

2023 SGH Concepts / Dri-Design Scholarship



SGH
concepts



dri-
design
WALL PANEL SYSTEM

N

Spring 2023

Arch 411 Architectural Design Studio: Integrate
University of Nebraska-Lincoln
College of Architecture

2023 SGH Concepts / Dri-Design Scholarship

N *The Architecture Program provides the educational foundation for intellectually aware and self-realizing architecture professionals. We promote collaboration and engagement through excellence in design research and creative scholarship.*

Spring 2023
Arch 411 Architectural Design Studio: Integrate
University of Nebraska-Lincoln
College of Architecture

University of Nebraska-Lincoln

College of Architecture
232 Architecture Hall
Lincoln, NE 68588-0107
(402) 472-7943

architecture.unl.edu

Spring 2023**Arch 411 Architectural Design Studio: Integrate.**

Continuation of complex problems as it relates to the integration and consideration of environmental stewardship. Emphasizing technological considerations as formal and organizational influences including technical documentation, accessibility, site design, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

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Photographs.

All photos by Greg Foral unless otherwise noted.

4 Sponsors**6 Jury:**

Elyse Agnello, Marcelo López-Dinardi, and Todd Walker

20 Award of Excellence:

Elena Garcia Tapia and Brandy Nguyen

28 Award of Honor:

Luryn Hendrickson and Haley Herman

36 Award of Merit:

Nico Forte and Devyn Beekman

44 Award of Merit:

Landon Healy and Luke Heidenreich

52 Award of Citation:

Grace Carlson, Clara Hetherington, and Sidney Renelt

The College of Architecture at the University of Nebraska-Lincoln, in partnership with SGH Concepts (A Division of SGH Redglaze Holdings Inc.) and Dri-Design, has established a student scholarship competition for the fourth-year, undergraduate, architectural design studios. The scholarship recognizes student projects exemplifying outstanding design investigation, resolution, and significance. This opportunity brings together aspiring architects and industry leaders to advance disciplinary knowledge of design, materiality, and innovation.

Following the end-of-semester review, one project from each studio is selected to compete for the SGH Concepts (A Division of SGH Redglaze Holdings Inc.)/Dri-Design Scholarship. These projects are presented to an external jury who are all established practitioners in their fields. A finalist is chosen for producing and communicating a comprehensive architectural project that is a result of design decisions at different scales. To be successful, students demonstrate a high degree of professional dedication, rigor, open-mindedness, and resourcefulness. Projects are rigorously developed and clearly communicate the breadth and depth of investigation.

We thank our sponsors SGH Concepts (A Division of SGH Concepts Redglaze Holdings Inc.), a leading distributor and installer of customized building products, and Dri-Design, a producer of advanced and sophisticated metal wall panel systems.

Spring 2023 - Architecture Design Studio Faculty

Ashley Byars, Vice President Architect & Design, Noddle Companies, Lecturer of Architecture

Jeff Day, FAIA, NCARB, Professor of Architecture

Michael Harpster, AIA, Assistant Professor of Practice - Architecture

Ryan Hier, AIA, TACK Architecture, Lecturer of Architecture

Beau Johnson, DLR Group, Lecturer of Architecture

David Newton, Assistant Professor - Architecture

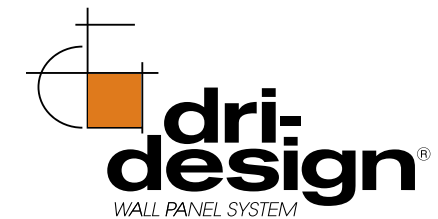


SGH CONCEPTS

At the center of our craft is our passion for premium, innovative design. With over 70 years experience in designing and engineering building product solutions for some of the most challenging architectural feats in the market, our focus each day is to find the best way to give form to our clients' vision.

Our team approaches every project with a reverence for making innovative design possible. We are passionate about solving challenges that—in the end—make buildings more beautiful. At SGH Concepts, it is our mission to provide smarter solutions to design opportunities and challenges, from concept to completion. So, whether you are an architect, a general contractor, or an owner, we provide a level of professionalism you demand and a sense of individuality you expect.

We would like to thank Troy Burkey of SGH Concepts for helping establish this program and his continued support of the college and students.



DRI-DESIGN

Founded in Holland, Michigan, in 1995, under the leadership of President Brad Zeeff, Dri-Design has turned the Metal Panel Industry on its ear. With Dri-Design, Zeeff set out to solve what he viewed as the significant shortfalls of traditional metal panel systems: delamination, staining due to the effects of weather on joints and gaskets, a lack of color and texture options, the rising cost of production and inefficient installation practices.

The result of Dri-Design's meticulous engineering, is a 100% recyclable, pressure equalized rain-screen, architectural metal wall panel system that attaches to nearly any substrate without the use of clips or extrusions. The pressure equalized rain-screen design can be installed simply over commercial grade Tyvek onto plywood, or as the most sophisticated outboard insulation pressure equalized rain-screen you can design.

We would like to thank Jason Zeeff of Dri-Design for his continued support of the college and students.



ELYSE AGNELLO

DAAM and Guild Row

Elyse Agnello, AIA, NCARB, is the Founding Principal of DAAM and a Co-Founder of Guild Row. She has a diverse professional background that spans from architectural design and construction to real estate development and cultural event production. Elyse holds a MArch from Harvard, a BS in Architecture from The University of Michigan, and a PGDip from the AA in London. She is a licensed architect in IL, NY & NJ.



MARCELO LÓPEZ-DINARD

Texas A&M University

Marcelo López-Dinardi is an Assistant Professor in the Department of Architecture at Texas A&M University. He is the editor of *Architecture from Public to Commons* (Routledge, 2023). He holds a B.Arch. from the PUPR and an MS in Critical, Curatorial, and Conceptual Practices from Columbia GSAPP.



TODD WALKER

archimania

Todd is a 1987 graduate of Mississippi State University's School of Architecture with studies at the University of London's Bartlett School of Architecture and Planning. Todd is Founding Partner and Partner-in-Charge of Design at archimania. He is a passionate promoter of design excellence. Progressive, sustainable, and contextual design remain at the core of his focus for the firm's work. He seeks design solutions that elevate the user experience and foster connections across the community.



DISCUSSION PANEL

David Newton and Ashley Byars moderate an insightful panel discussion with jury members Elyse Agnello, Marcelo López-Dinardi, and Todd Walker. The discussion touched on a range of topics involving architectural practice, the expressive use of materials, and architectural education.



The Market Hall Incubator

Faculty Mentor: Ashley Byars and Ryan Hier

Oldfather Hall is a twelve-story higher education building located in the University of Nebraska's downtown Lincoln Campus. Built in the late 1960s, this building is rich in educational opportunities and is home to five departments within the university's College of Arts and Sciences. Located at the center of UNL's academic core, Oldfather's abundance in program and connection to Burnett and Bessey Hall make it an ideal candidate for the development of a collaborative learning program.

Subtraction

Faculty Mentor: Jeff Day

This studio explored subtraction as a means for transforming and extending the usefulness of existing buildings. Spaces created by subtraction can be as dramatic and breathtaking, perhaps even more so, than those formed through addition, yet subtraction is an under-appreciated tool, of the architectural design process. Where subtraction and demolition are traditionally seen as necessary to make way for new architecture, this studio explored subtraction as the PRIMARY design procedure.

Possibilities For Low-Rise Infill Housing

Faculty mentor: Michael Harpster

This comprehensive studio will reimagine contemporary housing practices through the exploration of dense, low-rise infill housing typologies. Engaging with the pragmatic as well as the theoretical, the studio will examine the various constraints that make the construction of low-rise housing such a challenge, using these constraints as the starting point for projective exploration of alternative housing models within metropolitan regions across the United States.

Step Into The Frame

Faculty Mentor: Beau Johnson

This studio is an exploration of the frame, as formal articulation of threshold and the reciprocal relationships in manifests. Our medium as architects is the built environment, both internal and external, existing and proposed. Our responsibility is to articulate these relationships. Using the 'treasured' Sheldon Art Museum (by Phillip Johnson) as our frame(work), we will address these notions of threshold within a series of constructs.

Mindscales: Envisioning New Architectural Atmospheres for Knowledge Creation

Faculty Mentor: David Newton

This studio explored the design of an innovation center dedicated to transdisciplinary research on perception and cognition located on the UNL City Campus. The studio approached the project by introducing texts that provide a critical overview of thought on the role of perception and cognition in the creation of architecture. The relation of perception and cognition to computational technologies was explored in the studio by engaging topics such as building performance simulation, generative artificial intelligence, mixed reality, and digital fabrication.



16 DELIBERATION





Dean Kevin Van Den Wymelenberg makes opening remarks and reflects on the impacts of the scholarship over the last eight years.

UNveiled Oldfather Hall Renovation

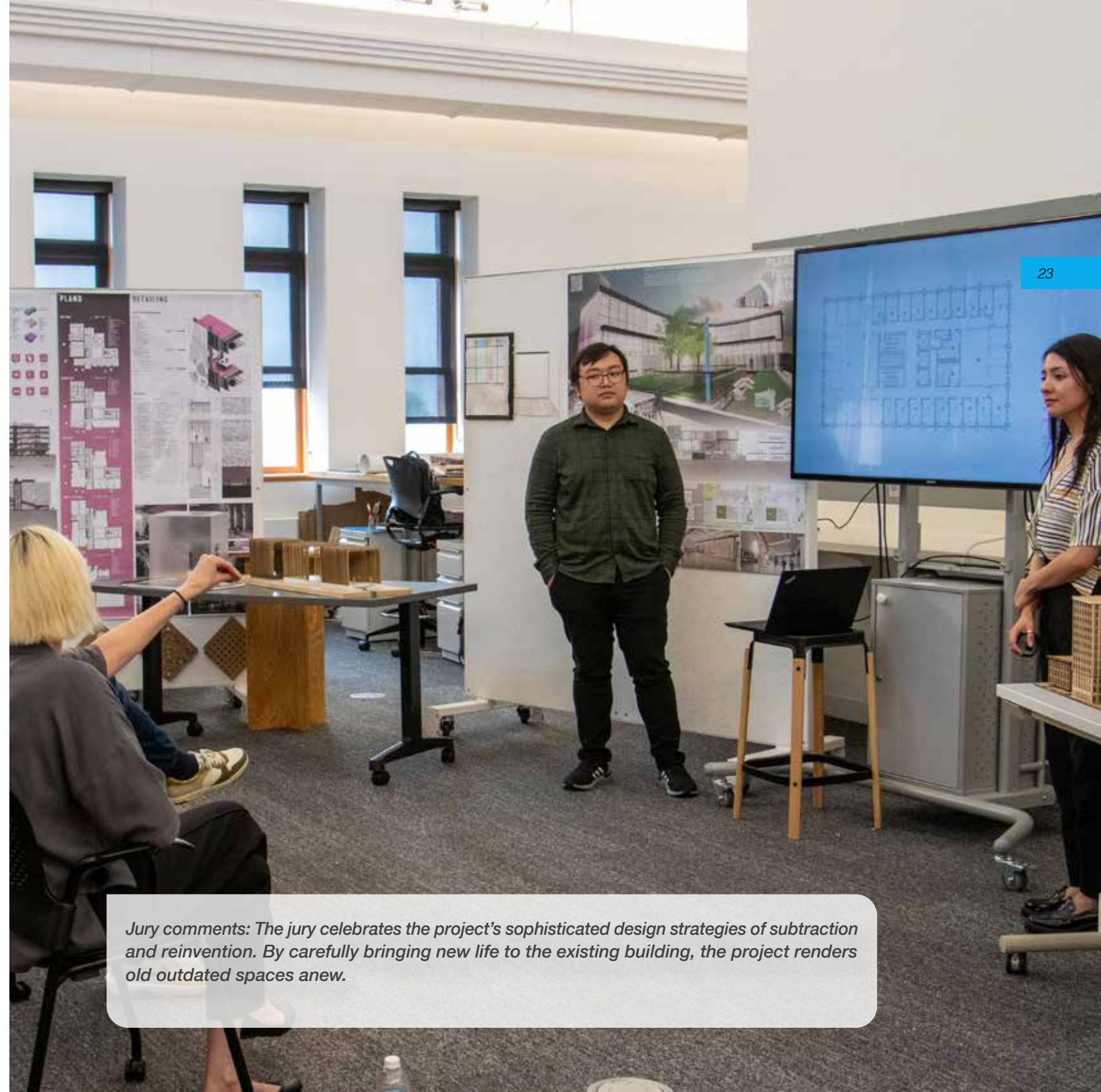
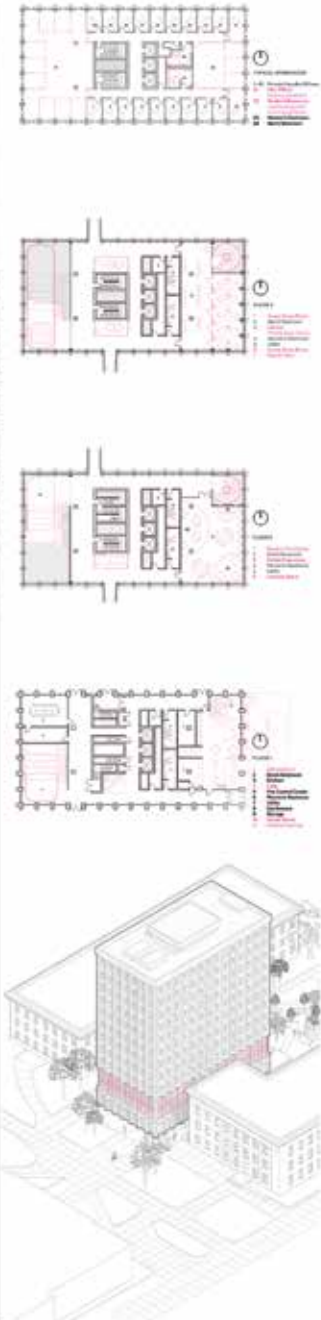
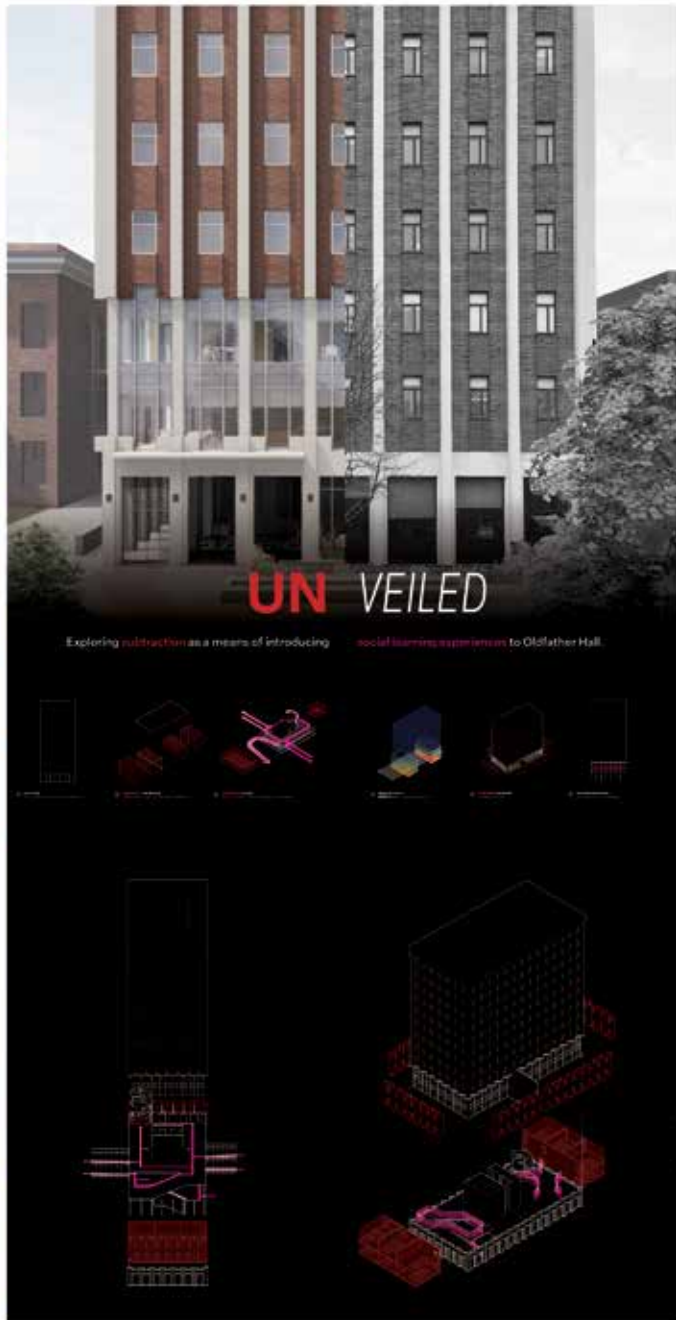
Elena Garcia and Brandy Nguyen
Faculty Mentor: Jeff Day

Oldfather Hall is a twelve-story higher education building located in the University of Nebraska's downtown Lincoln Campus. Built in the late 1960s, this building is rich in educational opportunities and is home to five departments within the university's College of Arts and Sciences. Located at the center of UNL's academic core, Oldfather's abundance in program and connection to Burnett and Bessey Hall make it an ideal candidate for the development of a collaborative learning program.

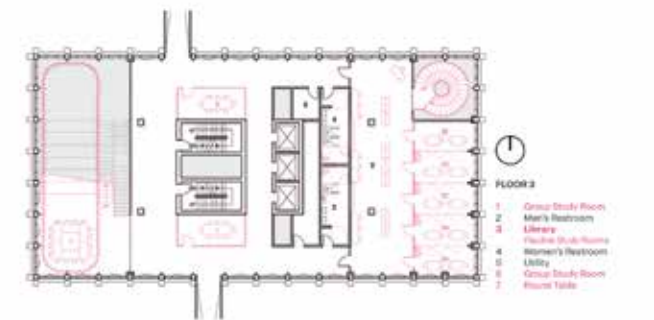
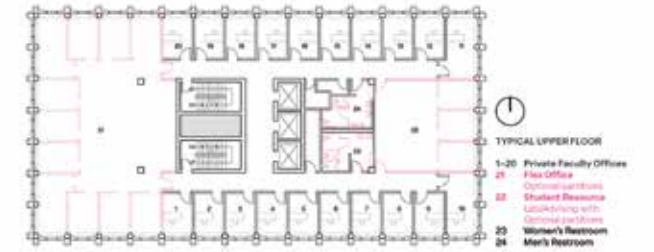
The University of Nebraska-Lincoln's comprehensive master plan envisions a collaborative multi-purpose learning and study space located within this site with the following objectives: the addition of new interactive and collaborative educational programs, the use of transparent facades used to reveal collaborative functions, emphasis on interior qualities of openness, design of new circulation pathways, and optimization of energy use and daylighting, all consolidated within a single location.

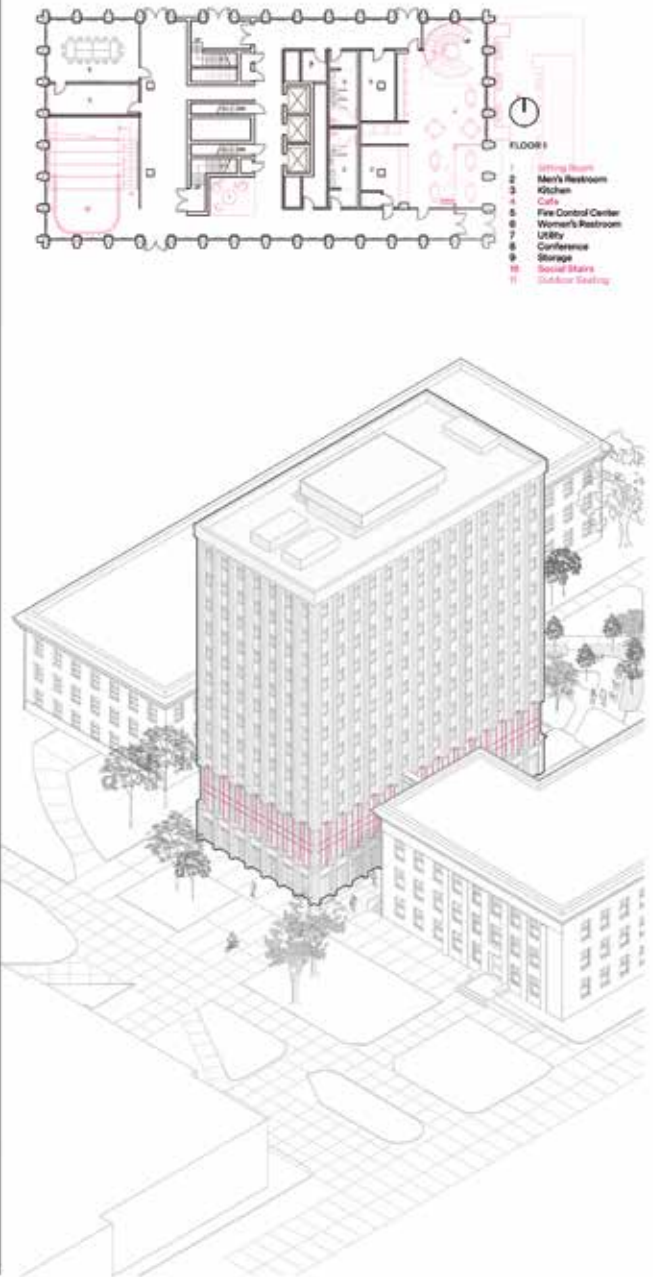
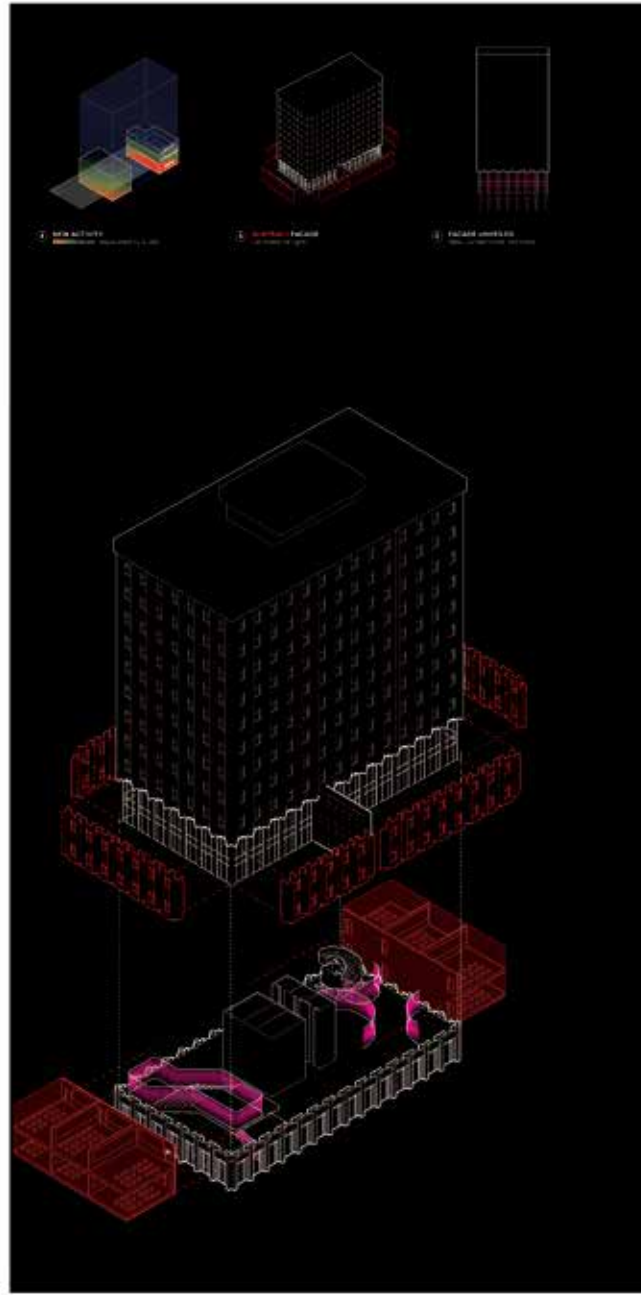
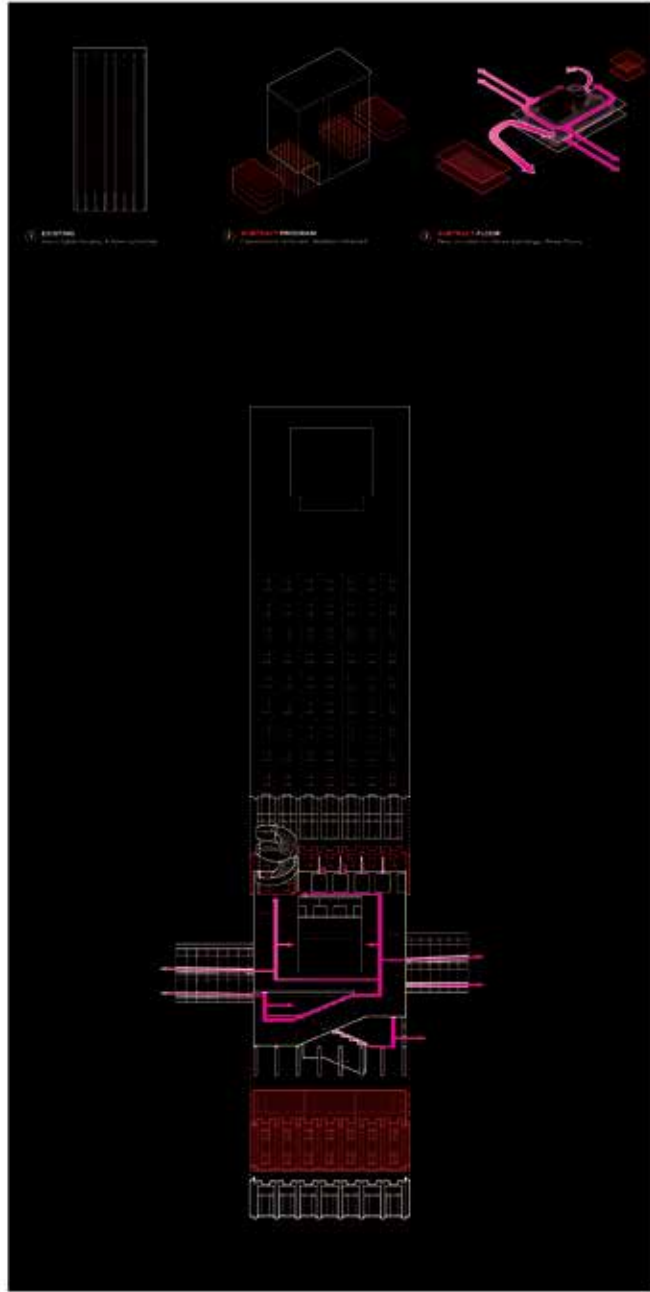
This project reimagines the architecture of collaborative learning through means of adaptive re-use rather than through a building addition. Through largely subtractive gestures, this project proposes replacing Oldfather's unused classrooms with collaborative programs on a spectrum ranging from formal to informal.





Jury comments: The jury celebrates the project's sophisticated design strategies of subtraction and reinvention. By carefully bringing new life to the existing building, the project renders old outdated spaces anew.





Honor

Low-Rise LNK

Luryn Hendrickson and Haley Herman
 Faculty mentor: Michael Harpster

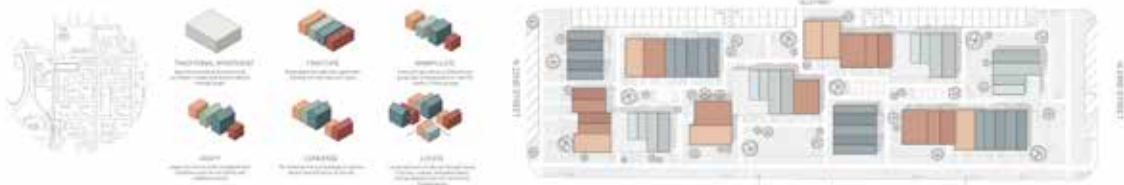
In the Low-Rise LNK studio, an emphasis on high density, low-rise housing was encouraged. Our 2.25 acre site, located in the historic Malone neighborhood adjacent to UNL city campus, presented a clean slate where we were able to challenge typical zoning regulations and home ownership models.

A traditional apartment building achieves density through height, with a small building footprint. However, in the case of low-rise housing, density can be sacrificed due to economic and zoning constraints. Our design approach began by breaking apart the traditional, rectilinear apartment building, looking more specifically at user needs. We analyzed our users, the different unit types, and catered them to the needs of the community; that being partial rentership and partial ownership models. Once a series of apartments, co-op living spaces, and townhomes were designed, each individual unit type became a building. Looking overall at the site, each building was situated in a way that achieved high density while also creating pockets of green space that serve as community spaces on a larger scale. Each unit maintains a yard condition, which furthers community interaction through a land trust. While a rental unit may be located next to an owned townhome, the 2.25 acre site is leased to all. Owners lease the land below the structure they own, restricting gentrification of the neighborhood and increasing community connection. The entire site also restrains vehicular traffic and promotes walkability through rezoning to a community unit plan, allowing further freedom of design.



LOW-RISE LNK

apartments



30

1
3

31

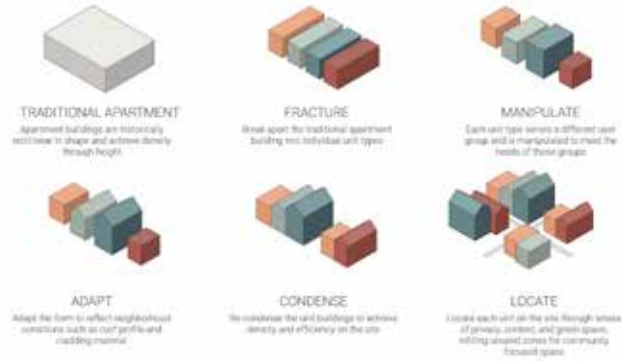
2
4



Jury comments: *The jury applauds the varying scales of design and planning, from the urban condition of housing to the material resolution of the buildings and the exterior spaces—and the use of the two CLT’s. The models and interior images successfully communicated the project’s design intent and craft.*

LOW-RISE LNK

[apart]ments





Boerner + Burrell | Board 3



Boerner + Burrell | Board 4

Merit

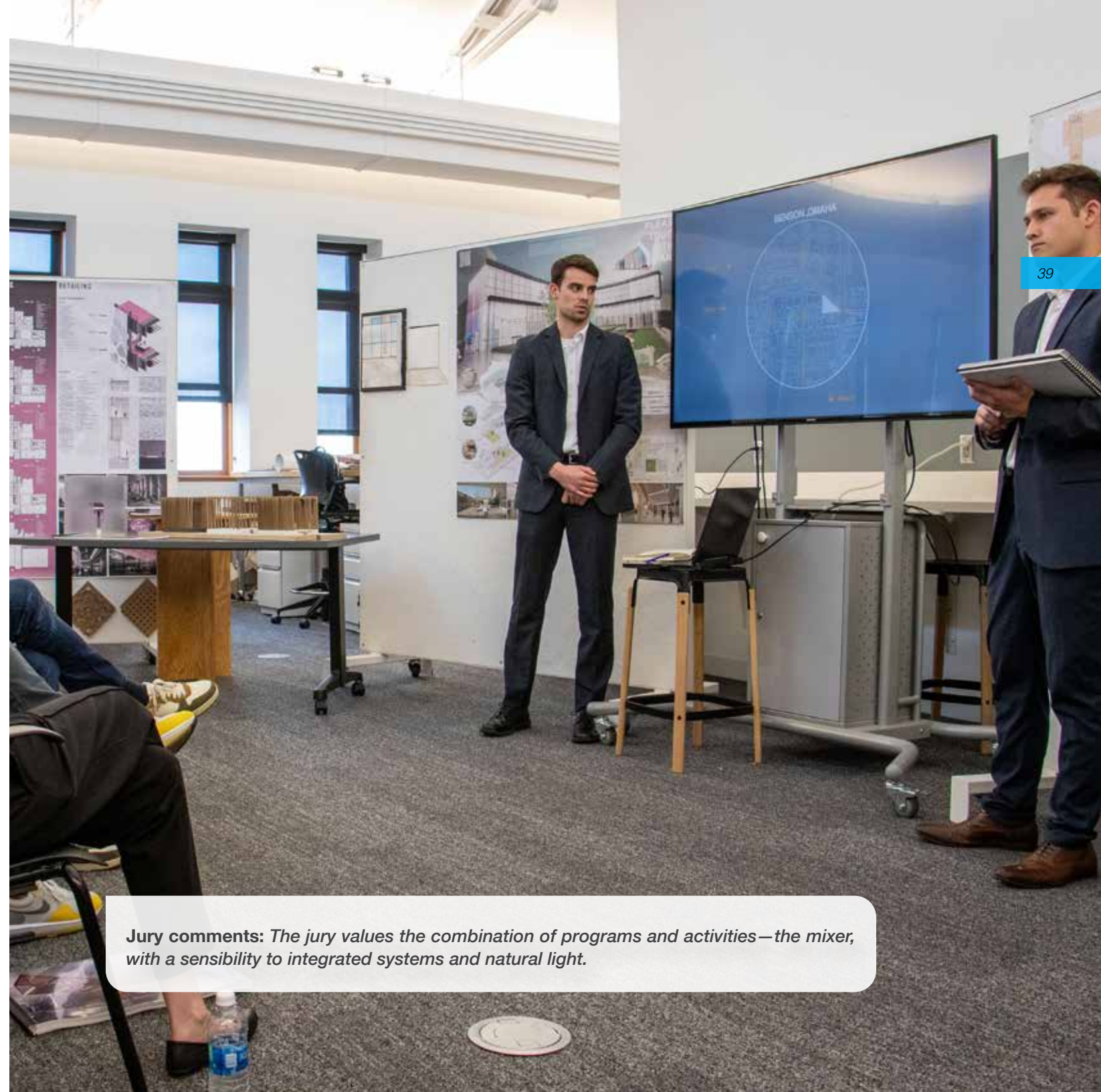
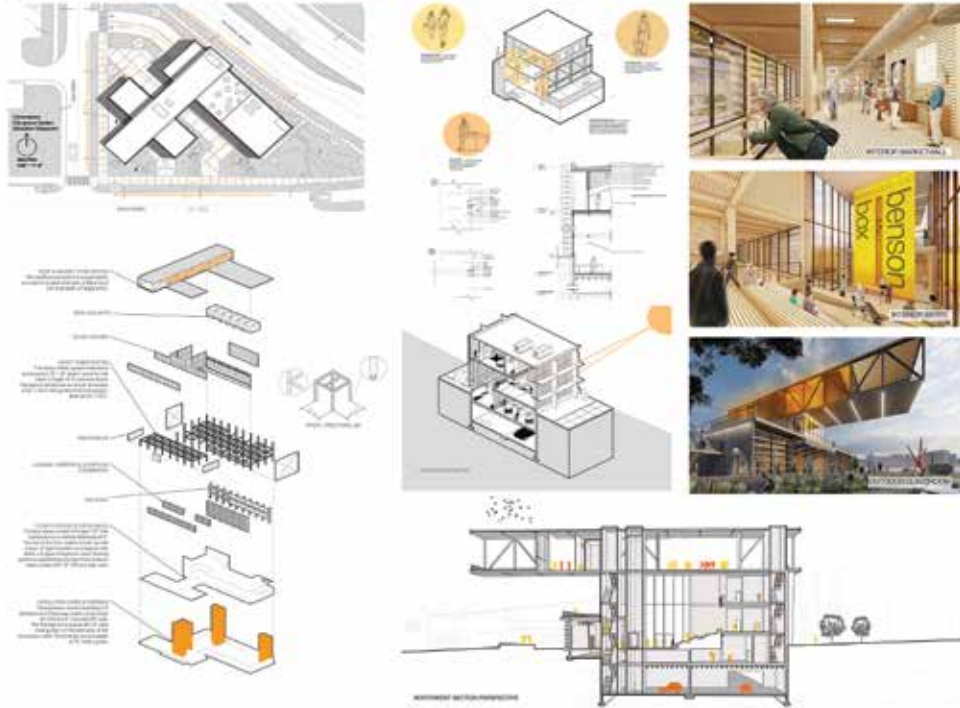
Benson Box

Nico Forte and Devyn Beekman
Faculty Mentor: Ashley Byars and Ryan Hier

The BENSON_BOX is a market hall in the Benson neighborhood of Omaha, NE. The building will serve as a multi-level, multi-use maker/performer space for the community.

With emphasis on the process of making products that are sold and used under the same roof. This idea of relationship is also activated by the dwelling units provided to the marketeers to live, work and teach their talents. This cohesiveness is also evident in section. The building footprint is small in proportion to the site in order to maximize the green space and activate the transparency between programs. This benefits the community by providing a space of discourse to share products, talents and ideas.





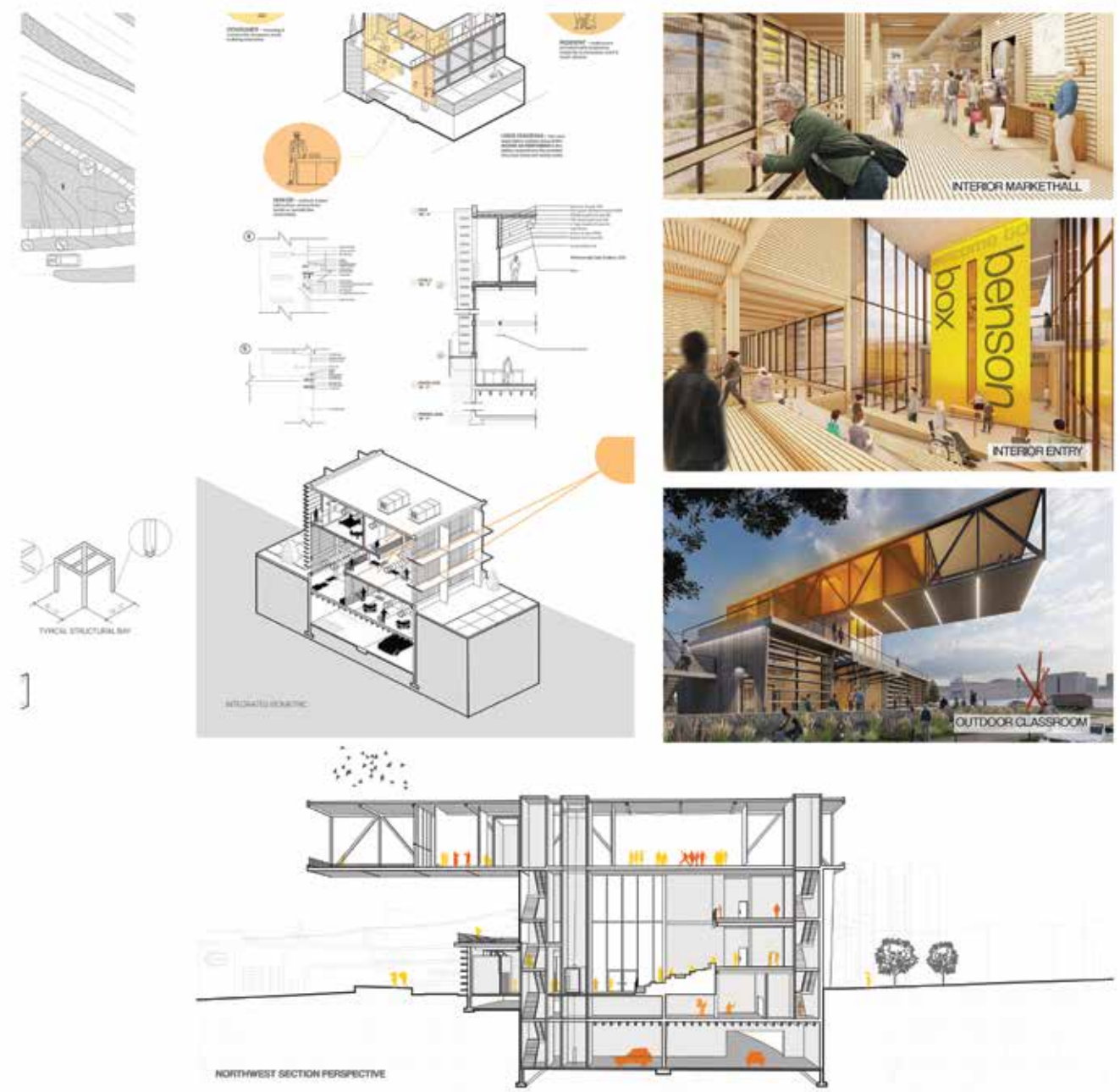
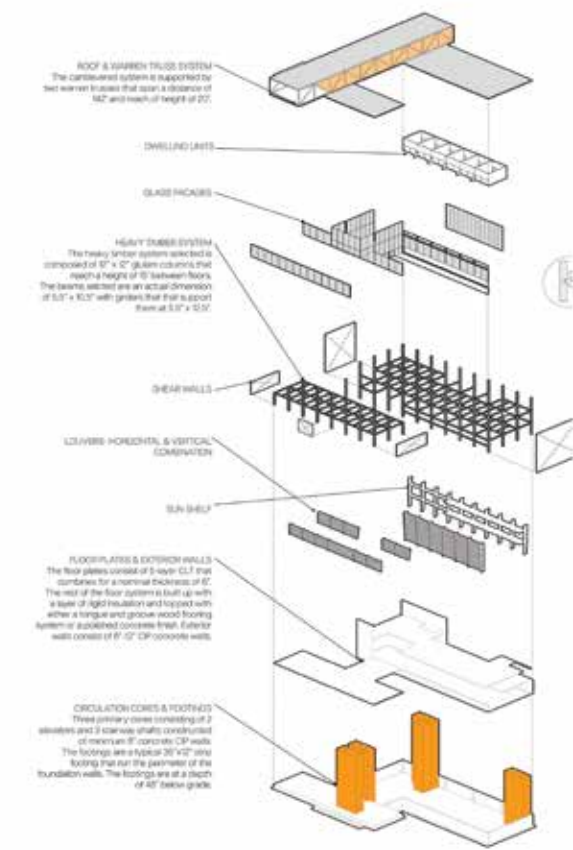
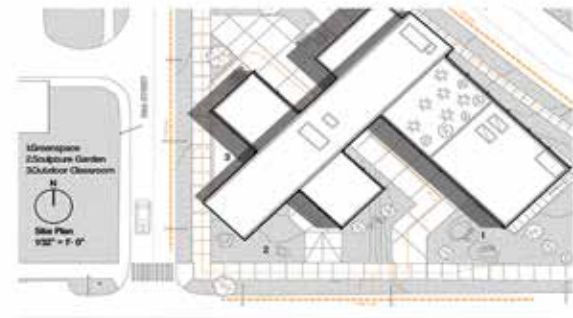
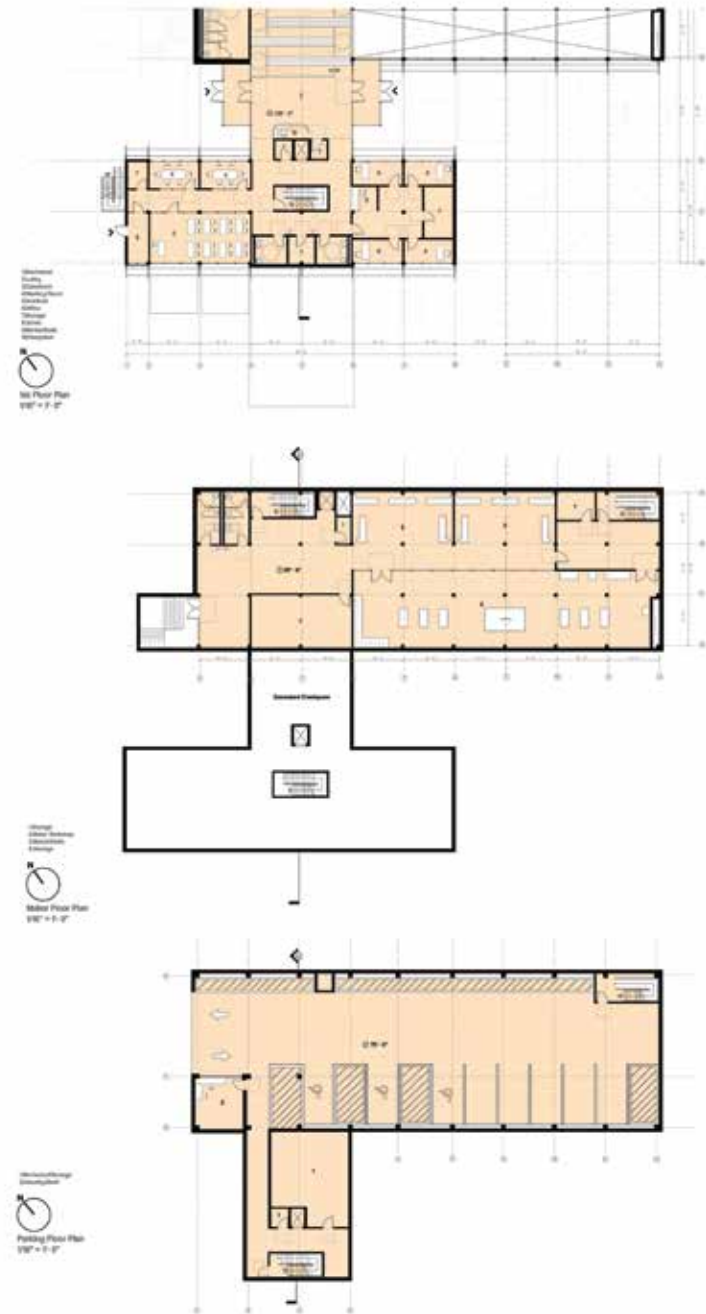
Jury comments: *The jury values the combination of programs and activities—the mixer, with a sensibility to integrated systems and natural light.*



Doerrfeld + Phillips | Board 1



Doerrfeld + Phillips | Board 2



The Mind Center

Landon Healy and Luke Heidenreich
Faculty Mentor: David Newton

Innovation, or the ascension to it, has several avenues that are suitable for different individuals. However, the discovery of these avenues can only be achieved through an awareness of one's environment and the cause and effect on their decision making. The Mind Center allows an individual to be consciously observant of their own behavior and be present in their very own atmosphere. The environment an individual lives and learns in has several implications on both cognition and perception. Students, researchers, and more are constantly learning through their senses in seven different ways: visual, kinesthetic, aural, social, solitary, verbal, and logical. As a result, the mindset one has determines the psychological connections to each of these types of learning. Though each person is impacted differently on varying scales, minute development of self perception is enough to create new ideas and innovations. The Mind Center houses three atmospheres focused on learning and environmental perception. These atmospheres combined create an environment designed for innovation, creativity, and discovery.

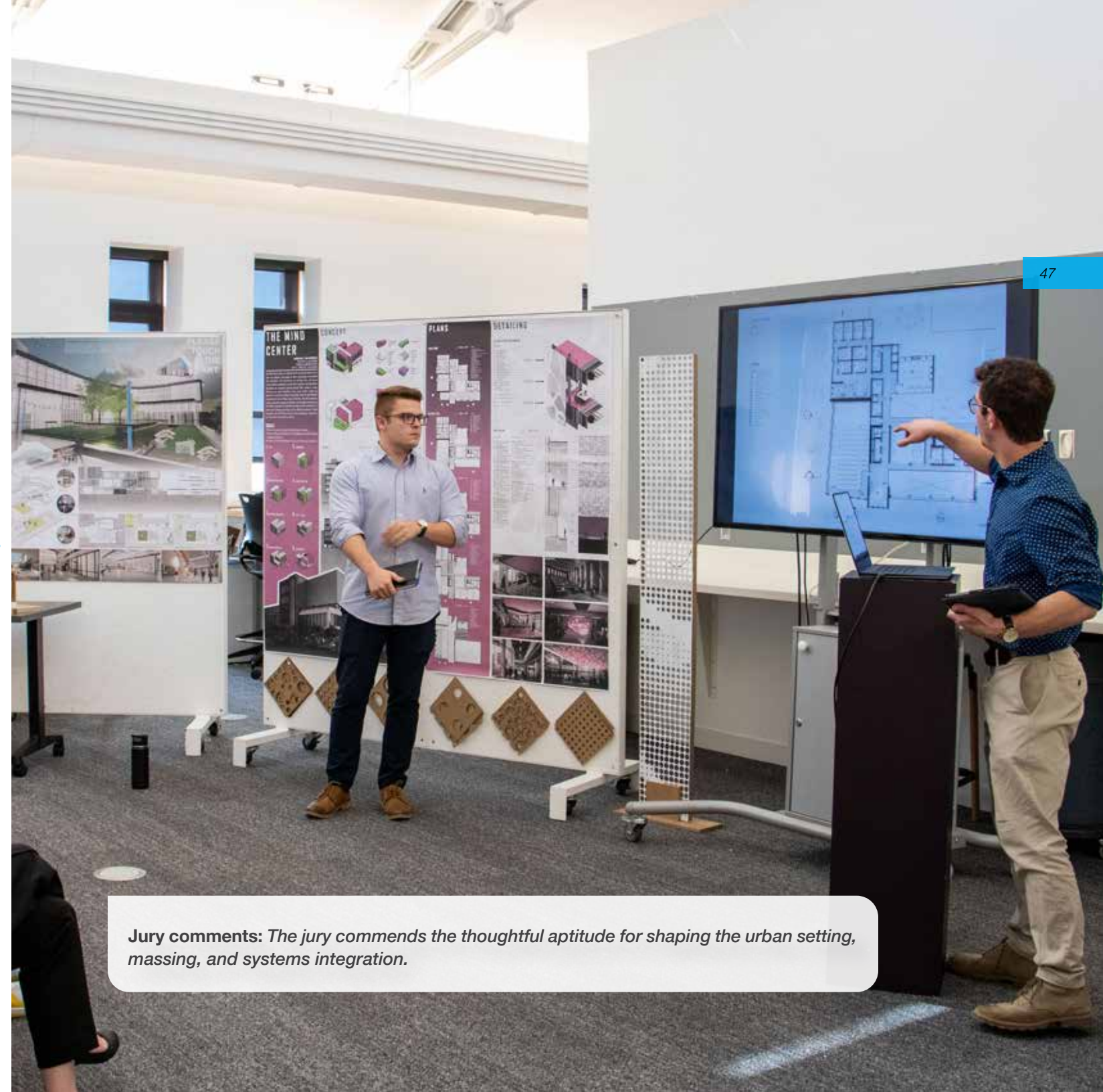
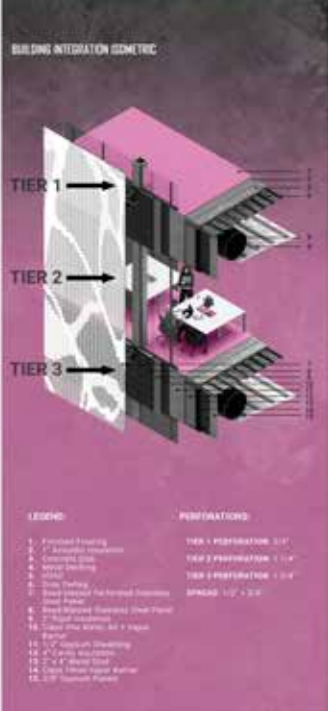
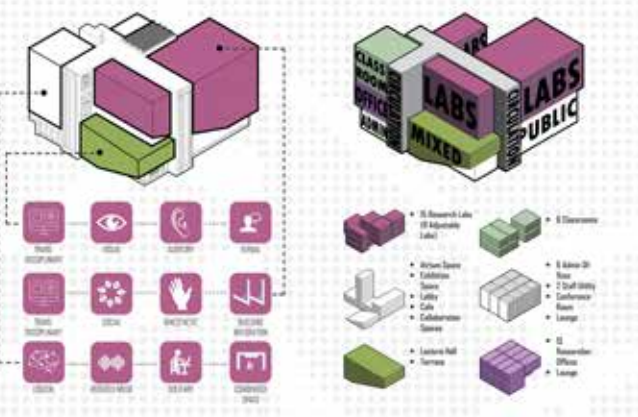


THE MIND CENTER

LONDON HEALY + LIKE HEERENFOSCH

1. SPLIT
2. CONFIGURE
3. INTERIOR CIRCULATION
4. SLIGHT ROTATION
5. EXTERIOR CIRCULATION
6. CUT + PIERCE
7. SOLAR APPLICATION
8. WATERGALITY

The Mind Center allows an individual to be consciously observant of their own behavior and impact on their surrounding environment and atmosphere. The environment an individual lives and learns in has several implications on both their cognition and perception. Individuals are constantly learning through their senses in seven different ways: visual, kinesthetic, aural, social, solitary, verbal and logical. As a result, the mindset one has determines the psychological connections to each of these types of learning. This will be done by creating separate instances of cognition and perception development that foster innovation for both the university and the community. To utilize one's learning type along with its effects on behavior, hence innovation, the Mind Center houses three atmospheres focused on learning and environmental perception.



Jury comments: The jury commends the thoughtful aptitude for shaping the urban setting, massing, and systems integration.

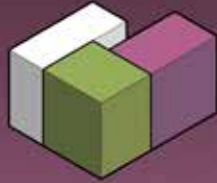
THE MIND CENTER

LONDON HEALY + LUKE HEIDENREICH

1. SPLIT



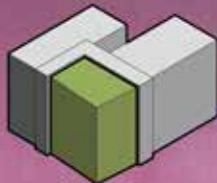
2. CONFIGURE



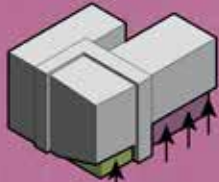
3. INTERIOR CIRCULATION



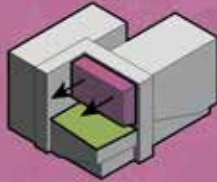
4. SLIGHT ROTATION



5. EXTERIOR CIRCULATION



6. CUT + PIERCE



7. SOLAR APPLICATION



8. MATERIALITY



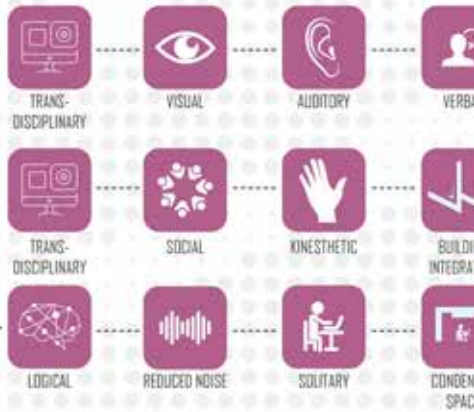
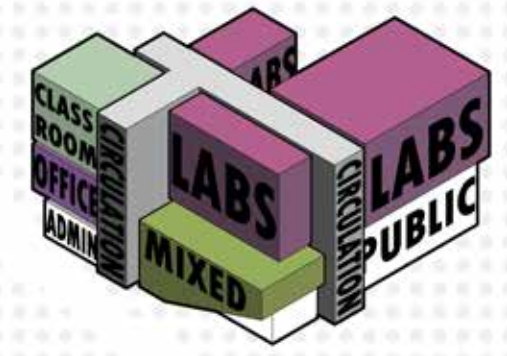
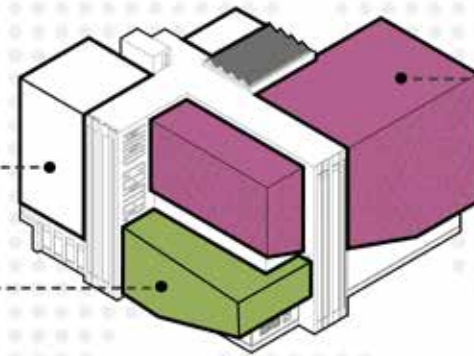
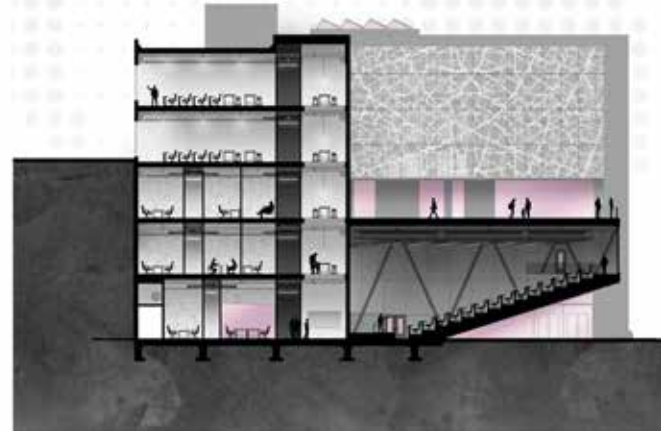
The **Mind Center** allows an individual to be consciously observant of their own **behavior** and impact on their surrounding environment and atmosphere. The environment an individual lives and learns in has several implications on both their **cognition** and **perception**. Individuals are constantly learning through their senses in seven different ways: **visual, kinesthetic, aural, social, solitary, verbal,** and **logical**. As a result, the mindset one has determines the psychological connections to each of these types of learning. This will be done by creating separate instances of cognition and perception development that foster **innovation** for both the university and the community. To utilize one's learning type along with its effects on behavior, hence innovation, the Mind Center houses three atmospheres focused on learning and environmental perception.

CONCEPT DRAWING



WEST SECTION A

SCALE: 1" = 1/16"



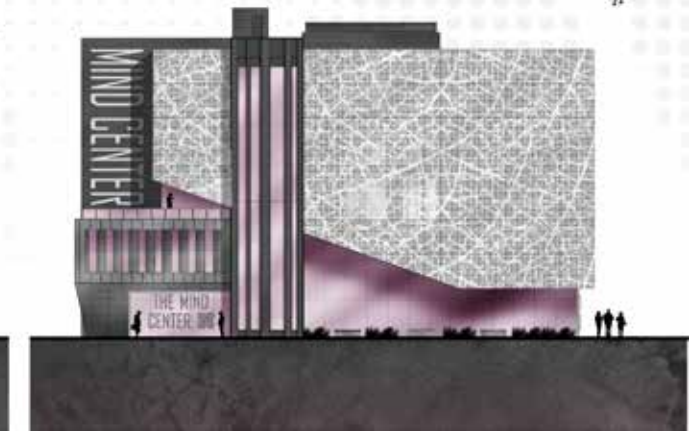
- 15 Research Labs (9 Adjustable Labs)
- 6 Classrooms
- Atrium Space
- Exhibition Space
- Lobby
- Cafe
- Collaboration Spaces
- 6 Admin Offices
- 2 Staff Utility
- Conference Room
- Lounge
- Lecture Hall
- Terrace
- 15 Researcher Offices
- Lounge

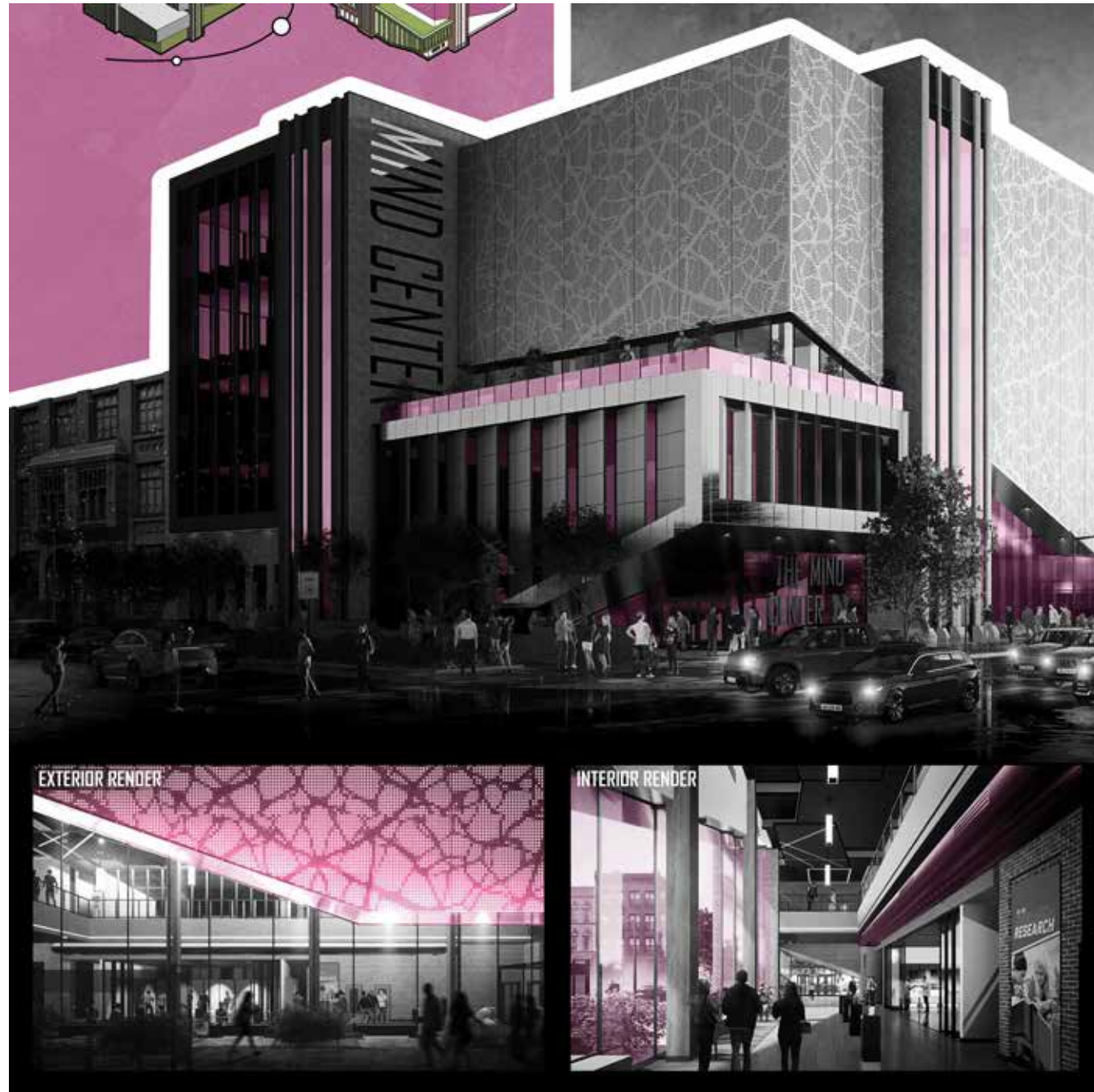
SOUTH SECTION B

SCALE: 1" = 1/16"

SOUTH ELEVATION

SCALE: 1" = 1/16"





Krusemark + Kortenhof | Board 3



Krusemark + Kortenhof | Board 4

Citation

Please Touch the Art

Grace Carlson, Clara Hetherington and Sidney Renelt
Faculty Mentor: Beau Johnson

The Sheldon Art Museum is a hub for creative expression. Behind each piece of art displayed and stored within the Sheldon, there was a unique and individualized process that occurred in order to express the message that each artist wanted to portray. The only part of this creative process that the viewers are experiencing, however, is exhibition. "Please Touch the Art" is an informal approach to taking in how art is traditionally observed and created.

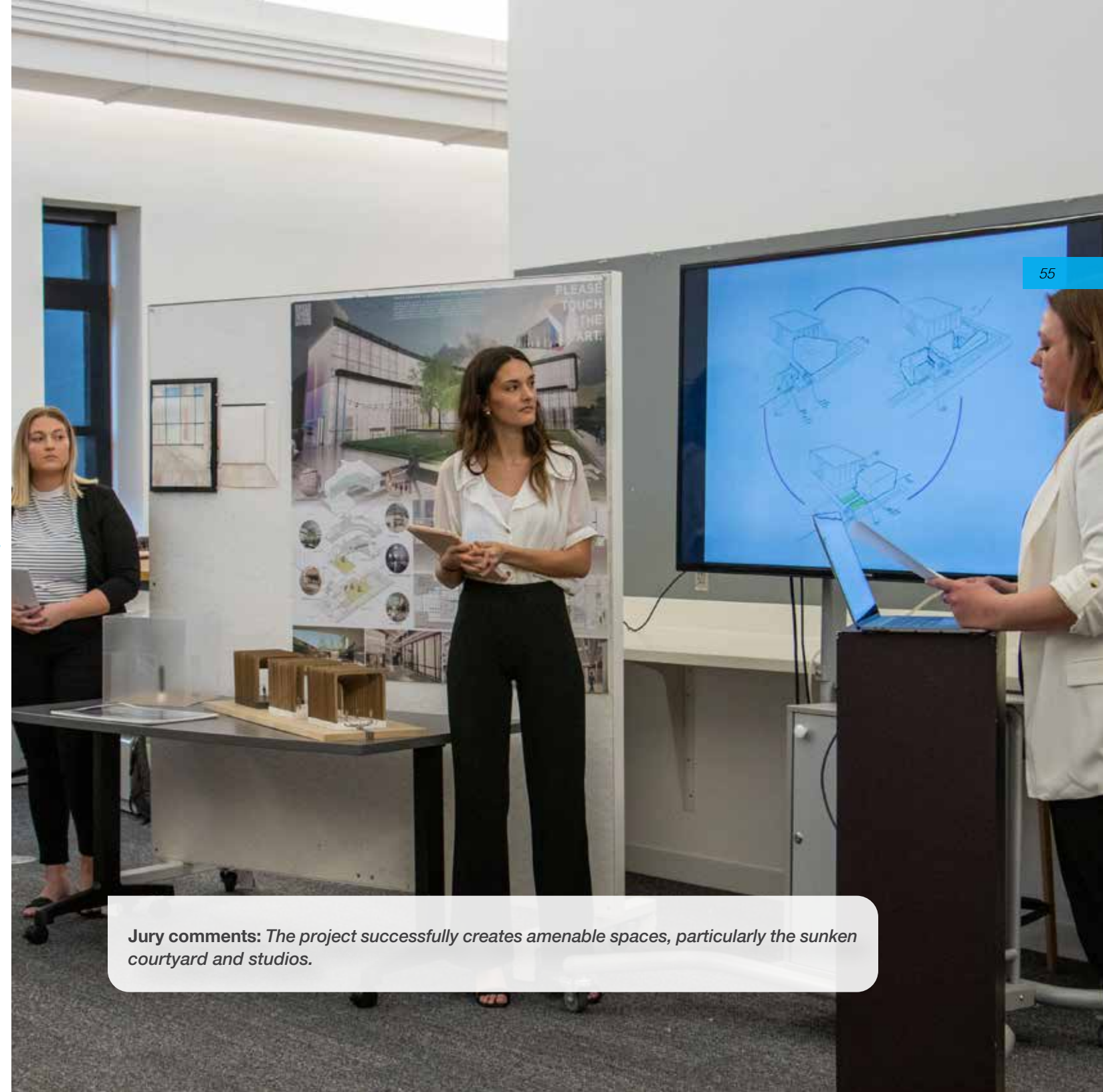
Taking part in an individualized journey of the creative process, occupants of the space are encouraged to engage in art through a variety of different ways. Our addition aims to facilitate individualized creative expression, establish a creative community, and inspire people to partake in the creative process. It also serves to revitalize the sunken garden, an underutilized but unique space, into a creative hub that facilitates spontaneous interaction between occupants of the space. These goals help to facilitate an environment where creative expression can flourish, and individuality can prosper. Through colorful, immersive installations and spaces where creativity can be fully expressed, "Please Touch the Art" engages its occupants in the creative process so that they can view themselves as artists.





1
3

2
4



Jury comments: *The project successfully creates amenable spaces, particularly the sunken courtyard and studios.*



GRACE CARLSON CLARA HET

"Please Touch the Art" is an informal traditionally observed and created. Take the creative process, occupants of the through a variety of different ways. Th and spaces where creativity can be ful occupants in the creative process so th

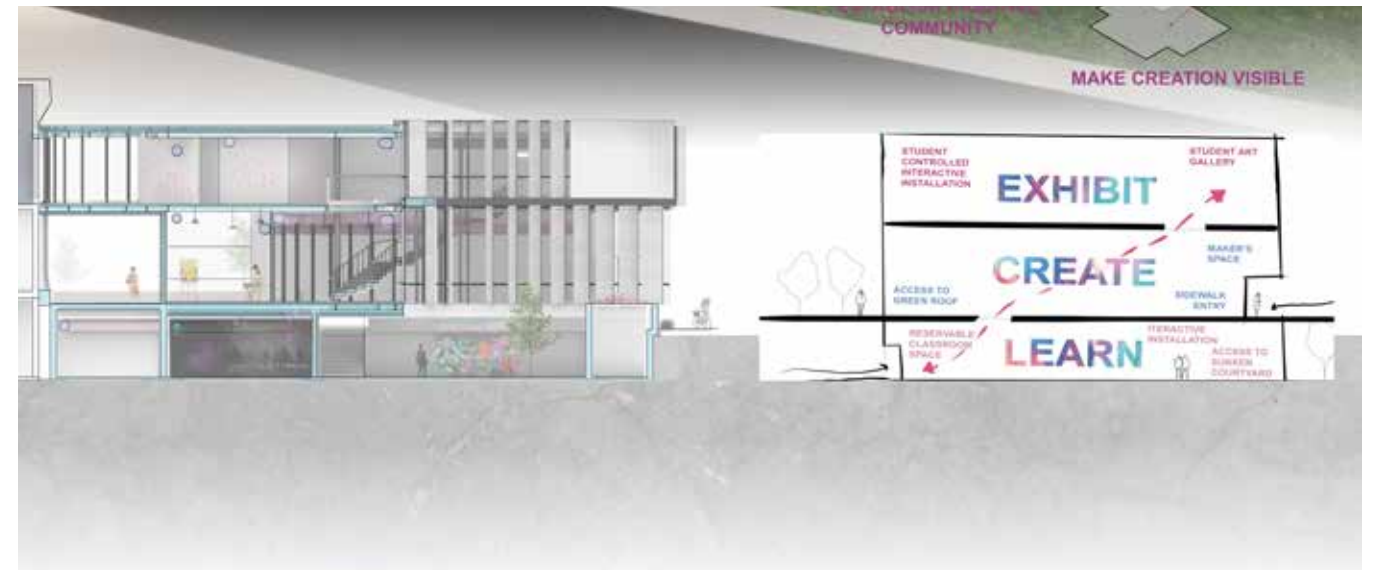
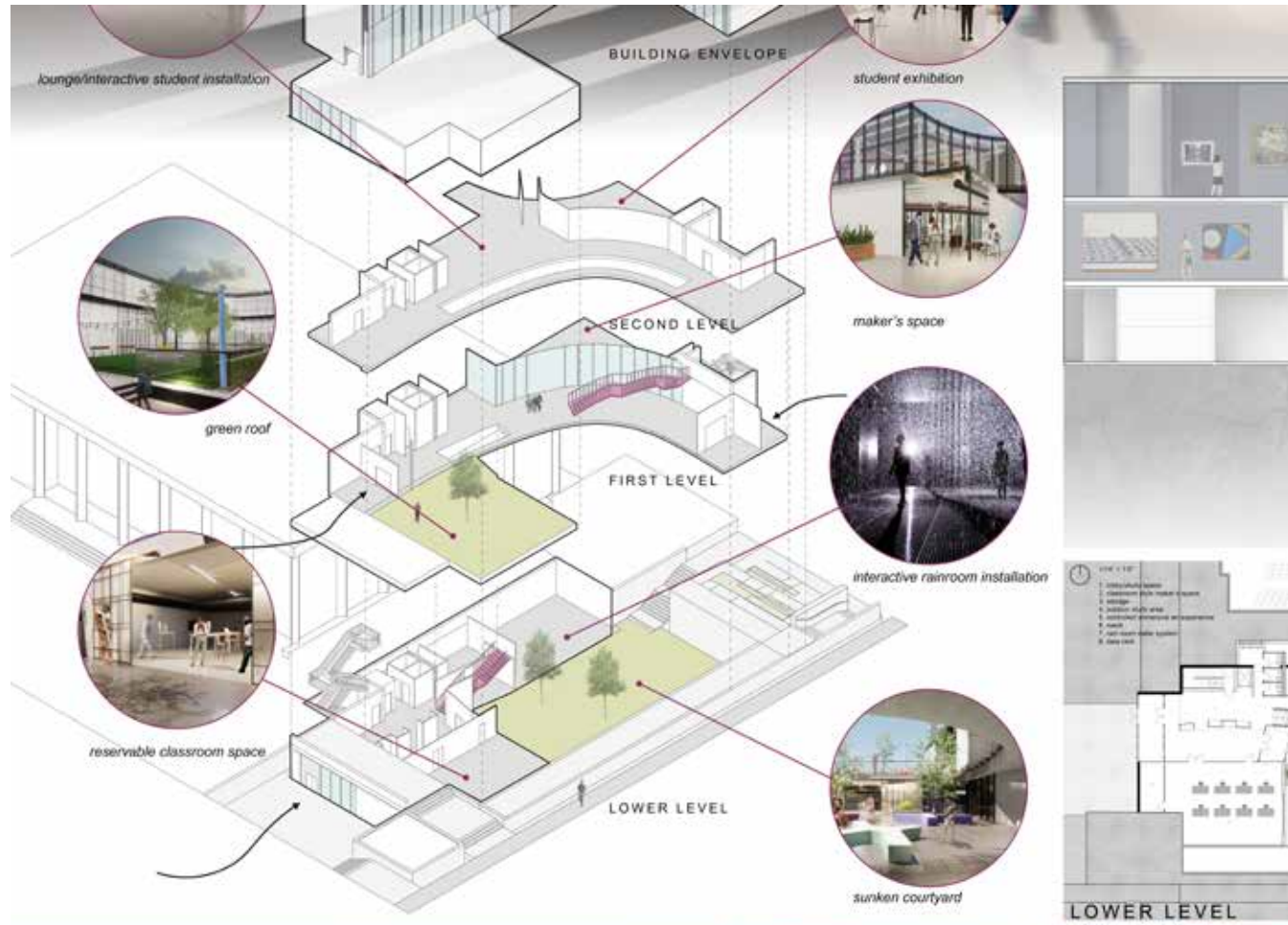


HERINGTON SIDNEY RENELT

approach to experiencing how art is ing part in an individualized journey of space are encouraged to engage in art rough colorful, immersive installations ly expressed, this building engages its at they can view themselves as artists.

PLEASE TOUCH THE ART.





STUDIO TEACHERS

STUDIO TEACHERS

60 **SGH Concepts + HDR + Whiting-Turner**

61



*A special thanks to **William DeRoin (HDR)**, **Adam Meyer (Whiting Turner)** and **Troy Burkey (SGH Concepts)** for discussing the collaborative integration for the new addition to Architecture Hall at UNL.
(photo taken by Kerry McCullough-Vondrak)*



Ashley Byars, Lecturer

Ryan Hier, Lecturer

* Nico Forte and Devyn Beekman | Merit

Lubna Al Sebaie	Thinh Nguyen
Colin Balbach	Renee Pasapera
Paulina Garcia-Medrano	Steven Powers
Sarah Johnson	Alissa Vlach
Caleb Mohnike	Angela Vu
Abby Mowbray	Trever Zelenka

Jeff Day, Professor of Architecture

* Elena Garcia Tapia and Brandy Nguyen | Excellence

Ian Carroll	Joshua Lorenzen
Sophia Gawrick	Caitlin Maloney
Hannah Gould	William Roarty
Mitchell Hill	Londell Stubblefield Jr.
Kael Jakub	Ethan Watermeier
Greta Krohn	Allison Woodring

Michael Harpster, Professor of Practice | Honor

* Luryn Hendrickson and Haley Herman | Honor

Kate Brashear	David Ortiz De la torre
Kade Jensen	Michael Rieder
Samantha Keetle	Edgar Roman
Dylan Lambe	Nicholas Theoharis
Zade Miller	Mara Wasserman
Elizabeth Nielsen	Renee Zandt

Beau Johnson, Lecturer

* Grace Carlson, Clara Hetherington, and Sidney Renelt | Citation

Haleigh Carr	Son Huynh, Son
Nick Carraher	Nikita Mansinghani
Lauren Castaneda	Elijah Schmit
Malik Darwish	Aly Timmerman
Jampe Gergen	Trent Weatherwax

David Newton, Assistant Professor

* Landon Healy and Luke Heidenreich | Merit

Stephanie Cabarcas	Alex Martino
Oz Eckhorn	Paul Mullins
Riley Jarosz	Megan Pfeifer
Cody Kleinschmit	Hayden Rech
Mia LeRiger	Grant Wolfe

* **Studio Finalist**



The jury offer insightful reflection on finalist projects prior to announcing the winners.

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