Well-being and Mental Health Collaborative

Built and Natural Environment Subcommittee

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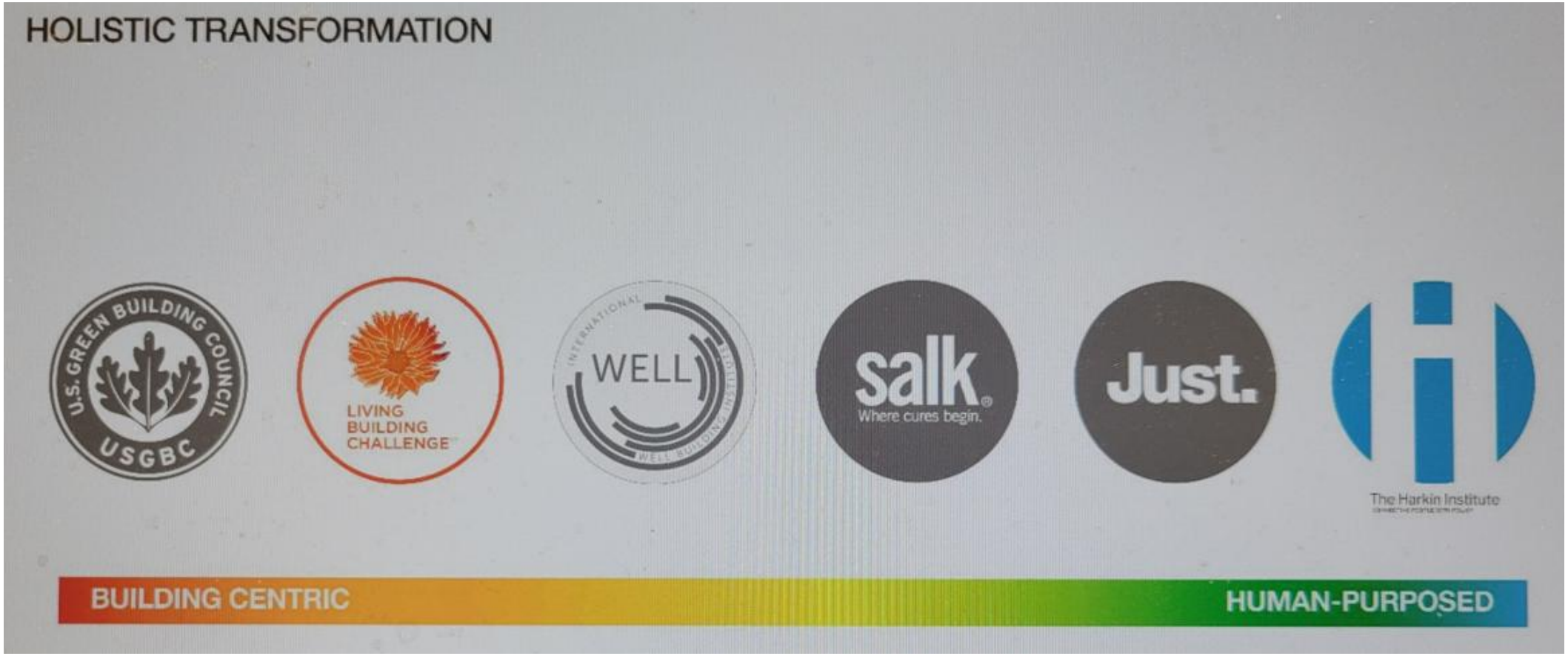
Design Creates Culture, and Culture Informs Design.

Beyond LEED: Iowa's Evolution to Human-Centered Design



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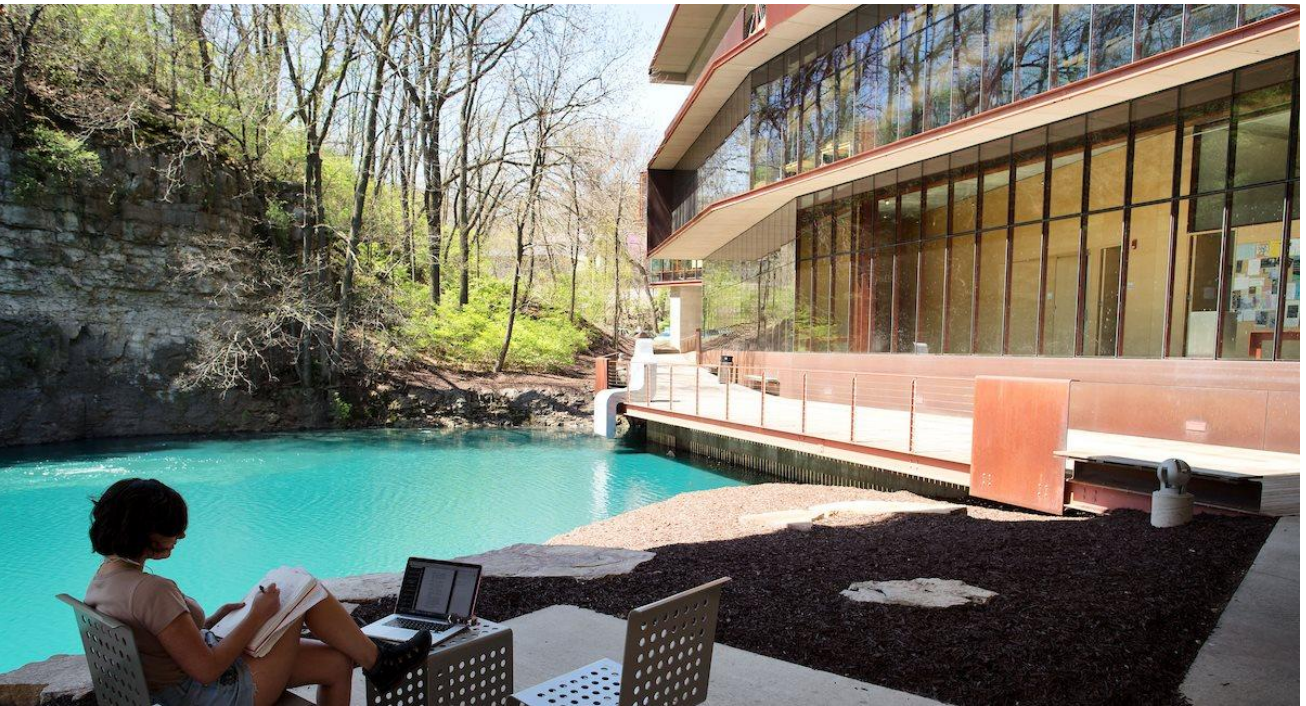
We all want buildings that are good for people!

Q: How do we achieve this by design and not by default?

A: Formalize our University-wide Approach



What is Human-Centered Design?

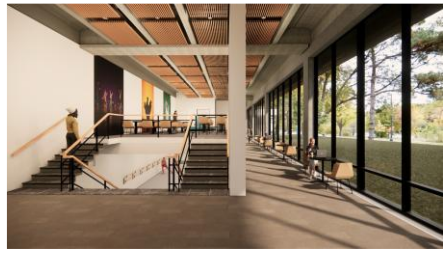
Strong stakeholder engagement early in the design process

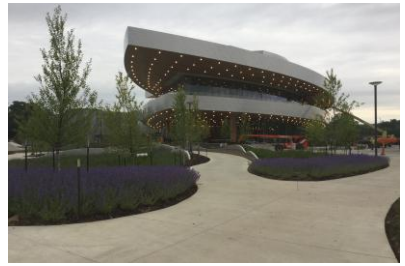
Incorporating established best practices for occupant health in design standards

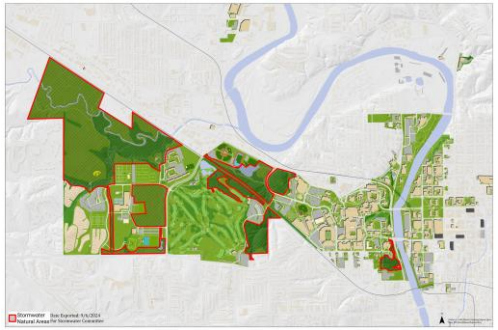
Communicating a campus culture that prioritizes occupants in new building and renovation RFPs and design charrettes

When done right . . .University of Iowa

Built and Natural Environments







Design Principles

A Cohesive Campus

- Unique but integrating with campus.
- Lasting materials with contemporary design.
- Utilize transparency to highlight important moments of program and circulation.

Community-Focused

- Open campus strategies.
- Use design to shape experiences on campus.
- Consider the visitor, student, faculty, and staff experience.

Strong Relationship of Site and Architecture

- Use of the master plan as a guide.
- Clear wayfinding and entry.
- Leverage outdoor spaces.
- Maximum outdoor area and function.

Iconic and Symbolic Architecture.

- Day and night presence of connectivity.
- A contemporary statement of an innovative campus.
- A destination as a result of the architecture.
- Reflect sustainability and well building strategies

University of Iowa - Health Sciences Academic Building- Human Centered Design Case Study

1. Design for Integration

- Retain established trees on site
- Extend existing campus circulation access points

2. Design for Equitable Communities

Accessibility entries that utilize:

- Universal Design
- Physical Accesisbility
- Sensory Considerations
- Clear Wayfinding and Orientation
- Ergonomics and User Comfort
- Inclusive Social Spaces
- Ongoing Engagement

3. Design for Water

- Water Softening System for longetivity and user comfort
- Hot water recirculation system
- Water Fountains and bottle fill stations

4. Design For Economy

- Provided clinical and research support to the community and University
- Flexible spaces to accommodate program evolution

5. Design for Energy

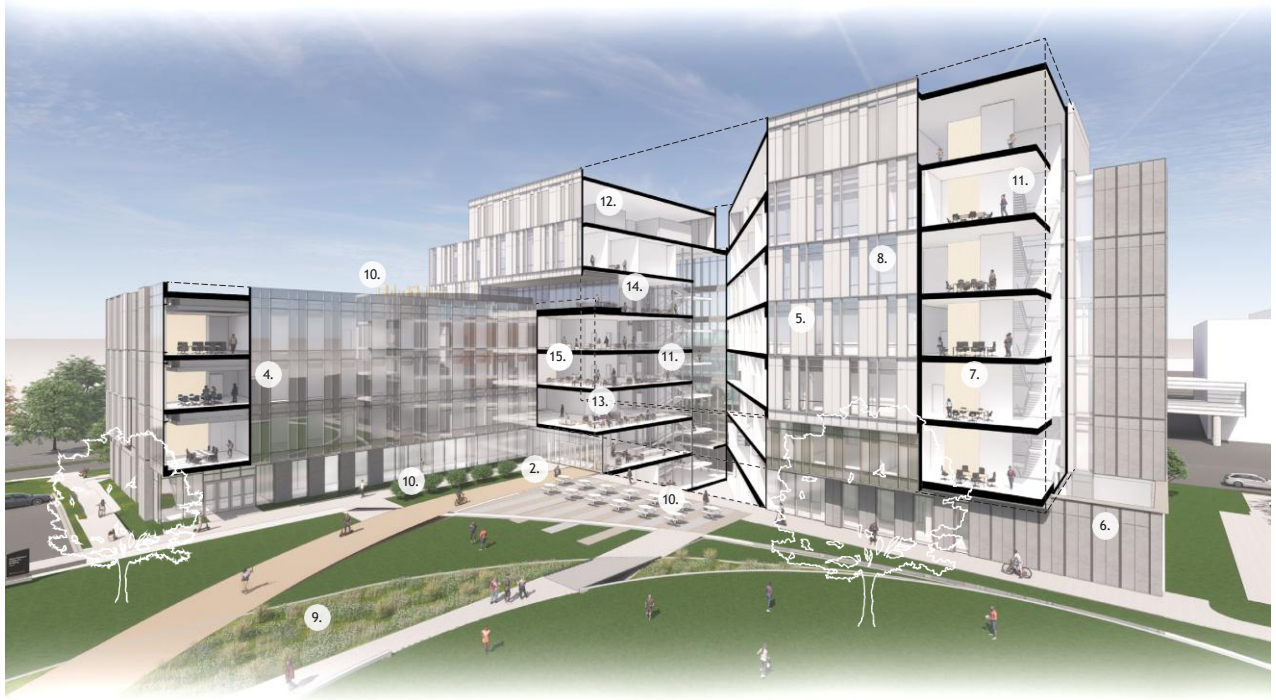
- Energy Use Intensity (EUI): Anticipated EUI of 75.1 kBTU/SF/YR compared to code baseline EUI of 93.6.
- 40% window to wall ratio, deep window pockets, and high performance envelope.
- Occupancy sensor controls
- Demand control ventilation
- Total energy recovery
- CO sensor control
- Controls to minimize fan speeds
- Zoning to optimize fan power
- Incorporates enthalpy control to utilize outdoor air

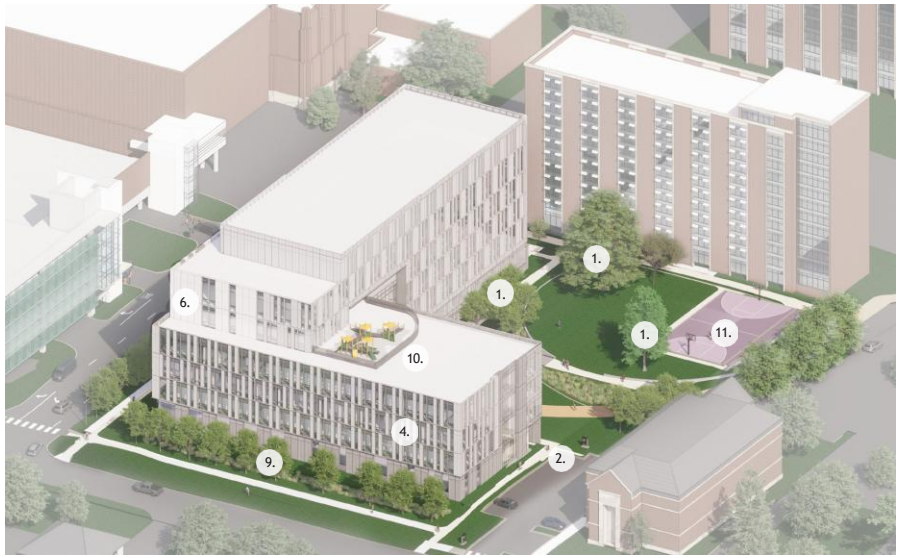
6. Design for Resources

- Resilient, durable and low maintenance materials
- Prioritized healthier materials
- Durable reconstituted stone cladding

7. Design for Discovery

- Design allows user to develop advanced knowledge, innovation, and creativity through collaboration and work-share environments





RDG PLANNING ● DESIGN

Wellbeing and Sustainability Strategies.

8. Design for Change

Program evolution allows for flexibility of space through:

- Deliberate structural bays
- Circulation paths
- Optimized program utilization

9. Design for Ecology

- Bioswales provide on-site storm water retention and encourage natural irrigation of native plantings

Design for Wellness

10. Nature

Access to nature through:

- Outdoor gathering spaces
- Views to the outdoors and to campus
- Access to natural light to offices and labs

11. Fitness

- Designated spaces and outdoor environments for exercise, recreation and sports.
- Physical movement is promoted through increased quality and location of daylit egress stairs

12. Air

- Building utilizes MERV 15 filters to remove airborne contaminants and sources of indoor air pollution
- Monitored and alarmed filters ensure regular maintenance

13. Light

- Equitable access to daylight while avoiding glare and overheating from direct sunlight.
- The design intentionally reduces light trespassing to reduce light pollution in evenings.

14. Comfort

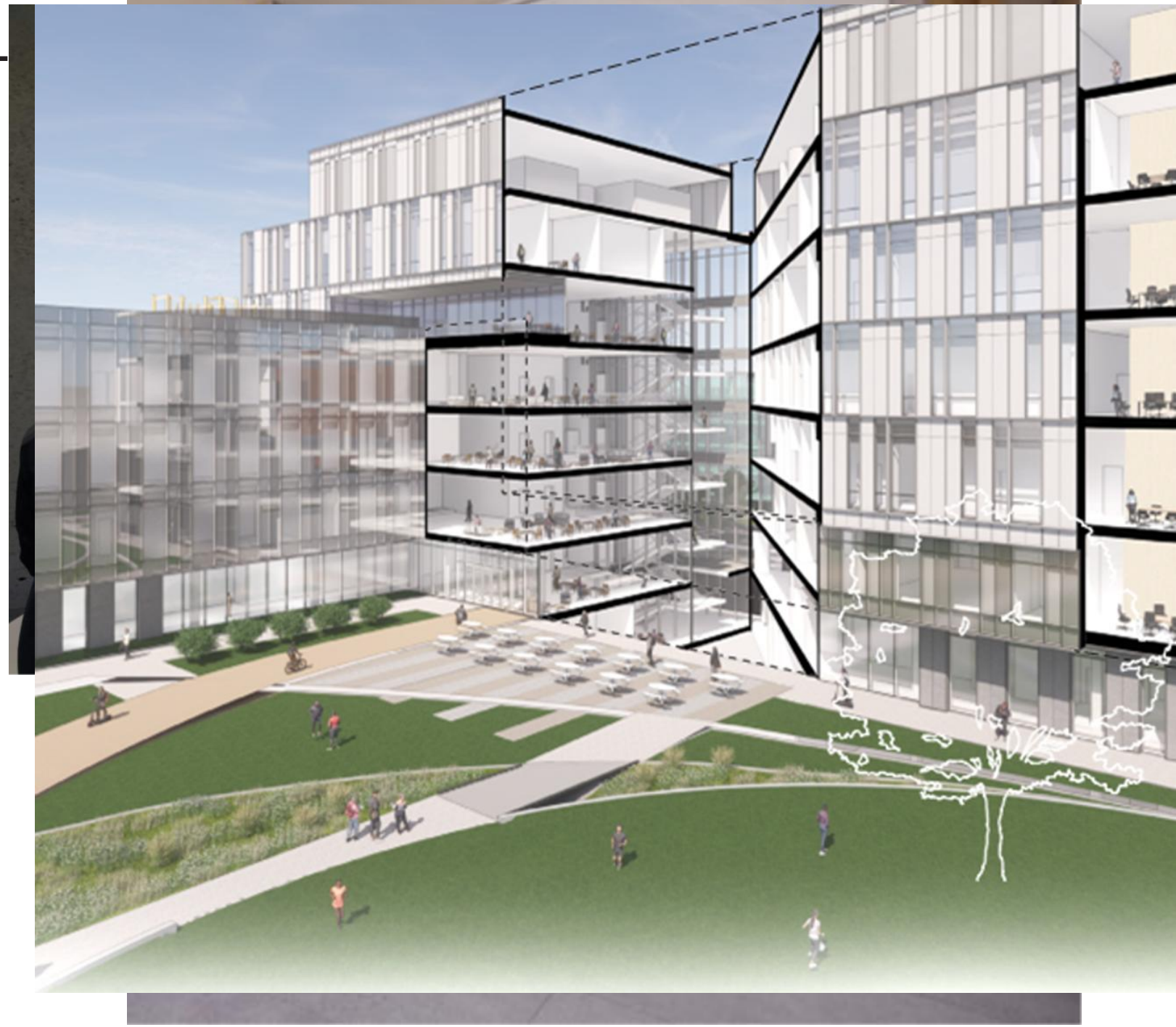
- Design ensures that the indoor temperature, humidity, and air speed are within acceptable ranges.
- Designed to reduce or eliminate sources of noise and vibration to prevent disturbing or distracted users.
- The site design and architecture follow Crime Prevention Through Environmental Design (CPTED) principles.

15. Mind

- Clear way-finding and visual connectivity stimulate the users by putting the programs and users on display to the community
- Stairs and elevators were strategically placed near public spaces to promote social connectedness

Health Sciences Academic Building- Human Centered Design Case Study

- Equitable access to natural light throughout (i.e. corridors, offices, labs, etc.)
- Building design and overhangs mitigates glare and overheating from direct sunlight
- Views to the outdoors and to campus



Health Sciences Academic Building- Human Centered Design Case Study

- Physical movement is promoted through increased quality and location of daylit stairs
- Stairs and elevators were strategically placed near public spaces to promote social connectedness
- Clear way-finding and visual connectivity to exterior to orient building occupants

Health Sciences Academic Building- Human Centered Design Case Study

- Access to nature through outdoor gathering spaces
- Retain established trees on site

Health Sciences Academic Building-
Human Centered Design Case Study

University of Iowa - Health Sciences Academic Building- Human Centered Design Case Study

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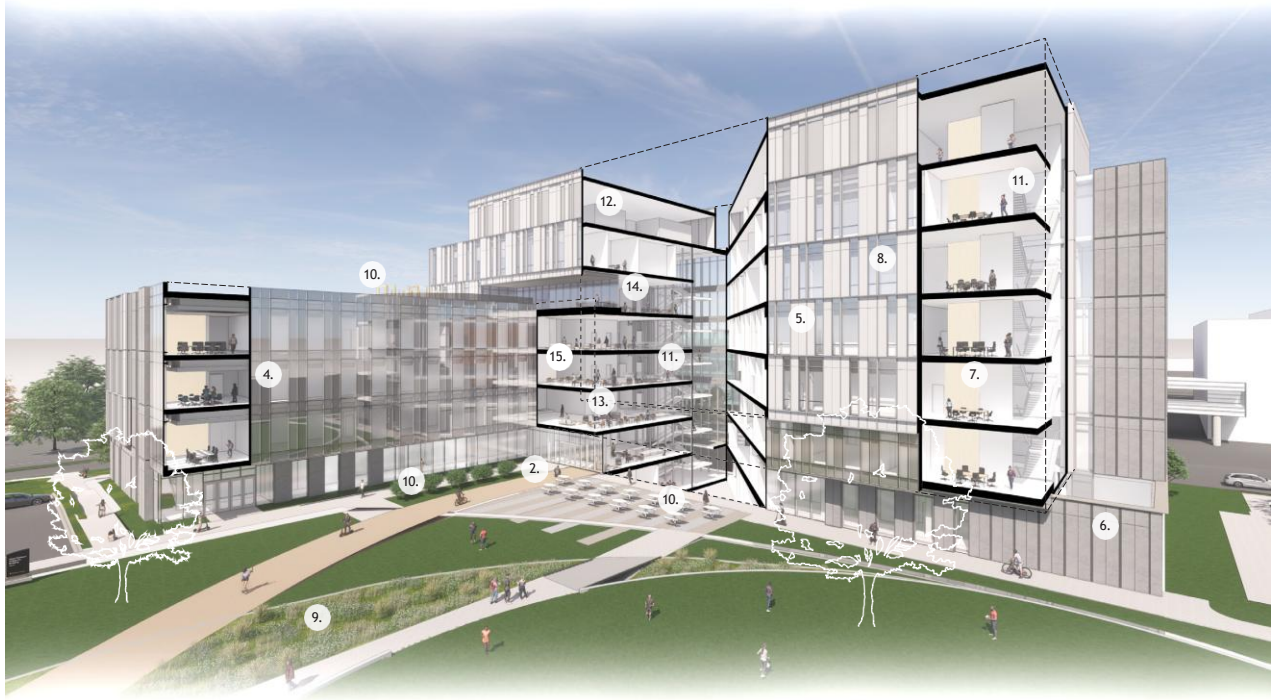

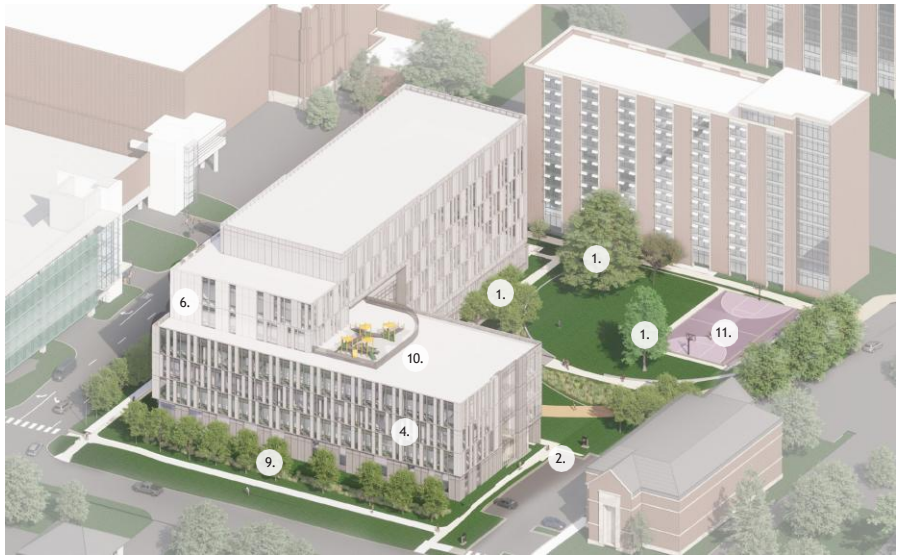

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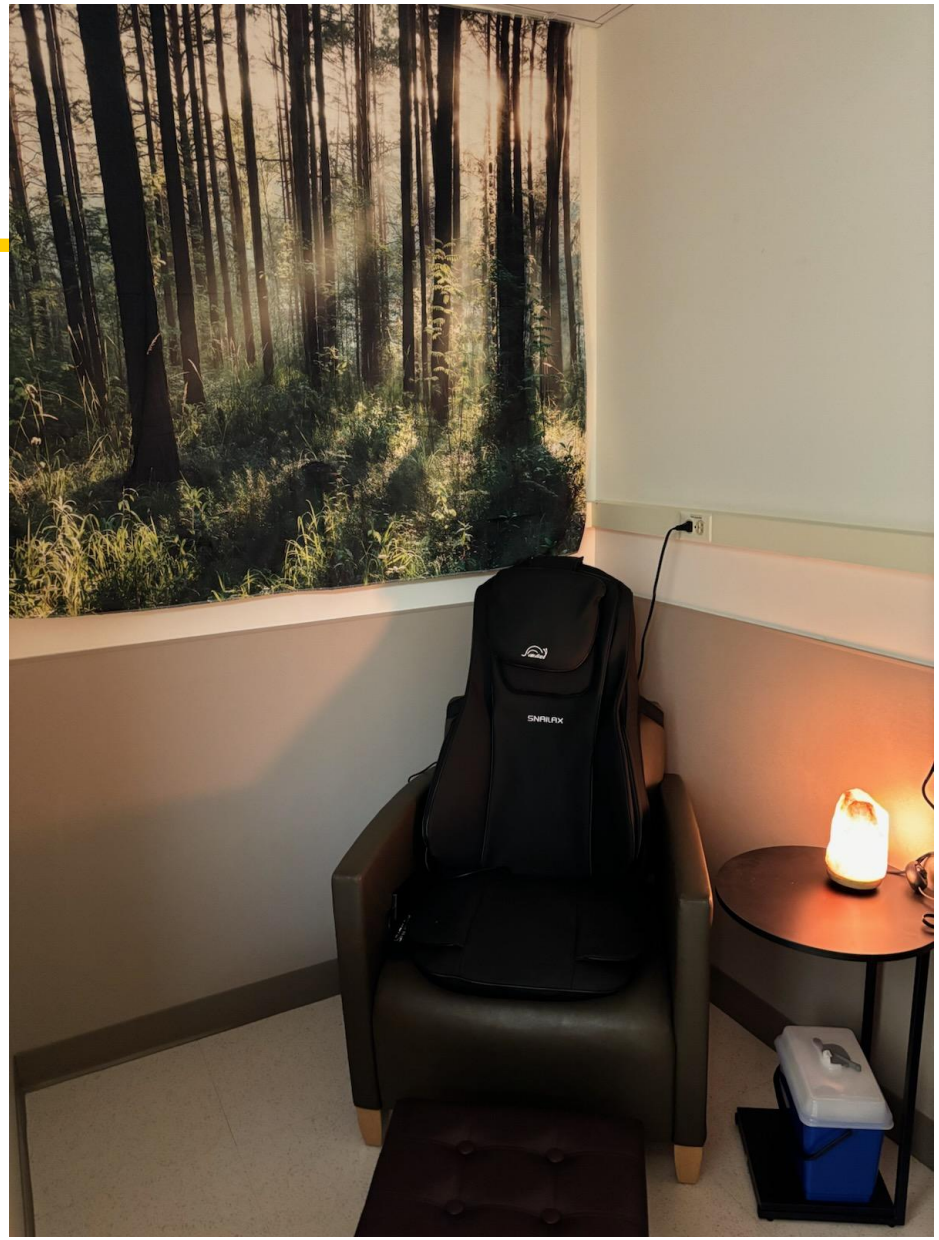
Next Steps

Integrate human-centered design principles into the culture of the University of Iowa's built and natural environment

- UI Design Standards & Procedures
- Campus Master Plan and Master Plan Themes
- Leverage LiveWell Resources to Adapt Existing Spaces
- Update Strategic Plan Tactics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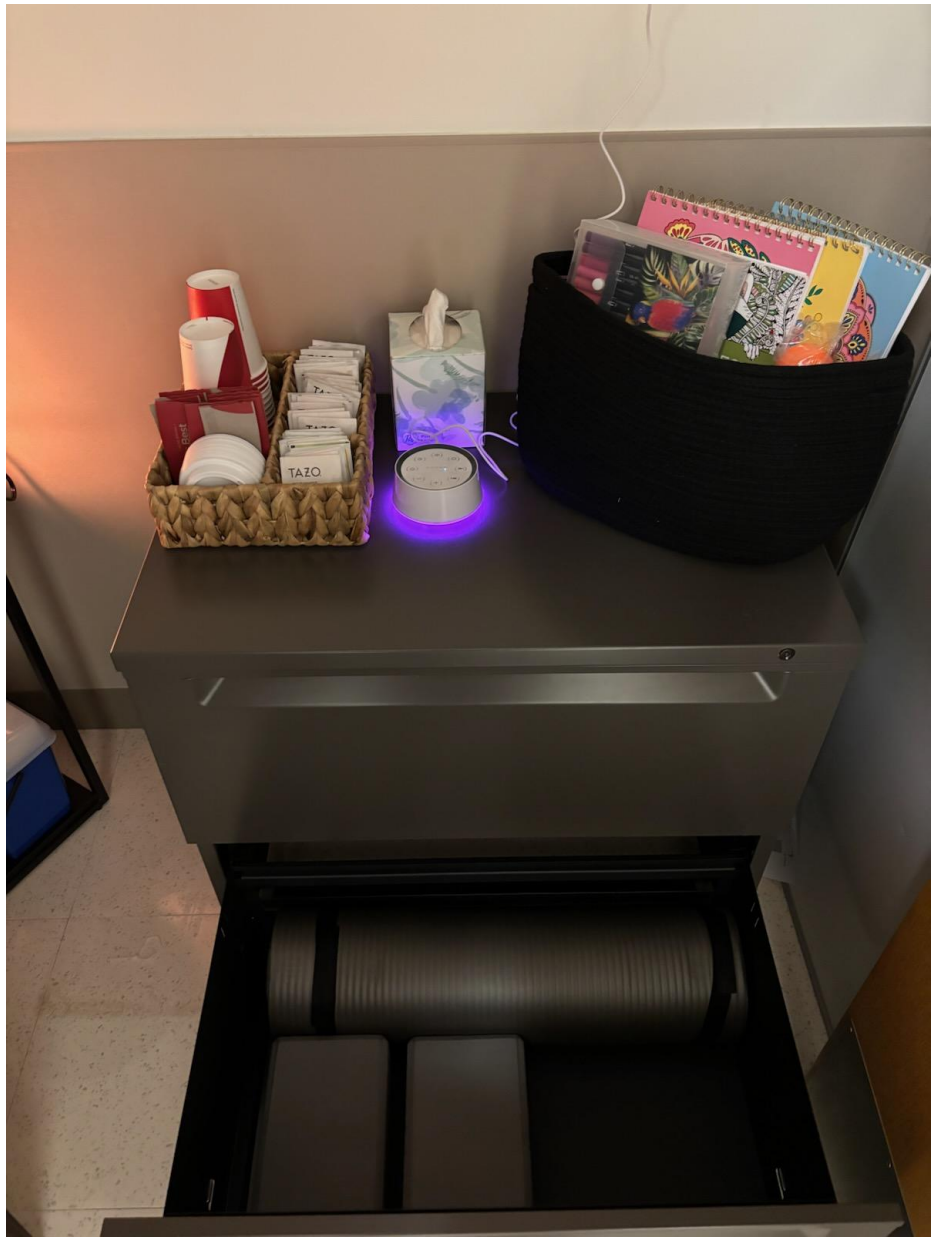
TAZO

Items Purchased

- Massage Chair
- Coloring Books
- Markers
- Salt Lamp
- Mindfulness Cards
- Stress Balls
- Tea Bags
- Salt Lamp
- Sound Machine
- Neck Massager

Items not permitted within UI Health Care (confirmed with accreditation team)

- Petroleum based lotions – These may impact glove integrity
- Diffusers or unapproved essential oils for smells – These may impact individuals with migraines or airway issues

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Thank you

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