HR THAARCHITECTURE

MEETING NOTES

Meeting Date February 05, 2009

Project : UO Lewis Integrative Science Building

Author David Gibney / Becca Cavell Job No. : THA Project 0810

Re Sustainable Design – Programming Phase.

Present:

UO representatives

Jeff Madsen - Facilities Kay Coots - EH&S Steve Stuckmeyer – EH&S Ernie Svensson - Facilities Denise Stewart- Facilities Del McGee- Facilities Steve Mital - Sustainability Director

LISB User Group Members

Corey Griffin - Architecture Bruce Bowerman - Bio Rick Glover – Chem student Jim Hutchison - Chem Dave Johnson - Chem Frank Vignola – Physics

UO Campus Planning Fred Tepfer Emily Eng

EWEB Rod Olsen TBD

Consultants

Regina Filipowicz, HDR David Gibney, HDR Bruce Johnson, HDR Becca Cavell, THA Laurie Canup, THA Steve Simpson, THA Chuck Cassell, HDR Bruce Powers, HDR April Cottini, HDR Mark Penrod, BHE Mike Ware, BHE Marv Caldera Dave Knigton, BHE Geoff Larsen, BHE TBD - GLUMAC (energy)

Introductions/Agenda

 Purpose of meeting is to define the University's values, goals, and objectives in regard to this projects' sustainability.

Overall Project Schedule

Project will likely be in design through 2009 with construction beginning in early 2010.

Site Conditions and Initial Massing/Layout Schemes

- Site is the last green space available in the Lokey Science Complex.
- Site is an important campus entry location.
- Important building layout considerations are:
 - separation/adjacency of offices to labs for HVAC efficiencies
 - east-west central atrium for vertical and horizontal circulation space, daylighting and natural ventilation potential.

Sustainable Metrics to Consider

- Living Building Challenge Exceeds LEED Platinum. Net zero energy and zero carbon goals.
- Architecture 2030 Challenge Net zero carbon buildings by 2030.
- Labs21 Environmental Performance Criteria (EPC) based on LEED structure but specific to lab issues. Benchmarking and published case studies. Highly applicable to this project and recommended by THA/HDR. Attendees agreed Labs21 should be used.
- LEED 2009 perhaps. UO has had mixed experience with previous LEED projects. LEED doesn't address many lab environmental impacts.

NOTE: Attention Attendees! Please review these notes carefully as they will form the basis of future work on this project. If you feel that anything is incorrect or incomplete, please call the author at 503.227.1254.

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- DAS LEED required
- SEED required
- 1.5% solar initiative may not be applicable but project may still want to implement.

University of Oregon Environmental Values

- American University and College President's Climate Commitment comprehensive goal of achieving a zero carbon footprint by 2050 with minimal use of carbon offsets
- Highly visible campus sustainable features/operations with educational value
- Adaptable facilities to facilitate future change and minimize long-term impacts
- Synergistic, smart sustainable design: one strategy, multiple benefits
- Scientific safe practices

Broad Project Goals

- Use energy modeling coupled with life cycle analysis for maximum ROI.
- Carbon management plan: design, construction and operation of project.
- Leverage public-private partnerships for funding and educational opportunities
- LISB should lead the UO campus and the nation as a sustainable lab project.
- LISB should be the benchmark for sustainable laboratories.
- Project can be an environmental billboard but not in meaningless ways using only appropriate strategies
- Sustainability for LISB should support:
 - Human Safety
 - Excellent Science
 - Innovation
 - Educational Values
 - Leadership

Ideas/Potential Strategies:

- Natural ventilation in offices and circulation spaces; possibly in some dry lab areas
- Looser temperature set points (high-low range on t-stats) to conserve energy
- Individual control over both heat and ventilation to improve user comfort.
- LISB will be heavily used year-round design mustn't assume lower summer occupancy.
- On-going building performance reporting with web-based dashboard and/or individual displays to promote healthy competition
- Educational component to educate building visitors about "hidden" sustainable design strategies
- Educational / experimental component building itself could be a laboratory for sustainable design strategies, ideas and testing.
- Fume hood fans could be monitored
- "Inside-outside" modular lab design arranged for HVAC efficiency
- "Right-sized" air change rates and temperature set points
- Fume hood sash management plan
- Smaller fume hoods when possible
- Lab occupancy sensors
- Lab air quality sensors (not likely other than CO)
- Localized cooling for equipment
- Bigger ductwork (push more air slowly)
- Rainwater and clean wastewater re-use
- Building could showcase Oregon's wind power industry and pilot wind power on UO buildings.
- Synthesis of sustainability with other campus disciplines, such as art
- Encourage sociological / behavioral changes to support long term building performance goals.

Other

- The idea of using on-site HVAC heating/cooling was discussed and eliminated. LISB will connect to central plant, although energy will be reused internally as well.
- Meeting adjourned at 1:00. END OF NOTES

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