East Campus Residence Hall User Group Meeting No. 6

MEETING NOTES:       June 11, 2009

FROM:            Lee Kerns

PRESENT:  UNIVERSITY OF OREGON
            Cathy Soutar  Susan Lesyk
            Gregg Lobisser  Virginia Cartwright
            Fred Tepfer  Tom Driscoll
            Allen Gidley  Martina Bill
            Sandy Schoonover  Aly Stanton

            ZIMMER GUNSUL FRASCA ARCHITECTS LLP
            Mark Foster  Josh Peacock
            Johanna Brickman  Sue Kerns

DISTRIBUTION:  Those present, Lee Kerns, Sean Landry, Adrian Ho, Ryan Wagner, Jon
               Erlandson, George Bleekman, and Master File

1.0  PURPOSE OF THE MEETING

This was the sixth meeting of the East Campus Residence Hall (ECRH) User Group. The focus of
the meeting was to consider the graphic representations of various two-story hearth group
configuration studies, studies of ground floor public space organization, the two tower
configurations, and their resulting influence on the site. The ground floor configuration studies
reflect the space impact of the proposed program cuts, which were to be discussed. Initial ideas
were presented for building systems that will need to be explored through the energy model and
life cycle costing process. A copy of graphic information presented at the meeting is attached.

2.0  INTRODUCTION FROM GREGG LOBISSER

2.1 The incoming president of the Residence Halls Association, Aly Stanton, was introduced. She
will be attending User Group meetings in this role, formerly held by AJ Eaton.

2.2 The Campus Planning Committee presentation took place 6-10-09. The dialogue was positive,
with constructive suggestions, questions, and observations.

     2.2.1 With regard to open space, a view corridor should be considered from Agate to
     the central green.

     2.2.2 The plan should strive to frame the edges of the green to create a border to the
     space, reinforcing the central space that is created.

     2.2.3 Observed that the 3-bar building study allows more light through if the southern
     bar has less height.
2.2.4 Suggested ensuring through floor/suite configurations that each room has a window.

2.2.5 Would like the open space plan to better reflect consideration of location and massing of the next building projects on the East Campus.

2.2.6 No concerns were raised about the 5-floor building height.

2.2.7 Indicated that the crossings of Agate at 17th Avenue and of 15th Avenue at the Humpy Lumpy need to be better defined and understood.

2.2.8 The design of the ECRH should strive to preserve views to the East and the hills.

2.3 The East Campus Neighbors meeting also took place 6-10-09.

2.3.1 Primary discussion topic was parking.

2.3.2 Neighbors would like to ensure that parking remains available – dedicated parking – would be desirable.

2.3.3 Child Care Center

2.3.3.1 Bus access and turn around required several times per day
2.3.3.2 They would like to lose parking, as they perceive it to be a safety hazard
2.3.3.3 They want to ensure that there is adequate bike parking and a bike path to their project if the street is closed.

2.3.4 Longhouse’s view to the East and the hills is very important to them culturally and functionally.

2.3.4.1 Cathy Soutar will follow up to ensure we fully understand the need so that it can be accommodated.
2.3.4.2 Virginia suggested that some section/elevation drawings could illustrate what view would remain with the proposed design.

2.3.5 One attendee suggested that the residence hall should be designed in the “residential college” approach with separate doors to vertically-oriented hearths.

2.4 Academic Linkages discussion also took place 6-10-09.

2.4.1 Discussion held regarding how faculty could help with the development of the design. Faculty are excited to engage and are interested in helping to build the living/learning connection

2.4.2 Faculty can help guide the design of instructional spaces to make them more functional – probably 40-50 individuals available. Particular areas of interest include design for technology, lighting, sound, and furniture. Faculty expertise in classroom setup and orientation can help the design reflect recent research findings.

2.4.3 The User Group discussed this option and thought that the team may only want to actively engage 4-5 faculty, as representatives of the larger group’s concerns, such as the classroom committee that met with the LLC design team through the design process.
2.4.4 All agreed that such a group should be engaged only if their expectations were carefully managed to ensure that likely constraints around timeframe, phasing, and actual classroom availability are clearly understood up front.

3.0 HEARTH GROUP ORGANIZATION

2.1 Two-story hearth group configurations were presented, attached.

2.2 Discussion of circulation within and to those 2-story hearths.

2.3 In order to keep daylight and views to the shared spaces in those hearths, some space efficiency is lost.

2.4 Configurations that allow daylight from north and south of the shared spaces are strong.

2.5 The committee, including student representative, indicated that shared bathrooms should be in the middle of a series of rooms as opposed to at the end or at any public space, for sense of privacy.

2.6 The committee liked the size of the hearth rooms – they should be sized to ensure all hearth residents can gather at once for meetings with the RA. Sitting on the floor for such meetings was indicated to be acceptable. Communicating stairs could be configured with a turned landing to allow for some informal seating on lower stairs for such meetings.

2.7 The design should address acoustical treatment to reduce noise from Hearth rooms disturbing residence rooms. Storage under communicating stairs could act as a buffer, as could auxiliary spaces set between the hearth and residence rooms.

2.8 It was observed by several attendees that the LLC laundry rooms are really nice spaces, and could be better utilized if slightly larger so that furniture could be included and the space could be lived in more. As they are, they aren’t as active as they could be.

4.0 GROUND FLOOR PUBLIC SPACE AND SITE ORGANIZATION

3.1 Ground floor public space configurations were presented, attached.

3.2 The design team explored the idea of utilizing below grade loading, and discovered that this approach would not be workable due to the length of ramp required to get down to the required depth. The length required would exceed the width of the building site.

3.3 A decision regarding the expansion of the Museum of Natural and Cultural History is expected soon. This decision and the decision about the program scope are required before decisions can be made about the ground floor, and as a result, the project as a whole.

3.4 It was noted that removing the commissary program from the 1st phase would afford more flexibility in the configuration of the ground floor.
The committee provided feedback on various aspects of the ground floor studies, both positive and negative.

Positive attributes:
- Seating on 15th Avenue frontage would provide a good level of activity.
- Performance space near the nerve center
- Study rooms facing courtyard space
- Studies with reduced hallway area for efficiency (such as the 3-bar 1d study)
- Direct Apartment connection to Moss Street
- Variety of outdoor spaces resulting from having a courtyard facing west and a courtyard facing east – particularly if the scales can be different to result in a major and minor space for difference in character.
- Large grassy area as active social hub – particularly if wireless access provided

Negative attributes:
- Study rooms on 15th Avenue wastes the active frontage
- Too much hallway area in some studies (such as the 3-bar 1c study)
- Having apartments back up to a courtyard is a burden to those occupants due to need for constant monitoring – though the 2-sided light would be nice.
- Concern about East-facing courtyard on Moss, and safety issues particularly with foot traffic resulting from the Arena. Some felt it would get gated soon after if left open.
- Need to ensure that if courtyards smaller, the size needs to be large enough to be social spaces.
- Concern about long, contiguous, narrow dining spaces being less socially comfortable, and that breaking up the spaces into smaller areas might be better.

Open questions:
- There is no obvious place for loading, as there is no “back” to this building. Where should it go?
- Less kitchen program would mean less loading dock, which needs to be reflected in the schemes with less kitchen area.
- Some interest in exploring ground floor residence rooms as appropriate. The ground floor units are very popular at the LLC – not only preferred by those with disabilities, but also popular with rental occupants in the summer. Isolation is not considered a problem for those units.

Tower configuration briefly discussed. Most indicated a preference for the 3-bar studies due to greater flexibility and opportunity for variety, as well as improved energy performance over the C study. The committee was not comfortable yet with dropping the C tower, and would like to carry that forward at least for this next round of study.

PROGRAM SPACE LIST

The committee did not focus on specific space reductions at this meeting. The committee would like to engage the cost estimator to provide a recommendation on cost per sq. ft. so that the space program and project budget can be reconciled together.
6.0 SUSTAINABLE DESIGN STRATEGIES

6.1 Johanna Brickman provided a review of sustainable design goals as stated by the user group and in the project description, followed by an introduction of concepts that should be explored during schematic design due to the unique nature of the program or due to the stated goals. She ended with a concise list of next steps to be pursued early in the schematic design phase. The summary document is included in the attachments.

6.2 Johanna will provide a presentation at the next meeting providing further details about how the various suggested systems might work.

6.3 The energy modeling, pricing, and system sizing efforts should include the following as a start:
   6.3.1 Domestic Hot Water sourced from Solar Thermal Panels and Waste Heat from refrigeration as well as exhaust air from kitchens and showers.
   6.3.2 Space Heat provided from Solar Thermal and Waste Heat as well either via radiant panels or heat recovery ventilators (see item 6.3.4 below)
   6.3.3 Ground Floor cooling could be provided in total or in part by pulling air intake through a thermal labyrinth (or earth tubes). This might need to be augmented by air conditioning for active spaces.
   6.3.4 Ventilation could be provided through natural ventilation only or through heat recovery ventilators to provide better control over thermal transfer in extreme conditions.
   6.3.5 Operable windows throughout.
   6.3.6 Extensive insulation, high performance windows, and design to reduce thermal transfer.
   6.3.7 Daylight sensors and dimmable ballasts for electric light control in public areas.

6.4 Additional sustainable design features that should be considered in the coming phase:
   6.4.1 Baseline design: Water efficient fixtures and stormwater reuse for non-potable uses.
   6.4.2 Baseline design: low-VOC finishes, urea-formaldehyde free composite products, recycled products and certified wood.
   6.4.3 Baseline design: Interactive educational displays for the Sustainability Center, as well as building metering to inform the real-time performance reporting.
   6.4.4 Baseline design: dual-flush toilets throughout the facility, and pint-flush urinals wherever urinals are used.
   6.4.5 For study: Living Machine/Tidal Wetland for onsite wastewater treatment - academic linkage and water use reduction.
   6.4.6 For study: Photovoltaics for onsite energy production - either rooftop or in shading devices at ground floor – needs to weighed against the cost-effectiveness of solar thermal.

6.5 Next Steps
   6.5.1 Energy Modeling and Life Cycle Costing exercise
   6.5.2 After Energy Modeling has commenced, an EcoCharrette is to be held to further flesh out project goals and metrics for success. Will require at least 4 hours of meeting time. The team will need to discuss the ideal attendee list for this event at our next meeting.
7.0 **ACTION ITEMS**

7.1 The next meeting is scheduled for June 25, 2009.
7.2 Contractor selection underway.
7.3 Cathy to have Energy Modeler engaged prior to moving into next phase.

*END OF MEETING NOTES*

JB/ctc

Attachments:
- Agenda
- Graphic materials presented at meeting: Ground Floor Studies, Massing Studies, Typical Floor Studies, Program, and Sustainable Design Strategies

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1. Project update.

2. Hearth group organization.
   a. Two story configuration

3. Site concept studies.
   a. Ground floor public space organization.
   b. Site influence

4. Program space list.
   a. Program reductions

5. Sustainability Strategies

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Agenda
Open Space Framework
Meeting No. 6
3:00-4:30pm

1. Project update

2. CPC/Neighborhood meetings feedback

3. Next steps
east campus residence hall

museum of natural + cultural history
possible expansion

building related open space

C 2_ ground floor
East Campus Residence Hall

Hearth Studies

Laundry
JANITOR / ELECTRICAL
Storage

Hearth

[OPEN TO BELOW]

Upper Floor

Study Space

Lower Floor

Hearth 1

Hearth 2

0' 5' 10' 20'
east campus residence hall

view from SE

view from NW

plan view

15TH AVE

museum of natural + cultural history

possible expansion

MOSS ST.
East campus residence hall

View from SE

View from NW

Plan view

Museum of natural + cultural history

Possible expansion

15TH AVE

MOSS ST.
east campus residence hall

view from SE

view from NW

plan view

museum of natural + cultural history
possible expansion
East campus residence hall

C1, typical floor

- 16 traditional single beds (x4 fl = 64 beds)
- 46 traditional double beds (x4 fl = 184 beds)
- 12 semi suite single beds (x4 fl = 48 beds)
- 48 semi suite double beds (x4 fl = 192 beds)

- Heart 1: 6 traditional single beds (x4 fl = 24 beds)
- 3 semi suit single beds (x4 fl = 12 beds)
- 4 semi suit double beds (x4 fl = 16 beds)

- Heart 2: 6 traditional single beds (x4 fl = 24 beds)
- 3 semi suit single beds (x4 fl = 12 beds)
- 4 semi suit double beds (x4 fl = 16 beds)

- Heart 3: 10 traditional single beds (x4 fl = 40 beds)
- 12 semi suit single beds (x4 fl = 48 beds)
- 12 semi suit double beds (x4 fl = 48 beds)

Museum of natural + cultural history

Possible expansion

East 15th Ave

East campus axis

Moss St

Laundry

Study

Space

Hearth 1

Janitor / electrical

Storage

Hearth 2

Hearth 3

60'-0" 226'-3" 17'-2"
museum of natural + cultural history
possible expansion

3 bar 2, typical floor

13 traditional single beds
38 traditional double beds
17 semi suite single beds
46 semi suite double beds
[4 fl = 52 beds]
[4 fl = 152 beds]
[4 fl = 68 beds]
[4 fl = 184 beds]

hearth 1
[36 total beds]
6 traditional single beds
0 traditional double beds
2 semi suite single beds
4 semi suite double beds
[4 fl = 24 beds]
[4 fl = 0 beds]
[4 fl = 16 beds]
[4 fl = 32 beds]

hearth 2
[41 total beds]
0 traditional single beds
0 traditional double beds
11 semi suite single beds
36 semi suite double beds
[4 fl = 0 beds]
[4 fl = 0 beds]
[4 fl = 52 beds]
[4 fl = 120 beds]

hearth 3
[37 total beds]
7 traditional single beds
14 traditional double beds
4 semi suite single beds
12 semi suite double beds
[4 fl = 28 beds]
[4 fl = 42 beds]
[4 fl = 16 beds]
[4 fl = 48 beds]
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| Resident entry   | 1 0 0 100 100 |
| Resident hearth  | 1 0 0 300 300 |
| Double resident  | 2 2 2 225 0 |
| Single resident  | 12 1 12 142 1704 |
| Semi-Suites      | 7 4 18 650 4550 |
| Shared floor     | 2 0 0 400 800 |
| Janitor          | 1 0 0 48 48 |
| Laundry          | 1 0 0 120 120 |
| Subtotal         | 120 |
| 3 Hearths        | 120 |

| Residence C      | 22,413 |
| Resident entry   | 1 0 0 100 100 |
| Resident hearth  | 1 0 0 300 300 |
| Double resident  | 13 2 26 225 2925 |
| Single resident  | 9 3 9 142 1278 |
| Semi-Suites      | 5 4 18 650 1300 |
| Shared floor     | 2 0 0 700 1400 |
| Janitor          | 1 0 0 48 48 |
| Laundry          | 1 0 0 120 120 |
| Subtotal         | 120 |
| Ancillary storage| 45 7471 |
| 3 Hearths        | 135 |

| Residence D      | 19,254 |
| Resident entry   | 1 0 0 100 100 |
| Resident hearth  | 1 0 0 300 300 |
| Double resident  | 0 0 0 753 0 |
| Single resident  | 0 1 0 142 0 |
| Semi-Suites      | 9 4 36 650 5850 |
| Shared floor     | 1 0 0 700 0 |
| Janitor          | 1 0 0 48 48 |
| Laundry          | 1 0 0 120 120 |
| Subtotal         | 36 6414 |
| 3 Hearths        | 108 |

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The East Campus Residence Hall project description clearly states goals for energy efficiency and sustainability achieved through a collaborative and integrated design process. The University needs to meet performance targets established through University and State policy, and this project represents an opportunity to do so through a design process and end result that provide academic and community-building opportunities for the University.

Sustainable Design goals explored prior to concepts and through the User Group meetings can be summarized in the follow five aspirations. The University would like for the ECRH to be:

- the next evolution of cutting edge sustainable design on campus
- attractive to students and linked to educational mission through interactive features
- an inspiring spaces – provide connection to the outdoors
- enduring design drawing from the best of the University’s architectural heritage
- Priority on setting the stage with the most critical early steps: orientation, massing, passive design

Throughout Conceptual Design, the design team has considered the relative impact of various approaches to orientation, massing, unit configuration, and adjacencies. Incident Solar Radiation and resulting external loads were studied using several of the proposed design alternatives during concepts to assist the User Group in providing informed feedback to the design team. During Schematic Design, those impacts will be explored in more detail, including specific analysis of building systems, as the design direction gets clarified.

Evaluation of the Building Program brought up the following unique opportunities for this project:

- Large volume of refrigeration required 24/7 year-round – large heat source
  Refrigeration waste heat, in concert with Solar Thermal Panels, could provide a significant heat source for Domestic Hot Water, Space Heating (if needed), and possibly a cooling source through an absorption chiller or solar chiller
  Thermal storage could also be valuable, given the seasonal variability in heat demand
• Condensate from dishwashing and other humidity-producing functions such as shower rooms
  Heat reclaim to add to heat rejected from refrigeration
  Condensate water treated and included in storage for reuse – requires cooling coil
• Thermal mass works very well in the NW climate
  Earth tubes for pre-cooling of intake air for ground floor areas where cooling is needed
• PassivHaus – German high performance design standard
  Eliminate active radiant heating = reduce mechanical and controls costs by $6/SF
  These savings are applied to pay for the following building features:
    ▪ Thick, insulated walls – R-60
    ▪ Sealed exterior
    ▪ Super high-performance windows
    ▪ Heat recovery ventilators in lieu of natural ventilation – better control

• Water consumption is likely to be significant, with the commissary and residential program
  Look for water use reduction strategies wherever possible – inside and outside the building
  Utilize treated stormwater and wastewater only for non-potable purposes – stormwater and treated water storage creates a significant thermal volume, and has potential synergy with thermal storage.

Living Machine – onsite wastewater treatment, reduces Systems Development Charges, provides an excellent academic linkage and draw to the site, represents a landscape opportunity that may be complementary to open space goals.

Immediate Steps for early Schematic Design:

  Energy modeling – determine cost/benefit of moving from efficient to passive – compare scenarios and engage estimator in the process of LCCA

  EcoCharrette to establish goals, engage community, identify critical barriers and opportunities, envision design solutions, guide design process, establish metrics for measuring success

Schematic Design Phase will also involve:

  Decision on efficient vs. passive approach based on early modeling

  Research and Test concepts explored in EcoCharrette (full team engagement – MEP, Structural, Civil, Landscape, UO, and ZGF)