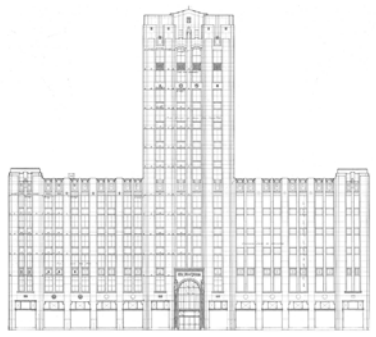
Multi-Story/
Multi-Purpose Design



321 W. Lafayette Blvd
Detroit, MI 48226

DETROIT FREE PRESS BUILDING

INDE 401 | Monday, December 9th, 2019 | Professor Heidi Schlegel

NTID SCHOOL OF DESIGN COMING TO DETROIT

The Building Circa 1925

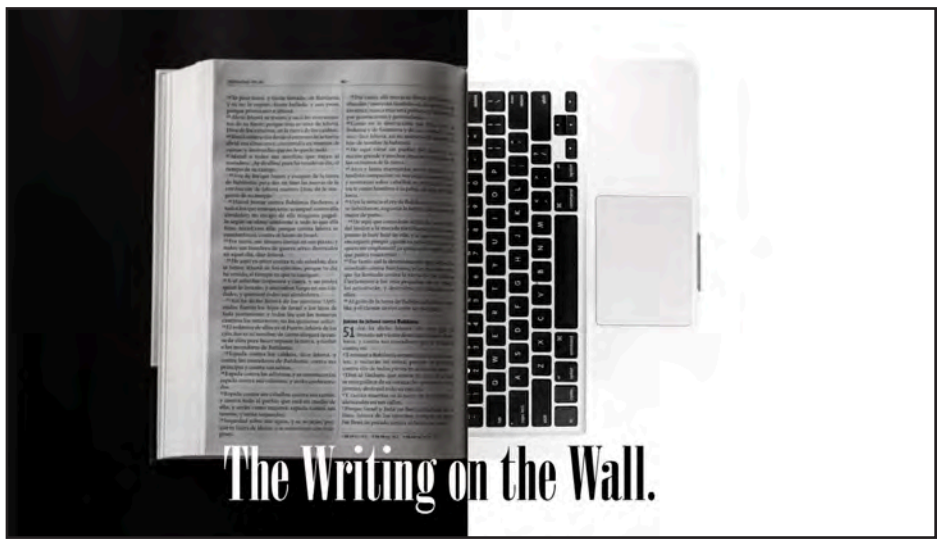
This historic 14-story high-rise is located in Detroit, Michigan. The now abandoned high-rise has varied story sizes, a tower and has two basement levels. The building is a steel frame with a limestone façade.

Objective

To develop a greater understanding of more complex programmatic thinking with a human centric and global view while furthering abilities to work within a team construct. To apply building codes to a design project. To develop the ability to interpret and work with complex base-building systems with an emphasis on vertical circulation systems and mechanical distribution through a multi story structure.

The Writing on the Wall

Combining the history of the Free Press Building & the new global standard of education is where The Writing on The Wall begins. Deaf Culture relies on visual communication, and is an important aspect of their community, this language will be implemented in the environment. New and innovative solutions will set this education experience apart from others.



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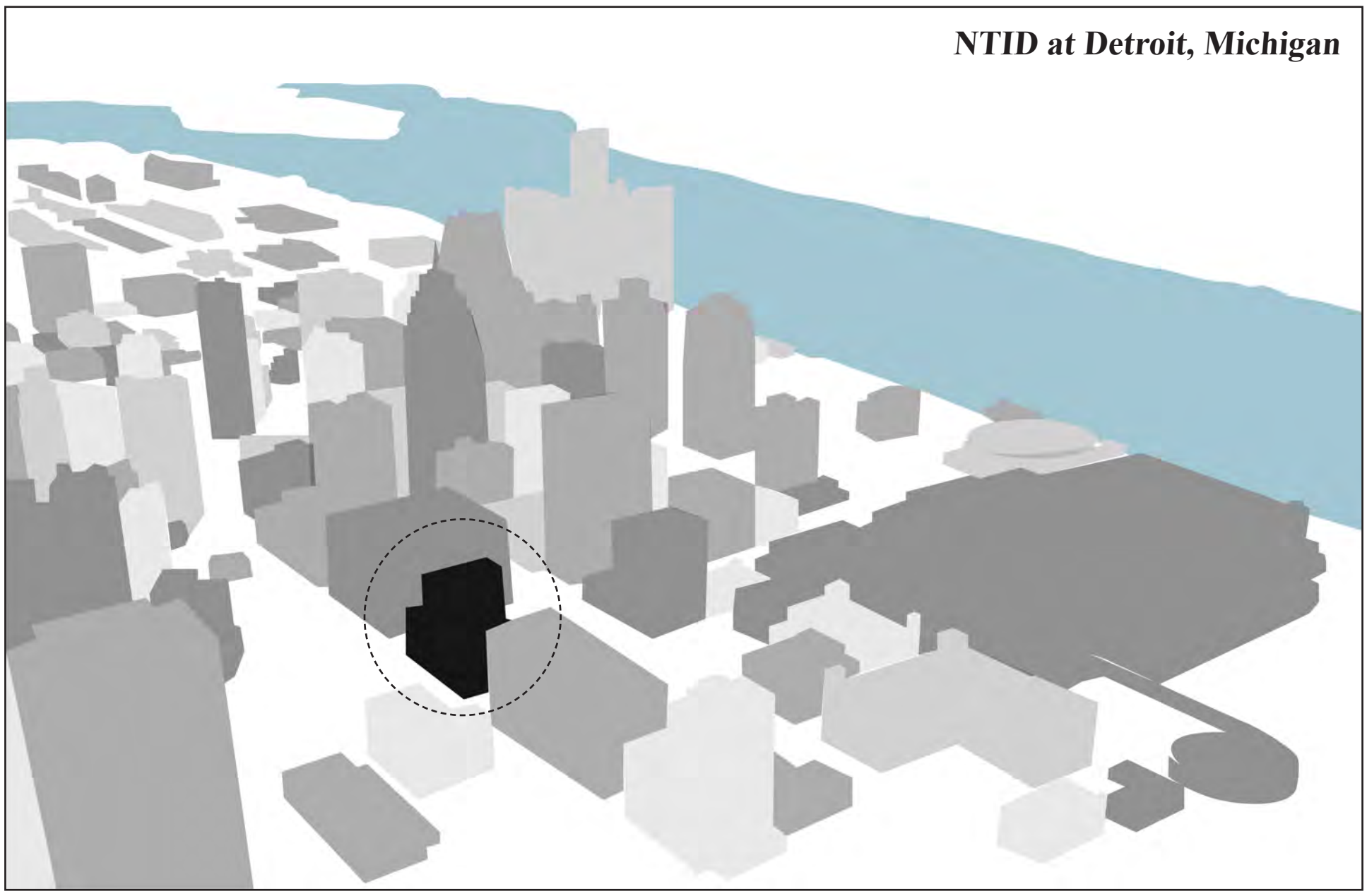
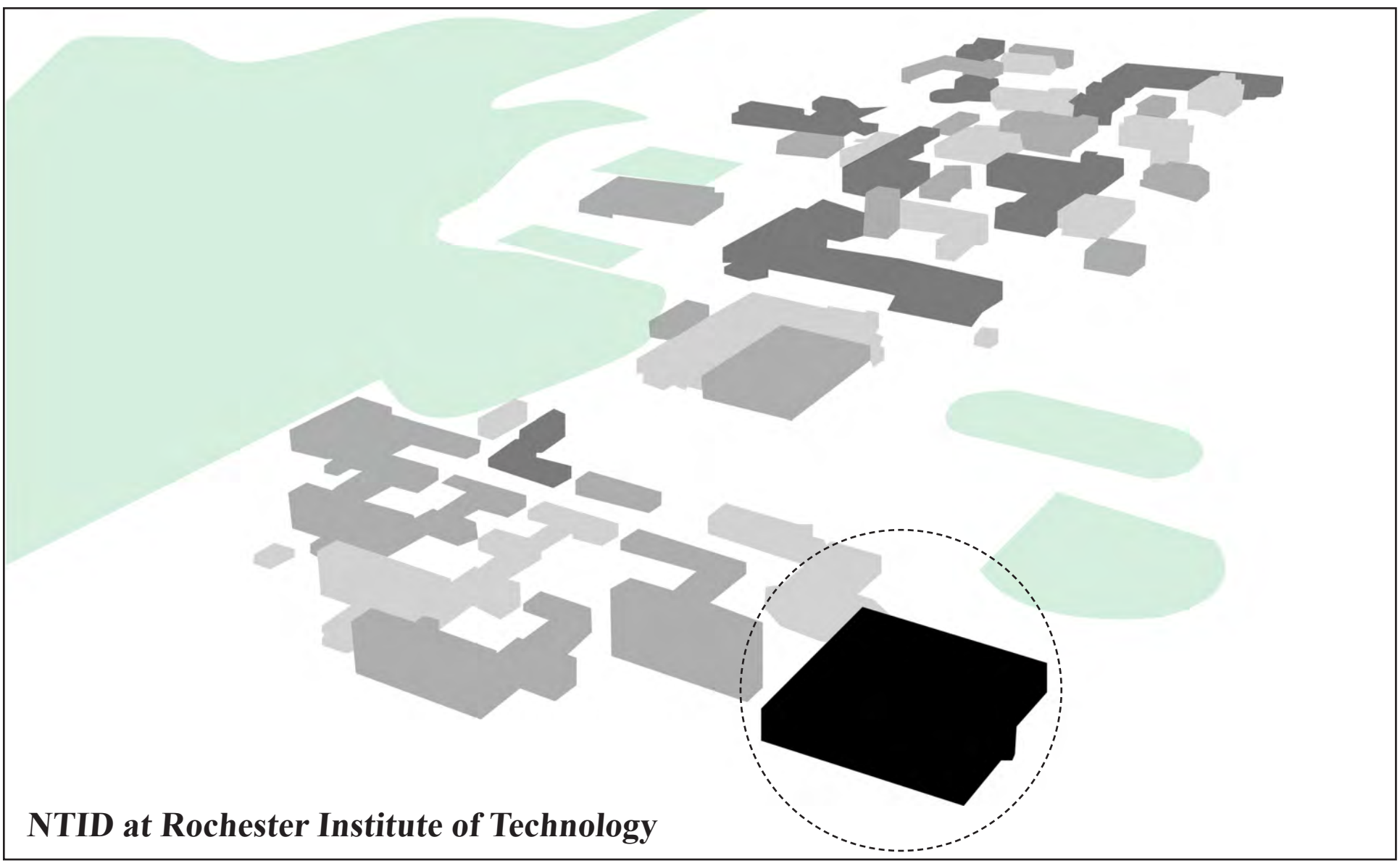


NTID at Detroit, Michigan

NTID is one of the nine colleges of Rochester Institute of Technology. 1,100 deaf or hard of hearing students, come to campus every year to take advantage of the benefits of an RIT/NTID education. The opportunities for deaf and hard-of-hearing students at RIT/NTID are unmatched by any university in the world. Career-focused programs that reflect the needs of today's employers, work experience gained through the university's cooperative education program, faculty who specialize in educating deaf and hard-of-hearing students, outstanding graduation and job placement rates, and unparalleled access and support services all set RIT/NTID apart.

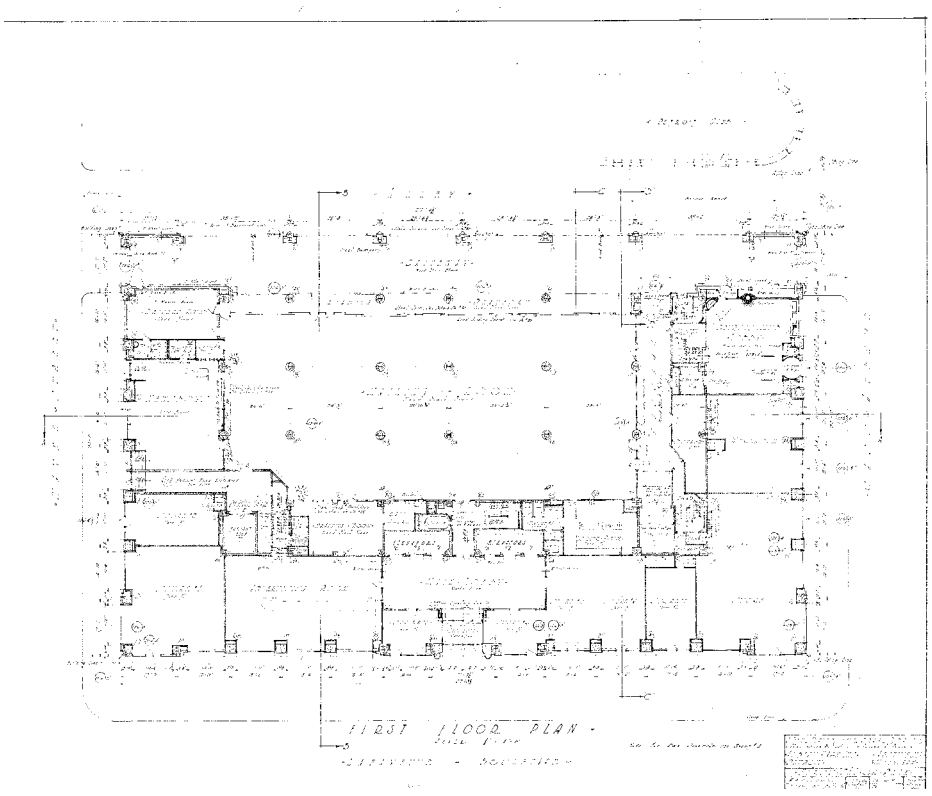
*From project brief



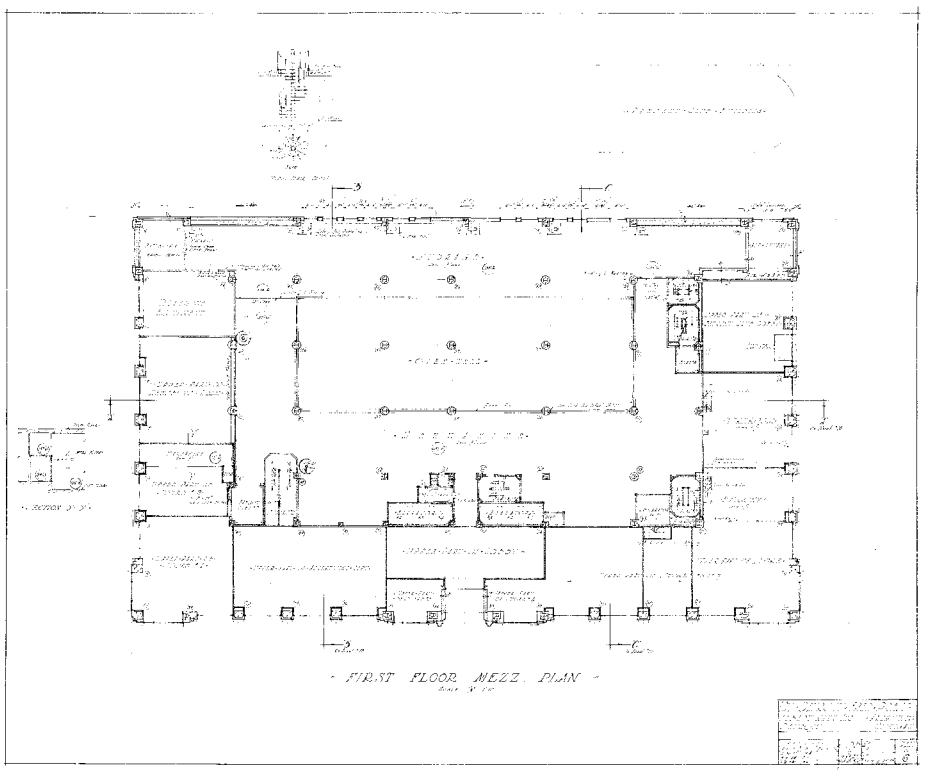
NTID at Rochester Institute of Technology

Original Drawings of Building

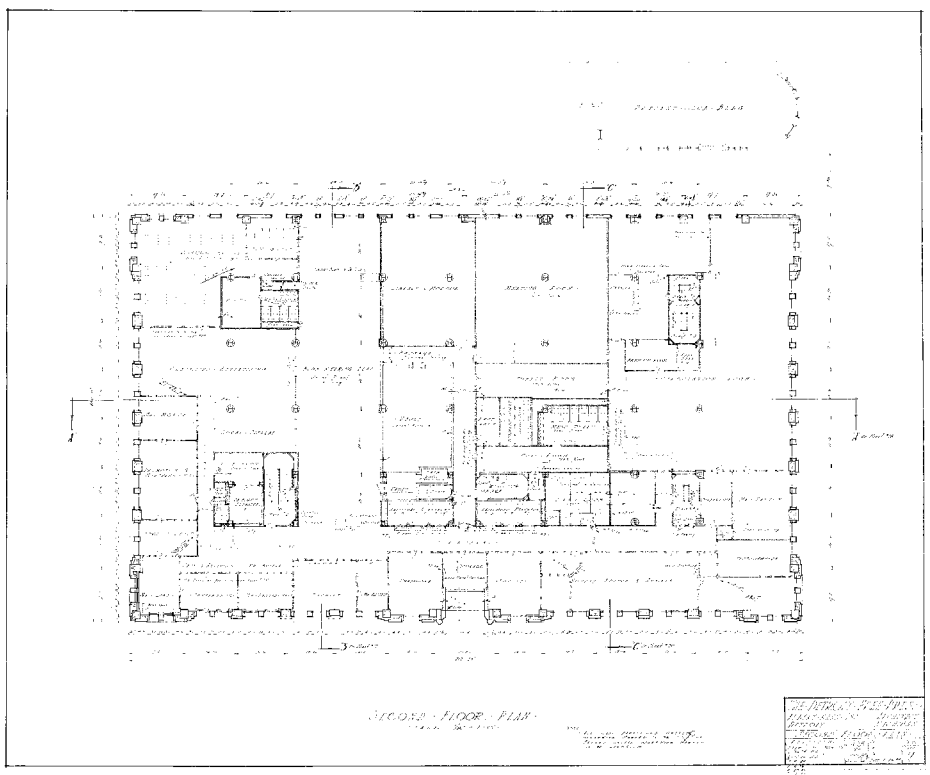
First Floor



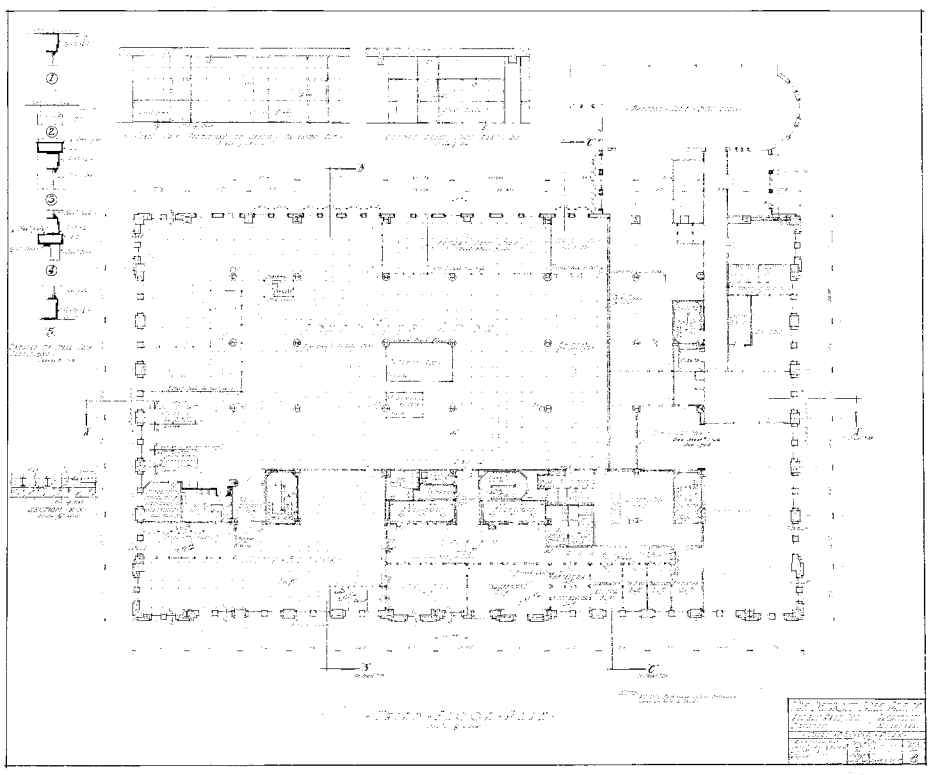
Mezzanine



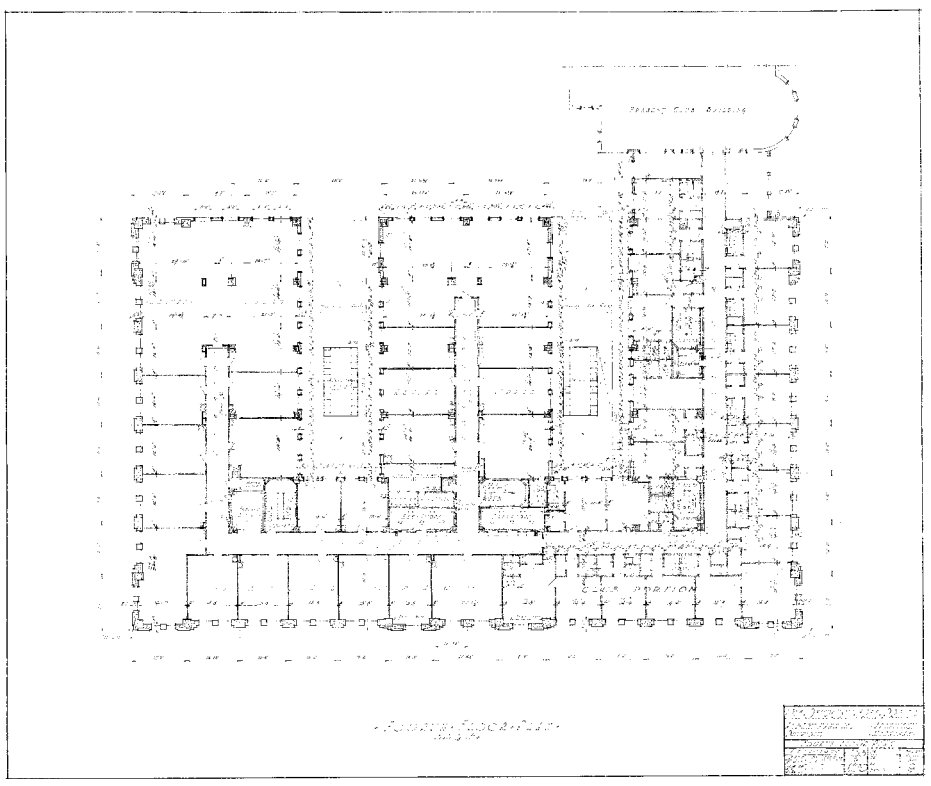
Second Floor



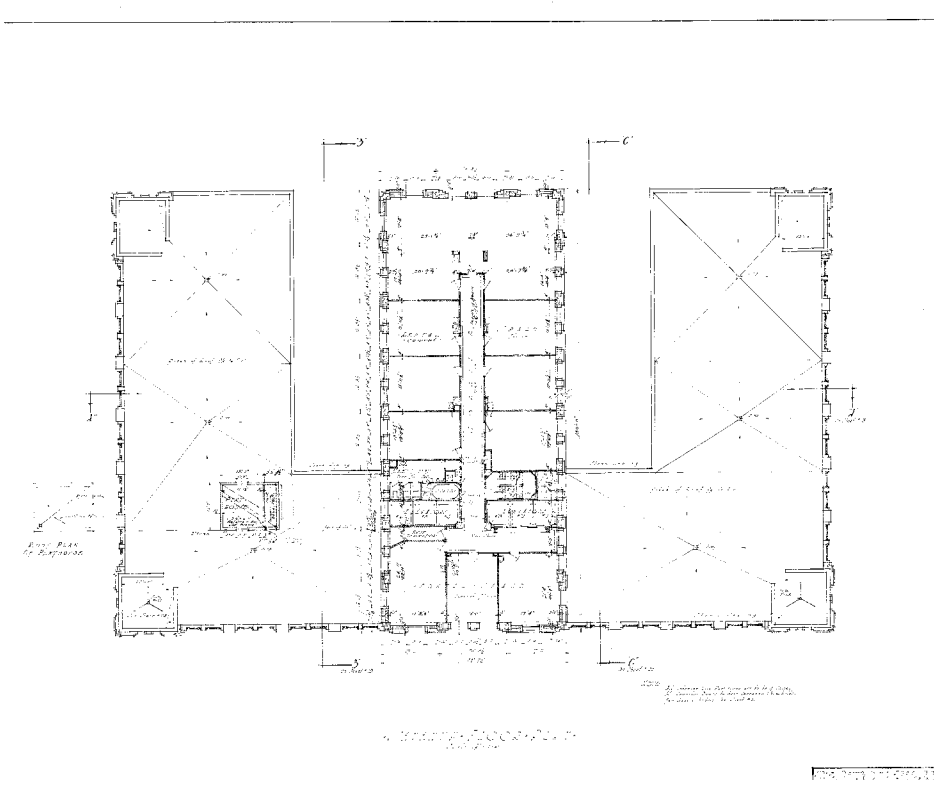
Third Floor



Fourth, Fifth, & Sixth Floors



Seventh Floor



Interior Photos of Existing Conditions

The gallery cafe on the first floor is the idea behind the concept and inspired "the writing on the wall".

This original barrel vault ceiling will still be maintained with a modern style in the new lobby.

A gallery will be located in this space to display work from students or visiting artists.

No changes will be made to the original entrance.

Wood paneling will be re-purposed and used for the security desk in the lobby in order to preserve the history of the building by using the original material.

The exterior will remain the same.

Interviews Conducted with RIT College of Art and Design Chairmen

Graphic Design
Nancy Bernardo

Nancy was the chair of graphic design for many years at RIT. An interview was conducted with her on September 3rd to discuss teaching methods, model for education in the future and needs of the students.

We discussed how students work within the major and there preferred methods such as sketching and storyboarding, scanning and printing and digital work.

Her vision for the future classrooms for graphic design is having more interaction within the different disciplines of design.

3D Digital Design
Shaun Foster

Shaun is the chair of 3D Digital Design at RIT. He is new to the position but has years of experience in the field. He considered himself an expert grant writer and just received a $100,000 grant for this major at RIT.

In his interview he talked about the spatial requirements of 3DDD such as a computer lab, lecture room, presentation area and a VR/AR room.

He discussed how all disciplines of design should blend together in a seamless way to feed off each others knowledge.

Industrial Design
Josh Owen

Being the chair of industrial design he is proud of the current ID studio at RIT, it is a great example of what studios should look like.

He wishes to see some sort of espresso bar and retail location within the studio to keep an informal and formal balance for conversations between faculty, students, prospect students and alumni.

Wishes to implement more real world experiences at the student level, incorporating an industry, academic and sponsored research balance.

Interior Design
Mary Golden

As the chair of interior design, she has implemented a studio culture much like the ones you would see in real world. She thinks that the future of education will not be strictly on the computer and a human interaction with design is always necessary.

Balance is an important aspect of studio culture and having many different opportunities to have conversations both formal and informal.

Social and global awareness is also very impactful in any design disciplines and she would like to see more students involved in this.

(Bernardo, 2019; Foster, 2019; Golden, 2019; Owen, 2019)

The 5 Major Touch Points Between Deaf Experience and the Built Environment

"Architecture can play a big role in making the deaf community from isolation to acceptance. Deaf and hard-hearing people have become a group that cannot be ignored. According to World Health Organization data in March this year, 466 million people worldwide lost their hearing; by 2050, this number will exceed 900 million."

Space & Proximity

Some contributing factors to space and proximity include: communicating in Sign Language, and how this requires more space to communicate visually. There is also a pro - tactile movement.

It is important to enhance a clean visual connecting, by standing in a distance to see facial expressions and ensure that there is enough space left for sign language.

You need space to talk to someone using verbal communication, same goes for visual communication, you just need more space in between individuals.

Sensory Reach

Deaf individuals have extremely sensitive situational and environmental awareness because of hearing loss. They can be uncomfortable when they can't see what is happening. Vision is the primary way for them to receive information.

Shadows, movements, vibrations and facial expressions are needed, when these are implemented in design it can "extend" a persons sight.

DeafSpace principles say it is best for a Deaf individual has greater than 180 degree vision. In classrooms, a circular seating arrangement is better than the atypical layout of rows of seats.

Mobility & Proximity

Maintaining visual communication is key for designing space for deaf and hard of hearing individuals, they tend to maintain wide distance to keep visual communication. Hallways and sidewalks should have enough width to satisfy their needs and avoid obstacles throughout a space.

Space should be able to guide deaf and hard of hearing individuals while they are walking and communicating. It could help individuals to avoid tripping and falling. Implementing color contrasts can guide directions and texture transitions can reinforce travel.

Acoustic Surroundings

Acoustic consideration for Deaf/HOH individuals say that hearing devices have each individual hear different sound levels.

"It is important for buildings to be structurally designed to offset vibrations. For example, old houses are infamous for their creaking noises, which produce vibrations that disturb Deaf individuals."

Reverberation needs to be reduced in buildings, along with muting of background noises, to minimize interference with hearing devices and other sensitivity to sounds/vibrations. Hard surface materials make reverberation bounce while soft surfaces absorb some of the reverberation.

Light & Color

The Deaf community may experience more eye strain than others. Soft green and blue tones are the best choices as background colors. The reason is that soft green and blue tones contrast against various skin tones, which will cause less eye strain.

Light is also an important factor for the Deaf community because when the lighting is poor or too bright it may cause eyestrain or headaches. Soft, diffused lighting & natural lighting is best.

Shadows, backlighting and glare are also considerations to have while designing.

(*DeafSpace*, n.d.; Desroches, 2017; Dillan, 2019; Hurley, 2016; Jenning, 2010; Korkki, 2014; *Living*…, 2017; Meyer, 2018; Trillingsgaard, n.d.)

*Works Cited referenced on last page

IDEATION

Where Did the Concept Come From?

Typeface design is an example of breaking out of a grid, negative space and placement.

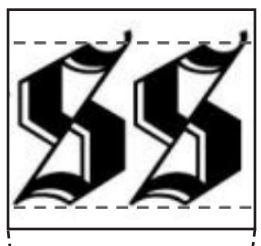
This design became the beginning of our concept and how to break out of a grid, in this case the existing columns of the building.

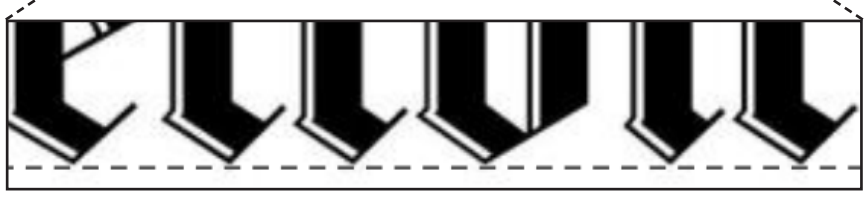
The negative space in this typeface is implemented into the conference rooms and classrooms.

The design of the Detroit Free Press typeface is shown throughout this entire project in large architectural form and small intricate details.

Room corners are based off of the angle of the *apex*.

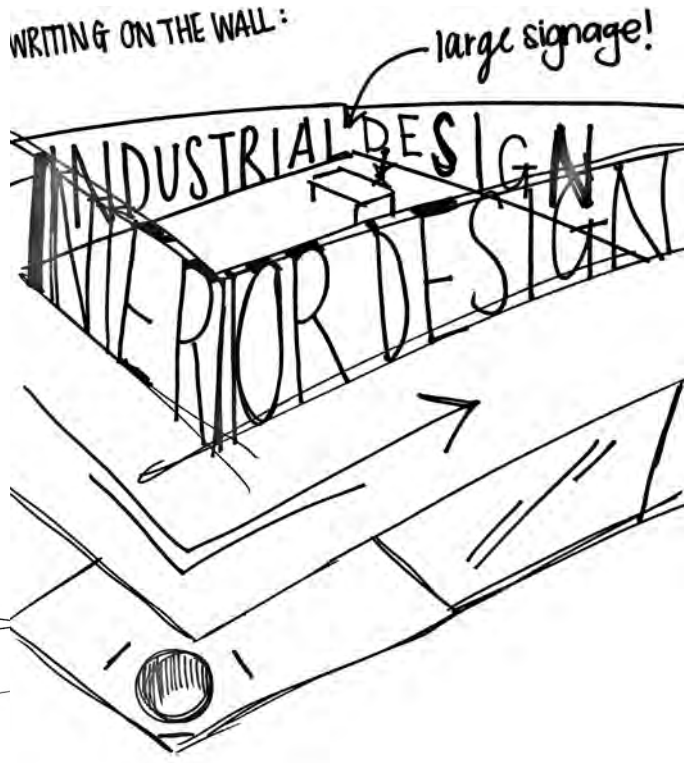
Classrooms and computer labs are based off of the angles in the 'S'

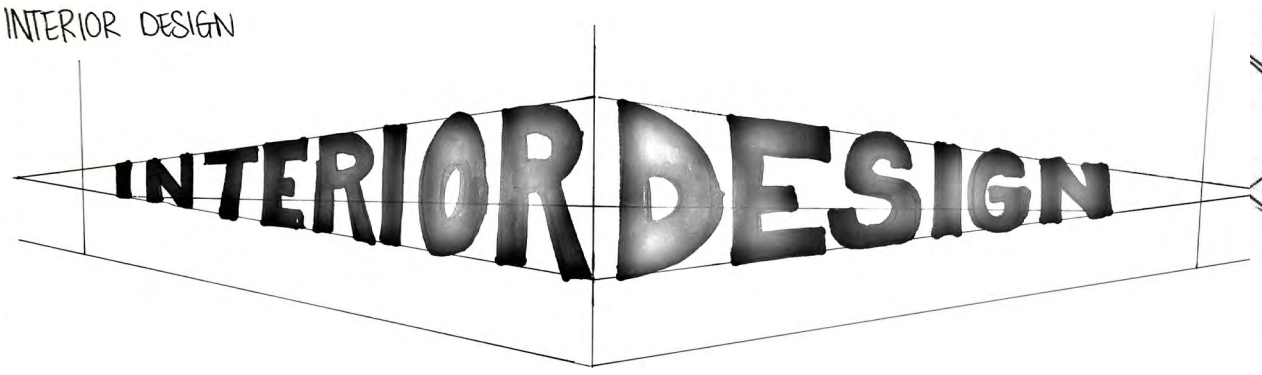


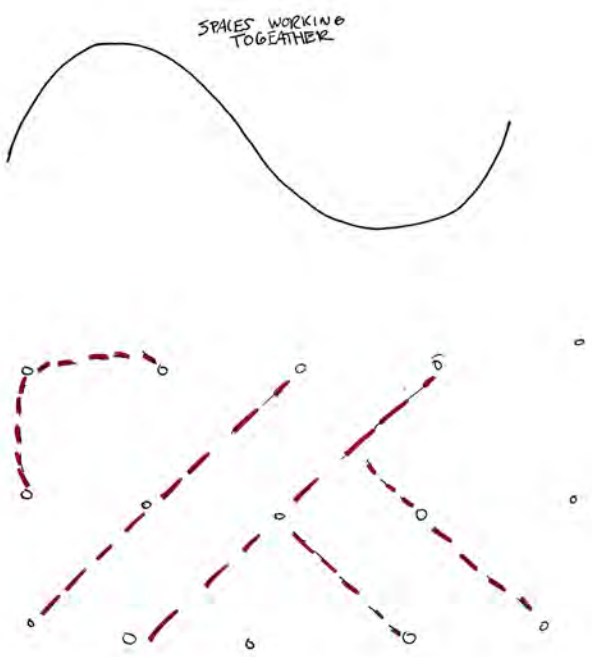


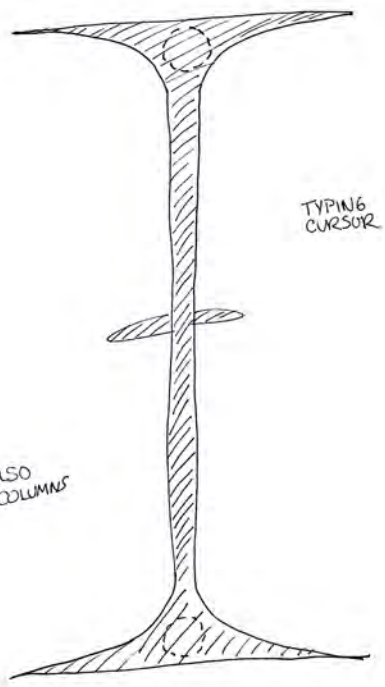
The angles between the bottoms of letters are replicated in the architecture of the conferences rooms located on the second and third floors.

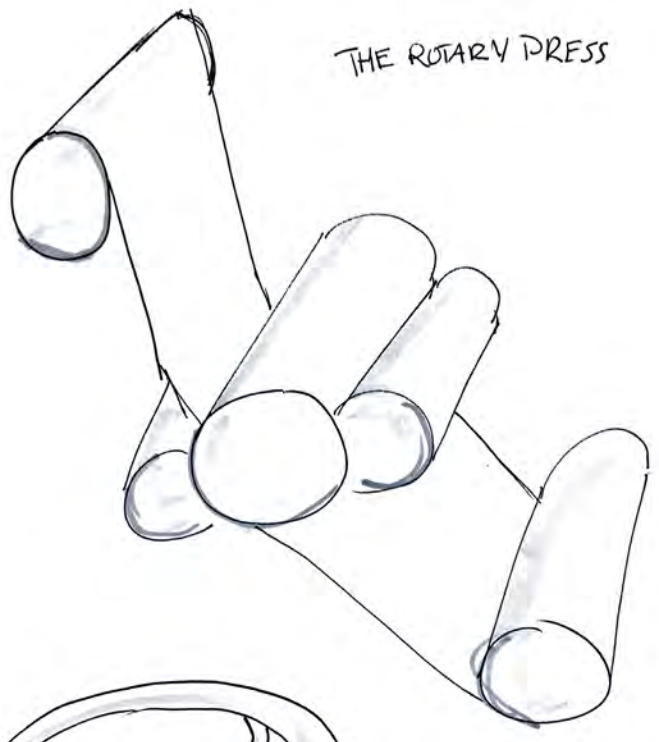
Process Work: Sketches and Ideation

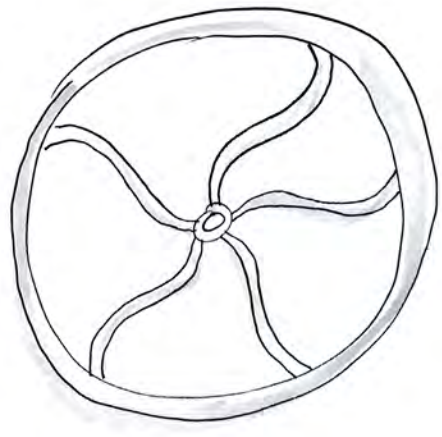












Typography

space

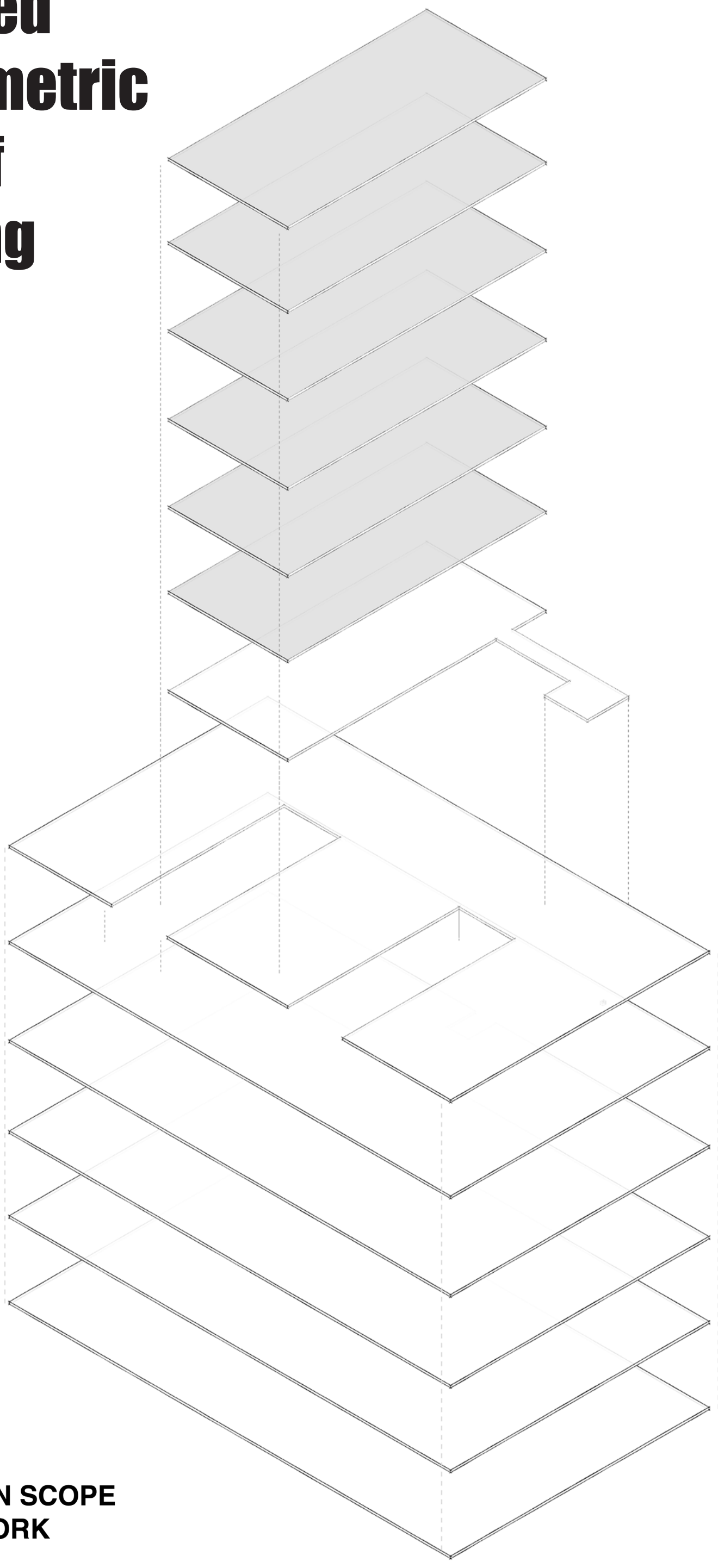
ascender line

baseline

decender line

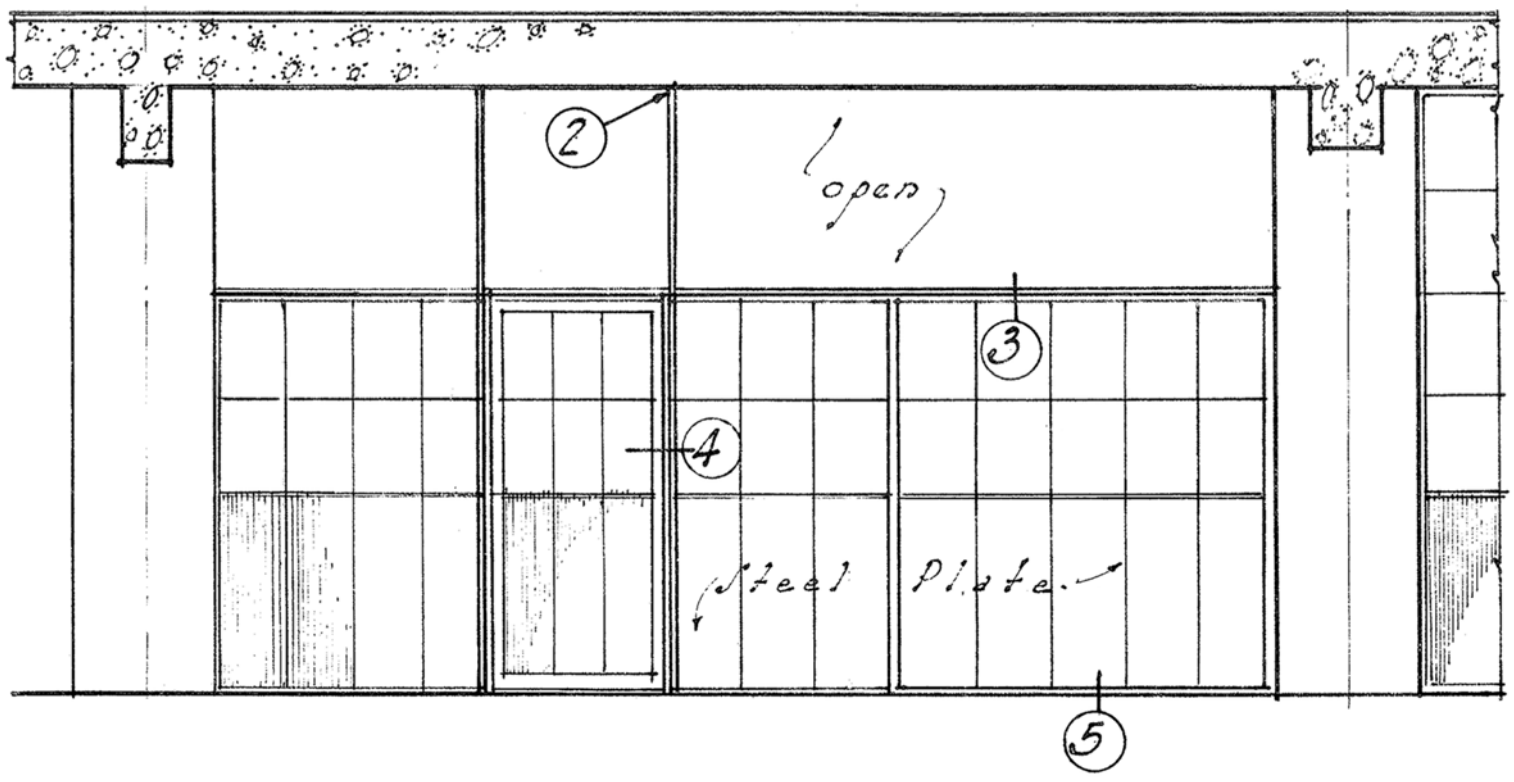
DESIGN DEVELOPMENT

Exploded Axonometric View of Building

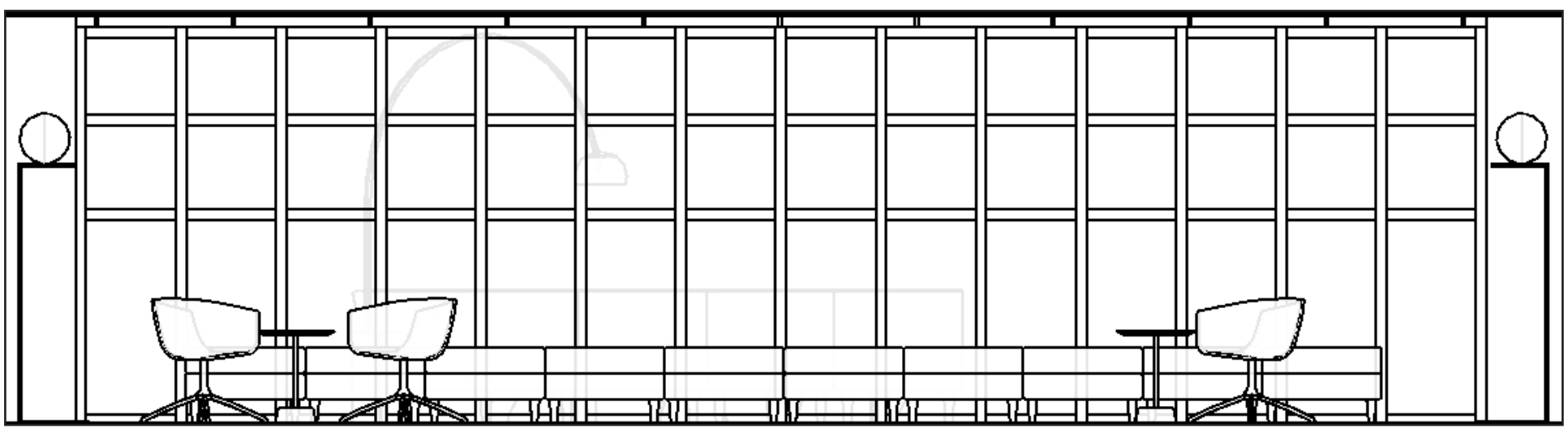


NOT IN SCOPE OF WORK

Original Steel Sash Partition and Spiral Stair to be Incorporated Into Design



RECORD PRINT SHOP PARTITION
Scale 1/4"=1'-0"



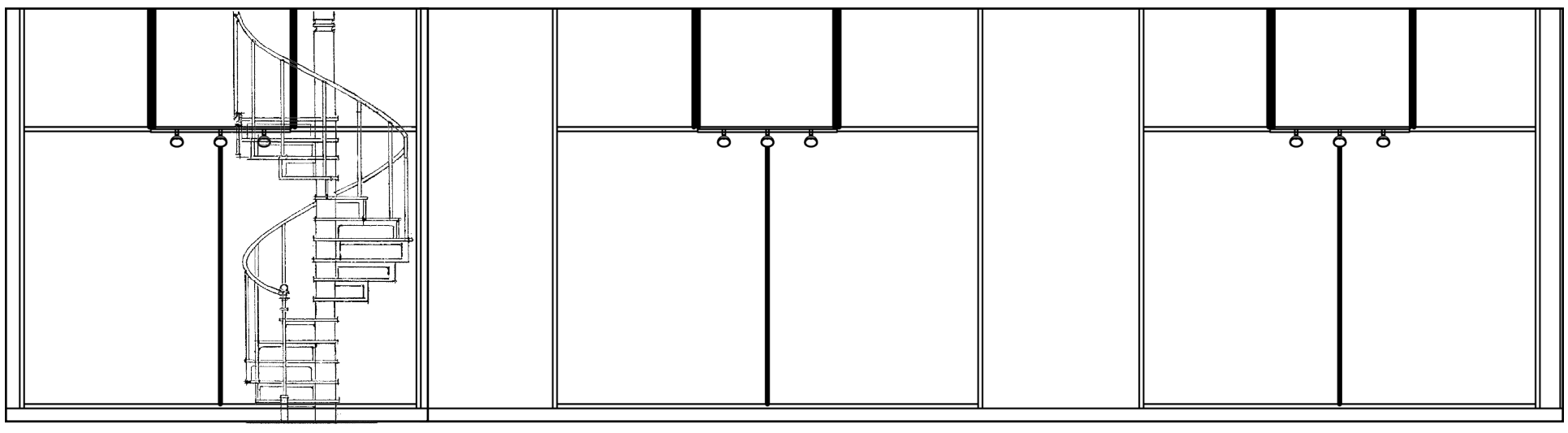
New location of curtain wall in shared space of first floor

In the original building, the curtain wall was located on the third floor as part of the record print shop.

To tie in with the concept and preserve the rich history of the building, the curtain wall has been moved to the shared space.

Originally, both spiral stairs connected the first floor to the mezzanine. Now, they will serve as a visual connection.

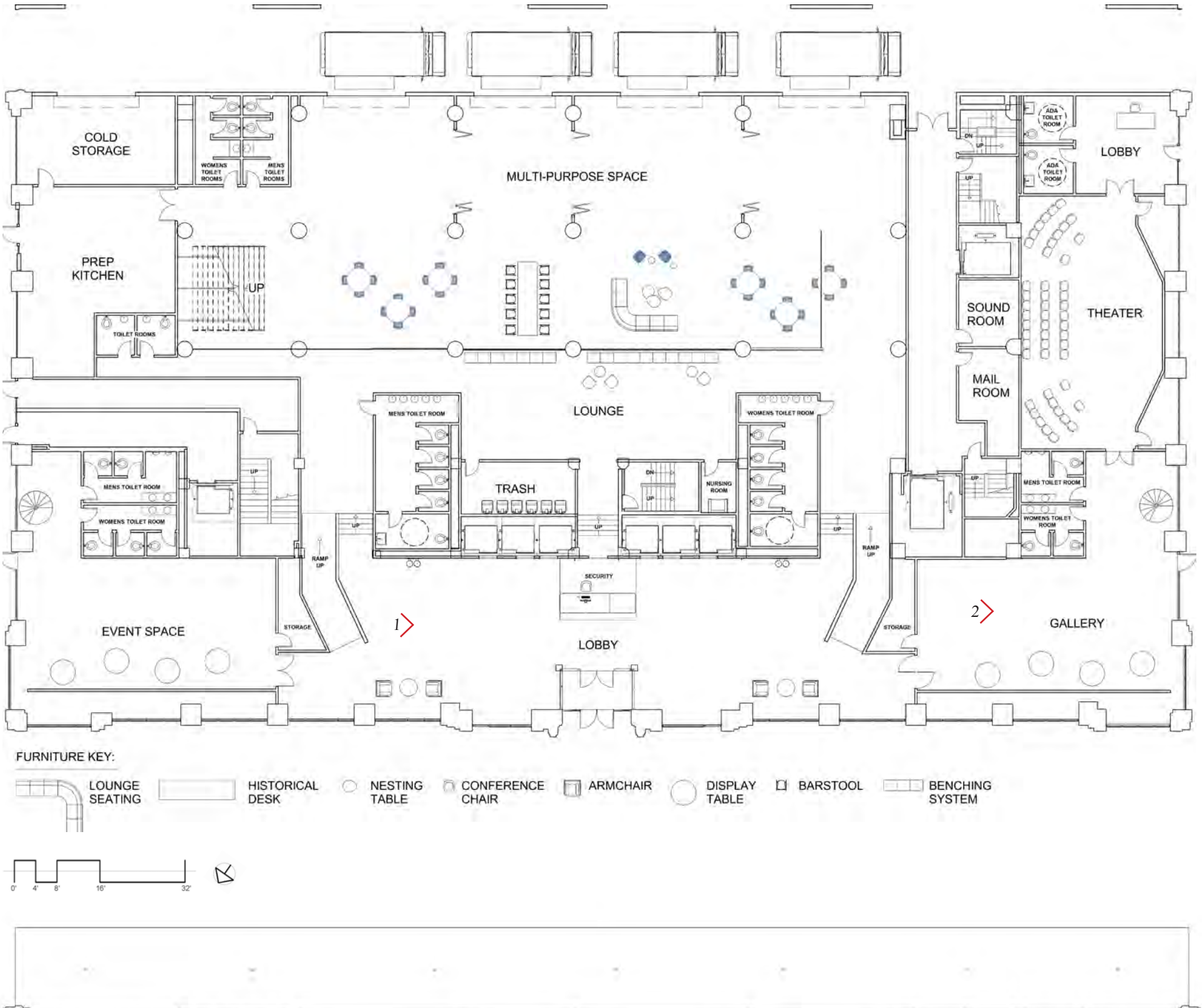
The existing spiral stairs are not code compliant and therefor both must be used for display only as seen below.



Section of display stair in new gallery space

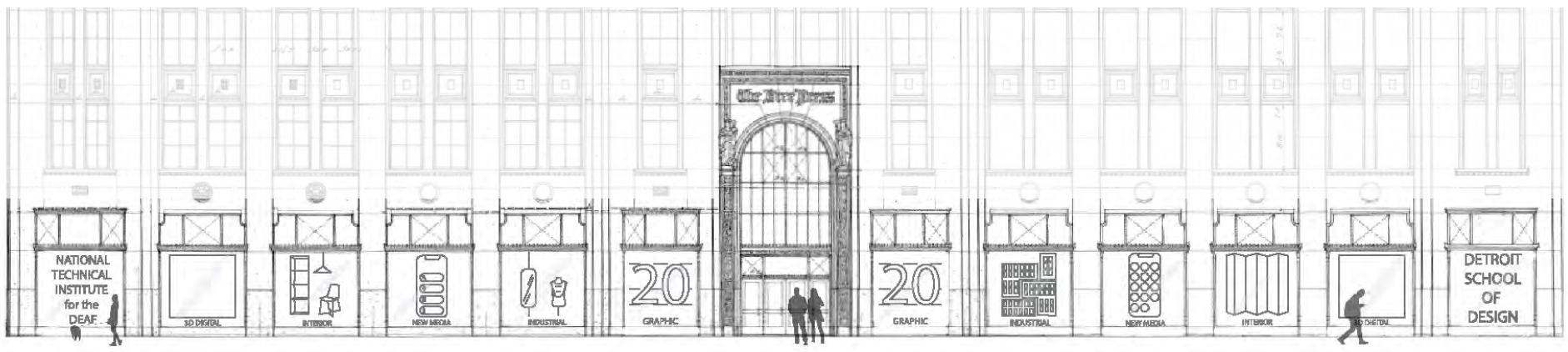
DESIGN DEVELOPMENT

Floor Plan and Reflected Ceiling Plan of the First Floor



Taking a Closer Look at the First Floor

(1) View from east side of lobby



Exterior elevation of storefront branding

(2) View from entrance of gallery

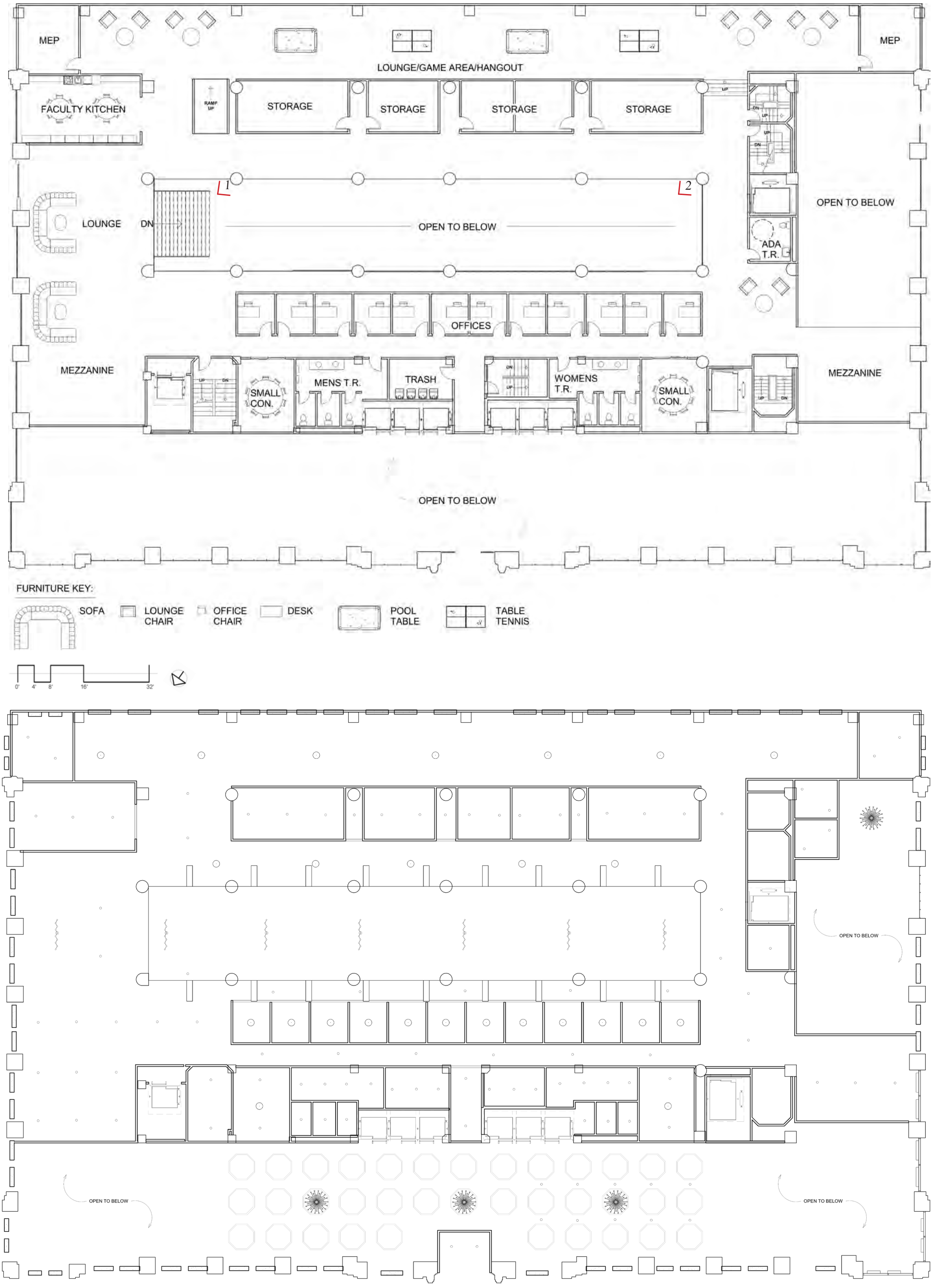
Branding along the storefront windows display the five core programs from the School of Design.

Re-purposed wood from the existing building is used to make the desk seen in the lobby.

The barrel vaulted ceiling replicates the original ceiling and materials that were used.

A public gallery serves as a location for students or visiting artists to exhibit their work.

Floor Plan and Reflected Ceiling Plan of the Mezzanine

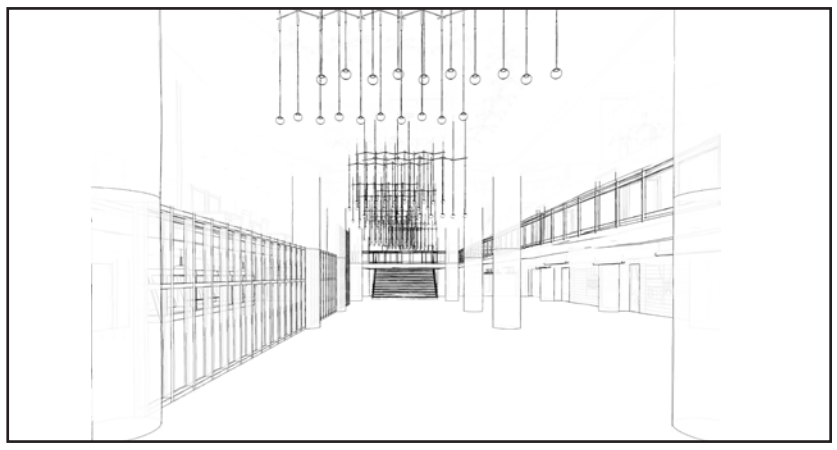


(1) Final rendering of multi-purpose space on first floor

Multi-Purpose Space

The first floor multi-purpose space includes plenty of tables and seating for casual interactions, eating, or even to hold class outside of the classroom.

This space is flexible on the daily for visiting chefs, small gallery spaces, meetings, and is a focal point for prospective students while touring the school.

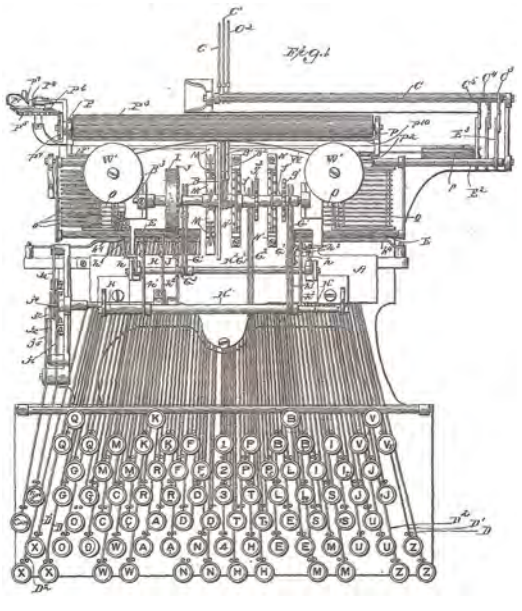


Progress sketch of shared public area

(2) View of stair connecting the first floor to the mezzanine

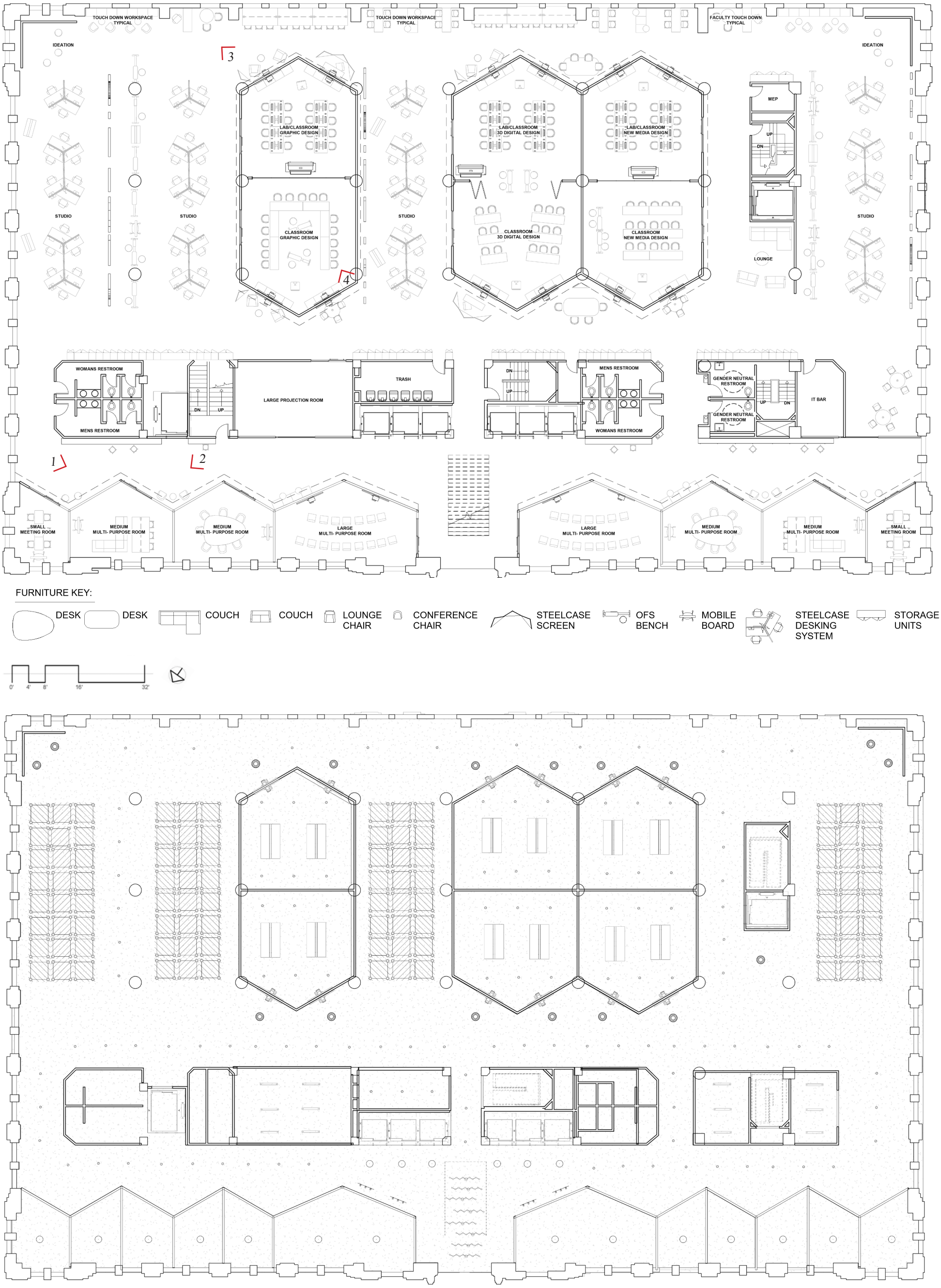
A large stair is incorporated to connect the first floor to the mezzanine.

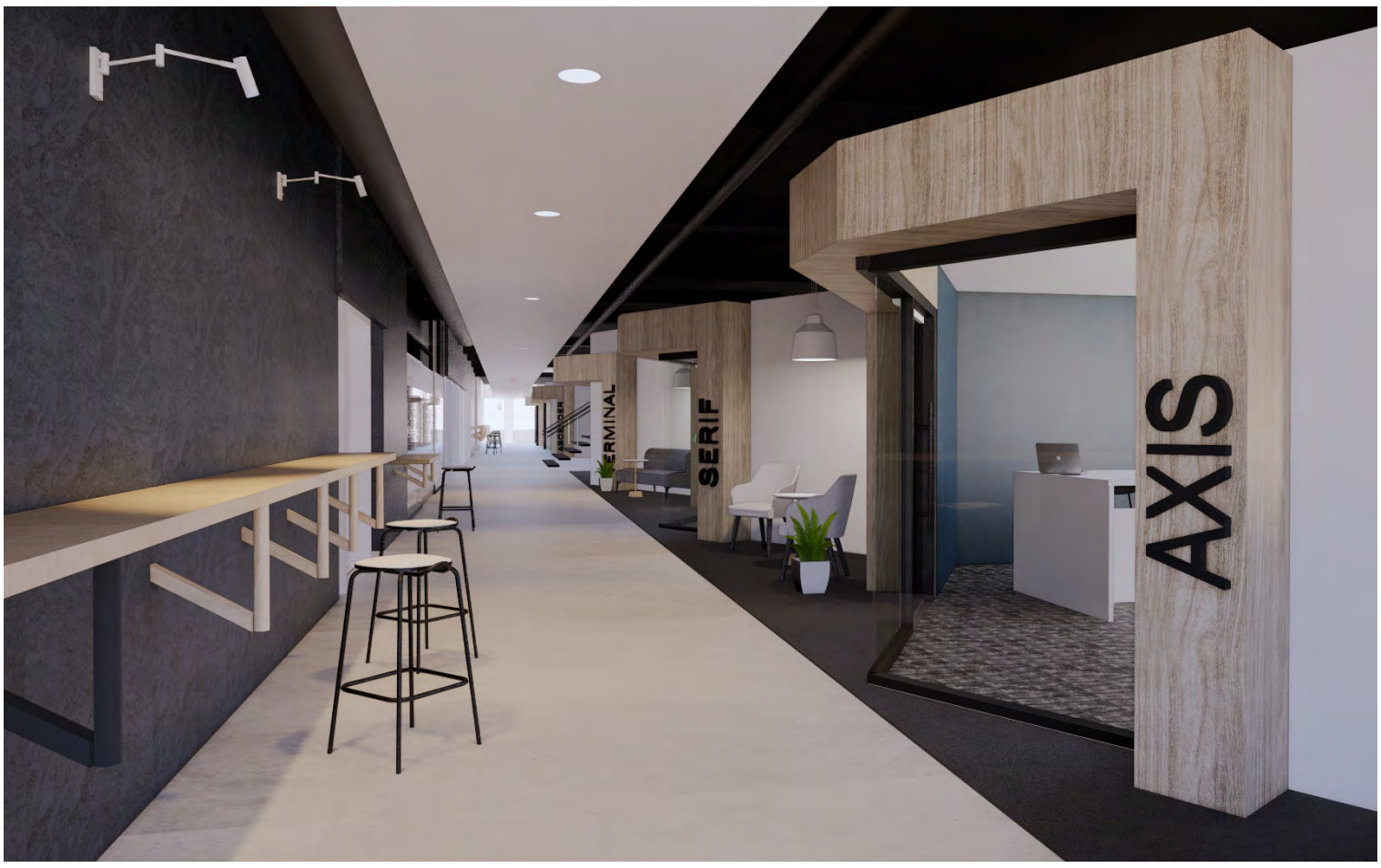
Its design is intentional and meant to represent how a real typewriter and its keys functions, as seen in the graphic below.



DESIGN DEVELOPMENT

Floor Plan and Reflected Ceiling Plan of the Second Floor





New Media, Graphic Design, and 3D Digital Design

(1) Rooms can be utilized for conferences, small class meetings, or touchdown areas

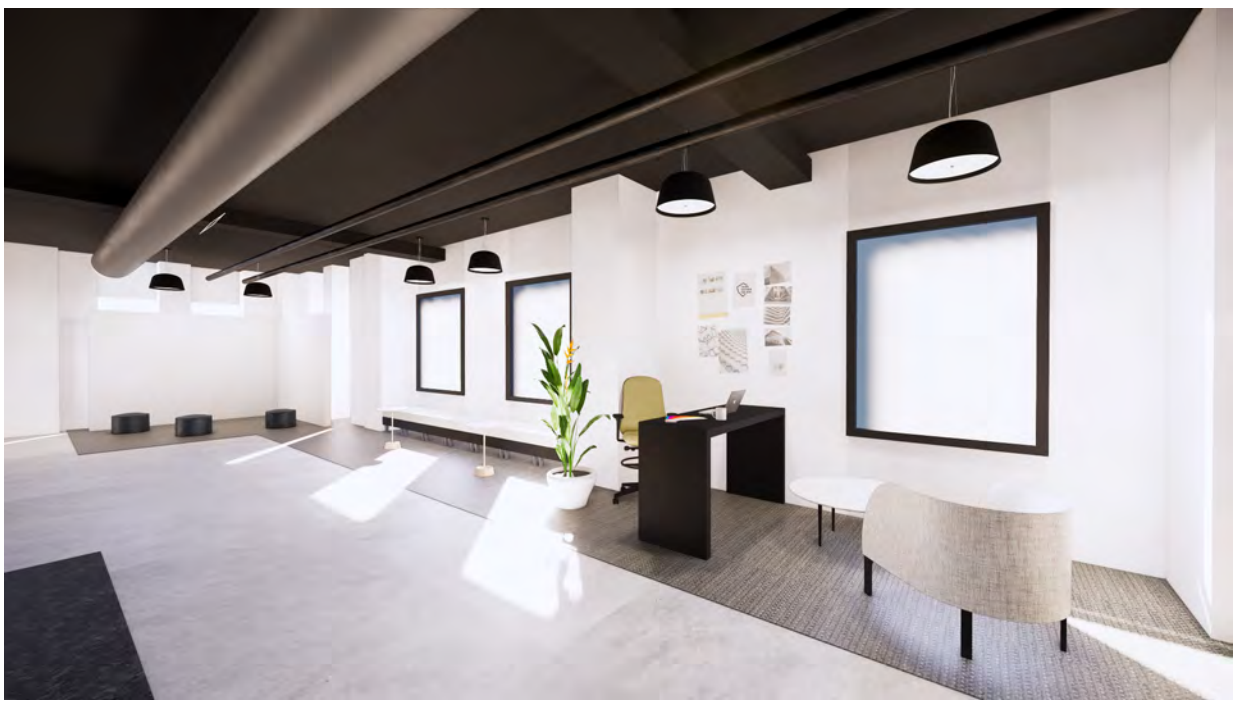
Laptop bars are located along the corridor as a spot to set down any items if an individual needs to communicate through signing.

Each room is named after the anatomy of typeface. As the length of the name increases, so does the size of the room and amount of seating.

Glass doors are used to address deaf space by not creating a visual barrier along the circulation route.

Original sketch

(2) Students and faculty are able to book these rooms right outside the room itself



(3) Small collaboration areas are located throughout the educational floors, along with small desks for professors to use away from their offices

(4) Typical classroom layout for lecturing

(4) Typical classroom layout with classrooms combined

Benching systems are located in the front of the classrooms for interpreters who may need to be seated.

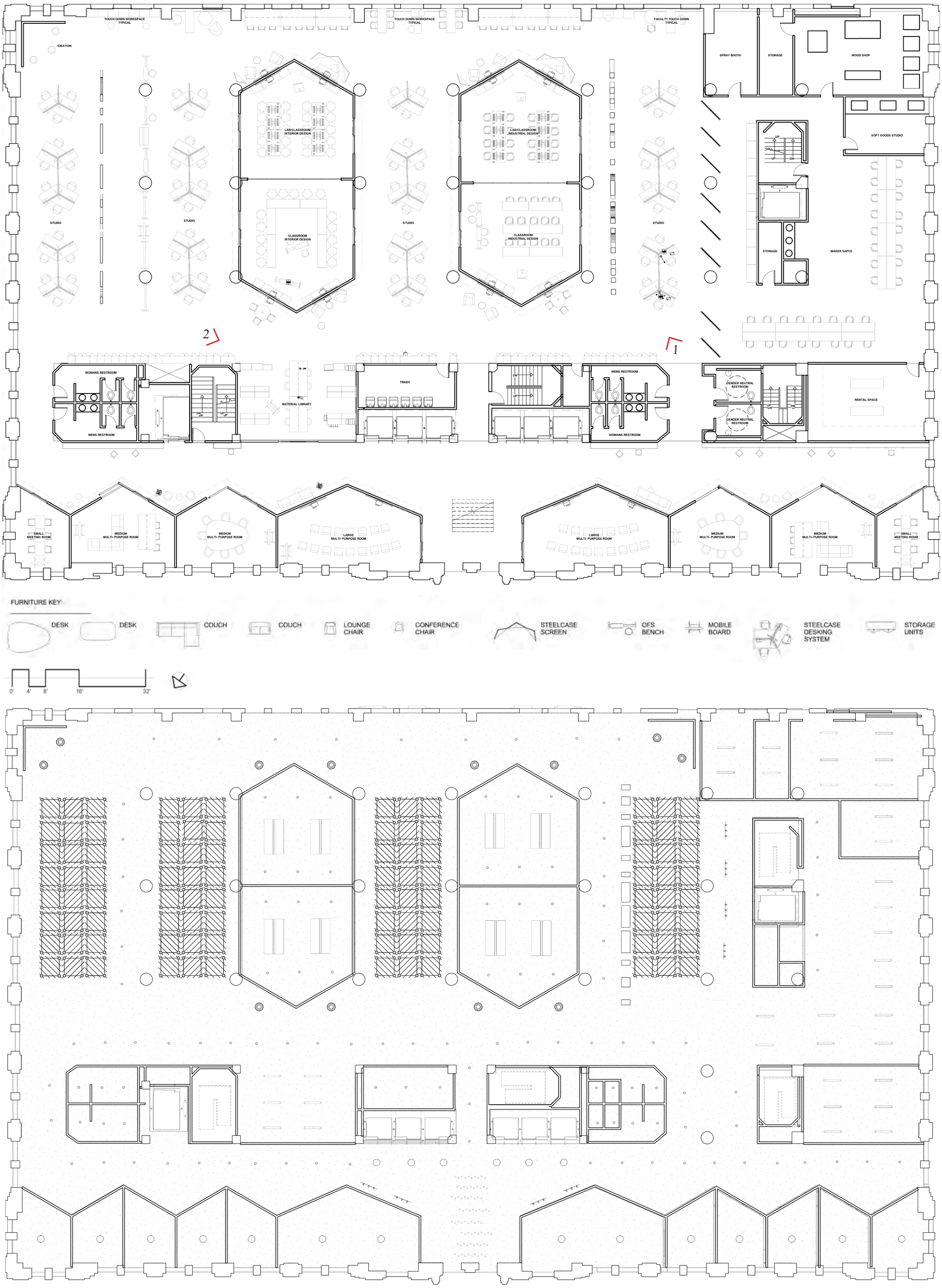
Tables and chairs are arranged in a 'U' shape so that deaf students may have full view of everyone in the room.

Height adjustable chairs and tables are used in this space to accommodate any needs of the users.

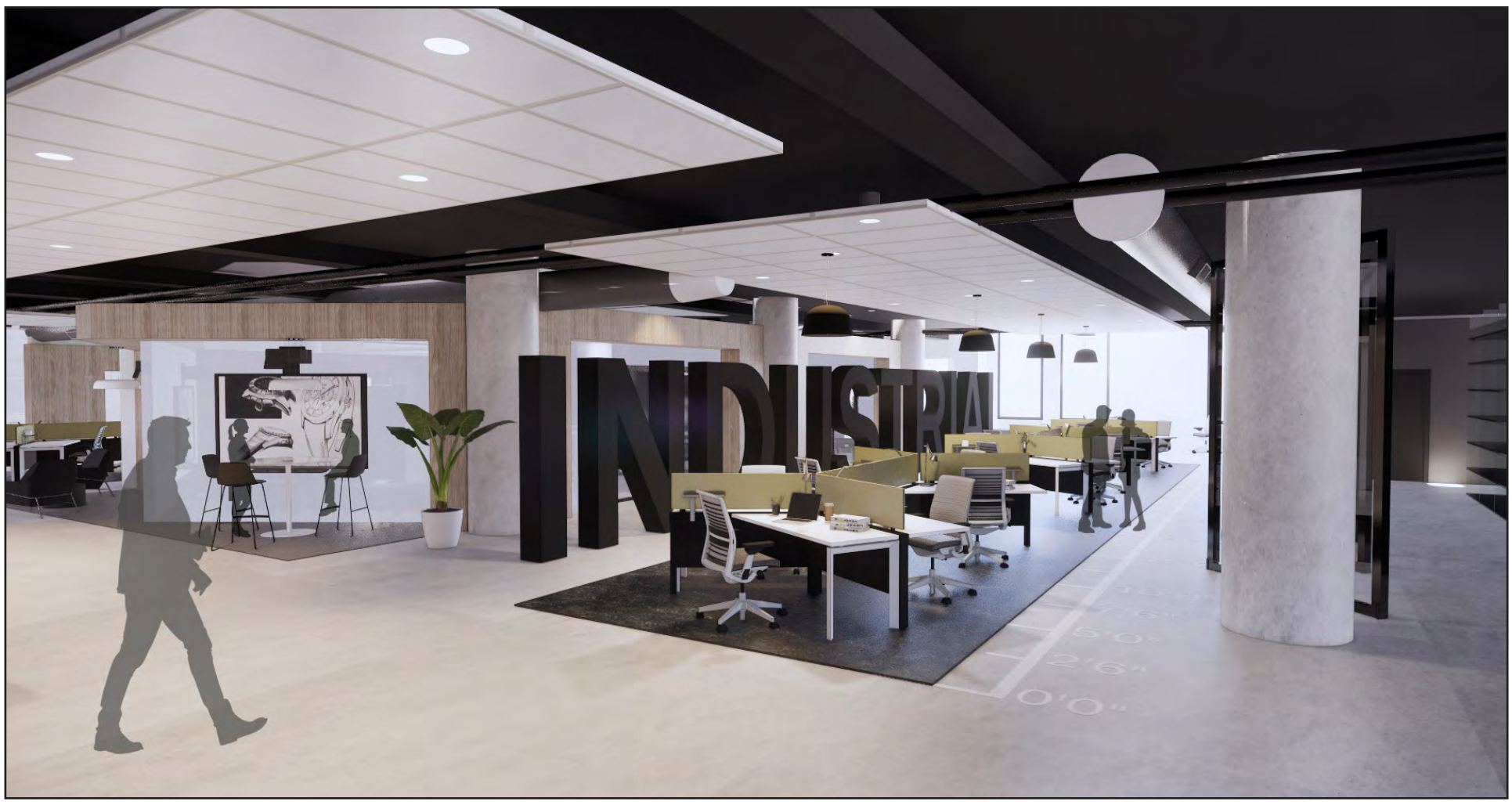
Doors between classrooms can be opened to create a larger space, or for collaboration between classes.

DESIGN DEVELOPMENT

Floor Plan and Reflected Ceiling Plan of the Third Floor

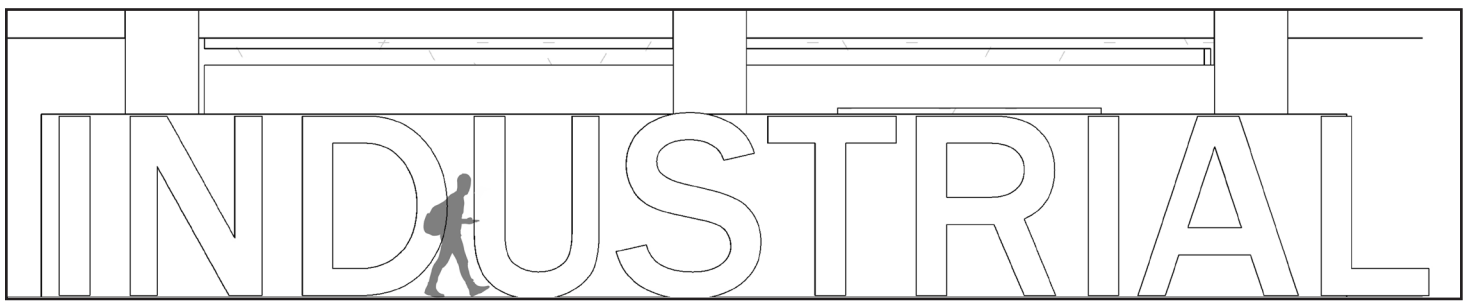


DESIGN DEVELOPMENT



(1) Typical studio layout with letter wall

What majors will share this floor?



Section of industrial design letter wall

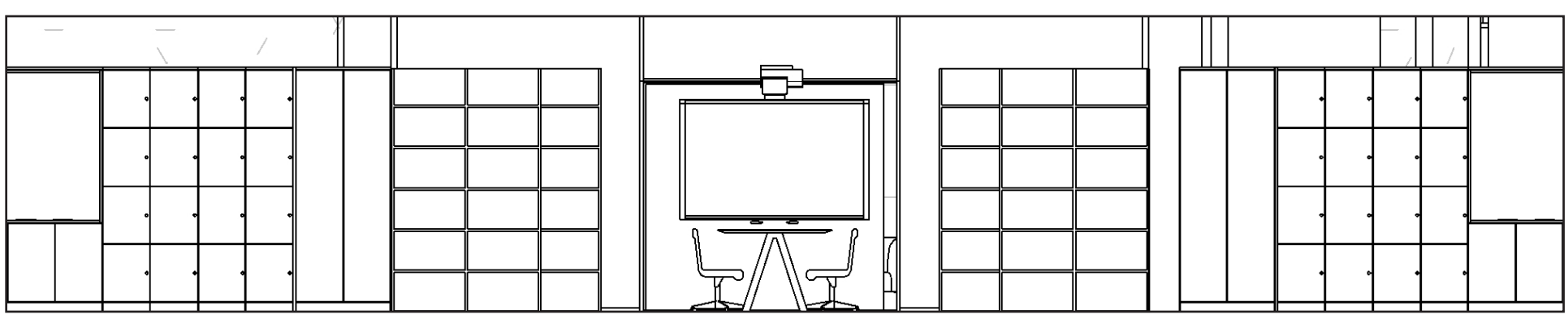
(2) The material library is located adjacent to the interior design studio

Larger than life letters will be used to create a break in the space, while not creating a visual barrier between students.

Interior and Industrial design will both occupy this floor because of their frequent collaboration and hands on approach to design.

Measurements incorporated into the floors help with measuring materials, typical dimensions, or products.

Storage walls near the studios include lockers for students to store personal belongings, closets for storage, and recycling areas.



Section of storage wall near studios and classrooms

DESIGN DEVELOPMENT

Floor Plan and Reflected Ceiling Plan of the Fourth Floor

Existing Rooms Converted to Suites

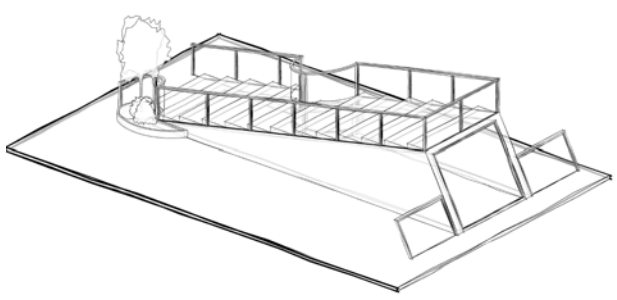
(1) Typical double room suite layout following existing walls and plumbing

Suites are designed around the existing walls, resulting in double rooms connected by a shared common area.

Each suite also includes a small kitchenette and private bathrooms.

Each residential floor is equipped with laundry rooms, kitchens, and lounges. There are approximately 26 rooms that are able to house 44 students per floor.

Outdoor Living Space

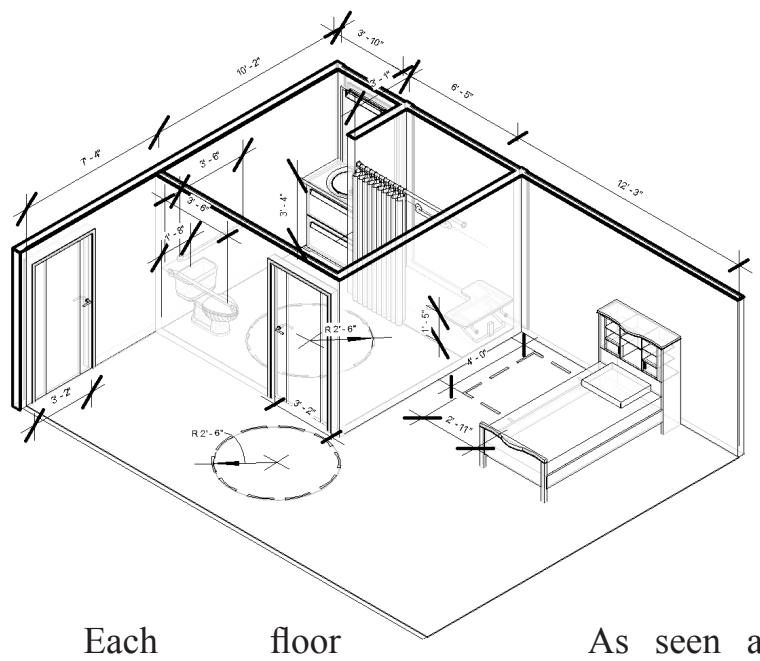


This area gives residents a place to relax, while the new skylight allows for diffused light to enter the third floor.

(2) Outdoor living space on fourth floor

Typical ADA Room

(3) Typical ADA room layout

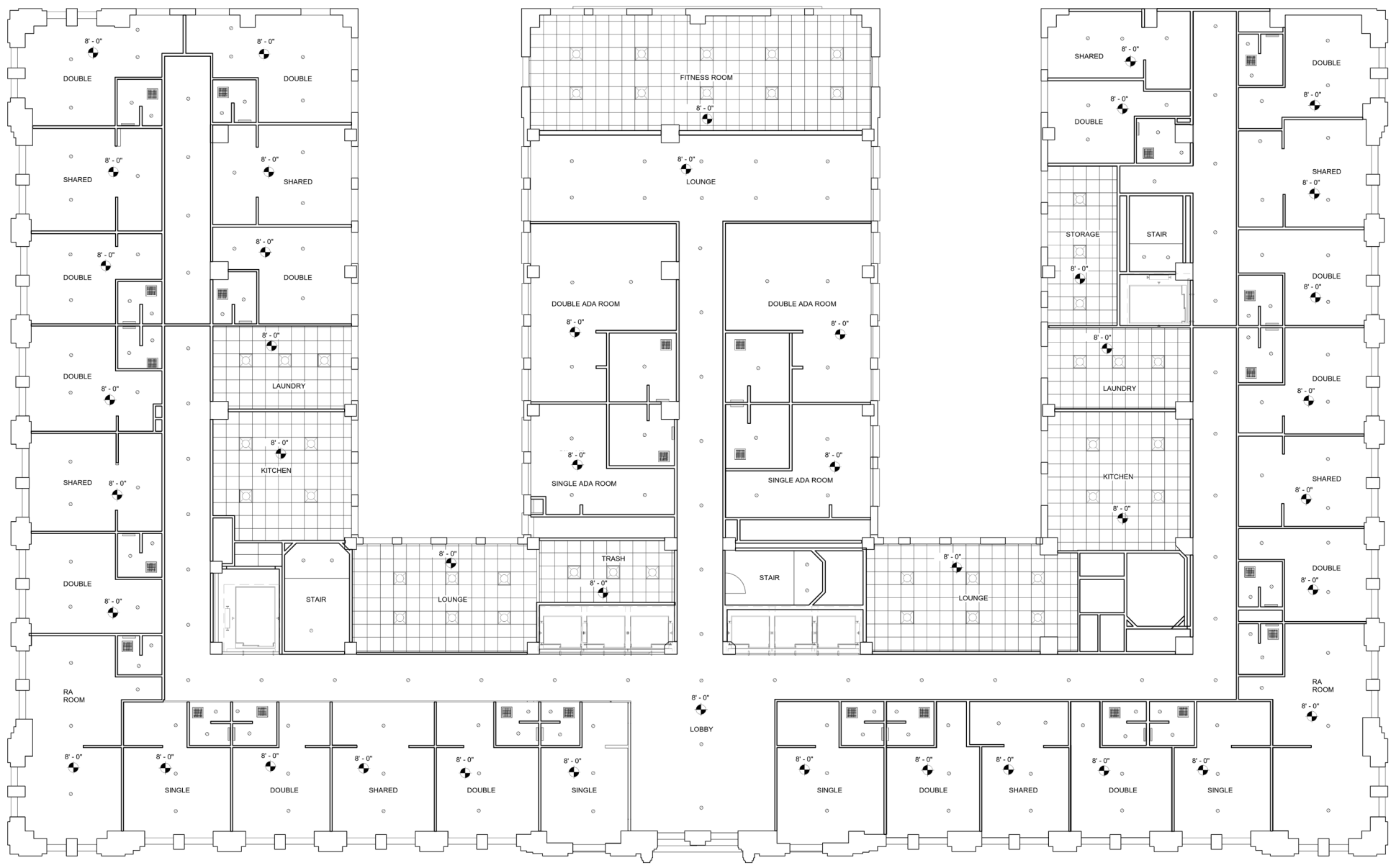


Each floor has two single ADA accessible rooms and two double ADA accessible rooms.

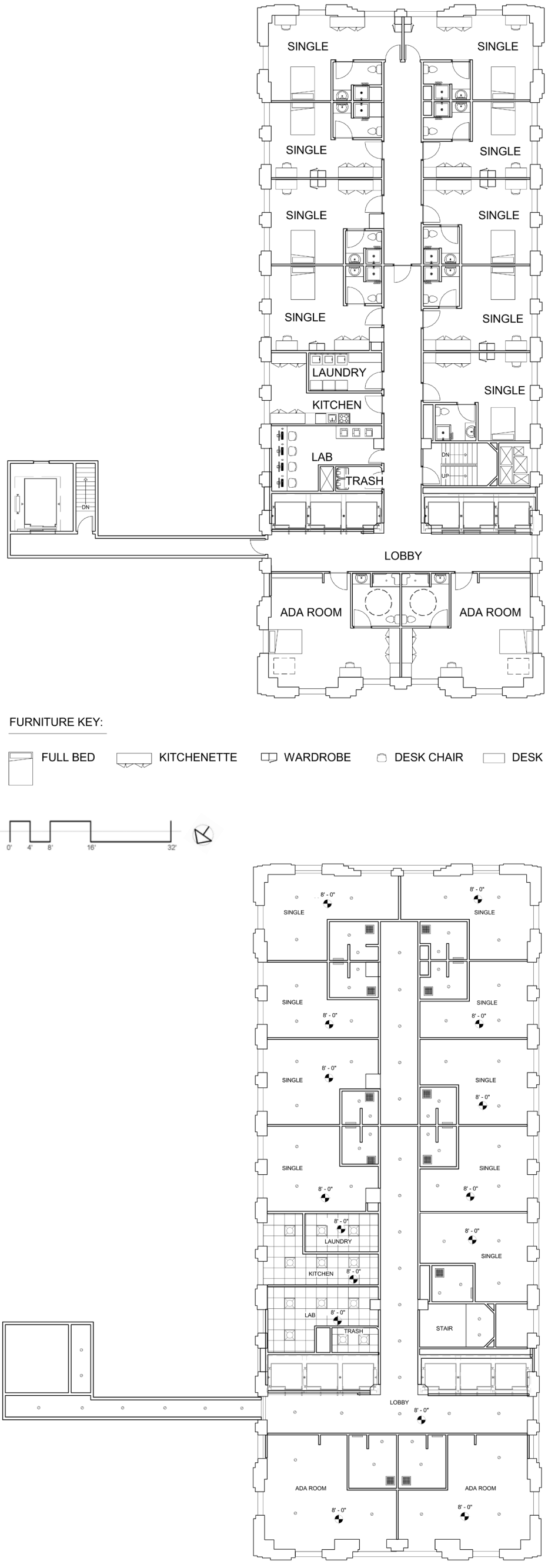
As seen above, each ADA room is fully accessible from the shower to the room itself.

DESIGN DEVELOPMENT

Floor Plan and Reflected Ceiling Plan of the Fifth and Sixth Floors



Floor Plan and Reflected Ceiling Plan of the Seventh Floor



The seventh floor is residential, however, this floor is exclusively for professors or adjunct professors who may live here during the semesters.

Each room comes equipped with a small kitchenette and private bathroom.

A private printing lab, laundry room, and kitchen are available for professors use.

This floor is also equipped with two ADA accessible rooms.

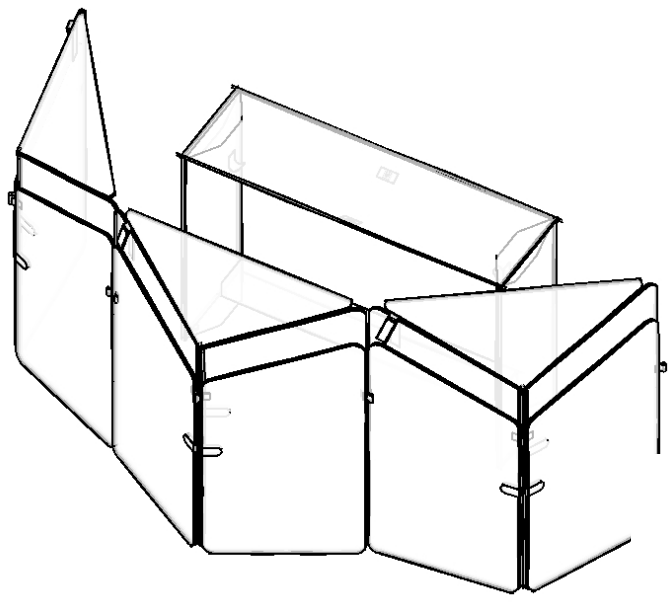
Materials Used Throughout All Floors

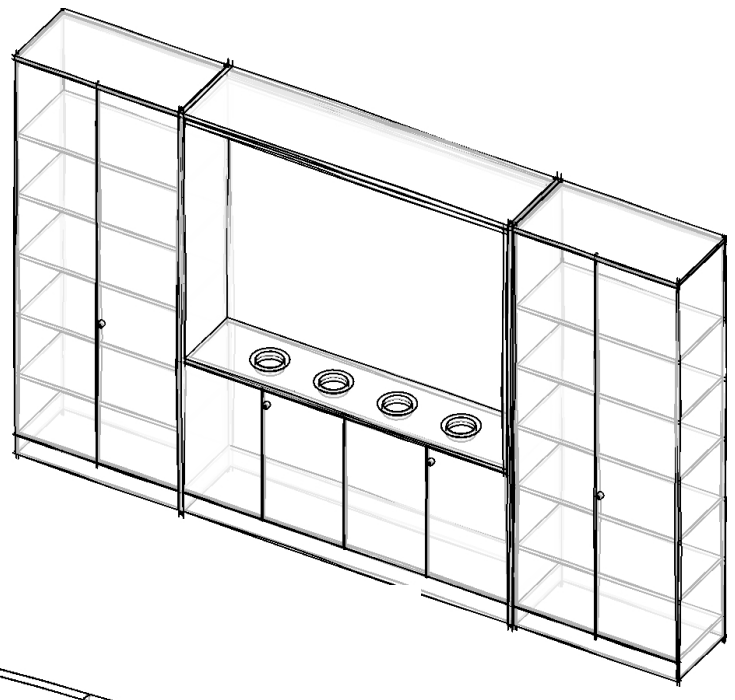
First Floor and Mezzanine

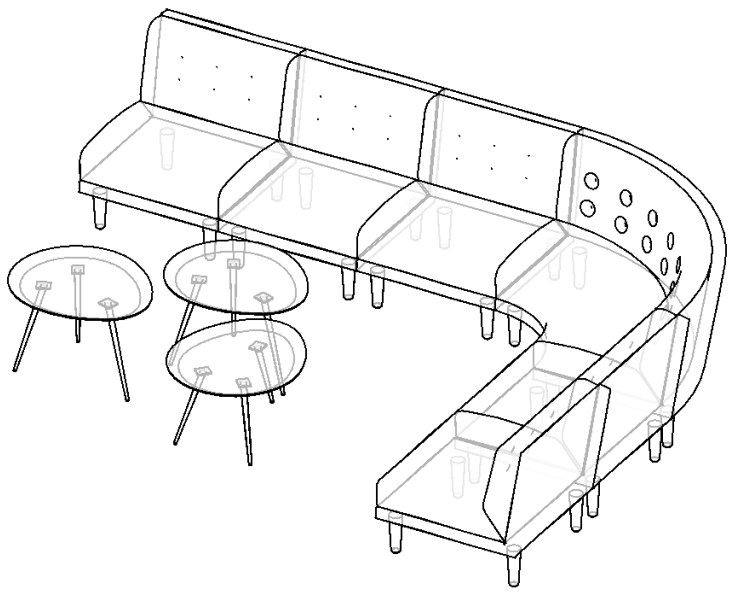
Second and Third Floors

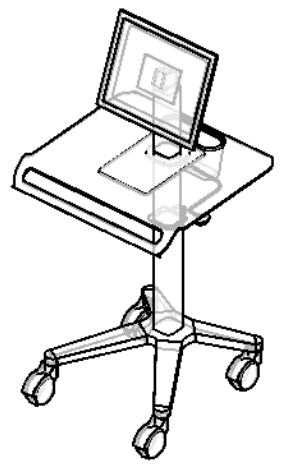
Fourth - Seventh Floors

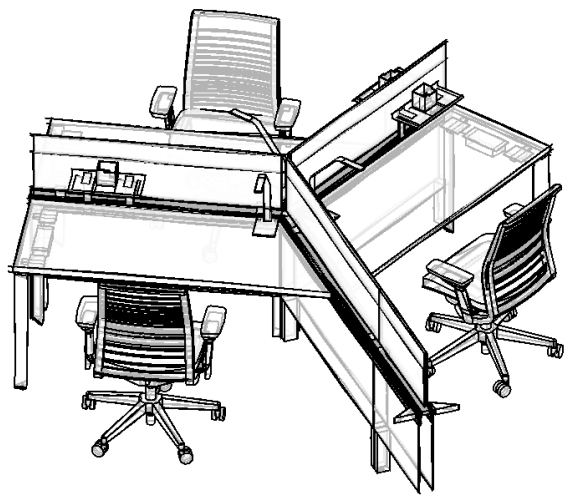
Furniture

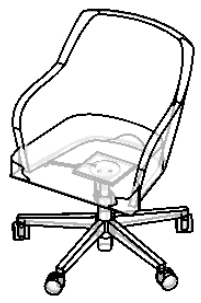


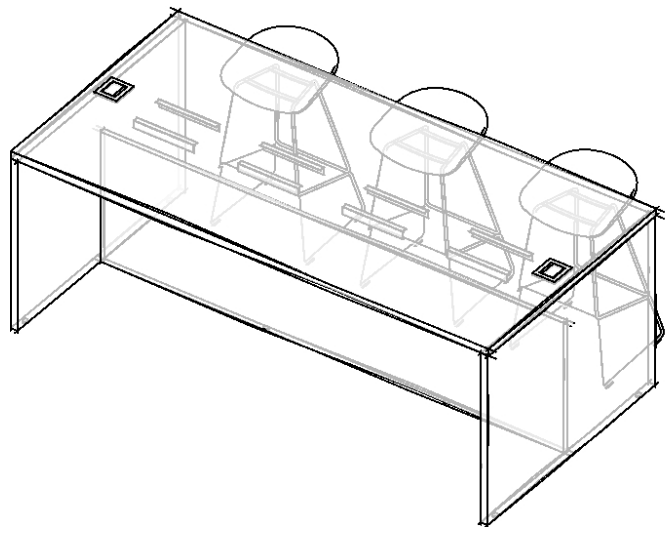


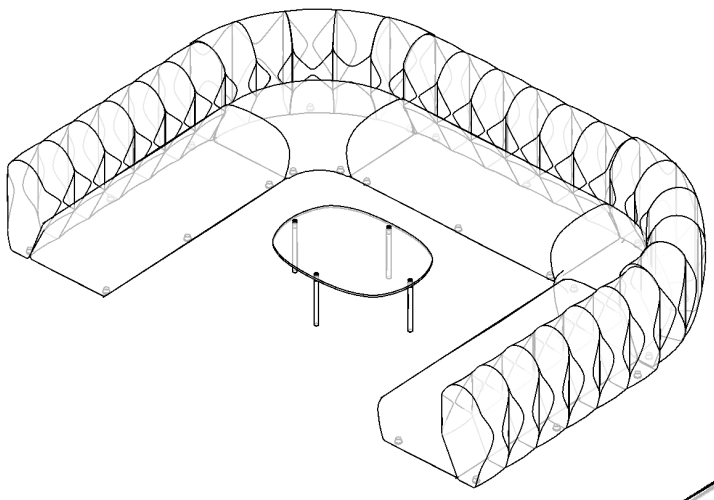


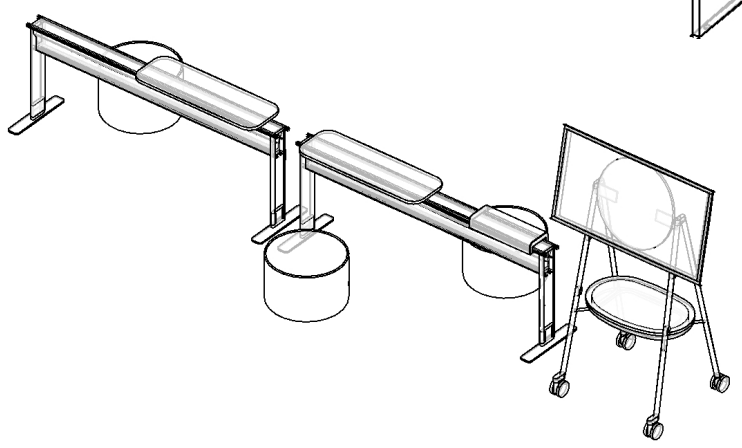


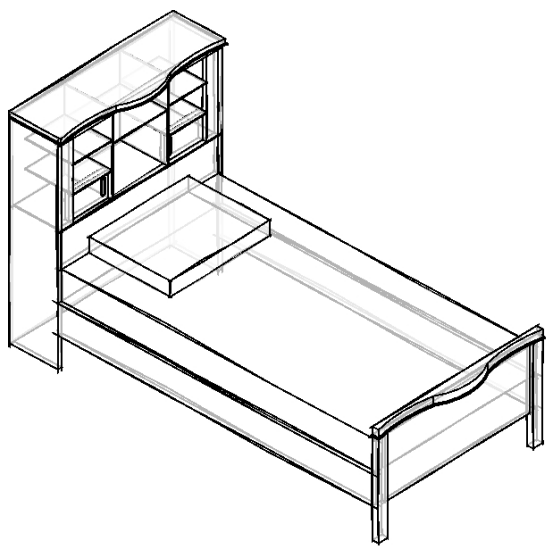


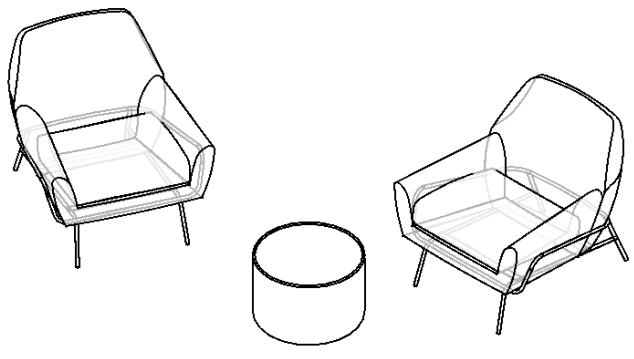


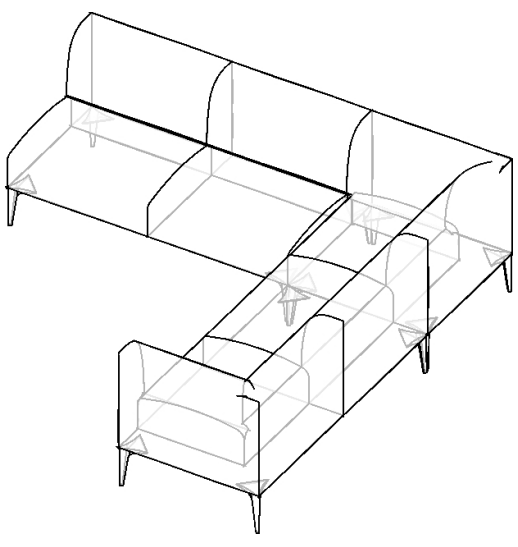












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(Left to right): Madison Miller, Shangchen Chen, Yeuran Yin, Stefani Schultz

About the Designers

As fourth year Interior Design students at Rochester Institute of Technology, located in Rochester, New York, this group was tasked with the Detroit Free Press building as their senior year studio project. Working together throughout the Fall 2019 semester, this is their result.