

FOSTER RECORDS



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Studio 2: Specialized Interior Environments
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Record Shop
Fall 2017

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RESEARCH

CONCEPT

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PHASE I

Three overlapping circles of varying sizes and positions, creating a layered effect. The largest circle is centered on the left side of the page. Two smaller circles overlap it, one positioned higher and to the right, and another lower and to the right.

DESIGNING FOR DISABILITIES

MOBILITY IMPAIRMENTS

Definition: “[T]he inability of a person to use one or more of his/her extremities, or a lack of strength to walk, grasp, or lift objects.”

<http://accessproject.colostate.edu/disability>



Examples:

- Elderly with limited strength or ability to move
- Persons involved in an accident resulting in injury
- Paralysis

Types of Paralysis:

Paraplegia - Loss of function in lower extremities

- Full movement of arms and hands
- Typical to use a manual wheelchair

Quadriplegia - Loss of function to upper and lower extremities

- Limited use of arms and hands
- Typical to use a motorized wheelchair

<http://accessproject.colostate.edu/disability>



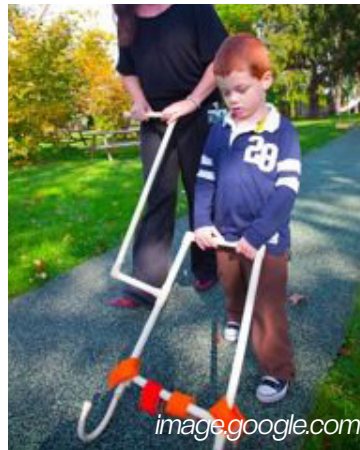
Causes:

- Disease
- Accident
- Congenital Disorder
- Neuro-muscular Impairments
- Orthopedic Impairments

<http://accessproject.colostate.edu/disability>

Mobility impairments can be temporary, such as a broken arm, or permanent, such as a form of paralysis or muscle degeneration. Some of these impairments may be present at birth while others may be the result of an illness or physical injury.

<http://disability.illinois.edu>



Solutions:

Personal Use:

- Wheelchair
- Motorized Wheelchair
- Motorized Scooter
- Crutches
- Walker

<http://accessproject.colostate.edu/disability>

Courtesies:

- Attempt to talk to a person in a wheelchair at eye level instead of looking down on them.
- Someone with a physical disability may not always want assistance.

<http://disability.illinois.edu>

COGNITIVE IMPAIRMENTS

Definition: The technical definition of a cognitive impairment is trouble with things like memory or paying attention, speaking or understanding, as well as having difficulty recognizing people, places, or things and possibly finding new situations overwhelming (usually someone with an IQ of 75 or lower).

<https://www.healthdirect.gov.au>

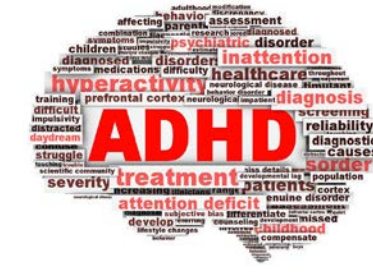


Examples:

Severe Cognitive Disability - Things such as Down syndrome, Traumatic Brain Injury (TBI), Autism, or Dementia, that are often permanent. These people have IQ scores under 30 and have few communication skills.

Mild or Moderate Cognitive Disability - Dyslexia, Attention Deficit Disorder, Dyscalculia, and other learning disabilities. These people have IQ scores ranging from 30-75.

<https://www.disabled-world.com>



Causes:

- Infections (UTI, Pneumonia, etc.)
- Vitamin deficiency
- Dehydration
- Reactions to medications.
- Dementia
- Stroke
- Brain injury
- Birth Conditions such as Chromosomal Issues

<https://www.healthdirect.gov.au>



Solutions:

- Many Technological Aids
- Therapy
- Medications

<https://www.healthdirect.gov.au>

VISUAL IMPAIRMENTS

Examples:

Low Vision - "Uncorrectable vision loss that interferes with daily activities."

Legal Blindness - "A visual acuity of 20/200 or less in the better-seeing eye with best conventional correction," or "a visual field [...] of 20 degrees or less (also called tunnel vision) in the better seeing eye."

Total Blindness - "[T]he complete lack of light perception and form perception."

<http://www.visionaware.org>

Causes:

- Injury
- Infection
- Hereditary Cause (Retinitis pigmentosa is most common)
- Amblyopia (Lack of use during childhood causing "lazy-eye")
- Cataract (Clouding)
- Diabetes
- Glaucoma (Increased pressure in eyes)
- Age Related Macular degeneration
- AIDS
- Cancer

<https://www.news-medical.net>

Solutions:

Many surgeries and other medical solutions are now available.

Personal Use:

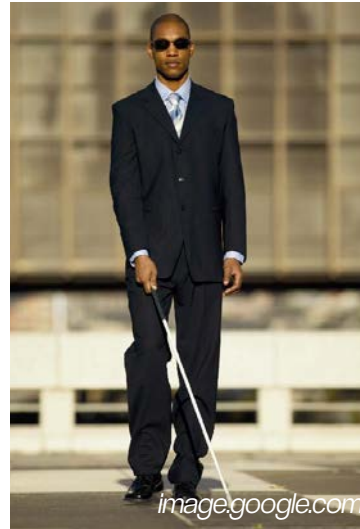
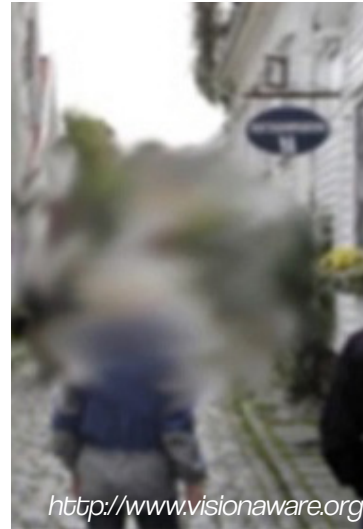
- Cane
- Dog Guide

Most students with very low vision or who are totally blind use a cane or a dog guide.

Public Use:

- Braille
- Magnification Devices
- Bright Incandescent Lighting
- Tactile Cues

<http://disability.illinois.edu>



HEARING IMPAIRMENTS

Examples:

Conductive Loss - Affects the sound-conducting paths of the inner ear causing one to possibly speak softly, hear better in noisy surroundings, and experience ringing in their ears.

Sensorineural Loss - Affects the inner ear and auditory nerve and "can range from mild to profound." One might speak loudly, experience greater high-frequency loss, have difficulty distinguishing consonant sounds, and not hear well in noisy environments.

Mixed Loss - Resulting from both a conductive and sensorineural loss.

<http://disability.illinois.edu>

Solutions:

- Many forms of sign language

<http://disability.illinois.edu>

- Surgery
- Medical Therapy
- Hearing Aids

<http://www.hearingloss.org/>

Causes:

- Malformation of outer ear, ear canal, or middle ear structures
- Fluid in the middle ear from colds
- Ear infection
- Allergies
- Poor Eustachian tube function
- Perforated eardrum
- Benign tumors
- Impacted earwax
- Infection in the ear canal
- Foreign body in the ear
- Otosclerosis
- Exposure to loud noise
- Head trauma
- Virus or disease
- Autoimmune inner ear disease
- Hereditary Causes
- Aging (Presbycusis)
- Malformation of the inner ear
- Meniere's Disease
- Tumors

<http://www.hearingloss.org/>



SPEECH IMPAIRMENTS

Examples:

Aphasia - Loss of the ability to understand or express spoken or written language.

Dysarthria - Person has problems expressing certain sounds or words.

Voice Disturbances - Anything that changes the shape of the vocal cords or the way they work.

<https://medlineplus.gov>

Causes:

- Alzheimers
- Brain tumor
- Dementia
- Head trauma
- Stroke
- Transient ischemic attack (TIA)
- Diseases that affect nerves and muscles
- Facial trauma
- Facial weakness
- Nervous system (neurological) Disorders
- Stroke
- Transient ischemic attack (TIA)
- Growths or nodules on the vocal cords

<https://medlineplus.gov>



Solutions:

- Home Care - Speaking slowly and using hand gestures
- Text to Speech Options
- Speech Therapy
- Surgery

<https://medlineplus.gov>



FIG 1. Percentage of People in the US with Disabilities, 2008-2015

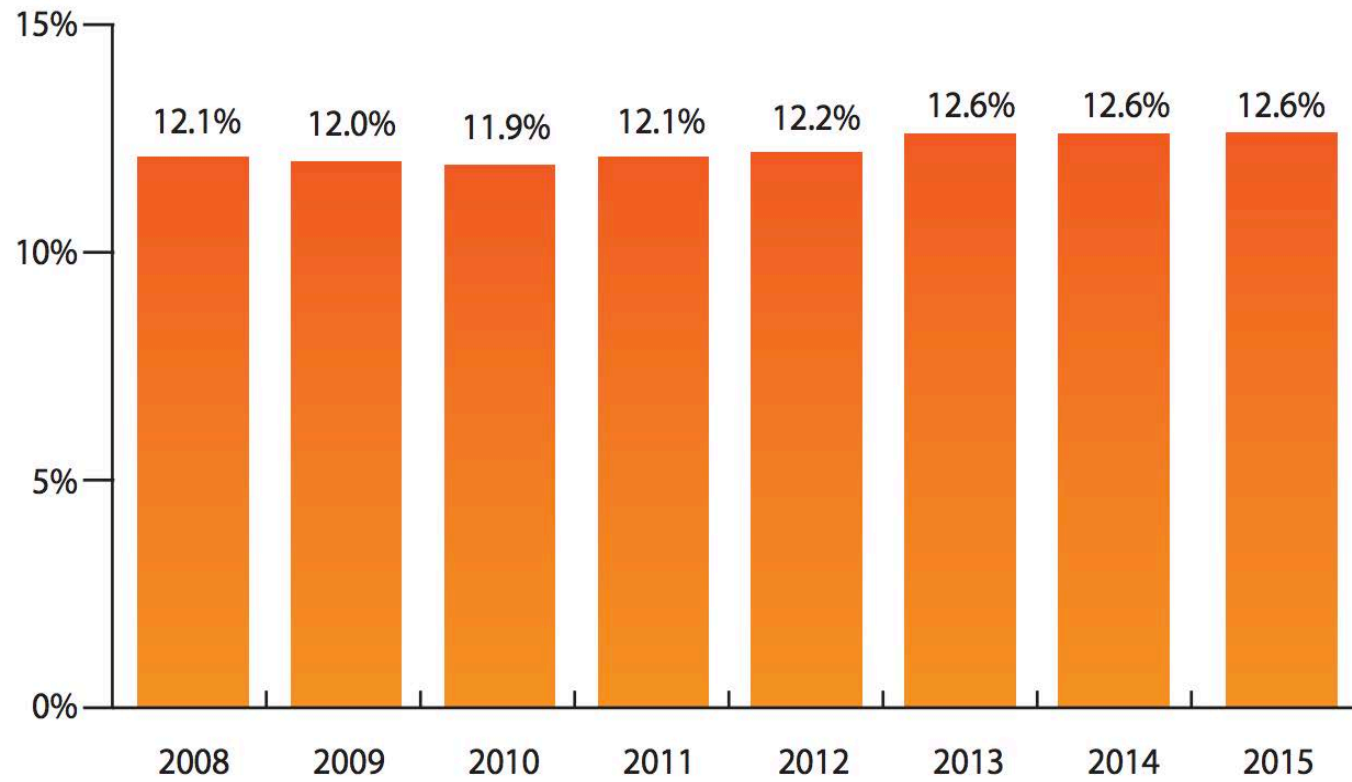


FIG 11. People with Vision Disability, by Age Group, 2015

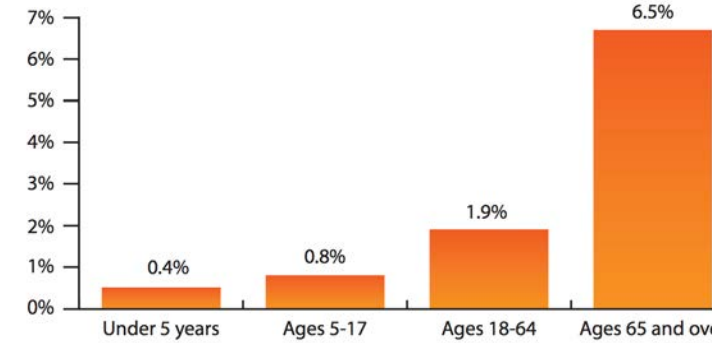


FIG 12. People with Cognitive Disability, by Age Group, 2015

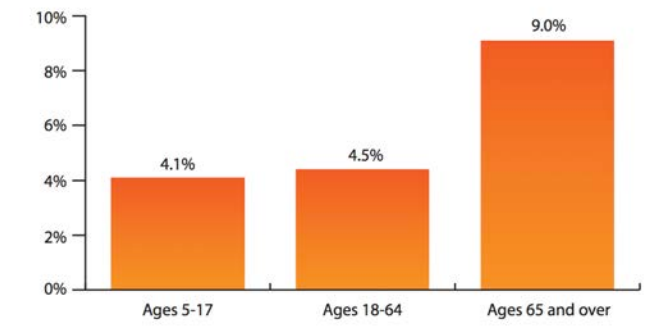


FIG 10. People with Hearing Disability, by Age Group, 2015

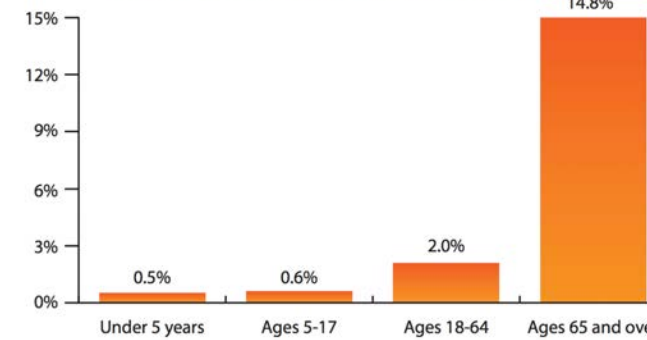


FIG 13. People with Ambulatory Disability, by Age Group, 2015

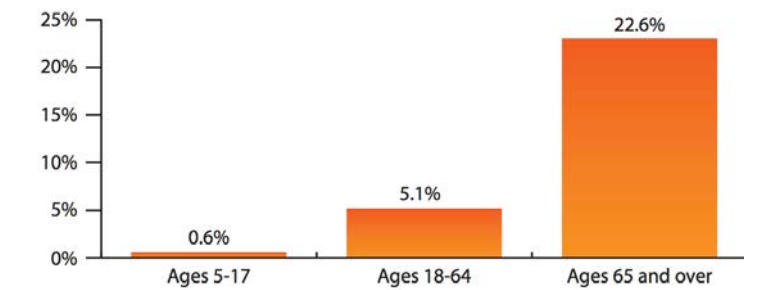
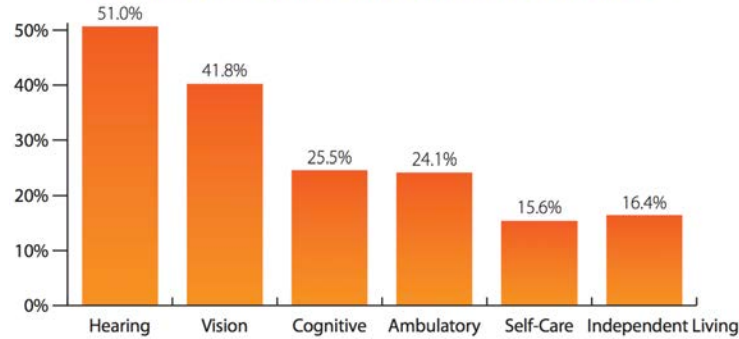


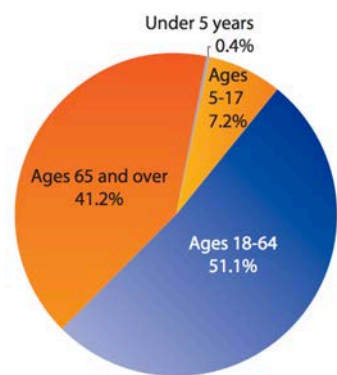
FIG 21. Employment Percentage by Type of Disability, Ages 18-64, 2015



Facts:

- According to the American Community Survey (ACS), the overall percentage of people with disabilities in the US in 2015 was 12.6%.
- 34.9% of people ages 18-64 with disabilities in the US were employed, while 76% of people without disabilities were employed.
- 21.2% of people living with disabilities in the US were living in poverty, 7.4% higher than the national poverty rate.

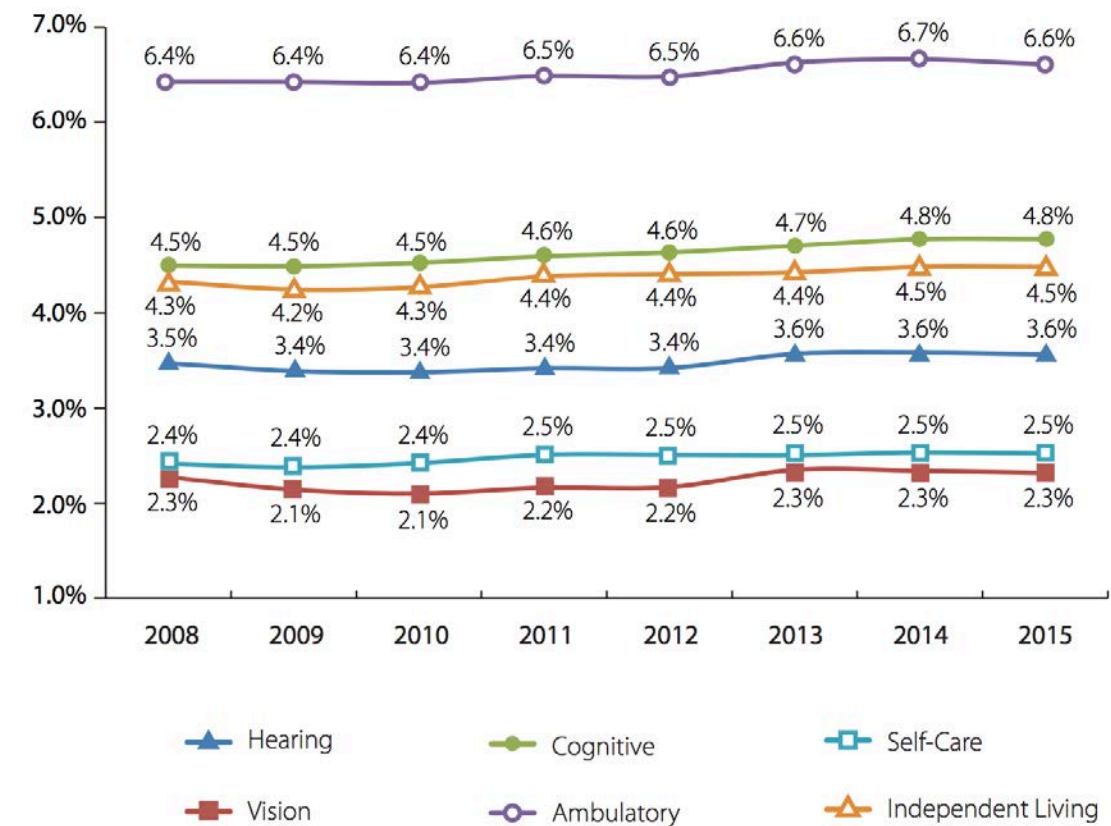
FIG 4. Age Distribution in the US Population of People with Disabilities, ACS, 2015



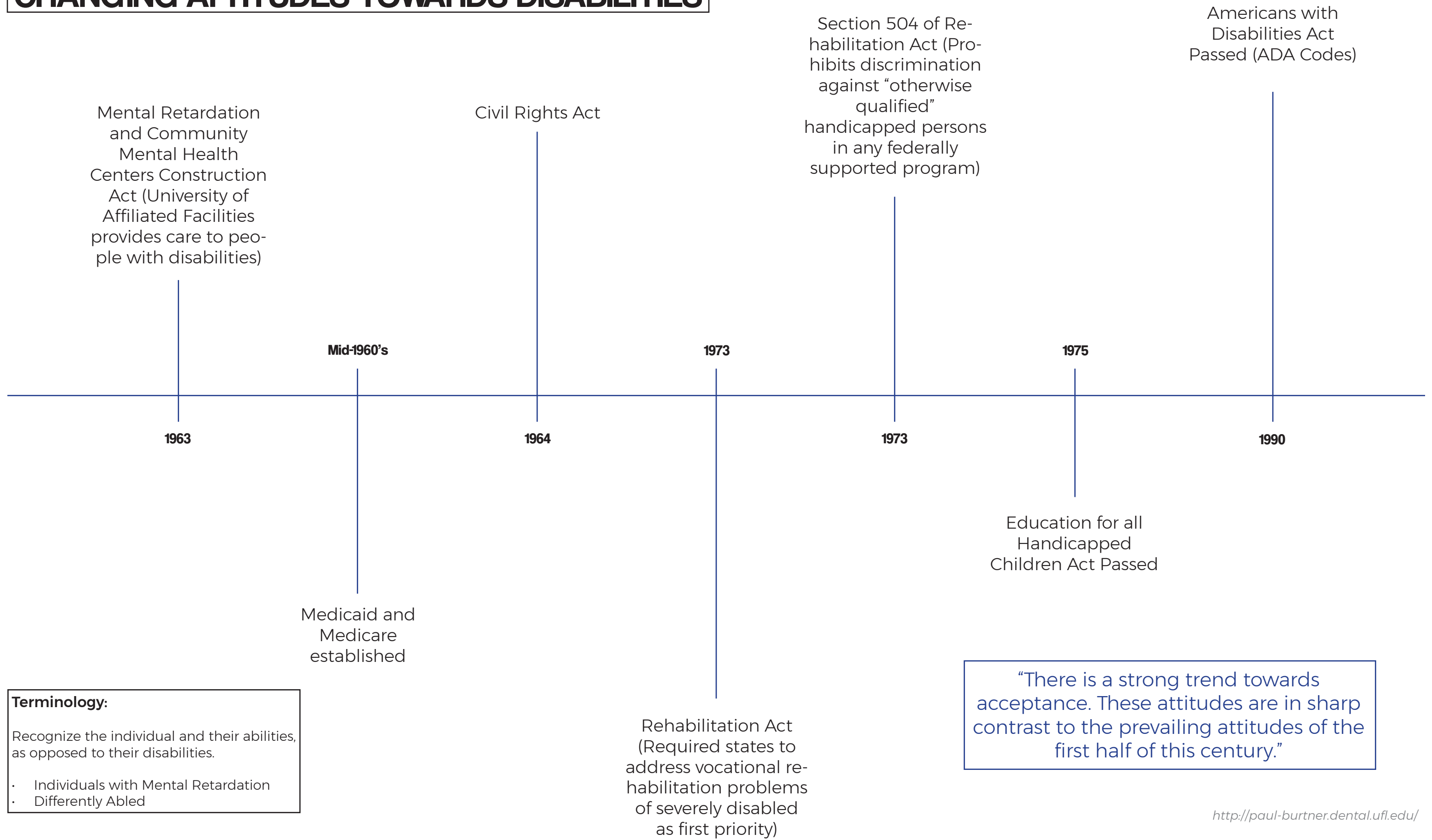
All charts, graphs, and information from:

<https://disabilitycompendium.org>

FIG 9. People with Disabilities, by Type and Year, 2008-2015



CHANGING ATTITUDES TOWARDS DISABILITIES



Terminology:
 Recognize the individual and their abilities, as opposed to their disabilities.

- Individuals with Mental Retardation
- Differently Abled

<http://paul-burtner.dental.ufl.edu/>

DESIGN FOR THE VISUALLY IMPAIRED

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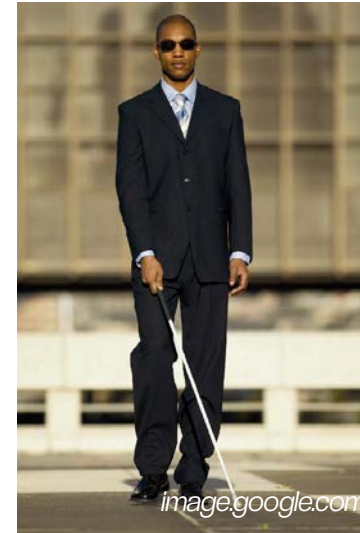
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- Age Related Macular degeneration
- AIDS
- Cancer

<https://www.news-medical.net>



Needs:

- Clear Paths
- Clear Signs
- Smooth Walking Surfaces
- Wider Hallways and Dwellings
- Bright Lighting
- Tactile Clues
- Braille Options

Solutions:

Many surgeries and other medical solutions are now available.

Personal Use:

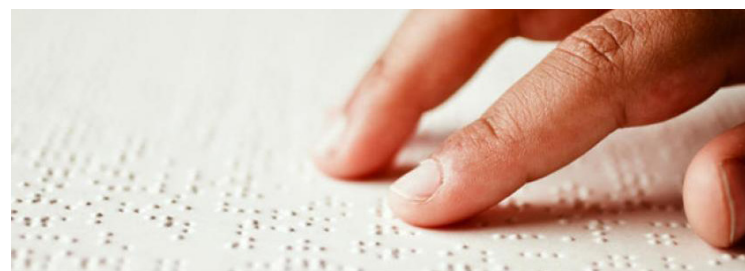
- Cane
- Dog Guide

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Public Use:

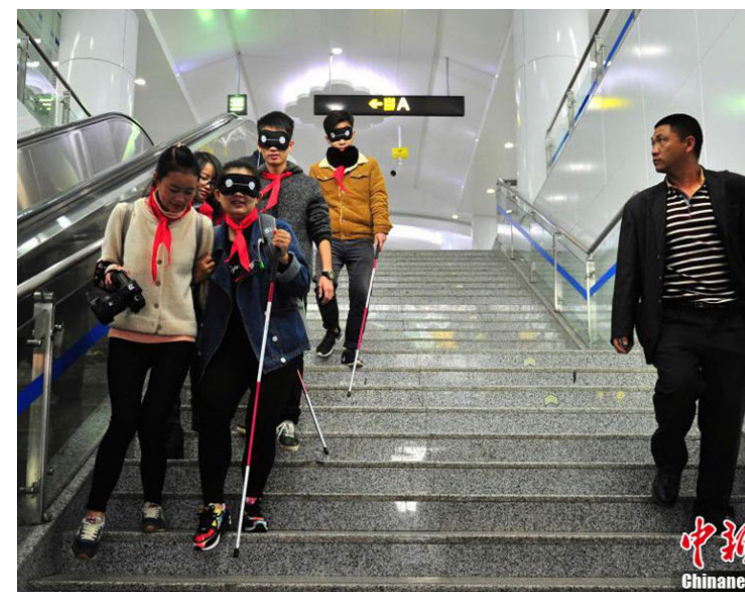
- Braille
- Magnification Devices
- Bright Incandescent Lighting
- Tactile Cues

<http://disability.illinois.edu>



Obstacles:

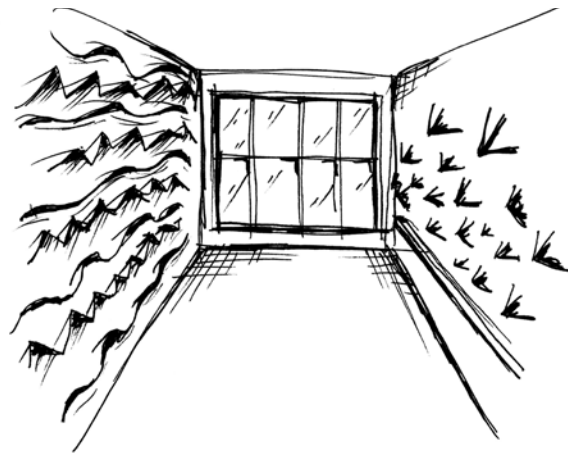
- Crowded Areas
- Steps
- Poor Lighting
- Small or Hard to Read Signs
- Uneven Walking Surface
- Objects Jutting from Walls
- Unclear Paths



DESIGN FOR THE VISUALLY IMPAIRED

Design Needs:

- Clear Paths
- Clear Signs
- Smooth Walking Surfaces
- Wider Hallways and Dwellings
- Bright Lighting
- Tactile Clues
- Braille Options



Texture:

- Use Varying Textures to Create a Path
- Use Different Materials, Patterns, and Designs
- Use Texture on Walls to Create a Sensory Experience
- Use a Variety of Flooring to Create a Path that is Consistent (i.e. Floor Surrounded by Carpet)

<https://www.smashingmagazine.com>



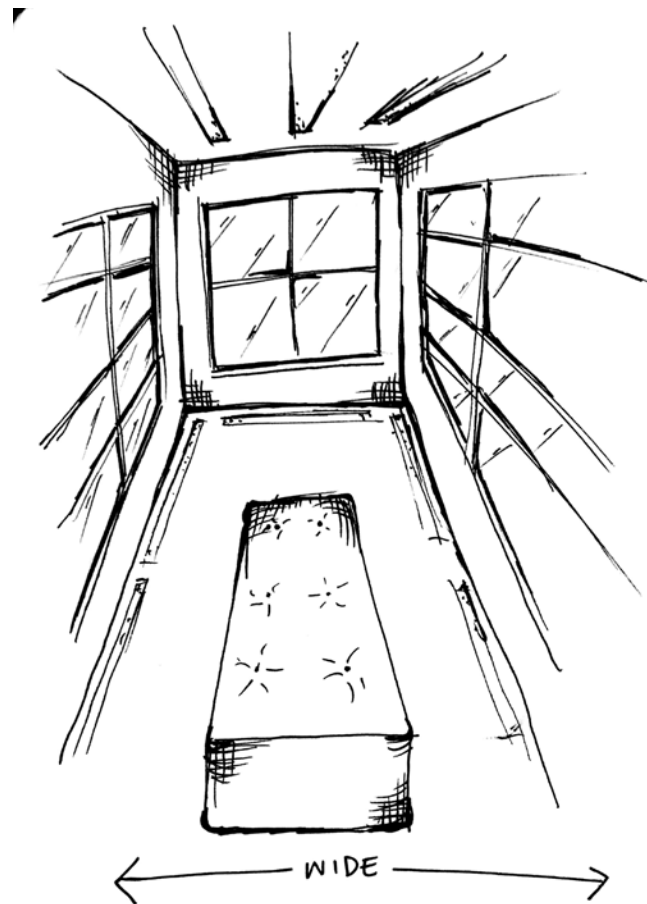
Visual weight - "A measure of the force that an element exerts to attract the eye."

<https://www.smashingmagazine.com>



Lighting:

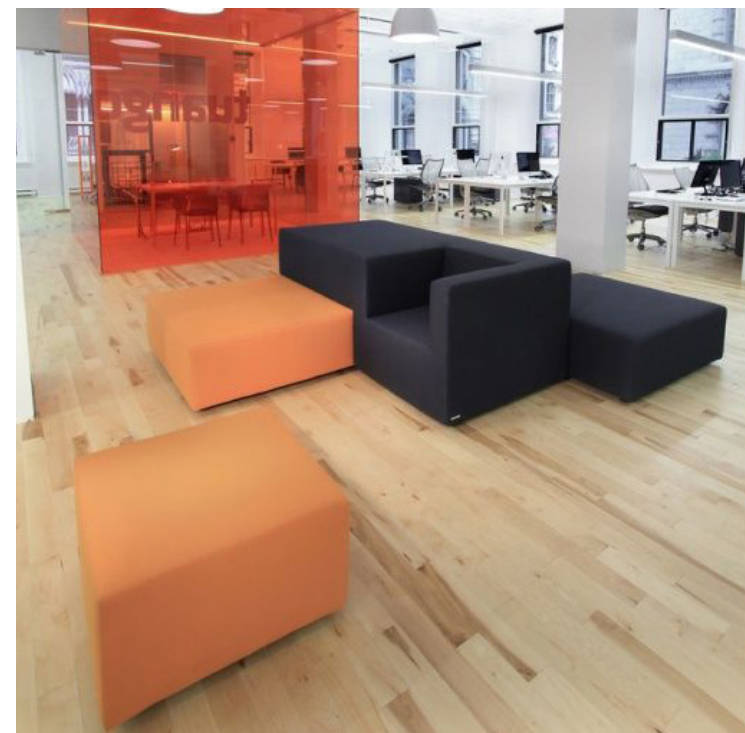
- Use Brighter Lights on Floors, Walls, and Ceiling (Can help with those who have blurry vision)
- Incorporate more Natural Light through Large Windows
- Use Bright Lighting to Create a Path



Size:

- Large Elements Draw Attention and Can Create a Path

<https://www.smashingmagazine.com>



Color & Value:

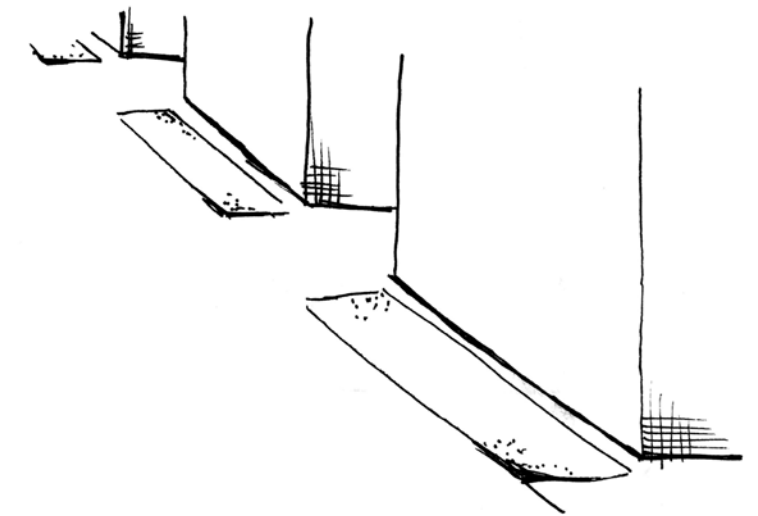
- Use High Contrasting Colors and Value

Color:

- Warm Colors Advance to Foreground
- Cool Colors Recede to Background
- Red is Heaviest Color
- Yellow is Lightest Color

Value:

- Dark Elements Have more Visual Weight



Other:

- Wider Hallways and Public Spaces to Reduce Crowding
- More Things on Walls Rather than in the Middle of the Space
- No Bumps on Floors (Especially in Doorways)
- No Steps
- Block Furniture (No Space Underneath)
- Use Sound to Guide Visitors
- No Sharps Edges (Round Walls)
- No Objects Sticking out from Walls or Floors
- Railings (Can act as a guide to the start and end of hallways, steps, and ramps.
- Braille for Signage
- Ramps Can be Used as a Visual Guide to Lead



CLIENT

RESEARCH



EVERETTE & OPHELIA FOSTER

Biographical Information

Everette and Ophelia Foster are two of the nicest people anyone could ever meet. Both now in their late 40's-early 50's, they met at the University of Minnesota, where Everette was studying Medicine and Ophelia was studying art - specifically photography and painting. It was music that initially brought them together. They have always shared the same tastes in music, as they did with most things. After college, Everette landed a job with Doctors without Borders, so he proposed to Ophelia and asked her to accompany him to the various countries. She, of course, agreed, and came along, using photography and painting as a way of spreading the word about each place they went. Eventually, they moved back to Minneapolis, Minnesota and had two children, Annelise and Dexter. Everette still occasionally does work with Doctors without Borders, bringing his family with him whenever possible, but to he and Ophelia, family is the number one priority.

Children

Annelise and Dexter are as loving, caring, and friendly as their parents. They are currently both in college, Dexter, a freshman at the Curtis Institute of Music in Philadelphia, PA, studying orchestral performance, and Annelise, a Junior at Stanford University in California studying to obtain her degree in child and family psychology. Annelise and Dexter were always extremely close growing up. They, too, shared their parents love for music and traveling, and always enjoyed their family adventures. Their parents ingrained the idea of experiencing life to the fullest into their brains, and they constantly sought to live by those words. This, however, was not always easy, especially for Annelise. At the age of 11, a drunk driver hit the Foster's car, causing Annelise to suffer a serious head injury, resulting in partial blindness. She is still able to make out bright lights and high contrast objects, but for the most part, she is unable to read signs, distinguish faces, or see many other essentials for every-day life.



Hobbies/Likes/Dislikes

Everette and Ophelia love visiting new places as well as new cultures, and strive to experience everything they possibly can while here on Earth. Each summer they take their kids on a trip to a new country and attempt to pass on the joys of new experiences. Their favorite foods are authentic cuisines from all around the world. Everette and Ophelia attend many concerts (even though they are usually the oldest ones there), and they are big movie buffs, as well.



Personality

The Foster family is anything but ordinary. They dislike cliché or boring, and they are never petty. They all treat every day like it is their last, and would love to spread that mentality to everyone they meet. They believe that enjoying life, especially the little things, is always necessary. They taught their children to always be unique and embrace their differences. Everette and Ophelia are outgoing, passionate, cultured, and young at heart.



Accommodations for Annelise

The Fosters have done everything they possibly could to accommodate for Annelise's impairment. In their home, they use bright lights and high contrast objects, along with many textural elements, especially in Annelise's room. When they travel, they focus on doing experiential things more than visual, in attempt for her to have an equally incredible experience. Ophelia even uses extra thick paint on her paintings so Annelise can "see" them.

EVERETTE & OPHELIA FOSTER



THINK/FEEL

- Intrigued by new cultures
 - Uniqueness is a good thing
 - Excited about new experiences
 - Glass half-full
- Grateful to have Annelise and Dexter in their lives
- Worried about their children's happiness
 - Often choose heart over brain
 - Young at heart

HEAR

- Music Everywhere
- People in need not asking for help
- Disability concerns from Annelise
- Positive encouragement

SEE

- Children effortlessly enjoying life
- The world
- Beauty everywhere
- Potential hazards for the impaired

SAY/DO

- Help everyone they can
 - Include anyone who wants to be included
 - "Embrace differences."
- Watch movies
- "Enjoying life, especially the little things, is important"
 - Travel everywhere they can
 - Play instruments
 - Eat new foods

PAIN

- Difficulties for Annelise
- Misunderstandings
- Cliché
- Boring

GAIN

- Equally enjoyable experiences for all abilities
- Teaching others
- Helping others
- Creativity



FOSTER RECORDS

Music

- Classical Music from the 60's-80's (Maybe early 90's)
- To Evoke Nostalgia in Adults
- To Show Youth "What Good Music Really Is"



Why the Record Shop

Music has always played an extremely large role in the lives of Everette, Ophelia, and their children. Growing up, Everette and Ophelia were both constantly surrounded by music. Annelise and Dexter took to this passion just as quickly, always wanting to try new instruments and have music playing at all hours of the day. After the accident and Annelise's injury, music became even more important in the Foster's lives. It became the light for Annelise, and helped her understand that life can still be enjoyed without sight. Everette and Ophelia want to spread this light onto others, sighted and non-sighted, and give others the opportunity to appreciate the necessity of music in their lives.



What's in It

- A Place to Hangout (Coffee, Tables, Seating)
- Magazines/Books on Classic Bands or Artists
- Maybe a Screen for Movie Nights
- Facts and Memorabilia
- Fun Things to Touch and Play With



Design

- Raw Materials
- High Contrast Value or Color
- Industrial & Rustic
- Incorporate Ophelia's Photo's/Paintings
- Retro Vibe with a Modern Twist
- Stay Away from Cliché Retro Style
- Welcoming
- Inspiring
- Cozy
- Connected
- Intuitive Wayfinding
- People Want to Come back for the Design



Extra

- Visual Impairment Accommodations
 - Tactile Walls, Floors, and Objects
 - Brighter Lighting
 - High Contrast Values and Colors
 - Minimal Sharp Corners
 - Braille on all Signage
 - Wayfinding Cues on Floor
 - Navigational Map of Some Sort in Entry
 - Music and Sound
 - Block Furniture (No Space Under)
 - Wider Walking Space and Dwelling
 - Railings or Guide Lines Along Walls/Shelves
 - Consistent Walking Surface
- Unique Idea for Shelving Records

CONCEPT



ENLIGHTENING

EXTEROCEPTIVE

INSPIRING

INTRINSIC

TACTILE

EXPERIENTIAL

SAFE

INTRIGUING

COLORFUL

SENSATION

CREATIVE

THE WORLD THROUGH A CHILD'S EYES

JOURNEY

NOSTALGIC

SENSE DATUM

FEELING

STIMULATING

EMPIRICISM

MAGICAL

AWAKENING

CONSONANT

UNIQUE

PASSIONATE

WHY CHILDREN...



What they Do and Think

- Want to touch everything
- Want to explore experience different things
- Everything they see is new and exciting
- Their curiosity takes over
- They believe everything is good
- Everything seems almost magical
- New and exciting places inspire happiness in them
- They are creative thinkers
- They often think more with their heart
- They are usually experiential learners (they learn with all 5 senses)



Other

- The music selections dates back to older generations own childhood - Nostalgia plays a large role



Personal

- Everette and Ophelia always taught their own children to embrace and experience life to its fullest potential - they want to instill this idea in others, as well
- Everette and Ophelia travel a lot - take those experiences but through a child's lens

Other

- Foster Records (Foster family is a family that takes you in, just as Foster Records will do - Can be your home away from home)

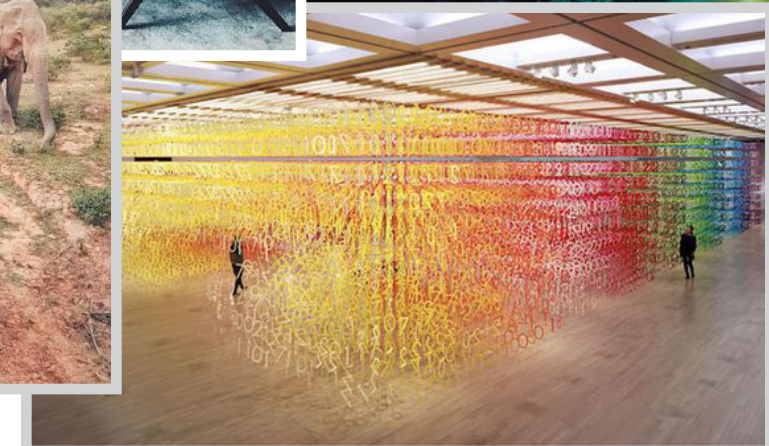
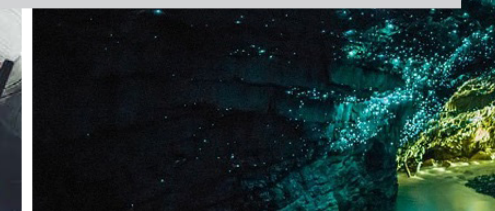
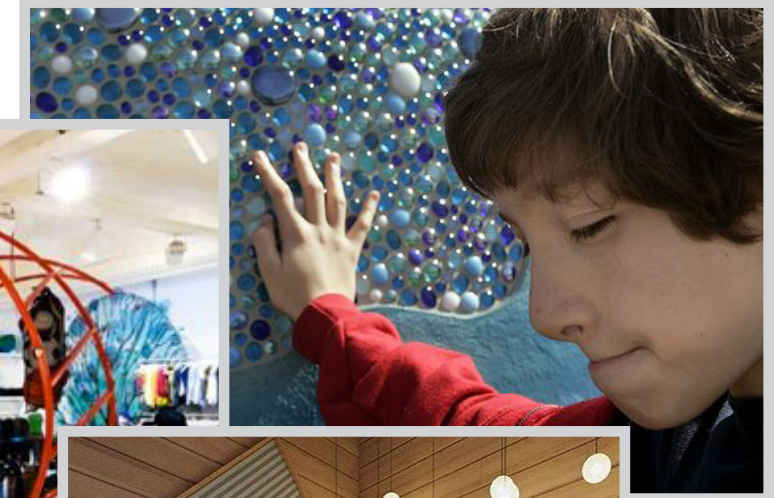


CONCEPT EXECUTION

The way children see the world is the way I want people to see my space.

Design Aspects

- Tactile Walls, Floors, etc.
- Bright Colors
- Unique Shapes
- Otherworldly/Magical
- Things to Discover/Explore



The world is their playground.

The page features several thin, grey, curved lines that sweep across the top and right sides, creating a modern, abstract background. The text is centered in the upper-left quadrant.

CUSTOMER RESEARCH



| | RESEARCH | CHOOSING | DRIVING TO SHOP | PARKING | WAY TO SHOP |
|-------------------|--|--|--|---|---|
| USER GOALS | To move through the space easily and comfortably. Easy access to merchandise checkout. | Customer must see clear prices and merchandise options when making a decision to purchase. | East access in and out of the parking lot. | Clear/wide entryway to parking lot. | Enter through front door and be able to have a clear path. |
| USER EXPECTATIONS | Able to access bathrooms easily with no wait time. | To have a variety of items in stock. | Enough parking for all customers and employees. | Free parking/enough parking. | Customers expect to be able to navigate the space easily. |
| PROCESS | A customer's process will start from the minute he/she enters the space and will end with check-out and exiting. | A customer will look at all options and want visual displays to look at/guide. | A customer/employee will be hoping there is a lot specifically for the shop. | A customer will pull into lot successfully. There is options for handicap parking. | The customer will be guided by the path of the floor and not by signs because there are no clear signs. |
| EXPERIENCE | <p><i>(Positive Emotions)</i></p> <p>A positive point for the Ex Libris Bookstore and Cafe is that their marketing strategy is good, forcing customers to make their way through the merchandise to get to the cafe; however, there are no clear signs that the cafe is located in the back. There are also no clear signs to where things are located, including bathrooms.</p> <p><i>(Negative Emotions)</i></p> | | | | |
| TOUCHPOINTS | Activities done in the store are shopping (materials, supplies, clothing), eating/drinking, and homework. | Good display of food with labels - creates a visual menu for people who have trouble reading (Kids and Elderly). | There is a handicap parking spot. | There is enough parking. | Easy access for employees to and from cafe and kitchen. |
| PAIN POINTS | No clear sign where the bathroom is located. Bathroom is on the second level, not the main level. | No clear menu. One mat menu option, but it is very small to read and not in plain sight. | No huge driving/parking concerns. | Good job in this area. | There is a lot of traffic at the bottom of the stairs, resulting in traffic around the cafe. |
| PROBLEMS | <ul style="list-style-type: none"> Not a clear path. Cafe is hidden. Line starts on one side and ends on the other with cream/sugar at the beginning of the line. | No clear menu. | On a main road, but has a small parking lot. | Good job in this area. | Awkward navigation. |
| IDEAS | <ul style="list-style-type: none"> Switch direction of line. Have clearer signs. Bigger menu behind counter. | Big sign for menu with food and prices visible to the customers. | <ul style="list-style-type: none"> Expand lot out. Have back entrance to cafe from lot to have handicapped spots closer to entrance. Easier access to cafe. | An idea to improve the path would be to have more signs other than the merchandise guide the customers. | The Employees must enter the store through the same entry as everyone else. |

This is an observation following these three demographics:

- An Elderly Man

- The Employee's

- Students Ages 18-24

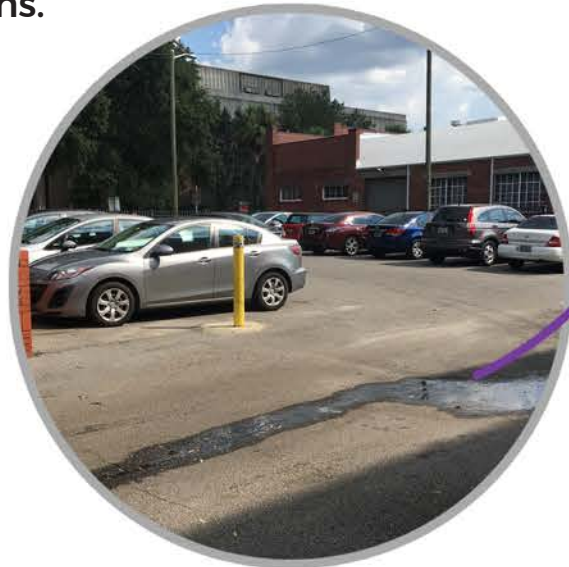
THE JOURNEY

The journey is very similar for every demographic type, but many parts of the store are untouched unless someone knows they need a specific item in that area of the store.

One main entrance and exit with many display windows.



Small parking lot behind the building, but street parking options.



Only way-finding aid in the store.



Enter immediately into merchandise and a view of the check-out area.



Merchandise tables and racks very close together.



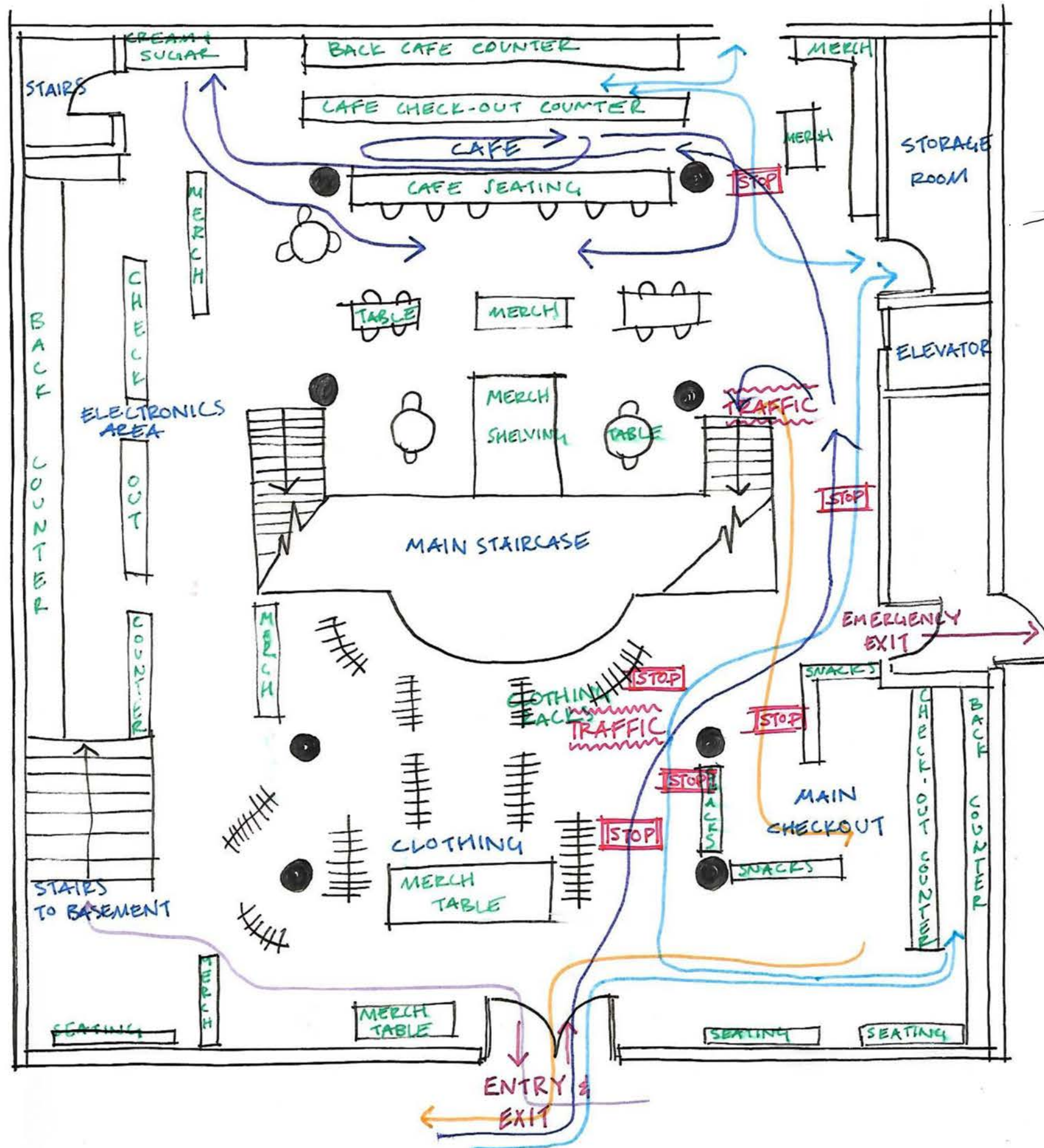
Cafe with seating for resting or eating/drinking.



Some go directly upstairs to buy supplies.

The Customer Experience:
Ex Libris

1. ENTER
2. OBSERVE
3. SHOP
4. EXPLORE
5. REST
6. CHECK-OUT
7. EXIT

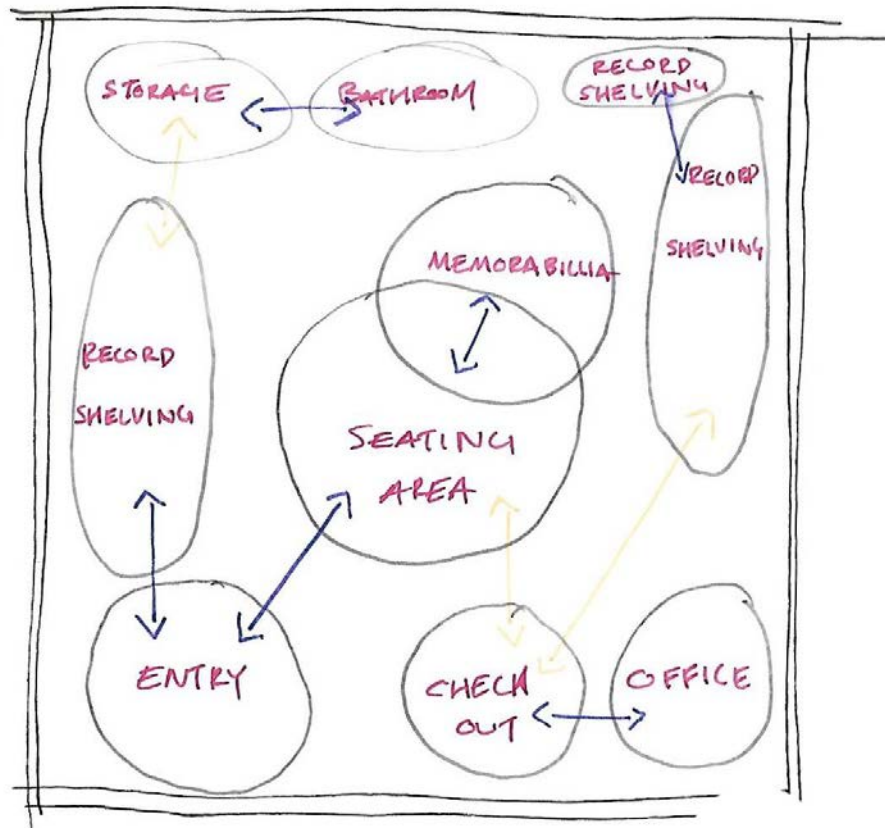


— = STUDENT MOST COMMON ENTRY PATH
 — = STUDENT LESS COMMON ENTRY PATH
 — = STUDENT EXIT PATH
 — = EMPLOYEE PATHS

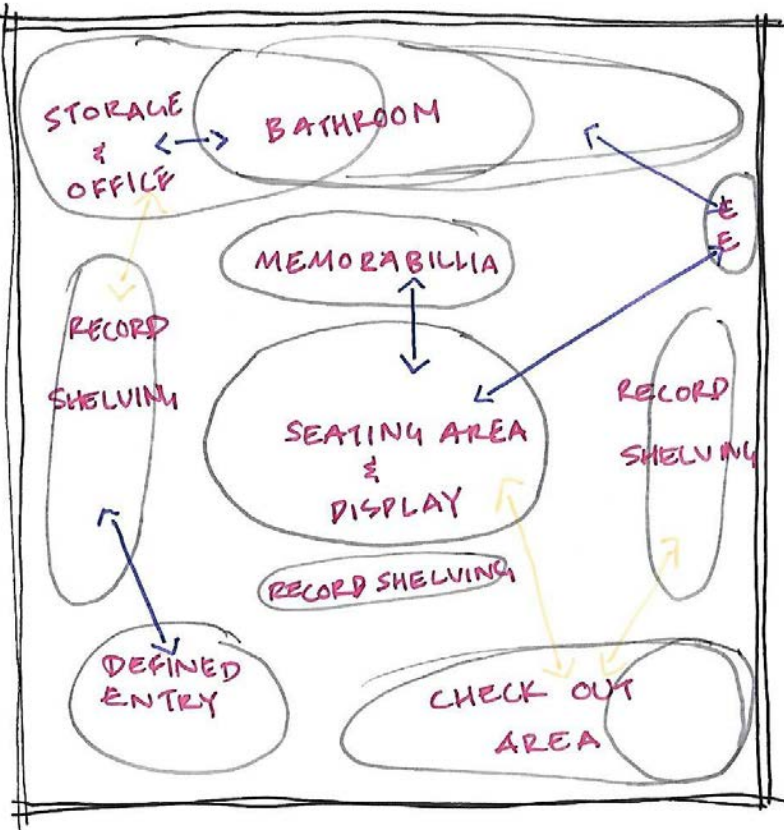


PHASE II

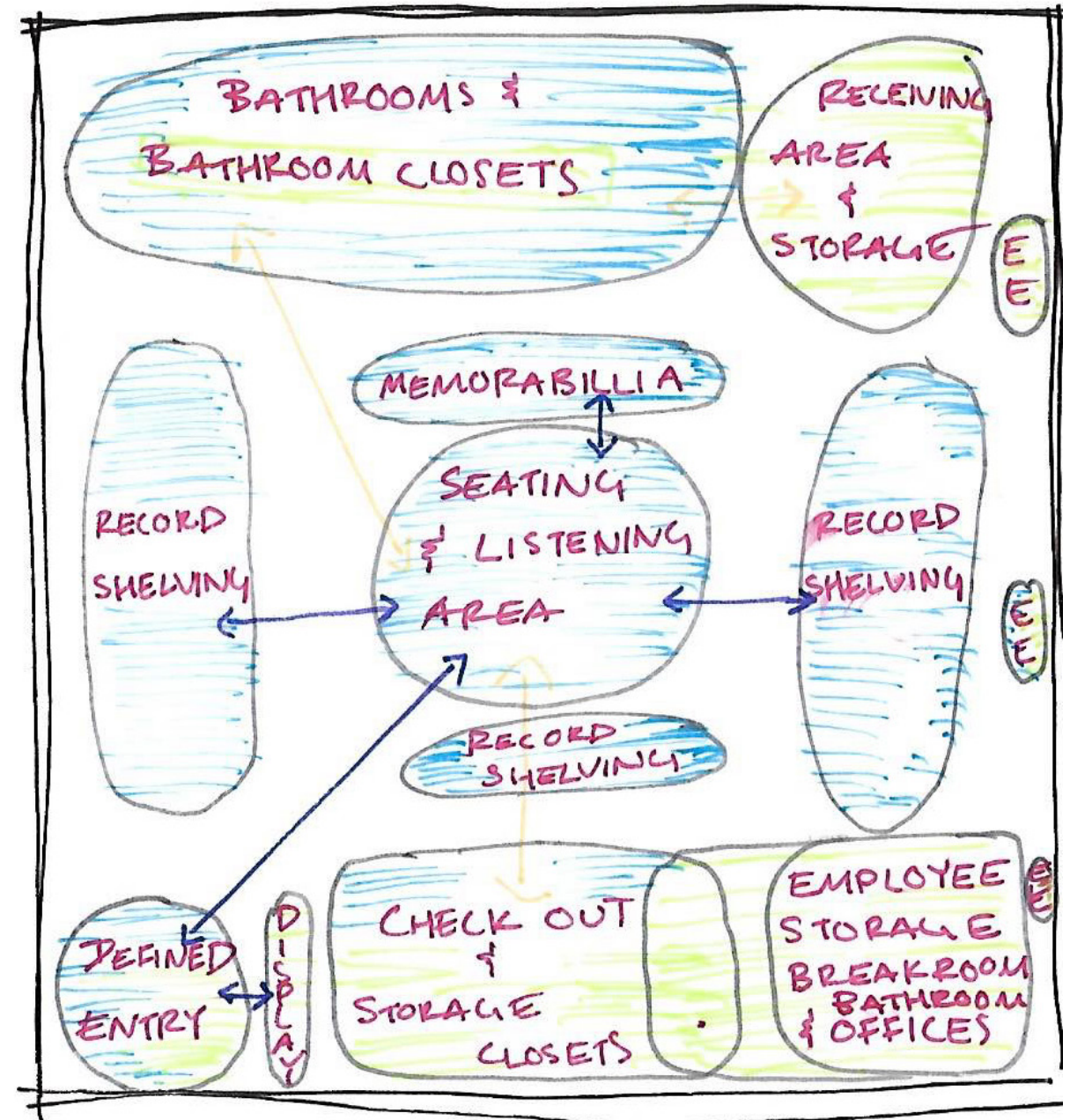
DESIGN PLANNING



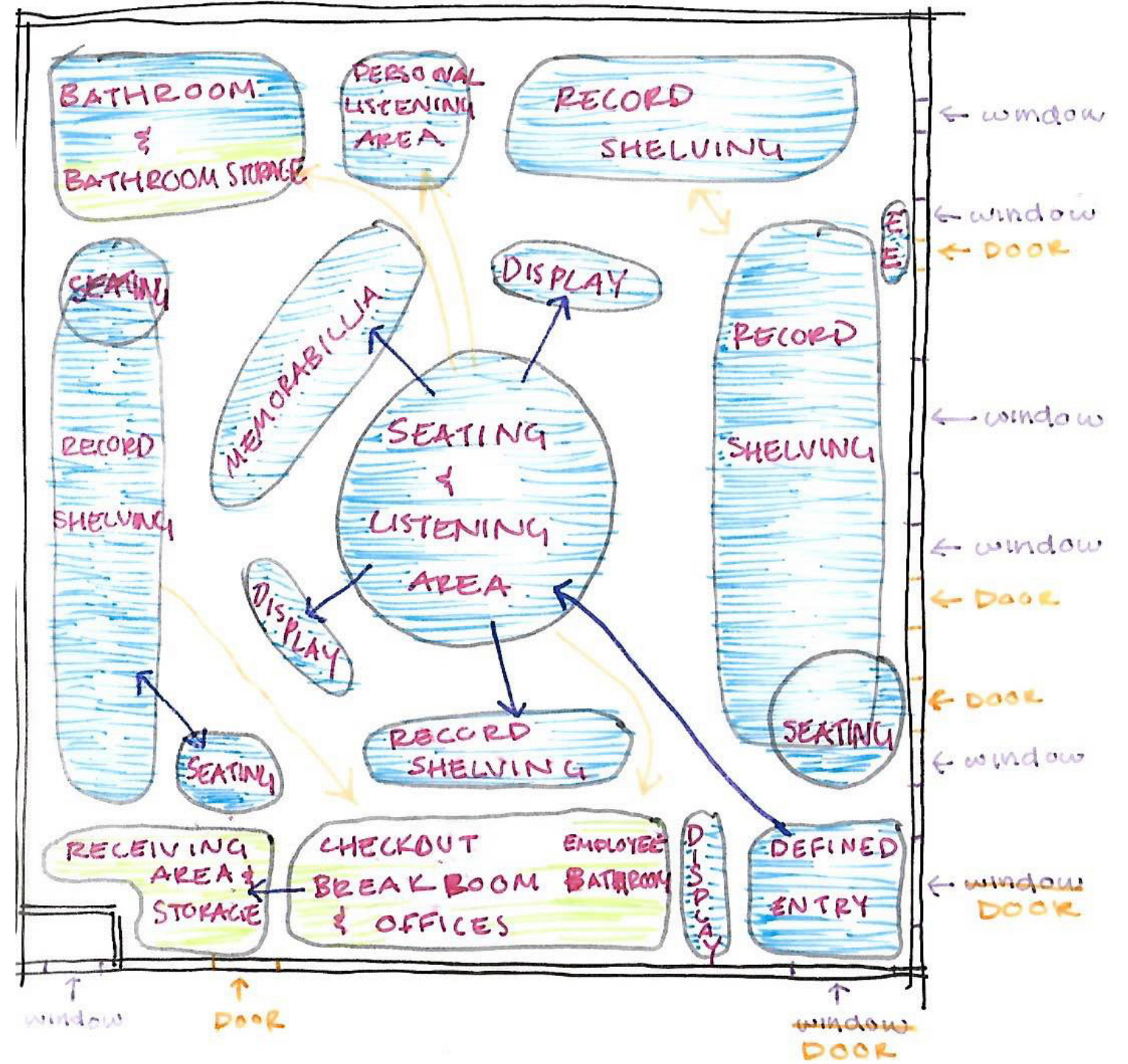
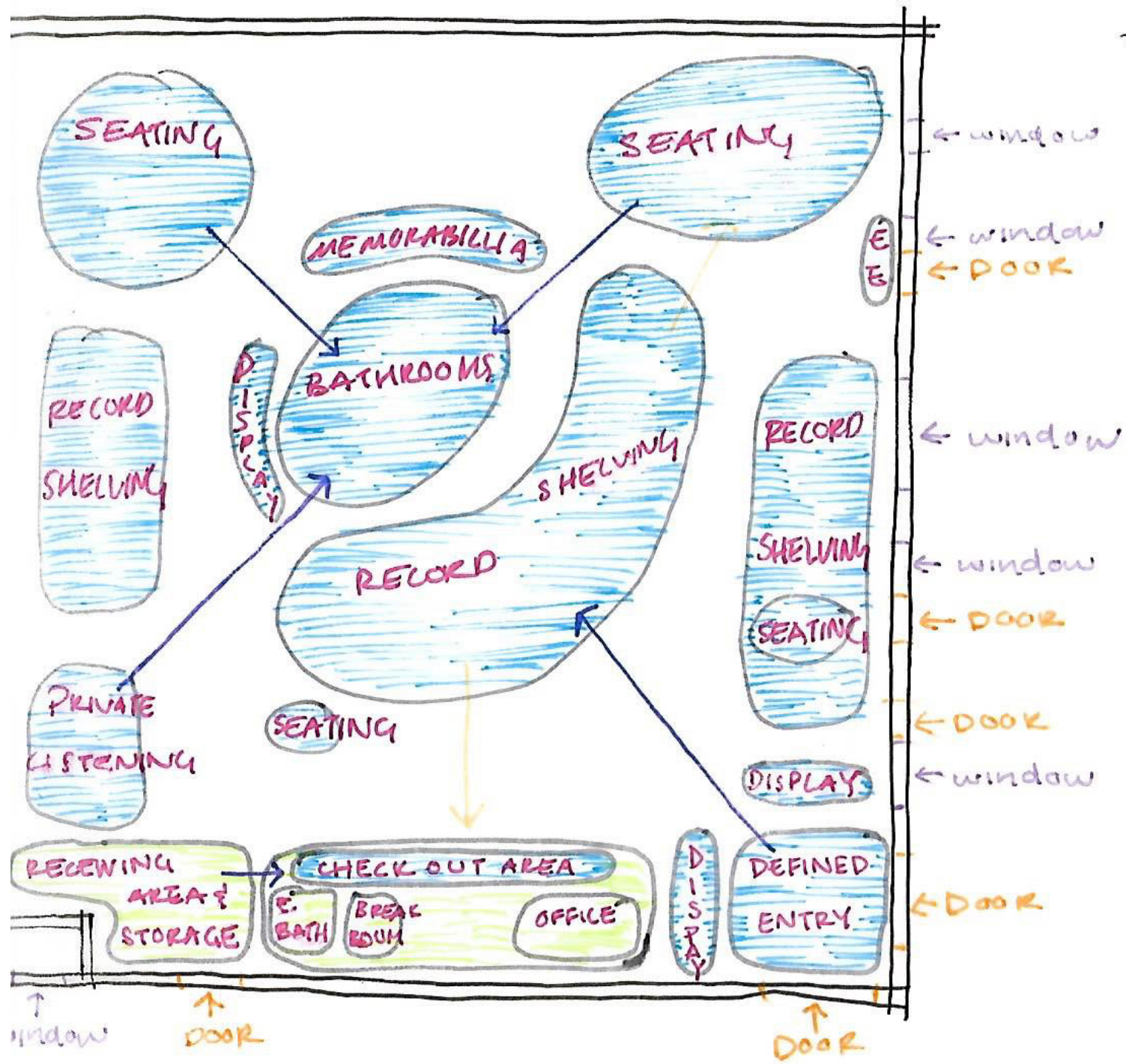
— = DIRECT CONNECTION
 — = CLOSE PROXIMITY

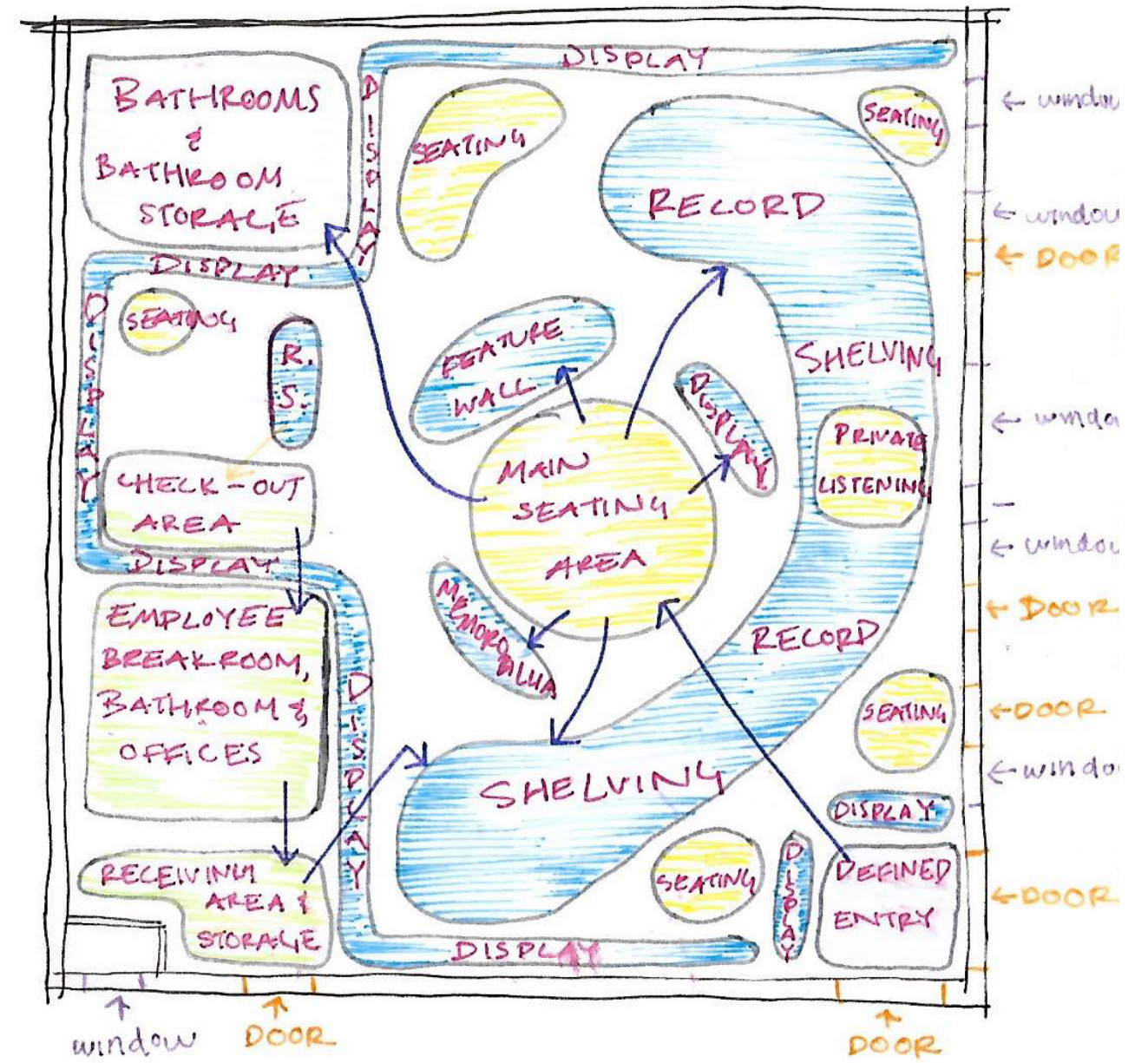
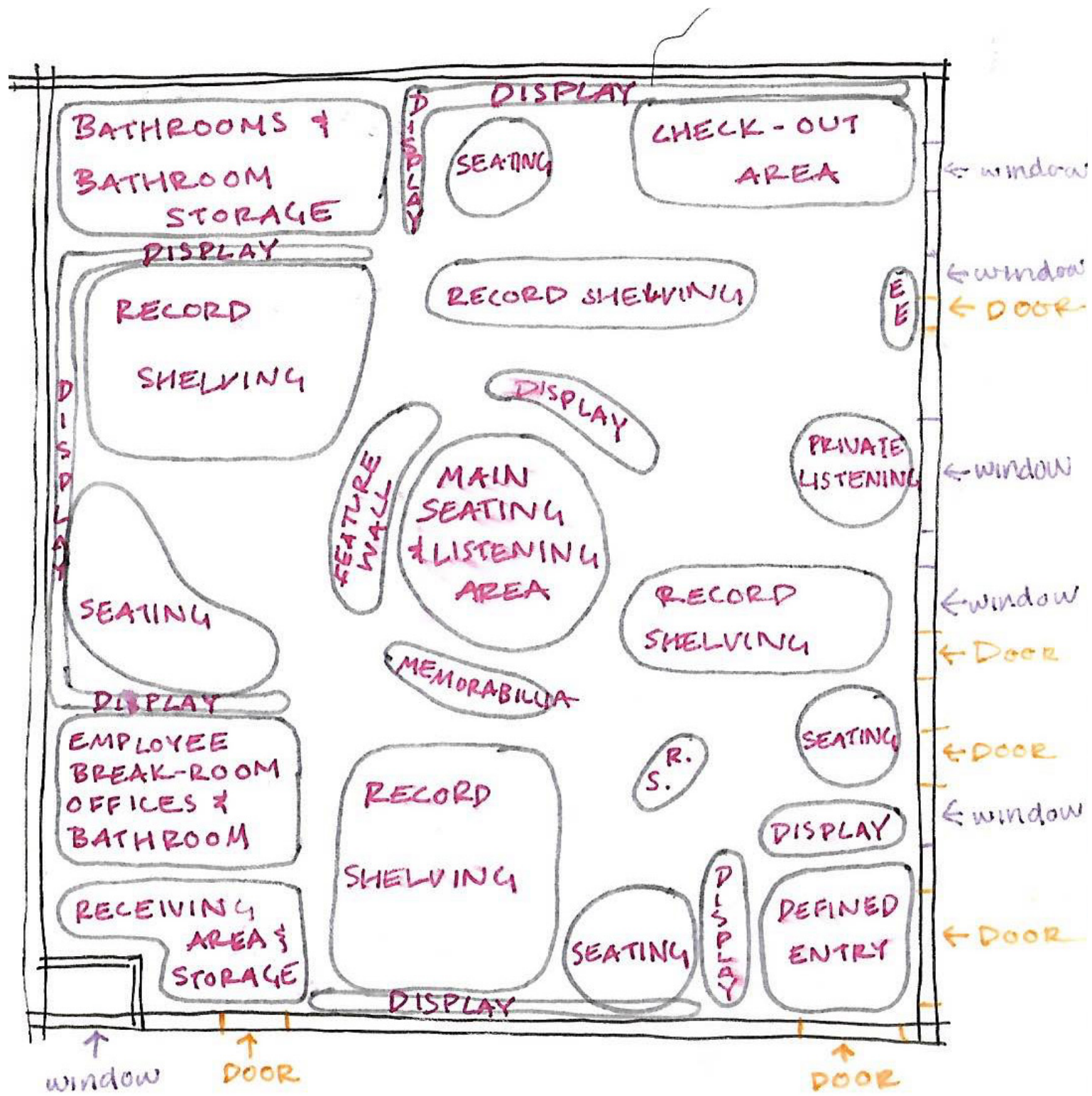


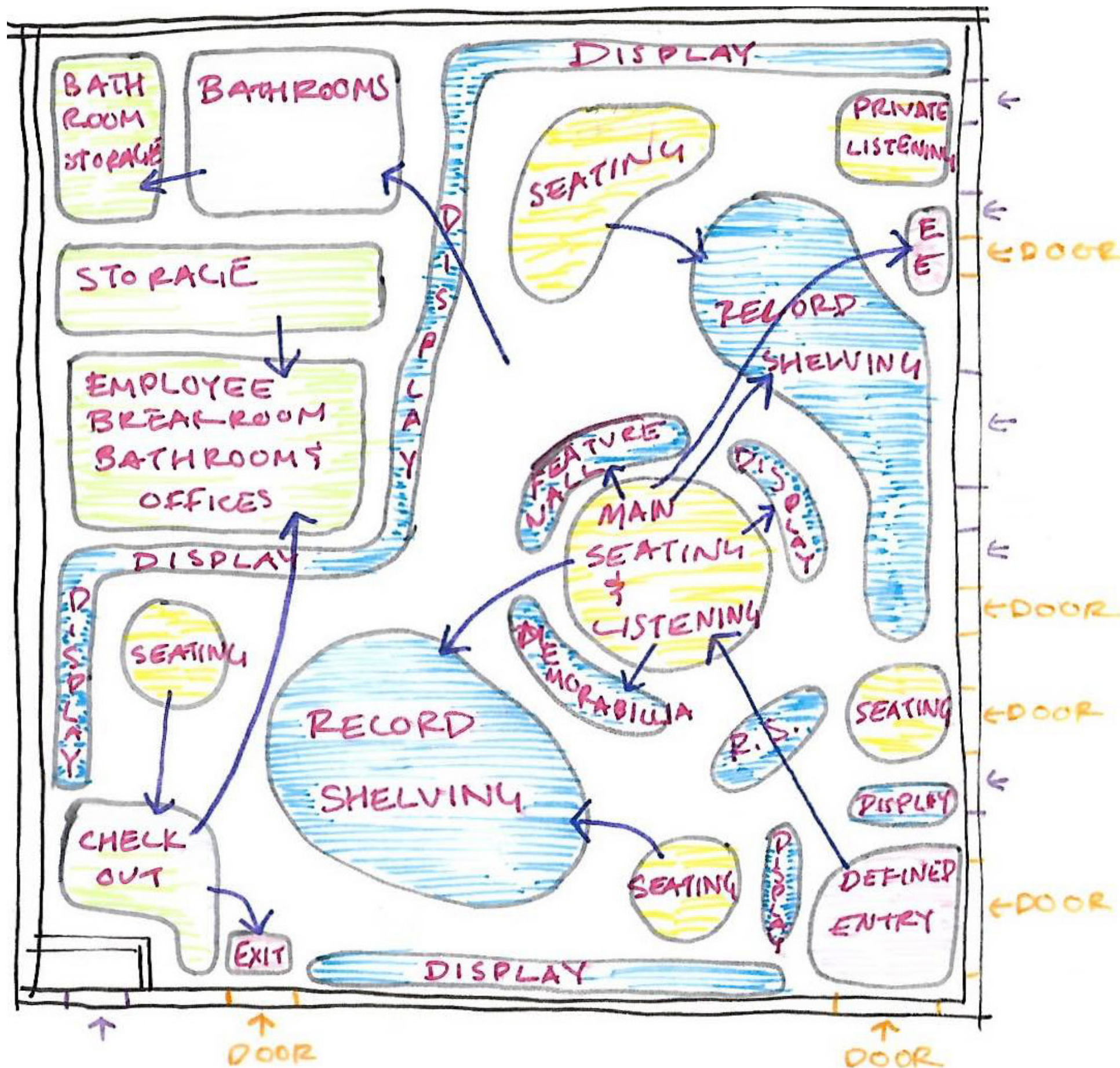
— = DIRECT CONNECTION
 — = CLOSE PROXIMITY



≡ = customer
 ≡ = Employee







— = DIRECT CONNECTION
 ≡ = DISPLAY & MERCH
 ≡ = SEATING
 ≡ = EMPLOYEE AREA

/// = EMPLOYEE AREA

■ = STRUCTURAL

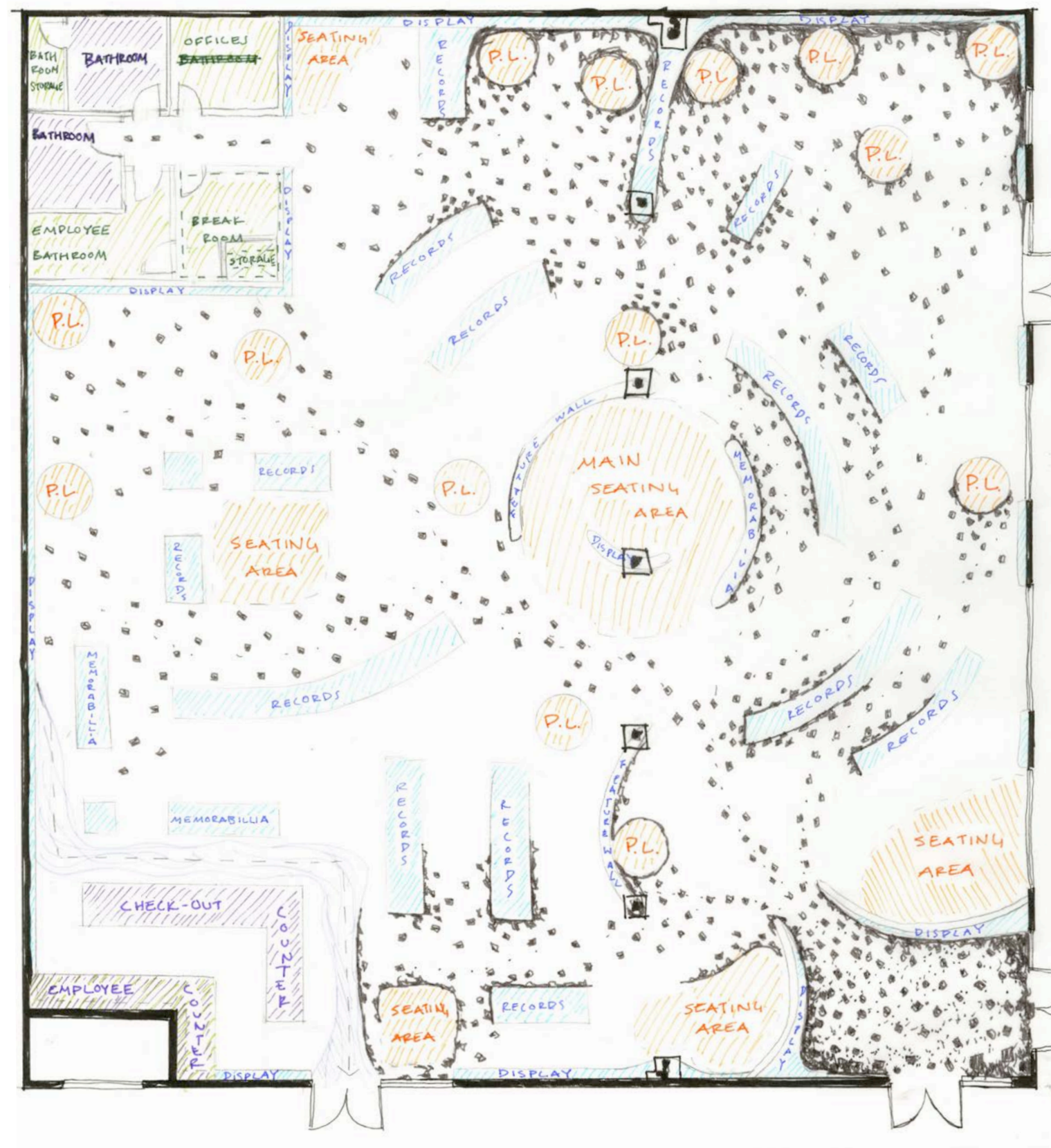
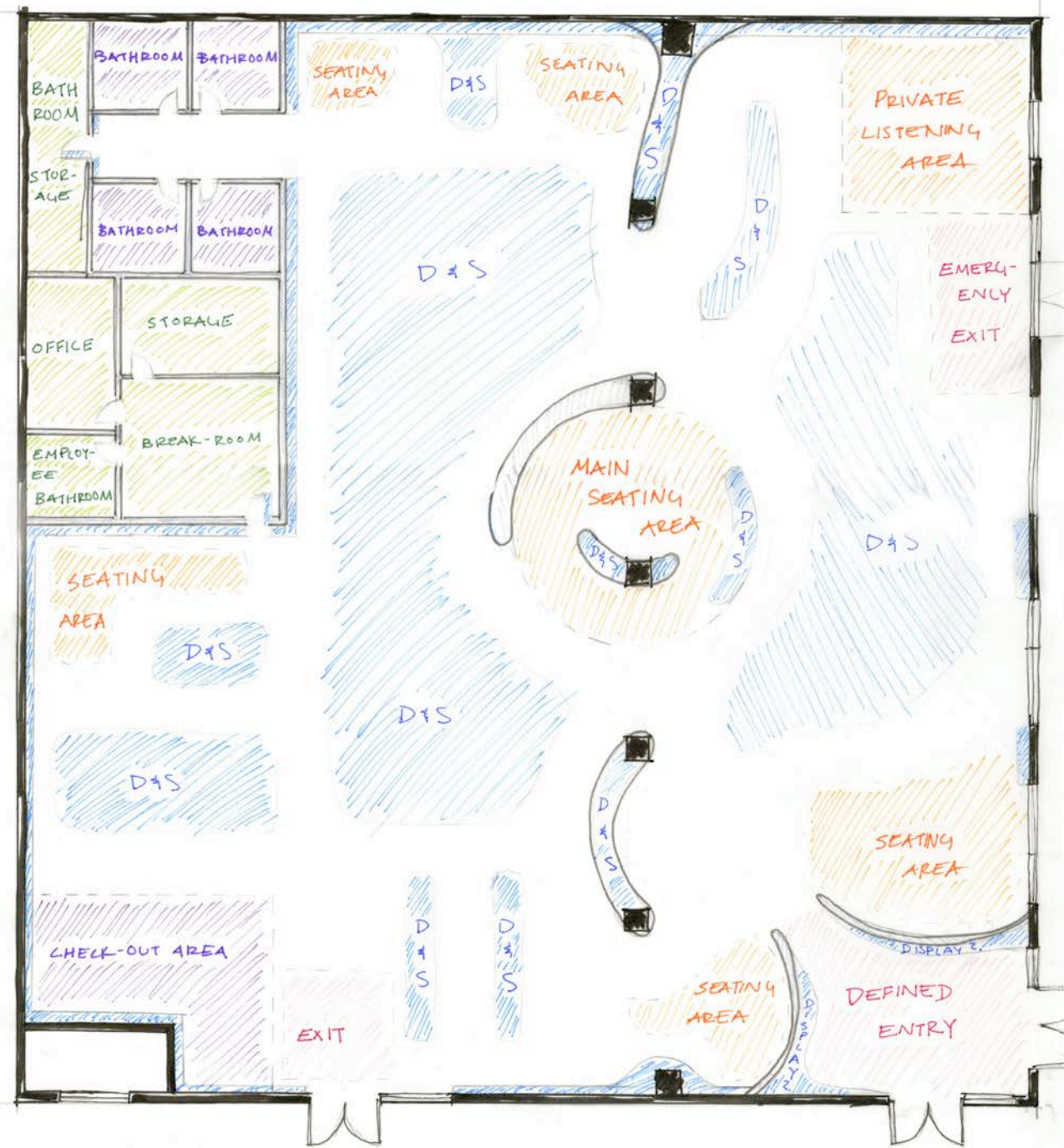
/// = EGRESS

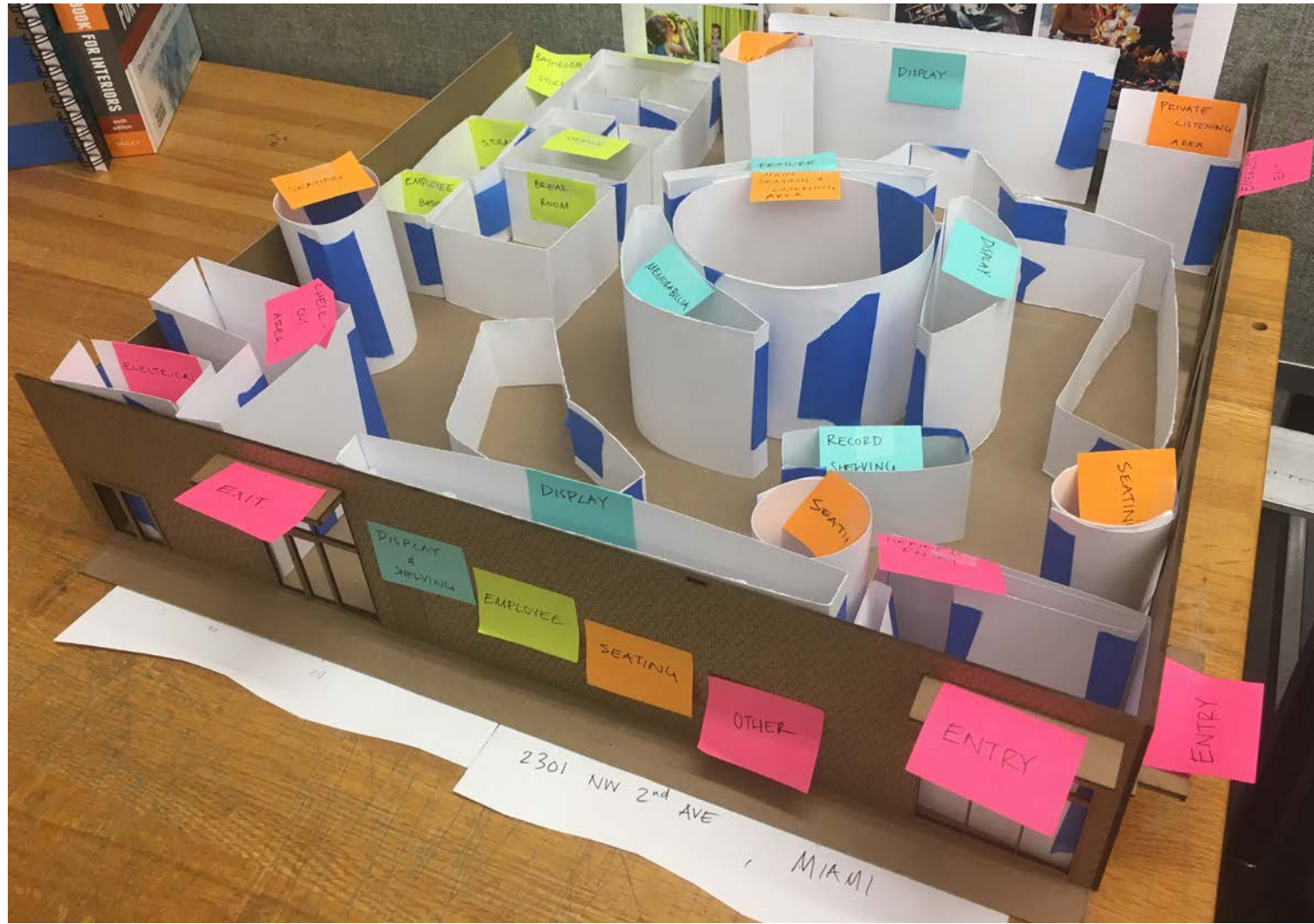
/// = DISPLAY & SHELVING

□ = WALLS

/// = OTHER

/// = SEATING

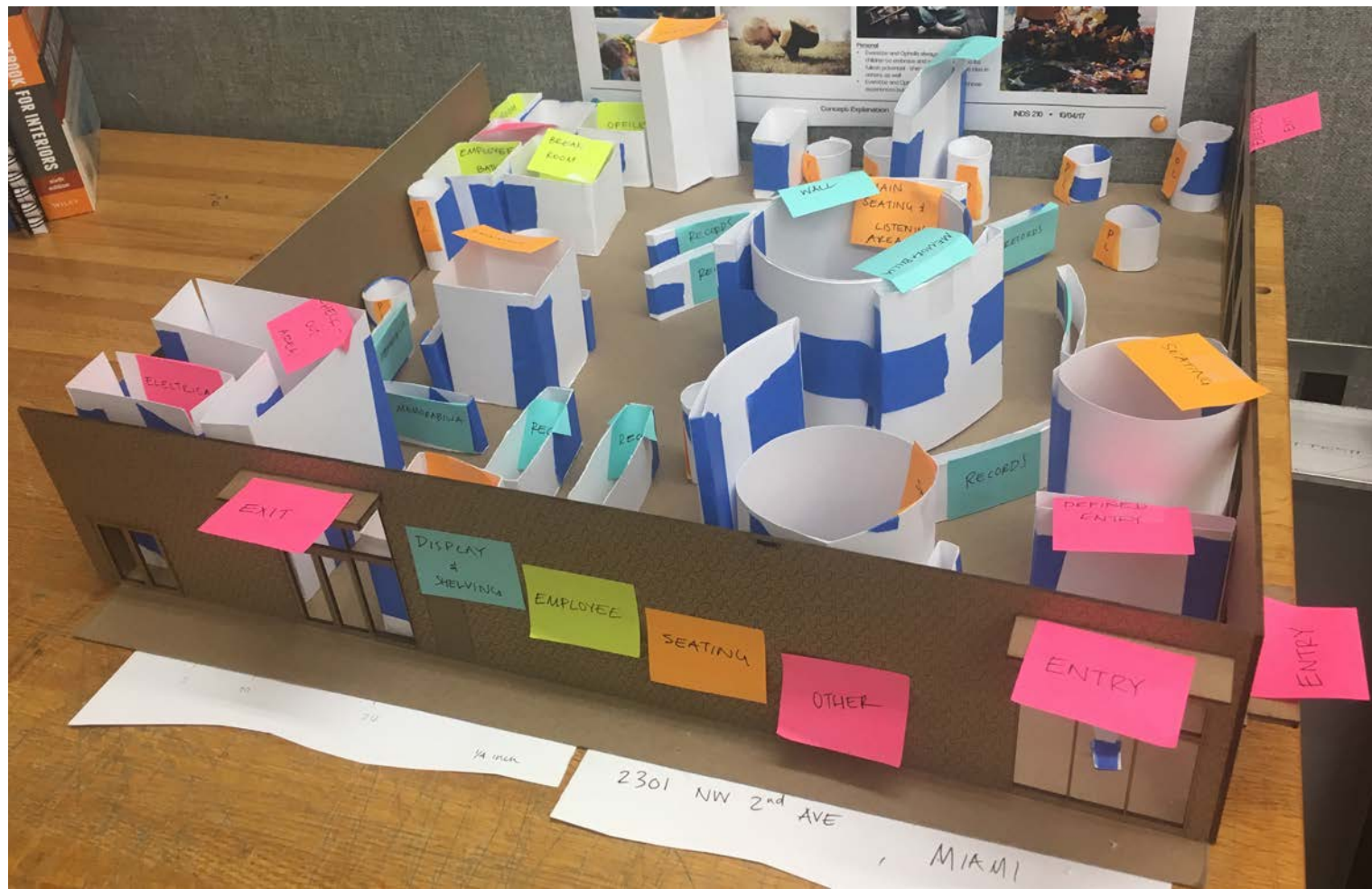




SCHEME ONE



SCHEME TWO



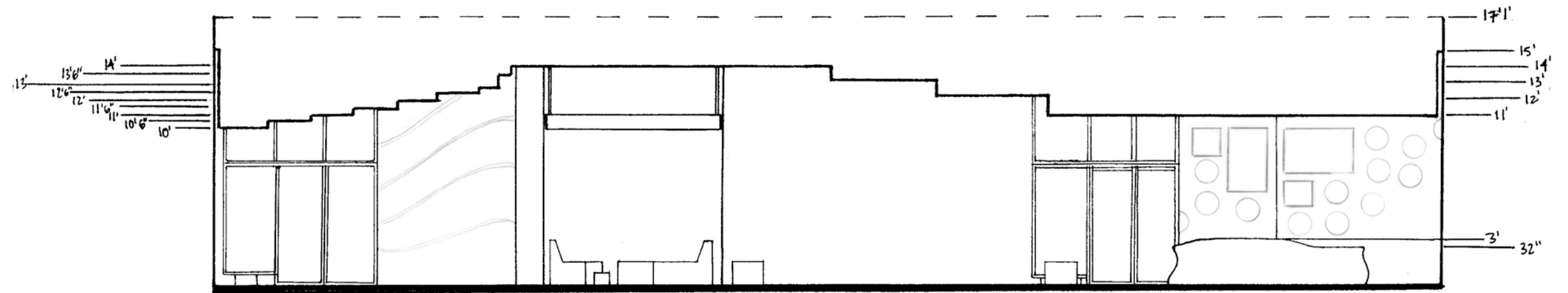
SCHEME THREE

Side View

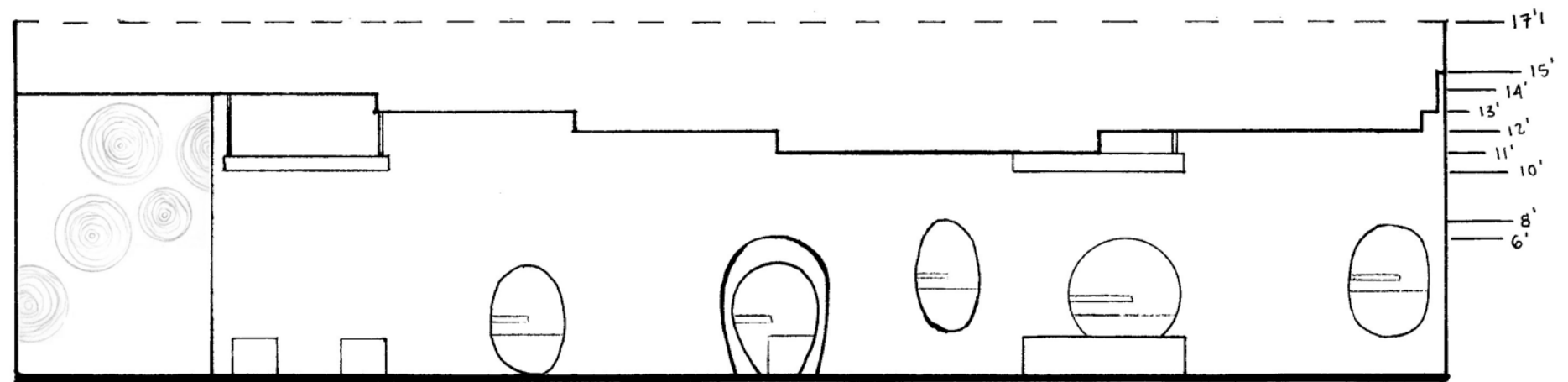
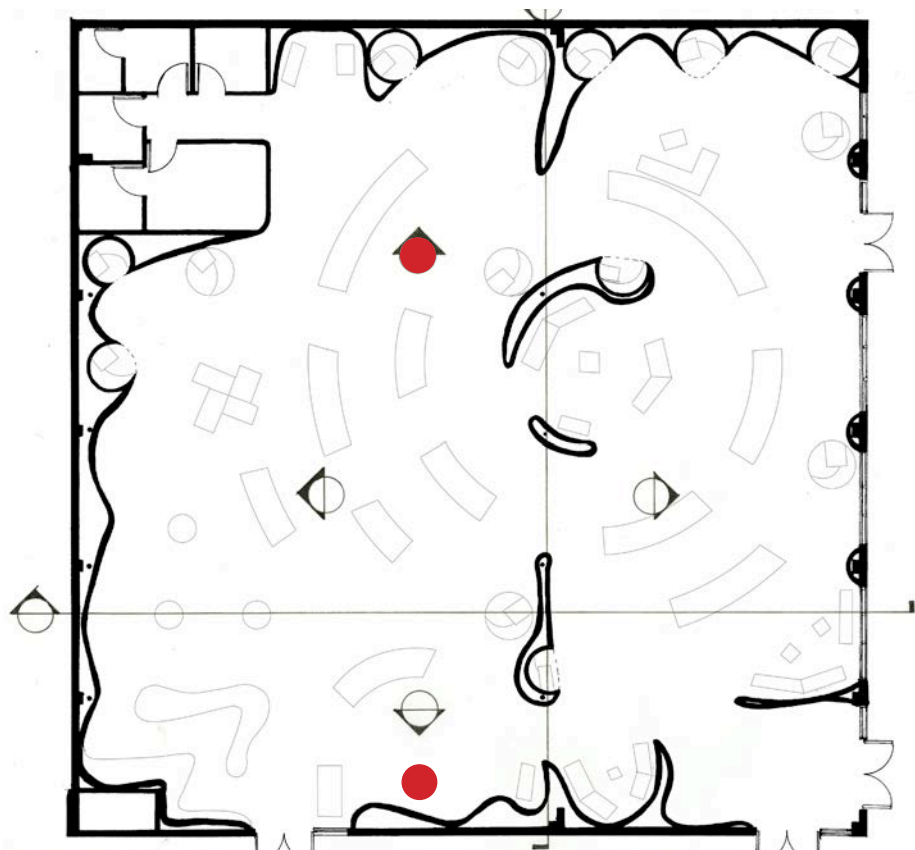


SCHEME THREE

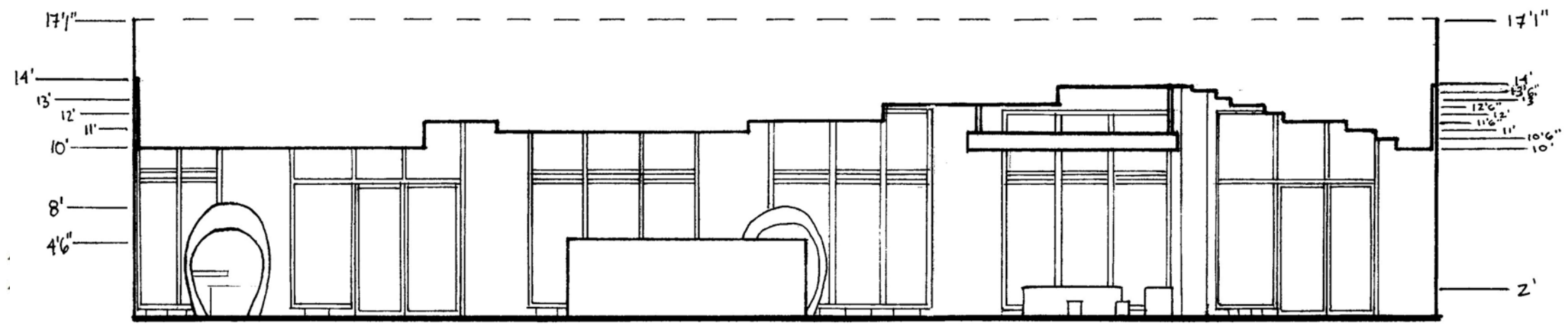
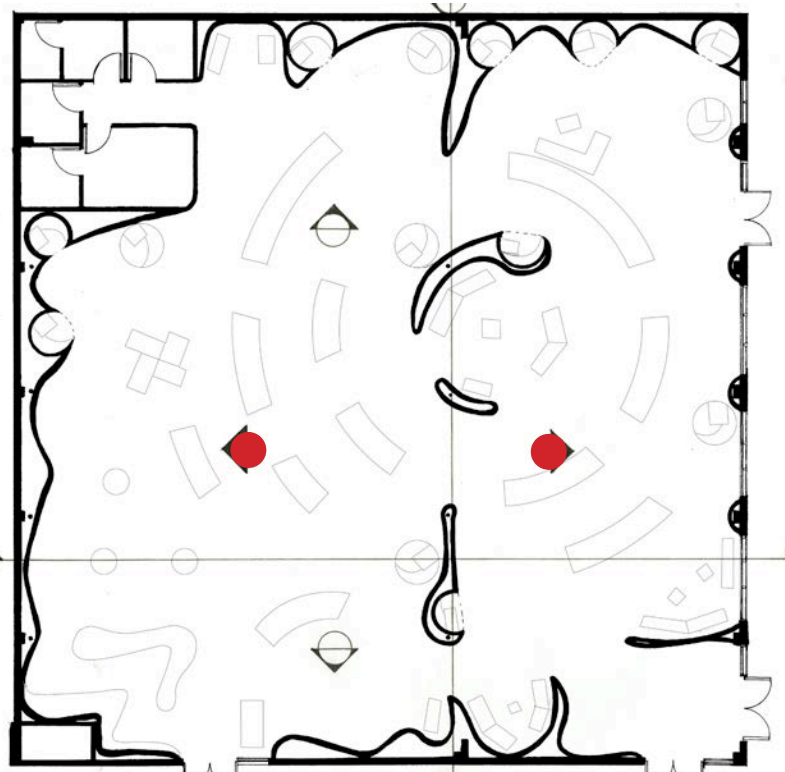
Top View



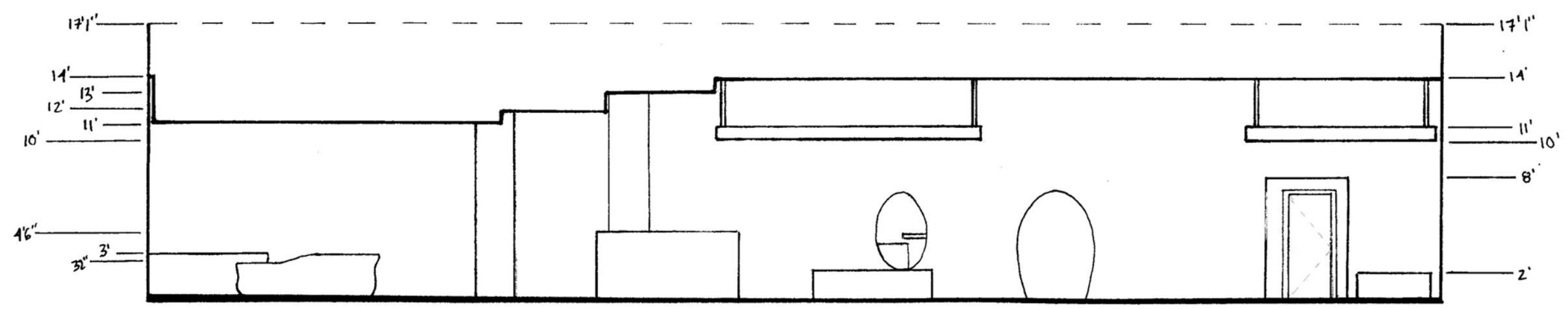
FRONT WALL ELEVATION



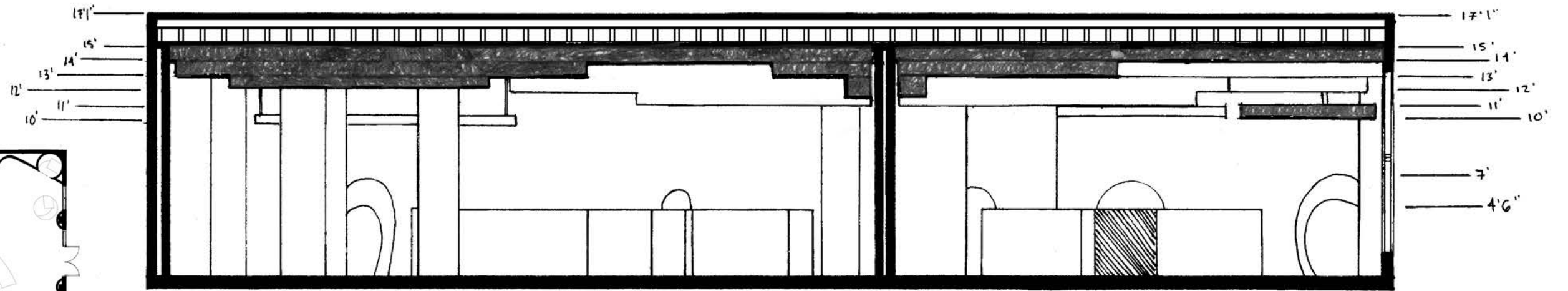
BACK WALL ELEVATION



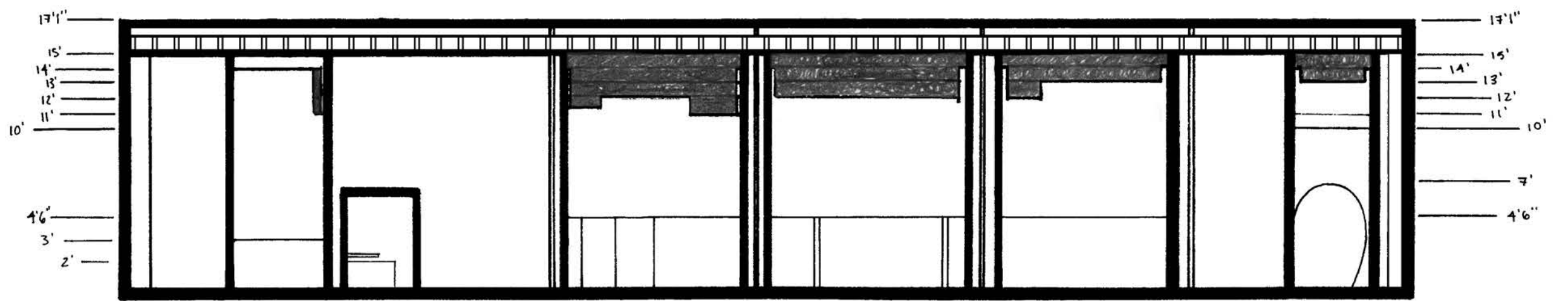
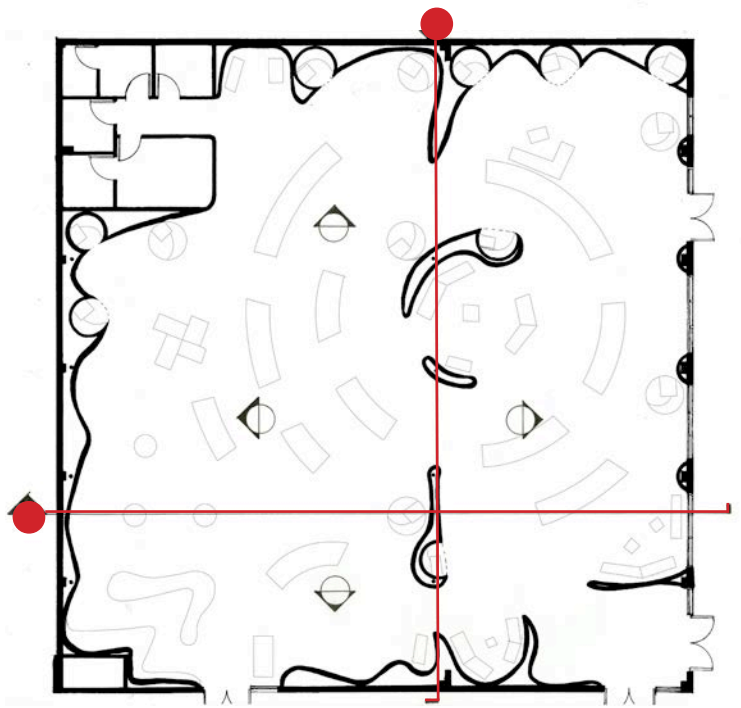
RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



BACK WALL SECTION



LEFT SIDE SECTION

