

**Project Name** UO Erb Memorial Union Renovation and Expansion  
**Project Number** 110451  
**Purpose** User Group Meeting #3  
**Location** Bean East Conference Room

**Attendees**

**Name**

**Organization**

**Project Staff:**

Martina Bill	UO, CPRE
Fred Tepfer	UO, CPRE
Jeff Madsen	UO, Capital Construction

**User Group:**

Gregg Lobisser	UO, User Group Chair
Christine Theodoropoulos	UO, AAA
Mandy Chong	UO, EMU Staff
Michael King	UO, Student
Dan Geiger	UO, Outdoor & Bike Program
Molly Kennedy	UO, PE & Rec
Dana Winitzky	UO, EMU Staff
Wendy Polhemus	UO, EMU Staff
Nora Alvarez	UO, Student
Helen Chu	UO, Academic Technology

**Contractor:**

Mark Butler	Lease Crutcher Lewis
Matt Pearson	Lease Crutcher Lewis
Andrew Colas	Colas Construction

**Consultant Team:**

Larry Gilbert	Cameron McCarthy, Principal
Matt Scheibe	Cameron McCarthy
Brian Johnston	Glumac, MEPT Project Manager
Rob Schnare	Glumac, Mechanical Engineer
Mitch Dec	Glumac, Energy Modeler
David Martin	AC Martin, Design Principal
Bob Murrin	AC Martin, Programmer
Tammy Jow	AC Martin, Stakeholder Advocate
Natasha Koiv	SERA, Design Team Project Manager
Walker Templeton	SERA, Project Designer
Lisa Petterson	SERA, High Performance Green Building Specialist
Caity McLean	SERA, Administrative Support
Ray Chirgwin	SERA, Green Building Technician

**Discussion Items**

**1.0 INTRODUCTION**

1.01 CMSG AND COST ESTIMATOR

Martina Bill announced that Lease Crutcher Lewis was selected as the CMGC and Rider Levett Bucknall will be the Cost Estimator. Both will serve an active role in the project moving forward to provide cost estimates related to the program and concept design.

1.02 REFERENDUM

Gregg Lobisser announced that ASUO President Ben Eckstein withdrew the EMU from the referendum November 14 – 18<sup>th</sup>, postponing the EMU vote to Spring 2012. Gregg explained that the project budget is based on a schedule that depends on a Fall referendum in order to bring to the State Board January 2012 and then the State Legislature in February. Postponing the referendum to Spring delays submitting the project to the State Legislature until Fall 2012, which costs the overall project timeline a full year and may cause substantial additional costs (5-7% minimum) as construction costs and commodity prices will continue to increase with inflation.

1.03 STUDENT OPEN HOUSES

October 20 focused on schemes developed in User Group #1 and sustainability. Overall a success. UO will continue encouraging attendance, student involvement and feedback for upcoming Open House scheduled for November 9 in the Fountain Courtyard.

1.04 GOALS OF TODAY

- a) Review the program: Design Team will present new affinity diagrams and results of the latest SAC meetings to gain understanding of how broad the program is.
- b) Deeper Dive into Sustainability: Determine specific sustainability goals and strategies to achieve these goals.

**2.0 PROGRAM UPDATE**

Current program of 272,000 GSF is 40,000 over B&D study that set the construction budget. Program total does not include Bike Center and Oregon Bach Festival offices. Program priorities will need to be defined in the near future by UO, so that project scope and budget can be aligned.

2.01 FEEDBACK FROM LATEST SAC MEETINGS

- Having armature in mind is helpful; front doors, hub of campus, Hearth, take advantage and encourage paths through building
- Consensus that central space, the Hearth, is currently lacking; causes unused space as people walk around rather than through communal space. Design can look at how to rearrange program around hearth to generate activity. Food service, among other things. Hearth as organizing element
- Woman's Center and LGBTQA requested more privacy, less public view and connection
- Create thoroughfares by limiting entrances
- Survival Center should be separated from Sustainability Center

## 2.02 AFFINITY CLUSTERS OR 'SUITES'

Suites refer to groups of programs that share similar attributes or synergies. The group discussed the importance of dispersing these suites around the Hearth. Diagrams of the programs to scale that make up these suites were used as a visual tool throughout the discussion.

### **The likely suites / functions to front the Hearth are:**

Recreation  
Media  
Multicultural Center  
Concert Hall  
Computer Center (and dispersed kiosks)  
Conference Center  
Food Service  
Lounges

## 2.03 UPDATED AFFINITIES AND CLUSTERS

Adjacency diagrams illustrating functions in terms of: noise, hours of use, energy use and access to daylight affinities were discussed as additional design considerations to be explored. **Refer to Appendix I, II, III, IV and V.**

### Feedback:

- Provide separate bubble for Survival Center, breaking out from Sustainability Center, Woman's Center and LGBTQA based on SAC meetings
- Student Lead: ASUO, Student Resource Center, Sustainability Center
- How to connect programs without specific affinities, Call Center, EMU Admin
- Media Suite; visual access to 13th
- Conference Center Suite; revenue generator, key to share meeting rooms between Student Groups and Conference use. Should include some large spaces served by food service, but also include smaller rooms dispersed throughout building that can be used by various student groups
- Noise: Hearth should be stripes of all three colors rather than purple – needs variety of quiet / noisy spaces
- Hours of Use: UO wants to grow late night student activity around campus so coffee, student resources open late to support late night activity. Consider zones with clusters of space; security issues, HVAC and general energy implications, operational costs
- Relocating Food Service entirely is costly, redistribute a few food services around Hearth? Remote Food Services (transport current location as carts, for example)
- Distribute and activate to work together as a group, for instance, have Conference guests all get food at different vendors yet sit together. Works with current Food Service program, would like to continue this feature
- Food Service program ideas could change based on the needs of the vendors that will eventually occupy the space, which is managed by UO as an RFP process
- Bob presented SF spreadsheet of updated program and illustrations of office furniture space allocations to show what activity could occur based on size
- Bike Center is still unaccounted for in the SF total; programming prioritization will be necessary if it is to be accommodated in the design

### 3.0 FRAMING SUSTAINABILITY

Lisa provided an overview of the frameworks for sustainability the project could consider. The intention for this session was to develop a project specific framework around sustainable design that would allow the group to begin brainstorming about the project's sustainability goals.

#### 3.01 REVIEW FROM USER GROUP #1 AND #2

- Energy use is the highest in buildings
- EUI (Energy Use Index) used as unit to measure overall sustainable strength of the building, the lower the better
- Reduce energy through climate responsive design, load reductions (increase passive, decrease active), right sizing (scale), utilities in district
- 60 – 65% better than ASHRAE 90-1- 2007 (45% better than Oregon Code)
- Campus scale - stormwater

#### 3.02 FRAMEWORKS FOR SUSTAINABLE DESIGN

*Which philosophy should we use?*

Lisa introduced an approach called backcasting - begin with the end in mind, move backwards from the vision to the present and then move step by step towards the vision.

*Referring back to User Group Meeting #1, the sustainability principles of The Natural Step (listed below) address the broad reaching goals listed as important in that meeting and in the Existing building report. The four system conditions are:*

- Concentration of substances extracted from the Earth's crust
- Concentrations of substances produced
- Degradation by physical means and in that society
- People are not subject to condition that systematically undermine their capacity to meet their needs
- SERA's version - Take, Make, Respect, Choose

#### 3.03 RATING SYSTEMS

*Which rating system makes the most sense to adopt for the EMU? The Living Building Challenge? LEED Certification? A hybrid?*

Living Building Challenge

- Cascadia Region Green Building Council
- Metaphor of Flower
- Site – limits to growth, urban architecture, habitat exchange, car-free living
- Energy – net zero energy
- Water – net zero water, ecological water flow
- Materials – RED list, embodied carbon footprint, responsible industry, appropriate sourcing, conservation and reuse
- Health – civilized environment, healthy air, biophilia
- Equity – human scale and humane places, democracy and social justice, rights to nature
- Beauty – beauty and spirit, inspiration and education

LEED

- Costly to pursue certification with USGBC, point chasing is not congruent with UO's mentality

Oregon Model of Sustainability

- Energy
- Water
- People
- LEED

3.04 REVIEW DESIGN DRIVERS ESTABLISHED DURING USER GROUP #1

- Recruiting best students & faculty
- Timeless
- Intuitive
- Multi-functional (efficient use of resources)
- Subtle, graceful, elegant (nothing is inferior) (equality)
- Simple and enduring approaches – not tech based
- Building should teach & integrate natural processes
- Simplicity
- Most needed – daylight & heat
- Promote engagement of campus
- Provide a venue to welcome the public into our campus.
- Support initiatives that engage faculty and staff and spark the intellectual curiosity of students
- Host expanded activity during evenings and weekends, activate the heart of campus, and contribute to the overall residential quality of campus.
- Integrate academic uses into the building
- Promote the EMU's elevated role in recruitment and retention of students and as the home base for student government and student multicultural programs
- Demonstrate high-quality design and use of materials, and showcase sustainability and technology in support of student scholarly expression
- Create a university center that announces the EMU as the central hearth for campus and tells the stories of the UO culture

3.05 SETTING SUSTAINABLE DESIGN GOALS

*Considering the design drivers established in User Group #1, what are the sustainability goals for the EMU?*

Energy Reduction Strategies

- Performance metric around energy use
- Oregon Model min.
- Suggest 60 to 65% better than ASHRAE 90.1-2007 (45% better than Oregon Code)
- Additional 10 to 15% from occupant engagement
- Solar Thermal
- Photo Voltaic (PV) Ready – could look for third party funding of demonstration PV array

Energy / Health

- Provide daylighting for all student offices and views for 90% of regularly occupied spaces for all new construction projects

Materials

- Reuse most of materials from demolished building in the new Union
- Recycle 95% of construction debris
- Minimize use of non- toxic materials
- Source products locally where ever possible
- Eliminate waste
- Adopt the 2030 Challenge for Products to reduce the carbon-equivalent footprint of products by 35% by 2015

Water

- 50% reduction in water use (against Energy Policy Act of 1992) by using water reclaim strategies (rainwater collection)
- Demonstration project
- Meet Oregon Model for stormwater management

Campus Scale Systems

- District ready for future incorporation into a larger network that incorporates the campus
- Repair the campus connections

People (equity)

- Maintain access for daylight for surrounding buildings
- Create a universally accessible design
- Incorporate and embrace diversity in design of the building

Design Process (Beauty)

- The student union that inspires its occupants towards greater good

3.05 WORKSESSION

The User Group and Design Team counted off into two separate groups, Hardware and Software. The Hardware Group discussed sustainability goals based on the physical structures that exist, with energy efficiency and longevity in mind, and its overall relationship to occupant health. The Software group considered site, people, beauty, and education while brainstorming sustainability goals and strategies to achieve these goals.

**Hardware Group:**

Energy / Health

- OMSD Goal – 30%, 40% better than code
- Architecture 2030 goal – 60% - 65% above requirements
- Air Quality
- Daylight and view; harvesting, education, immediate user feedback, occupancy sensors
- Either daylight + task or systems electric overhead + task
- Encourage healthy transportation; walk, bike, skateboard, mass transit, carpool. Changing space, secure parking

- User education: Dashboards, energy history, orientation/introDUCkTion, keep building true to concept, psychological / cultural importance of “sustainability billboards”
- Elevator replacement relative to stairs

#### Water

- Stormwater; pollution control. Oregon Model; treat dirty water first, visible biological treatment, temporary ponds
- Domestic water; reuse of roof water, reuse of building graywater
- Strategies:
  - visible measures, as education and celebration
  - windows that work – daylighting, ventilation
  - sustainable billboards / dashboards
  - incentivize good behavior
  - systems and appropriate longevity; put emphasis on long-horizon systems and long-durability

#### Site

- Directions / position to match climate from outside air exhaust
- Maintenance
- Topography, natural insulation
- Education / edible landscapes
- Opportunity to reach building users and beyond, lead to larger scale
- Software not just a gimmick
- Student, faculty, staff get updates on amount of water, energy saved
- Group leads from design through use in the future

#### Software Group:

- Schedule trash / composting pickup weekly or semiweekly,
- Visible or sign fun fact if can't be seen, OSU Pulper
- How to support the Eugene community? Collect food waste, building policies
- Comfort: Scrubber on exhaust hoods, smells, energy
- Passive experienced differently
- Redefine “comfort”
- Dashboards – temp, water, heating / cooling. Don't assume all occupants can have technology to this
- Interactive, tangible reports
- Single/dual flush toilets – choice or inherent forced
- Adjustable sensors, key to turn on lights, leave remote key card, lights off
- Varied participation: diversity of users

#### Educate / Behavior & Lifestyle Change

- Educational signage vs. interactive strategies, “piano steps”, food utensils and products
- Sign Blindness Syndrome, teaching and demonstrating to form habits
- Freshman Orientation through EMU, learn the building, don't blame it
- Student group as “eco-concierge”

**Site**

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**Wrap-Up / Next Steps**

- Martina proposed the creation of a Sustainability Technical Advisory Group (TAG) that includes 3 students, 1 faculty member, 3 EMU Staff members, and 3 campus experts. Additional individuals interested in serving on the committee should contact her directly
- Future SAC meetings will be done in groups based on suites / affinities
- Upcoming Campus Planning Committee meeting is intended to provide an update on the progress so far and allow them to give feedback. The meeting will address massing layouts, site opportunities, designated open space framework, patterns, pedestrian and bike paths. This first check in is not for CPC to give approval but allows them to provide feedback and comment on whether they agree with the overall direction.
- Next Open Design Session: Thursday November 10, 2011; 10:00 – 5:00pm; Fountain Courtyard
- Next User Group Meeting: Tuesday November 29, 2011; 8:00 – 4:00; Bean Hall East Conference Room

**End Time:** 12:00pm

**Recorded by:** Caity McLean

**Date of Report:** 11/22/11



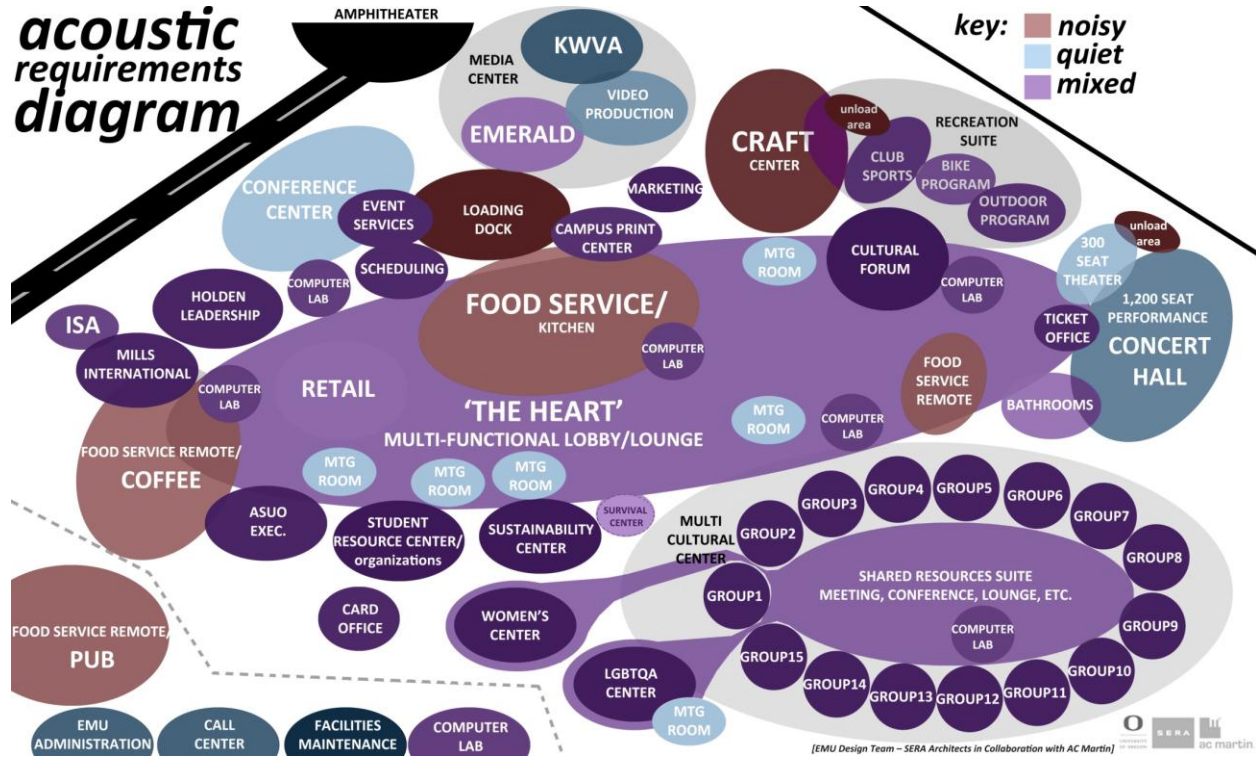
Appendix I  
Adjacency Affinities

**adjacency  
diagram**



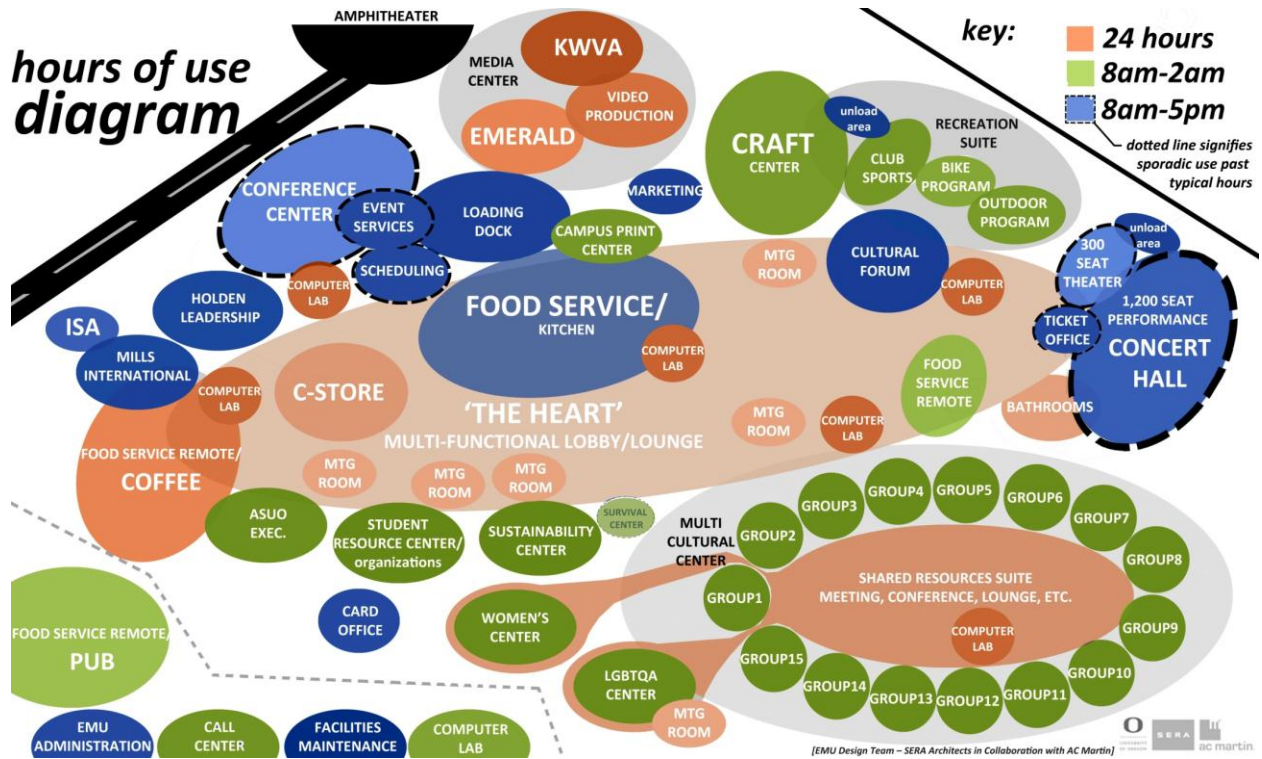
Appendix II  
Acoustic Requirements Affinities

*acoustic requirements diagram*



Appendix III  
Hours of Use Affinities

*hours of use diagram*



**Appendix IV**  
**Energy Affinities**



Appendix V  
Daylighting Affinities

**daylighting  
diagram**

