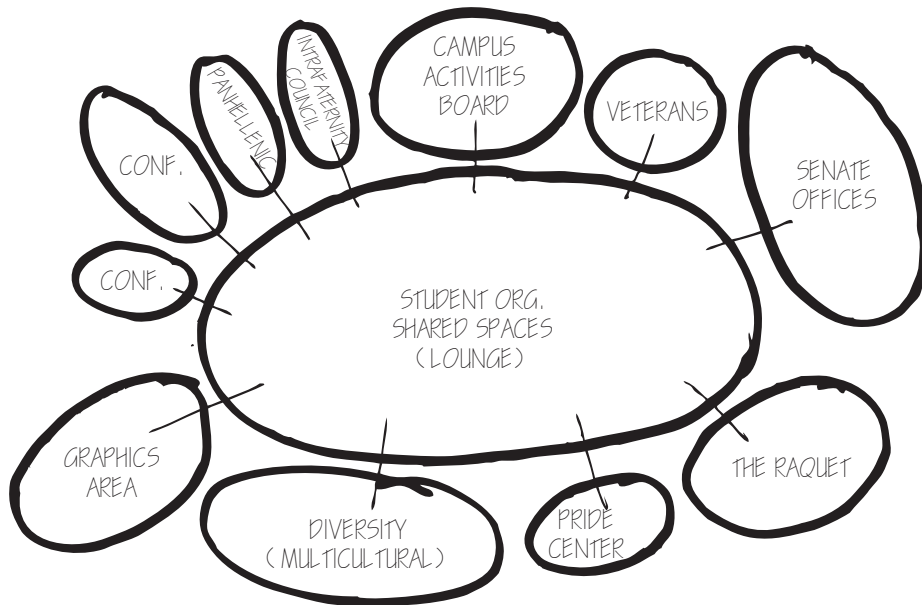


Office 4
50 SF

Office 4: An open workstation within a larger space. Intended for interns, student employees or support office roles/part time employees.

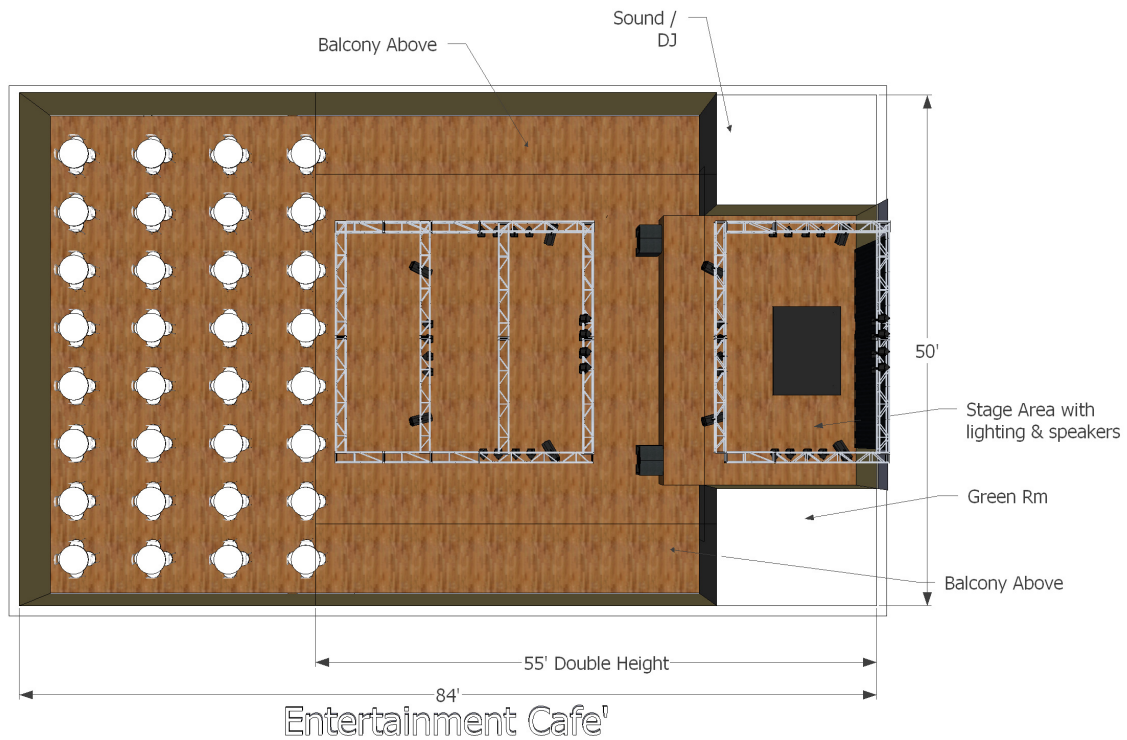
See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.6 Student Organizations



Spatial Relationships

6.4.7 Entertainment Cafe'

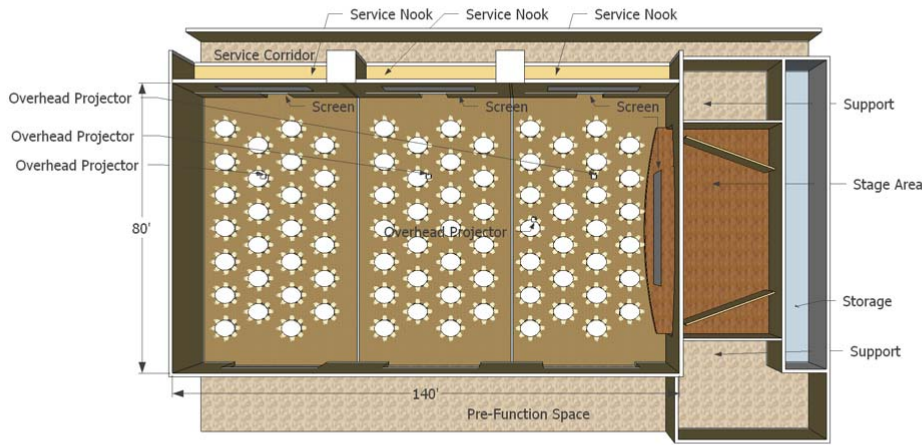


For concept rendering see Figure 6.1.3

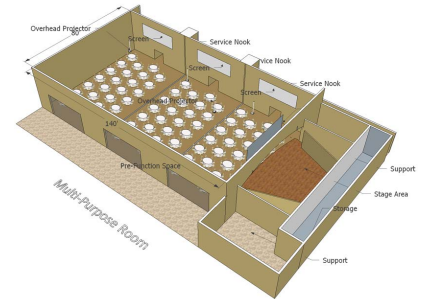
See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

SPACE DESCRIPTION

6.4.8 Multi-Purpose Room

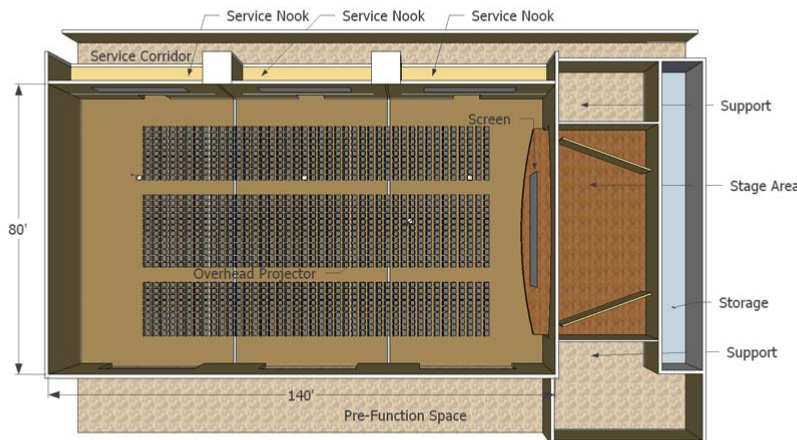


Multi-Purpose Room

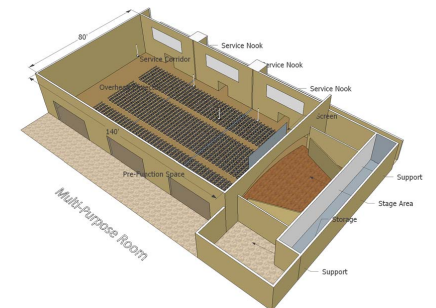


Tables: 78
Chairs: 624

Table Seating



Multi-Purpose Room

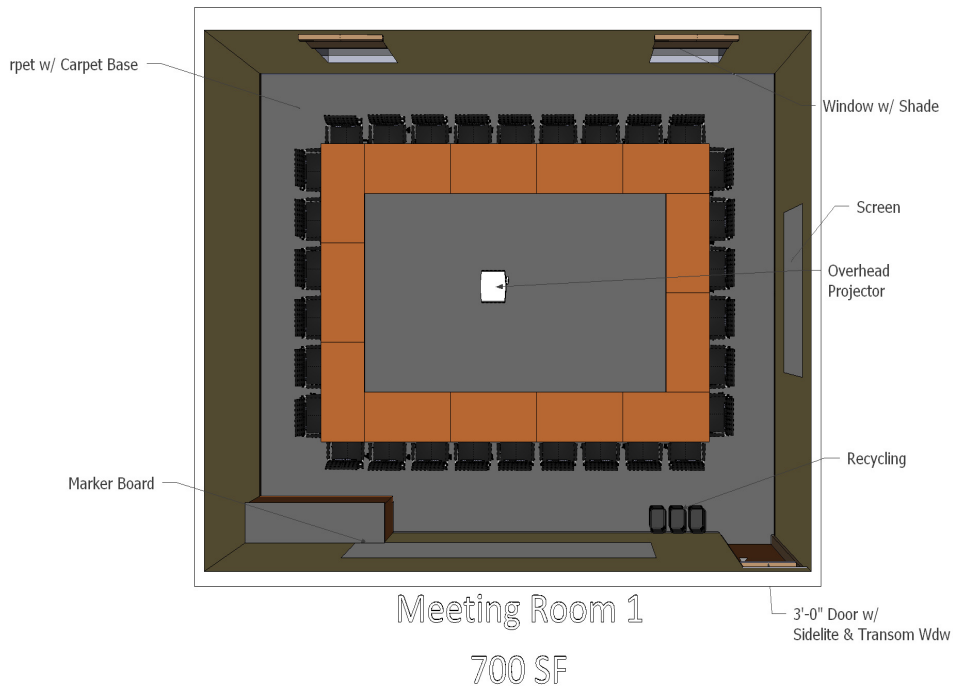


Tables: 0
Chairs: 1,260

Assembly Seating

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.9 Meeting Room 1 (700 SF)

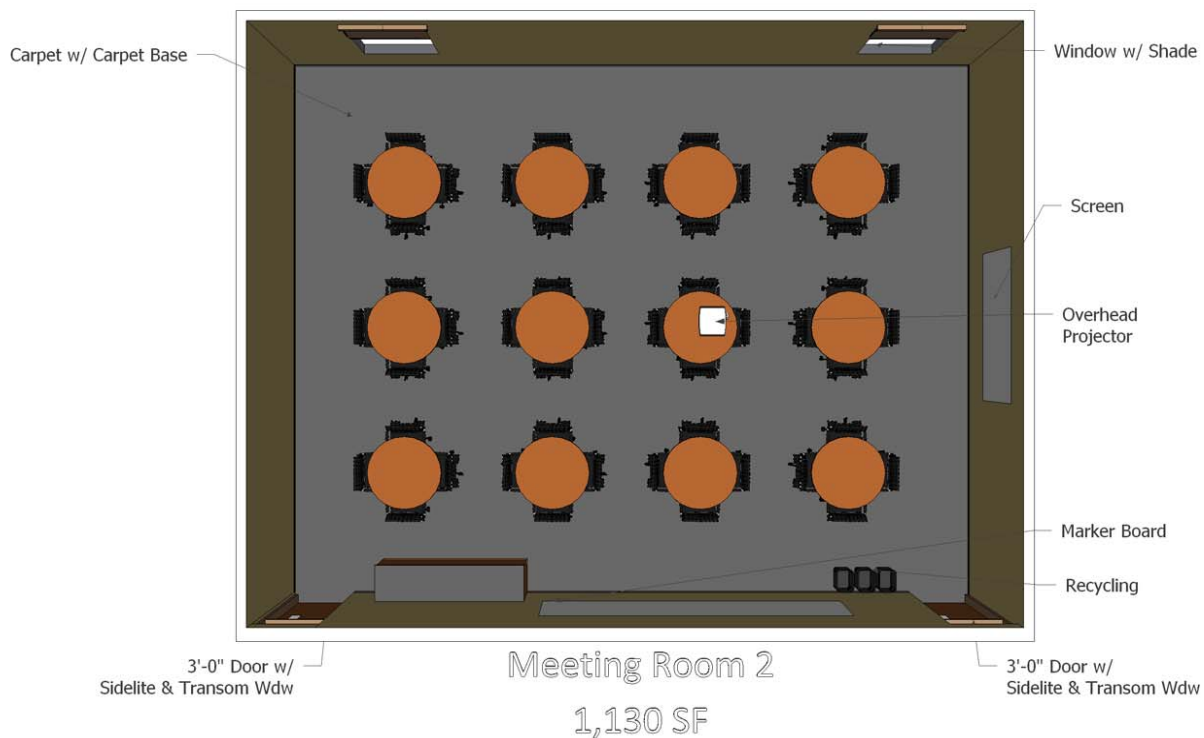


Available Arrangements:

- 2 permanent - hollow square
- 1 flexible with seminar/theatre set up

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.10 Meeting Room 2 (1,130 SF)

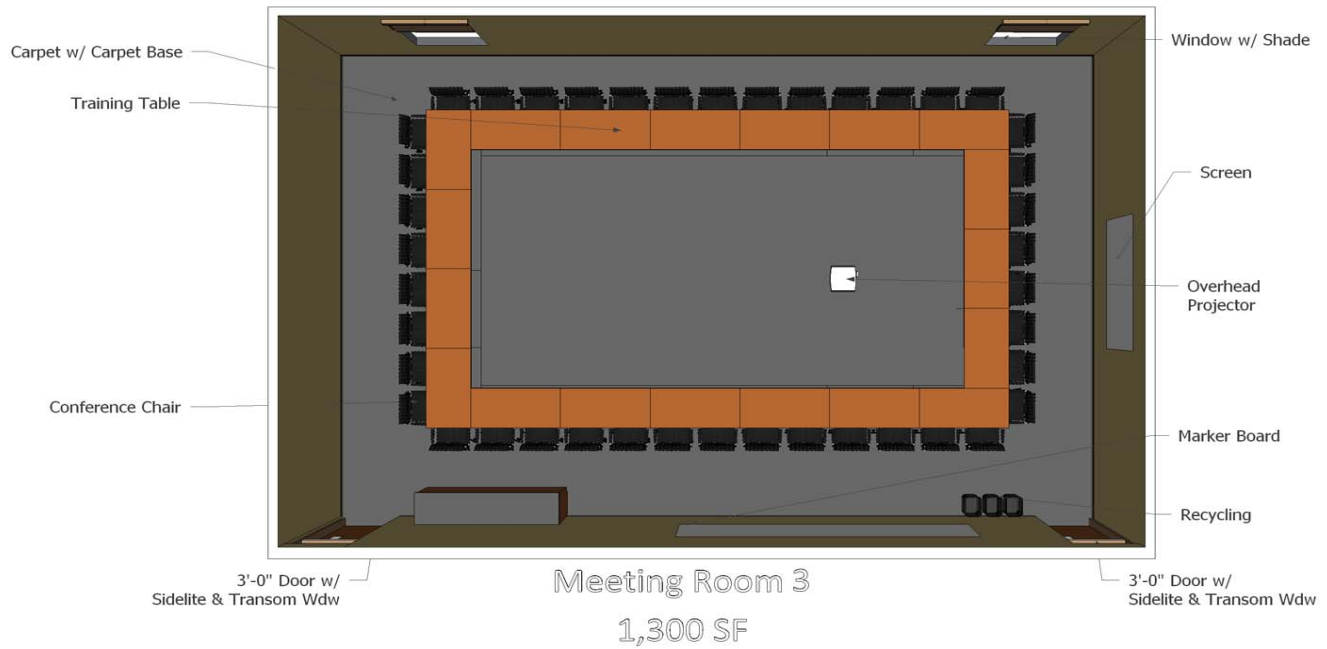


Available Arrangements:

- Banquet, diagram indicates maximum seating arrangement.

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.11 Meeting Room 3 (1,300 SF)

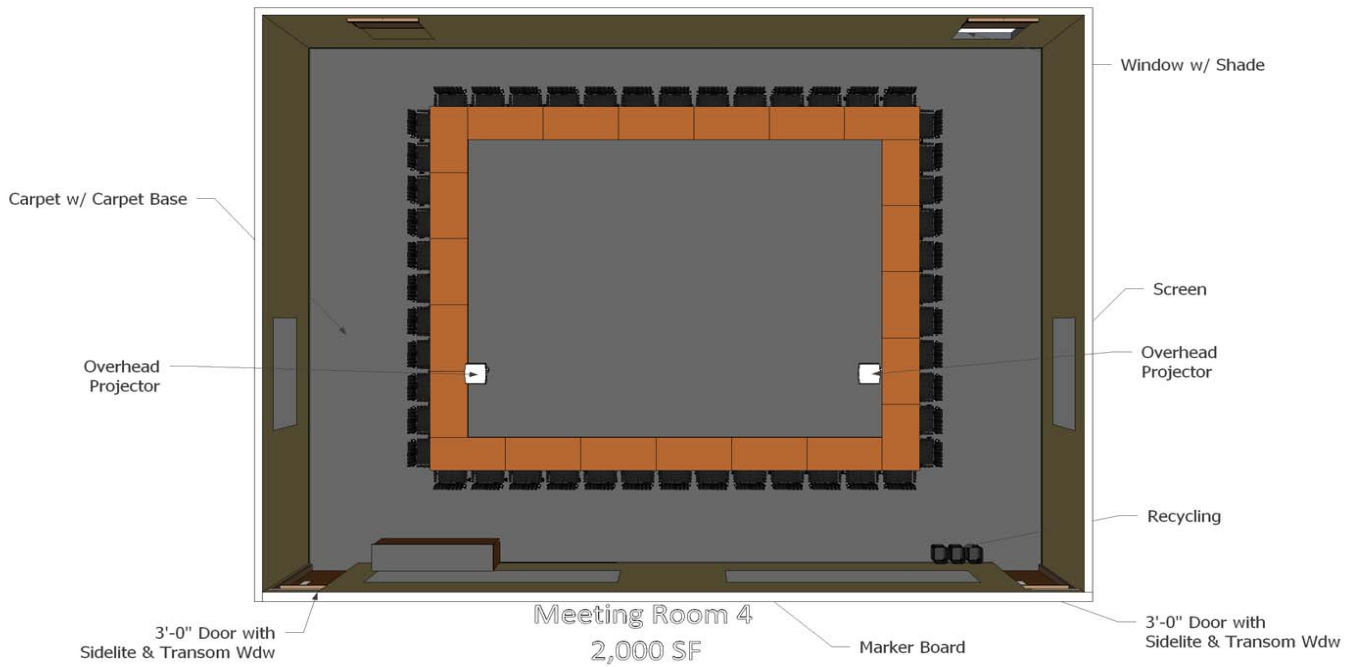


Available Arrangements:

- Theatre Style (Rows of Chairs)
- Seminar (Shown)
- Banquet

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.12 Meeting Room 4 (2,000 SF)

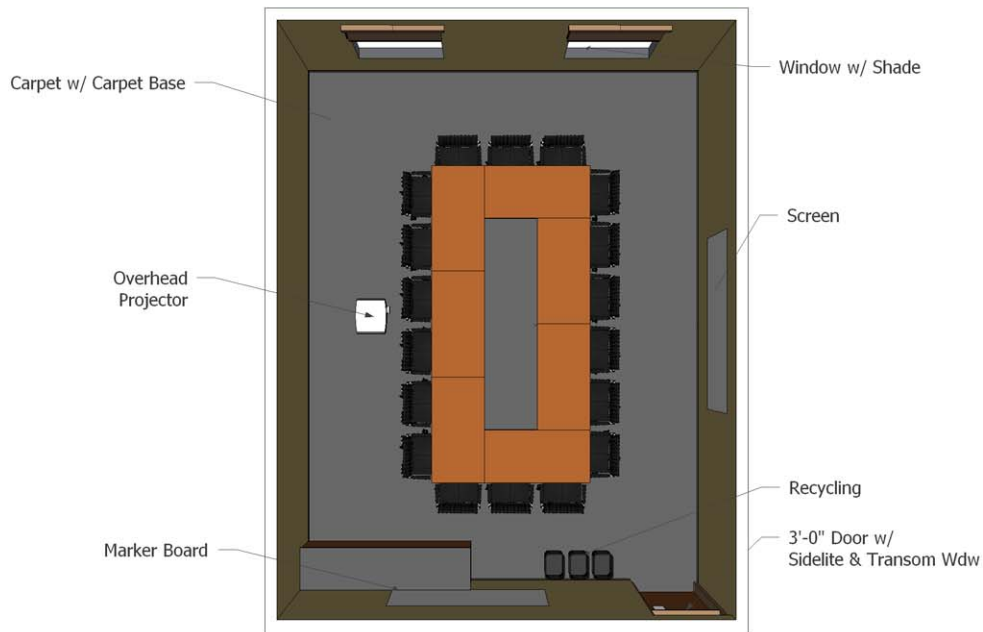


Available Arrangements:

- Theatre Style (Rows of Chairs)
- Seminar (Shown)
- Banquet

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.13 Meeting Room 5 (480 SF)



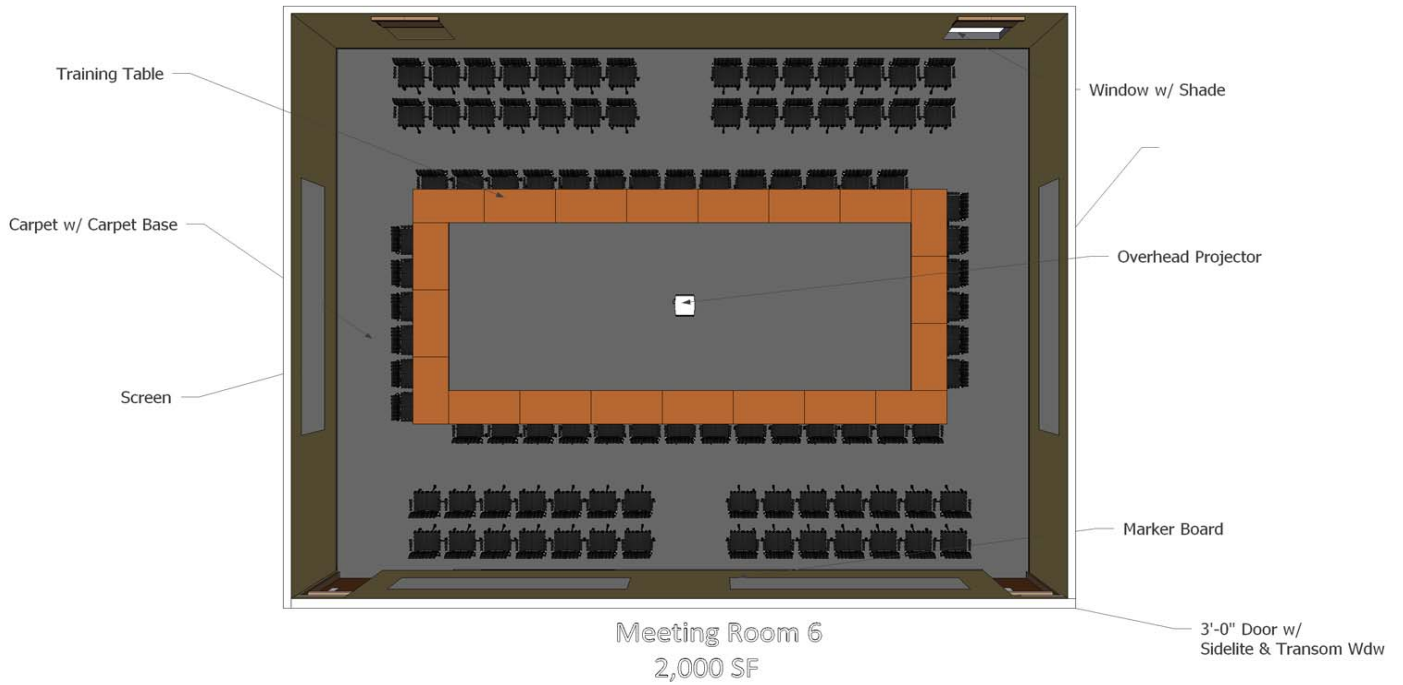
Meeting Room 5
480 SF

Available Arrangements:

- Seminar (Shown)

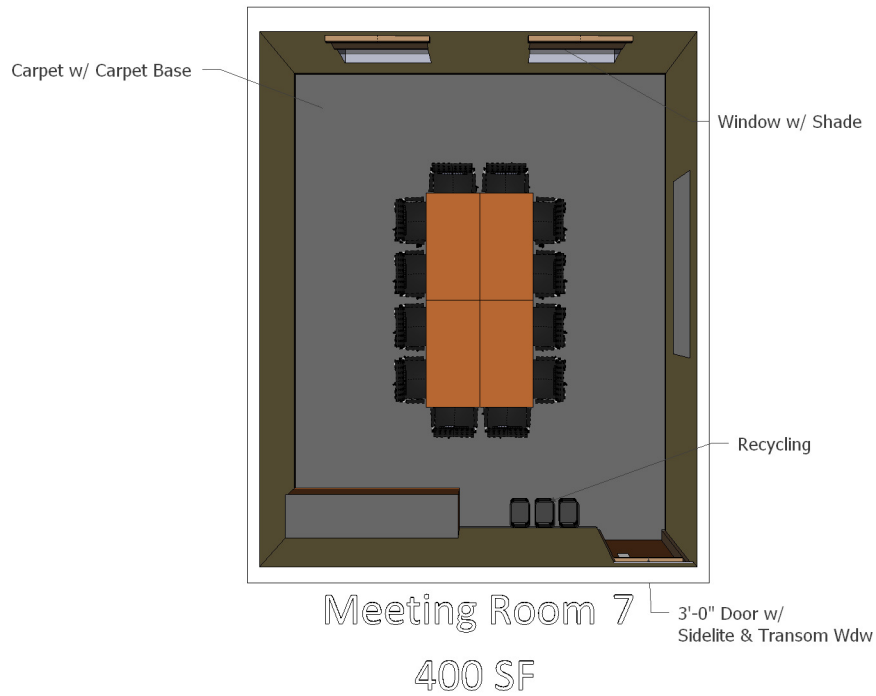
See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.14 Meeting Room 6 – Student Senate (2,000 SF)



See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.15 Meeting Room 7 (400 SF)

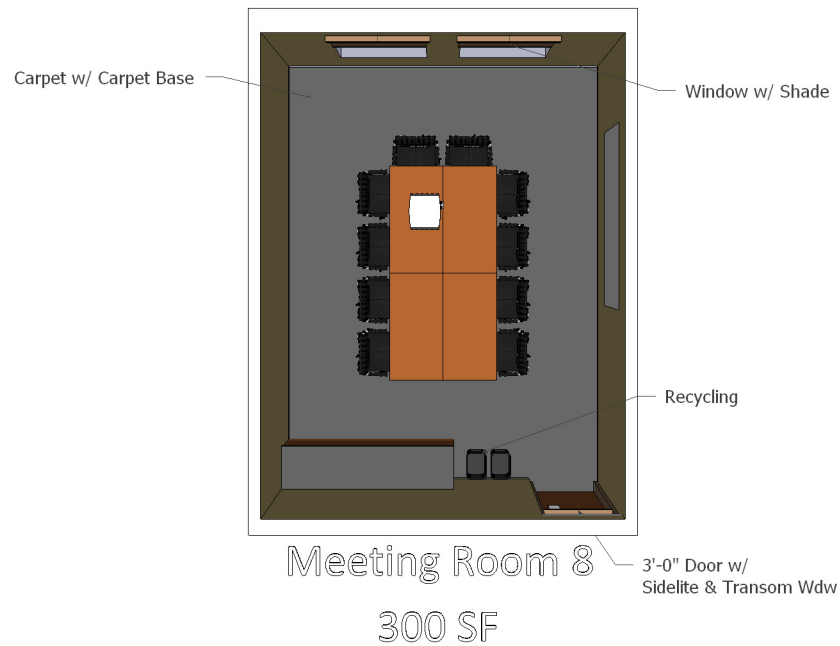


Available Arrangements:

- Seminar (Shown)

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.16 Meeting Room 8 (300 SF)

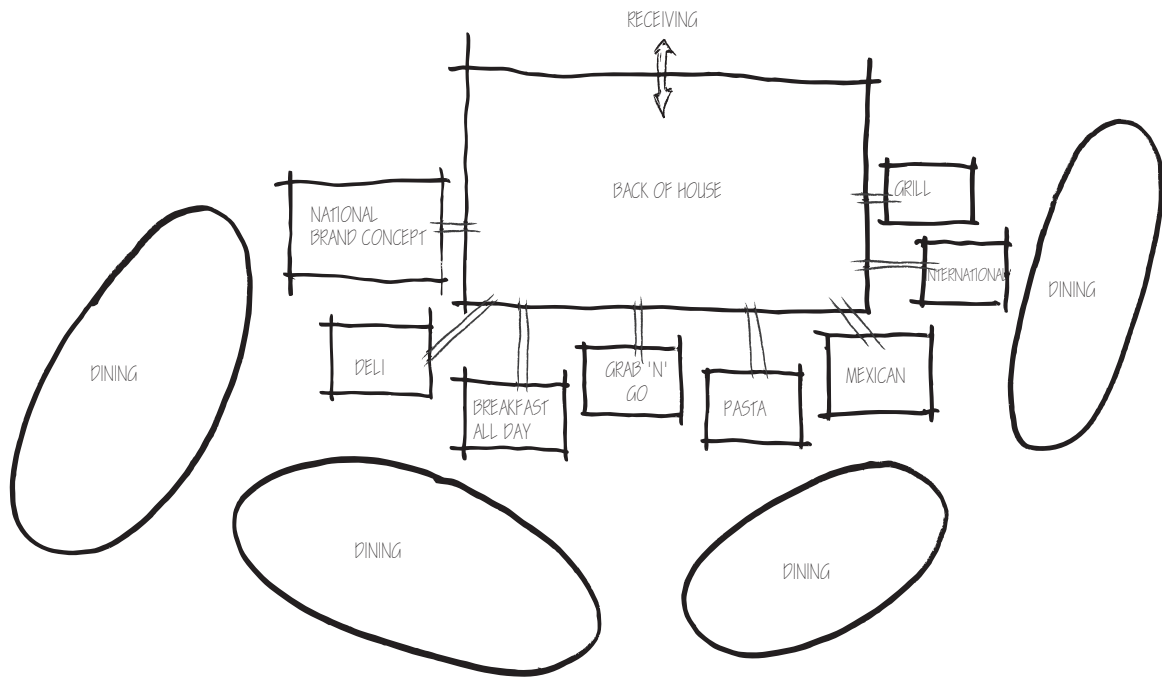


Available Arrangements:

- Seminar (Shown)

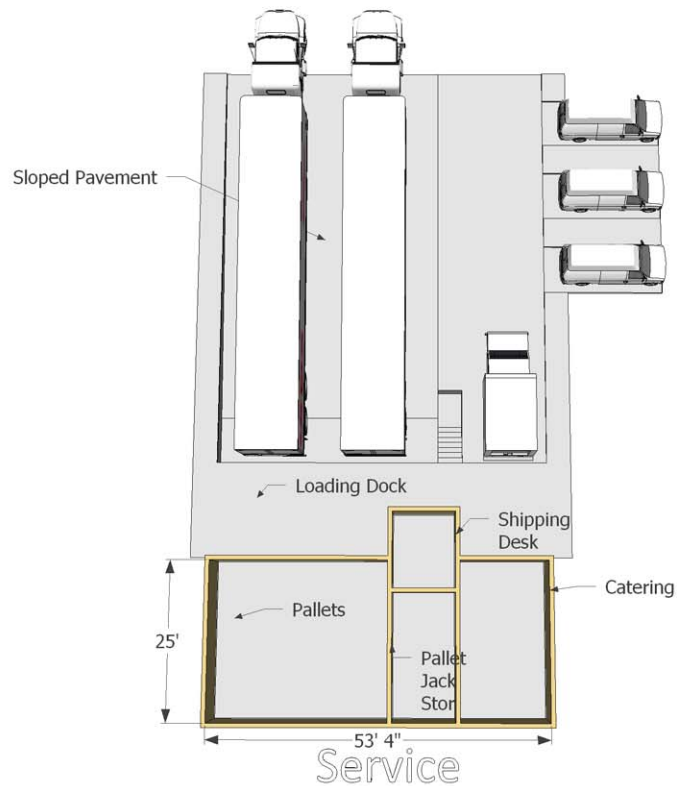
See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

6.4.17 Retail Dining



Spatial Relationships

6.4.18 Service (Back of House/Loading)



Equipment List:

- Lights
- Dock Leveler
- Bumper

See Room Data Sheets for additional information regarding finishes, furnishings and other equipment.

7. Design Criteria

7.1. Overview

Design Goals:

- Create a signature building with a unique identity, while respecting the Campus Master Plan Guidelines and the consistency of existing material use and scale.
- The building will be highly visible from the Campus main entrance. The design response should take advantage of this siting opportunity by creating an architecture response that is visually capturing and readily identifies the New Student center from this entrance.
- The building should visually and physically address its relationship to the future pedestrian campus mall.
- Consideration should be made to minimize cross-traffic between building service and pedestrians.
- The building's orientation and organization of interior spaces should provide opportunities to create outdoor programming areas such as a performance space, outdoor dining, outdoor lounges, passive green space, rain gardens, and or bike/moped parking.
- The interior should create engaging, synergistic, easily navigated circulation and way-finding. The design team should explore openings in floors to provide vertical visual connections.
- The building should be inviting and easy to use for the broader community/public. Care should be taken to design readily identifiable entrances.
- Maximize usable outdoor area, particularly to the south of the proposed building, and at the south east corner.
- Achieve at a minimum LEED Silver certification from the U.S. Green Building Council.

7.2 Design Guidelines/Parameters:

Siting:

- The Loading/Receiving functions should be located at the northwest corner of the site to allow for truck access from Farwell Street and minimize/eliminate deliveries and service access from East Avenue.
- It is desirable to locate active functions and lounge spaces along Badger Street (south) and East Avenue as these two sides of the building will have the strongest connections to the future campus mall, the stadium and the academic core. It would also provide opportunities to create indoor/outdoor functional connections. Creating visual and physical connections to the vacated, pedestrian only, Badger Street is critical.
- The northeast corner will be highly visible from the main campus entrance. It is desirable to place the retail bookstore at this location to animate the base of the building and also to capture a significant amount of foot traffic travelling between the Stadium and the future parking structure.
- A minimum of 40' should be kept between the new Student Center and the existing Wimberly Hall. This distance should increase if the new Student Center exceeds three stories in height. Although Wimberly's east elevation is monolithic with sparse windows, care should be taken to create a thoughtful, attractive response on the new Student Center's west elevation.
- It is desirable to create a pedestrian connecting pathway between the new student center and Wimberly Hall. This pathway would connect the new parking structure to the future pedestrian mall. The Service Drive to Wimberly (northeast corner of Wimberly) should be reconfigured to minimize any cross traffic with pedestrians.
- The building entrances should be located to capture campus pedestrian traffic coming from: the Residence Halls to the west and to the east; the new parking structure; the future Campus Mall, and from the Stadium.
- See Diagram "Existing Site Design Criteria" below for Existing Site Influences and Opportunities

Transportation Analysis

Vehicular circulation for public traffic is currently limited to La Crosse Street, East Avenue, 16th, 17th and Farwell Streets. Vine and 16th Streets also provide vehicular access to the southwest quadrant of Campus but limit traffic to the Campus perimeter. The limited street frontage of campus buildings necessitates alternate access means as identified in the Campus Master Plan. Service vehicles and deliveries access Campus buildings using sidewalks with distinctive scoring patterns meant to identify vehicular rated

pavement. Badger Street has been vacated despite its streetscape profile and vehicular traffic is restricted from Badger Street other than emergency and service access needs. Campus prefers service access on Badger Street be kept to a minimum and has stated that no service access for the new Student Center will be allowed off of Badger Street.

The new Student Center site has street access via East Avenue and Farwell Street. East Avenue is a main thoroughfare for Campus with high visibility by campus visitors and the general public rendering it a less than ideal location for service functions. Farwell Street on the other hand is considered a secondary campus vehicular route lending it a better location for service functions. The new parking structure and police services facility will generate high vehicular and pedestrian volumes which will need to be carefully considered in the final site plan and site access program. In addition the new Student Center will have high service needs. Building service access, space and accommodations need to be well vetted and planned to minimize visual impact and pedestrian conflicts.

Zoning

Campus and the site are zoned public/semi-public. There are no requirements for plan commission or zoning by the consultant team as Campus handles all City requirements and coordination. Campus recently worked with the City to vacate the two block section of Farwell between 17th Street and East Avenue. 16th and 17th Streets were also vacated between La Crosse Street and Farwell. Badger Street was vacated around the time of the Campus Master Plan (2005). East Avenue is the only site frontage that will need to conform to City setback ordinances. At the time of this publication, the setbacks are as such:

Chapter 15, section 15.17, C.

“Except as otherwise provided in Subsection (E), all new buildings or additions to existing buildings shall be set back at least ten (10) feet from all public ROW plus one additional foot for each five (5) feet of building height exceeding thirty-five (35) feet. (Am. Ord. #2938 - 10/7/85, #3213 - 5/10/90, 2nd Am. Ord. #4173 – 5/13/04 & Ord. #4294 – 10/13/05)”

Although there are no setback requirements from Wimberly Hall, careful consideration should be given to the massing and position of the new Student Center to minimize impacts on the east side of Wimberly. Pedestrian traffic may be high between these buildings as people access the campus academic core from the new parking facility. The east windows of Wimberly provide light and visibility to offices and classrooms.

Building

- It is desirable to have the Textbook Rental function in the lower level accessed from inside the first floor Retail Bookstore area. Direct access to the freight elevator is mandatory to the Textbook Rental area.
- The Retail Bookstore could have its own exterior entrance.
- The Entertainment Café (Pub Space) should be located in the lower level and directly adjacent to the Recreation area, possibly accessing the Entertainment Café through the Recreation area. This allows both spaces to share resources. The Entertainment Café dance floor area and performance platform should be double height space. Consideration for a future balcony area should be included, or explore opportunities to overlap upper functions, such as dining seating areas and the Coffee House, to create the same “balcony” feel, without building additional space.
- Consider locating the Coffee House and the Entertainment Café in close proximity to allow for earlier or later hours of operation when the remainder of the building may be closed.
- The Entertainment Café shall have superior sound control construction of its upper levels/ceiling to isolate it from other functions.
- The Entertainment Café should not have windows to the exterior; therefore the projection of the upper area above grade creates the potential for monolithic walls at the exterior. Care should be taken to place this in a non-premium location or to integrate the wall(s) into outdoor programming events such as a backdrop for a stage or outdoor movies.
- The Main Lounge should be located on the first floor, positioned such to take advantage of daylighting

opportunities. This could be situated partially or fully under an opening in the floor to create a spacious environment.

- The design team should accommodate “pocket” lounges throughout the facility. These are two to four person alcoves that are semi private, but not secluded. These are not specifically called out in the program space tabulations, however, approximately 12-15 should be planned for.
- The Student Organization was considered for placement on the first floor. Due to its aggregate size and to other functions that require first floor presence, placing Student Organization on the first floor would significantly reduce the usable outdoor programming space and storm water management areas. The Steering Committee determined that Student Organization should be located on the second floor, in close proximity to an opening in the floor to allow for visibility from the first floor. The design consultant should explore incorporating a balcony to give the Student Organization a prominent exterior presence.
- The Multi-Purpose Space requires a pre-function area that is parallel to the length of the main room. It is desirable to have large openings into each of the three dividable sections that are contiguous to the pre-function area, allowing the functions to individually and collectively capture additional space for events. The Multi-Purpose Space shall be a double height room and care should be taken with the proportions of the main room, and each of the dividable sections for proper sight lines, acoustics, and aesthetics.
- Some of the mechanical equipment can be located in the basement; however the majority shall be located in a penthouse. This area should not be placed over the Multi-Purpose Space due to weight, vibration and noise concerns. The penthouse shall be designed to be integrated into the architecture.

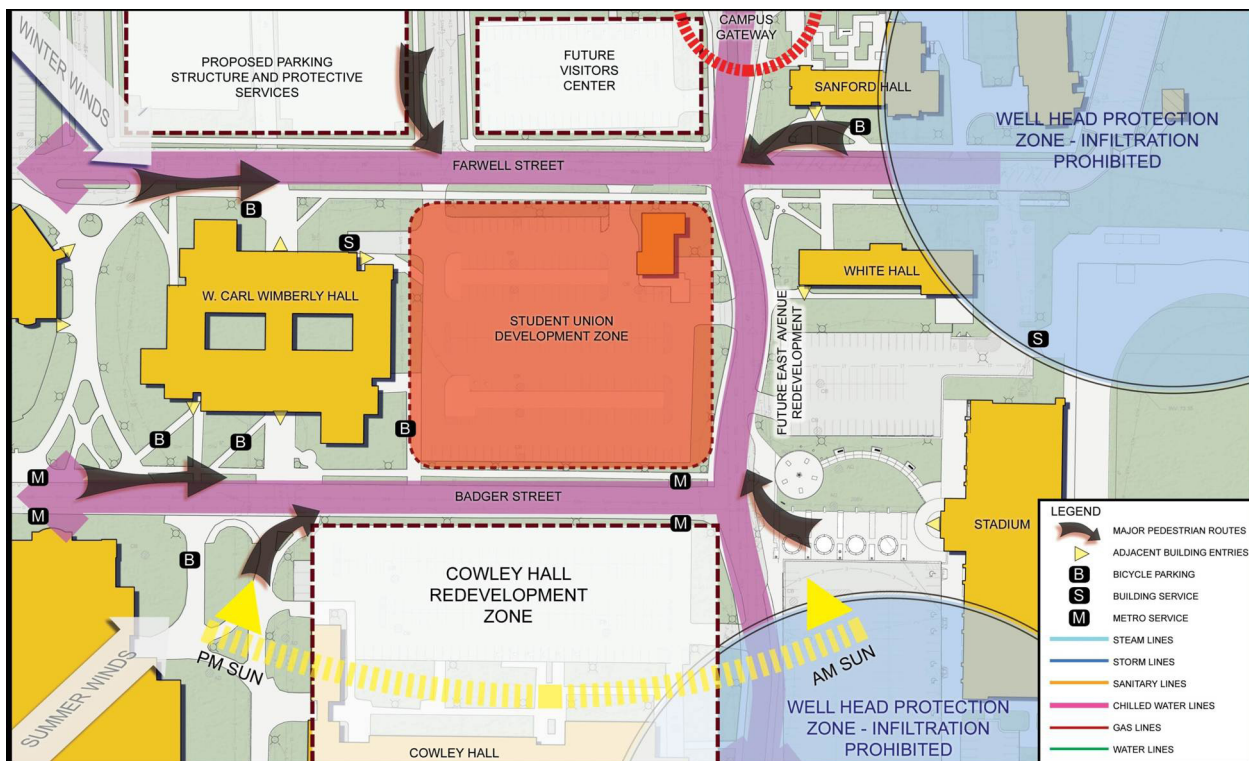


FIGURE 7.2 Existing Site Design Criteria

7.3 Regulatory Requirements and Guidelines

The codes and standards listed are minimum requirements. Nothing is to prevent the architect, engineer, or consultant from exceeding the applicable requirements. In all cases, the most recent editions of referenced standards apply.

Wisconsin Commercial Building Code (International Building Code)

International Energy Conservation Code

Local codes and ordinances

Accessibility

ICC/ANSI A117.1

State and Federal guidelines for accessibility

Universal Design Principles

7.4 Sustainable Facilities and Energy Conservation

The intent is to create a sustainable and energy efficient facility that has low operating costs, healthy indoor environments, and low environmental impact. The overarching goals of the campus, which began with their Campus Master Plan, are to promote energy efficiency and conservation, and to mitigate storm water. It is important to the campus, since there is very limited land to expand, that water is safeguarded; the building and site design must be able to handle and control water runoff. Secondary to the energy efficiency and stormwater management, it has been stated that conserving of materials and resources should also be taken into consideration in the design of the student center.

These environmental goals will be integrated into the design strategies for form, function, schedule, and budget. The design will incorporate sustainable design principles that are sensible and valid, especially those with an emphasis on energy efficiency, stormwater management and long term durability. The University's and student body's goal is to achieve LEED® Silver Certification, at a minimum, while striving for gold. Based on recent University projects, it is assumed that similar as well as new Innovation credits are achievable.

7.4.1 Division of State Facilities

The Division of State Facilities (DSF) is committed to sustainable design to promote the environmental and economic benefits of energy conservation in the planning, design, construction, and operation of state facilities. DSF has implemented policies to reduce energy consumption in state facilities without adversely affecting program operations.

Recognizing that the greatest cost of owning state facilities over their lifetime is the cost of energy to heat, cool, light, and operate them, DSF expects the design of every project to:

- Achieve the highest energy efficiency and lowest energy consumption that life-cycle costing will justify; Incorporate the most energy-efficient materials, products, equipment, and systems consistent with program and budget;
- Incorporate renewable energy technologies at the earliest possible stages of design whenever they are technically and economically feasible;
- Consider the impact on the utility infrastructure of the existing facility;
- Select environmentally responsible materials and products with reduced maintenance required.

Integrated Design Process

DSF expects the A/E to follow an "integrated design approach." This means that architectural, mechanical, and electrical systems are designed as parts of a whole building/energy system. The architect will consider HVAC and electrical loads in making fundamental decisions about the basic building concept and architectural form, e.g. orientation, massing, treatment of façade, fenestration, interior surfaces and lighting.

The design is to be developed through a collaborative effort integrating the knowledge and talents of all disciplines. This process starts at the earliest stages of design, building energy modeling during conceptual and working design phases and it requires strong energy conservation advocacy and commitment from the prime A/E. The design

team shall include representatives of all aspects of the project: site development, landscaping, all engineering disciplines, interior design, exterior and interior lighting, commissioning authority, operation and management staff, and any other specialty areas that will be utilized in the project, e.g. foodservice consultant.

Building Energy Modeling

Building energy modeling will be required for the new student center. In addition, the building modeling is to demonstrate that the annual building energy cost is 30% less than a code designed base building per Executive Order 145. The code designed base building comparison must be based on the Total Building Performance method included in Commerce 63/IECC 506.

During schematic design, the A/E shall use integrated design to determine the most energy efficient building configurations and systems. The A/E shall develop multiple building design concept options and/or multiple building envelope options, mechanical system options, lighting system options, and plumbing system options. Building energy modeling will be performed to compare these options.

The building energy modeling used to compare building/system options and used to demonstrate the 30% better than code requirement must utilize a computer based program for the analysis of energy consumption in buildings. The A/E shall report the modeled energy consumption and code comparison results in the Energy Performance Report portion of the Design Report. The A/E shall also use life cycle cost analysis to evaluate all relevant costs for each building alternative.

Renewable Energy Sources:

The Division of State Facilities expects all projects to make maximum practical and economic use of passive solar energy and daylighting. The design of all state facilities will, to the fullest extent possible, incorporate natural lighting, to replace the need for electric lighting during daytime hours. Geothermal technologies for space and water heating systems where technically feasible and cost effective shall be considered in the design of this project. For further information, please reference the Section 8.4.3 Mechanical Systems/Chilled Water.

Projects with a total budget exceeding \$500,000 are expected to make maximum practical use of active solar heating and renewable electric generation from solar thermal or photovoltaic systems, wind power, geothermal technology, biomass, fuel cells using renewable fuel or tidal or wave action and small hydro, when technically and economically feasible. In the Design Report the A/E shall state what consideration was given to these renewable energy systems.

Design Guidelines:

- Energy Design Guideline
- Sustainable Facilities Guideline
- Daylighting Standards for State Facilities
- Lighting Design Guidelines
- LEED® New Construction, Latest Edition

Sustainable Facilities and Energy Conservation

UW-La Crosse is committed to being a campus that values sustainability. It is a goal of this project to provide a high performance building following the guidelines outlined by the U.S. Green Building Council in order to achieve LEED® Silver Certification, at minimum. The DSF Sustainable Facilities Standards should also be followed closely throughout the project.

It is a goal of the University to emphasize energy efficiency and conservation, future maintainability and flexibility, long term durability, and effective stormwater runoff. The University desires to maximize the use of natural daylight in all occupied spaces, reducing the need for artificial lighting, thus decreasing energy usage. Systems described in the Pre-Design Study outline those mechanical functions (HVAC, lighting, stormwater management, etc.) that will assist in achieving the goals outlined above. The use of local, renewable, and recycled materials should be considered wherever possible. Sustainability can be divided into the following key subjects: Sustainable

Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Air Quality and Innovation, and Design.

The following narrative descriptions provide a summary of the credits available in the LEED rating system. See DSF Design Criteria Checklist and LEED 2009 NC Checklist following this section for more information.

Sustainable Sites (SS)

SSW1 - Construction Site Erosion & Sedimentation Control

Intent: To reduce pollution from construction activities by controlling soil erosion, waterway sediment and airborne dust generation.

Approach: Project is required to prepare erosion control plan.

Points: Prereq. (Regional Priority Credit Option (RP))

SS1 - Site Selection

Intent: To avoid the development of inappropriate sites and reduce the environmental impact from the location of a building on a site.

Approach: Project site will not develop farmland or impact ecologically sensitive environmental areas. This site was selected in the campus master plan since it was an already developed site.

Points: 1

SS2 - Development Density & Community Connectivity

Intent: To channel development to urban areas with existing infrastructure, protect greenfields, and preserve habitat and natural resources.

Approach: Project site is considered a developed site and is within ½ mile of at least 10 basic services.

Points: 5

SS3 – Brownfield Redevelopment

Intent: To rehabilitate damaged sites where development is complicated by environmental contamination and to reduce pressure on undeveloped land.

Approach: Not applicable. This site is not known to be contaminated or a brownfield site.

Points: No

SS4 - Alternative Transportation

SS4.1 - Public Transportation Access Credit

Intent: To reduce pollution and land development impacts from automobile use.

Approach: Project site is within ¼-mile walking distance of 2 or more public/campus bus lines

Points: 3Y/3

SS4.2 - Bicycle Storage & Changing Rooms Credit (RP)

Intent: To reduced pollution and land development impacts from automobile use.

Approach: The project needs to pursue providing bicycle parking facilities for a minimum of 5% of all building users. This credit is achievable if site area is provided to accommodate the required bike parking quantities. Shower facilities are within range at Eagle Recreational Center.

Points: 1

SS4.3 – Low-Emission & Fuel Efficient Vehicles

Intent: To reduce pollution and land development impacts from automobile use.

Approach: Possible with Campus providing their electric vehicle.

Points: 3

SS4.4 - Parking Capacity

Intent: To reduce pollution and land development impacts from automobile use.

Approach: Credit is achievable as the project includes no new parking other than limited parking for service vehicles only.

Points: 2

SS5 - Site Development

SS5.1 - Protect or Restore Habitat (RP)

Intent: To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

Approach: This credit is possible only if a green roof for a majority of the building is considered.

Points: 1

SS5.2 - Reduced Site Disturbance: Development Footprint (RP)

Intent: To promote biodiversity by providing a high ratio of open space to development footprint.

Approach: This credit is possible by means of Case 3 – providing vegetated open space equal to 20% of the project's site area. In urban cases, pedestrian oriented hardscape may be counted in the 20% as long as a minimum of 25% of the overall project open space is vegetated. Vegetated roofs also qualify.

Points: 1

SS6 - Permanent Stormwater Management

SS6.1 - Discharge Rate and Volume per DNR 151 (RP)

Intent: To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

Approach: The project must meet the DNR 151 requirements. This can be achieved by integration of rain gardens, pervious site pavements and surface detention or subsurface detention facilities. Adequate site area will need to be programmed to accommodate the rate and volume calculations based on the final massing of the building, site design and total impervious site surfaces.

Points: 1

SS6.2 - Permanent Stormwater Design, Quality treatment per DNR 151

Intent: To limit disruption of pollution of natural water flows by managing stormwater runoff.

Approach: The project must meet the DNR 151 requirements. This can be achieved by integration of biofiltration planters, grass swales and rain gardens.

Points: 1

SS7 - Heat Island Effect

SS7.1 - Non-Roof

Intent: To reduce heat islands to minimize impacts on microclimates and human and wildlife habitats. The heat island effect is the thermal gradient difference between developed and undeveloped areas.

Approach: The project may struggle to provide adequate shade from existing or proposed landscaping but the point can be pursued by using site pavement with a solar reflectance index of at least SRI 29.

Points: 1

SS7.2 - Roof

Intent: To reduce heat islands to minimize impacts on microclimates and human and wildlife habitats. The heat island effect is the thermal gradient difference between developed and undeveloped areas.

Approach: Use of a light colored roof, such as polyvinyl-chloride or match recently completed projects on campus. Based on initial findings, the area of roof being considered for a green roof (approximately 13,500 SF) would not have a significant effect on the SWM and is relatively expensive. The Campus ultimately determined that the dollars would be better spent on program space. The green roof was eliminated from the project.

Points: 1

SS8 - Light Pollution Reduction

Intent: To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction and reduce development impact from lighting on nocturnal environments.

Approach: Site and building lighting needs to be full cut-off fixtures

Points: 1

Water Efficiency (WE)

WE1 - Water Efficient Landscaping (RP)

No Potable Use or No Irrigation

Intent: To limit or eliminate the use of potable water or other natural surface or subsurface resources available on or near the project site for landscape irrigation.

Approach: The project should specify native or adaptable landscape materials and provide no permanent irrigation. The project is not considering use of gray water for any irrigation use.

Points: 4

Energy & Atmosphere (EA)

EAP1 - Building Systems Commissioning

Intent: To verify that the project's energy-related systems are installed, and calibrated to perform according to the owner's project requirements, basis of design, and construction documents. Benefits of commissioning include reduced energy use, lower operating costs, fewer contractor callbacks, better building documentation, improved occupant productivity and verification that the systems perform in accordance with the owner's project requirements.

Approach: The project shall include a commissioning team independent of design and construction team. The commissioning agent shall ensure the proper installation and operation of building components and produce a report upon completion. The commissioning agent shall follow DSF project requirements for commissioning and LEED NC 2009 Reference Guide.

Points: Prereq.

EAP2 - Minimum Energy Performance

Intent: To establish the minimum level of energy efficiency for the proposed building and systems to reduce environmental and economic impacts associated with excessive energy use.

Approach: Follow mandatory and prescriptive requirements of ASHRAE/IESNA Standard 90.1-2007 and DSF Energy and Lighting Design Guidelines.

Points: Prereq.

EAP3 - CFC Reduction in HVAC&R Equipment

Intent: To reduce stratospheric ozone depletion.

Approach: Zero use of CFC based refrigerants in new building and HVAC systems.

Points: Prereq.

EA1 - Optimize Energy Performance: For Project > 2 million (1-19 points)

Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy usage.

Approach: Reduce the design energy costs as regulated by ASHRAE/IESNA Standards 90.1-2007. The energy use reduction ranges from 12% to 48% better than the ASHRAE baseline.

Points: 10Y/2/7N

EA2 - Renewable Energy (1% to 13%)

Intent: To encourage and recognize increasing levels of on-site renewable energy self-supply to reduce environmental and economic impacts associated with fossil fuel energy use.

Approach: Consider use of on-site renewable energy in design of the student center, such as photovoltaic, solar domestic hot water heating, bio fuels, etc.

Points: 2Y/5N

EA3 - Enhanced Commissioning

Intent: To begin the commissioning process early in the design process and execute additional activities after systems performance verification is completed.

Approach: Provide enhanced third-party commissioning for project. See also 7.4.12

Points: 2

EA4 - Enhanced Refrigerant Management

Intent: To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to climate change.

Approach: Use refrigerants that minimize or eliminate emission in atmosphere.

Points: 2

EA5 - Measurement & Verification Credit

Intent: To provide for the ongoing accountability of building energy consumption over time.

Approach: Meet requirements of State specification sections 23 05 15, 23 09 14 or 26 27 13. Develop and implement a Measurement and Verification plan to cover a one year period of post-construction occupancy.

Points: 3

EA6 - Green Power

Intent: To encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.

Approach: The University will consider purchasing green power for a period of 2 years. Donations may be given by student organizations through the Green Fund. The approximate costs for this is \$15,000 – 25,000 total. These costs have been considered in the current project budget. The team should revisit these points during the project design to determine applicability.

Points: 2

Materials & Resources (MR)

MRP1 – Storage & Collection of Recyclables

Intent: To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

Approach: The University's goal is to provide areas throughout the student center for recycling glass, plastic, office paper, newspaper, cardboard and organic wastes. The foodservice area will contain composting bins.

Points: Prereq.

MR1 – Building Reuse

MR1.1–Maintain 75% of Existing Walls, Floors & Roof

Intent: To extend the lifecycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Approach: Not applicable.

Points: 3N

MR1.2 - Maintain 50% of Interior Walls, Ceilings & Doors

Intent: To extend the lifecycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Approach: Not applicable.

Points: 1N

MR2 - Construction Waste Management

MR2 - Divert 75% from Disposal

Intent: To divert construction and demolition debris from disposal in landfills and incineration facilities. Redirect recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites.

Approach: The construction contractor shall divert construction and demolition debris from disposal landfills and incineration facilities and shall adopt a waste management plan to achieve these goals.

Points: 2

MR3 – Materials Reuse, 5%

Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

Approach: Include salvaged materials in building design. A list of items will be provided by the campus. No building materials are anticipated to be used from Cartwright Center.

Points: 2

MR4 - Recycled Content, 5% - 10% (post-consumer + ½ pre-consumer)

Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

Approach: Include salvaged materials in building design.

Points: 1Y/1N

MR5 - Regional Materials, 10% - 20% Extracted, Processed & Manufactured Regionally

Intent: To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts from transportation.

Approach: As much as possible, provide local materials within a 500 mile radius. The percentage goals to be determined with University and design team during the design process.

Points: 2

MR6 - Rapidly Renewable Materials

Intent: To reduce the use and depletion of finite raw materials and long-cycle materials by replacing them with rapidly renewable materials.

Approach: Incorporate rapidly renewing materials into the project.

Points: 1

MR7 - Certified Wood

Intent: To encourage environmentally responsible forest management.

Approach: Investigate opportunities for incorporating certified wood into the project. This credit is not considered in the LEED NC Checklist. Review opportunities for this point during initial design.

Points: 1N

Indoor Environmental Quality (IEQ)

IEQP1 - Minimum IAQ Performance

Intent: To establish minimum indoor air quality (IAQ) performance to enhance indoor air quality in buildings, thus contributing to the comfort and well-being of the occupants.

Approach: Provide a minimum of outdoor air in the building.

Points: Prereq.

IEQP2 - Environmental Tobacco Smoke (ETS) Control

Intent: To prevent or minimize exposure of building occupants, indoor surfaces and ventilation air distribution systems to environmental tobacco smoke (ETS).

Approach: This building will be non-smoking. No smoking is allowed within 25 feet of the entries, outdoor air intakes and operable windows.

Points: Prereq.

IEQ1 - Outdoor Air Delivery Monitoring

Intent: To provide capacity for ventilation system monitoring to help promote occupant comfort and well-being.

Approach: Provide carbon dioxide and outdoor airflow monitors that signal when fresh air is required according to the minimum set points defined by ASHRAE 62.1-2007.

Points: 1

IEQ2 - Increased Ventilation

Intent: To provide additional outdoor air ventilation to improve indoor air quality (IAQ) and promote occupant comfort.

Approach: This credit is not being pursued.

Points: 1N

IEQ3 - Construction IAQ Management Plan

IEQ3.1 - During Construction

Intent: To reduce indoor air quality (IAQ) problems resulting from construction or renovation and promote the comfort and well-being of construction workers and building occupants.

Approach: The design team should work with the contractor to provide an IAQ management plan to protect HVAC systems during construction, control pollutant sources and interrupt contamination pathways.

Points: 1

IEQ3.2 - Before Occupancy

Intent: To reduce indoor air quality (IAQ) problems resulting from construction or renovation and promote the comfort and well-being of construction workers and building occupants.

Approach: The design team should work with the contractor to provide an IAQ management plan to protect HVAC systems during construction, control pollutant sources and interrupt contamination pathways.

Points: 1

IEQ4 - Low-Emitting Materials

IEQ4.1 - Adhesives & Sealants

Intent: To reduce the quality of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Approach: Specify products with low VOC materials.

Points: 1

IEQ4.2 - Paints & Coatings

Intent: To reduce the quality of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Approach: Specify products with low VOC materials.

Points: 1

IEQ4.3 - Flooring Systems

Intent: To reduce the quality of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Approach: Specify products under the Green Label Plus program or for which testing has been done by qualified independent laboratories in accordance with the appropriate requirements.

Points: 1

IEQ4.4 - Composite Wood & Agrifiber Products

Intent: To reduce the quality of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Approach: Specify products such that there are no added urea-formaldehyde resins.

Points: 1

IEQ5 - Indoor Chemical & Pollutant Source Control

Intent: To minimize the exposure of building occupants to potentially hazardous particulates and chemical pollutants.

Approach: Design the building to provide cleaning and maintenance areas with isolated exhaust systems for contaminants. Incorporate permanent entryway systems such as grilles or gates to prevent occupant-borne contaminants from entering the buildings.

Points: 1

IEQ6 – Controllability of Systems

IEQ6.1 –Lighting

Intent: To provide a high level of lighting system control by individual occupants or groups in multi-occupant spaces (e.g., classrooms and conference areas) and promote their productivity, comfort, and well-being.

Approach: Review point with project team as offices will have occupancy sensors. Where possible, allow individuals to control the lighting levels in workspaces.

Points: 1

IEQ6.2 –Thermal Control

Intent: To provide a high level of thermal comfort system control by individual occupants or groups in multi-occupant spaces (e.g., classrooms and conference areas) and promote their productivity, comfort, and well-being

Approach: Review practicality with project team once the floor plans have been established.

Points: 1

IEQ7 – Thermal Comfort

IEQ7.1 – Thermal Comfort, Design

Intent: To provide a comfortable thermal environment that promotes occupant productivity and well-being.

Approach: Design HVAC systems to meet ASHRAE Standard 55-2004.

Points: 1

IEQ7.2 – Thermal Comfort, Verification

Intent: To provide for the assessment of building occupant and thermal comfort over time.
Approach: Implement IEQ7.1 first. Survey occupants after occupancy and provide corrective measures as required.
Points: 1

IEQ8 – Daylight and Views

IEQ8.1 – Daylight 75% of Spaces

Intent: To provide building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.
Approach: Provide proper glare control and minimize solar heat gain in design of building.
Points: 1

IEQ8.2 – Views for 90% of Spaces

Intent: To provide building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.
Approach: Credit not pursued.
Points: 1N

Innovation and Design Process (ID)

ID1.1-1.5 Innovation in Design

Intent: To demonstrate quantifiable environmental benefits through new strategies and techniques not specifically identified in the LEED rating system. These strategies show exemplary performance and innovative strategies.
Approach: Implement and design into facility many innovative strategies. Some of the possibilities are listed below.

Exemplary Performance for: Certified Wood (MR7)
Maximizing Open Space
Water Use (WE3.1)
Site Development (SS5.2)
Construction Waste Management (MR2)

Innovation for UW-La Crosse's Green Cleaning Policies.
Public Education including tours of site and LEED buildings on campus, and signage.
Community supported agriculture
Recycling program & education

Points: Up to 5

ID2 LEED Accredited Professional

Intent: To support and encourage the design integration required by a LEED project and to streamline the applications & certification process.
Approach: Design team to employ at least one LEED accredited professional.
Points: 1

Regional Priority Credits (RP)

RP1.1-1.4 Regional Priority

Intent: To encourage projects to pursue credits with regional environmental significance
Approach: Utilize and implement as many as possible as these extra points are automatically achieved. The design team should also consider applying credits achieved but not counted as ID credits if applicable. 4 credits can be counted from the 6 credits available.
Points: 4

7.4.1.2 Commissioning

Commissioning practices are to be implemented into all procedures and documentation used in the planning, design, construction, closeout, and operations of this building. Provide verification through the commissioning process that building systems are designed, installed, and perform according to DSF's project requirements, basis of design, and construction documents. A third-party commissioning agent will be used for this project.

Implement the fundamental best practice commissioning procedures as outlined in the DSF AE and Consultant Policy and Procedure Manual. The design team shall reference procedures for commissioning in the Design Report. Provide a final commissioning report, signed by the commissioning provider, confirming that the fundamental commissioning requirements have been successfully executed.

Specific commissioning submittal and documentation requirements are to be identified in the commissioning provider's contract and in the project bid documents. Engage a commissioning authority and adopt a commissioning plan. Task the commissioning provider to produce a final commissioning report once all outstanding commissioning activities are completed and all identified issues are resolved successfully.

Project
Project No.
Project Stage
Checklist Author

UW-La Crosse New Student Union
11A2A
Planning

Melissa Rudolph, Kindness Architecture + Planning, Inc.

4/24/2012

Applicable?	Requirements	Primary Responsibility	Remarks <small>Note any: Reason if Unknown or Not Applicable, Any goals beyond Min. Req'ts., Other comments</small>
1. Portfolio Management & Assessment of Need			
Yes	** Portfolio Management & Assessment of Need	A	
2. Program Development			
Yes	** Program Development	A	
3. Integrated Design			
Yes	** Integrated Design	D, DSF	
4. Sustainable Site Requirements			
Yes	SS W1/P1 * Construction Site Erosion & Sedimentation Control	D/C	
Yes	SS C1 Site Selection	A	
Yes	SS C2 Development Density & Community Connectivity	A	
No	SS C3 Brownfield Redevelopment	A	Not Applicable
?	SS C4.1 Alternative Transportation Public Transportation Access	A	Goal is for partial points for LEED NC
Yes	SS C4.2 * Alternative Transportation Bicycle Storage & Changing Rooms	D	
?	SS C4.3 * Alternative Transportation Low Emitting & Fuel Efficient Vehicles	D	Minimal to no parking is associated with the bldg.
Yes	SS C4.4 Alternative Transportation Parking Capacity	A	
Yes	SS C5.1 Site Development, Protect or Restore Habitat	A/D	
?	SS C5.2 Reduced Site Disturbance Development Footprint	A/D	This may not be possible due to site/bldg ratio.
Yes	SS C6.1 Permanent Stormwater Management (Discharge Rate & Vol - DNR 151)	D	
?	SS C6.2 * Permanent Stormwater Management (Quality Treatment - DNR 151)	D	Due to existing conditions, may not be possible.
Yes	SS C7.1 Heat Island Effect: Non-Roof	D	
	SS C7.2 LEED Credit Not Used		
Yes	SS C8 Light Pollution Reduction	D	
5. Water Efficiency Requirements			
	WE C1.1 Incorporated into WE C1.2		
Yes	WE C1.2 Water Efficient Landscaping No Potable Use or No Irrigation	D	
	WE C2 LEED Credit Not Used		
?	WE C3.1 Water Use Reduction, 20% Reduction	D	May not be possible.
	WE C3.2 LEED Credit Not Used		
6. Energy & Atmosphere Requirements			
Yes	EA P1 * Commissioning	D, C	DSF Level 2 +Third Party Commissioning
Yes	EA P2 Minimum Energy Performance	D	
Yes	EA P3 * CFC Reduction in HVAC&R Equipment	D	
?	EA C1 * Optimize Energy Performance for Projects > \$2 million	D	Partial LEED points anticipated
?	EA C2 * Renewable Energy	D	Partial LEED points anticipated
	EA C3 Incorporated into EA P1		
	EA C4 LEED Credit Not Used		
Yes	EA C5 * Measurement & Verification	D, O	
Yes	EA C6 Green Power	A, O	See Program Statement; project team to explore

DSF Requirement / LEED Credit Comparison	Primary Responsibility	
Same as LEED 2.1 or 2.2 Credit	A	Agency - Planning, Budget Analyst
* DSF variation of LEED 2.1 or 2.2 Credit	D	Architect/Engineer
** DSF only Standard	DSF	Division of State Facilities
	C	Contractor
LEED Credit Not Used, Incorporated into another Standard or not supported	O	Agency - Operation & Maintenance

11A2A		UW-La Crosse New Student Union		41023	
Applicable?	Requirements			Primary Responsibility	Remarks Note any: Reason if Unknown or Not Applicable, Any goals beyond Min. Req'ts., Other comments
7. Materials & Resources Requirements					
Yes	MR P1	Storage & Collection of Recyclables		D	
No	MR C1.1	Building Reuse		A	Not Applicable
	MR C1.2	Incorporated into MR C1.1			
	MR C1.3	LEED Credit Not Used			
Yes	MR C2.1	Construction Waste Management		C	
	MR C2.2	Incorporated into MR C2.1			
Yes	MR C3.1	Resource Reuse		D	
	MR C3.2	Incorporated into MR C3.1			
?	MR C4.1	Recycled Content		D	Partial LEED points anticipated
	MR C4.2	Incorporated into MR C4.1			
Yes	MR C5.1	Local/Regional Materials		D	
	MR C5.2	LEED Credit Not Used			
Yes	MR C6	Rapidly Renewable Materials		D	
No	MR C7	* Certified Wood		D	LEED points not anticipated.
Yes	MR W1	** Durable Buildings		D	
8. Indoor Environmental Quality Requirements					
Yes	EQ P1	Minimum IAQ Performance		D	
Yes	EQ P2	* Environmental Tobacco Smoke (ETS) Control		O	
	EQ C1	LEED Credit Not Used			
	EQ C2	LEED Credit Not Used			
Yes	EQ C3.1	Construction IAQ Management Plan During Construction		C	
Yes	EQ C3.2	Construction IAQ Management Plan Before Occupancy		C	
Yes	EQ C4.1	Low-Emitting Materials Adhesives & Sealants		D	
Yes	EQ C4.2	Low-Emitting Materials Paints		D	
Yes	EQ C4.3	Low-Emitting Materials Carpet		D	
Yes	EQ C4.4	Low-Emitting Materials Composite Wood		D	
Yes	EQ C5	Indoor Chemical & Pollutant Source Control		D	
	EQ C6.1	LEED Credit Not Used			
	EQ C6.2	LEED Credit Not Used			
	EQ C7.1	LEED Credit Not Used			
	EQ C7.2	LEED Credit Not Used			
Yes	EQ C8.1	* Daylight & Views		D	
	EQ C8.2	LEED Credit Not Used			
9. Operation & Maintenance Requirements					
Yes		** Operation & Maintenance		O	
10. Purchasing of Furniture, Fixtures and Equipment Requirements					
Yes		** Purchasing of Furniture, Fixtures and Equipment		A	
11. Accountability, Verification, and Reporting Requirements					
Yes	AR 1	** Accountability for Sustainability		DSF	
Yes	AR 2	** Verification during Project Design		DSF	
Yes	AR 3	** Verification during Project Construction		DSF	
Yes	AR 4	** Verification following Construction		DSF	
Yes	AR 5	** Reporting on Construction Results		DSF	
LEED Goals					
Yes		Seeking LEED Certification		A	LEED NC Silver
Yes	LEED EB	(Agency Operations Equal to LEED Existing Building)		A	

7.4.2 Leed Checklist

11A2A Preliminary Checklist - 11-17-11 Meeting

Indicates Regional Credits

LEED 2009 for New Construction and Major Renovations		Project Name			
Project Checklist		Date			
16	9	1	Sustainable Sites	Possible Points: 26	
Y	?	N	Prereq 1 Construction Activity Pollution Prevention		
1	1		Credit 1 Site Selection	1	1 to 2
5			Credit 2 Development Density and Community Connectivity	5	1 to 2
1			Credit 3 Brownfield Redevelopment	1	1
3	3		Credit 4.1 Alternative Transportation—Public Transportation Access	6	1
1			Credit 4.2 Alternative Transportation—Bicycle Storage and Changing Rooms	1	
3			Credit 4.3 Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3	
2			Credit 4.4 Alternative Transportation—Parking Capacity	2	
1			Credit 5.1 Site Development—Protect or Restore Habitat	1	
1			Credit 5.2 Site Development—Maximize Open Space	1	
1			Credit 6.1 Stormwater Design—Quantity Control	1	
1			Credit 6.2 Stormwater Design—Quality Control	1	
1			Credit 7.1 Heat Island Effect—Non-roof	1	
1			Credit 7.2 Heat Island Effect—Roof	1	
1			Credit 8 Light Pollution Reduction	1	
4	2	4	Water Efficiency	Possible Points: 10	
Y			Prereq 1 Water Use Reduction—20% Reduction		
4			Credit 1 Water Efficient Landscaping	2 to 4	
2			Credit 2 Innovative Wastewater Technologies	2	
2			Credit 3 Water Use Reduction	2 to 4	
21	2	12	Energy and Atmosphere	Possible Points: 35	
Y			Prereq 1 Fundamental Commissioning of Building Energy Systems		
Y			Prereq 2 Minimum Energy Performance		
Y			Prereq 3 Fundamental Refrigerant Management		
10	2	7	Credit 1 Optimize Energy Performance	1 to 19	
2			Credit 2 On-Site Renewable Energy	1 to 7	
2			Credit 3 Enhanced Commissioning	2	
2			Credit 4 Enhanced Refrigerant Management	2	
3			Credit 5 Measurement and Verification	3	
2			Credit 6 Green Power	2	
8	1	5	Materials and Resources	Possible Points: 14	
Y			Prereq 1 Storage and Collection of Recyclables		
3			Credit 1.1 Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3	
1			Credit 1.2 Building Reuse—Maintain 50% of Interior Non-Structural Elements	1	
2			Credit 2 Construction Waste Management	1 to 2	
2			Credit 3 Materials Reuse	1 to 2	
70	16	24	Total	Possible Points: 110	
					Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Materials and Resources, Continued

Y	?	N		
1	1		Credit 4 Recycled Content	1 to 2
2			Credit 5 Regional Materials	1 to 2
1			Credit 6 Rapidly Renewable Materials	1
1			Credit 7 Certified Wood	1

Indoor Environmental Quality Possible Points: 15

Y	?	N		
1	1		Prereq 1 Minimum Indoor Air Quality Performance	
1			Prereq 2 Environmental Tobacco Smoke (ETS) Control	
1			Credit 1 Outdoor Air Delivery Monitoring	1
1			Credit 2 Increased Ventilation	1
1			Credit 3.1 Construction IAQ Management Plan—During Construction	1
1			Credit 3.2 Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1 Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2 Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3 Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4 Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 5 Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1 Controllability of Systems—Lighting	1
1			Credit 6.2 Controllability of Systems—Thermal Comfort	1
1			Credit 7.1 Thermal Comfort—Design	1
1			Credit 7.2 Thermal Comfort—Verification	1
1			Credit 8.1 Daylight and Views—Daylight	1
1			Credit 8.2 Daylight and Views—Views	1

Innovation and Design Process Possible Points: 6

Y	?	N		
1			Credit 1.1 Innovation in Design: Specific Title	1
1			Credit 1.2 Innovation in Design: Specific Title	1
1			Credit 1.3 Innovation in Design: Specific Title	1
1			Credit 1.4 Innovation in Design: Specific Title	1
1			Credit 1.5 Innovation in Design: Specific Title	1
1			Credit 2 LEED Accredited Professional	1

Regional Priority Credits Possible Points: 4

Y	?	N		
1			Credit 1.1 Regional Priority: Specific Credit	1
1			Credit 1.2 Regional Priority: Specific Credit	1
1			Credit 1.3 Regional Priority: Specific Credit	1
1			Credit 1.4 Regional Priority: Specific Credit	1

Note: Potential Regional Priority Credits are noted in the red boxes within each section.

8. Building and Site Concept

8.1 Conceptual Site Plan

The new student center will be a place of interaction, offering many activities and becoming, in essence, the “living room” of the campus. The development of the exterior space around the student center offers an opportunity to provide places which will allow students to gather, relax, and enjoy outdoor activities throughout the year, to become the “front yard” of the campus. A high degree of integration between indoor and outdoor spaces is envisioned in terms of views, adjacencies of activities, and entrance points. The intent is to create a memorable space, a place that becomes a cherished feature of the UW La Crosse campus.

In addition, the exterior space development of the student center must allow facilitation of access in terms of vehicles, pedestrians, and building services. The site design must also be conceived as an integral component in the campus open space system as envisioned in the campus master plan. Occupying a prominent site, the building and site will become an important gateway into campus and a destination for students, faculty, staff and the general public. For further descriptions of current site conditions that impact the components of the site program please refer to the Site/Existing Conditions Report located in the appendix of this document. A conceptual site plan has been prepared as part of this study to illustrate the site program and design intent.

Site Program

During the planning process a series of programmatic requirements were established and are reflected in the conceptual site plan.

- **Gathering Space: “Great Lawn”** - A south facing multipurpose lawn area is to provide a focal point for the site and become a memorable public space on campus. The lawn is to serve as a casual seating area for group events and performances, a setup area for tents or other gatherings, or as a place where students can just “hang out” on the grass. The lawn should be able to accommodate seating for approximately 400-500 people (estimate based upon chairs set up on the lawn auditorium-style). One end of the lawn should feature a focal point or stage surface. The feature should be a minimal structure, level with grade or only slightly raised and oriented to face northeast, away from campus academic buildings. Adequate power and infrastructure should be provided at this location to accommodate performances of various types. The campus may consider purchasing a movable movie screen which may be used in this area for showing outdoor movies.
- **Gathering Space: Dining Terrace** - A multipurpose area adjacent to and looking out toward the Great Lawn, consisting of a hardscape surface which could be slightly elevated, containing tables and chairs for seating approximately 150 patrons. Seat walls or other built in/integral seating options could be considered as well. Any elevated areas should be limited to the point where steps are not required, and only minimal ramping should occur if needed. This is also a condition that should apply to all exterior areas of the student center site. The terrace should be directly adjacent to the building edge, with doors providing access to other interior social gathering spaces or major circulation. The dining terrace should be visually connected to the interior spaces as well.
- **Gathering Space: Southwest Entrance** - A major building entrance is envisioned near the southwest corner of the site. This will be an important entrance because it will provide access to the student center from the future campus mall open space which will extend south from Wimberly Hall to Wing Technology Center serving as a focal point and main pedestrian pathway for the academic core. This building entrance should have a small plaza to allow for adequate pedestrian circulation and include features such as seat walls or informal gathering areas to accommodate the flow of pedestrians and the chance encounters which often occur at crossroad spaces such as this.
- **Fire Pit** - Offering a gathering place for the winter months, the fire pit should be located in an area with an advantageous microclimate, protected from prevailing winter winds and positioned to capture direct sunlight. The fire device should be gas fueled and the pit should be sized to accommodate intimate groups (approximately 12 people) as opposed to large gatherings.

BUILDING AND SITE CONCEPT

- Pedestrian Corridor between Wimberly and the New Student Center - This space will become a pedestrian connection between the new parking structure, located north of Wimberly on Farwell, and the rest of the academic core to the south. The corridor should not become an “alley space” but instead be a safe, attractive, and well-lighted pedestrian space. The design of the space should respect and accommodate existing door and window placements on the east side of Wimberly. A “green corridor” character should be provided for the space, possibly containing small rain gardens and other planted areas. Adequate screening should be provided along the pathway where it abuts the service/loading area of the new Student Center in the form of plantings or a screen wall.
- Loading/Service Area - The loading area is located on the northwest corner of the site. The spatial requirements for the loading dock are indicated in the building program section elsewhere in this document. Turning movements for a 53’ semi-truck need to be accommodated, backing in from Farwell Street. Adequate screening between the service area and adjacent pedestrian pathways and sidewalks should be provided. It is proposed that a separate service drive and curb cut be provided for Wimberly (see site concept) so that the pedestrian pathway connection between Wimberly and the new student center does not need to cross over a service drive.
- Farwell Street Frontage (north side of building) - Because of the location of the new parking structure and overall campus vehicular circulation patterns, the Farwell Street frontage will be the major vehicular access point for the building. In addition, there will be considerable pedestrian flow along the north side of the building, between the parking structure and the north entrance to the student center. The north side of Farwell should maintain the existing on-street parking but be designated short term for visitors. An accessible vehicular drop off area should be provided at the north building entrance along the south side of Farwell, along with several short term parking spaces as room allows. Because of the current width of Farwell, it is anticipated that a portion of the south side of the street will be widened (limited width, approximately 8’) along the north side of the student center. In order to accommodate the anticipated pedestrian use and space available after widening the street to provide the drop off lane, it is anticipated that the entire sidewalk area north of the building will be a hardscape condition, with paving and any trees provided in grates. Special pavement should be provided at the crosswalks at the Farwell/17th Street intersection to help pedestrians that are coming from the parking structure understand they should cross the street at this intersection and not midblock. The design of this entire drop off/parking area/circulation area should be achieved in a manner that does not interfere with backing/turning movement of trucks and service vehicles that are accessing the building loading and service area.
- Bus Stop - The main bus stop location is anticipated to be on the southeast corner of the building site, just north of the intersection of East and Badger.
- Bike Parking - Approximately 250-275 bike parking spaces should be provided on site. These spaces should generally be distributed around the site, with primary locations as close to building entrances as possible.
- Rain Gardens/Stormwater - Best management practices, including a combination of grass swales and biofiltration areas will need to be considered as an integral component of the site design. Please refer to section 8.2.2 for a discussion of site stormwater issues and how these needs were addressed in the conceptual site plan. For estimating purposes it was assumed that rain garden areas would require a 2.5’-3’ depth.

BUILDING AND SITE CONCEPT

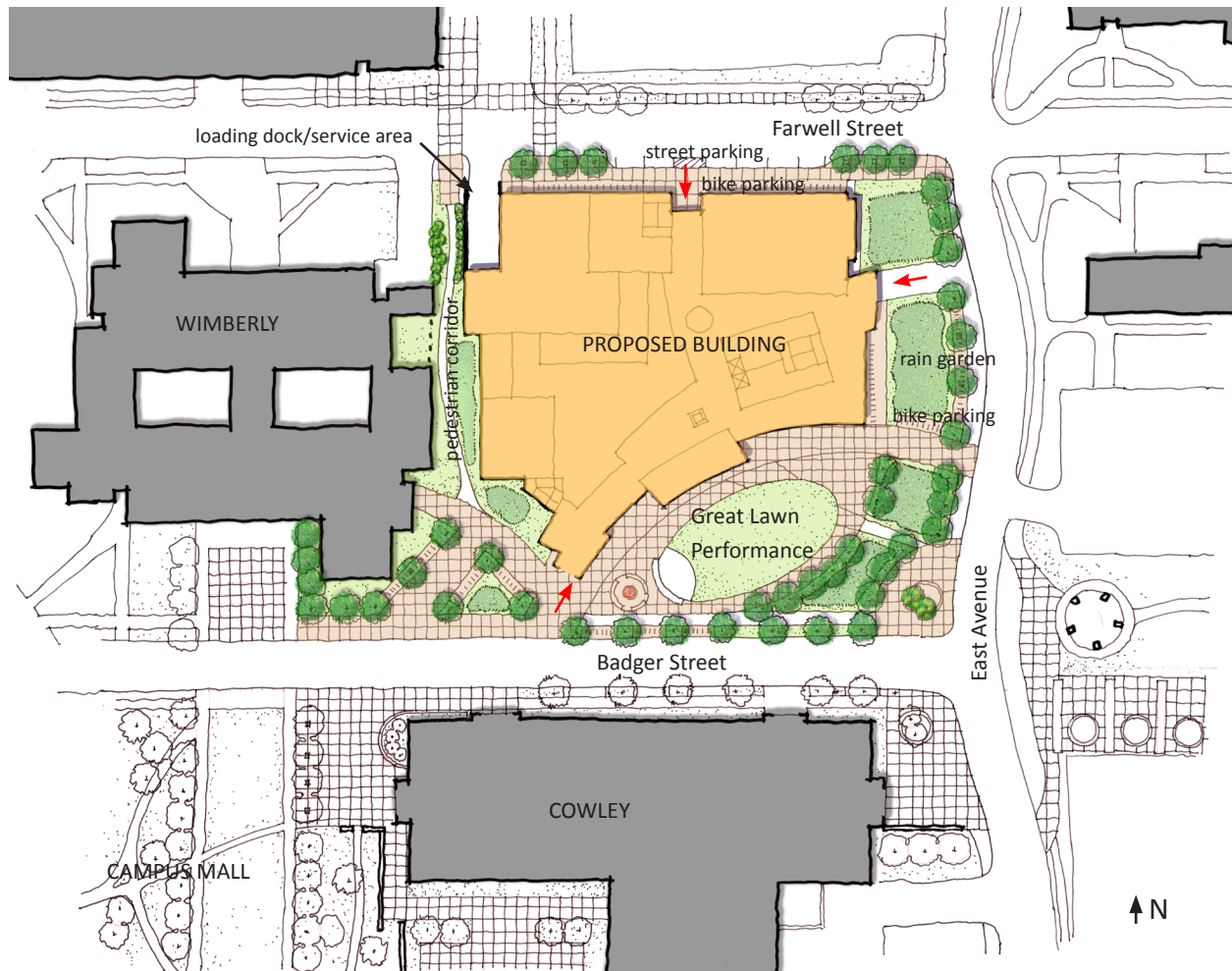


FIGURE 8.1 PROPOSED SITE PLAN DIAGRAM

Site Design Intent

The site concept provides for a major campus open space on the south side of the new student center. Building and site design are integrated to the degree that the building is oriented to wrap around and enclose the space. Transparency of the south elevation of the building allows views of the space and a sense of integration of the inside and outside. The concept illustrates design priorities outlined in the site program as follows.

The oval shaped “Great Lawn” is the centerpiece of the site, and is surrounded by a number of other gathering places. This new campus space is seen as an integral part of the campus open space system and continues the establishment of a series of interconnected places along the future campus mall, running north/south through the heart of the academic core. The student center is one of four major building projects that have been recently completed (Centennial Hall), are under construction (Parking Structure and Police Building), or in study (Cowley Science Building, New Student Center) along the central campus mall corridor. Each of these projects has the opportunity to reinforce and extend the campus mall.

The “Great Lawn” is oriented to the south and east, opening the space up to the southern sun. The curve of the building allows the space to extend diagonally along a northeast/southwest axis, allowing the space to “point” southwest, toward the northern terminus of the campus mall. It also allows the space to open toward the northeast, allowing it to be visible from the intersection of East and Farwell, which is a major campus entry node. The space also opens southeast to the pedestrian plaza leading to the stadium. Thus the space is designed to fully act as a crossroads along major campus circulation pathways and between campus destinations. A stage area (slightly raised) is located at the southeast end of the oval, providing a focal point for the space. The lawn area

BUILDING AND SITE CONCEPT

provides a place to hold events (concerts, “movies on the green”, winter carnival, student organization gatherings, etc.) or as a place for students to relax on the grass on a nice day. The entire lawn and plaza area would serve as an event center for game days when the stadium is in use, substantially increasing opportunities to enhance the game day experience for students and visitors alike. Stepped portions of the building façade along the “Great Lawn” offer upper level roof terraces that overlook the scene.

The lawn is surrounded by a series of hardscape plaza areas and circulation zones that accommodate a variety of activities and events. A dining terrace is located between the building and the lawn providing a hardscape plaza area for seating. Multiple door openings in the glass façade at ground level would allow a flow of activity and uses between inside and outside. A fire pit offers a winter focus for the southern edge of the terrace. The oval shape, diagonal orientation and arrangement of surrounding walkways allow the establishment of a strong focal shape, yet encourage pedestrian circulation around the space and/or through it. A smaller semicircular plaza space at the southeast corner of the site provides a gateway image from the intersection of East and Badger. It also provides a link toward the stadium entrance plaza and a proposed building entrance plaza for the new Cowley Science Building.

To the east and north east of the lawn are a series of rain gardens that receive stormwater runoff and allow gradual percolation into the ground. There are also additional rain garden areas in other portions of the site, at the southwest entrance plaza and in the pedestrian corridor space between Wimberley and the Student Center. The area shown on the plan as rain garden/biofiltration areas represents approximately 10,000 square feet. Please refer to section 8.2.2 for a discussion of stormwater issues and how they were addressed in the site concept.

At the southwest corner of the site, an entrance plaza area provides a gathering place for a major building entrance that leads to the campus mall. The paved surface also accommodates pedestrian circulation movements between the exit door on the east side of Wimberly and the Student Center southwest entrance. A planted area provides spaces for rain gardens and bicycle parking. A linear “green walkway” is provided between Wimberley and the Student Center, offering a pleasant pedestrian experience on a pathway that will become increasingly important when the parking structure is completed and a natural north/south pedestrian flow is reinforced between the structure and the campus mall and academic core to the south.

The northern edge of the site, along the Farwell street frontage, presents a need to accommodate major vehicular and service access while also providing a safe and welcoming pedestrian experience. Vehicular patterns in this part of campus necessitate locating the building service/receiving area on the northwest corner of the site. The site concept includes a hardscape streetscape design along the entire north edge of the building, offering a vehicular drop off lane, several short term parking stalls, and bicycle parking along the edge of the building. Crosswalk paving is enhanced at the intersection of Farwell and 17th to encourage crossing in this location and bringing the “urban streetscape” character of the frontage further west, to tie in to the pedestrian exits from the parking garage and the small plaza that will be provided just southeast of the proposed police building.

Bike parking has been indicated in several areas of the concept plan and efforts have been made to provide it near all major building entries. The parking areas are integrated into landscape spaces in order to minimize their visual impact and to contribute to a coordinated and holistic spatial character.

8.2 Civil Utilities

8.2.1 Water Service

Water service connection to the Student Center will most likely occur from either Badger Street or East Avenue. Current capacity has been discussed with City of La Crosse Water Utility staff. They have indicated that the water main is well looped and they do not have pressure issues in the area of the Student Center. They do not believe there will be capacity issues connecting to the City's water infrastructure. Final location will be determined by location of mechanical and plumbing on the building. A fire access connection will likely need to occur on either Farwell Street or East Avenue.

8.2.2 Storm

Drainage & Connections

In discussions with the City of La Crosse Public Works Department, the 42-inch pipe in East Avenue has the greatest capacity of any system near the site.

Infiltration, Peak Flow Reduction & Sediment Removal

The most effective best management practices (BMPs) would be a combination of grass swales and biofiltration areas for infiltration (rain gardens). The site design will need to find a balance between stormwater management needs and exterior improvements and amenities desired as both program elements have site area requirements. Preliminary layouts have indicated an impervious footprint on the proposed site to be approximately 85% of the project site area, with a majority of impervious as rooftop for the proposed Student Union. The current site is a parking lot; the impervious area is not increased by the new building.

The City of La Crosse reviews all projects on campus for stormwater management goals. The campus (like the City) has a goal of reducing TSS (Total Suspended Solids) in their runoff by 40 percent over a condition where there are no BMPs. In addition, the City is implementing a Stormwater Utility that assesses fees to property owners (including the University) based on the amount of impervious area on a property. The Utility will allow credit reductions for property owners who employ BMPs to reduce stormwater peak flows as well as capture TSS. The more TSS captured and the better peak flow reduction, the less the property owner will pay in fees.

The Division of State Facilities (DSF) has Sustainability Guidelines similar to the LEED rating system. Two credits (DSF SS C6.1 and SS C6.2) relate to stormwater management. Both of these credits are achievable with the use of rain gardens and bioswales on this site, but attaining these will require a portion of the building roof water to be directed to the rain gardens to be infiltrated. For this project, these DSF guidelines are summarized as follows:

- SS C6.1 – Stormwater Quantity: reduce the rate and volume of stormwater discharge by 25 percent for the 1.5-year, 24 hr storm event.
- SS C6.2 – Stormwater Quality: capture 80 percent of TSS and 40 percent of total phosphorus (TP) from the runoff over no controls over an annualized period.

The project reviewed the capacity of rain gardens to contain a 100-year event. Although rain gardens are not typically designed to fully contain a 100-year event, the size of the disturbed site for the project is greater than what a rain garden can be typically designed to accommodate. Rain gardens are generally designed to handle routine rain events up to a 1 to 2 inch rain storm, which will treat/infiltrate (ideally) 90% of the average annual rain. The 100-year event on a redevelopment site such as this is generally managed by a combination of detaining as much water as possible, but also making sure the 1st floor of the building is set so that water will not encroach during a rare event. The city storm sewers have limited capacity, so on this confined site the most critical item for a 100-year event is making sure drainage is away from the building. Since this is currently a parking lot, it is unlikely that the flow rate will be increased.

In summary, with the use of rain gardens on site and grass swales around the building, it is possible to achieve the stormwater management goals as defined by DSF, DNR, the City of La Crosse, and LEED. A 10,000 square foot

area has preliminarily been allocated for rain garden/bioretention basins. Preliminary estimates indicate that this best management practice, with a focus on infiltration and sediment removal, would be able to handle runoff for storms up to a 50-year event and an 80 percent reduction in both TSS and TP can be achieved. This would exceed the stormwater management goals for the project. The 50-year capacity is met, assuming all of 120,936 s.f. of the impervious area will drain to 10,000 s.f. rain garden. To quantify, a 50-year event, based on modeling, is 5.4 inches of rainfall for 24-hour storm duration.

8.2.3 Sanitary Sewer Service

Based on existing available information, routing sanitary service lines from the new Student Center building to the Badger Street system or the 21-inch diameter main on the western side of the project site may be more desirable than routing to the Farwell Street sewer. Final building size and placement may have an impact to existing infrastructure, the sanitary line on the west side of the site in particular. This line (and potential for reroute) should be evaluated in conjunction with final building size, orientation and desirable open space locations on site in the next phase of design. Any proposed modification to the existing utility will necessitate review and approvals by the City and possibly the DNR along with typical State Plumbing Reviews.

8.2.4 Gas

Gas service can be served from Badger Street or East Avenue. Capacity is believed to be sufficient to serve a new Student Center. Final location will be determined by location of mechanical and plumbing on the building.

8.2.5 Chilled Water

Mechanical cooling will be provided by extending campus chilled water to the proposed building. The campus has recognized that there is a campus wide shortage of chilled water which is being addressed concurrently as part of a separate project. That project will extend 12" chilled water mains to the east from the existing 18" chilled water mains located near the southwest corner of Wimberly Hall. These 12" mains will serve both Phase 1 of Cowley Hall and the Student Union. It is anticipated that 8" chilled water laterals will be extended north to serve the proposed Student Union.

8.2.6 Steam

High pressure steam from the campus power plant will be utilized as the primary source of energy for building heat, domestic water heating, and some food service equipment.

This project will extend a new 6" high pressure steam (HPS) and 3" pumped condensate (PC) main from Pit 3 to a new steam pit located south of the proposed building.

A 4" high pressure steam and 2" pumped condensate lateral will extend north from the new steam pit to serve the Student Union.

8.2.7 Electrical

This facility will be fed from the Campus Primary circuit known as the Feeder 7-8 Loop. Electrical service shall be obtained from Primary Manhole Number 21 on the east side of East Avenue. An underground primary voltage concrete encased ductbank with primary cables shall be extended from primary Manhole No. 21, under East Avenue to the new building. New primary manholes shall be installed on the west side of East Avenue and at 200 foot intervals to reach the new electrical service equipment room. The Service voltage shall be 4160 volts, 3 phase.

8.2.8 Telecommunications

Multiple new 4" conduits (min qty (4)) and (2) 2" conduits and cable are to be fed to new building from existing signal source. Conduits and cable to be in routed in concrete encased duct bank and turn up into first floor main telecom room (MTR). Depth to be 48" or more below grade with 40" bend radius maintained for all conduit bends. Distance between manholes and building entrance facility (BEF) must not exceed 250', otherwise provide additional manholes as required.

8.3. Building Organization Framework Diagram

8.3.1 Concept Diagrams

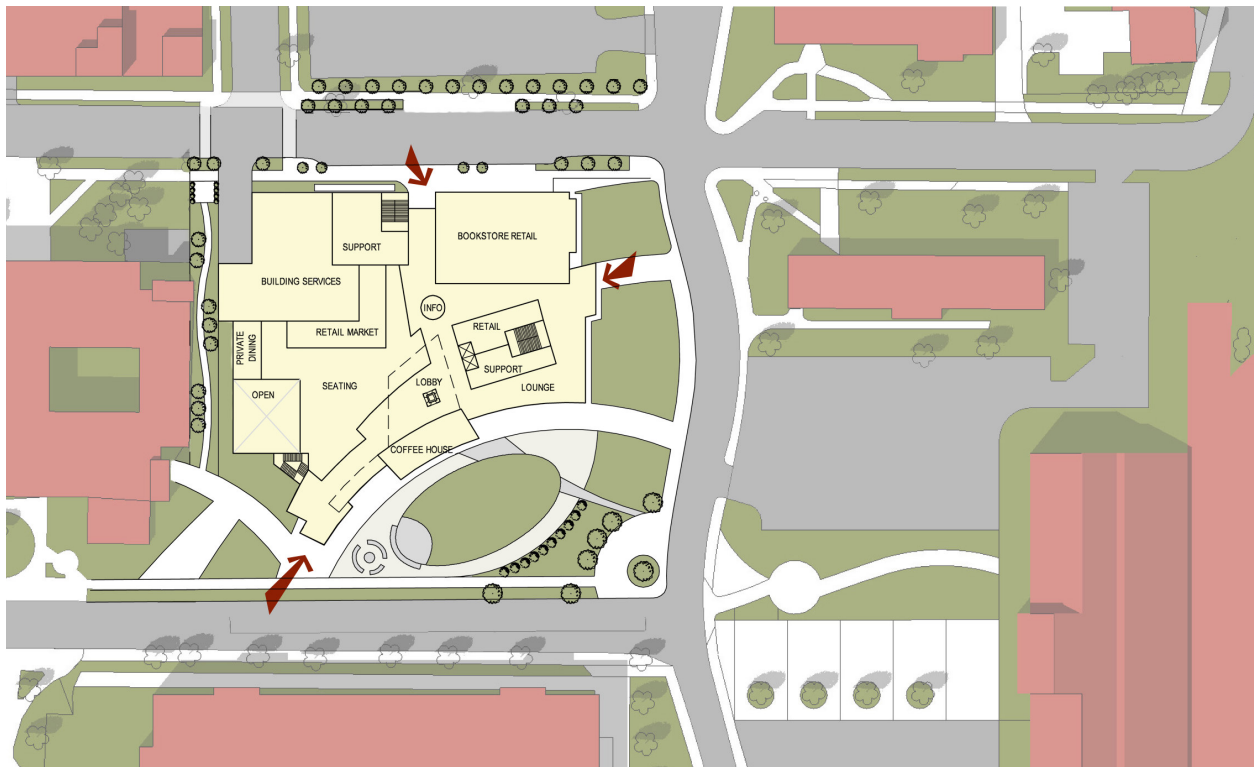
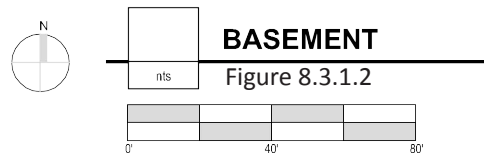
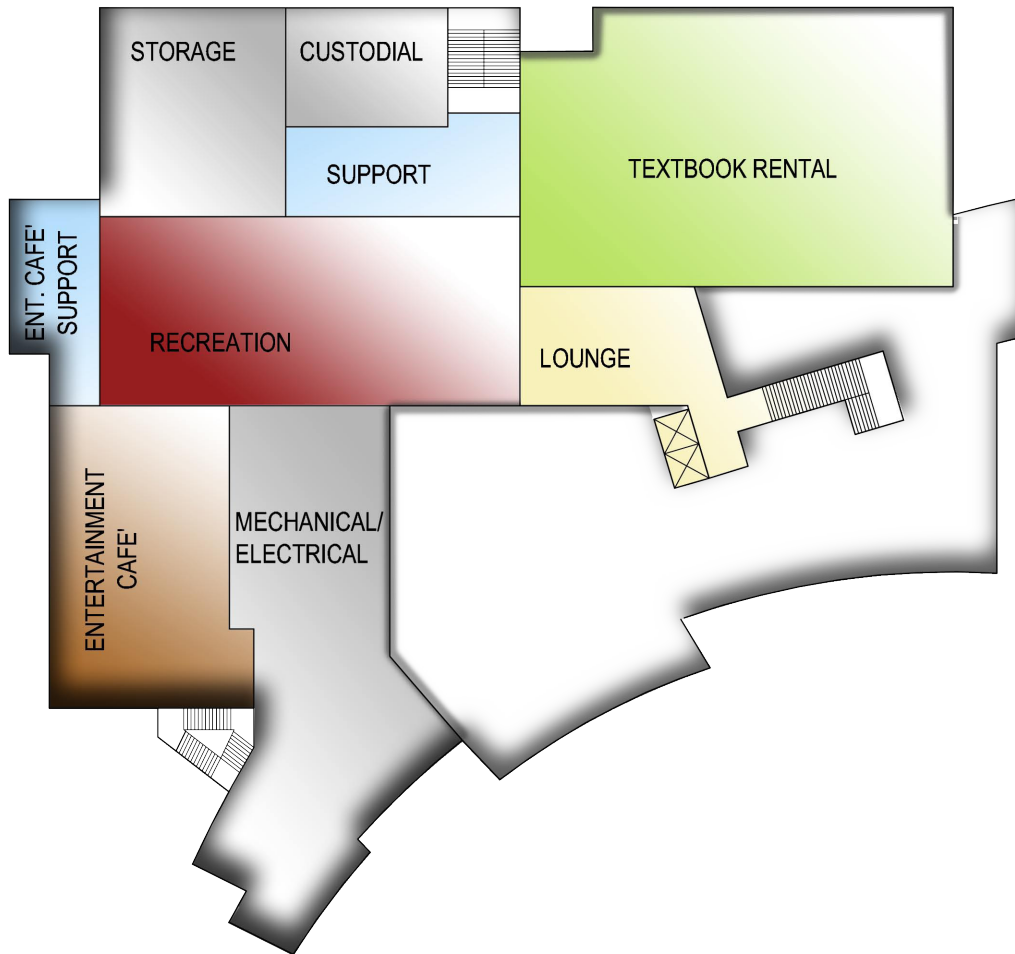
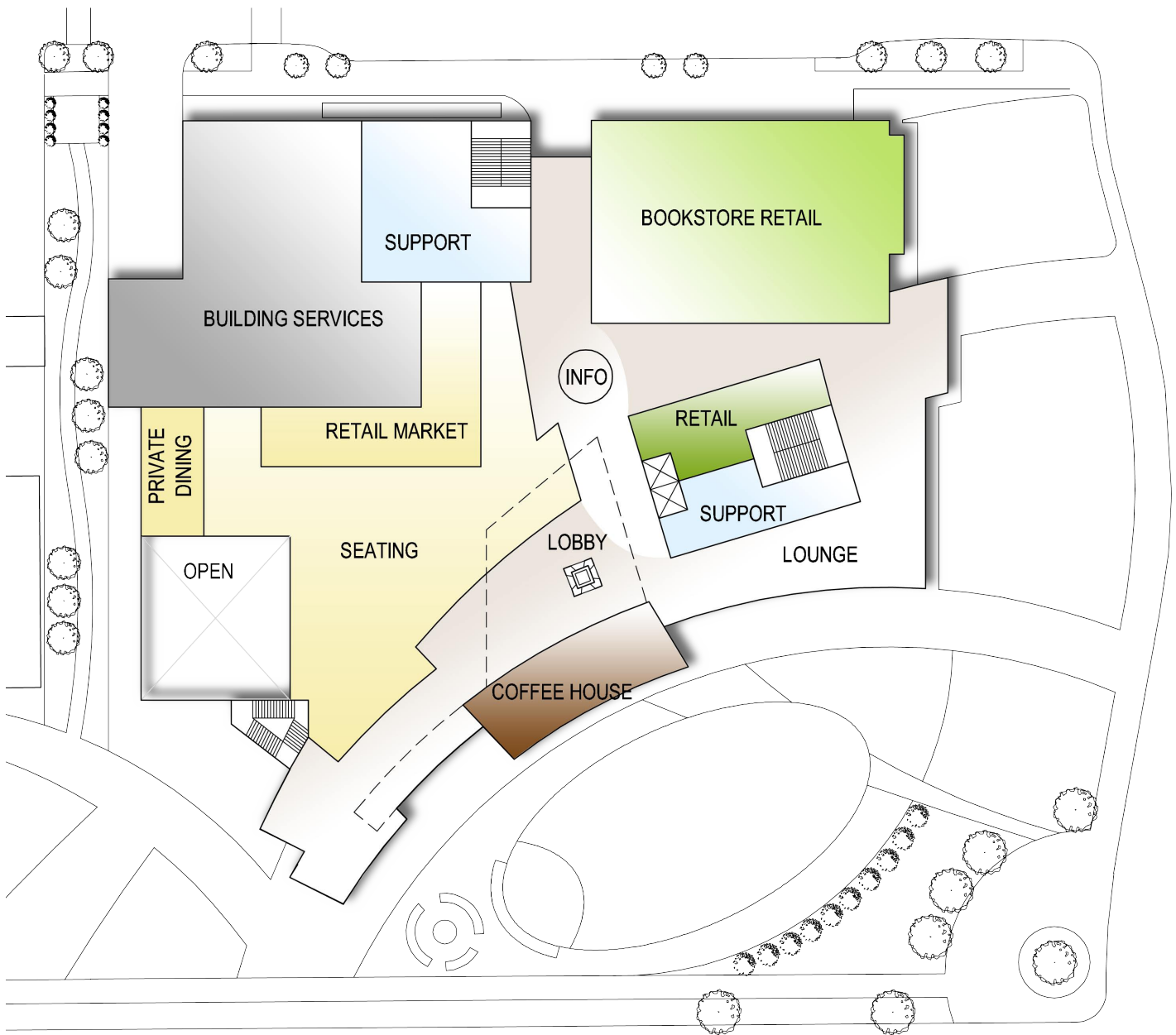


Figure 8.3.1.1 Site Concept

BUILDING AND SITE CONCEPT

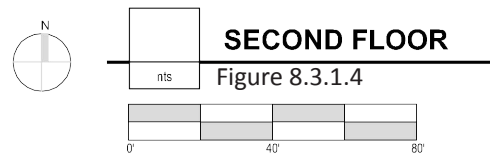
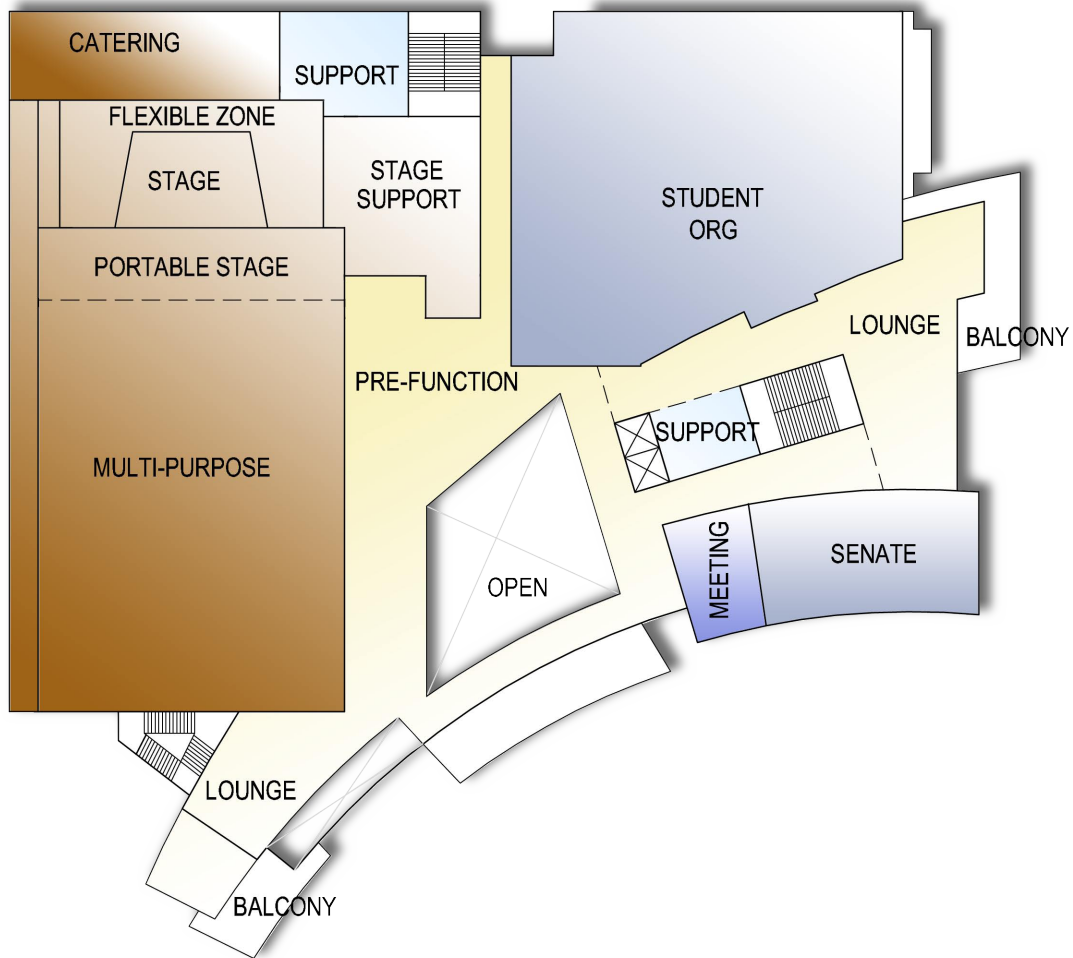


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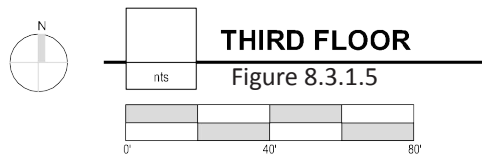
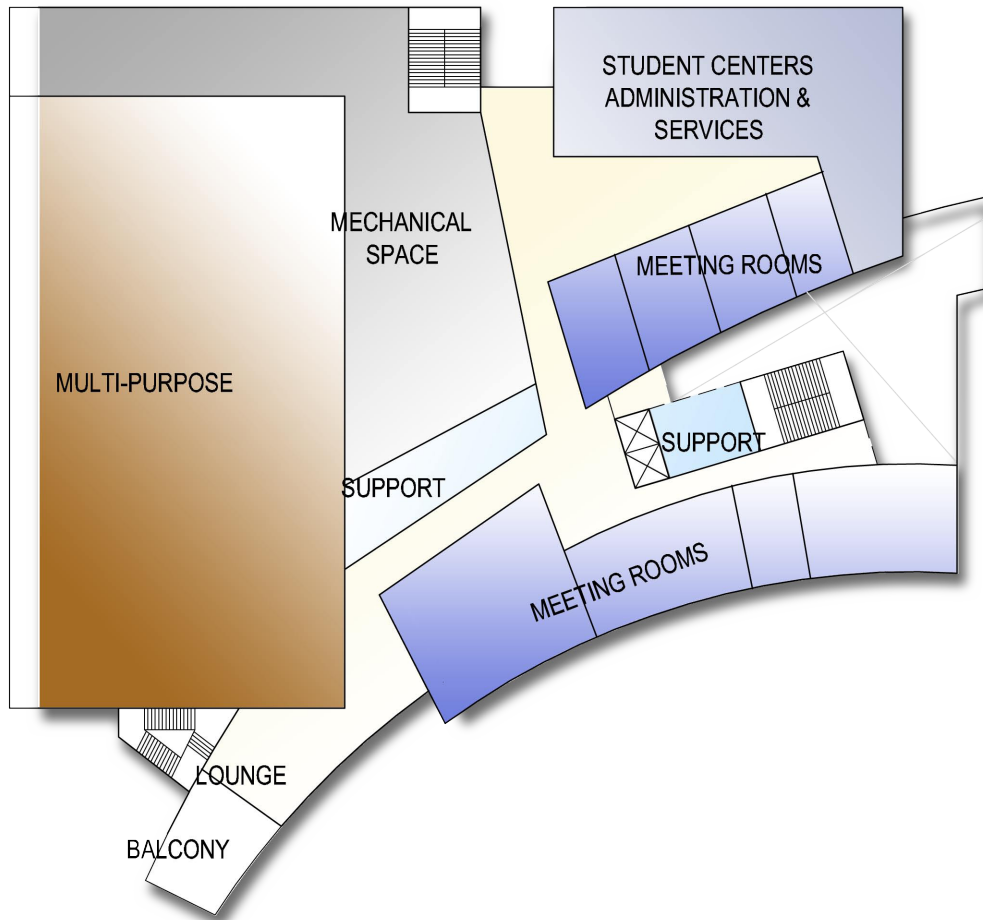


N
FIRST FLOOR
nts
Figure 8.3.1.3
0' 40' 80'

BUILDING AND SITE CONCEPT



BUILDING AND SITE CONCEPT



8.3.2 Architectural Concept Renderings



Figure 8.3.2.1 Aerial View



Figure 8.3.2.2 Street Entrance



Figure 8.3.2.3 Outdoor Plaza

8.4. Building/Systems Description

8.4.1. Architectural Systems

Site

The UWL Student Center is proposed to be located just off of the center of campus and highly visible from the main vehicular campus entrance. It will provide a centralized location for the main student activities of the campus and will provide an excellent destination/terminus for the northern end of the future Campus Mall. The building site is surrounded by existing buildings with Wimberly Hall to the west, Cowley Hall to the south, the Stadium & Fields to the east, Cleary Center to the North, the future Parking Structure to the northwest and Residential Halls to the northeast. A future addition is planned to the north of Cowley Hall and its configuration will have an impact on the visual and physical connection of the new Student Center. It is important that the design of the two buildings recognize and respond to the impact they will have on each other.

The new Student Center should be constructed a minimum distance of 40' from Wimberly Hall to minimize daylighting obstructions. The loading/receiving dock should be located at the northwest corner of the site and be designed to minimize cross-traffic with pedestrians. Semi-trailer traffic and major deliveries will ideally come from the west on Farwell Street to avoid using the Campus entrance at East Avenue and La Crosse Street.

This building will be utilized by a large number of students, faculty and staff, as well as the broader community and public. Special attention will need to be given to the development of the site and its amenities including; circulation of pedestrians, bicycles and service vehicles; landscaping; exterior signage; and the creation of gathering areas, both passive and active.

Character/Image

The challenge of a new building in an established campus setting is to contribute to the visual unity while tastefully expressing its own design character. This facility should express the timeless collective spirit and resourcefulness of its inhabitants, without being trendy. The building should exude an inviting, memorable, and socializing air that attracts and retains visitor and promotes a sense of community. Due to its prominent location on campus, the building will need to be treated as one that will be seen and experienced from multiple sides. Consequently, the design of the exterior of the building will be a critical task.

The UWL Student Center should respect the context of the overall campus physical organization and should also respect the context created by the UWL Stadium, the proposed new parking structure and the proposed addition to Cowley Hall.

Efforts should be made to adhere to the Architectural Guidelines that are in place within the Campus Master Plan.

The new Student Center should integrate the consistent material use that contributes to the campus milieu, however it should also stake out its own identity as a unique building that arguably will be used by every student.

Scale

The building's height, massing and location will be a critical to integrate into the framework of the campus context. The height of the facility relative to adjacent buildings is an important factor in maintaining a homogenous character to the campus and maximizing views of, and from, the building.

The primary challenge will be the massing of the building, as there are many functions that consume large areas and volumes within the building, and many functions that want to be adjacent to each other. These phenomenon in conjunction with a square proportioned site, create the potential for a large aggregate volume, or centralized building. Care should be taken to address the pedestrian scale and humanizing entry sequences.

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Care should also be taken in the positioning of the building on the site to create favorable outdoor spaces, welcoming entrances. Easy way-finding is of utmost importance. Explore ways to penetrate and sculpt the massing, using transparency and fenestration as a perceived opaque volume separator which will reduce apparent mass and minimize the boundaries of the building shell.

Building Access/Circulation

The entry routes to the UWL Student Center and the interior circulation system will be barrier-free accessible, functionally organized to promote efficient way finding, and distinctively designed. The primary building entrance(s) will be strategically positioned relative to the primary student migratory routes identified in the site analysis section.

The site provides opportunities for multiple pedestrian building entrances from different sides of the building. The entrance(s) will be protected from the elements and have vestibules. The main entrance(s) could be positioned along the southwest and northeast corners of the building. An entrance along the north side will address pedestrian traffic to and from the New Parking Structure, with the southwest entrance having direct access to the campus mall. The main entrance(s) will open into a public lobby/main circulation space that serves as a general reception, route-finding, student lounges, and Retail Marketplace dining areas. Special amenities to economically distinguish this space (natural light, two story space, openness, materials, colors, etc.) will need to be considered.

The horizontal and vertical circulation routing should originate from this circulation and distribute people to the programmed rooms of the building in a convenient, safe, and memorable way. Integration of effective way finding devices, such as natural light, signage, and simple routing, are highly desirable. The Bookstore desires an entrance that can be accessed directly from the exterior of the building, or through an entry vestibule.

The Coffee House and Entertainment Café have the potential for late hours of operation and a separate entrance or the ability to safely close off these areas from the remainder of the building should be considered.

Efficient access to the large Multi-Purpose Space on the second floor should be convenient for the public as well as for Campus users. Large volumes of users will be converging on this use area and care should be taken to minimize disturbances to other functions.

Materials

Considering that the earliest buildings on the UW-La Crosse campus have been in use for nearly a century, the durability of materials is clearly a major material influence. Brick has been the primary building material utilized throughout the campus and should be the core material ingredient. Contributing subordinate material selections, i.e., stone, glass, metal, should be in keeping with the established campus palate of colors, textures, and finishes. Introduction of new materials requires sensitive design scrutiny and detailing, yet can be used effectively to distinguish the facility. The design team shall review the materials in depth with the campus.

Interior Spaces

The facility will include the following space types:

- Offices and Office Support
- Conference Rooms/Meeting Rooms
- Multi-Purpose Space
- Student Lounges
- Computer Areas
- Food Services Areas
- Performance Spaces
- Student Organization Spaces
- Building Support

Interior Partitions

- Walls should typically be constructed of gypsum wall board on metal studs with a painted surface. The gypsum wall board should be covered in dent and abrasion resistant materials at areas of heavy use (lounges). Chair rail trim to be provided in rooms with movable chairs.
- Sound attenuation should be used wherever sound isolation is required. See Acoustical Design Considerations below for recommendations on STC ratings.
- Conference rooms, the Multi-Purpose Space, and office walls should extend from top of slab to underside of structure and will be acoustically sealed at the top and bottom. Provide two layers of 5/8" drywall on each side of classroom and corridor walls with insulation in the cavity. Drywall seams will be staggered and each layer taped and mudded individually.
- Painted unit masonry or CMU with finished material may be used in spaces that require additional durability such as main corridors or high traffic areas.

Doors

- Interior doors should be 1-3/4" thick solid core natural wood finish doors in painted steel frames, at least 3'-0" wide by 7'-0" high, or wider if required for egress by code or higher if required for equipment movement.
- Vision panels and/or sidelites to corridors should typically be provided where feasible. Refer to Division of State Facilities Accessibility Guidelines for height requirements above finished floor.
- At code-required fire-rated locations, doors and frames should be fire-rated assemblies. Provide vision lites in stair doors.
- Door hardware should be code compliant, heavy-duty type, lever style, with mortise locksets. Locksets must be compatible with existing campus locks. All doors should be lockable with a "Classroom" function, i.e., egress is always possible without a key.
- Entrance doors and frames should be anodized, thermally broken aluminum with insulated glass and should be 3'-6" wide minimum or wider if required for egress by code. All entrances should incorporate automatic operators with push button access.
- Provide magnetic hold open at stair doors.

Windows

- Windows should be maximized at exterior walls where appropriate while also minimizing direct sunlight and glare on work surfaces.
- Windows at exterior walls should be provided with clutch-driven roller shades.
- Interior windows should be incorporated where appropriate for "borrowed" natural light.
- Exterior windows should be anodized, thermally broken aluminum frames with high performance insulated glass.
- Windows should be provided in as many occupied spaces as possible.
- Follow DSF "Daylighting Standards for State Facilities" guidelines for daylighting design. An integrated design strategy is recommended when designing the exterior façade.
- Provide solid surface or moisture resistant sill. Plastic laminate is not allowed.

Ceilings

- Suspended grid tile ceilings should be provided where required for acoustics and cleanliness. Rooms without such requirements will have no ceilings and can remain open to the structure above.
- Pendant mounted light fixtures may be suspended below a 10'-0" ceiling. Careful consideration and study should be done by the A/E team to determine the appropriate ceiling height as it relates to window height and daylight penetration into the space. A/E must also consider projection screen height and usable marker board space as it relates to mechanical space above the ceiling.
- Acoustic tiles should be used in most suspended grid ceilings. Wood and metal panel ceilings may also be used, but in limited quantities to control future maintenance needs.

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Flooring

- Lobbies, corridors, and stairs should have the highest quality floor finishes based on cost, maintenance, and durability. Acceptable materials include terrazzo, terrazzo tile, and porcelain tile.
- Ceramic/Porcelain tile and base will be provided in restrooms.
- Sealed concrete should be provided in mechanical spaces with waterproofing membrane finish at penthouse floor.
- Conference rooms and office suites should have anti-static, high traffic, commercial grade carpet tile.
- Reference Appendix A: Room Data Sheets for additional details.

Finishes

- Walls should typically be painted. UW-La Crosse prefers materials that are easy to maintain and that are mold resistant. UW-La Crosse also prefers paint instead of wall covering.
- Protective chair rails should be installed for wall protection in any conference room with movable furniture.

Technology Levels

- Technology levels for individual rooms are identified in their respective Room Data Sheets.

Casework

- Casework should be finished with plastic laminate unless noted otherwise on the Room Data Sheets.
- Floor mounted casework should be provided at room perimeters of rooms where required.
- Movable storage cabinets shall be provided in workrooms and storage areas.
- Grommets should be provided for wire management whenever possible.

Acoustical Design Considerations

- The following guidelines are based on ANSI/ASA S12.60-2002 American National Standard Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.
 - Walls between conference rooms and corridors should have a minimum STC rating of 45.
 - Walls between conference rooms should have a minimum STC rating of 50.
 - Walls between conference rooms and public use rooms should have a minimum STC rating of 53.
 - Walls between conference rooms and mechanical equipment rooms should have a minimum STC rating of 60.
- HVAC Considerations
ASHRAE 48.1-48.7
 - Diffusers should have a Noise Criteria (NC) rating of NC 18 or less.
 - Airflow velocities in duct mains shall be 1500 ft/min max and branch ducts shall not exceed 800 ft/min.
 - VAV boxes and fan-powered boxes should be located outside of conference rooms if possible.
- The design team must evaluate the acoustics in each size of conference rooms and performance areas. Provide acoustically absorbent finishes wherever required.
- Ceiling tiles with a .65 or greater Noise Reduction Coefficient (NRC) should be used.
- Recommended Noise Criterion - NC

	Recommended NC Level NC Curve	Equivalent Sound Level dBA
Meeting or Banquet Rooms	25-35	35-45
Service and Support Areas	40-45	45-50
Halls, Corridors, Lobbies	35-40	50-55
Conference Rooms	25-30	35-40
Private Office	30-35	40-45
Dining	40-45	50-55
Concert and Recital Halls	15-20	25-30

Restrooms

- Restrooms should have tile floors and walls.
- Restroom partitions should be epoxy resin.
- Restroom accessories provided by UW-La Crosse include: toilet paper, paper towel, feminine hygiene, and soap dispensers and trash receptacles.
- Restroom lavatories should be constructed of plastic laminate casework with a solid surface countertop and stainless steel under-mounted sinks.
- Ceramic/porcelain tile should be installed on toilet room walls. Walls behind and adjacent to plumbing fixtures should have a tile wainscot a minimum height equal to the height of the toilet partitions.
- Provide gender neutral restroom on each floor.

Signage

- Provide interior room signage, directories, and way finding graphics throughout the building.
- Digital signage should be considered in main corridors and lobby spaces.
- Provide exterior building signage at the northeast and southwest entrances.

8.4.2 Structural Systems

8.4.2.1 Structural Description

1. Based on the size and use of the building, the structure will be constructed with non-combustible materials and have a fire rating per code. Structural systems can be either concrete and/or structural steel. Both systems are acceptable systems for this type of building. A concrete structure will provide better sound separation between floors than a structural steel system and would be the recommended system. The roof of the multi-purpose room is recommended to be a long span structural steel system which provides a column free space.
2. Per the geotechnical report, the foundation system can be cast in place concrete spread footings. Because of the presence of 9 to 11 feet of fill over natural sand, it is recommended and economically feasible to provide a full basement under the building. Estimated bearing capacity is 8,000 pounds per square foot.
3. Floor system vibration and deflection criteria: the design will follow AISC Design Guide Series 11, Floor Vibrations Due to Human Activity. Due to mixed uses of space in close proximity, the performance criteria will be used minimize vibration/movement beyond their acceptable thresholds.
4. Exterior cladding interaction with floor systems: For the sustainability of the exterior envelope, the structural system must be integrated with the exterior envelope such to create optimal performance with the exterior envelope. Jointing, deflection of load bearing systems and thermal conductance should be a high priority when selecting and designing the integration of the two systems. The macro performance and design of the envelope system should correspond to the micro details of the systems and the interaction with the structure.
5. To allow for flexibility in usage, the live load reduction will be excluded for floor system design.

8.4.2.2 Design Criteria References

1. Governing Building Code
 - a. 2011 Wisconsin Commercial Building Code IBC 2009 Edition.
2. Industry Reference Standards
 - a. ACI 318-02 (Building code Requirements for Reinforced Concrete)
 - b. ACI 315-99 (Details and Detailing of Concrete Reinforcement)

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- c. ACI 315R-94 (Manual of Engineering and Placing Drawings for Reinforced Concrete Structures)
- d. CRSI (Manual of Standard Practice and Placing Reinforcing Bars)
- e. AISC (Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings)
- f. AISI (Specifications for the Design of Cold-Formed Steel Structural Members)
- g. AWS (Structural Welding Code)
- h. SDI (Design Manual for Composite Decks, Form Decks, and Roof Decks)

8.4.2.3. Design Loads

1. Roof Live Load	30 psf (plus drifting and ponding)
2. Wind Loads	
Wind Speed	90mph
Importance Factor	1.0
Exposure	B
Building Category	Enclosed
3. Seismic Loads	
Seismic Use Group	II
Seismic Design Category	A
Site Class	D
Seismic Importance Factor	1.0
4. Floor Live Loads	
Office/Multi-purpose	100 psf
Stairs, lobbies, vestibules	100 psf
Corridors	100 psf
Bookstore	150 psf
Mechanical Area	150 psf
5. Superimposed Dead Loads	
Floor (ceilings, MEP)	15 psf

8.4.3 MECHANICAL SYSTEMS

8.4.3.1 HVAC SYSTEMS

A. Applicable Codes, Guidelines, and Standards

1. Design and construction codes and standards are listed below.
2. The codes and standards listed are minimum requirements. Nothing is to prevent the design team from exceeding the applicable requirements.
 - a. ASHRAE 62.1 - Ventilation for Acceptable Indoor air Quality
 - b. IBC 2009 - International Building Code – as adopted by the State of Wisconsin
 - c. IECC 2009 - International Energy Conservation Code – as adopted by the State of Wisconsin
 - d. IMC 2009 - International Mechanical Code – as adopted by the State of Wisconsin
 - e. UL - Underwriters Laboratories
 - f. Division of State Facilities Master HVAC Specifications
 - g. Division of State Facilities HVAC Systems Standards & Design Guidelines

B. Summary of Mechanical System

1. In general, the Mechanical system goals for this project are environmental comfort and quality, energy conservation, and sustainability. All proposed HVAC systems will be designed in accordance with DSF Standards.

C. Design Criteria

1. Outdoor Design Conditions
 - a. Summer: 89 F db / 74 F wb
 - b. Winter: -15 F
2. Indoor Design Conditions
 - a. Summer: 76 F db
 - b. Winter: 68 F db
3. Relative Humidity
 - a. Summer: 50% +/- 10%
 - b. Winter: No humidification
4. Heated Only Spaces
 - a. The following spaces will be heated only:
 - Janitor Rooms
 - Toilet Rooms
 - Mechanical and Electrical Rooms
 - Storage Rooms
 - Staircases
 - Vestibules
5. Unheated spaces
 - a. Generator room (when operational)
6. Air Conditioned Spaces
 - a. The remainder of the building
 - b. Lower level storage rooms to have a minimum air movement of 2 air changes per hour (ACH).
 - c. All other storage rooms to have a minimum air movement of 4 air changes per hour (ACH).

7. No provisions are necessary for future expansion of this building or expansion of the mechanical systems.
8. A basement mechanical equipment room is anticipated. This room shall accommodate:
 - HPS entrance
 - Steam pressure reducing station
 - Condensate pumps
 - Heat exchangers
 - Building hot water pumps
 - Backup steam boiler
 - Heat recovery chiller (if any)
 - Water filter chemical treatment equipment
 - MER ventilation
 - Variable frequency drives
 - Associated temperature controls
9. The air handling systems are anticipated to be located in a penthouse.
10. Particular care and consideration shall be taken when determining the final size, location, configuration, and construction of mechanical equipment room as it relates to maintenance, serviceability, and acoustics. Reference the architectural section for acoustical requirements.
11. Given the nature and complexity of this building type, the engineer of record is reminded that there is a significant amount of detailed coordination that needs to take place during design, especially with the food service equipment. See Section H Food Service.

D. Chilled Water Systems

1. Mechanical cooling will be provided by extending campus chilled water to the proposed building.
2. The chilled water will generally be pumped from the campus chilled water plant.
3. The need for a building chilled water booster pump is not anticipated but will need to be confirmed in the design phase.
4. No filtration of chilled water is anticipated in this building.
5. Provide isolation valves for all chilled water piping where they branch off of the main.
6. Provisions need to be incorporated into the design to allow for proper cleaning and flushing of the chilled water systems.
7. In accordance with Executive Order 141, the pre-design process evaluated the feasibility of a ground source geothermal system for space and water heating. The site available for this project lacks suitable area for a geothermal well field of any significant size and is in close proximity to an existing municipal well head. Henneman Engineering's experience from other projects indicates that the life cycle cost of such a system typically exceeds 20 years. Given the logistical challenges posed by the site and lengthy payback on investment, the option of a closed loop ground source geothermal systems has been eliminated for this project.
8. The use of a heat recovery chiller to provide simultaneous heating and cooling should be studied during the design phase.

E. Steam and Condensate Systems

1. The existing high pressure steam and condensate service will be intercepted adjacent to the proposed project site and extended into a new mechanical equipment room (MER) at grade with a steam pit or in a basement.
2. It is anticipated that there will be a need for both a low pressure and medium pressure steam within the building. Therefore high pressure steam will need to reduce to both medium pressure and low pressure.
3. Low pressure steam (15 PSIG) is anticipated for air handling unit coils and building heating hot water heat exchangers.
4. Medium pressure steam (20 – 30 PSIG) is anticipated to serve kitchen equipment and domestic water heating.
5. A backup system is needed for the medium pressure system to serve process loads, domestic water heating, and reheat loads when the campus steam system is unavailable. One approach to consider is the installation of a gas fired high pressure steam boiler subject to a life cycle cost analysis during the design process.
6. Condensate will be collected into a condensate receiver(s) equipped with duplex pumps to pump condensate back to the central plant.
7. Condensate flow back to the plant will be metered as it leaves the building.

F. Hot Water Heating Systems

1. Steam-to-hot water shell and tube heat exchangers will use low pressure steam to generate building heating water.
2. The hot water will be distributed with a variable volume pumping system. Two circulating pumps (one being 100% standby) will distribute hot water to air handling unit coils and terminal heating devices.
3. The hot water heating system will be equipped with a side stream filter.
4. Provide isolation valves to allow for the hot water distribution system to be isolated into a minimum of 3 zones per floor.
5. Provisions need to be incorporated into the design to allow for the proper cleaning and flushing of the hot water systems.

G. Ventilation Design Criteria

1. Minimum outside air requirements will meet or exceed the requirements of the Wisconsin Administrative Code, Chapter 64 and the ventilation rates of the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Standard 62.1.
2. Verification of the minimum outside air quantities in variable volume systems will be accomplished through the use of airflow measuring stations located in the outside air intake ductwork.
3. Air flow measuring stations will be provided in the supply and return air systems of VAV systems to maintain the building at a slight positive pressure at all times.

4. Building intake and exhaust locations shall take into consideration the possibility of cross contamination. Intakes shall be located in a manner that minimizes the potential for contamination.
5. Louver sizing, placement, and design shall consider snow penetration issues. Refer to DSF design guidelines.

H. Central Air Handling Systems

1. Air handling units will be installed in mechanical rooms. The HVAC equipment in the mechanical rooms will be designed to provide full access for filter replacement, coil replacement, fan shaft removal and any other equipment maintenance and replacement procedures.
2. The units will contain blenders, filter sections, preheat coils, chilled water coils, reheat coils, access sections, supply fan, and return fans as required.
3. Air handling units will be provided with 2" pre filters and 65% bag filters.
4. Preheat coils subject to freezing conditions may be either steam or pumped hot water coils.
5. At a minimum, separate air handling systems are to be provided for the following spaces:
 - Kitchen
 - Dining Services
 - Meeting Rooms

I. Energy Recovery

1. Energy recovery may not be used in any grease laden exhaust. Energy recovery shall be considered for non-grease laden exhaust.

J. Air Distribution

1. The anticipated air distribution system is a variable air volume system with hot water reheat and perimeter baseboard however this shall be confirmed during design development.
2. The supply, return, and exhaust air systems will be distributed using a fully ducted system constructed of sheet metal per SMACNA standards.
3. Ductwork to be externally insulated per DSF specs and standards.
4. The return and exhaust air ductwork system may be internally lined were necessary for acoustics only.
5. All transfer ducts located in sensitive areas will be lined for acoustics.
6. Grilles and diffusers will typically be selected with noise criterion rating of NC 25 or less.

K. Building Exhaust

1. The kitchen hoods shall be equipped with a variable speed control system that varies the exhaust and makeup air volumes based upon need.
2. Roof mounted upblast exhaust fans shall be used for grease laden exhaust ductwork.
3. General building exhaust shall be accomplished with fans located within mechanical rooms.

L. Terminal Heating Devices

1. Finned tube radiation will be provided in all spaces having an exterior exposure for added comfort and to heat the building for when the central air handlers are in unoccupied mode and shutdown.
2. VAV boxes will modulate from maximum to minimum airflow prior to opening the hot water valve to the reheat coils. A VAV box will be furnished for each thermostatic zone.
3. Each thermostatic zone will take into consideration exposure, occupancy schedule, and space use.
4. At a minimum the building will be zoned as follows:
 - a. All zones must have similar exposure.
 - b. Maximum of 3 offices per zone.
 - c. Corner offices, conference rooms, and supervisory type offices shall be independent zones.
 - d. Spaces with movable partitions shall have corresponding zones.
5. Cabinet unit heaters will be installed in entry vestibules and at doors leading to the outdoors. Cabinet unit heaters will be downflow hot water type with wall-mounted thermostat and be recessed wall whenever possible.
6. Unit heaters will be provided in mechanical rooms, generator room, electrical rooms with exterior exposure, and loading dock.

M. Temperature Controls

1. This building will be integrated into the existing campus building automation system.
2. Direct digital controls with electric actuation will be used to control the air handling units, booster coils, VAV boxes, and wall fin.
3. All cabinet unit heaters and unit heaters are to have electronic control.
4. All control valves and dampers are to have electric actuation.
5. Air handling units will be provided with economizer controls and demand controlled ventilation.
6. All VAV boxes will be interlocked with occupancy sensors to allow box to go into an unoccupied mode when zone is not being used.
7. Kitchen hood control system shall be provided with the kitchen hoods, and integrated into the DDC system.
8. The following building utilities will be metered and integrated into the DDC system:
 - Steam condensate
 - Chilled water
 - Natural gas
 - Electrical demand
 - Electrical consumption
9. Meters must be read at the meter and at control system.

N. Testing, Adjusting, and Balancing

1. The building will be tested and balanced in accordance with AABC or NEBB Standards.

O. Emergency Power Requirements

1. The following systems shall be fed from an emergency power source:
 - a. Building hot water pumps
 - b. Steam condensate pumps
 - c. Air handling unit serving the Kitchen
 - d. Kitchen hood exhaust fans
 - e. Coil pumps associated with an air handling unit fed by emergency power
 - f. Backup boiler
 - g. All temperature controls

8.4.3.2 FIRE SUPPRESSION SYSTEMS

Design And Construction Codes And Standards Are Listed Below

1. The codes and standards listed are minimum requirements. Nothing is to prevent the architect, engineer, or consultant from exceeding the applicable requirements. In all cases the most recent editions of referenced standards apply.
 - a. NFPA 13, Installation of Sprinkler Systems
 - b. NFPA 14, Installation of Standpipe and Hose Systems
 - c. NFPA 20, Installation of Stationary Pumps for Fire Protection
 - d. NFPA 24, Installation of Private Fire Service Mains
 - e. NFPA 70, National Electric Code
 - f. NFPA 72, National Fire Alarm Code
 - g. NFPA 101, Life Safety Code
 - h. State of Wisconsin, DOA, Division of State Facilities Master Specifications
 - i. University of Wisconsin-La Crosse Design Standards

Water Service

1. The facility shall be provided with a combined fire protection & domestic water service (8" diameter) installed by the plumbing contractor. The fire protection contractor shall connect to a tee provided by the plumbing contractor.
2. Water pressures on campus are reported to be 70 – 90 psi. Although flow test reports have not been obtained, the reported pressures appear to be sufficient to support a sprinkler system. Water pressure is not sufficient to support an automatic wet standpipe system if required by code or the Fire Department.
3. Current water supply flow test results will be obtained from the campus or the local water utility for design purposes.
4. An ASSE 1015 Double Check Fire Protection Backflow Prevention Assembly shall be provided by the fire protection contractor to isolate the fire protection systems from the potable water system.

Water-Based Fire Suppression Systems

1. Fire suppression systems consist of:
 - a. Wet pipe automatic sprinkler system.
 - b. All areas of the building will be protected, including electrical rooms (switchgear, transformers, generators, electrical and telecommunications closets, etc.), elevator hoistways and machine rooms, loading docks, stair towers, exterior canopies, and mechanical rooms.

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2. All systems will be hydraulically calculated with a computer calculation program using the Hazen-Williams method.
 - a. Areas designated as Light Hazard Occupancy will be designed for a minimum sprinkler flow of 0.10 gpm per sq. ft. over the hydraulically most remote 1500 sq. ft.
 - b. Areas designated as Ordinary Hazard, Group 1 will be designed for a minimum sprinkler flow of 0.15 gpm per sq. ft. over the hydraulically most remote 1500 sq. ft.
 - c. Areas designated as Ordinary Hazard, Group 2 will be designed for a minimum sprinkler flow of 0.20 gpm per sq. ft. over the hydraulically most remote 1500 sq. ft.
3. Minimum water supply requirements for a hydraulically designed sprinkler system shall be determined by adding the appropriate hose stream demand per NFPA 13 to the total sprinkler water demand.
4. Each floor will be a separate sprinkler zone with floor control valve, supervisory switch, and water flow indicator switch.
5. Wiring from supervisory switches and flow switches will be extended to and connected to the building fire alarm panel.
6. Materials: The piping for the wet pipe sprinkler system will be black steel. Piping 2" and smaller in size will be Schedule 40 with threaded joints. Piping larger than 2" will be Schedule 10 with welded or roll groove couplings or Schedule 40 with welded, threaded, or cut groove couplings.
7. Unscheduled specialty steel and CPVC plastic piping is not allowed.
8. Butterfly valves with geared operator, visual position indicator, and supervisory switch.
9. Flow Switches: Vane type water flow indicator switch with adjustable retard.
10. Quick response fusible link or glass bulb sprinklers, UL listed/FM approved. Provide ordinary temperature rated sprinklers except at skylights, adjacent to unit heaters, and adjacent to un-insulated heating piping.
11. The type of sprinkler used in a particular area will be selected by the Engineer of Record and the Architect. Generally, concealed sprinklers will be installed in areas with ceilings. Pendent or upright sprinklers will be installed in areas without ceilings.
12. Center-of-tile sprinkler head placement will be specified in all public and occupied spaces. Back-of-house spaces do not require center-of-tile placements. Sidewall sprinklers will be used only when other types cannot be used.
13. Flexible sprinkler connectors are allowed, subject to DSF product approval.
14. Dry sprinklers or a dry pipe sprinkler system may be provided to protect areas subject to freezing temperatures.

Class 1 manual wet standpipe system

1. The standpipe system described is based upon the assumption the highest floor level of the buildings is more than 30' above the lowest level of fire department access, but less than a height that would define the building as a high rise.
2. Standpipes will be located in each stair tower with 2½" fire department valves/hose connections serving each floor level and on roof. Additional 2½" hose connections may be required by the Fire Department if the most remote portion of a floor is located in excess of 200' of travel distance from a stair tower containing a hose connection.

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3. Materials: Piping for will be black steel, Schedule 10 with welded or roll groove couplings or Schedule 40 with welded, threaded, or cut groove couplings
4. Wall mounted four-way fire department inlet connection (FDC) on street address side of building in location subject fire department approval.
5. The building is not anticipated to be a high-rise therefore an automatic standpipe system is not required by the building code. These requirements will be verified during design.

8.4.3.3 PLUMBING

A. Design and Construction Codes and Standards Are Listed Below.

1. The codes and standards listed are minimum requirements. Nothing is to prevent the architect, engineer, or consultant from exceeding the applicable requirements.
2. In all cases the most recent editions of referenced standards apply.
 - a. Safety & Professional Services 381-387, Wisconsin Plumbing Code, latest edition
 - b. State of Wisconsin, DOA, Division of State Facilities Master Specifications
 - c. University of Wisconsin-LaCrosse Design Standards
 - d. NFPA 54, National Fuel Gas Code

B. Water Service

1. A combined domestic and fire protection water service, 8" diameter, will be provided. Flow tests will be requested during design to verify adequate flow and available water pressure.
2. A blind flange will be furnished at the building entrance for the fire protection contractor to connect the combined automatic sprinkler/standpipe system.
3. A water meter, with full size by-pass, will be provided at the building entrance. The water meter will be sized for the building's design flow and maximum allowable pressure drop.
4. Water pressures on campus are reported to be 70–90 psi. Although flow test reports have not been obtained the reported pressures appear to be sufficient to support the domestic water distribution system.
5. Current water supply flow test results will be obtained from the campus or the local water utility for design purposes.
6. Maximum water pressure in the building distribution system will be limited to 80 psi. The minimum available pressure at the most remote fixture or piece of equipment will be 35 psi. Water distribution piping will be sized for a maximum velocity of 8 fps
7. Domestic water will be provided to all plumbing fixtures and any other devices and equipment that require a domestic water supply.
8. Water Quality: According to the best available information water hardness for the City of La Crosse is an average of 16 grains per gallon with a high value of 19 grains per gallon.

C. Sanitary Drain, Waste and Vent System

1. A sanitary drain waste and vent system will be provided for all plumbing fixtures, floor drains, indirect waste receptors, and equipment that require drainage. Plumbing fixtures and devices will be drained by gravity through conventional drain, waste and vent stacks, sanitary building drains and a building sewer to the municipal sewer. The sanitary drainage system will be pitched to maintain flow at a minimum velocity of 2 fps.
2. Grease laden waste from the kitchen shall be routed through an exterior pre-cast concrete grease interceptor before connecting to the sanitary building sewer. Size of interceptor will be based upon the number of meals served per day in accordance with the Wisconsin Plumbing Code.
3. Grease laden waste from remote food service locations may be routed through an interior polyethylene or steel grease interceptor before discharging to the sanitary building drain.
4. There will be a vent system to protect the fixture traps. The vents will collect into vertical stacks in multiple locations and be routed to terminate in vent terminals through the roof. Every trap and trapped fixture shall be vented so that the water seal of the trap shall be subject to a maximum pneumatic pressure differential of one inch water column.
5. Building drain piping which cannot discharge by gravity will be drained by gravity to duplex sewage ejectors. The pump discharge shall be connected to the gravity sanitary drainage system.
6. Assume a minimum 6" sanitary building sewer.

D. Storm Drainage System

1. A storm drainage system will be provided to convey rainwater from the roof of the building to site storm sewers. Roof will be drained by gravity through storm building drains and a building sewer to the site storm sewers or municipal sewer. The intent is to connect storm drainage to the rain gardens/biofiltration system and then discharge to the storm sewer to the greatest extent possible. See 8.2.2 Storm.
2. To protect the structural elements from excessive water on the roof, overflow roof drainage will be accomplished through roof scuppers, or overflow roof drains and piping that discharges through the building wall to daylight.
3. Clearwater waste from air handling units, ice machines, etc. will be conveyed by gravity through a separate drain and vent piping system and will connect to the building storm drain.
4. Building drainage systems (storm, clearwater waste, elevator hoistways, sub-soil drains) which cannot discharge to the sewer by gravity will be drained by gravity to sump basins with sump pumps. The pump discharge shall be connected to the gravity storm drainage system.
5. Assume a 12" size for storm building sewer.

E. Sub-Soil/Foundation Drain System

1. A geotechnical report will be needed for recommendations regarding the need for a sub-soil drain system for the addition. If the geotechnical report indicates the need for a sub-soil drain system, perforated drains will be provided. Sub-soil drains will connect to a storm/clearwater sump pump.
2. A sub-soil drainage system at the exterior building perimeter should be assumed.

F. Domestic Water

1. Domestic hot and cold water will be provided to all plumbing fixtures and any other devices and equipment that require a domestic water supply. Maximum velocity in the piped systems shall be 8 fps.
2. If the water pressure and flow to the building is not adequate then provide a variable speed drive duplex or triplex water pressure booster pump system for the domestic water systems.
3. Domestic hot water will be produced by double wall steam-to-water heat exchangers utilizing plant steam and a hot water storage tank. An electric or natural gas fired back-up water heater will be required to furnish hot water to the building during the annual shut-down of the campus steam system.
4. Hot water system temperatures will be maintained by re-circulation of the hot water with in-line circulating pump(s).
5. Domestic hot water shall be heated, stored, and distributed at two temperatures. 140°F hot water with a return of 124°F shall be distributed to the main Kitchen. Hot water temperatures to all other sections of the building shall be limited to not exceed 120°F.
6. Hot water only will be softened. Duplex alternating water softeners will be installed ahead of the water heaters. Space will be provided for storage of salt pallets.
7. One or more reduced pressure backflow preventers will protect the domestic water system at all connections to equipment where there is a possibility of contamination due to cross connection or backflow conditions (ex: mechanical heating and cooling equipment).
8. Water hammer arrestors will be provided at all solenoid valves and at other potential water hammer sources.

G. Natural Gas

1. A piped distribution system will furnish natural gas to all food service cooking equipment, fireplaces, and emergency generator.
2. Building Distribution Piping (above grade): Schedule 40 black steel pipe, ASTM 53, type E or S.

H. Food Service

1. Food Service fixtures and equipment will be furnished and set in place by the Division 11 contractor. Plumbing contractor will provide all rough-in piping, traps, tailpieces, indirect waste lines, and thermostatic mixing valves; and install faucets, drains, vacuum breakers, solenoid valves, check valves, flow control valves, water inlet fittings, filters, and strainers furnished by equipment contractor.
2. Final utility connections will be made by the appropriate trades.
3. Existing fixed and major movable equipment from Cartwright will be relocated by the Division 11 contractor.
4. All foodservice equipment will meet NSF standards.
5. Production area equipment will be constructed of stainless steel.
6. Exhaust Hoods: low volume UL-listed grease extractors with demand control systems served by no less than one fan for each work center or station.

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7. Serving Counters: stainless steel cabinetry with millwork front and end panels; quartz composite tops; adjustable protector shelves.
8. Cooking equipment will be provided with flexible quick disconnect gas and water lines.
9. An interconnection between the hood demand control system and the make-up air system should be provided.
10. The hood ductwork should be fully welded, in rated shafts, sloped back toward the hoods and include access panels at each elbow and floor transition. The fans should have hinged access for duct cleaning, roof grease protection and flexible mounts for sound reduction. Fans are to be sized to 125% of the designed exhaust volume to prolong life, reduce noise and provide balancing flexibility. Duct runs should be as direct as possible.
11. Separate condensate exhaust systems will be provided for the warewashing areas. Review with the campus if the hoods should be controlled thru the building automation system. It is recommended that the system is only monitored, not controled, as the foodservice can run at off times or schedules of the building.
12. IMC 2006 states that in a commercial kitchen the temperature differential between the make-up air and the air in the conditioned space shall not exceed 10 degrees. Review current IMC code when designing the mechanical system.

I. Plumbing Fixtures

1. Water efficiency within the building will be maximized to reduce the burden on municipal water supply and wastewater systems. At minimum there will be a 20% reduction in water use over water use standards required by the Energy Policy Act (EPA) of 1992. To achieve the water use reduction goals outlined above the design will incorporate high efficiency water closets, high efficiency urinals, and low-flow lavatory and sink faucets.
2. Fixtures will comply with ADA Accessibility Guidelines where required.
3. Water Closets: Wall hung vitreous china HET with manually operated 1.28 gpf flush valve or dual flush 1.1/1.6 gpf flush valve.
4. Urinals: Wall hung vitreous china HEU with sensor operated flush valve, 0.5 gpf maximum.
5. Lavatories: Self-rimming or wall hung vitreous china fixtures will be provided in all toilet rooms. Faucets shall be sensor operated. Flow will be restricted to 0.5 gpm maximum.
6. Wall hung bi-level electric water coolers with inlet water filter.
7. Showers: Built-up stall by General Contractor with 2" floor drain by Plumbing Contractor. Plumbing Contractor to provide pressure balancing shower valve with fixed shower head for non-ADA showers and fixed shower head and hand shower with 24" glide bar and 72" long hose at all ADA showers. Shower heads shall be flow restricted to 2.0 gpm.
8. Sinks: Single and double compartment 18 gauge self-rimming stainless steel sinks with manually operated faucets. All faucets will be restricted to a maximum flow of 1.6 gpm.
9. Wall boxes with a valved water inlet will be provided at all locations where an ice maker or coffee maker is required.
10. Wall boxes with cold & hot water inlets, mechanical shock arrestors, and 2" indirect waste receptor will be

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provided at all locations where an automatic clothes washer is required.

11. Mop basins: 36" x 24" x 10" mop service basins, faucet with hose connection vacuum breaker and lever handles, and stainless steel wall guard panels.
12. Self-draining frost resistant wall hydrants with ¾" hose connections will be provided along the building perimeter with one per each wall face and at maximum of 150' intervals.
13. Emergency Fixtures: Emergency eyewash and showers with thermostatic mixing valves to deliver 80°F water will be provided per building program.
14. Drains and Cleanouts: Floor drains in finished areas will have cast iron bodies with nickel-bronze strainers. Floor drains in mechanical areas will have cast iron bodies with a cast iron grate. Roof drains will have cast iron bodies with an aluminum or cast iron dome strainer. Drains in green roofs will have cast iron bodies with a bronze dome strainer covered by a stainless steel mesh screen. Floor cleanouts will have cast iron bodies with nickel-bronze covers. Wall cleanouts will have a stainless steel wall plate.

8.4.4. ELECTRICAL SYSTEMS

A. Electrical Service

1. Interior primary service switch gear shall include two loop-feed non-fused switches and a single primary switch and fuse unit. The equipment shall be rated 15/5kV. The normal electrical distribution systems shall include a 1500kVA, 4160 to 480/277 volt unit substation dry type transformer, 2500 amps, 277/480 volt main breaker, 2500amps 3 phase 4 wire switchboard and distribution breakers. The 480 volt Main and feeder circuit breakers shall be solid state type and shall be equipped with long time, short time and instantaneous trip elements for selective coordination. The 480 volt main and feeder breakers shall also have Ground Fault trip elements to avoid nuisance tripping of the main breaker. A single 300kVA, 480 volt to 120/208 volt step down transformer shall connect to a 1200 amp, 120/208 volt, 3 phase, 4 wire distribution switchboard. The 208 volt switchboard feeder circuit breakers shall also be solid state type with long time, short time and instantaneous trip elements for selective coordination.
2. All 480 volt switchboard feeders shall be equipped with BACNet compatible digital metering for measurement and verification purposes.
3. The normal electrical service electrical equipment shall be located in a dedicated room which is separate from the generator room and emergency electrical equipment room. The estimated size of the normal power room is 420 square feet (15' x 30'). This room shall not contain building columns within the space. This room requires two means of exit at opposite ends. The doors must open out of the room and have panic-type, hands free hardware. No plumbing is permitted through this room. No HVAC equipment is permitted through this room except that which serve this room. No plumbing equipment or fixture or floor drains are permitted above this room. The main door shall be a minimum of 6' wide and of adequate height to get equipment in and out of the room. An unobstructed pathway shall be provided and maintained from the electrical room to the building exterior doors for installation, removal and replacement of large electrical equipment.

B. Electrical Distribution

1. One (1) 277/480 volt, 3 phase, 4 wire branch circuit panel board shall be provided in each service area on each floor for lighting loads. The estimated size of each floor distribution room space is 108 square feet (9'x12'). Minimum of two dedicated electrical rooms shall be provided on each floor at approximately quarter points across the length of building so that distance from the electrical room to furthest device does not exceed 100'. Floor distribution electrical rooms shall be stacked vertically. Electrical rooms shall not contain building columns within the space. Columns at walls may be acceptable. Provide one (1)

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3'x7' out-swinging door with panic-type, hands-free hardware for each electrical room. No plumbing is permitted through electrical rooms. No HVAC equipment is permitted through electrical rooms except that which serve these rooms. No plumbing equipment or fixture or floor drains are permitted above electrical rooms.

2. One (1) 277/480 volt, 3 phase, 4 wire branch circuit panel board shall be provided for food service equipment. This panel shall have multiple sections. This panel shall be located in the Food Service area. Where possible, kitchen loads shall operate at 480 or 277 volts. Food service panels shall be flush mounted in thickened walls to facilitate cleaning.
3. Each 277/480 volt panel shall be connected to the 277/480 volt distribution switchgear located in the distribution electrical room.
4. Two (2) 120/208 volt, 3 phase, 4 wire branch circuit panel board shall be provided in the service areas on each floor for receptacle loads. To address the ASHRAE 90.7-2010 energy code requirements for switching receptacle loads, these panels shall be circuit breaker with integral relays. An acceptable option is to provide low voltage relay panels adjacent to the circuit breaker panels. The quantity of circuit breakers and relays will be determined by the quantity of controlled loads.
5. One (1) 120/208 volt, 3 phase, 4 wire branch circuit panel board shall be provided for food service equipment. This panel shall have multiple sections. This panel shall be located in the Food Service area. Where possible, kitchen loads shall operate at 480 or 277 volts. Food service panels shall be flush mounted in thickened walls to facilitate cleaning.
6. Each 120/208 volt panel shall be connected to the 120/208 volt distribution switchgear located in the distribution electrical room.
7. New 120/208 volt panel boards shall be double tub type with 84 circuit capacity. Panel boards shall have copper bus with a separate ground bus rated 100%. All panel boards shall be constructed with the entire front trim hinged to the box with a standard door within the hinged trim cover for access to breakers.
8. Style and type of site lighting equipment shall be coordinated with the campus. Control of site lighting shall be coordinated with the Campus Building Automation System.
9. Lighting shall operate at 277 volts. Where possible, motors shall operate at 480 volt, 3 phase. General receptacles and computer loads shall operate at 120 volts.

C. Emergency Electrical Systems

1. The emergency power shall be obtained from a new natural gas fueled generator. The generator rating is currently estimated to be 375kW. This size is to be verified by the design team. Consideration shall be given to staging the mechanical loads to minimize the capacity of the generator.
2. The generator and fuel system shall be located inside the building in a dedicated 2-hour rated room. Natural gas shall be extended from the mechanical room to the generator room. The generator will be equipped with a unit mounted radiator. The room will be situated where it can be easily serviced and where supply and discharge air can be efficiently ducted from the exterior of the building to the equipment. The exhaust stack will be routed through the building to discharge above roof level. The estimated size of the emergency generator room is 300 square feet (12'x25'). This room shall not contain building columns. Columns at walls may be acceptable. No plumbing is permitted through this room. No HVAC equipment is permitted through this room except that which serve this room. No plumbing equipment or fixture or floor drains are permitted above this room.

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3. The emergency generator shall be provided with a complete integral control panel and annunciator. LED type remote generator annunciators shall be provided in the transfer switch room and at the building entrance. The annunciator signals shall be sent to the building automation system.
4. An emergency distribution switchboard shall be provided with code required dedicated sections for each emergency branch. At least four (4) automatic transfer switches shall be provided. One for Life Safety loads, one for optional equipment loads, one for an elevator and at least one for optional selected food service equipment. Emergency distribution panel boards shall be provided to serve these loads. The estimated size of the emergency power distribution room is 200 square feet (10'x20'). This room shall not contain building columns within the space. Columns at walls may be acceptable. This room shall be located in close proximity of normal power distribution and emergency generator if possible. No plumbing is permitted through this room. No HVAC equipment is permitted through this room except that which serve this room. No plumbing equipment or fixture or floor drains are permitted above this room.
5. Life safety distribution shall be provided for all emergency egress lighting, fire alarm system, and communications power.
6. The optional emergency distribution shall be provided for plumbing loads such as sump pumps, mechanical loads for building freeze protection such as boilers and heating pumps, selected food service equipment such as coolers and freezers. Automatic transfer switches shall be bypass isolation type with closed transition. Automatic transfer switches shall be contactor type not circuit breaker type.
7. The emergency distribution switchboard, transfer switches and distribution panels shall be located in a dedicated electrical room separate from the normal electrical distribution room and separate from the generator room.

D. Lighting Systems

1. All lighting and controls shall comply with State of Wisconsin requirements and campus standards. Lighting fixtures shall consist primarily of 2x4 recessed lens volumetric type fixtures. Fixtures shall contain electronic ballasts with 25 watt or 32 watt, T8, SP5000 (5000K) lamps. Lighting layouts shall provide average maintained ambient light levels as recommended by the Illuminating Engineering Society, IESNA , 10th edition handbook.
2. The use of high-efficiency decorative and suspended linear indirect fixtures may be considered. Fixtures may be either fully indirect or combination of direct/indirect. Suspended fixtures shall utilize multiple T8 lamps with multiple electronic ballasts to allow for inboard-outboard dual level switching. For multiple uniform light levels, multi-level (step-dim type) ballasts shall be utilized. Fixture layout and controls must take into account the issue that 25 watt T8 lamps cannot be arranged to share master-satellite ballasts. Fixture layout and controls also must take into consideration the temperature limitations of 25 watt T8 lamps.
3. Storage rooms and utility spaces such as janitor's closets, mechanical rooms, electrical rooms, etc. with lay in ceilings shall be provided with 2x4 recessed lensed fluorescent fixtures. Spaces without ceiling shall be provided with industrial type fixtures.
4. Recessed downlights using compact fluorescent lamps shall be provided where appropriate and required for accenting architectural features.
5. Emergency egress lighting for interior and exterior spaces shall be provided from the emergency life safety distribution system. Life safety panel boards shall be located on minimum of every other floor. All exit fixtures shall be LED source type.
6. All lighting controls shall comply with the Wisconsin Energy Codes and be a combination of general

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switching, occupancy sensors, and light level sensors. The interior lighting shall be controlled locally. Exterior lighting shall be connected to the Campus Automation system to coordinate On/Off times with the other exterior campus lighting.

7. All spaces shall utilize multi-level switching schemes to allow the lighting to be reduced based on needs within the spaces. Switches shall be provided to allow the occupants to manually turn off lamps as desired.
8. Occupancy sensors shall be used for automatic off control of lighting circuits.
9. Emergency egress lighting shall be equipped with transfer relays to allow egress lighting to be switched normally when normal power is available and be operated to on automatically when normal power fails.
10. Occupancy sensors shall be ceiling or wall mounted depending of space layouts and requirements. Passive infrared (PIR), ultrasonic, or dual-technology (both PIR & ultrasonic) shall be used as necessary to meet the required space requirements.
11. The use of photo-sensors for "daylight" harvesting shall be considered based on architectural layouts. When adequate levels of daylight are available, the daylight zones shall be controlled to a preset level using automatic dimming controls. Utilize step-dim ballasts in daylight zones such that the fixtures are being controlled to 50% or OFF.

E. Electrical Devices

1. Devices shall be flush mounted and specification grade.
2. Devices in Food Service preparation areas shall be industrial grade.
3. Cover plates shall be smooth nylon, except in Food Service preparations where coverplates shall be stainless steel.

F. Fire Alarm System

1. The fire alarm system shall be a multiplex addressable microprocessor controlled system. The central processing unit shall monitor and record all events. All initiation devices shall be programmable and addressable.
2. Audible and visual signaling devices shall be provided in all public areas including double occupancy offices. Additional signaling devices shall be provided in mechanical equipment rooms. Audio/visual signals shall be placed to cover all areas of the building for alarm signaling. Fire alarm pull stations, visual and audible devices shall be located to comply with public mode operations.
3. Smoke detectors shall be provided in storage areas, elevator equipment rooms, stairwells, elevator lobbies, at each Fire Alarm Panel and mechanical equipment rooms. The Fire Alarm System shall be interconnected with the elevator recall system. All relays, monitor modules, control modules and associated controls shall be provided.
4. Smoke detectors shall be provided in corridors at all smoke door locations. Smoke detectors shall also be placed inside HVAC ducts at smoke damper locations, upstream of each damper location. This requirement applies to all ducts supplying or returning in excess of 2,000 cfm and/or crossing smoke walls. Addressable control relays shall be provided for air handling equipment shut down.

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5. LCD style Fire Alarm Annunciators shall be provided at the main entry, in the Main Electrical Room, at the Campus Police Department and other locations as might be requested by the Authority Having Jurisdiction (AHJ) Local Fire Department.
6. Monitor relays shall be provided for fire protection valves and flow switches.
7. The fire alarm system shall comply with campus standards for emergency notification system including but not limited to a building wide public address system which is audibly intelligible throughout the facility.

8.4.5 TELECOMMUNICATIONS SYSTEMS

A. General Requirements

1. Structured cabling system shall be designed so that no horizontal voice or data cable exceeds 295 feet in length. Station voice and data cabling shall be Category 6, 4-pair, UTP copper. Refer to DSF specifications for mandatory, minimum performance criteria. All cable for all systems shall be routed in conduit and cable tray. J-hooks may be permitted in unexposed areas for last few feet of run between cable tray and conduit. Assume use of plenum rated cable until confirmation by mechanical engineer and architect that ceiling spaces are rated as non-plenum. Every workstation outlet assumed to consist of one voice and two data jacks (3 universal jacks), unless directed otherwise by User Agency. Private offices shall have two workstation outlets located on opposite walls. Refer to the room data sheets for further information on data jack locations and quantities.
2. Consideration should be given to providing either cabling, or a complete distributed antenna system (DAS), to accommodate frequencies used for mobile (cell) phone service, emergency responders and faculty or maintenance staff.
3. For precise cable requirements and all other requirements not discussed in this narrative consult the DOA Telecommunications Guidelines for Structured Building Wiring Systems and the UW LaCrosse IT staff. Begin fiber optic backbone cable count between Main Telecom Room (MTR) and Telecom Rooms (TR's) at 18 strands 50 micron laser optimized multi-mode (MM) and 18 strands single-mode (SM). Confirm actual cable sizes with UW LaCrosse staff. Station jacks are to be terminated with either TIA 568A or 568B pin configurations per campus standards. Consult with UWL and DSF prior to final design to determine which pin out is required on this campus. Provide additional data jacks in hallway ceilings for wireless access points on 50 foot centers.
4. Provide grounding and bonding system for all telecommunications systems and equipment bonded to one central location at the main electrical service for the building. Provide telecommunications grounding bus bars in every TR.
5. Back boxes to be 4x4 x 4-11/16" deep with single gang mud ring connected to 1" conduit stubbed to nearest accessible ceiling or cable tray.

B. Space Requirements

1. A minimum of one telecom room shall be provided on each floor. Telecom room size to begin at DSF's recommended size of 10'x12', centrally located on the floor plan, stacked one above the other. Telecom rooms should be located no farther than 250 feet from the farthest voice/data station outlet in order to maintain the required 295' wiring length. Wire lengths beyond this limit may cause systems to fail. Depending on size and shape of building, an additional TR may be required on each floor to maintain wiring lengths. Fewer TRs are preferred to reduce network electronics, power and cooling requirements.

2. The telecom room on first level where campus backbone cable enters should be designated as the main telecom room and be sized slightly larger (12'x14' per DSF recommendation) to accommodate campus backbone services and to consolidate all riser cable within the building. The main telecom room will also serve as the telecom room for that floor. It is acceptable to DSF to locate the main telecom room in the basement as required.

C. Telecommunications Rooms (TRs)

1. Telecom rooms shall be constructed with walls from floor to deck above, ¾" fire-retardant plywood on all walls, no drop ceiling tiles, anti-static flooring and no windows. Connect telecom rooms with minimum (4) 4" conduits. Doors are typically secured with card access (confirm with campus standard), off public corridors, and are not trapped by restrooms, elevators or other MEP utilities. Cooling requirements will vary depending on room use and need to be verified by design team. Two or three data racks are typically required, each provided with power on dedicated circuits. Additional power circuits are required on walls for wall mounted equipment and convenience. In addition, 208VAC power may be required for larger UPS in the main telecom room. Overhead cable runway to be connected to top of all data racks and securely fastened to at least two walls for stability. Other utilities (not serving the telecom room) shall not pass through the room.
2. The main telecom room may also be considered the building entrance facility (BEF). This room shall be connected to the underground conduit system with (4) 4" and (3) 2" conduits to a nearby manhole. Only one conduit entrance is required. Assure there is always at least one spare conduit of each size.
3. Systems typically located within TRs include cable and electronics for: voice, data, paging, security CCTV, access control, fire alarm, audio-visual, cable TV, cable connections to other floors, cable connections to outside campus or telco services, connections to roof or antennae, other systems as determined by User Agency or local departments.

D. Campus Backbone Cable

1. Fiber and copper outdoor rated backbone cable shall be provided from Wing Technology and Murphy Library via underground signal conduits. A mixture of single-mode and multi-mode fiber and 200 pair copper will be required. Additional .500 hardline coax may be required to serve cable TV needs. Confirm actual cable sizes and fiber counts with UW LaCrosse IT staff.

E. Telephone System

1. Telephone system hardware, electronics and handsets are to be provided by the User Agency. Voice cabling, pathways (conduit, back boxes and cable tray) outlets, faceplates, termination blocks, backboards, termination and testing are to be provided.

F. Data System

1. Data system electronics including switches, routers, servers, distributed (rack mounted) uninterruptible power supplies and other electronic equipment are to be provided by the User Agency. Data cabling (backbone fiber optic and horizontal copper), pathways (conduit, back boxes and cable tray), outlets, faceplates, patch panels, equipment racks, terminations and testing are to be provided. The initial assumption is that both voice and data systems will utilize the same cabling system. Therefore no distinction is required between voice and data cabling.

G. Cable TV System (CATV)

1. CATV system electronics such as players, signal processors, and amplifiers are to be provided by the User Agency. CATV cabling, pathways, backboards, terminations and testing are to be provided.

H. Audio-Visual Instructional Systems (AV)

1. All audio-visual systems are to be included as part of this project. This would include screens, projectors, user interface control devices, and sound systems (microphones, amplifiers, speakers).

I. Security Access Control System

1. A card access system is to be provided which includes back box, conduit and raceway for card readers and other devices as required for primary building entrances and select interior doors. Equipment may be sole-sourced to integrate with centralized campus equipment.

J. Security Closed Circuit TV System

1. A closed circuit TV system is to be provided which includes back box, conduit and raceway for cameras and other devices as required for primary building entrances and are select interior locations.

K. Overhead Paging System

1. The need for an overhead paging system is to be confirmed with UW LaCrosse. At a minimum provide wall space, power and raceway to anticipate requirements.

8.4.6 Foodservice Systems

Summary

Students have higher expectations than ever before. They eat out frequently and are accustomed to the level of service offered in retail foodservice settings. This translates into the need for campus dining to become more retail or restaurant-like. The new Student center foodservice will cater to these more sophisticated customer demands in several ways. The décor will be interesting, inviting and non-institutional. The signage will be professional, digital and provide a wide variety of up-to-date information. The food venue finish materials will be quartz, stone and wood. Retail-quality lighting will add visual interest to the space in addition to lighting the food and the area. Food displays will incorporate the use of heated glass and frosted stone with colorful dishware in tiered arrangements and flexible protector shelves that seem to fade away rather than stainless steel wells. The new dining areas will be designed in a way that allows students to see and be seen, but also offers a wide variety of seating options to fit their mood or group size.

Retail Dining

Gone are the days of mystery meat, over-cooked steam table food and cycle menus. In the new Retail Market Place the food will be fresh and flexible stations will allow menus and concepts to change daily. Most menu items will be prepared in front of the customer and in some cases they will also have the ability to select their own freshly prepared ingredients. Designed to accommodate 800-1200 customers at the peak lunch hour, the Retail Market Place will include 7-8 primary menu concepts potentially including one nationally-branded venue. A Deli station will offer a variety of sandwich, wrap, soup and entrée salad options including toasted sandwiches and panini. The Pasta station will continue to offer the popular bread bowl in addition to a wide variety of custom options prepared at the pasta sauté area. Today's more sophisticated diners are also requesting a wide array of authentic ethnic options. In response to this trend, the Retail Market Place will include a flexible International station that incorporates a variety of interchangeable cooking equipment. Mexican items are always popular so a dedicated fresh Mexican station has been included in the mix. Additional menu concepts will include a Breakfast All Day station, a Grab-n-Go area, desserts and beverages.

Sustainability

The green revolution is also having an impact on campus dining. The new Student Center Dining Services will feature more energy-efficient equipment and systems. The equipment will be Energy Star certified if it fits into an existing classification. Heat reclaim will be provided on the dishmachine and a pulper will aid in composting food that is left on plates. Demand control ventilation systems will insure that only the level of exhaust required will be drawn from the cooking hoods. A parallel racked refrigeration system will reduce the energy required to cool the extensive number of refrigerated storage units.

Coffee House

Students also seem to be more involved and busier than ever. This has led to an increased demand for grab and go items and portable meal options. The Coffee House, with expanded smoothie capabilities, will give students another portable meal alternative. Casual dining in this area will create a true coffeeshop experience inside the Student Center.

Entertainment Café

No student dining facility would be complete without pizza. The decision was made to make it a featured item centered on a front-of-house stone hearth oven in the Entertainment Café. This venue will also include one of the most popular protein choices today, chicken. This great combination will be offered in a setting similar to those students go to for 'wing night' or Monday Night Football. The efficient nature of this venue will make it possible to keep extended hours on minimal labor. This will give students great late-night or weekend dining options.

Special Equipment

The use of technology will also attract students to the new student center. Digital menu boards and signage can offer up-to-date menus, more extensive nutritional information and fresh animated product photos to draw students to the various food venues. The option to pre-order food from their phone or laptop will increase the speed of service and improve participation.

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Catering

Campus catering has also been elevated to a level that is on-par with any hotel banquet facility. This requires separate service corridors and conveniently located support spaces. A support space with beverage service, refrigeration, storage and plating functions has been programmed and is intended to be adjacent the large Multi-Purpose Space. Larger catering storage and staging spaces are also required as this service requires items such as portable bars and dedicated serviceware to meet their customer expectations. Catering to events outside the student center has grown significantly over the past few years and a staging and distribution area has been included adjacent the production kitchen to accommodate this function.

Back of House

Additional back of the house production areas will include the Cold Food Prep Area which is much larger than the current Cartwright space to accommodate the increased use of fresh fruits and vegetables. The Hot Food Production area will include cooking equipment to support the Retail Market Place venues as well as production of catered meals. To provide the wide variety of items served daily in the Retail Market Place as efficiently as possible, a blast chiller has been included. This will facilitate advanced menu production and safe cooling of any leftovers. The Ware Washing area will accommodate a new more energy efficient flight-type dishmachine, a pot and pan washing area, a cart washing area and a Mop Closet with detergent storage.

As much as possible, the cooking equipment will be natural gas on casters with flexible quick disconnect gas hoses. All equipment within the kitchen will meet National Sanitation Foundation requirements. The layout and equipment will meet Wisconsin State Health Codes, including a hand sink within each workcenter.

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9. Budget Detail

9.1 Project Summary Budget Worksheets
9.1.1 UWL Student Center Project Budget Worksheet Summary

Construction - Phase 1: Student Center			
General Construction/Fees		18,830,100	See 9.2.3 (Lines 3-9 and 14,16)
LEED Certification		307,000	See 9.2.3 (Line 15)
Plumbing		1,683,700	See 9.2.3 (Line 11)
Fire Protection		407,600	See 9.2.3 (Line 12)
HVAC		4,705,200	See 9.2.3 (Line 10)
Electrical		5,006,200	See 9.2.3 (Line 13)
Demolition/Repair		62,300	See 9.2.3 (Line 1)
Building Automation/EMS	w/ HVAC		
Construction Testing	Incl		
Telecommunications	w/ Electrical		
Site / Utility Extensions		758,900	See 9.2.3 (Line 2)
Foodservice		2,690,000	See 9.1.2 (Item 7, detail)
Design Contingency (7%)		2,412,000	See 9.1.2 (Design Contingency)
Construction Subtotal		\$ 36,863,000	
Escalation ^A		\$ 3,686,000	See 9.1.2 (Escalation Factor)
Total Construction Cost		\$ 40,549,000	
Project Contingency (10%)		\$ 4,055,000	See 9.1.2 (Project Contingency)
Subtotal New Student Center		\$ 44,604,000	Total Construction + Escalation + Contingency
Construction - Phase 2: Cartwright Demolition & Site Prep			
Demolition	\$	687,800	See 9.2.2 (Line 1)
Abatement	\$	427,800	See 9.1.3 (Item 2)
Site Prep	\$	119,600	See 9.2.2 (Line 2)
Design Contingency (4%)	\$	49,000	See 9.1.3 (Design Contingency)
Construction Subtotal		\$ 1,284,000	
Escalation ^A		\$ 282,000	See 9.1.2 (Escalation Factor)
Total Construction Cost		\$ 1,566,000	
Project Contingency (10%)		\$ 157,000	See 9.1.3 (Project Contingency)
Subtotal Cartwright		\$ 1,723,000	Total Construction + Escalation + Contingency
Design - Phase 1: Student Center			
A/E Fees - Student Center	\$	2,838,500	See 9.1.2
Other Consultant Fees ^B	\$	459,000	See 9.1.2
Commissioning Consultant	Incl Above		
DSF Management Fee (4%)	\$	1,784,000	See 9.1.2
Reimbursables	\$	113,500	See 9.1.2
Geotechnical Investigation	Incl Above		
Site Survey	Incl Above		
Plan Review Fees	Incl Above		
Design SubTotal:		\$ 5,195,000	
Design - Phase 2: Cartwright Demolition & Site Prep			
A/E Fees - Cartwright Demo/Site	\$	47,100	See 9.1.3
Other Consultant Fees ^B	\$	35,000	See 9.1.3
DSF Management Fee (4%)	\$	69,000	See 9.1.3
Reimbursables	\$	1,900	See 9.1.3
Geotechnical Investigation	N/A		
Site Survey	Incl Above		
Plan Review Fees	Incl Above		
Design SubTotal:		\$ 153,000	
Equipment			
Moveable Furniture OFOI	\$	3,325,000	See 9.1.2 (Item 7)
Audio/Visual	Incl Above		
Telecommunication Equipment	Incl Above		
Special Equipment OFOI	Incl Above		
Communications Equip. OFOI	Incl Above		
Systems Office Furn. OFOI	Incl Above		
Computer Equipment OFOI	N/A		
Signage OFOI	Incl Above		
Subtotal:		\$ 3,325,000	
Percent for Art .25% (.0025)		0	
Land Purchase		0	
TOTAL PROJECT COST		\$ 55,000,000	
GSF:		161,439	
Construction Cost/GSF	\$	253	
Total Project Cost/GSF	\$	341	

Footnotes
A Escalation factor is 1.10%, based on July 2014 bid date.
B Escalation factor is 1.22%, based on January 2017 bid date.
C Other consultant fees include LEED Certification, System Furnitures and EIS/EIA Consultant
D Other consultant fees include Abatement Consultant.

11A2A UWL Student Center Project Budget Worksheet Comparison Summary

Budget	UWLax %	UWLax Cost	Student Center Escalation (4%)	Cartwright %	UWLax Cartwright Site	UWLax Cartwright Escalated	
Construction	7% design incl.	\$ 36,863,000		4% design incl.	\$ 1,284,000		
Demo of existing bldg		\$ -			incl.		
Hazmat Abatement		\$ -			incl.		
sustainable features		\$ -			\$ -		
total construction		\$ 36,863,000	\$ 40,549,000		\$ 1,284,000	\$ 1,566,000	
A/E Fees	8.4%		\$ 3,411,000			\$ 84,000	
DSF Fee	4.0%		\$ 1,784,000			\$ 69,000	
Contingency	10.0%		\$ 4,055,000			\$ 157,000	
moveable equipment	8.2%		\$ 3,325,000			\$ -	
% for art	0.0%		\$ -			\$ -	
subtotal			\$ 12,575,000			\$ 310,000	
TOTAL PROJECT COST			\$ 53,124,000			\$ 1,876,000	Tota UWLax Project \$ 55,000,000
			Escalation from 1-2012 to 7-2014			Escalation from 1-2012 to 1-2017	

BUDGET DETAIL

9.1.2 Budget Worksheet for Total Project Cost Phase 1

THE UNIVERSITY OF WISCONSIN SYSTEM	MAJOR PROJECT BUDGET SUMMARY
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PROJECT TITLE:	New Student Center	Date Prepared :	06/04/12
LOCATION :	La Crosse, WI	Prepared By :	mmr
		Revised By:	XXX
OPTION NO. :	1	TOT PROJ COST EST:	53124000
NEW BUILDING AREA			
ASF New Const	105,772	Base Date:	01/2012
GSF New Const	161,439	Base Index	5160
	65.52% Efficiency	Projected Bid Date	07/2014
		Projected Bid Index	5697
REMODELING AREA			
GSF Remodeling	0	Escalation Factor:	1.10
GSF Total Bldg	0	Est. Occup. Date :	08/2016
	\$ 383	/ASF: Construction Cost (building & site)	
	\$ 251	/GSF: Construction Cost (building & site)	
	\$ 502	/ASF: Total Project Cost	
	\$ 329	/GSF: Total Project Cost	

NEW CONSTRUCTION		31,761,000
REMODELING		0
DEMOLITION		0
HAZMAT ABATEMENT		0
SPECIAL CONSTRUCTION		2,690,000
SUBTOTAL CONSTRUCTION COST		34,451,000
DESIGN CONTINGENCY	7.0%	2,412,000
SUBTOTAL UN-ESCALATED CONSTRUCTION COST		36,863,000
ESCALATION FACTOR	1.10	
TOTAL CONSTRUCTION COST		>>>> \$ 40,549,000
A/E BASIC SERVICES	7.0%	2,952,000
A/E ADDITIONAL SERVICES		459,000
PROJECT CONTINGENCY	10.0%	4,055,000
DSF MANAGEMENT FEE	4.0%	1,784,000
TOTAL FEES		>>>> \$ 9,250,000
SPECIAL & MOVABLE EQUIPMENT		>>>> \$ 3,325,000
PERCENT FOR THE ARTS	0.00%	>>>> \$ 0
TOTAL PROJECT BUDGET ESTIMATE	>>>>>>	>>>> \$ 53,124,000

BUDGET DETAIL

THE UNIVERSITY OF WISCONSIN SYSTEM **MAJOR PROJECT BUDGET WORKSHEET**

PROJECT TITLE:	New Student Center	Date Prepared :	06/04/12
LOCATION :	La Crosse, WI	Prepared By :	mmr
		Revised By:	XXX
OPTION NO. :	1	TOT PROJ COST EST:	\$ 53,124,000
NEW BUILDING AREA		Base Date:	01/2012
ASF New Const	105,772	Base Index	5160
GSF New Const	161,439	Projected Bid Date	07/2014
	65.52% Efficiency	Bid Date Index:	5697
REMODELING AREA		Escalation Factor:	1.10
GSF Remodeling	0	Est. Occup. Date :	08/2016
GSF Total Bldg	0		
	0.00% Remodeling		

NEW CONSTRUCTION BY SPACE TYPE

Space Category	ASF	Eff	GSF	\$/GSF	Category Cost
Function	105,772	0.66	161,400	197	31,761,100
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
	105,772		161,400		Subtotal: \$ 31,761,000
SUBTOTAL CONSTRUCTION COST					31,761,000

REMODELING BY SPACE TYPE

Space Category	ASF	Eff	GSF	\$/GSF	Category Cost
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
	0		0		Subtotal: \$ 0

REMODELING BY TRADE

Trade Category	GSF	\$/GSF	Trade Cost
General			
-Surface Treatment	0	\$9.00	0
-Minor	0	\$28.00	0
-Partial	0	\$47.00	0
-Complete	0	\$60.00	0
Plumbing			
-Minor	0	\$9.00	0
-Partial	0	14.00	0
-Complete	0	18.00	0
-Special Laboratory Needs	0	\$39.00	0
Heat/Vent/Air Cond			
-Minor	0	\$12.00	0
-Partial	0	\$26.00	0
-Complete	0	\$50.00	0
Electric			
-Minor	0	\$10.00	0
-Partial	0	\$17.00	0
-Complete	0	\$22.00	0
		Subtotal: \$	0
SUBTOTAL REMODELING COST			0

BUDGET DETAIL

PROJECT TITLE: **New Student Center**
 SUBTOTAL BUILDING / REMODELING COST (from page 1)

>>>>> \$ **31,761,000**

ADDITIONAL CONSTRUCTION / REMODELING COSTS:

1. Demolition	<input type="text" value="0"/>	0
2. Hazardous Materials Remediation		0
- Asbestos Abatement	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
3. Additional Site Costs		0
- Site prep/demo @ Cartwright	<input type="text" value="0"/>	
4. Special Construction		0
- Specify	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
5. Utility Extensions		0
- Specify	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
6. Special Mechanical / Electrical Systems		0
- Specify	<input type="text" value="0"/>	
- Specify	<input type="text" value="0"/>	
7. Fixed Furnishings and Equipment		2,690,000
- Foodservice	<input type="text" value="2,690,000"/>	
- Specify	<input type="text" value="0"/>	
SUBTOTAL CONSTRUCTION/REMODELING COST	>>>>>>	>>>> \$ <input type="text" value="34,451,000"/>
DESIGN CONTINGENCY	<input type="text" value="7.0%"/>	2,412,000
SUBTOTAL UN-ESCALATED CONSTRUCTION COST	>>>>>>	>>>> \$ <input type="text" value="36,863,000"/>
ESCALATION FACTOR	1.10	
TOTAL CONSTRUCTION COST	>>>>>>	>>>> \$ <input type="text" value="40,549,000"/>

BUDGET DETAIL

PROJECT TITLE: **New Student Center**

TOTAL CONSTRUCTION COST (from Page 2)				>>>> \$	40,549,000
1. Architect/Engineer Basic Services					2,952,000
- Basic Services	<input type="text" value="7.0%"/>		2,838,400		
- Reimbursible costs	<input type="text" value="4.0%"/>		<input type="text" value="113,500"/>		
2. Additional Design Services					459,000
- Pre-planning	<input type="text" value="0.0%"/>		0		
- LEED™ certification			<input type="text" value="50,000"/>		
- Systems Furniture design	<input type="text" value="1.0%"/>		40,000		
- Commissioning (specify level)	<input type="text" value="0.8%"/>		324,400		
- EIS/EIA consultant			<input type="text" value="45,000"/>		
- Construction Testing			0		
- Testing & Balancing			0		
- Specify			<input type="text" value="0"/>		
3. Project Contingency	<input type="text" value="10.0%"/>	40,549,000	4,054,900		4,055,000
4. DSF Project Management	4.0%	44,604,000	1,784,200		1,784,000
5. Movable Equip. Allowance	<input type="text" value="8.2%"/>	40,549,000	3,325,000		3,325,000
6. Special Equipment					0
- Audio-Visual			<input type="text" value="0"/>		
- Computer Equipment			<input type="text" value="0"/>		
- Systems Furniture			<input type="text" value="0"/>		
- Food Service			<input type="text" value="0"/>		
- Waste Management Equipment			<input type="text" value="0"/>		
7. Percent for the Arts	0.00%	53,124,000	0		0
TOTAL PROJECT BUDGET ESTIMATE				>>>>>>>> \$	<input type="text" value="53,124,000"/>

\$ 383 /ASF: Construction Cost (building & site)
 \$ 251 /GSF: Construction Cost (building & site)
 \$ 502 /ASF: Total Project Cost
 \$ 329 /GSF: Total Project Cost

NOTES:

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BUDGET DETAIL

9.1.3 Budget Worksheet for Total Project Cost Phase 2

THE UNIVERSITY OF WISCONSIN SYSTEM	MAJOR PROJECT BUDGET SUMMARY
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PROJECT TITLE:	11A2A UWL Cartwright Demo & Landscaping	Date Prepared :	06/04/12
LOCATION :	La Crosse, WI	Prepared By :	mmr
		Revised By:	XXX
OPTION NO. :	1	TOT PROJ COST EST:	1876000

NEW BUILDING AREA					
ASF New Const	0			Base Date:	01/2012
GSF New Const	0	0.00% Efficiency		Base Index	5160
				Projected Bid Date	01/2017
				Projected Bid Index	6290
				Escalation Factor:	1.22
REMODELING AREA					
GSF Remodeling	0			Est. Occup. Date :	01/2018
GSF Total Bldg	0	0.00% Remodeling			
	\$		-	/ASF: Construction Cost (building & site)	
	\$		-	/GSF: Construction Cost (building & site)	
	\$		-	/ASF: Total Project Cost	
	\$		-	/GSF: Total Project Cost	

NEW CONSTRUCTION				0
REMODELING				0
DEMOLITION				687,800
HAZMAT ABATEMENT				427,800
SPECIAL CONSTRUCTION				119,600
SUBTOTAL CONSTRUCTION COST				1,235,000
DESIGN CONTINGENCY		4.0%		49,000
SUBTOTAL UN-ESCALATED CONSTRUCTION COST				1,284,000
ESCALATION FACTOR		1.22		
TOTAL CONSTRUCTION COST			>>>>	\$ 1,566,000
A/E BASIC SERVICES		3.0%		49,000
A/E ADDITIONAL SERVICES				35,000
PROJECT CONTINGENCY		10.0%		157,000
DSF MANAGEMENT FEE		4.0%		69,000
TOTAL FEES			>>>>	\$ 310,000
SPECIAL & MOVABLE EQUIPMENT			>>>>	\$ 0
PERCENT FOR THE ARTS		0.00%	>>>>	\$ 0
TOTAL PROJECT BUDGET ESTIMATE			>>>>>>>>	\$ 1,876,000

BUDGET DETAIL

THE UNIVERSITY OF WISCONSIN SYSTEM MAJOR PROJECT BUDGET WORKSHEET

PROJECT TITLE:	11A2A UWL Cartwright Demo & Landscaping		Date Prepared :	06/04/12
LOCATION :	La Crosse, WI		Prepared By :	mmf
			Revised By:	XXX
OPTION NO. :	1		TOT PROJ COST EST:	\$ 1,876,000
NEW BUILDING AREA			Base Date:	01/2012
ASF New Const	0		Base Index	5160
GSF New Const	0	0.00% Efficiency	Projected Bid Date	01/2017
REMODELING AREA			Bid Date Index:	6290
GSF Remodeling	0		Escalation Factor:	1.22
GSF Total Bldg	0	0.00% Remodeling	Est. Occup. Date :	01/2018

NEW CONSTRUCTION BY SPACE TYPE

Space Category	ASF	Eff	GSF	\$/GSF	Category Cost
Function	0	0.63	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
	0		0		Subtotal: \$ 0

SUBTOTAL CONSTRUCTION COST 0

REMODELING BY SPACE TYPE

Space Category	ASF	Eff	GSF	\$/GSF	Category Cost
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
Function	0	0.00	0	0	0
	0		0		Subtotal: \$ 0

REMODELING BY TRADE

Trade Category	GSF	\$/GSF	Trade Cost
General			
-Surface Treatment	0	\$9.00	0
-Minor	0	\$28.00	0
-Partial	0	\$47.00	0
-Complete	0	\$60.00	0
Plumbing			
-Minor	0	\$9.00	0
-Partial	0	14.00	0
-Complete	0	18.00	0
-Special Laboratory Needs	0	\$39.00	0
Heat/Vent/Air Cond			
-Minor	0	\$12.00	0
-Partial	0	\$26.00	0
-Complete	0	\$50.00	0
Electric			
-Minor	0	\$10.00	0
-Partial	0	\$17.00	0
-Complete	0	\$22.00	0
		Subtotal: \$	0

SUBTOTAL REMODELING COST 0

SUBTOTAL BUILDING / REMODELING COST >>>>> \$ 0

BUDGET DETAIL

PROJECT TITLE: **11A2A UWL Cartwright Demo & Landscaping**
 SUBTOTAL BUILDING / REMODELING COST (from page 1)

>>>>> \$ 0

ADDITIONAL CONSTRUCTION / REMODELING COSTS:

1. Demolition	687,800	687,800
2. Hazardous Materials Remediation		427,800
- Asbestos Abatement	427,750	
- Specify	0	
3. Additional Site Costs		119,600
- Site prep/demo @ Cartwright	119,600	
4. Special Construction		0
- Specify	0	
- Specify	0	
5. Utility Extensions		0
- Specify	0	
- Specify	0	
- Specify	0	
- Specify	0	
6. Special Mechanical / Electrical Systems		0
- Specify	0	
- Specify	0	
7. Fixed Furnishings and Equipment		0
- Foodservice	0	
- Specify	0	
SUBTOTAL CONSTRUCTION/REMODELING COST	>>>>>>	>>>> \$ 1,235,000
DESIGN CONTINGENCY	4.0%	49,000
SUBTOTAL UN-ESCALATED CONSTRUCTION COST	>>>>>>	>>>> \$ 1,284,000
ESCALATION FACTOR	1.22	
TOTAL CONSTRUCTION COST	>>>>>>	>>>> \$ 1,566,000

BUDGET DETAIL

PROJECT TITLE: **11A2A UWL Cartwright Demo & Landscaping**

TOTAL CONSTRUCTION COST (from Page 2) >>>> \$ 1,566,000

1. Architect/Engineer Basic Services				49,000
- Basic Services	3.0%		47,000	
- Reimbursible costs	4.0%		1,900	
2. Additional Design Services				35,000
- Pre-planning	0.0%		0	
- LEED™ certification			0	
- Systems Furniture design	0.0%		0	
- Commissioning (specify level)	0.0%		0	
- EIS/EIA consultant			0	
- Construction Testing			0	
- Testing & Balancing			0	
- Abatement			35,000	
3. Project Contingency	10.0%	1,566,000	156,600	157,000
4. DSF Project Management	4.0%	1,723,000	68,900	69,000
5. Movable Equip. Allowance	0.0%	1,566,000	0	0
6. Special Equipment				0
- Audio-Visual			0	
- Computer Equipment			0	
- Systems Furniture			0	
- Food Service			0	
- Waste Management Equipment			0	
7. Percent for the Arts	0.00%	1,876,000	0	0

TOTAL PROJECT BUDGET ESTIMATE >>>>>>> >>>> \$ **1,876,000**

- \$ - /ASF: Construction Cost (building & site)
- \$ - /GSF: Construction Cost (building & site)
- \$ - /ASF: Total Project Cost
- \$ - /GSF: Total Project Cost

NOTES:

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9.2. Order of Magnitude/Programmatic Construction Cost Estimate



The Concord Group

Construction Consultants

161 North Clark Street
Suite 205C
Chicago, IL 60601
tel 312.424.0250
fax 312.424.0257


UNIVERSITY OF WISCONSIN LACROSSE NEW STUDENT CENTER

Order of Magnitude / Programmatic Construction Cost Estimate
Revision #6

Prepared For:
Kindness Architecture + Planning
17 East Menomonee Street
Milwaukee, WI 53202

BUDGET DETAIL

9.2.2 Project Summary

 The Concord Group		UW LaCrosse New Student Center SUMMARY		OM/Programmatic Estimate March 22, 2012 Revision #6		
COST SUMMARY			GFA	161,439	SF	BUILDING
				\$/SF		TOTAL
1 Cartwright Building Demolition						\$687,800
2 Cartwright Site Renovation						\$119,600
3 New Student Center Building						\$31,777,600
4 Kitchen Equipment (OFOI*)						\$2,690,000
TOTAL ESTIMATED CONSTRUCTION COSTS						\$35,275,000
Environmental Abatement at Site & Building						\$427,800
FF&E for New Student Center (OFOI)						\$3,325,000
ALTERNATES						
Alternate #1: Added Basement capacity (13,819 SF)					ADD	\$924,400
Alternate #3: HVAC 25% geothermal capacity					ADD	\$1,464,400
Alternate #4: Plumbing Solar Water Heating					ADD	\$418,400
(assumes tie-in to base scope domestic hot water)						
*Owner Furnished Owner Installed						

BUDGET DETAIL

Description	Quantity	Unit	Unit Cost	Subtotal	Total
Demolition					
Demolish existing asphalt parking lot/landscaping. Clear & grub.	95,000	SF	0.55	\$52,250	
Remove existing building	1	LS	10,000	\$10,000	
Subtotal					\$62,300
Site					
<u>Site Work</u>					
Landscaping	17,332	SF	2.25	\$38,997	
Sidewalks / Paving	9,813	SF	5.50	\$53,972	
Rain garden	10,000	SF	8.25	\$82,500	
Fire pit	1	LS	15,000	\$15,000	
Outdoor performance lawn area	6,860	SF	2.75	\$18,865	
Outdoor performance stage	1	LS	5,000	\$5,000	
<u>West Site Work</u>					
Landscaping	4,188	SF	2.25	\$9,423	
Sidewalks / Paving	2,803	SF	5.50	\$15,417	
<u>North Entrance Site Work</u>					
Retaining wall at loading dock	70	LF	350	\$24,500	
Landscaping	2,500	SF	2.25	\$5,625	
Sidewalks / Paving	4,300	SF	5.50	\$23,650	
Allowance for bike racks, 2 locations	2	EA	6,500	\$13,000	
Heavy duty concrete pavement at loading dock	2,000	SF	11	\$22,000	
<u>Site Electrical</u>					
Lighting upgrades	1	LS	50,000	\$50,000	
<u>Site Utilities</u>					
Sanitary sewer, storm drainage, water service, relocations etc.	1	LS	325,000	\$325,000	
Steam piping, 6" std weight blk steel	150	LF	148.72	\$22,308	
Condensate return piping, 3" sch. 80 blk steel	150	LF	102.97	\$15,446	
Pipe insulation, 6" steam	150	LF	19.73	\$2,960	
Pipe insulation, 3" steam	150	LF	12.89	\$1,934	
Chilled water supply/return piping, 8" ductile iron	250	LF	41.80	\$10,450	
Chilled water supply/return piping, 8" HDPE	250	LF	11.28	\$2,820	
Subtotal					\$758,900
Foundations & Substructure					
Excavation for footings/foundations	15,568	CY	9.50	\$147,896	
Excavation for basement/slab	16,393	CY	6	\$98,357	
Backfill	14,734	CY	11.50	\$169,441	
Haul away	17,227	CY	14	\$241,176	
Concrete footings & foundations	834	CY	475	\$396,150	
Concrete slab	51,153	SF	6.50	\$332,495	
Subtotal					\$1,385,600
Superstructure					
Suspended concrete slab, concrete beams & columns	110,286	SF	24	\$2,646,864	
Suspended concrete roof slab, concrete beams & columns	51,153	SF	22	\$1,125,366	
Allowance for miscellaneous concrete	161,439	SF	0.75	\$121,079	
Stair & tower	3	EA	75,000	\$225,000	
Stairs at Textbook Rental	2	EA	15,000	\$30,000	
Elevator enclosures, double	2	EA	75,000	\$150,000	
Elevator enclosures, single	2	EA	50,000	\$100,000	
Monumental staircase	1	EA	60,000	\$60,000	
Subtotal					\$4,458,400
Exterior Wall and Canopy					

BUDGET DETAIL



The Concord Group

UW LaCrosse
New Student Center
Building Shell & Core

OM/Programmatic Estimate
March 22, 2012
Revision #6

Description	Quantity	Unit	Unit Cost	Subtotal	Total
Curtain wall including entrances	9,126	SF	72	\$657,098	
Facebrick w/CMU back up	26,809	SF	32	\$857,902	
Metal panels w/CMU back up	9,502	SF	45	\$427,594	
Windows	3,042	SF	48	\$146,022	
Balconies including railings	2,130	SF	70	\$149,100	
Main Entrance Canopy with snow melt system	2,000	SF	65	\$130,000	
Subtotal					\$2,367,800
Roofing					
Roofing	51,153	SF	9.50	\$485,954	
Subtotal					\$486,000
Interior Build Out (Special Construction)					
Fireplace, grand	1	LS	75,000	\$75,000	
Fireplace, modest	1	LS	25,000	\$25,000	
Subtotal					\$100,000
Equipment:					
Kitchen Equipment (per Kindness)			by owner		
Stage Equipment, flame retardant curtain (per Kindness)			by owner		
Subtotal					\$0
Conveying					
Passenger Elevators, 4 stops	2	EA	90,000	\$180,000	
Freight Elevator, 4 stops	1	EA	125,000	\$125,000	
Passenger Elevator, 2 stops	1	EA	55,000	\$55,000	
Subtotal					\$360,000
HVAC					
Shell & Core:					
Equipment, etc.	1	LS	1,500,000	\$1,500,000	
Basement	36,884	SF	4	\$147,536	
1st Floor	48,020	SF	8	\$384,160	
2nd Floor	46,430	SF	8	\$371,440	
3rd Floor	30,105	SF	8	\$240,840	
Subtotal					\$2,644,000
Plumbing					
Shell & Core:					
Equipment, etc.	1	LS	500,000	\$500,000	
Basement	36,884	SF	3	\$110,652	
1st Floor	48,020	SF	5	\$240,100	
2nd Floor	46,430	SF	5	\$232,150	
3rd Floor	30,105	SF	5	\$150,525	
Subtotal					\$1,233,500
Fire Protection					
Shell & Core:					
Equipment, etc.	1	LS	60,000	\$60,000	
Basement	36,884	SF	0.50	\$18,442	
1st Floor	48,020	SF	0.50	\$24,010	
2nd Floor	46,430	SF	0.50	\$23,215	
3rd Floor	30,105	SF	0.50	\$15,053	
Subtotal					\$140,800

BUDGET DETAIL


Description	Quantity	Unit	Unit Cost	Subtotal	Total
Interior Build Out (including circulation, support, etc.)					
<u>Program Areas:</u>					
Campus Services	6,766	SF	43	\$290,938	
Bookstore	16,000	SF	64	\$1,024,000	
Student Offices	10,312	SF	46	\$474,352	
Meeting & Program Rooms	15,229	SF	42	\$639,618	
Multi-Purpose Room	14,161	SF	45	\$637,245	
Dining Services	23,939	SF	58	\$1,388,462	
Lounges	5,500	SF	64	\$352,000	
Lobby - Entry	2,500	SF	82	\$205,000	
Recreation	6,000	SF	41	\$246,000	
Retail	1,300	SF	77	\$100,100	
Corridors, circulation	20,000	SF	28	\$560,000	
Storage	3,000	SF	12	\$36,000	
Bathrooms	10,000	SF	56	\$560,000	
Mechanical	12,500	SF	12	\$150,000	
Electrical	2,232	SF	13	\$29,016	
Support areas	8,000	SF	25	\$200,000	
Loading Dock, receiving/storage	4,000	SF	20	\$80,000	
Subtotal					\$6,972,800
HVAC					
<u>Program Areas (includes support areas etc.):</u>					
Campus Services	6,766	SF	12	\$81,192	
Bookstore	16,000	SF	12	\$192,000	
Student Offices	10,312	SF	12	\$123,744	
Meeting & Program Rooms	15,229	SF	12	\$182,748	
Multi-Purpose Room	14,161	SF	11	\$155,771	
Dining Services	23,939	SF	16	\$383,024	
Lounges	5,500	SF	13	\$71,500	
Lobby - Entry	2,500	SF	11	\$27,500	
Recreation	6,000	SF	13	\$78,000	
Retail	1,300	SF	13	\$16,900	
Corridors, circulation	20,000	SF	12	\$240,000	
Storage	3,000	SF	6	\$18,000	
Bathrooms	10,000	SF	16	\$160,000	
Mechanical	12,500	SF	16	\$200,000	
Electrical	2,232	SF	12	\$26,784	
Support areas	8,000	SF	10	\$80,000	
Loading Dock, receiving/storage	4,000	SF	6	\$24,000	
Subtotal					\$2,061,200
Plumbing					
<u>Program Areas (includes support areas etc.):</u>					
Campus Services	6,766	SF	2.50	\$16,915	
Bookstore	16,000	SF	2	\$32,000	
Student Offices	10,312	SF	2.50	\$25,780	
Meeting & Program Rooms	15,229	SF	2	\$30,458	
Multi-Purpose Room	14,161	SF	2	\$28,322	
Dining Services	23,939	SF	5	\$119,695	
Lounges	5,500	SF	4	\$22,000	
Lobby - Entry	2,500	SF	0.50	\$1,250	
Recreation	6,000	SF	4	\$24,000	
Retail	1,300	SF	2	\$2,600	
Corridors, circulation	20,000	SF	2	\$40,000	
Storage	3,000	SF	1	\$3,000	
Bathrooms	10,000	SF	6	\$60,000	
Mechanical	12,500	SF	2	\$25,000	
Electrical	2,232	SF	0.50	\$1,116	

BUDGET DETAIL


Description	Quantity	Unit	Unit Cost	Subtotal	Total
Bookstore	25,397	SF	2	\$50,793	
Student Offices	16,368	SF	5	\$81,841	
Meeting & Program Rooms	24,173	SF	5	\$120,865	
Multi-Purpose Room	22,478	SF	3	\$67,433	
Dining Services	37,998	SF	1	\$37,998	
Lounges	8,730	SF	2	\$17,460	
Lobby - Entry	3,968	SF	3	\$11,905	
Recreation	9,524	SF	2	\$19,048	
Retail	2,063	SF	2	\$4,127	
Corridors, circulation	20,000	SF	0.50	\$10,000	
Storage	3,000	SF	0.50	\$1,500	
Bathrooms	10,000	SF	0.50	\$5,000	
Mechanical	12,500	SF	0.50	\$6,250	
Electrical	2,232	SF	0.50	\$1,116	
Support areas	8,000	SF	5	\$40,000	
Loading Dock, receiving/storage	4,000	SF	2	\$8,000	
Subtotal					\$504,900
Security:					
CCTV rough in to monitoring location	10	EA	1,600	\$16,000	
CCTV cameras, including wiring and testing	10	EA	2,800	\$28,000	
Access control and wiring to monitoring location	10	EA	4,250	\$42,500	
Subtotal					\$86,500

BUDGET DETAIL

9.2.4 Cartwright

 The Concord Group	UW LaCrosse New Student Center Cartwright Building Demolition & Renovation			OM/Programmatic Estimate March 22, 2012 Revision #6		
	PHASE 2					
COST SUMMARY						BUILDING TOTAL
DEMOLITION						\$633,000
SITE CONSTRUCTION						\$0
FOUNDATIONS & SUBSTRUCTURE						\$0
SUPERSTRUCTURE						\$0
EXTERIOR WALL						\$0
ROOF						\$0
INTERIOR BUILD-OUT						\$0
EQUIPMENT						\$0
CONVEYING						\$0
HVAC						\$0
PLUMBING						\$0
FIRE PROTECTION						\$0
ELECTRICAL						\$0
SUBTOTAL						\$633,000
General Conditions, Testing, Insurance, & Bond	6.00%					\$38,000
General Conditions for LEED Silver Certification						\$0
Contractor's Overhead & Profit	2.50%					\$16,800
TOTAL ESTIMATED TRADE COSTS + FEES						\$687,800
Design Contingency	7.00%					\$48,200
TOTAL ESTIMATED CONSTRUCTION COSTS (01/2012)						\$736,000
Escalation to bid date (July 2016)	4.00%	pa				\$136,400
TOTAL ESTIMATED CONSTRUCTION COSTS						\$872,400

BUDGET DETAIL

	The Concord Group				UW LaCrosse New Student Center Cartwright Site Work Renovation		OM/Programmatic Estimate March 22, 2012 Revision #6				
COST SUMMARY							BUILDING TOTAL				
DEMOLITION							\$0				
SITE CONSTRUCTION							\$110,000				
FOUNDATIONS & SUBSTRUCTURE							\$0				
SUPERSTRUCTURE							\$0				
EXTERIOR WALL							\$0				
ROOF							\$0				
INTERIOR BUILD-OUT							\$0				
EQUIPMENT							\$0				
CONVEYING							\$0				
HVAC							\$0				
PLUMBING							\$0				
FIRE PROTECTION							\$0				
ELECTRICAL							\$0				
SUBTOTAL							\$110,000				
General Conditions, Testing, Insurance, & Bond							6.00%		\$6,600		
General Conditions for LEED Gold Certification									\$0		
Contractor's Overhead & Profit							2.50%		\$3,000		
TOTAL ESTIMATED TRADE COSTS + FEES									\$119,600		
Design Contingency							7.00%		\$8,400		
TOTAL ESTIMATED CONSTRUCTION COSTS (01/2012)									\$128,000		
Escalation to bid date (July 2016)							4.00%		pa	\$23,800	
TOTAL ESTIMATED CONSTRUCTION COSTS									\$151,800		

BUDGET DETAIL



The Concord Group

UW LaCrosse
New Student Center
Alternate #1: Additional Basement Capacity

OM/Programmatic Estimate
March 22, 2012
Revision #6

Description	Quantity	Unit	Unit Cost	Subtotal	Total
Foundations & Substructure					
ADD:					
Excavation for basement/slab	6,142	CY	6	\$36,852	
Haul away	6,142	CY	15	\$92,130	
Subtotal					\$129,000
Superstructure					
ADD:					
Suspended concrete slab, concrete beams & columns	13,819	SF	24	\$331,656	
Allowance for miscellaneous concrete	13,819	SF	1	\$13,819	
Subtotal					\$345,500
Interior Build Out (including circulation, support, etc.)					
ADD:					
Basement	13,819	SF	5	\$69,095	
Subtotal					\$69,100
HVAC					
ADD:					
Basement	13,819	SF	4	\$55,276	
Subtotal					\$55,300
Plumbing					
ADD:					
Basement	13,819	SF	4	\$55,276	
Subtotal					\$55,300
Fire Protection					
ADD:					
Basement	13,819	SF	0.50	\$6,910	
Subtotal					\$7,000
Electrical					
ADD:					
Basement	13,819	SF	3.75	\$51,821	
Subtotal					\$51,900
				TOTAL:	\$713,100

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10. Schedule/Phasing Detail

SCHEDULE/PHASING DETAIL

10.1 Schedule Summary

PRE-DESIGN ACTIVITIES

Begin Pre-Design.....	September 2011
Draft Program Statement and Pre-Design Study Complete.....	December 2011
Student Referendum.....	April 2012
Final Program Statement and Pre Design Study Complete.....	June 2012

DESIGN AND CONSTRUCTION

Phase 1: Student Center

Description	Date	Duration
BOR Approval 13/15 Capital Budget	Aug 2012	Milestone
Contract for A/E Services	Nov 2012 – Feb 2013	4 Months
Preliminary Design	Mar – July 2013	5 Months
Project Enumeration 13/15 Capital Budget	July 2013	Milestone
Design Development & 35% Review	Aug – Oct 2013	3 Months
Approval to Construct by BOR/SBC (Single Prime Waiver)	Oct 2013	Milestone
Final Design & 100% Review	Nov 2013 – April 2014	6 Months
Bidding and Contracting	May – July 2014	3 Months
Construction	Aug 2014 – May 2016	22 Months
Occupancy	June – July 2016	2 Months

Phase 2: Cartwright Center

Preliminary Design & 35% Review	Oct 2015 - Feb 2016	5 Months
Final Design & 100% Review	March – June 2016	4 Months
Bidding and Contracting	July – Sept 2016	3 Months
Construction (Existing Building Demolition & Landscaping)	Oct 2016 – March 2017	6 Months
Occupancy	May 2017	Milestone

SCHEDULE/PHASING DETAIL

10.2 Various Schedule Options

New Union Building - Various Project Schedule Options

June 28, 2012

	1.4 Executive Summary Schedule*			
	Usual PR Practice A/E Selection Prior to Enumeration	Accelerated A/E Selection	Usual Practice w/ CMAR	Accelerated A/E Selection w/ CMAR
BOR Approval 13/15 Capital Budget	August 2012	August 2012	August 2012	August 2012
Submit A/E Request to UWSA	November 2012	July 2012	November 2012	July 2012
A/E Selection	February 2013	October 2012	February 2013	October 2012
A/E Begins Design	April 2013	December 2012	April 2013	December 2012
CM Selected **			June 2013	February 2013
BOR/SBC Approval 35% Documents (contingent upon enumeration)		June 2013		
Project Enumeration 13/15 Capital Budget	July 2013	July 2013	July 2013	July 2013
BOR/SBC Approval 35% Documents	October 2013		October 2013	August 2013
CM Starts 1 st Bid Packages *			December 2013	September 2013
100% Documents Complete	April 2014	November 2013	N/A	N/A
Project Bidding (Single Prime)	June 2014	January 2014		
Construction Start (17 Months Construction Duration)	August 2014	March 2014		
Substantial Completion - Start Commissioning	January 2016	August 2015	January 2015	January 2015
Move In	March 2016	October 2015	May 2015	February 2015

*Basis for Schedule in 1. Executive Summary/1.4 Schedule Summary

**CM selected but cannot let bid packages prior to enumeration and BOR/SBC approval

11. Appendix Volume 1

11. Appendix Volume 2