

SoA+D

The University
of Memphis

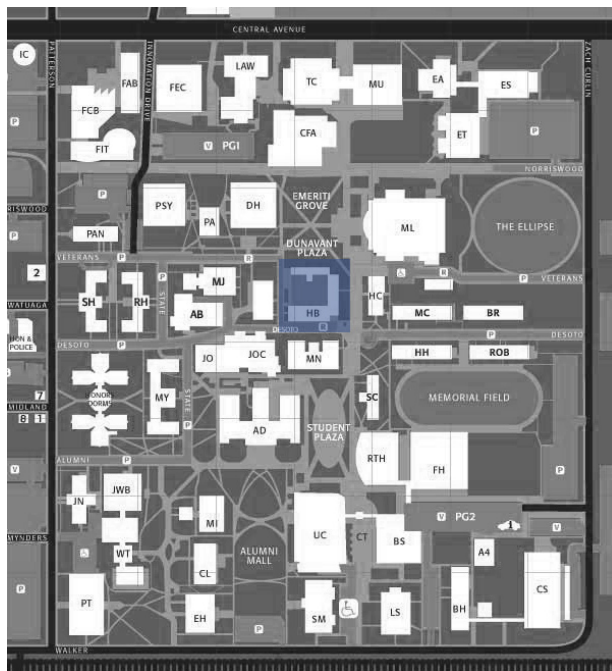
The following pages contain proposals for a new School of Architecture and Design (SoA+D) Building for the Department of Architecture at the University of Memphis. The new sustainable building will facilitate a growing program with an expectancy of one hundred and fifty undergraduate students, fifty graduate students and an ability to accommodate proposed new graduate programs. The design program for the SoA+D generally consists of the following: design studios, faculty offices, administration area, gallery, loading dock, library, lecture halls, classrooms, critique spaces, wood and metal shops, faculty and student lounges, outdoor spaces, storage, necessary service areas and circulation spaces. Two sites are offered for consideration: the current site of the Art Building and the current site of the Ray L. Herzog Building. With their location along primary axes, both choices offer immense potential.

The proposals have been created for the graduate summer studio, 2009; course ARCH 7711/7712; instructor, Michael Hagge.

A Proposal for a School of Architecture + Design

Located centrally within the University main campus, the second site also lies on DeSoto Avenue. The site fronts a major pedestrian path to the east and Dunavant Plaza to the north. It is adjacent to the Heating and Cooling Plant, the Tiger Den, Manning Hall, the Hudson Health Center and, grouped around Dunavant Plaza, Dunn Hall, the Ned R. McWherter Library and the Communication and Fine Arts Building. The site has a significant grade change of about fifteen feet.

Jennifer Barker
Alzbeta Bowden
Kristen David



3750 DeSoto Avenue (current Herzog Building site)

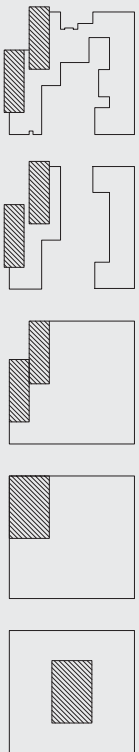
At the heart of architectural education today is the design studio. It is the place where everything the student learns is meant to be formed, synthesized and expounded upon. It is where the student spends most of his or her time and it is considered the eminent course within the curriculum. It can also be a place of great struggle, of both personal failure and triumph. This project realizes the significance of the space and places it as the dominating generator for the design of a new School of Architecture and Design.



Jennifer
Barker



view at upper level looking into studio

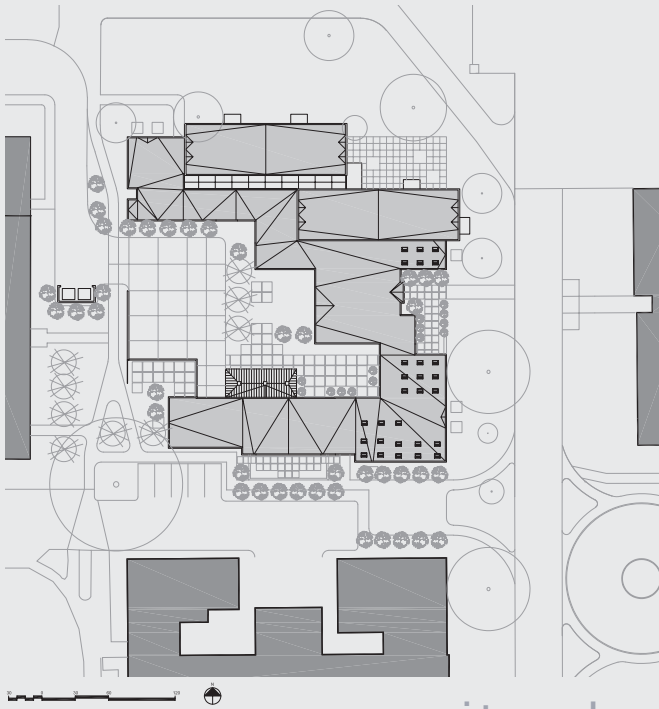


evolution of the idea

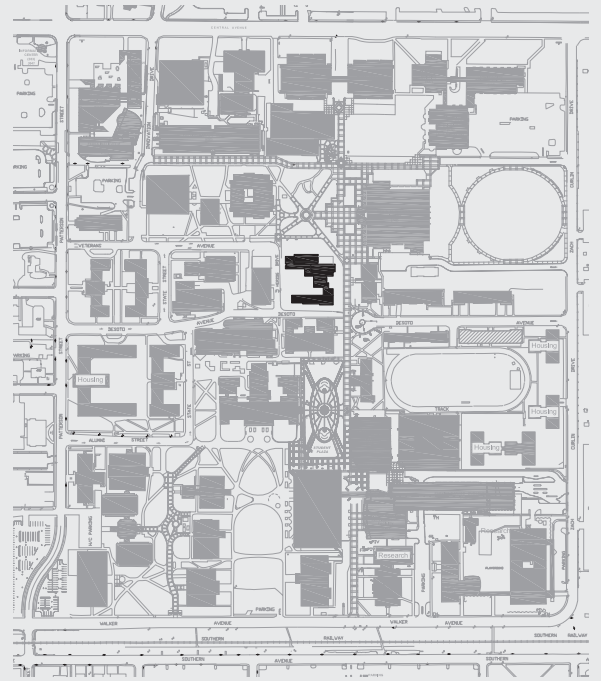
The site consists of two sets of axes, the north and east primaries and the south and west secondaries. The building design addresses them by that distinction. The studio spaces occupy the northeast corner of the site thereby taking advantage of the primary axes. The offices, administration and other supporting program elements align themselves around the site in order to serve the studio space.



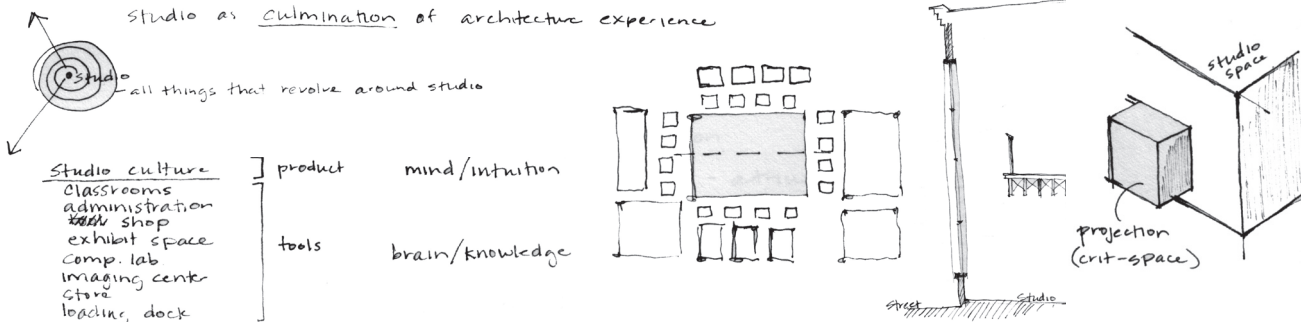
8 0 8 16 32



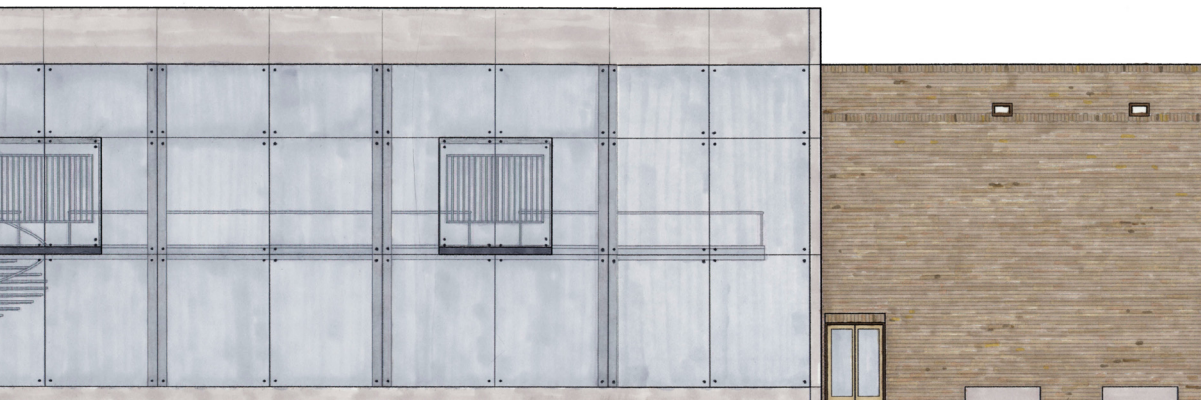
site plan



campus plan

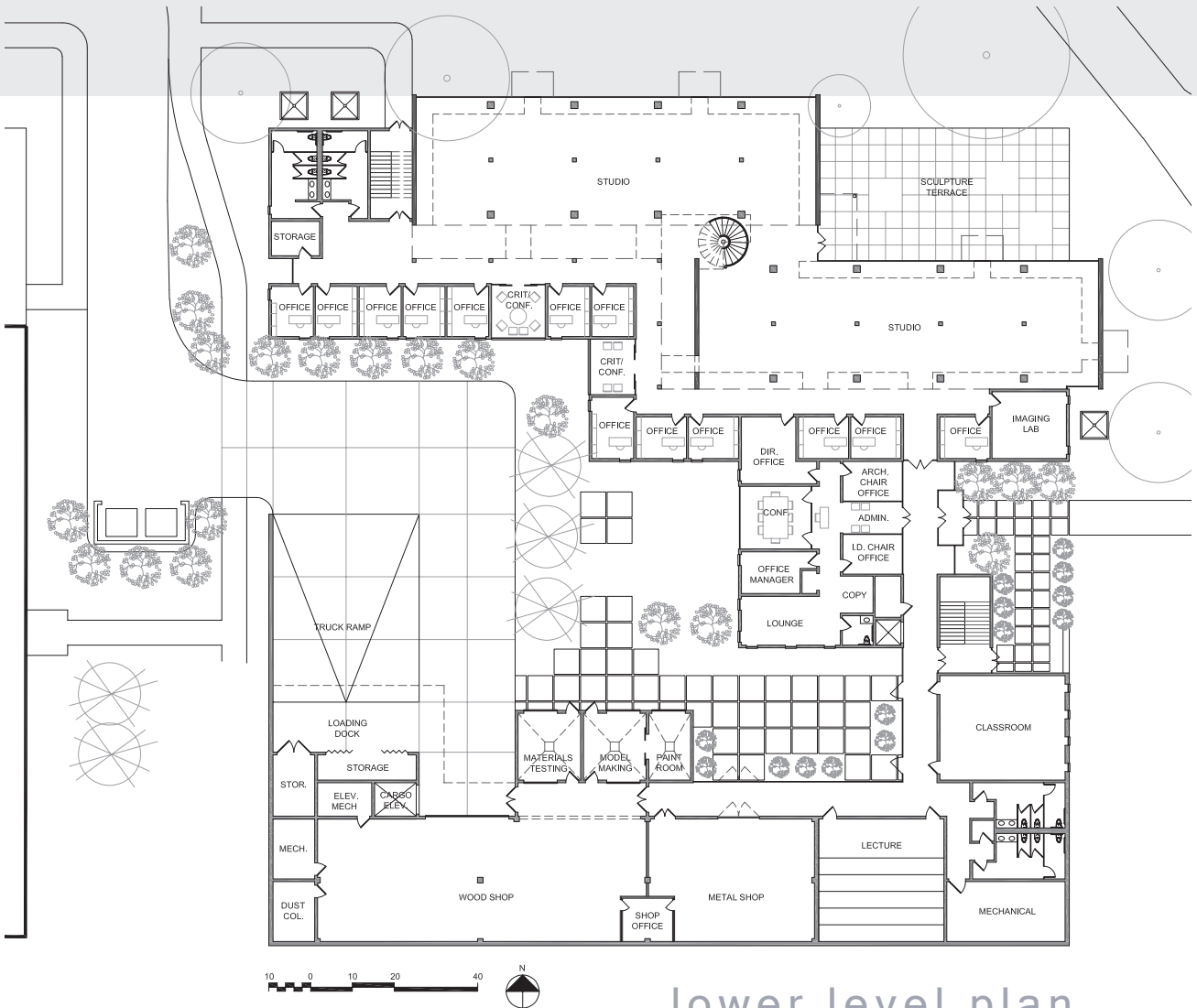
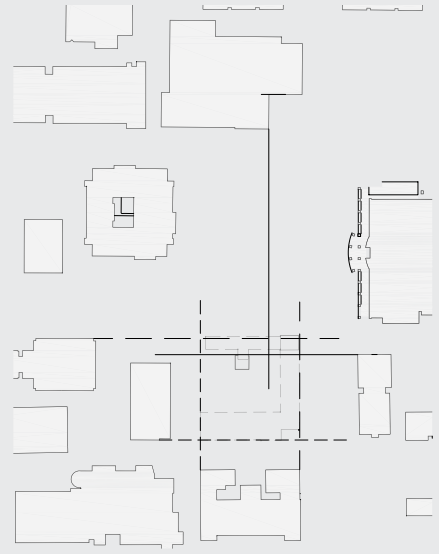
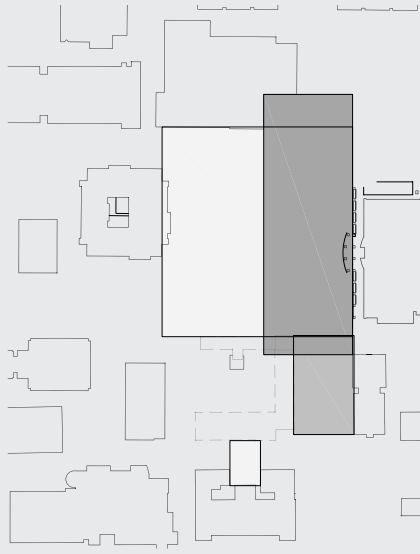
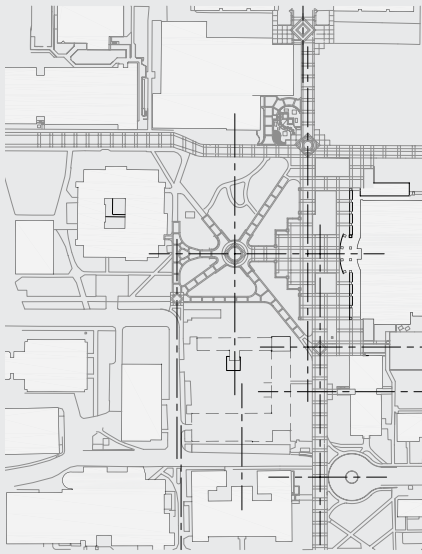


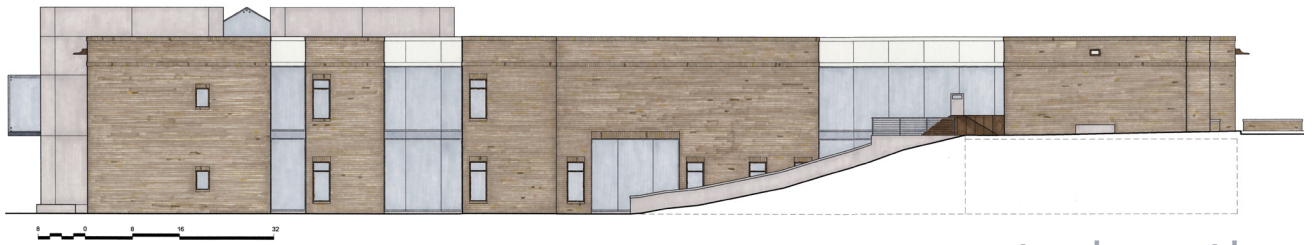
diagrams



north elevation

SoA+D





west elevation



south elevation

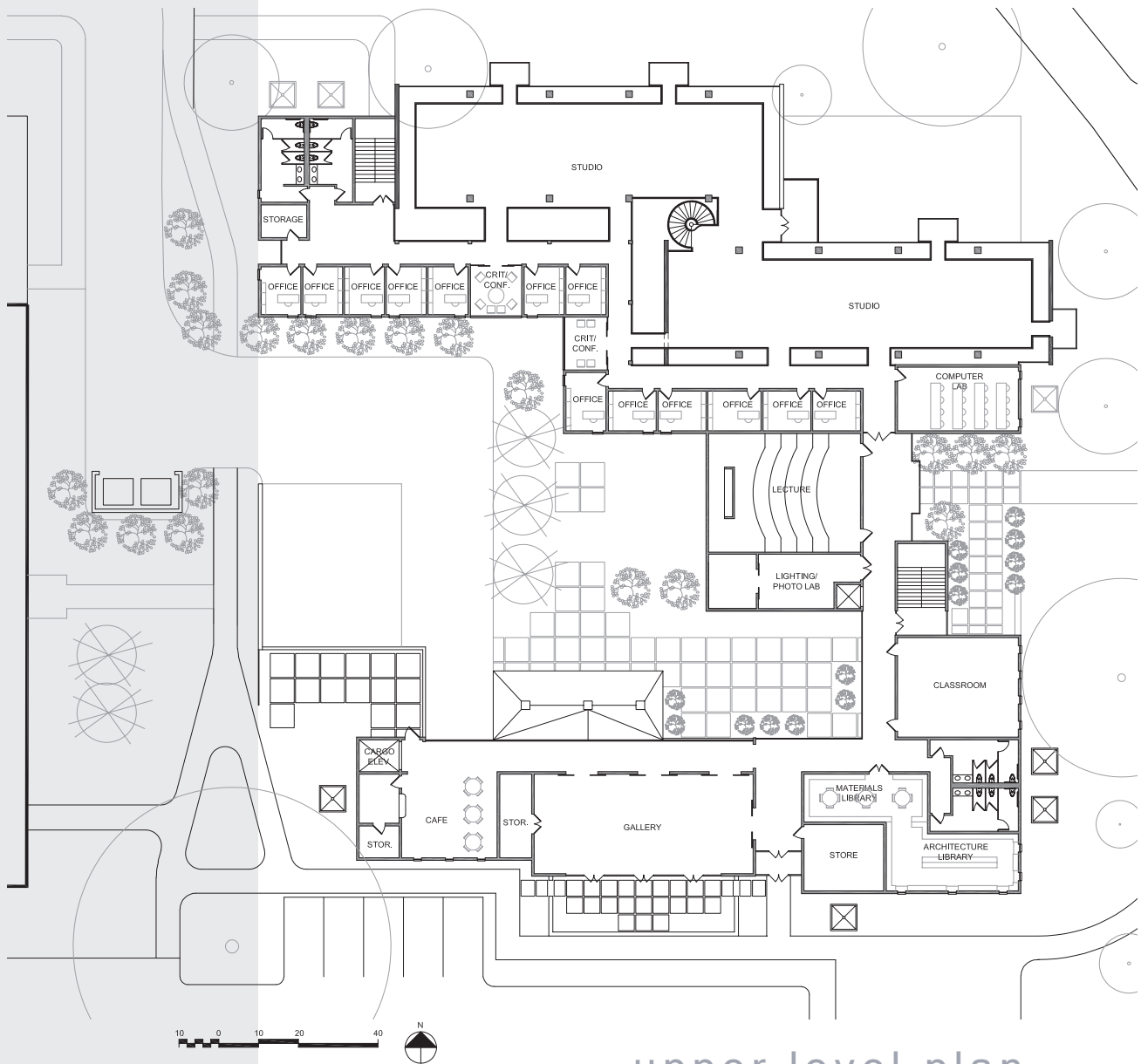


east elevation

The studio spaces, defined by two large concrete frames, feature small pop-out spaces intended for use by two or three people. Within the plan there are other gathering/critique spaces for varying size groups. Mainly, these rooms form a void in the brick supporting mass and allow views into and out from the studio space, connecting the users to the outside and vice versa. Brick is used throughout the campus and features prominently on this project to define the secondary mass of the building.

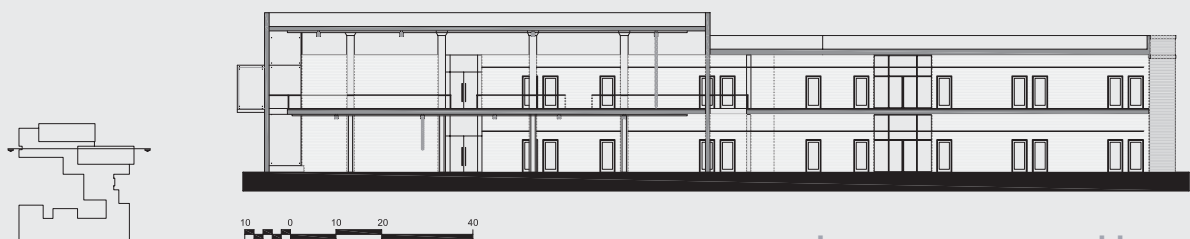


SoA+D



upper level plan

At the upper level, attempts have been made to address DeSoto Avenue in order to make it more pedestrian friendly, or at the very least, to make it a more comfortable space to look upon while passing through. Strong effort would be made to keep the existing tree that currently provides such expansive shade.



section at studios



partial south elevation at courtyard



partial west elevation at courtyard

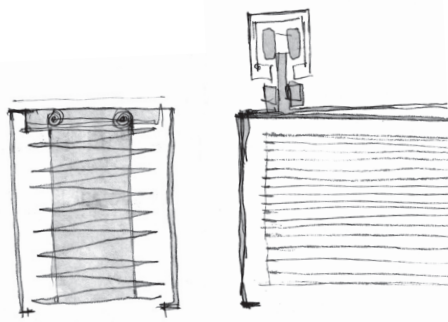
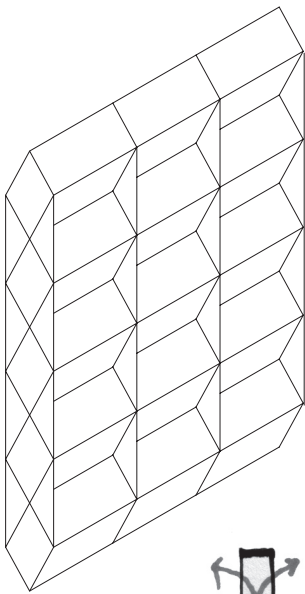
The slope of the site allows for part of the program -the shop facilities- to be located underground. This helps to provide for some acoustical isolation and permits the wood and metal shops to open onto a materials courtyard where there is access to the loading area and space made available for full-scale construction projects. The courtyard provides ample area for gathering, working on projects and a dedicated outdoor classroom space directly adjacent to an indoor classroom. Overlooking this area are faculty offices, the administration area and the main circulation corridor.



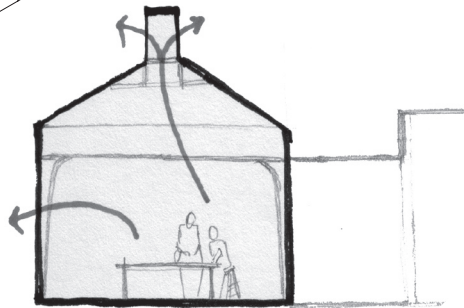
partial north elevation at courtyard



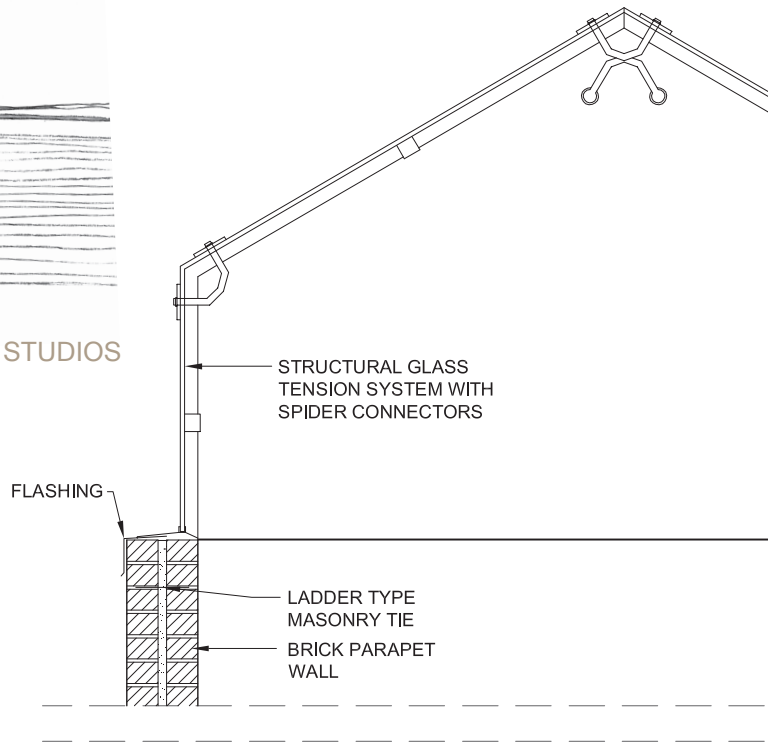
SoA+D



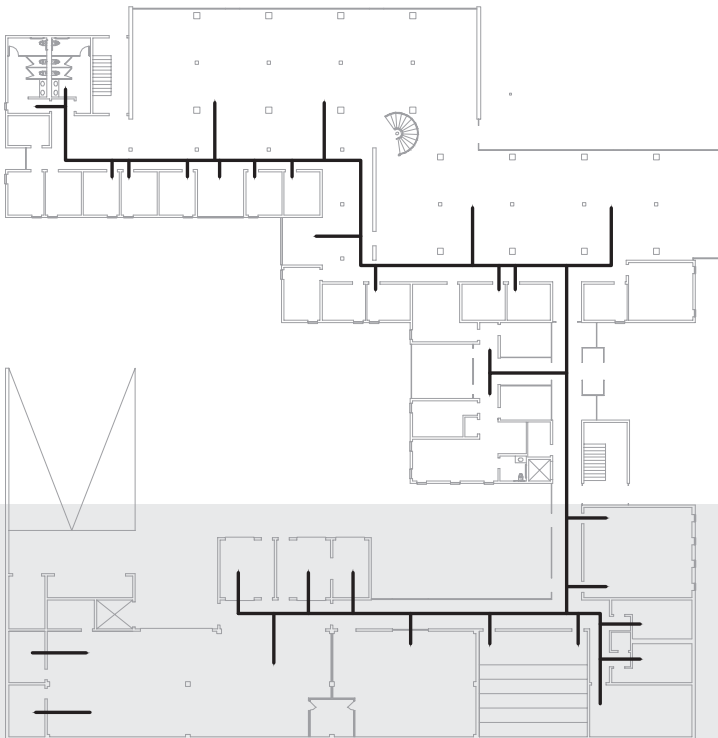
ACOUSTICAL DIVIDER IN STUDIOS



VENTILATION

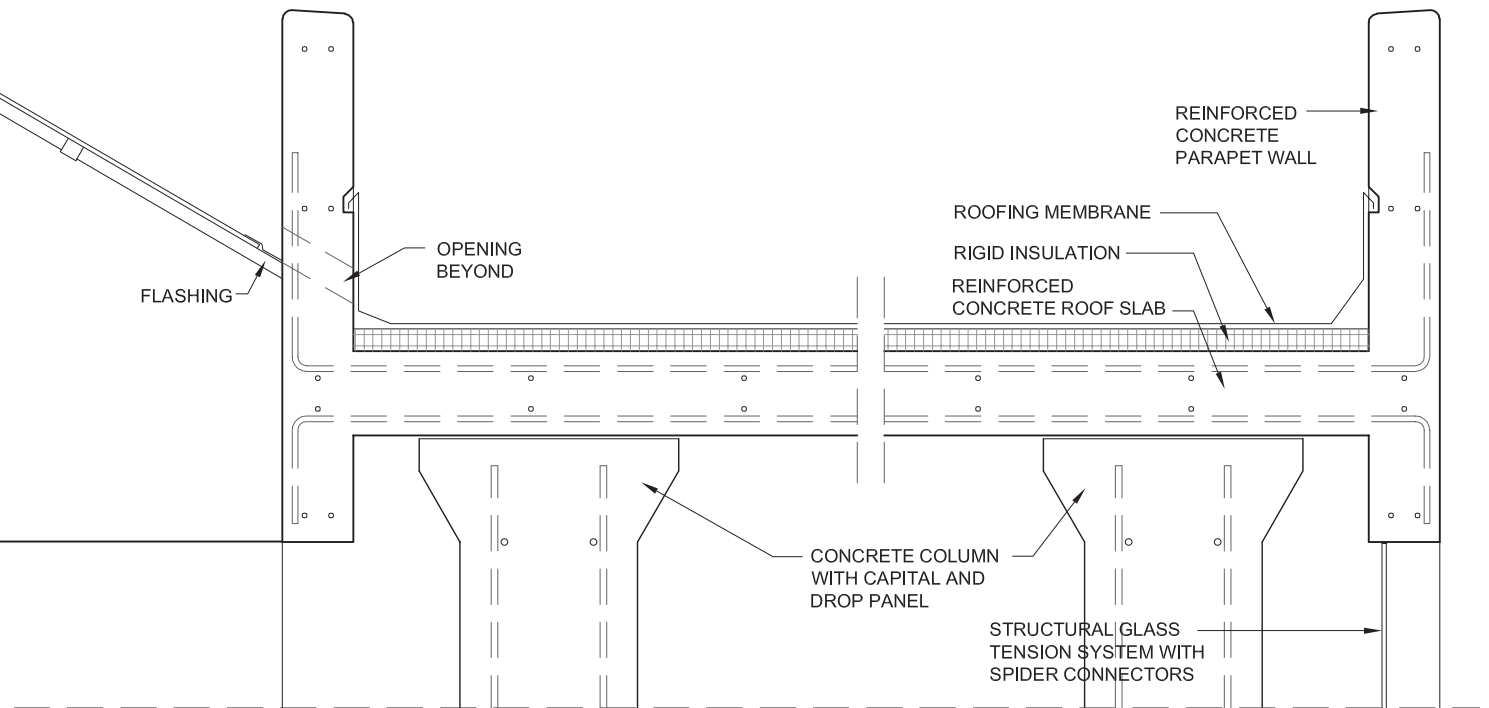


The building design features ideas for rain-water collection, special ventilation stacks at the materials testing and modeling areas and a design for an automated acoustical system in the studios. This last feature would be a moveable system attached on tracks to the top of each studio space, at each level. The acoustical dividers would be adjusted each semester to accommodate a given class size and then would be available to be used - either lowered or raised - at the discretion of the instructor.

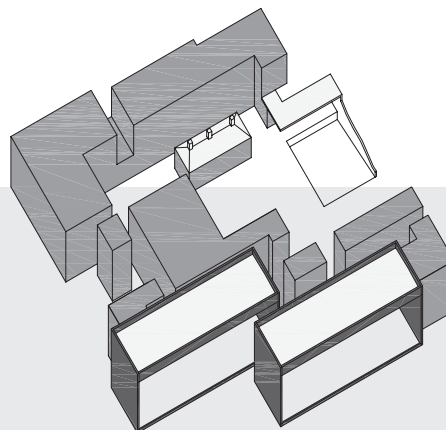
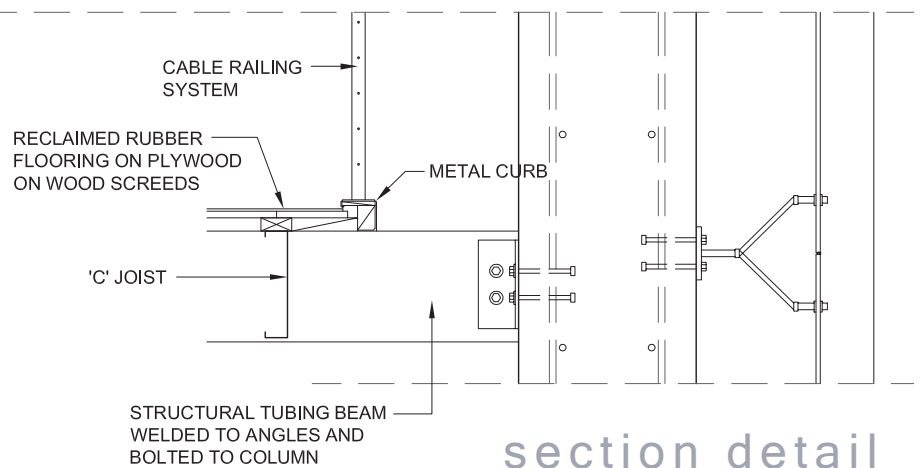


HVAC DIAGRAM





A linear skylight is used as a separation device between the studio spaces and the remaining spaces. It allows for more natural light for the studio space as well as for the corridor surrounding the studios. Structural glass is used for both the skylight and the enclosure system at the north face of the studios. The floor at the second level of the studio space is pulled back, seemingly floating above the lower level, in order for light to reach that area. It also helps to connect the lower and upper levels as a continuous space, encouraging intermingling between various design classes.



FRAME/ SUPPORTING MASS

The goal is to create a building that is highly innovative, yet honest to its structural components, and able to maintain a viable dialog with its surrounding structures. A height relationship with other buildings is necessary, as well as gentle consideration of placement and hierarchical relationship with others present.

Through simplicity and purity of the proposed building, it becomes a learning tool, allowing students to fully understand its structure process, while allowing for spaces with intricate plays of light and shadows, promoting feelings of openness and enclosure, experiencing different materials and textures. Truth and honesty are mixing up with abstraction, forbidding boredom and dullness of other campus buildings.

Spatial experience is a key to understanding of a building, the presence of absence enhances feelings and challenges the mind. A clear detection of public, private and semi-private spaces must be present.



Alzbeta
Bowden



STUDENTS:
 . 150 B.F.A. ARCHITECTURE
 . 50 B.F.A. INTERIOR DESIGN
 . 50 M.ARCH

FACULTY:
 . 30 FULL-TIME & ADJUNCTS

NAAB AND CIDA STANDARDS

STATE AND PRIVATE FUNDING
 COMBINED

BUILDING PRODUCING INCOME

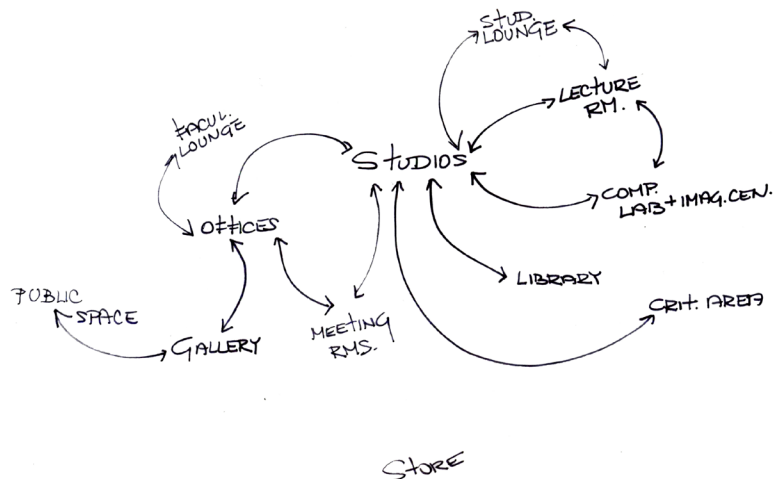
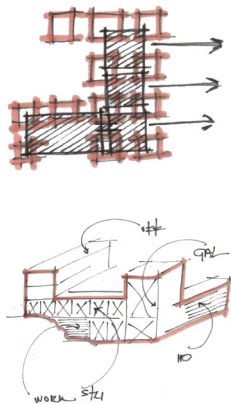
PROMOTE NEIGHBORHOOD
 VITALITY

s-w view
 public eye

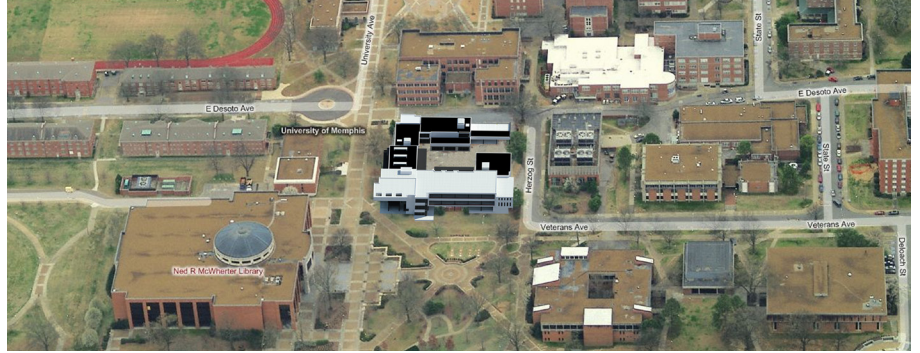
'We were born of light. The seasons are felt through light. We only know the world as it is evoked by light... To me natural light is the only light, because it has mood - it provides a ground of common agreement for man - it puts us in touch with the eternal. Natural light is the only light that makes Architecture Architecture.'

Louis Kahn

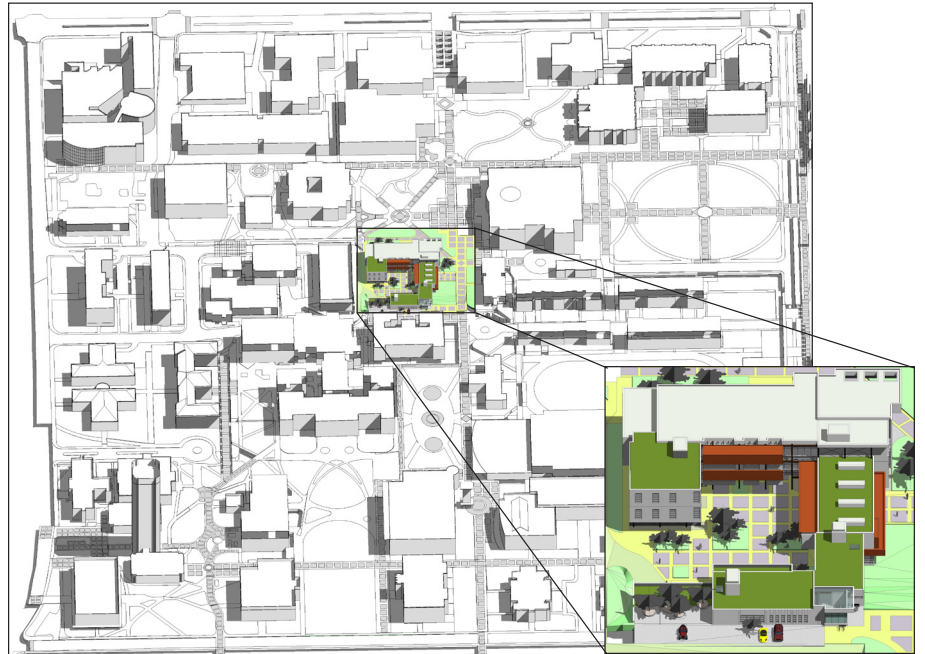
site analysis



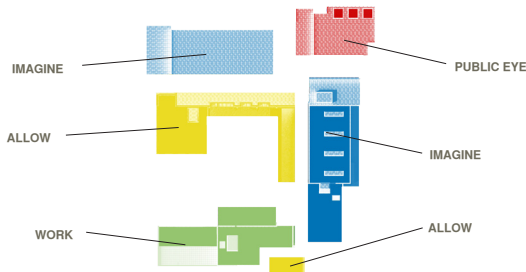
IN THE SPOTLIGHT - THE ARCHITECTURE OF ARCHITECTS. AN OPEN INVITATION TO THE HEART OF CAMPUS. CURRENT SITE OF THE HERZOG BUILDING. S-W OF THE MCWHERTER LIBRARY. S OF THE CFA BUILDING. SITE ELEVATION CHANGE OF 16 FEET. LINED UP BY MAIN PEDESTRIAN AXES.



s view



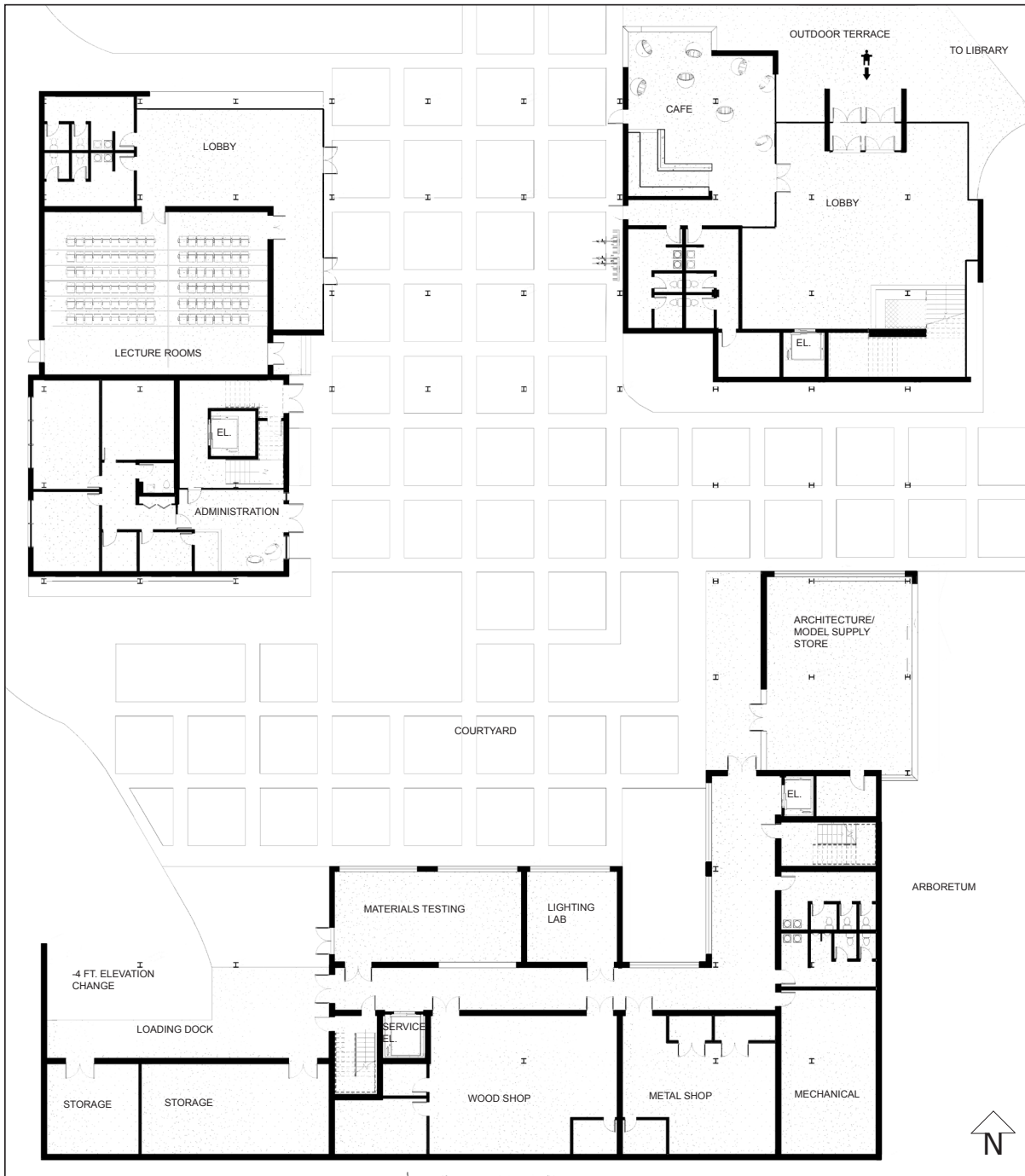
site plan - n view



exploded diagram



SoA+D



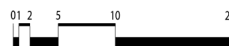
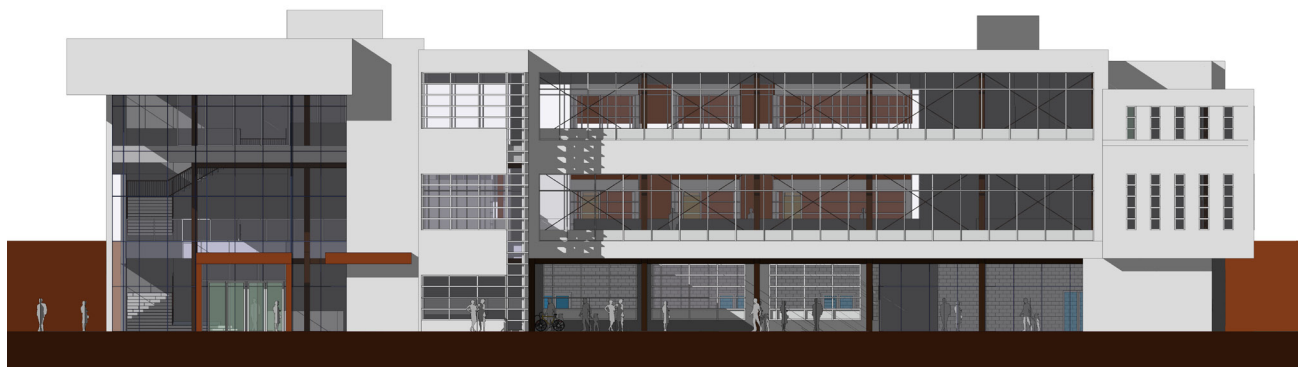
level one

'The game of architecture is an intricate play with rules that one may accept or reject.'

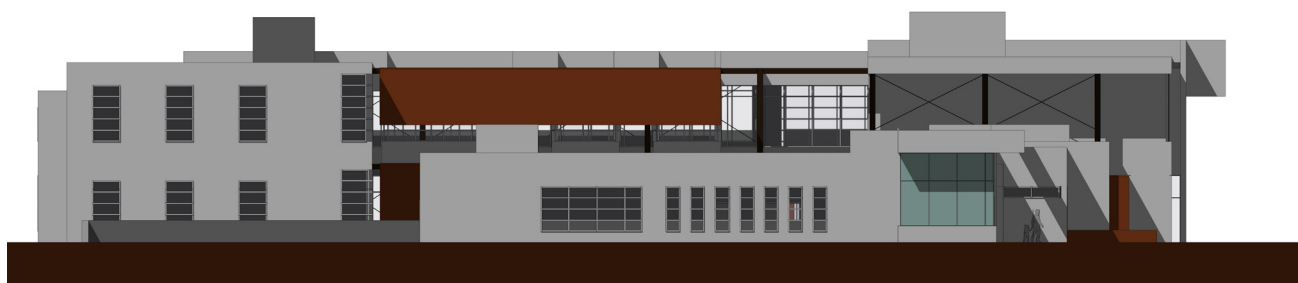
'Architecture is defined by the actions it witnesses as much as by the enclosure of its walls. Murder in the street differs from murder in the cathedral in the same way as love in the street differs from the Street of Love. Radically.'

Bernard Tschumi

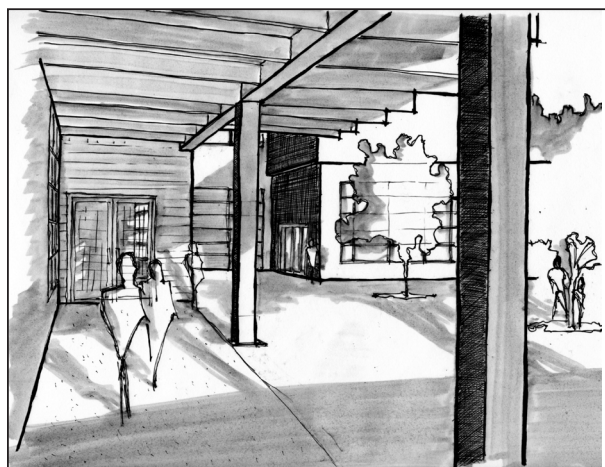
3 LEVELS. 250 STUDENTS. 33 OFFICES. 56,200 S.F. 1 COURTYARD. MANY LATE NIGHTS. 1 COMMON TOPIC. UNLIMITED DREAMS.



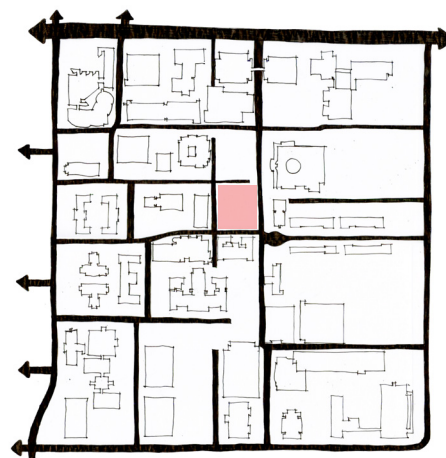
n elevation



s elevation



courtyard view



grid setting

NATURAL LIGHT
SUSTAINABILITY
ADAPTABILITY

URBAN ARTIFACT
SECURITY

MULTI-FUNCTIONALITY
SUPPORT OF THE LEARNING PROCESS
RELATIONSHIP TO OTHER BUILDINGS PRESENT

PUBLIC/ SEMI-PRIVATE/ PRIVATE
EXPERIENCE

SoA+D

orientation



level two

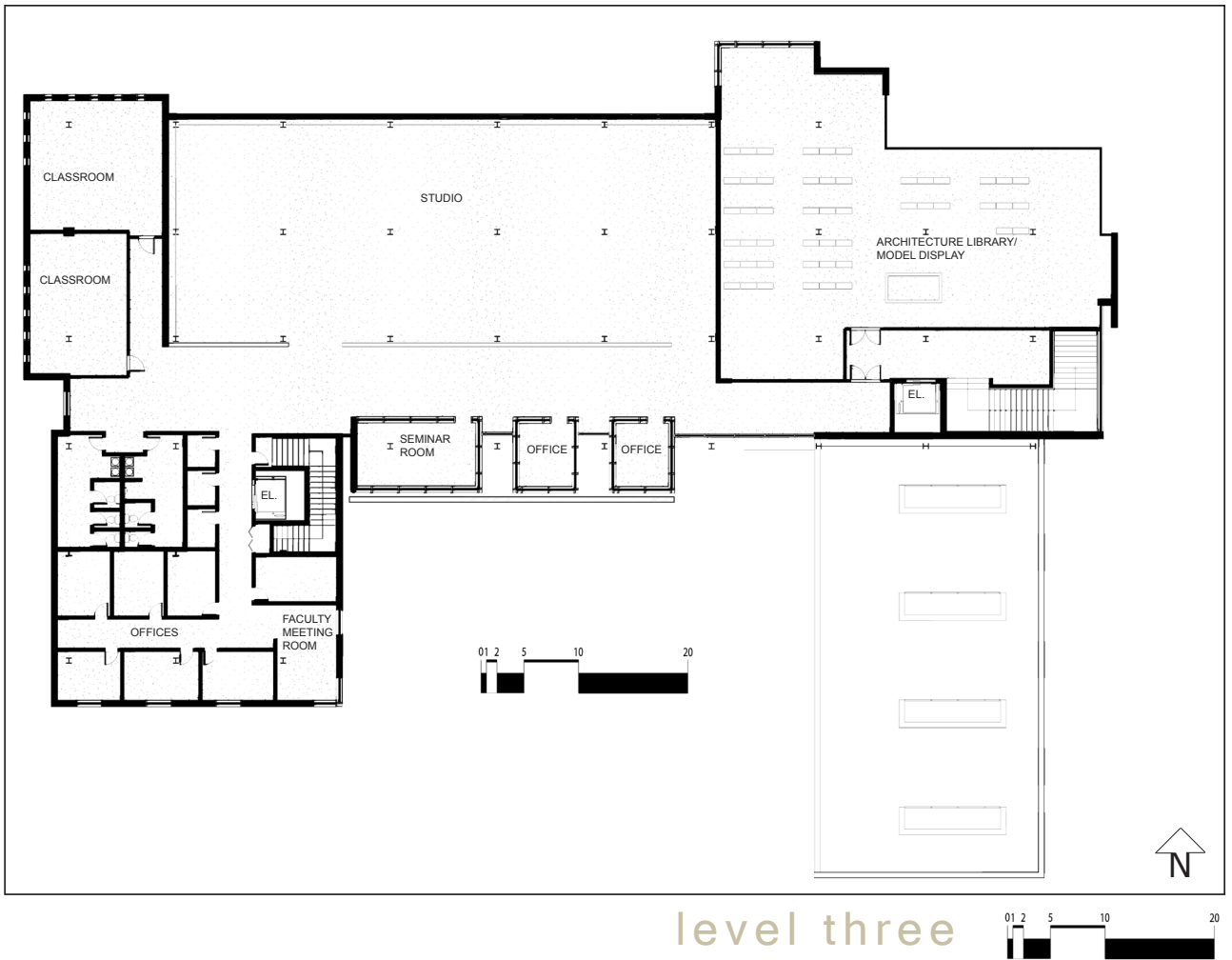
OUTDOORS BECOMES INDOORS
INDOORS BECOMES OUTDOORS

HONESTY OF BUILDING
SIGNATURE BUILDING

LIVING ARCHITECTURE

'How do we redefine education and make it more pleasant, interesting, appealing and challenging? What (if anything) makes Architecture and Interior Design students different from other students on campus?'

MATERIALS: CAVITY INSULATED CMU. INSULATED ALUMINUM CLADDING. RECYCLED ALUMINUM. PERFORATED SCREENING. LOW-E DOUBLE GLAZED WINDOWS. STRUCTURAL GLAZING. 80-100% RECYCLED STRUCTURAL STEEL. HIGH-LEVEL FLY ASH CONCRETE FLOORING.



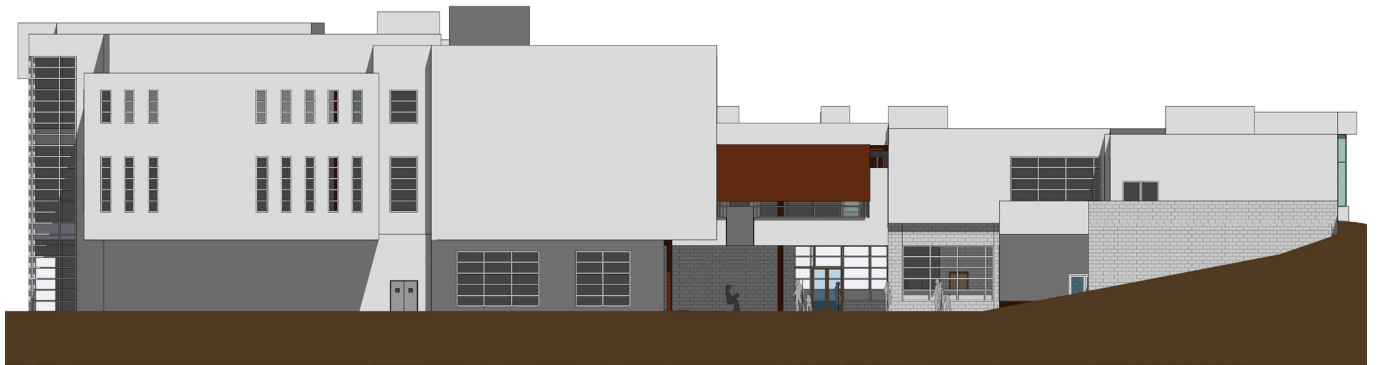
courtyard view



SoA+D

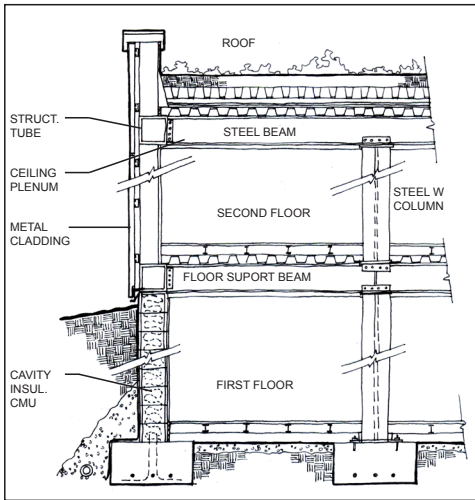


e elevation

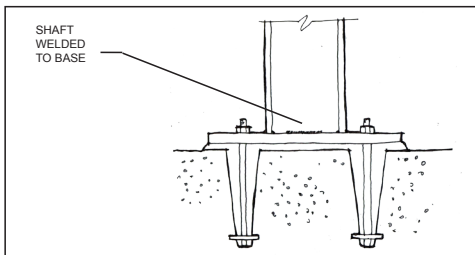


w elevation

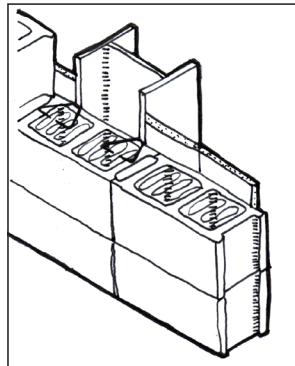




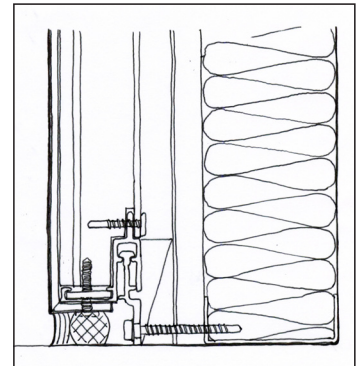
TYP. WALL SECTION



STEEL COLUMN BASE CONNECTION



INSULATED CMU WALL SECTION



METAL CLADDING



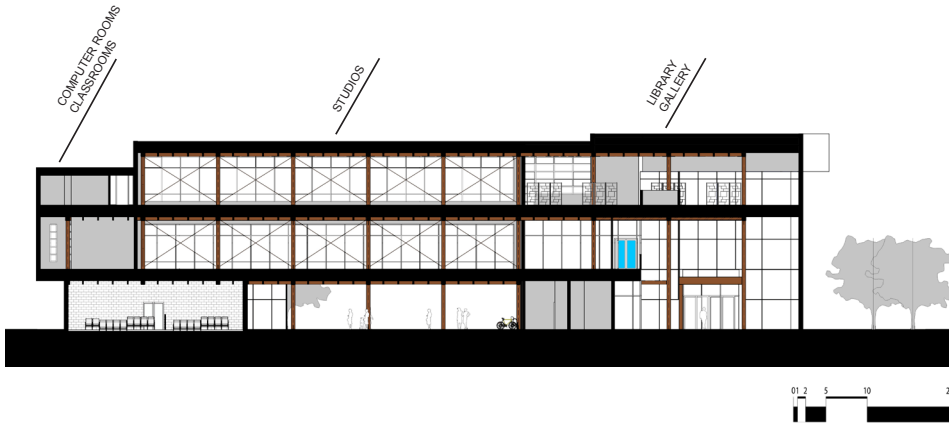
courtyard view

details

s entry
view



SoA+D



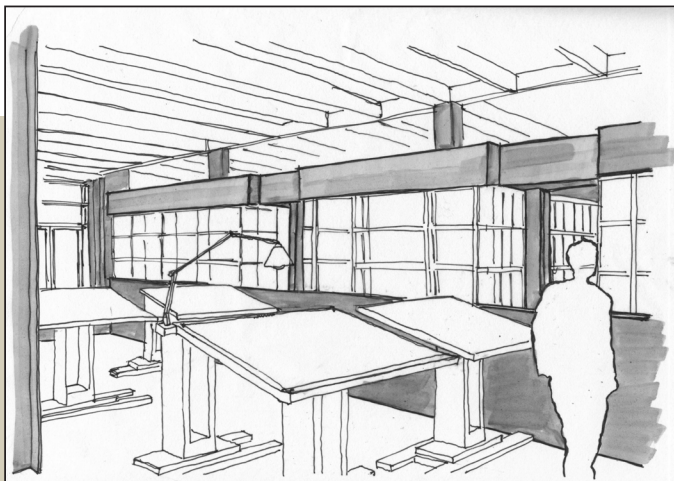
sections

REDEFINITION OF LEARNING ENVIRONMENT - INDOORS BLENDING WITH OUTDOORS. EXPOSED STRUCTURE.

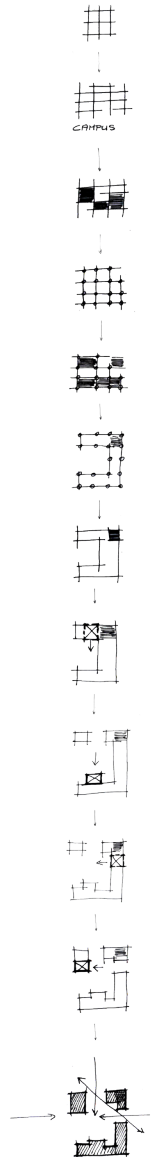
OPEN FLOOR PLAN ALLOWING MULTI-FUNCTIONAL SPACES. DEFINING PLACES RATHER THAN SPACES. 100% ACCESS TO DAYLIGHT.

COURTYARD - EMBRACEMENT. COMMUNITY. LIGHT. CONNECTION. A PLACE TO WORK, PLAY, RELAX AND CREATE.

studio views



inside



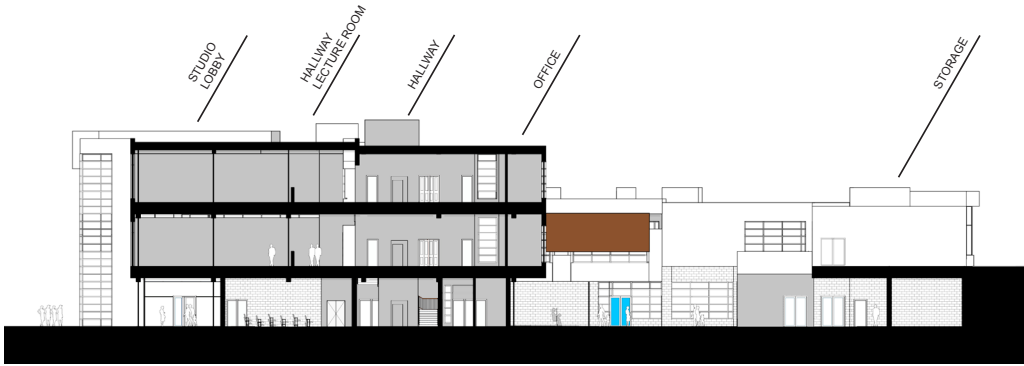
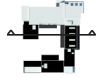
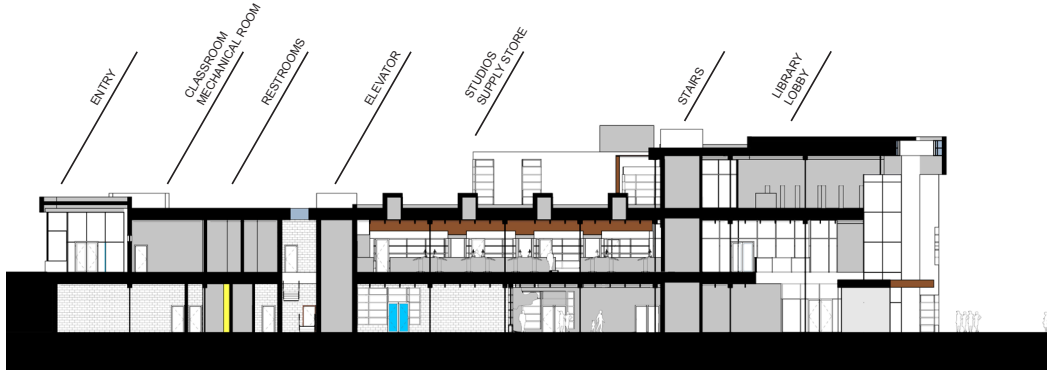
WHERE THE LIGHTS STAY ON ALL NIGHT. INVITING BUILDING OFFERING DIFFERENT EXPERIENCE WITHIN ITS WALLS. CIRCULATION SYSTEM ALLOWS FOR INTERACTION AMONG FACULTY AND STUDENTS. EASY ACCESSIBILITY AND ORIENTATION.

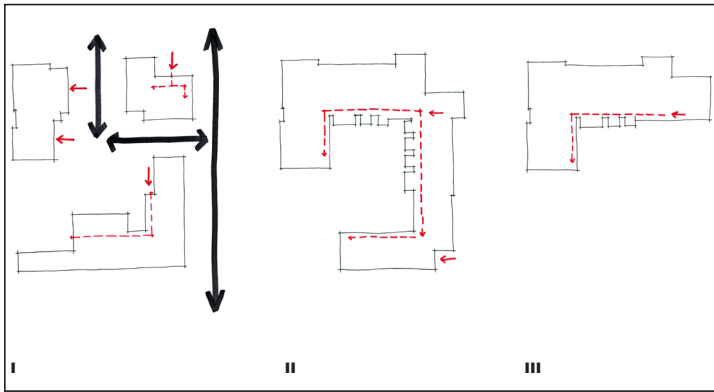
outside



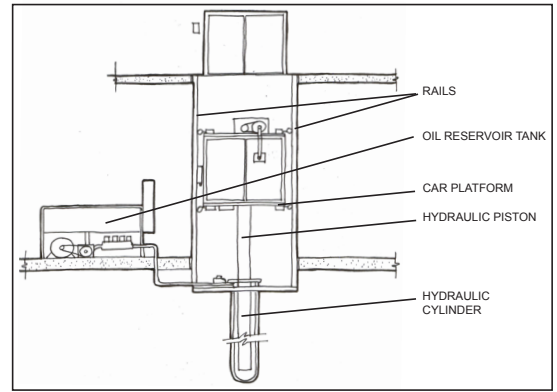
optional
fourth level

SoA+D





basic circulation



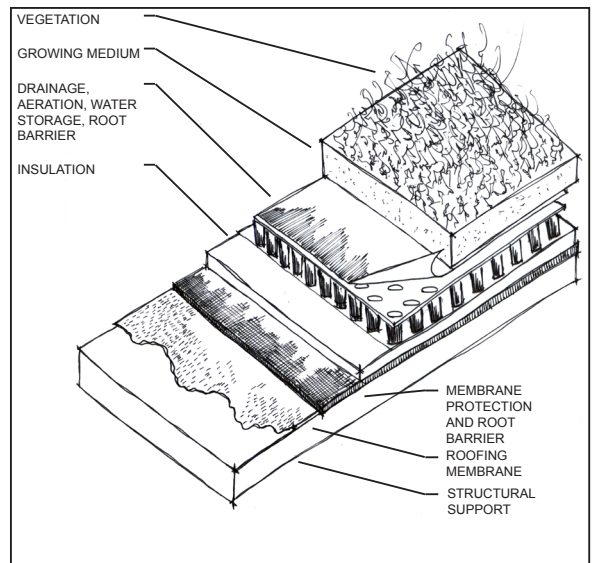
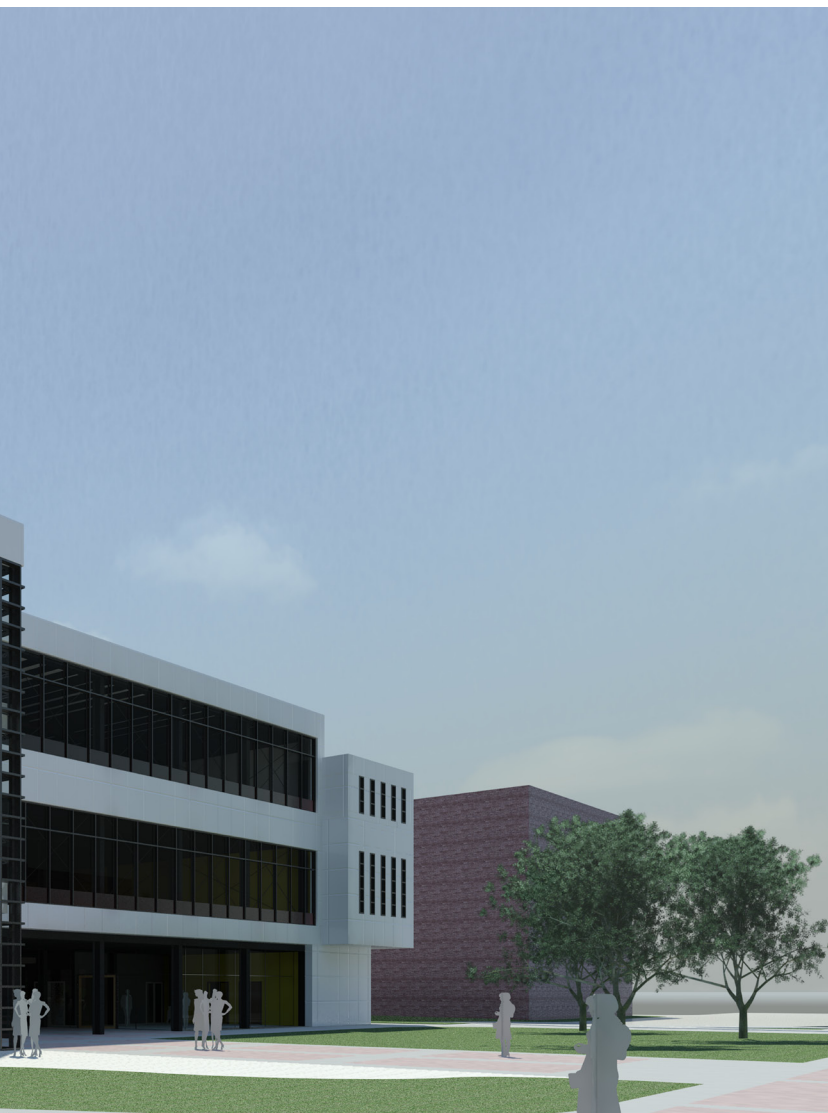
hydraulic elevator
diagram

s-w view





courtyard view

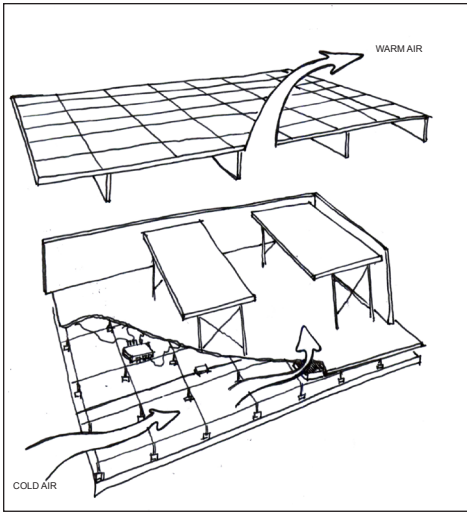


green roof detail

movement

The new structure is to 'give back more than it takes' from its neighbors. The building is to be adaptable, supporting learning process by modification of itself. It is to become an urban artifact, which would allow for future adjustability, without restricting usage and spatial definition.

SoA+D



ACCESS TO VOICE, DATA AND POWER SYSTEMS

DELIVERING CONDITIONED AIR THROUGHOUT THE UPPER FLOORS OF THE BUILDING WITHOUT IMPACTING THE FLOOR PLAN

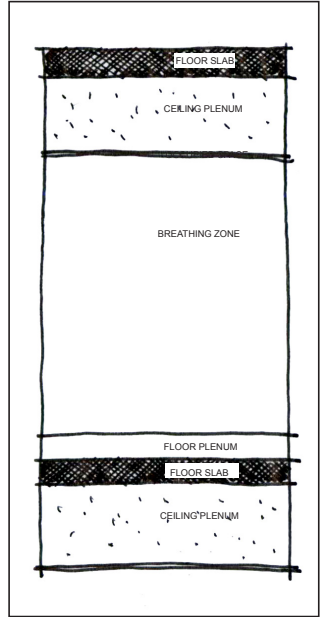
FLEXIBILITY

TIED INTO THE UNIVERSITY OF MEMPHIS STEAM AND CHILLED WATER SYSTEM

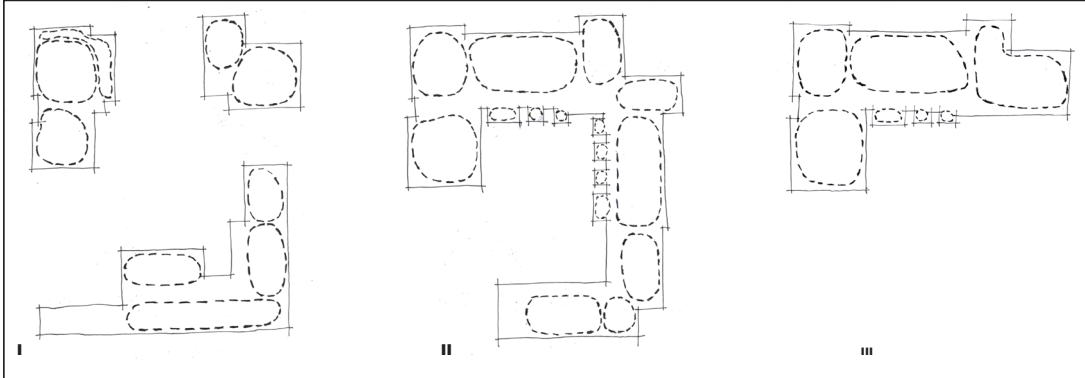
LESS DUCTWORK

ALLOWS FOR TALLER CEILINGS

RAISED ACCESS FLOORS - CONCRETE ACCESS FLOORING PANELS



underfloor-air distribution



under the skin

thermal comfort zones





s-w view



s-e view

SITE ORIENTATION
SMALL SITE DISTURBANCE

INCREASE IN PERVIOUS SURFACES
GREEN ROOFS - COOLING ,LESS WATER RUNOFF
ALLOWING FOR RAIN WATER HARVEST - DRIP IRRIGATION

MAXIMIZE DAYLIGHT USAGE - 100% USERS
CROSS VENTILATION, OPERABLE WINDOWS
TASK LIGHTING - WORK STATIONS, INDIVIDUAL CLASSROOMS

DIFFERENT A/C CIRCUITS - OPTIMUM SYSTEM COMPONENT

PERFORMANCE, GOOD INDOOR AIR QUALITY, ENERGY EFFICIENCY

GRAYWATER COLLECTION - TOILET FLUSHING

Site orientation should support the maximum use of daylight, allowing for cross-ventilation and pleasant views. The building is to become 'living architecture', with its 'all around' usage; it shall support the learning process inside and out. It is to be transparent, supporting views from inside - out and from outside - in, creating interest while promoting security. It is to become an anchoring structure, allowing for security for passersby along the main axes, as well as to its residents. It is to provide easy orientation and access within itself.



s view

OFFERING DIFFERENT PROGRAMS
FOR A BROAD VARIETY OF PEOPLE

EXHIBITS. MOVIES. LECTURES.
WORKSHOPS. OPENINGS. GAL-
LERY TALKS. SUMMER PROGRAMS.
SEMINARS

CAFE. ARCHITECTURE AND MODEL
SUPPLY STORE. LIBRARY. GAL-
LERIES. LECTURE ROOMS. COURT-
YARD

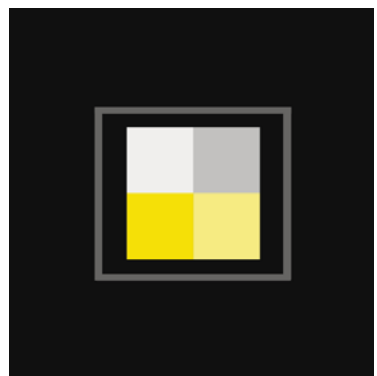
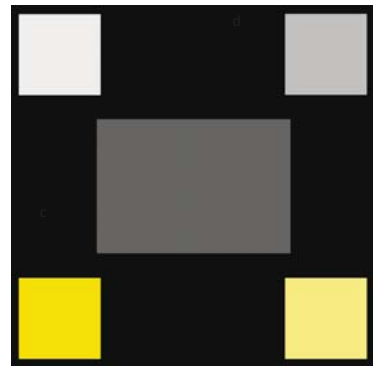
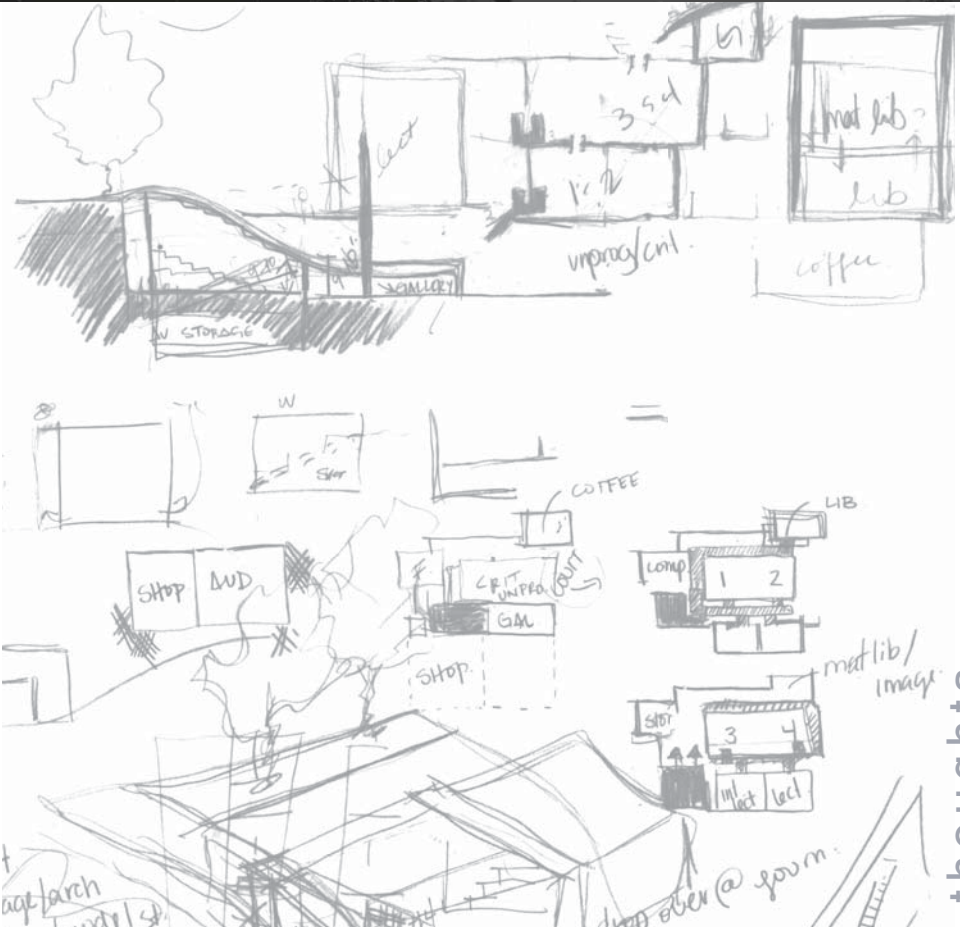
SoA+D

for all

The goal of higher education is human development. The project concept was to design a building for architecture and design students and faculty that promotes human development. The Kolb learning model was used as a study and prototype to construct such an environment. The Kolb model consists of four different learning styles, and each type is represented by multiple students within a higher education environment. They not only learn and synthesize information differently, but prefer different types of teaching pedagogy. What is just recently come to light is how the physical environment effects these styles. This project puts the learner at the center of its core, and surrounds the students with supporting elements. Through circulation, sight lines, natural light, and materials the structure attempts to create different ways and areas of learning creating a 3D dynamic environment that supports human development.

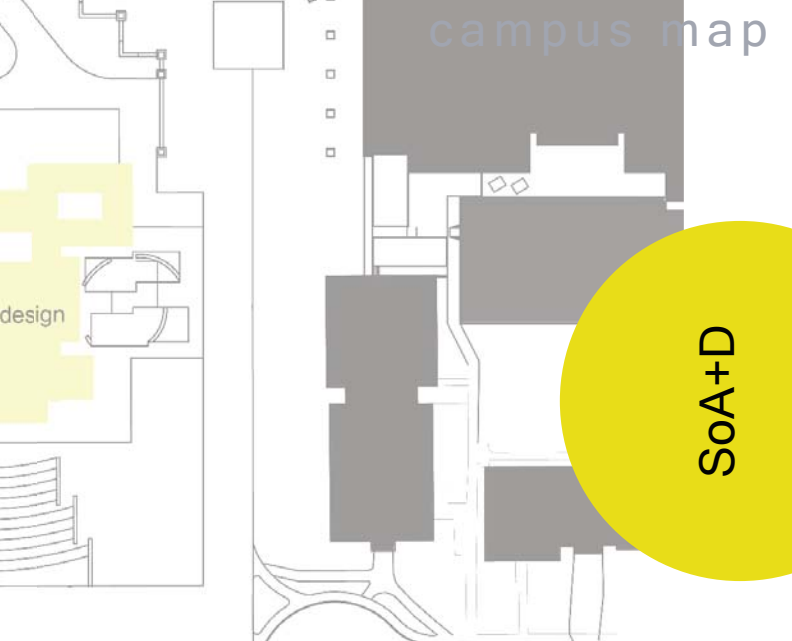
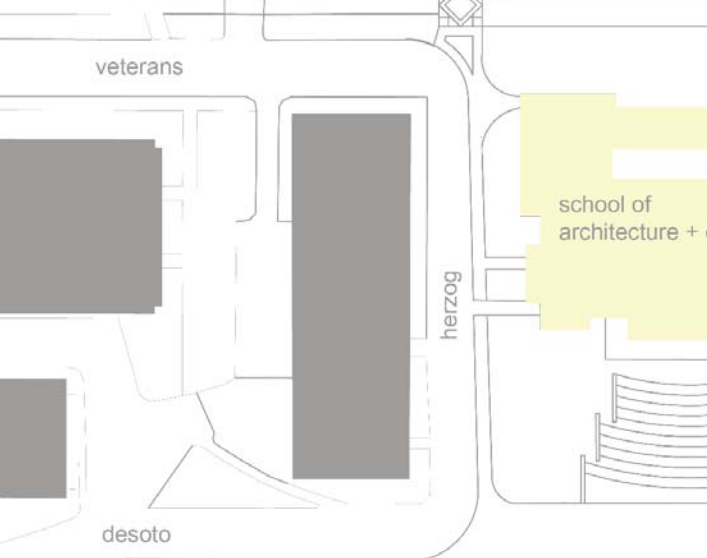
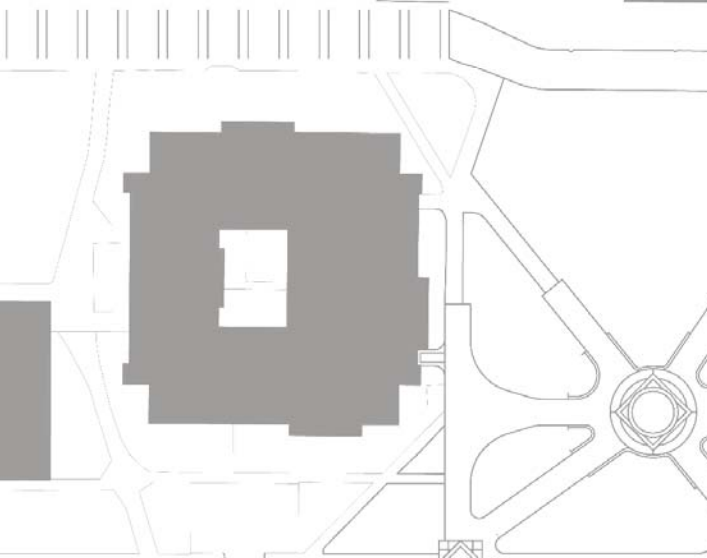
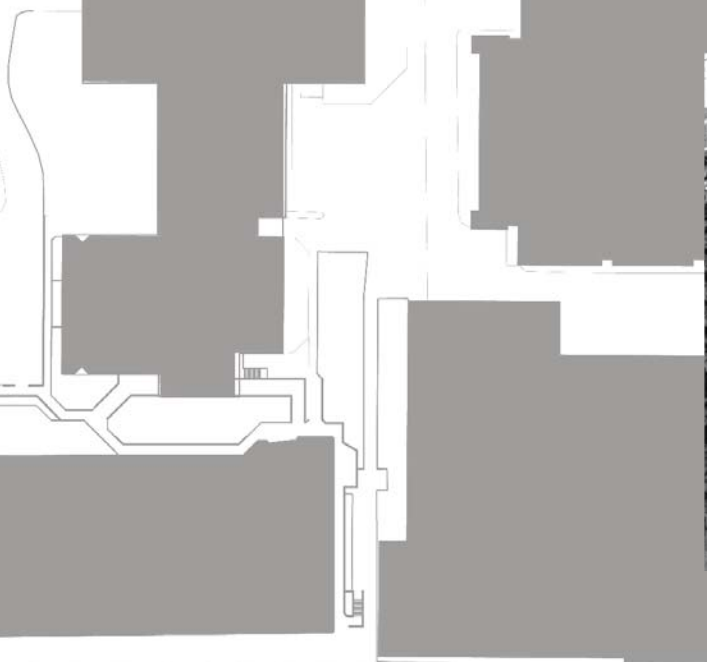


Kristen
David



thoughts

diagrams



campus map

veterans

school of
architecture + design

herzog

desoto

SoA+D

site plan



fp. 01

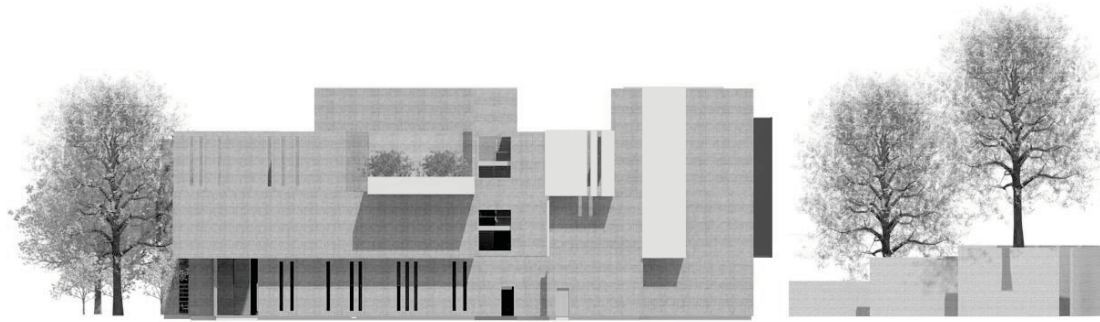
legend

- 1 atrium
- 2 gallery
- 3 library
- 4 cafe
- 5 offices
- 6 shop
- 7 studio space
- 8 computer lab
- 9 image center
- 10 lecture
- 11 critique area
- 12 study room
- 13 garden
- 14 lighting lab
- 15 auditorium
- 16 think tank

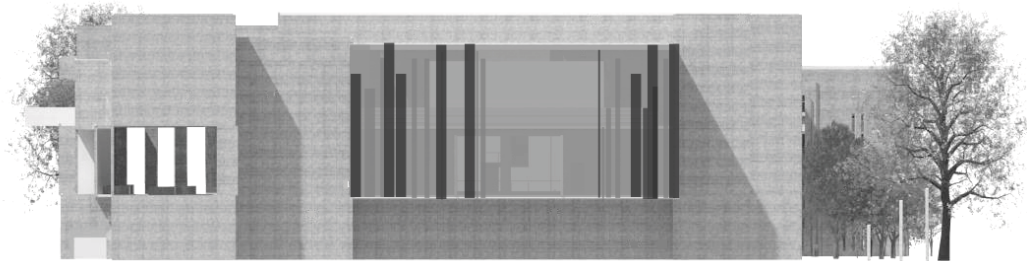


fp. 02





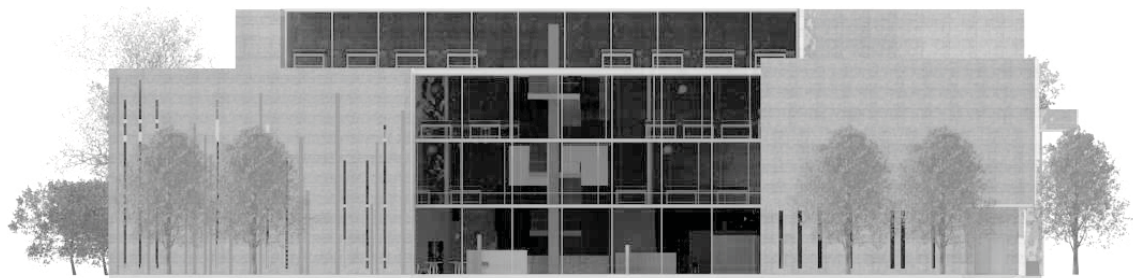
west elevation



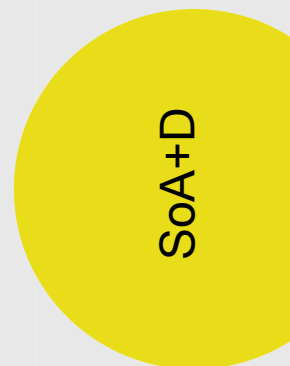
south elevation



east elevation



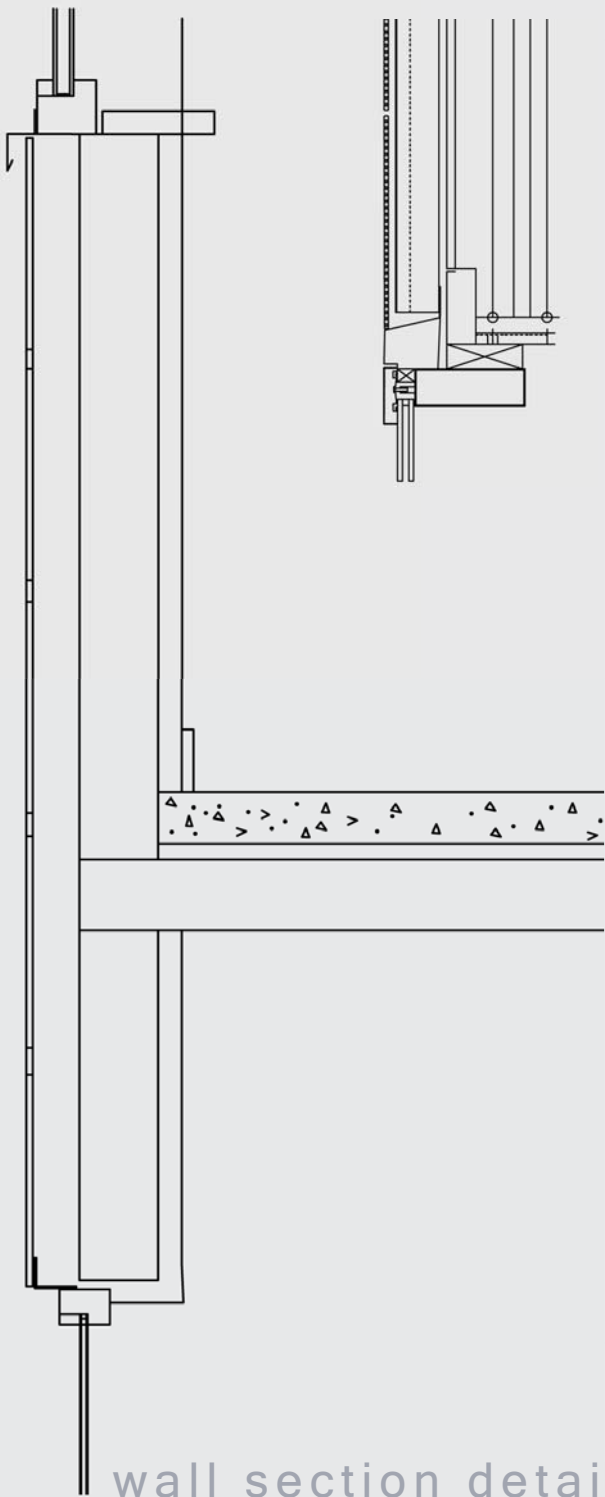
north elevation



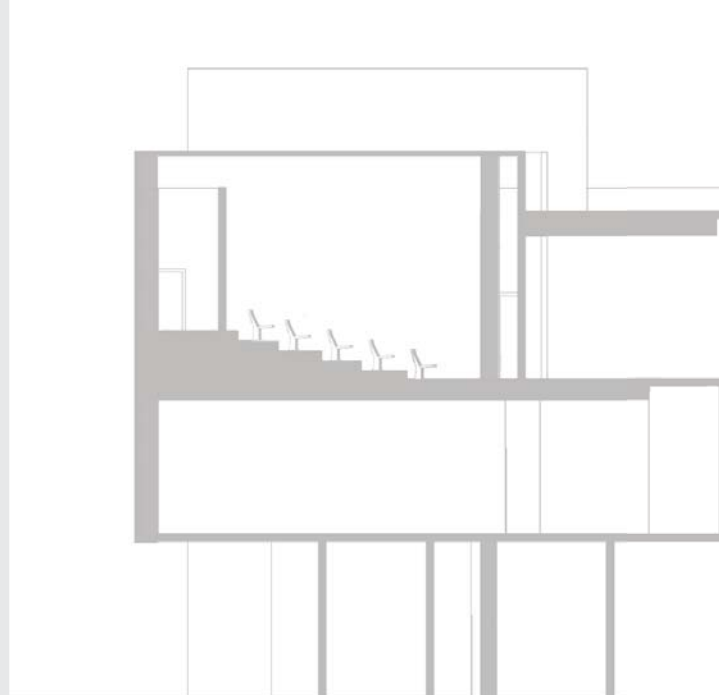
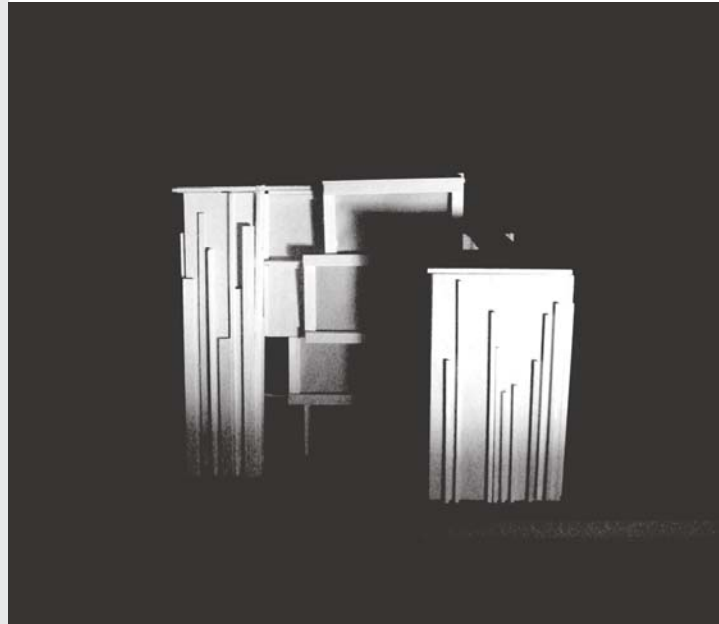
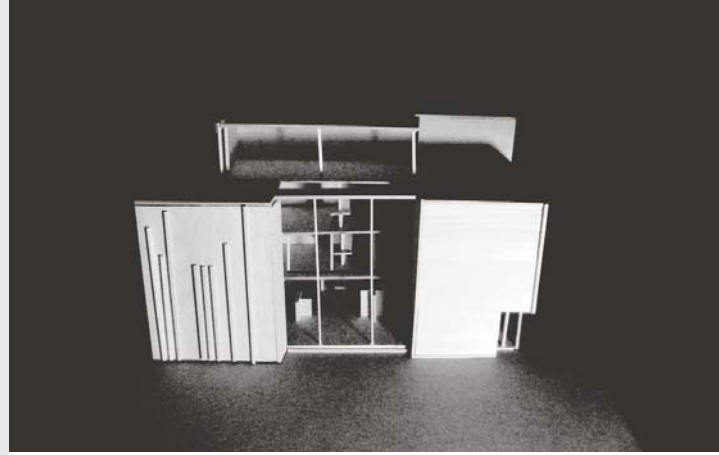




Atio loon: 2
20000000
90

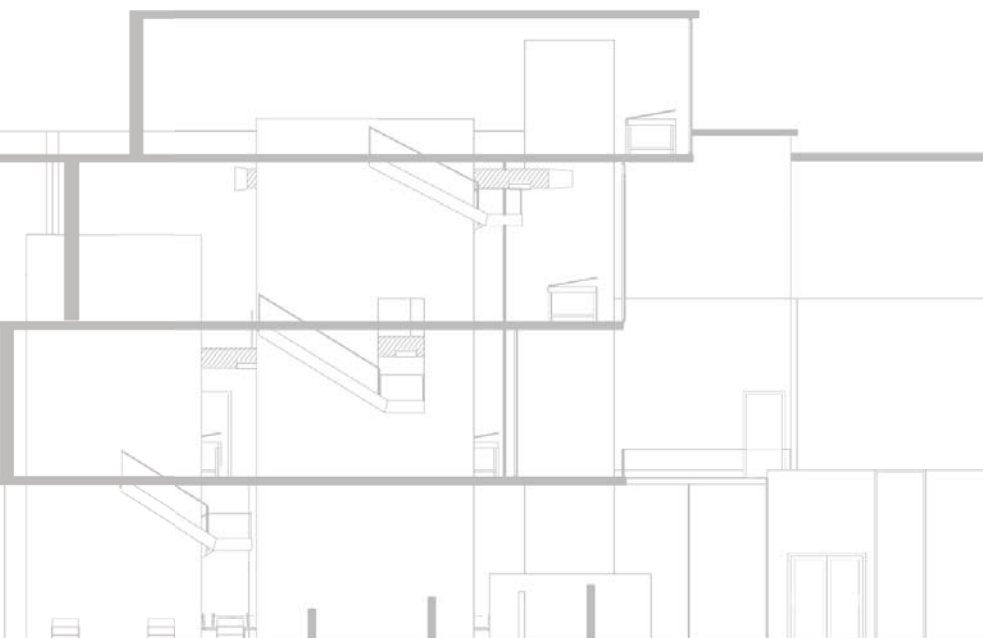


wall section details





HVAC DIAGRAM



ns section

SoA+D

Located on the southwest corner at the union of State Street and DeSoto Avenue lies the first proposed site for the SoA+D. Directly adjacent to the Edward J. Meeman Journalism Building, the site also addresses the Heating and Cooling Plant, Jones Hall, the Tiger Den and the dormitory, Rawls Hall.

Linda Šuhajdová



3700 DeSoto Avenue (current Art Building site)

The School of Architecture + Design, located at the main campus of the University of Memphis, is a place of creative ideas and public interaction. Its goal is to reach out to the local community and enhance it through constant involvement of the students of Architecture and Interior Design with real-world applications. The building was designed to reflect the School's character of transparency. The monolithic concrete Brise soleil of the south façade, while shading the building from the harsh southern sun, acts as a mediator between the students and the community. Its transparency brings public interest into the interactive studios and presentation spaces on the opposite side of the concrete screen.

A large orange circle is positioned in the bottom right corner of the page. Inside the circle, the name 'Šuhajdová Linda' is written in white, with 'Šuhajdová' on the top line and 'Linda' on the bottom line, both rotated 90 degrees counter-clockwise.

Šuhajdová
Linda

Community

The local community, which has been for years expressing interest in the academic events of the students of the University of Memphis, plays a major role in their education. It offers challenges as well as projects for the future designers and architects. The department of architecture and interior design of the U of M brings the scholars the best educational opportunities while offering the city of Memphis its future creative designers. The design of the SoA+D building strives to reflect the importance of the community in the academic world. The main tower, consisting of design studios and presentation spaces, is surrounded by supporting administration and public functions.

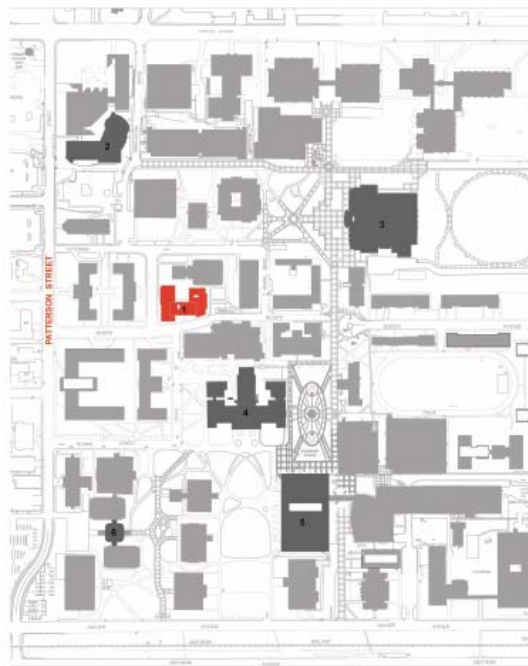




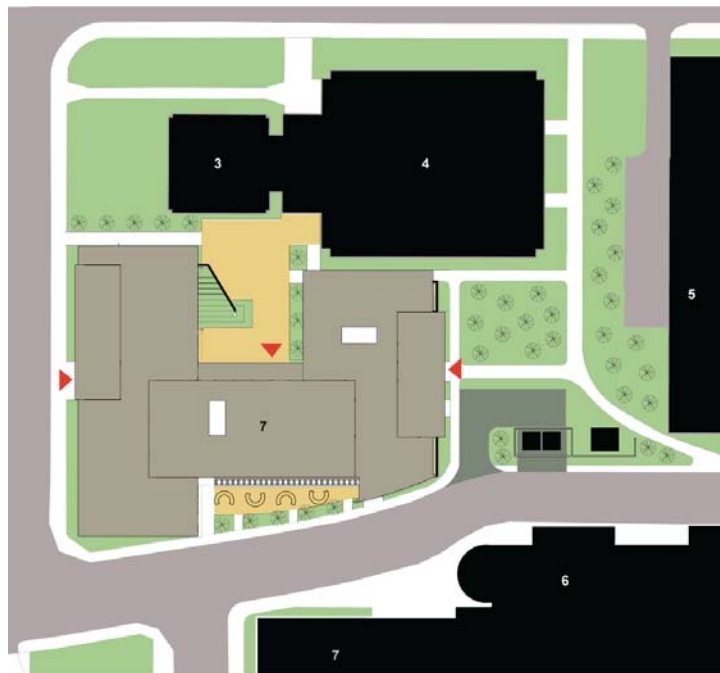
Site Analysis

The School of Architecture + Design, located at 3700 Desoto Avenue, is the site of the former Art Building on the main campus of the University of Memphis. Patterson Street, which is the current western boundary of the campus, is a major north-south axis, separating the campus from the surrounding residential and mix-use community. The site's proximity to Patterson Street has a potential to establish public interaction with the University of Memphis. The new SoA+D building, separated from Patterson Street by a layer of student housing, presents itself as a new community anchor.

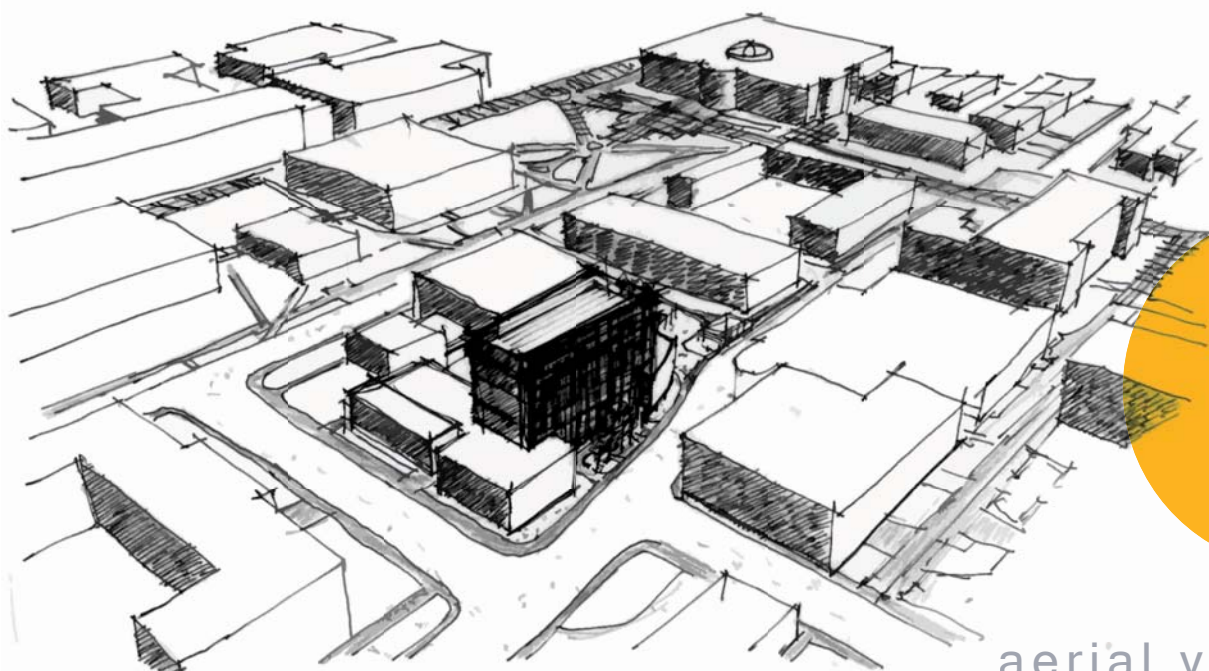




campus plan



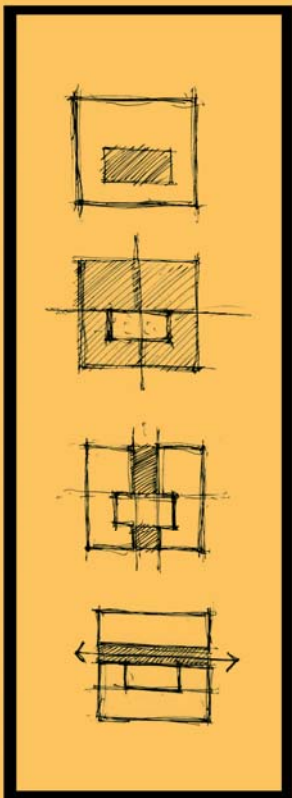
site plan



aerial view

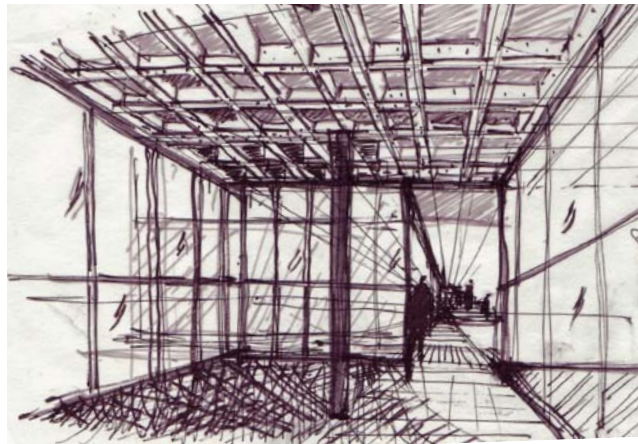
SoA+D

diagrams



Transparency

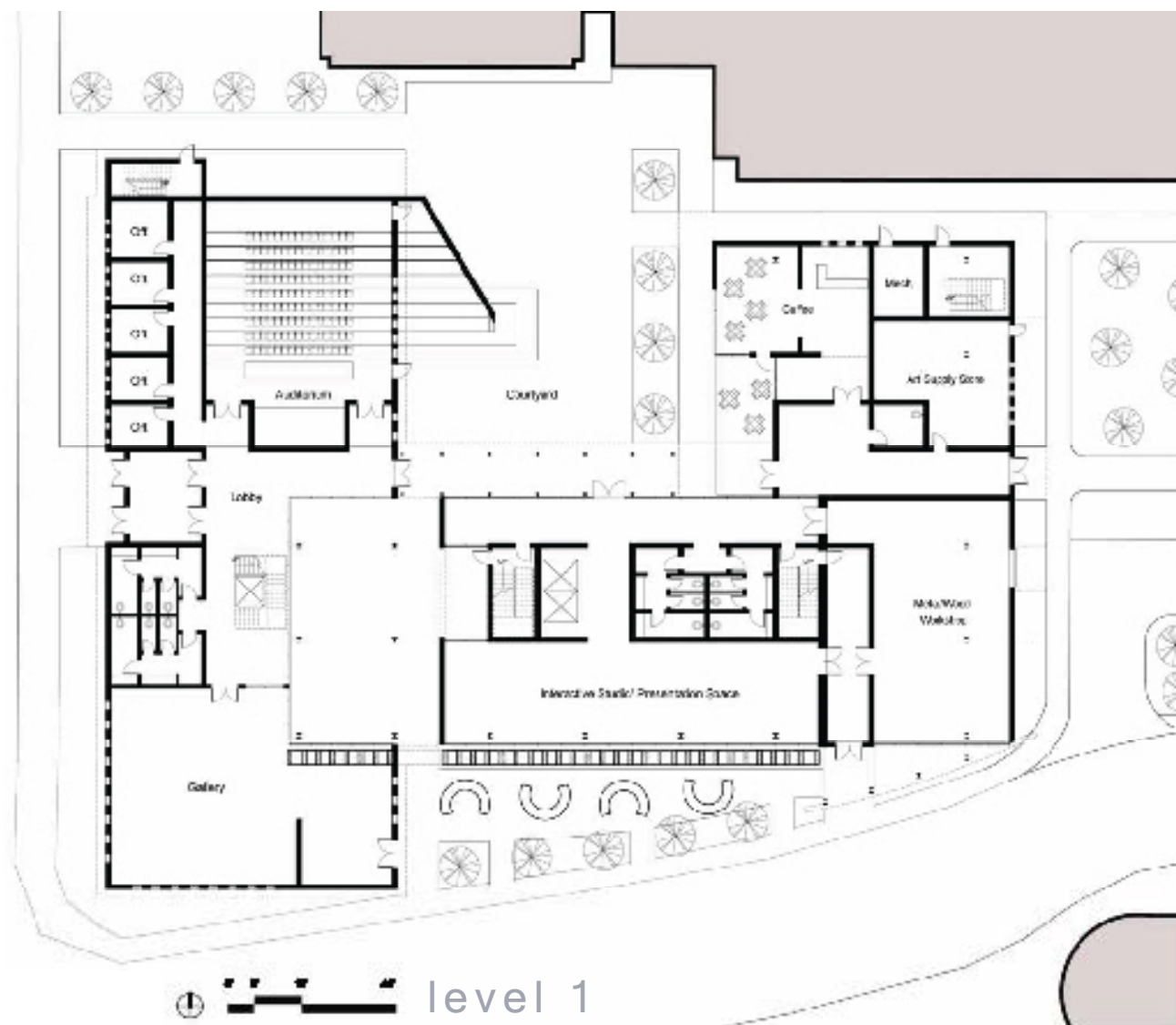
The building was designed to reflect the program's intentions of transparency and public interaction. The concrete screen of the student tower's south facade permits natural light to filter into the design studios while allowing the passerby to peek into the exhibits of the indoor and outdoor presentation spaces.



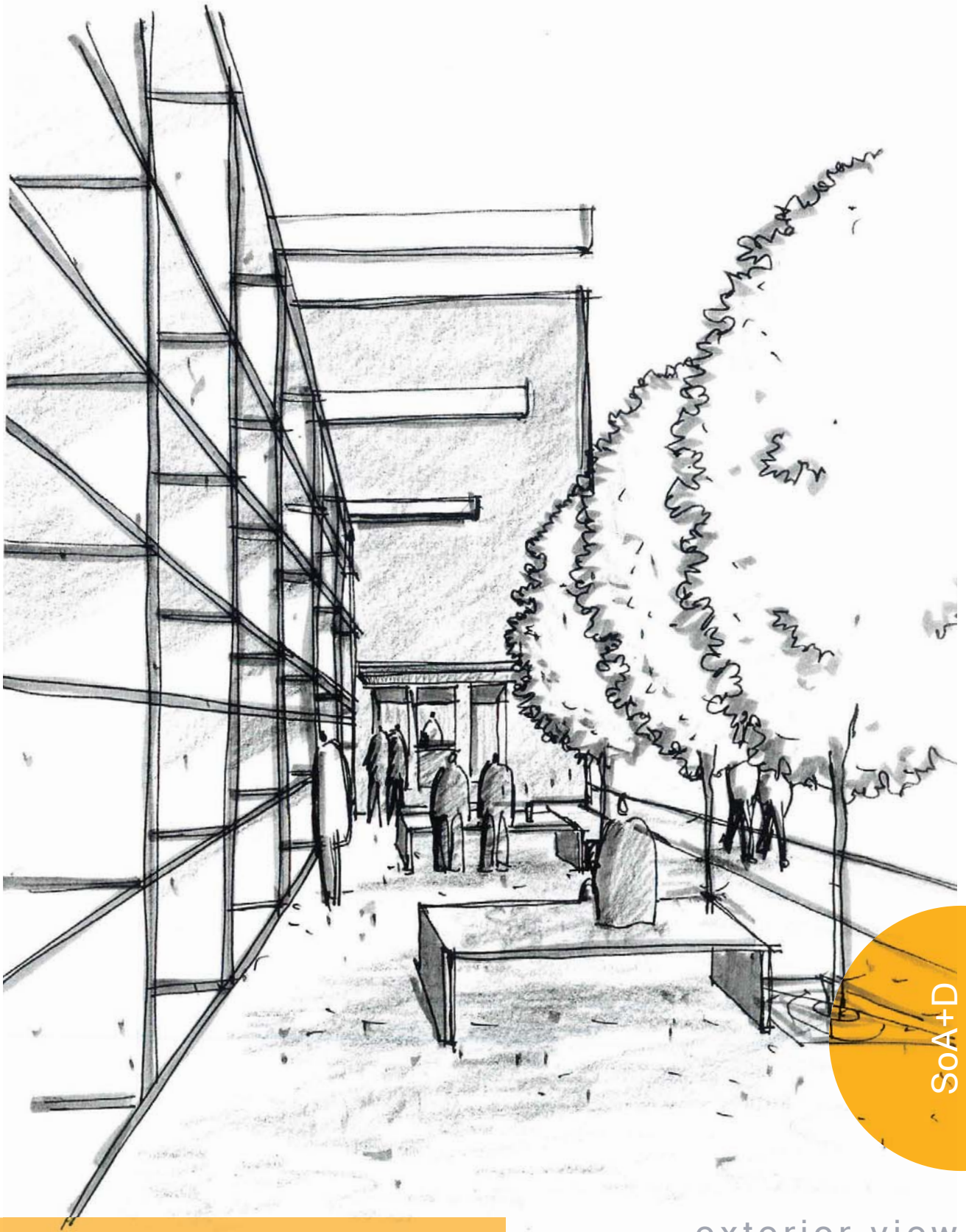


SoA+D

interior view



south elevation



SoA+D

exterior view



level 2



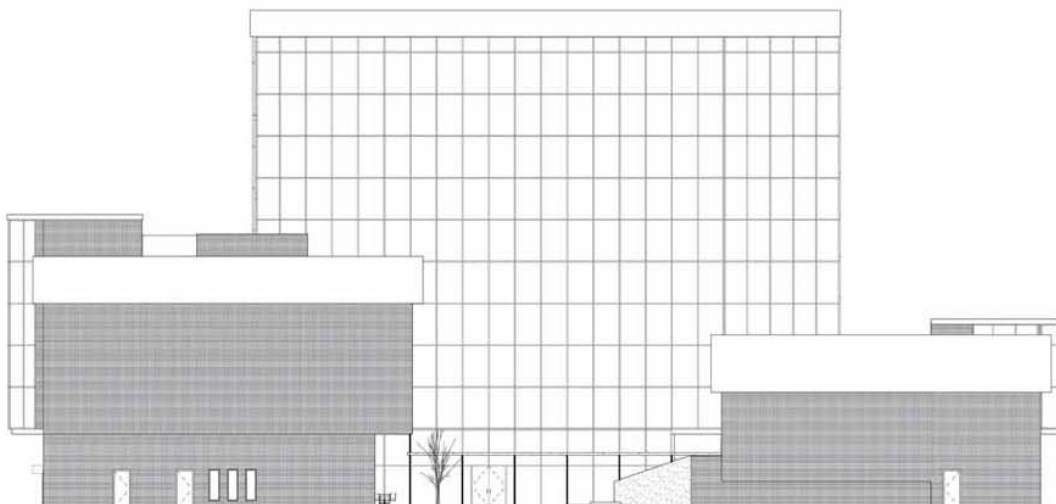


SoA+D

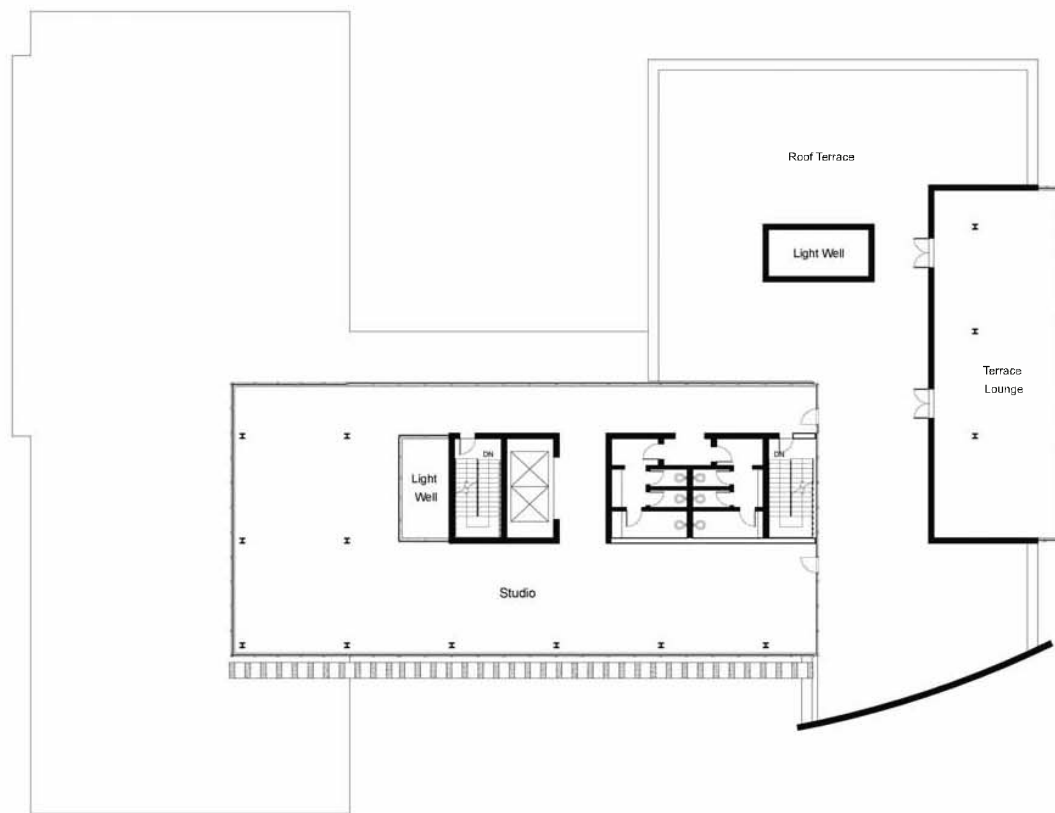
exterior view



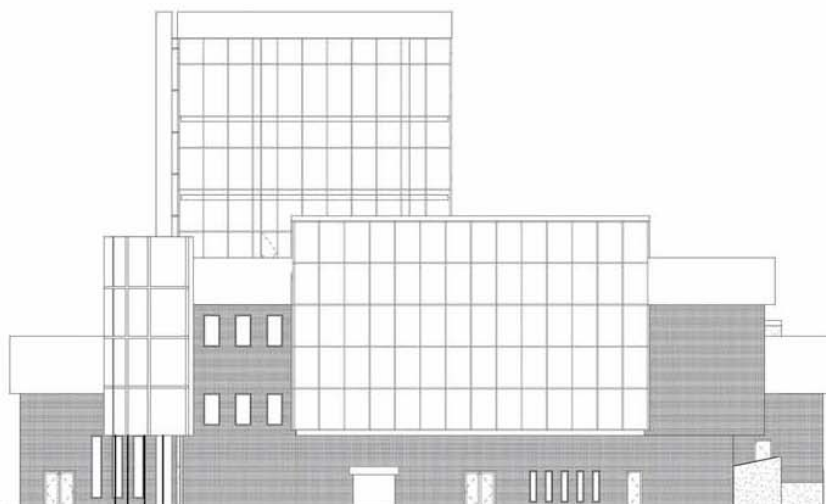
level 3



north elevation

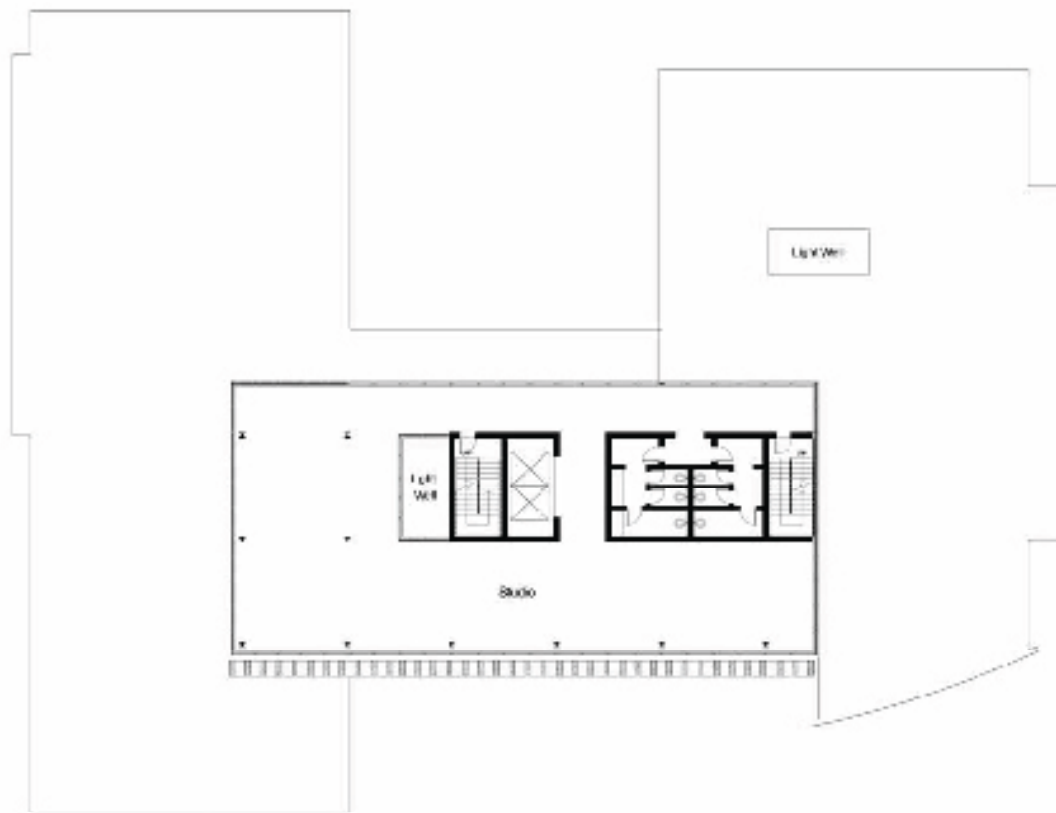


level 4

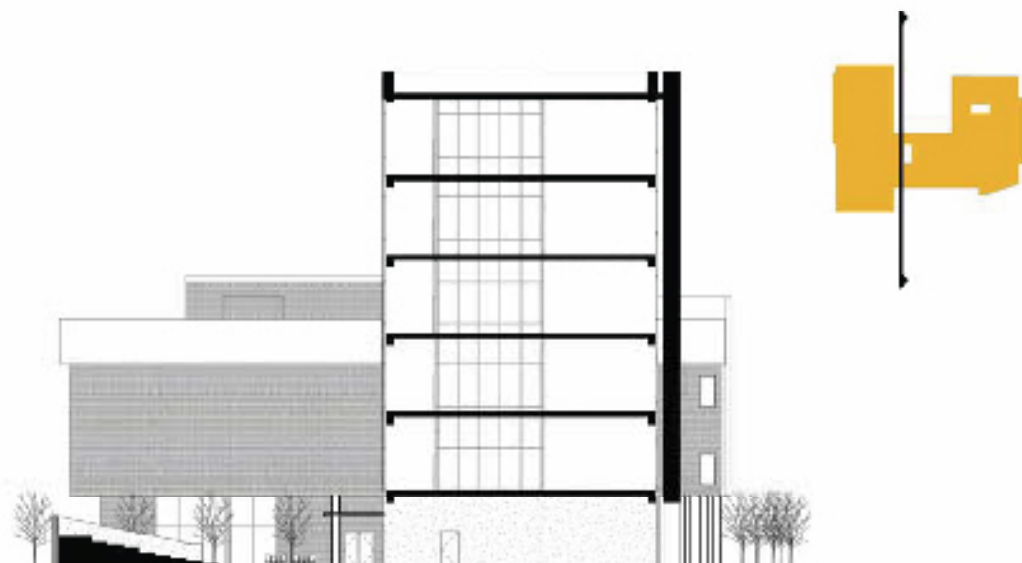


east elevation

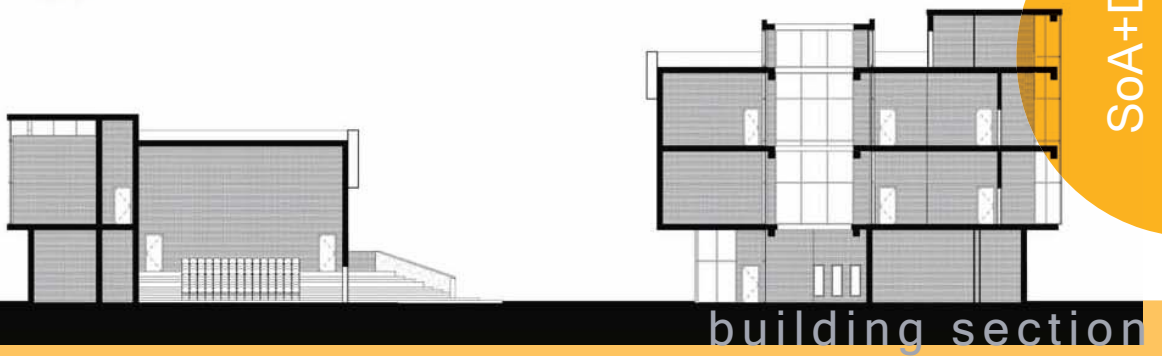
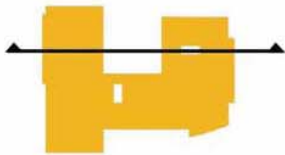
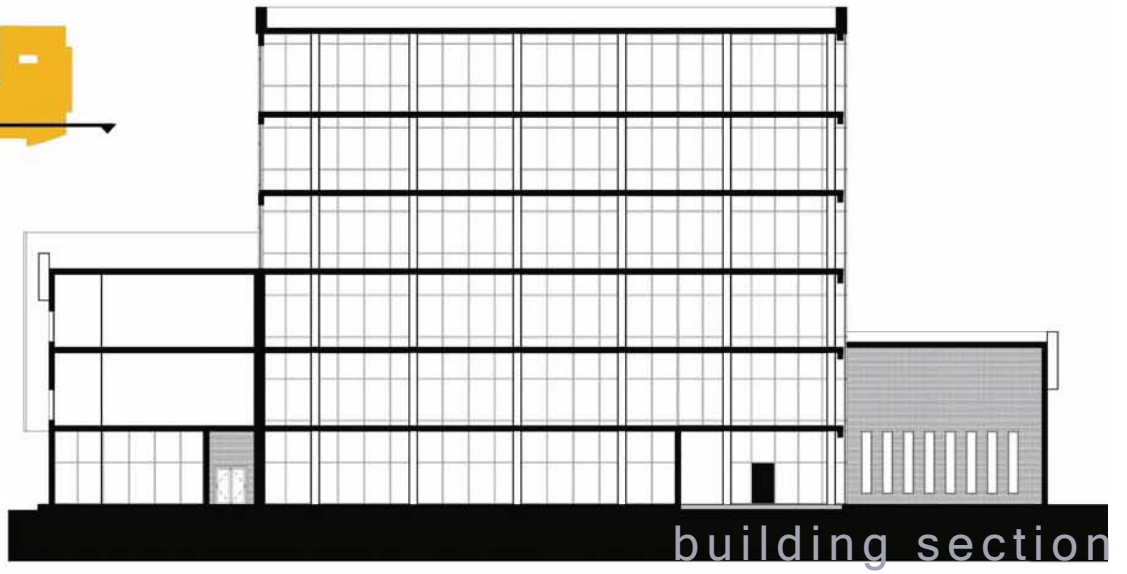
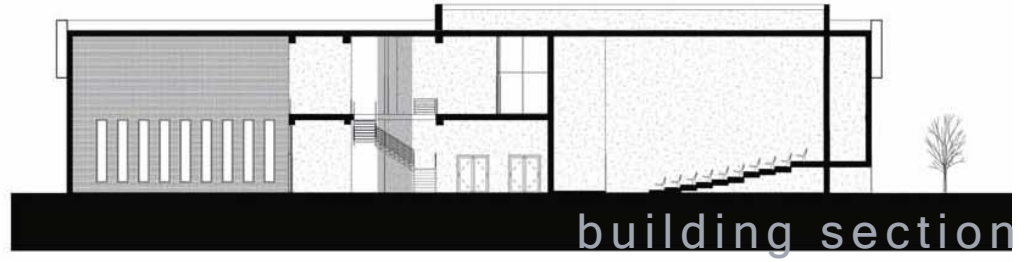
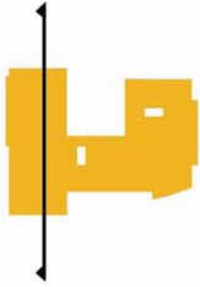
SoA+D



levels 5-6



building section



SoA+D





SoA+D