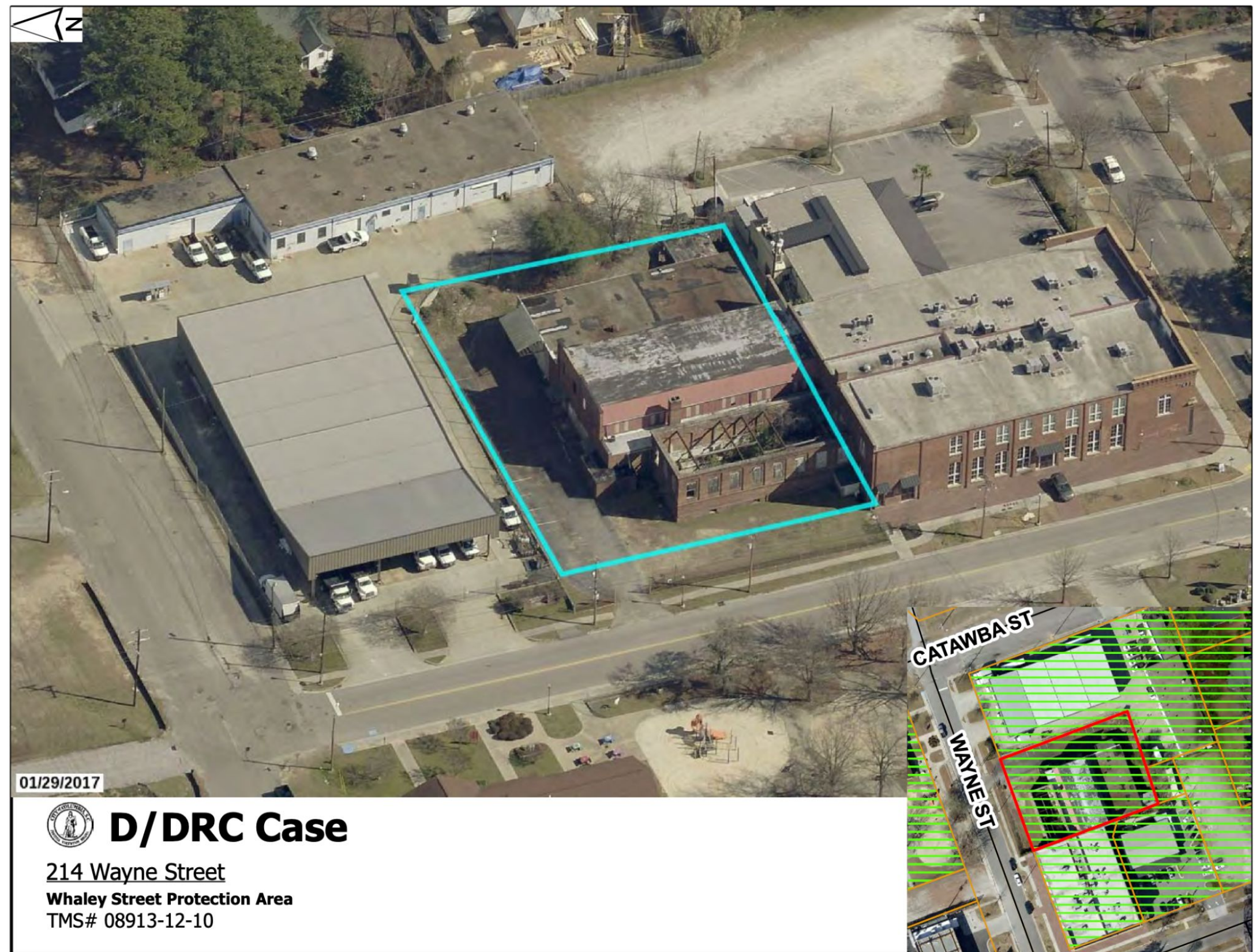
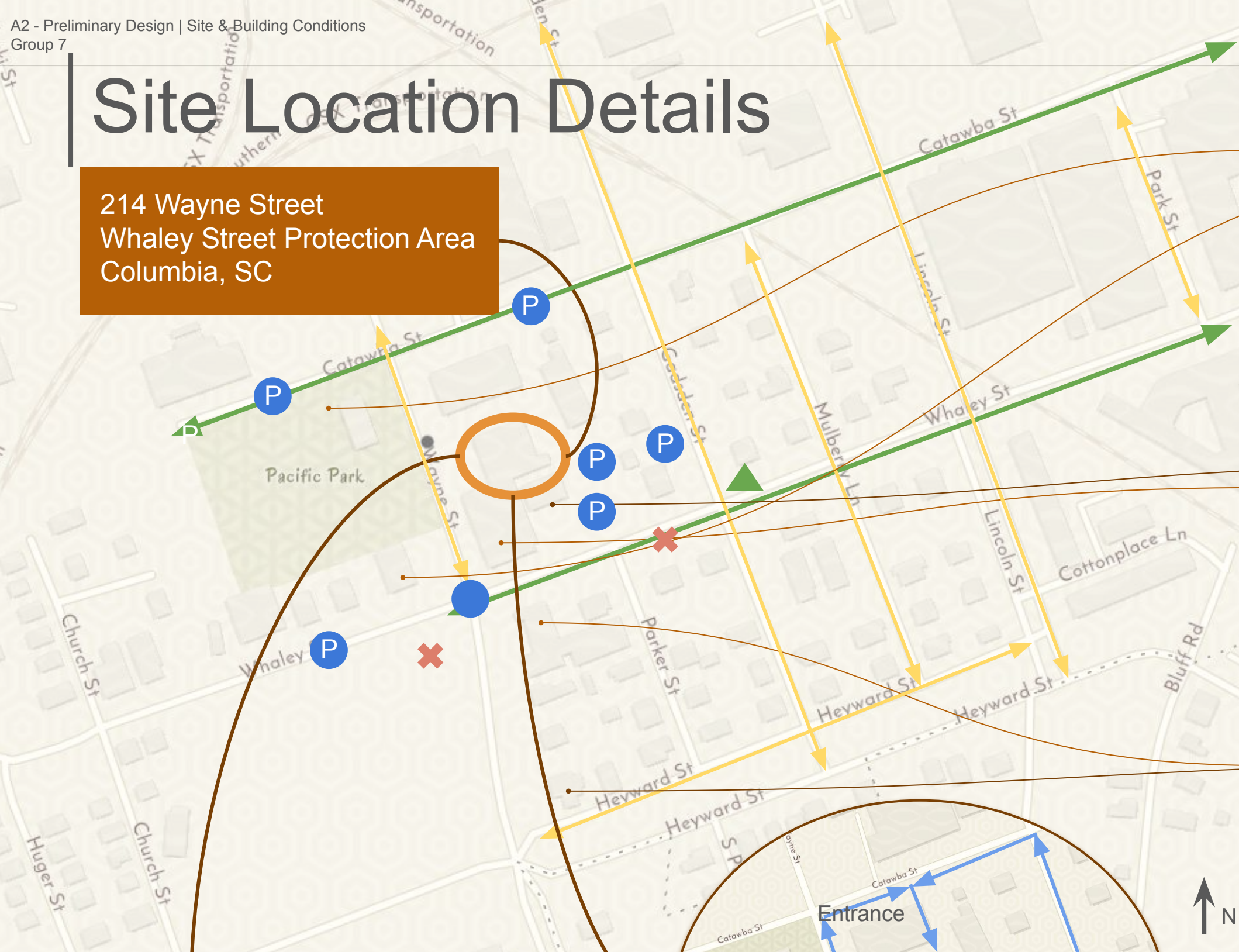


Preliminary Design | Site & Building Conditions

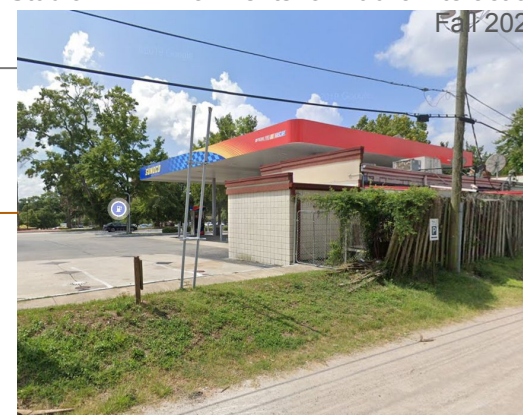


Site Location Details

214 Wayne Street
Whaley Street Protection Area
Columbia, SC



Pacific Park



Gas Station



The Boutique Day Spa



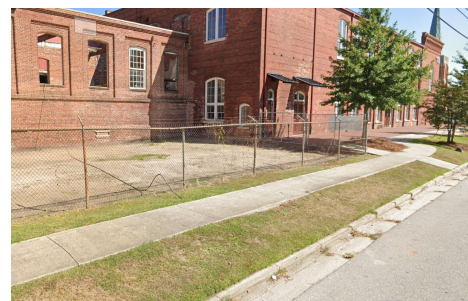
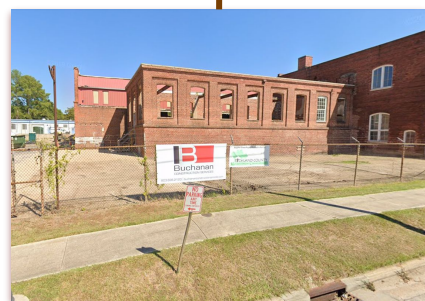
Grocery Store



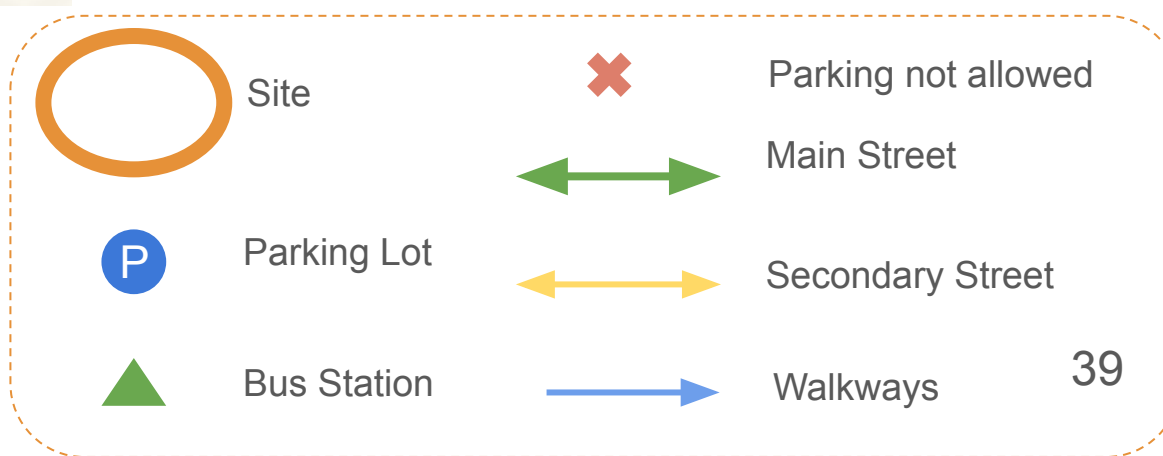
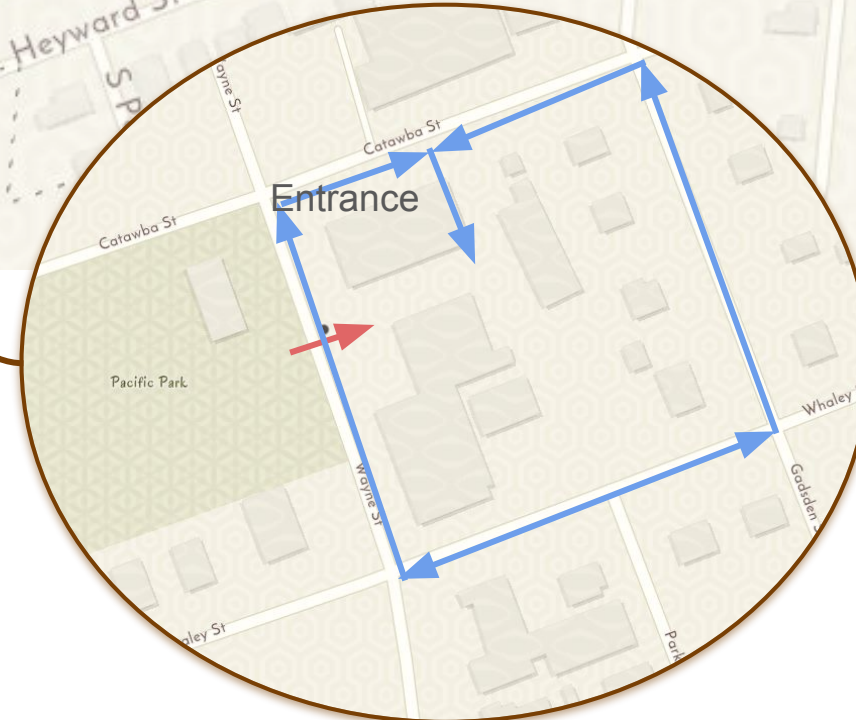
RADIUS Church



Cornerstone Baptist Church

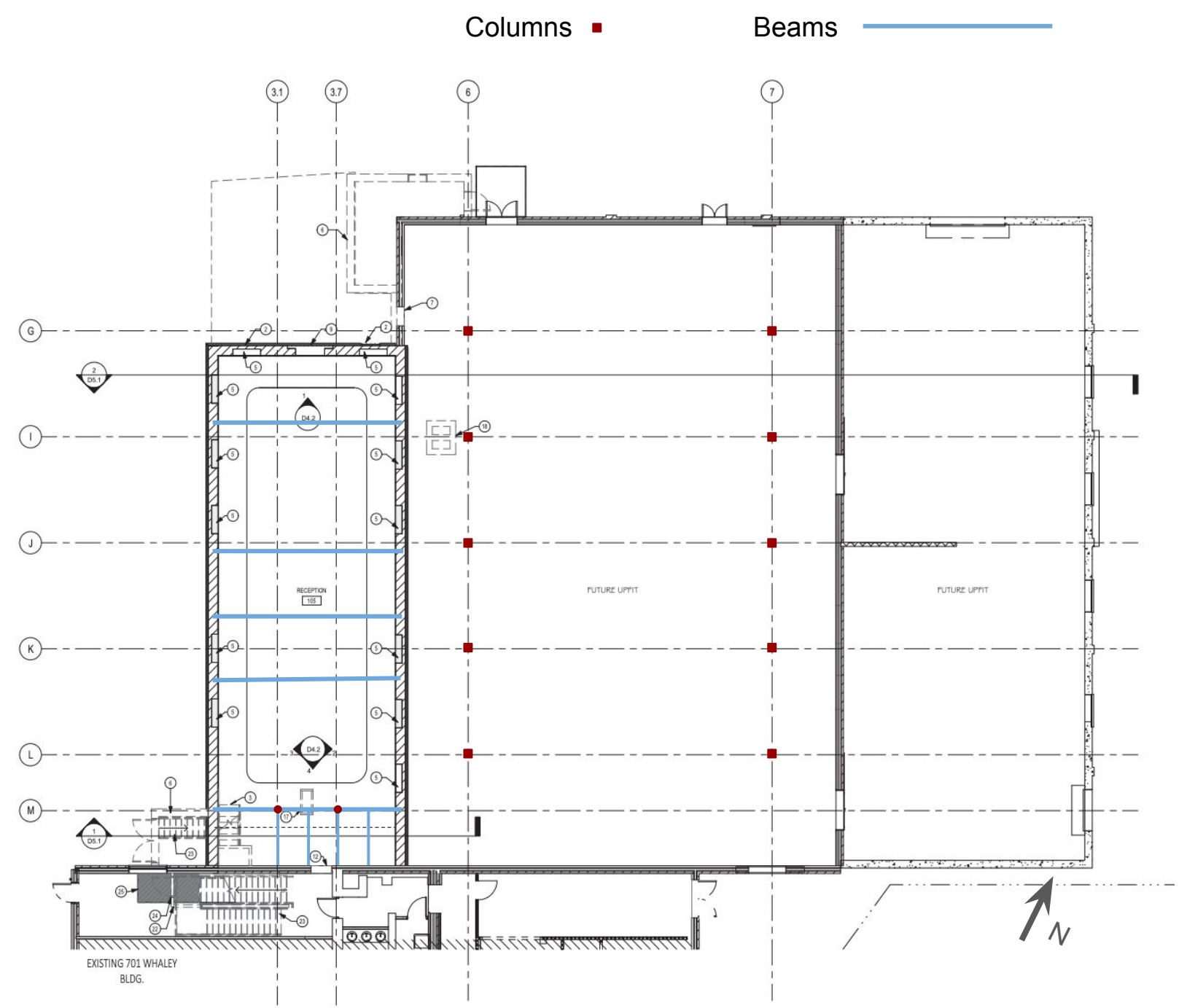


Walkway

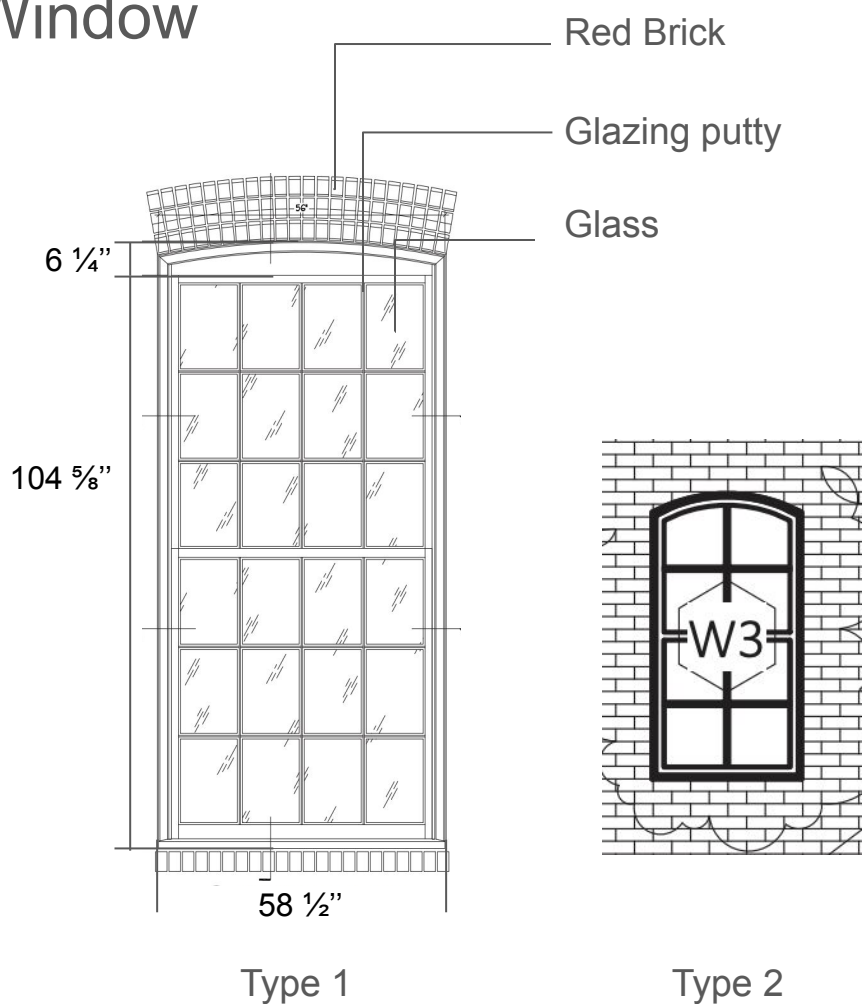


Site Location Details

Horizontal Structure



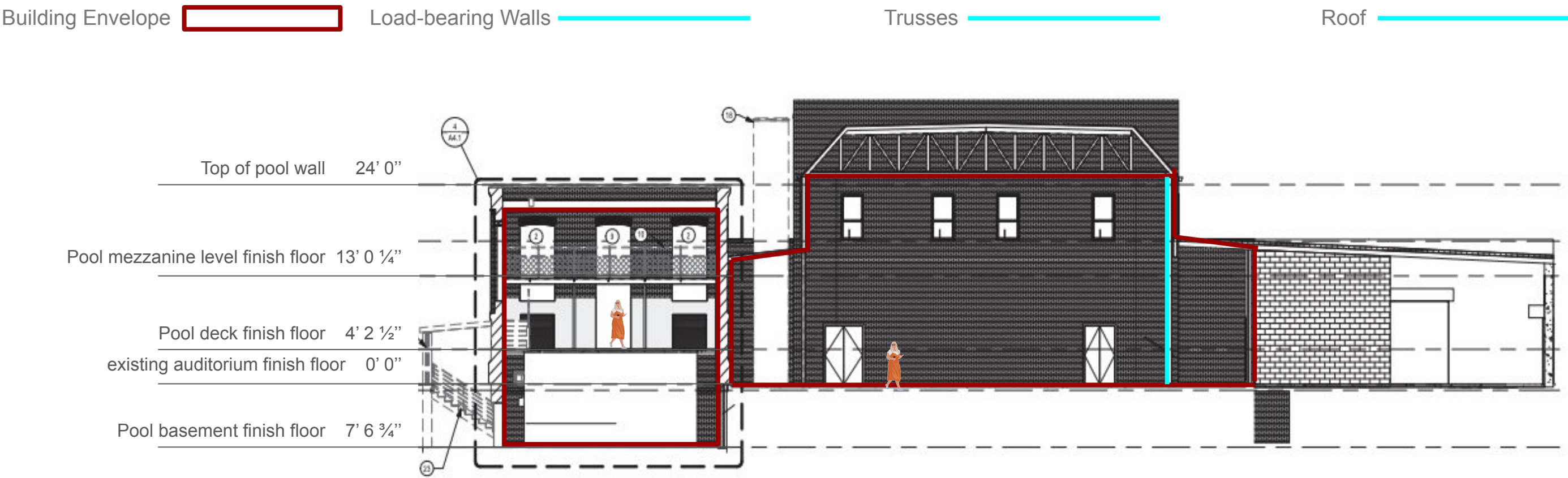
Window



- Occupation type: A
- Building Class: A
- Building construction type: I (Fire-resistive)
- Building Type: Cultural space
- Building Height: 24'

Site Location Details

Vertical structure



Surfaces and materials



Pool interior
Ceramic



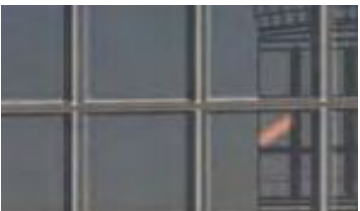
Exterior
Red Brick



Window Frame
Glazing putty



Pool Deck
Concrete



Window
Glass



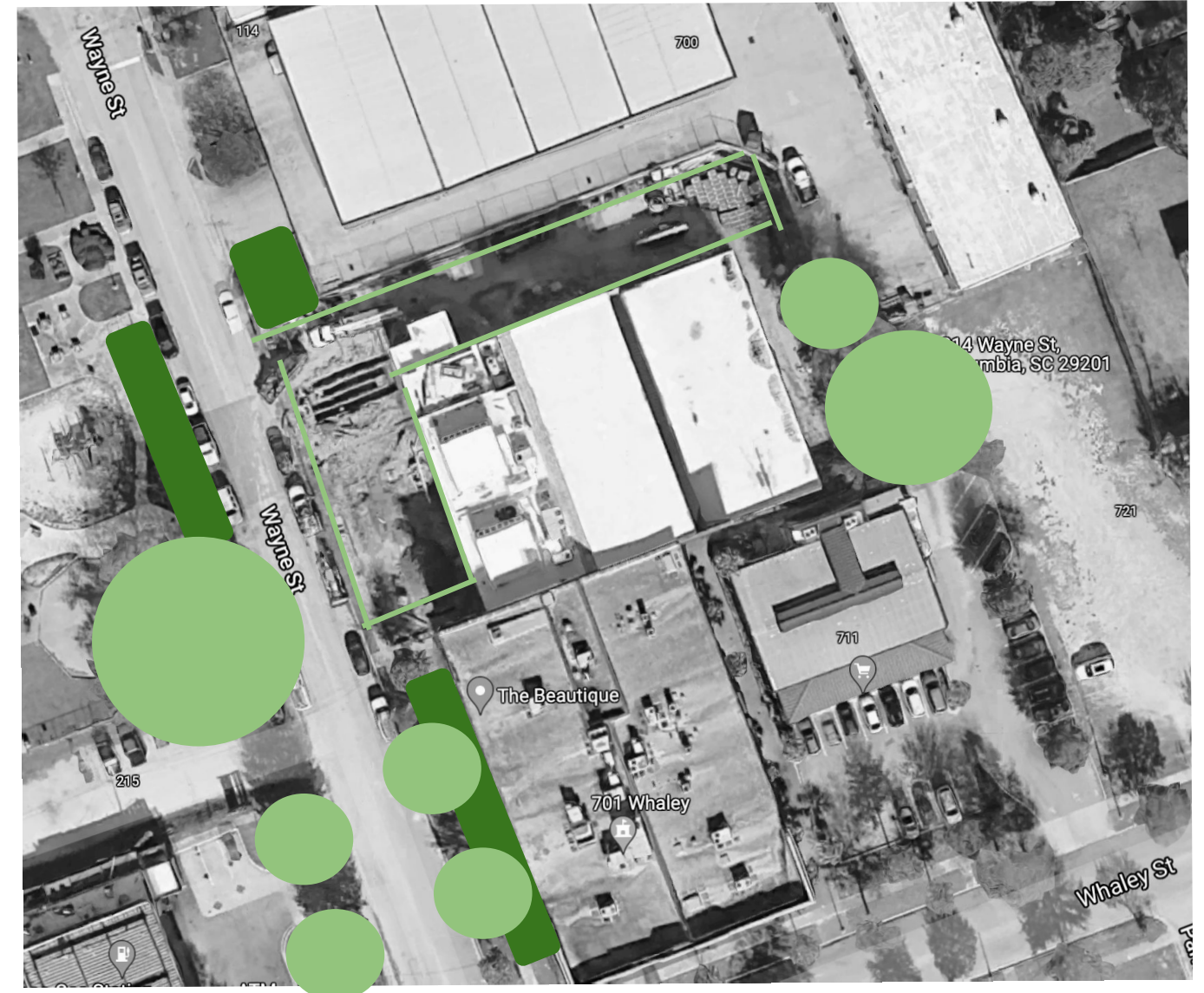
Trusses
Wood

Circulation



- Park
- Pavement

Vegetation



- Shrubs and trees
- Landscaping
- Open spaces

Best views

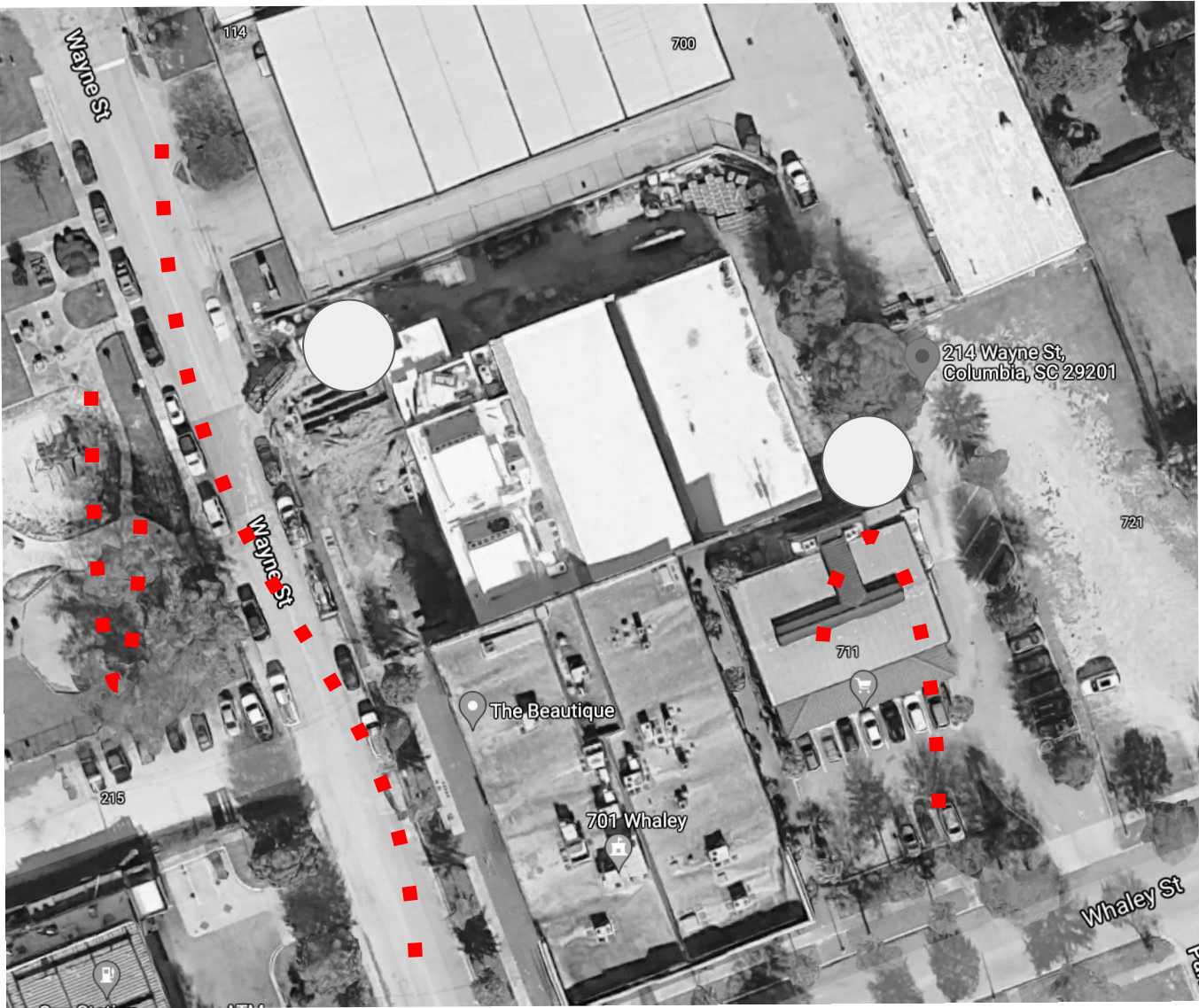


1. To the site



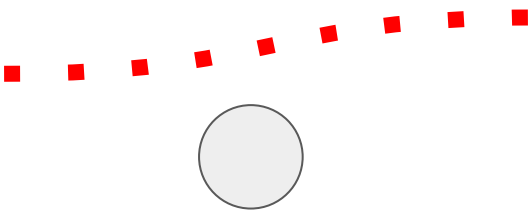
2. From the site

Noise (garbage)



Noise

Garbage



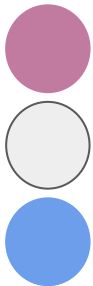
Odor



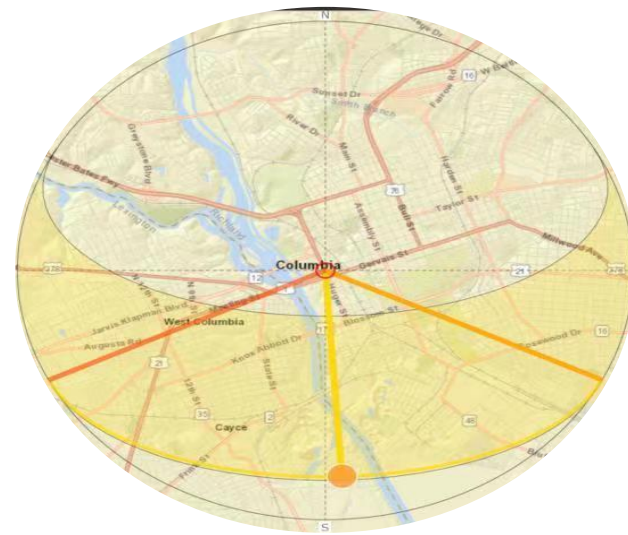
Food

Garbage

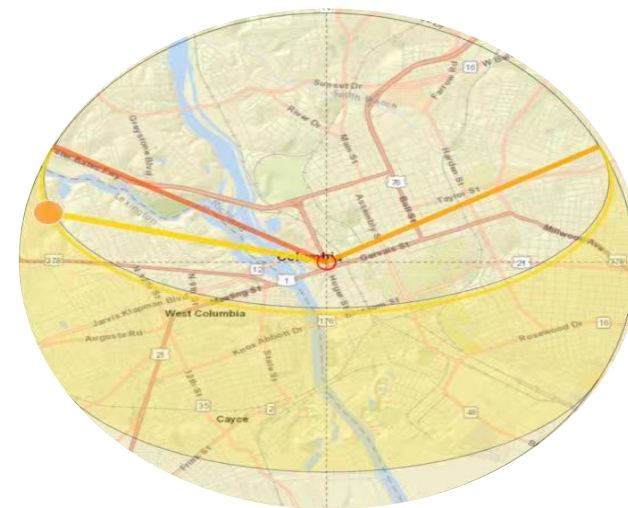
Gas



Sun path and angle

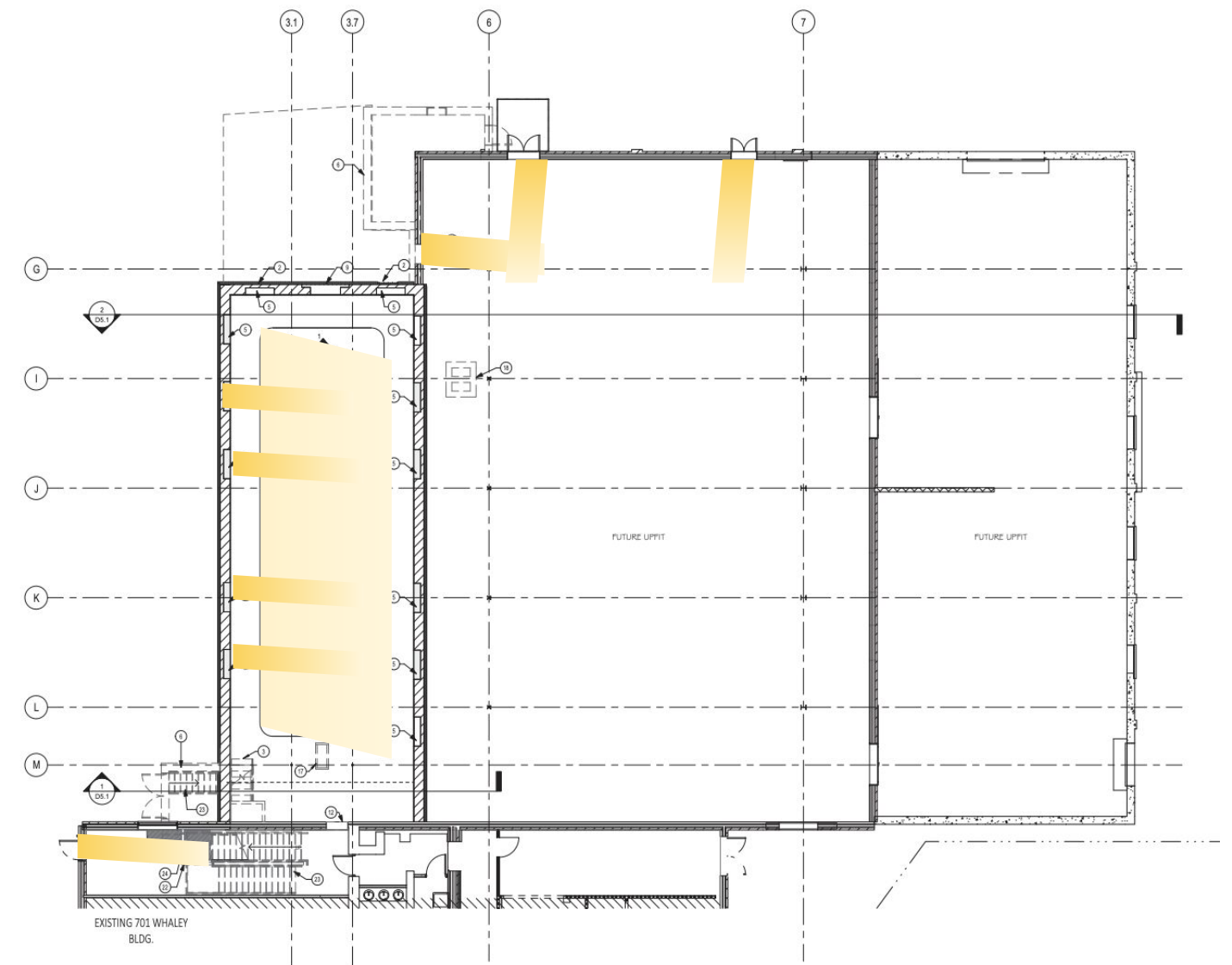


DECEMBER



JUNE

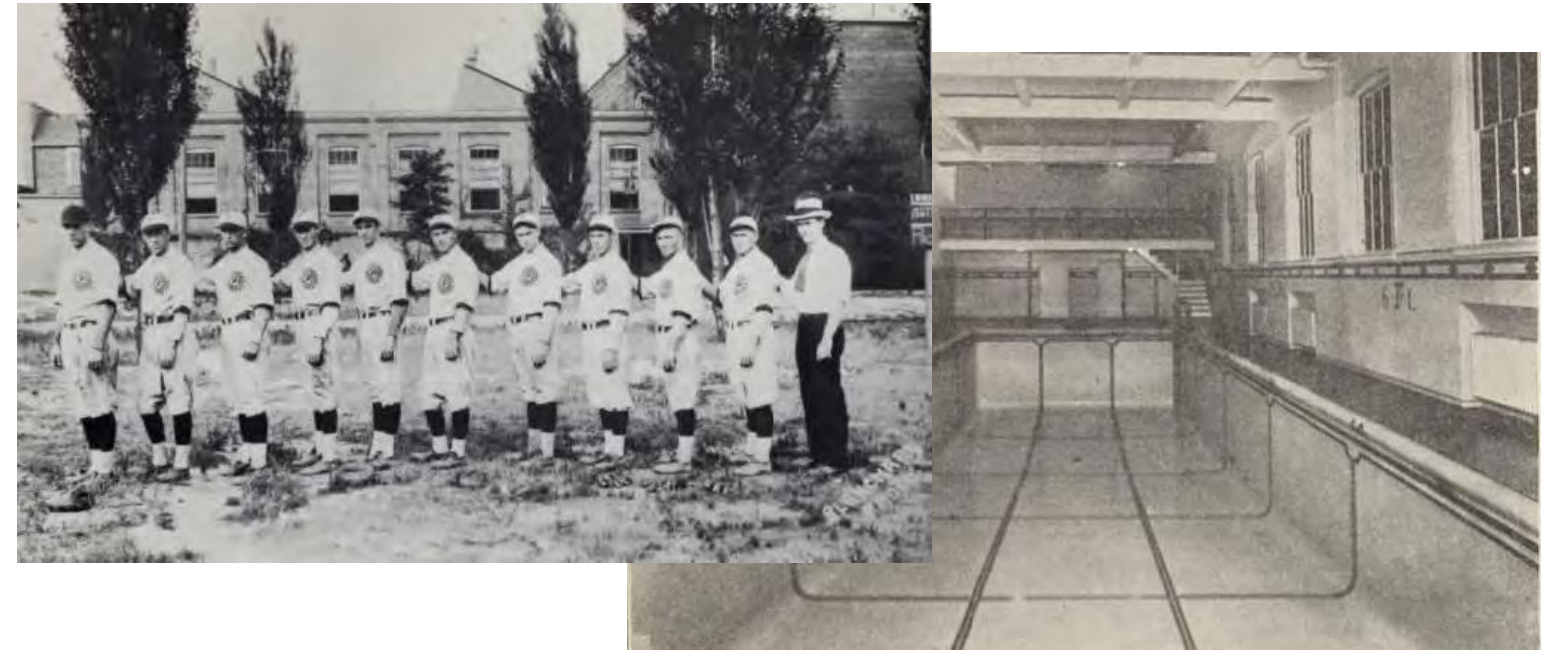
Quality of light



History & Demographics

Building History

This one story brick pool building was built c. 1918 to the rear of the main Pacific Community Association building (701 Whaley) as a space for swimming lessons and recreation for the associated mill community. Original features of the building included a flat roof with large skylights, slightly recessed 12/12 windows under arched lintels, extensive interior tilework at the walls, floor, and pool, and a balcony along the south wall that overlooked the diving boards.



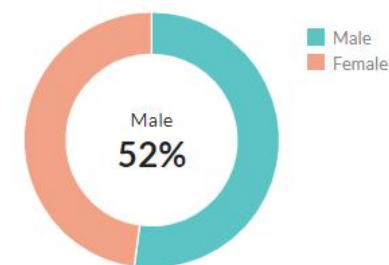
Mill District History

The Mill District is defined by the original mill neighborhoods of Granby, Whaley and Olympia. The District contains five (5) of the original six (6) mills developed in Columbia around the turn of the Twentieth Century and consists of Granby, Olympia, Capital City, Palmetto, and Richland Mills.

Demographic of Columbia

Columbia is a city located in Lexington County and Richland County South Carolina, with a 2020 population of 129,482. Columbia reached its highest population of 134,129 in 2016. Spanning over 139 miles, Columbia has a population density of 952 people per square mile.

Sex



[Show data](#) / [Embed](#)

Race & Ethnicity



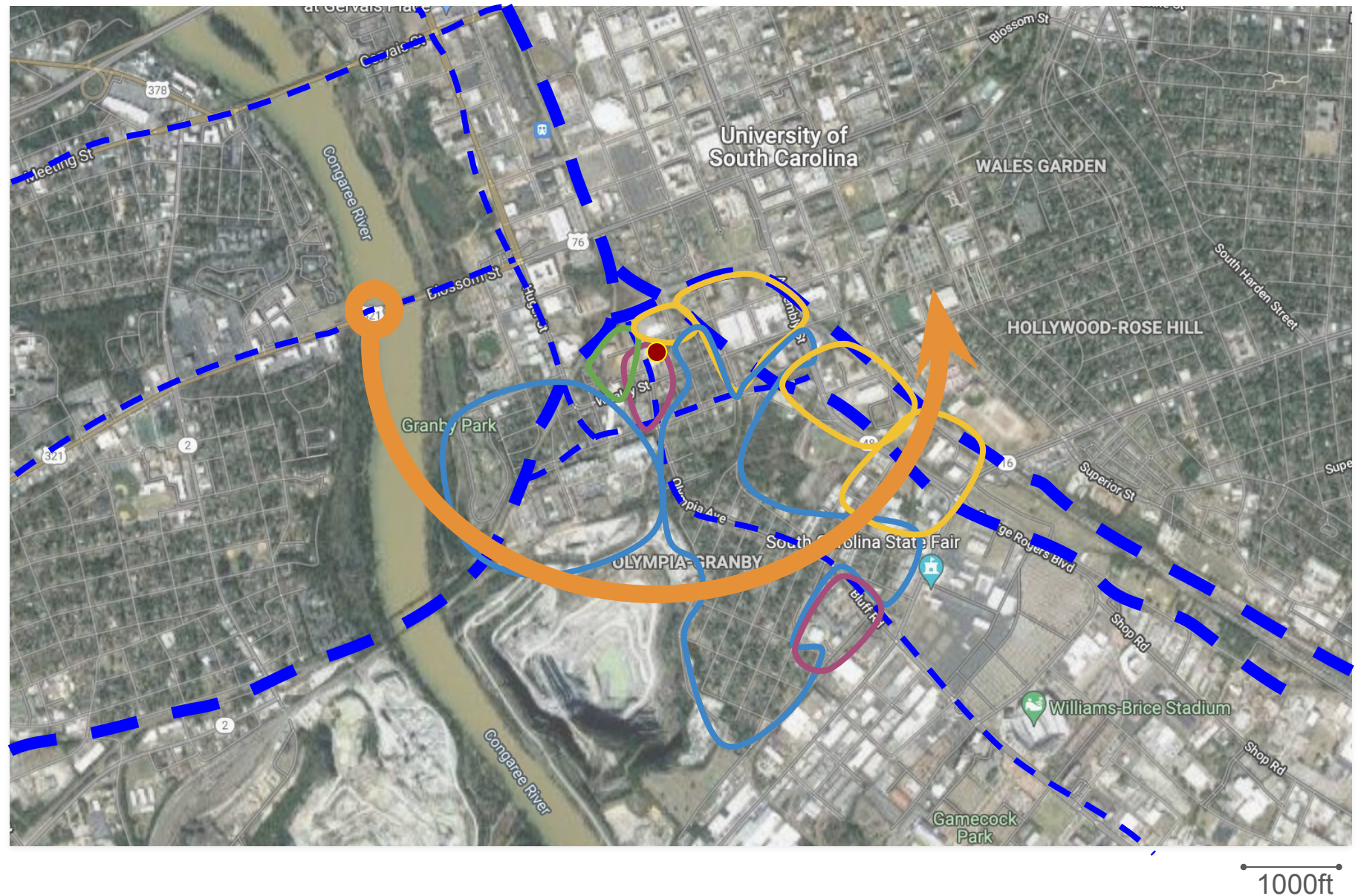
* Hispanic includes respondents of any race. Other categories are non-Hispanic; ACS 2019 5-year data

[Show data](#) / [Embed](#)

Zoning

Surrounding function

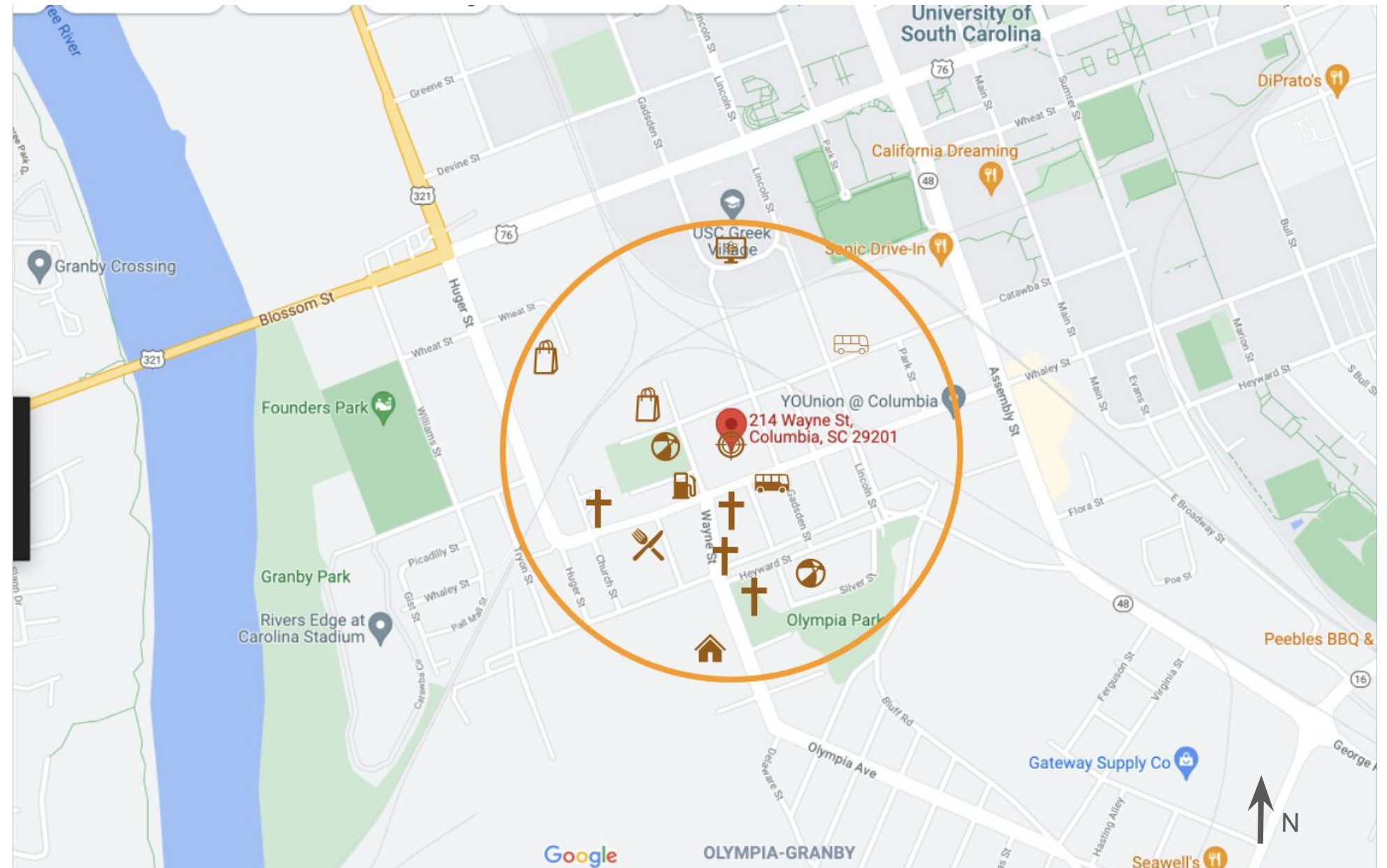
- Project location ●
- Recreation 
- Transportation 
- Residential 
- Commerce 
- Art/Cultural/Historic/Civic 
- Sun direction 
Sunrise Sunset



Aerial photographs

5 Minute Walk Distance

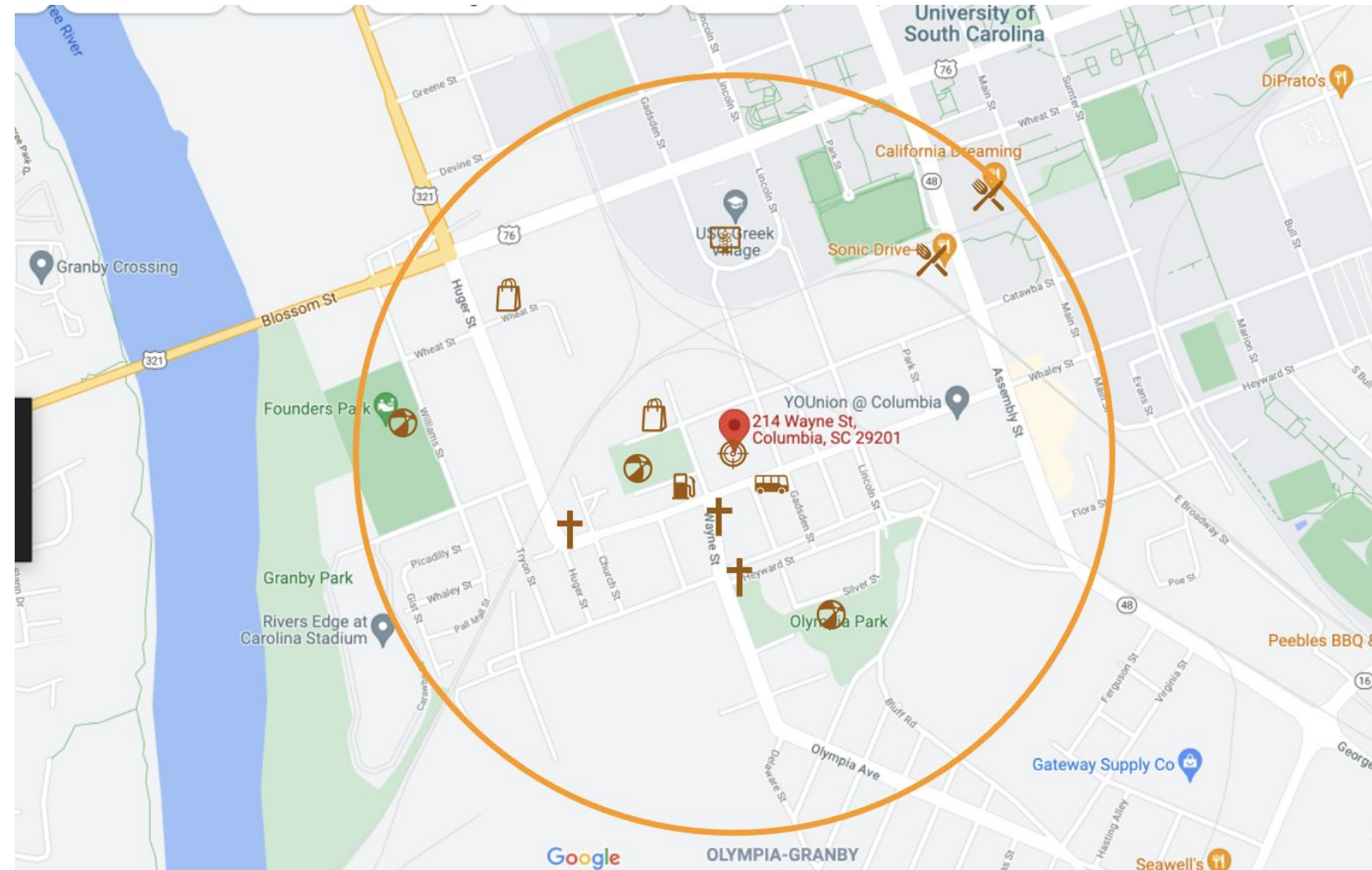
-  5 minutes access street
-  Project location
-  Church
-  Shopping mall
-  College
-  School bus
-  Bus station
-  Park
-  Apartment
-  Restaurant
-  Gas station



Aerial photographs

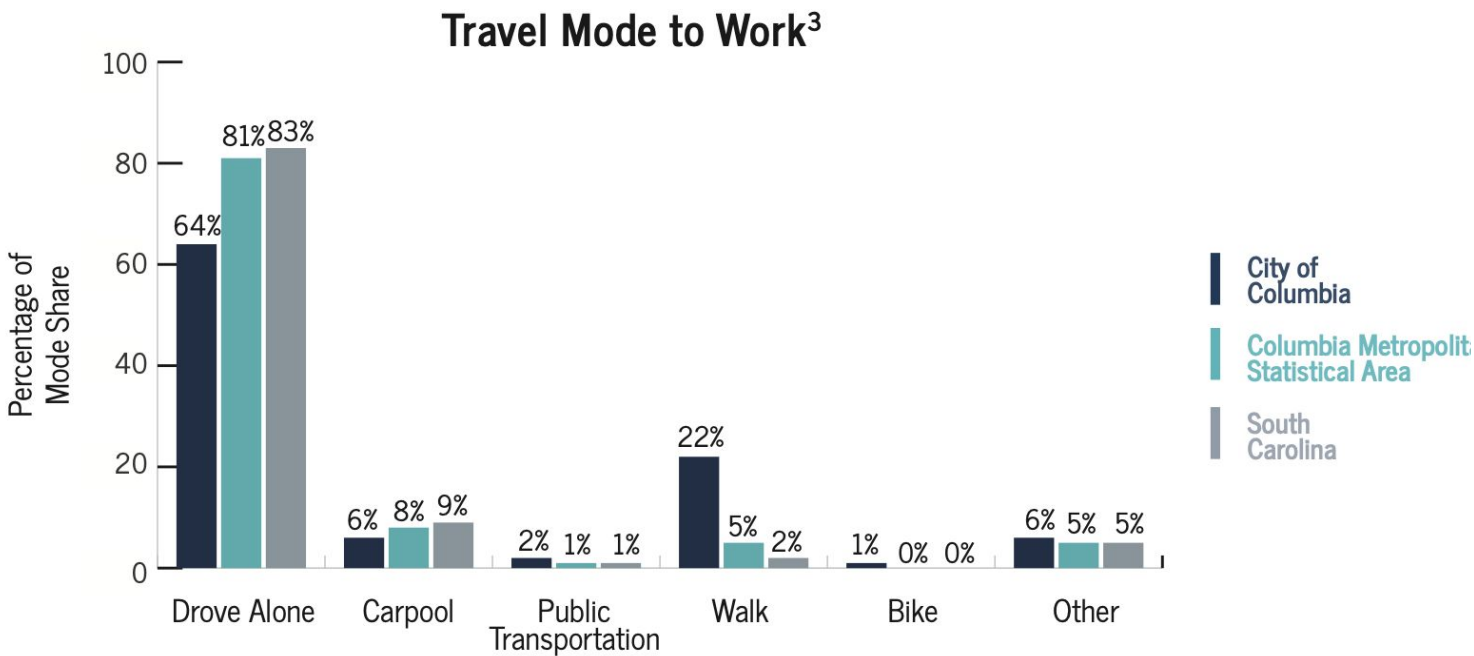
5 Minute Riding Distance

-  5 minutes access street
-  Project location
-  Church
-  Shopping mall
-  College
-  School bus
-  Bus station
-  Park
-  Apartment
-  Restaurant
-  Gas station



1/4 mile

Commuter information

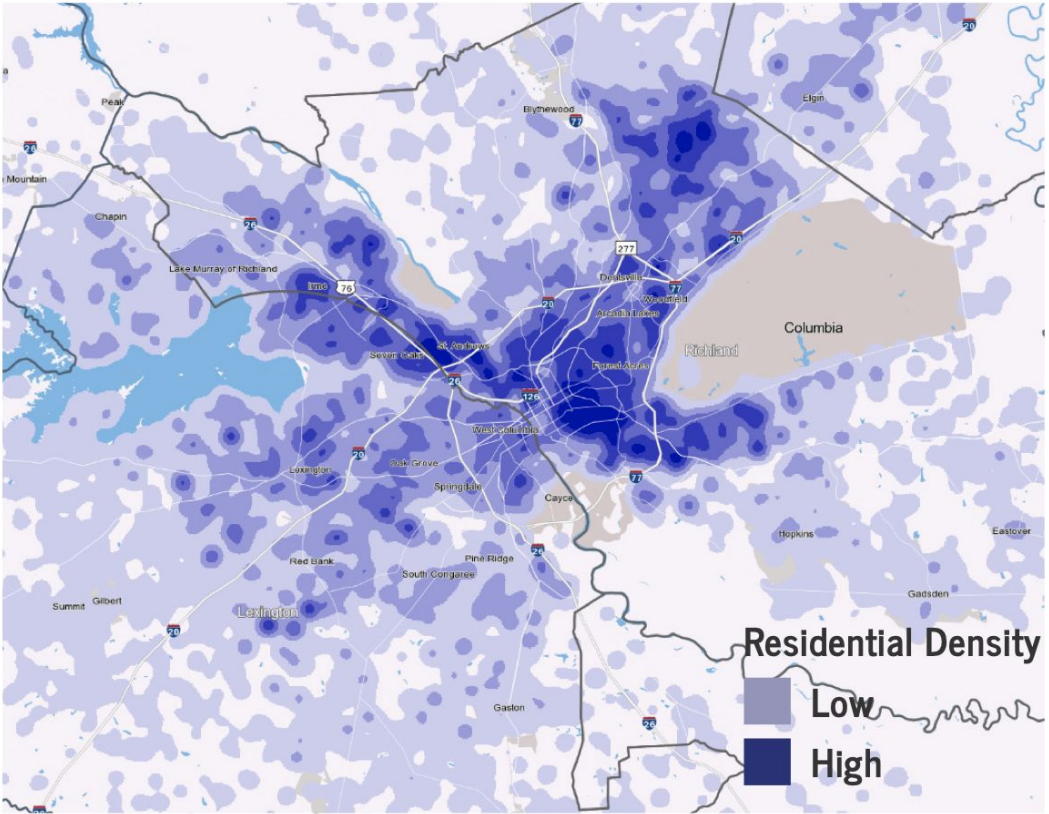


Top Work Destinations for Columbia Residents¹

Location	Workers	Share
Richland County	29,136	60.0%

Top Home Locations for Columbia Workers²

Location	Workers	Share
Richland County	59,487	44.5%

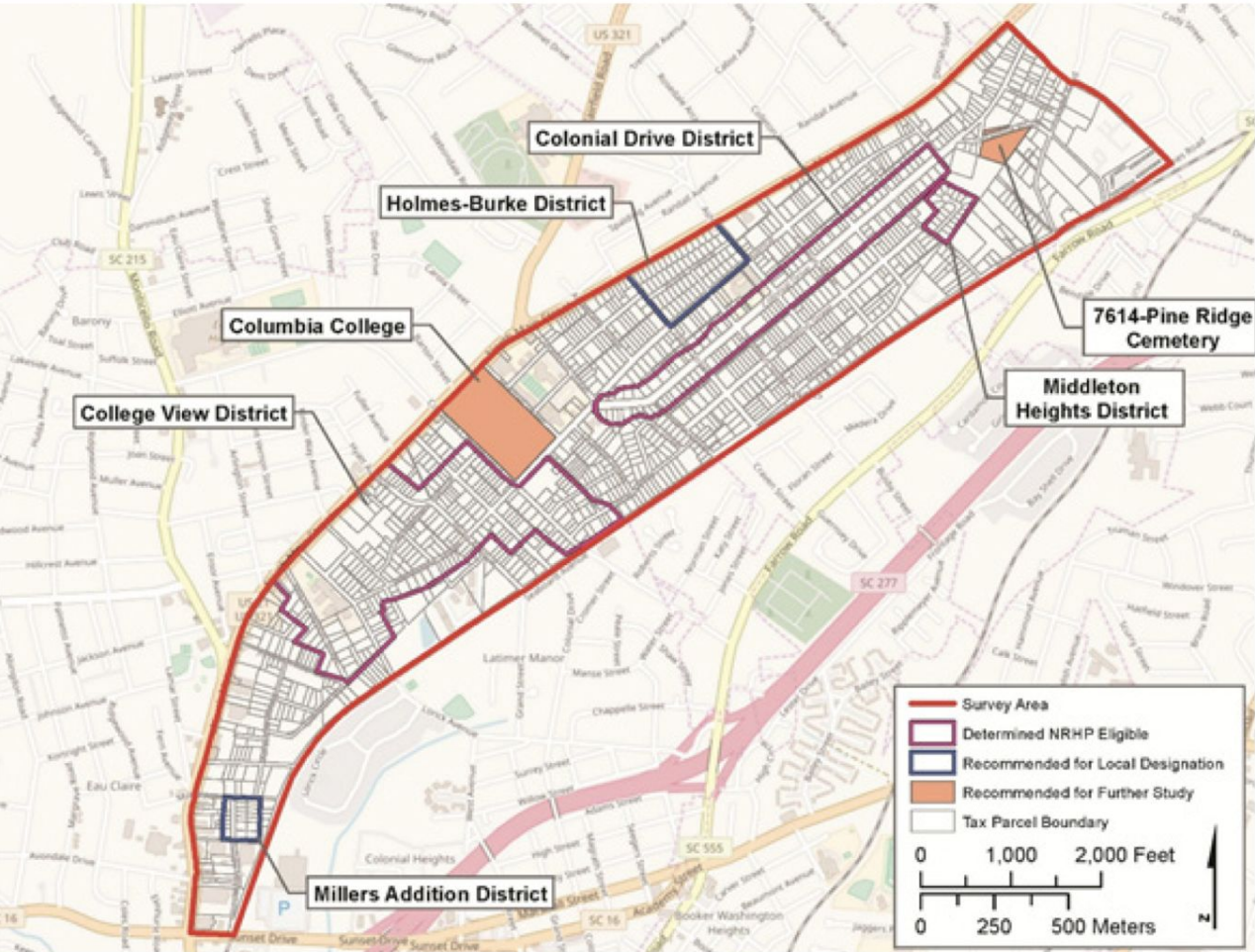


Home locations of those who work in Columbia.5

COMMUTE, CONTINUED

As shown to the right, while jobs in Columbia are highly centralized in the downtown area, home locations of Columbia workers are highly dispersed, mostly following transportation corridors. The following corridors within the City limits could be characterized as major commuter corridors facilitating trips into and out of Columbia

Columbia’s culture



Recommendations from the Eau Claire Historic Resources Survey

What Defines Columbia’s Culture

Who we are as a city and as a community is in a large part defined by our cultural resources. When asked how they might define Columbia’s culture, participants in the planning process often focused on our many festivals and cultural celebrations, our small town feel, our university and collegiate ties, and our deep connection to the rivers that run through the region. In addition to the more well-defined cultural resources such as organizations and facilities, these less tactile concepts in many ways echo how we envision ourselves as a city. The existing conditions that follow provide a brief snapshot of our many and varied cultural resources, and as such they have helped to develop the recommendations that are included in the Cultural Resources chapter.

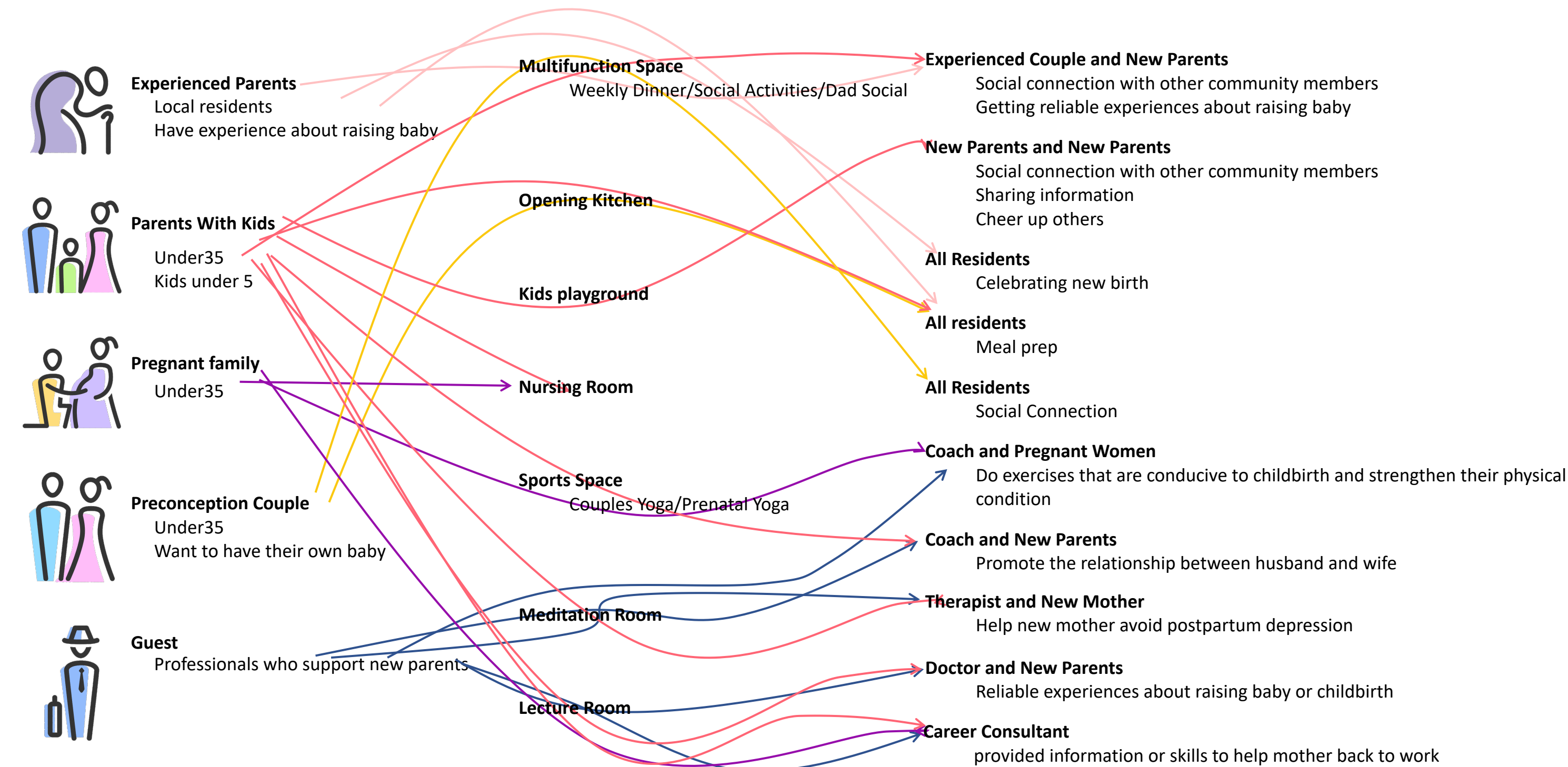
Facility Name	Address
701 Whaley	701 Whaley Street
Anastasia & Friends	1534 Main Street
Art Bar	1211 Park Street
The Big Apple	1000 Hampton Street
Blue Moon Ballroom	554 Meeting Street, West Columbia
Booker T. Washington Auditorium	1400 Wheat Street
Boyd Plaza	1505 Main Street
Chayz Lounge	607 Meeting Street, West Columbia
Central Energy (Downtown Church)	2030 Gregg Street
City Art	1224 Lincoln Street
Cola Makerspace	4808 Colonial Drive
Colonial Life Arena	801 Lincoln Street
Columbia Art Center	1227 Taylor Street
Columbia Canal and Riverfront Park	312 Laurel Street
Columbia Museum of Art	1500 Main Street
Columbia Music Festival Association	914 Pulaski Street
Converspace	136 Forum Drive
Cottingham Theatre at Columbia College	1301 Columbia College Drive
Earlewood Park Amphitheatre	1113 Parkside Drive
EdVenture Children’s Museum	211 Gervais Street

Facility Name	Address
Finlay Park	930 Laurel Street
Frame of Mind	140 State Street, West Columbia
Goodall Gallery at Columbia College	1301 Columbia College Drive
Harbison Theatre at Midlands Technical College	7300 College Street, Irmo
Historic Columbia	1601 Richland Street
Hunter-Gatherer	900 Main Street
Hunter-Gatherer at the Curtiss-Wright Hangar	Jim Hamilton Boulevard
Icehouse Amphitheater	107 W Main Street, Lexington
if Art Gallery	1223 Lincoln Street
Indie Grits Labs	1013 Duke Avenue
Indigo Blue Gallery	460-6 Town Center Place
Jam Room Music Studio	201 S Prospect Street
Jubilee Circle	2627 Millwood Avenue
Koger Center for the Arts	1051 Greene Street
Longstreet Theatre	911 Sumter Street
Lourie Center	1650 Park Circle
McMaster Gallery at the University of South Carolina	1615 Senate Street
New Brookland Tavern	122 State Street, West Columbia
Nickelodeon Theatre	1607 Main Street
Nonnah’s	923 Gervais Street

Design Charrette

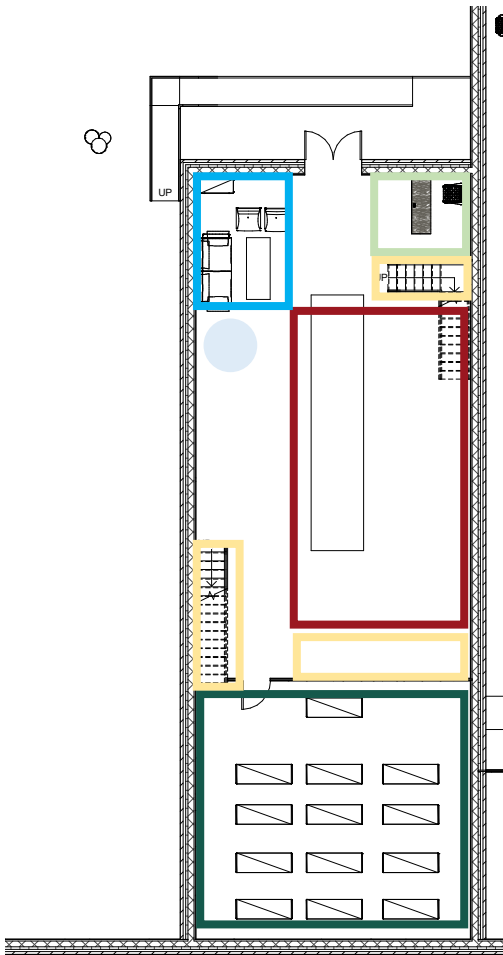
User Identification and Needs

This site is located in downtown Columbia and is surrounded by many residents. South Carolina has a low birth rate. As a space that fosters connections between community members, I hope to provide some support for families preparing to have children. By sharing things related to children and pregnancy, it fosters social connections and brings residents together. All the activities in this space are related to how to raise children and how to support women.

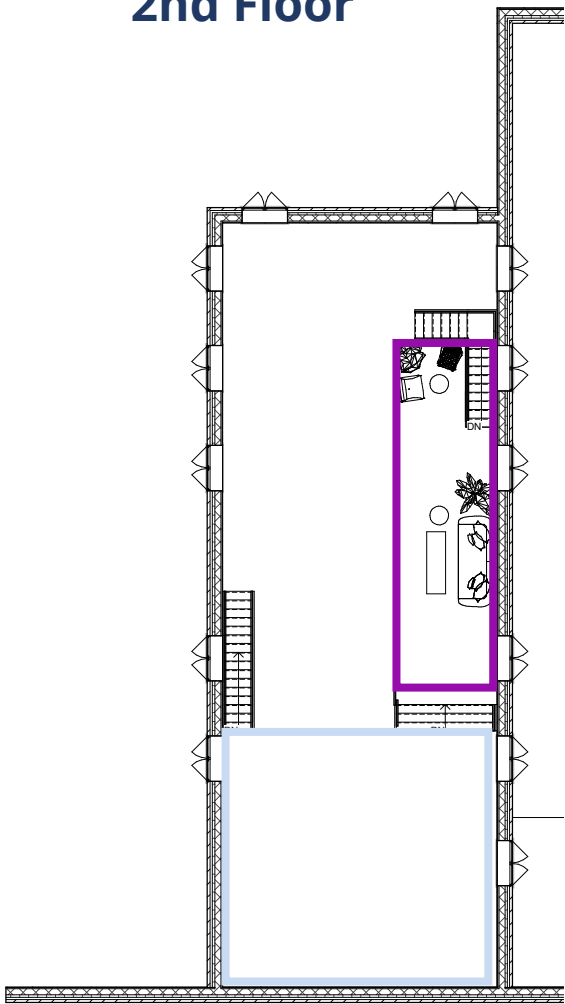


Design Solutions

1st Floor



2nd Floor



- Sports Space

Meditation Room

Kids playground

loungue

Vertical transportation

Private conversation

reception
- Experienced Parents

Parents With Kids

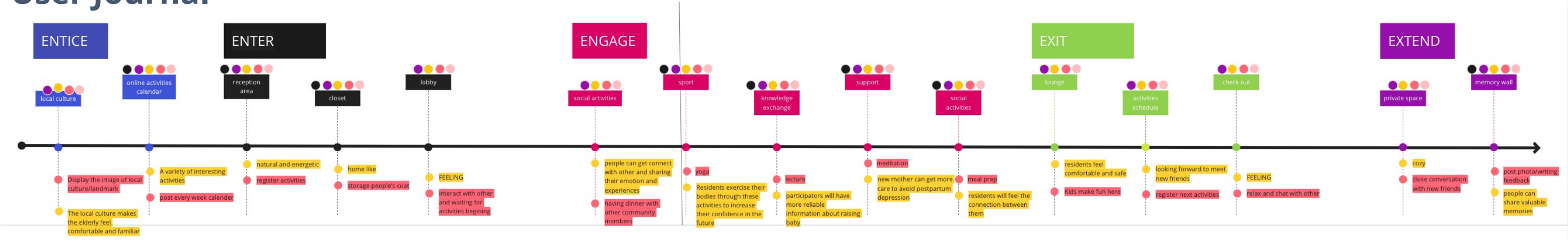
Pregnant family

Preconception Couple

Guest

Nursing Room

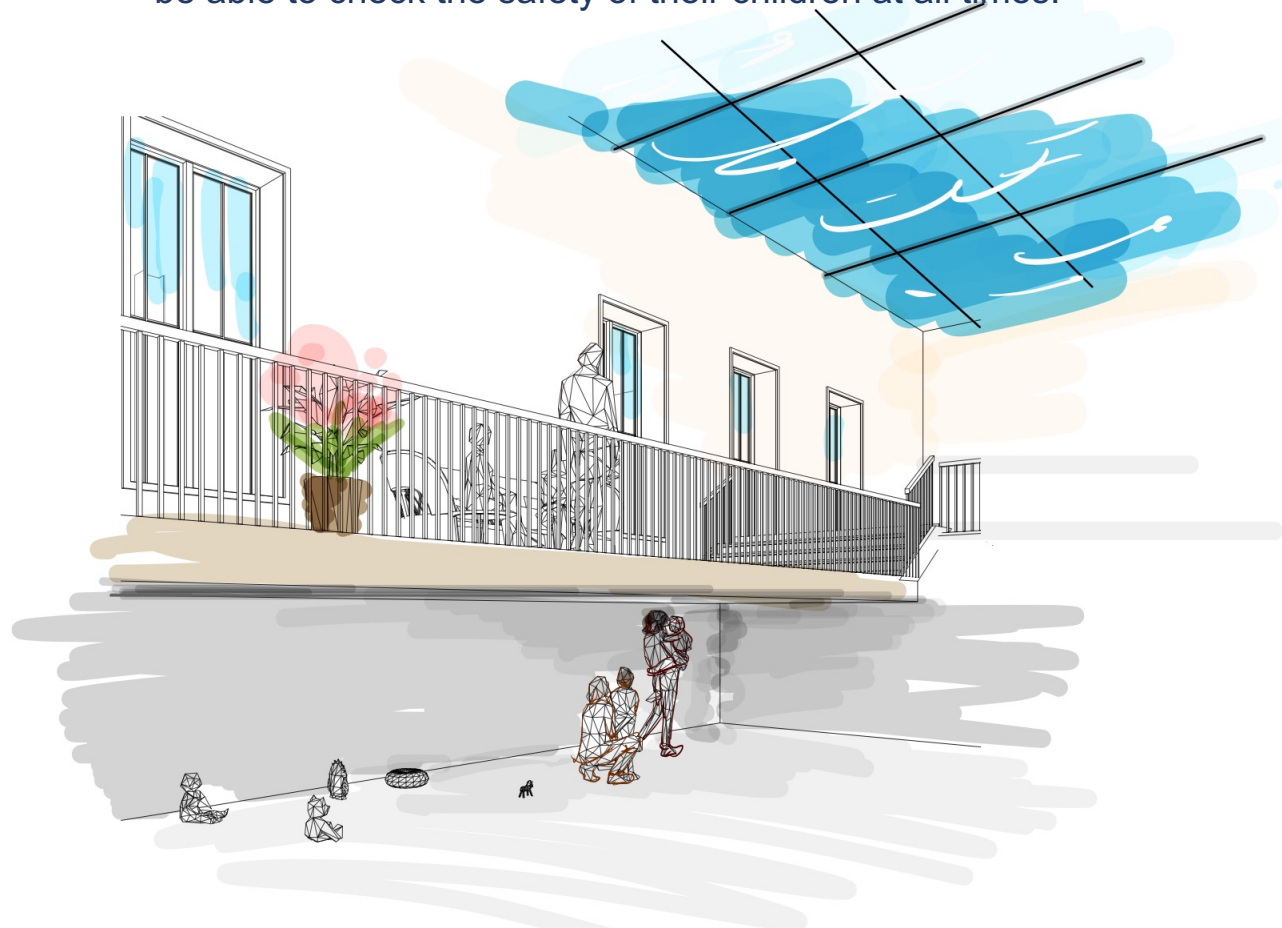
User Journal



Prototypes - Design Proposal

Comfort & Image

Children find their comfortable space on the first floor, a space with a low ceiling and a connection to the surrounding adult space. This not only gives parents a chance to relax but also helps parents to be able to check the safety of their children at all times.



Uses & Activities

The conversation area on the second floor is more private than the other spaces, allowing residents to relax and chat with friends while enjoying the view of the outdoors through the roof and windows.

Sociability

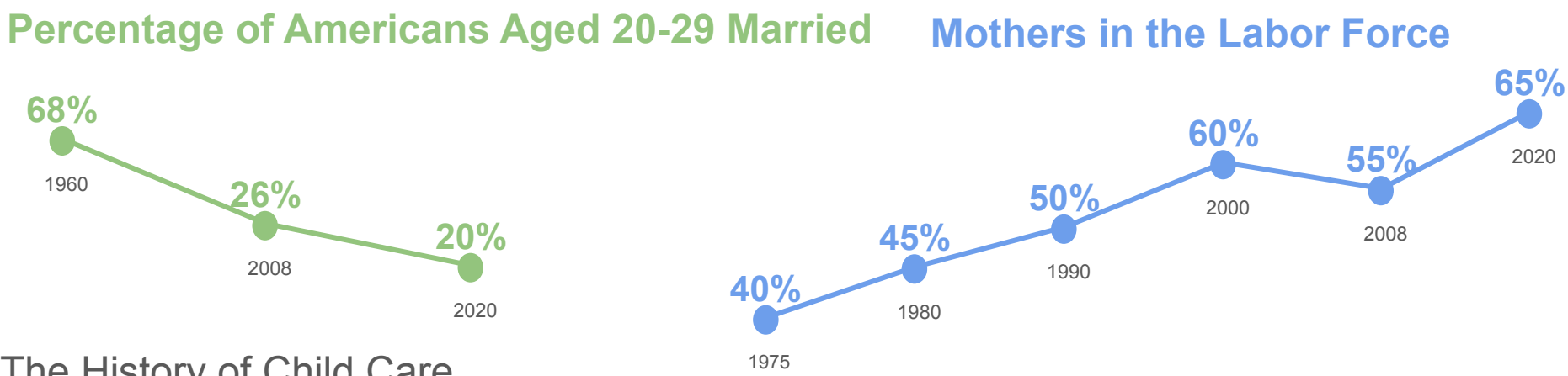
Residents share their memories after participating in an event or celebrating the birth of a child. The photo wall shows all the participants with their memories to all who enter. It is a place where people can tell their new friends about a memory. The photo wall is a natural way to bring residents closer together.



Schematic Design

History of Type/Timeline

The Evolution of the American Family



The History of Child Care



Health of Women & Children of SC

Strengths

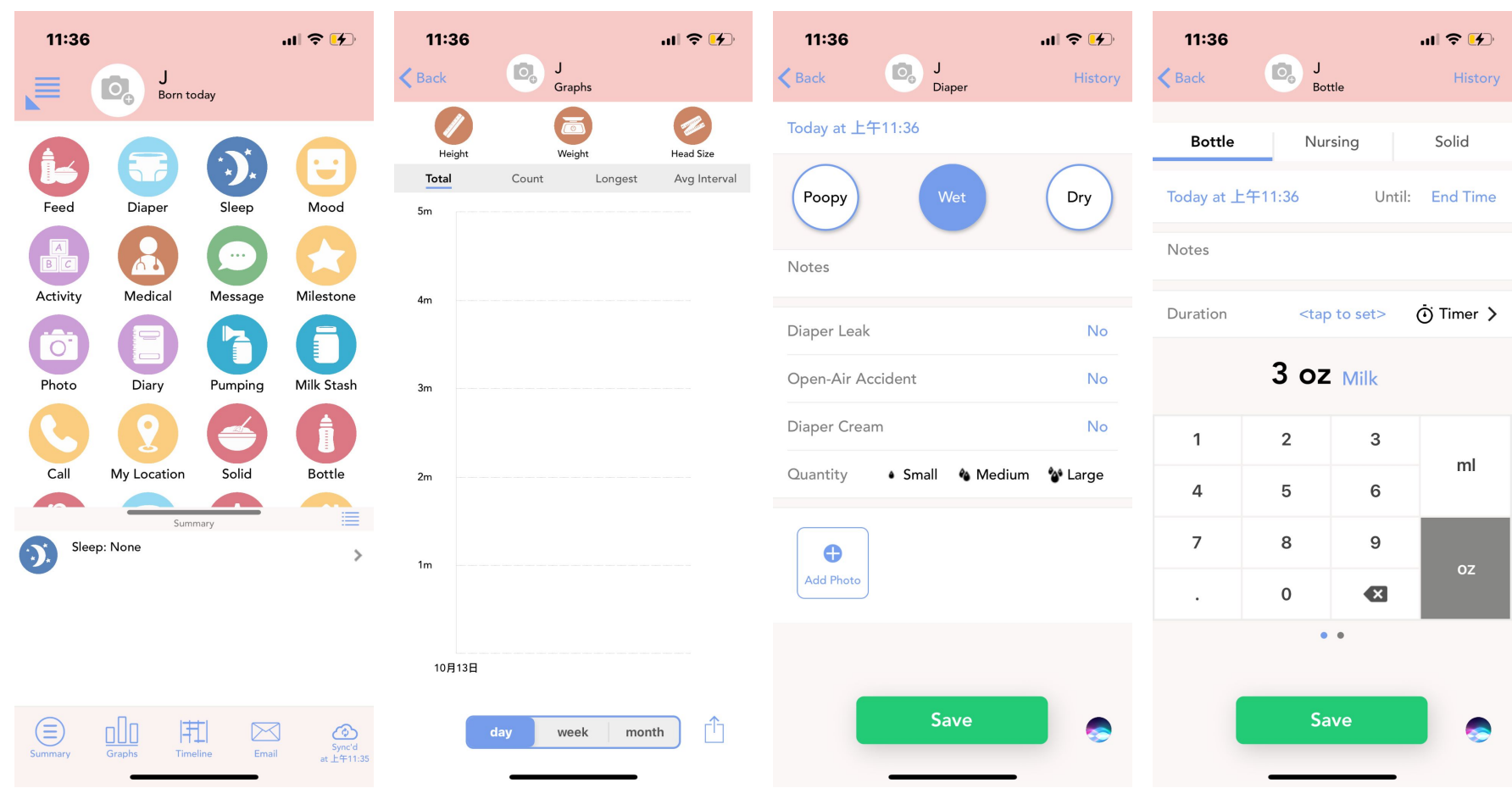
- Low prevalence of excessive drinking in women
- High percentage of well-baby visits

Challenges

- High prevalence of concentrated disadvantage
- High prevalence of smoking during pregnancy
- Low prevalence of protective home environment in children ages 0-5



Parenting Trends

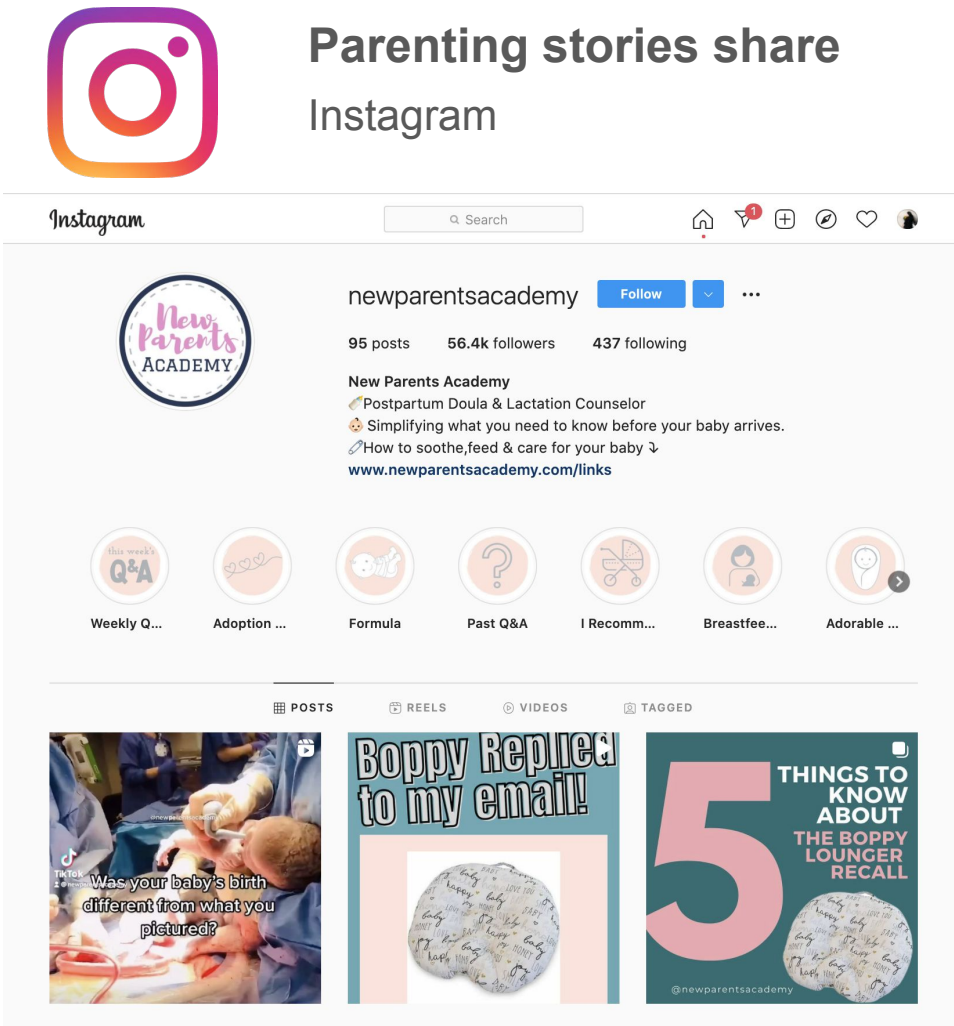


Parenting APP

Baby Connect

With the advent of technology, new parents have more opportunities to share their experiences with others. In addition to sharing their experiences with their families, they have access to more information using new technology. Using different apps has become a very basic behavior in people's lives. Many new parents use parenting apps to keep track of their children's growth so they can check how their children are doing. We are considering adding a feature in the design to record the child's growth and to guide the parents.

Parenting Trends



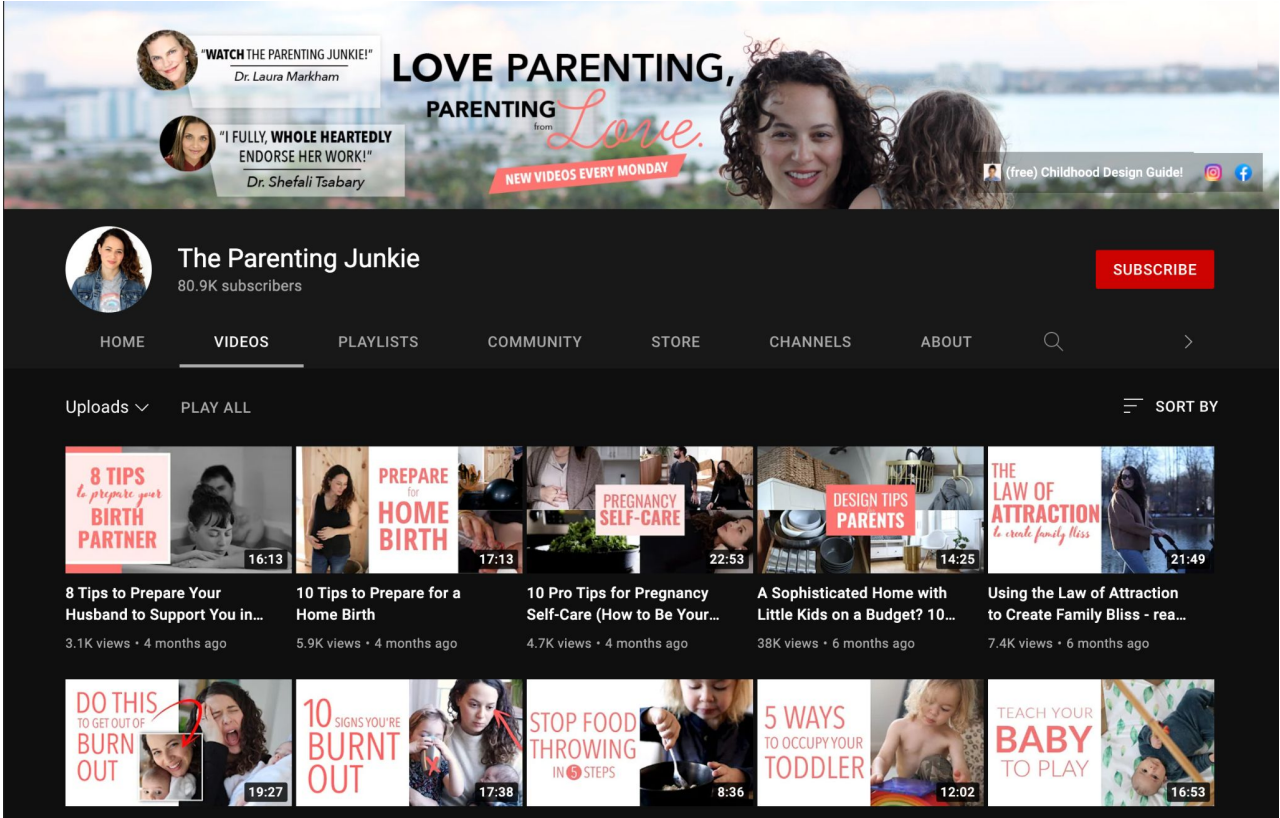
A large percentage of parents like to share stories about their children's growth. On Instagram, some new parents share the arrival of their child; family and friends send that blessing. There is a lot of sharing about parenting experiences here.

Documenting and sharing what has happened has a positive effect on facilitating connections between members. In our design program, Users have a place to see many stories about their parenting experiences here.



Facebook support groups are a great way for new parents to get information about parenting through the internet. There is a parenting tips group on Facebook with 96.9k members, where members exchange parenting information with each other and participate in various professional parenting tips shared online by professionals, such as breastfeeding tips, child-eating tips, child education, etc. This professional knowledge can be a catalyst for parents to join this space.

Parenting Trends

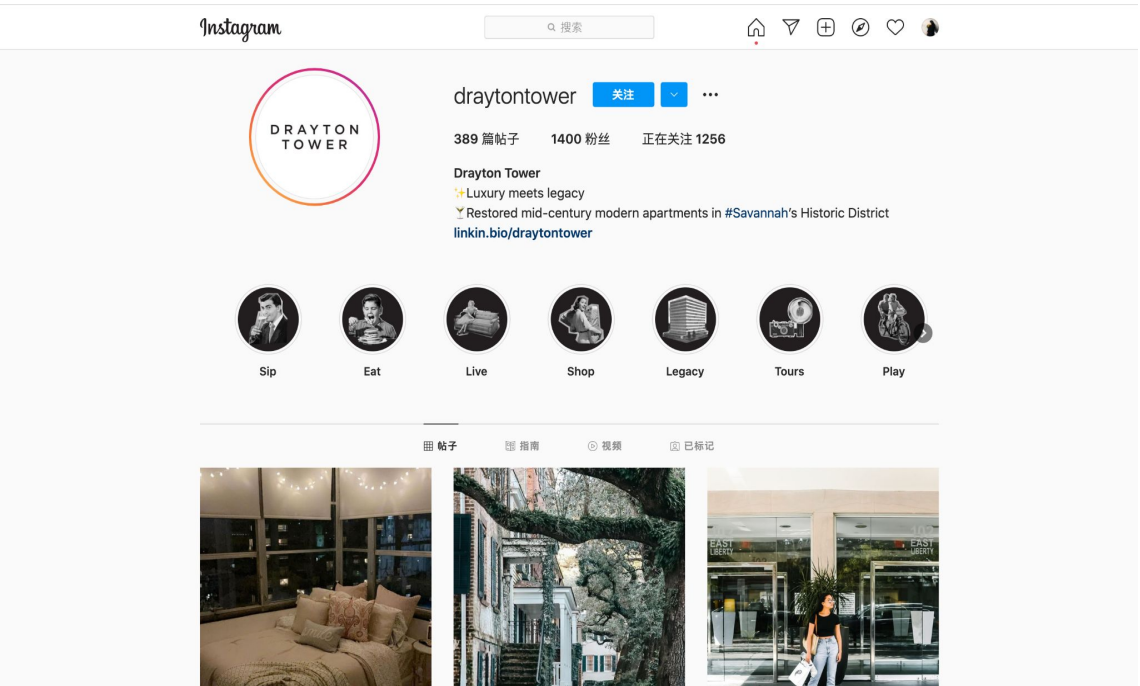
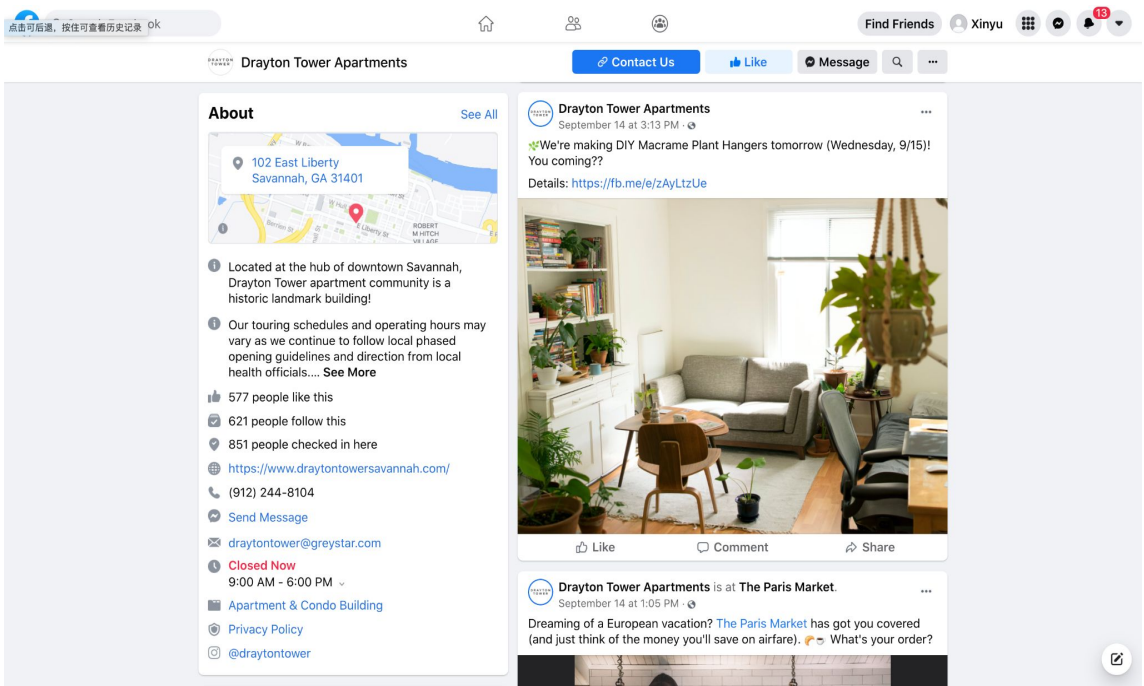


Parenting Skills Training

YouTuber

In addition to the new trends described above, many experienced people are also sharing videos about parenting on Youtube. People are also very willing to use this way of learning new things. New parents can see all the details of parenting clearly. Hence, We think real-time professional guidance from professionals can give parents a lot of useful information and confidence.

Community Social Trends



Social activities schedule share

Facebook



Social activities respons share

Instagram

Drayton Tower

Technology reinforce community engagement

Technology is equal for every user. Applying new technology to facilitate community engagement allows all members to participate equally and transparently in community activities, which can facilitate connections between residents and can successfully transform a space into a third-space.

Drayton town is an apartment that is using various new ways to facilitate connections between residents. For example, sharing events and post-event memories through social media. This also helps to promote fair and transparent participation in community activities for all.

Emerging Issues

ENTERTAINMENTCALENDAR.COM

HomeChange RegionFOR ORGANIZATIONS

KIDS OUT and ABOUT.com

Ride the NEW Stokoe Farms Express train!
PUMPKINS
STOKOE FARMS
Click for Information or Tickets

Rochester's online guide to everything for kids, teens, & families!

FREELOCAL EVENTSLOCAL LISTSLERNAONLINE / VIRTUAL ACTIVITIESROC FAVSWEEKLY E-NEWSLETTER

VR PLAYGROUND

Address:

Jefferson Plaza 376 Jefferson Rd
376 Jefferson Rd
Rochester, NY, 14623
Phone: 585-270-5182

Google Maps

https://www.vrplaygroundroc.com

marcy@vrplaygroundroc.com

Contact name:

Marcy Pontius

Business/organization type:

Home-grown or family business
Indoor Fun
Indoor Play Center

What our organization offers:

Arcade

VR Playground is a Virtual Reality arcade where kids, teens, families and, of course, true gamers of all ages can discover 50+ immersive virtual reality experiences!

Click For More Information

Open hours:

Sunday:

11:00 am-8:00 pm

Monday:

Closed

Tuesday:

Closed

Wednesday:

Closed

Thursday:

Closed

Friday:

6:00 pm-10:00 pm

Saturday:

11:00 am-9:00 pm

Bounce Hopper

FIC
Finger Lakes Opera presents
Three Little Pigs
Tickets only \$5/person
Sunday, July 24th at 4:00 p.m.
Asbury First United Methodist Church
BUY ONLINE @
fingerlakesopera.org

It's Time To Pick Apples!
G and S Orchards
825 Atlantic Ave. (Route 286)

Virtual reality in children's life

Rochester's online guide to kids,teens, and families

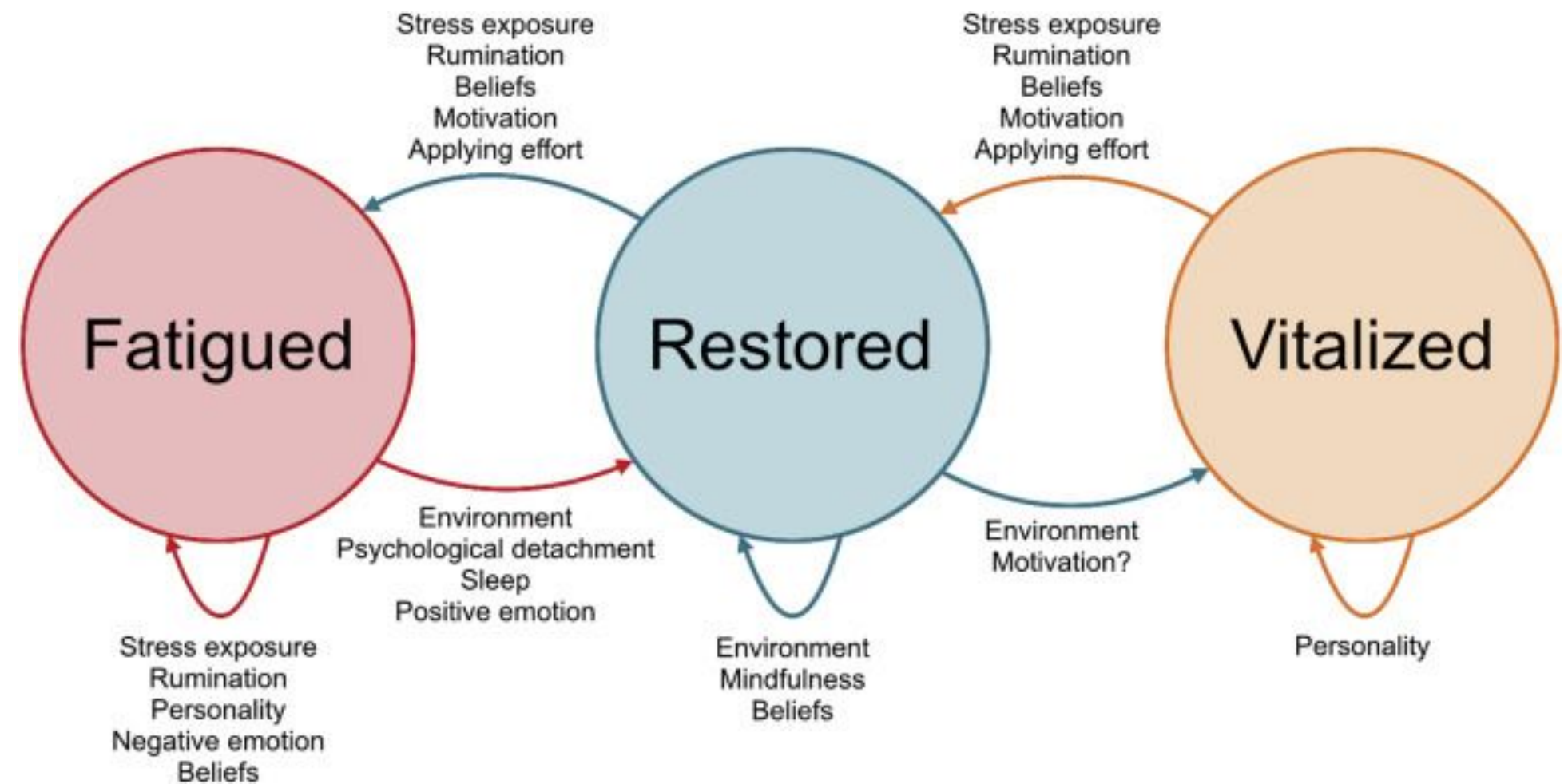
Technology has changed the way children learn, and virtual activities are entering the entertainment and education of children. The advantage of virtual technology is that children can explore other parts of the world where their parents can see them, but using virtual technology has some unpredictable risks for our target audience of children under the age of 6. They may not be able to distinguish between the scale of the virtual and the real. Therefore, we do not take virtual technology into account in our subsequent designs.

Theory

Attention Restoration Theory

In a nutshell, Attention Restoration Theory, or ART, proposes that exposure to nature is not only enjoyable but can also help us improve our focus and ability to concentrate (Ohly, White, Wheeler, Bethel, Ukoumunne, Nikolaou, & Garside, 2016).

This theory was developed and popularized by Stephen and Rachel Kaplan in the late 1980s and early 1990s, a time period characterized by rapid technological advancement and ever-increasing indoor entertainment. ART hypothesizes that nature has the capacity to renew attention after exerting mental energy.



Four key components that characterize a restorative environment:

1. **Being Away**
2. **Soft Fascination**
3. **Extent**
4. **Compatibility**

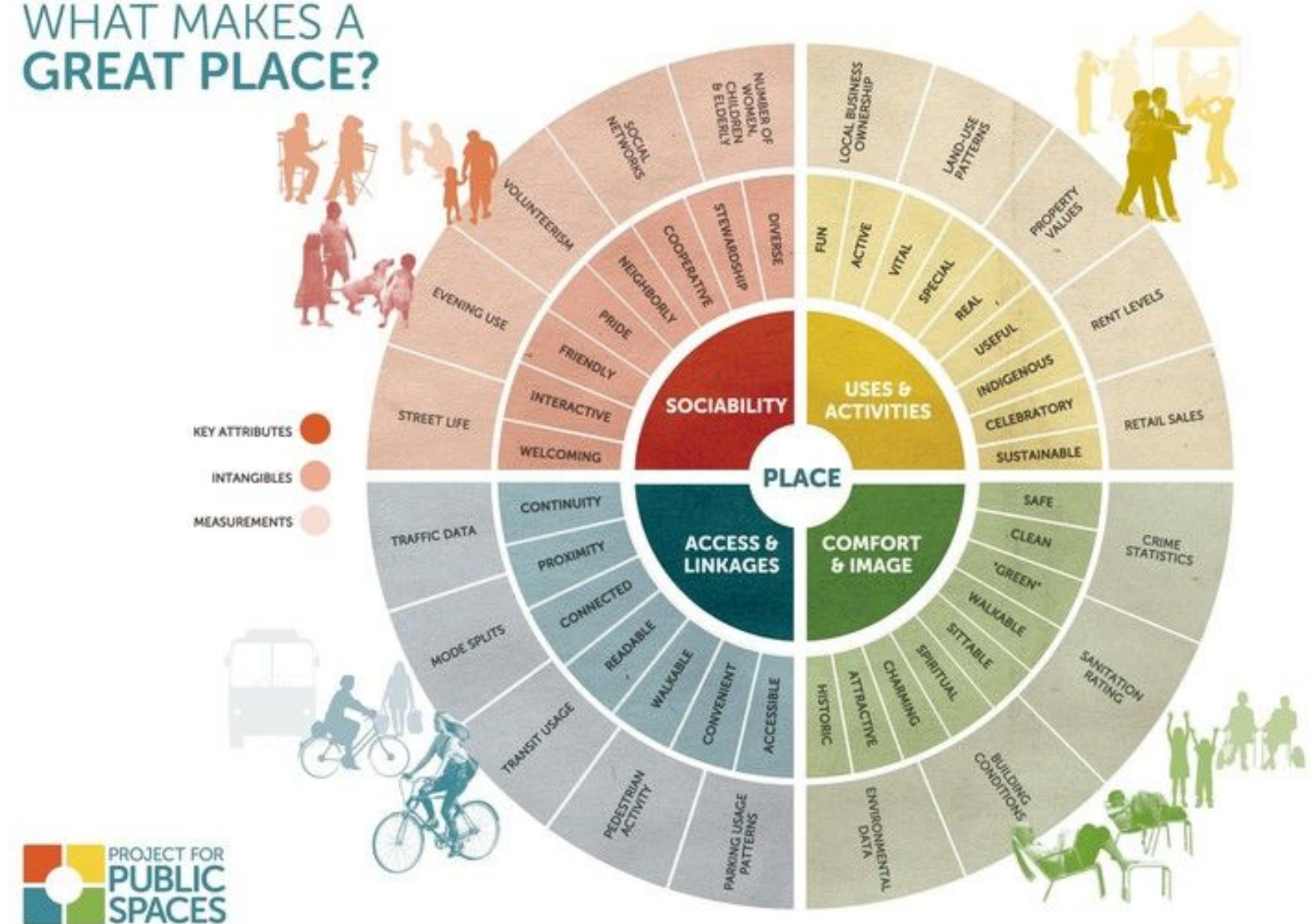
Theory

Placemaking

Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of every community. Strengthening the connection between people and the places they share, placemaking refers to a collaborative process by which we can shape our public realm in order to maximize shared value. More than just promoting better urban design, placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution.

- **Sociability**
- **Access & Linkages**
- **Uses & Activities**
- **Comfort & Image**

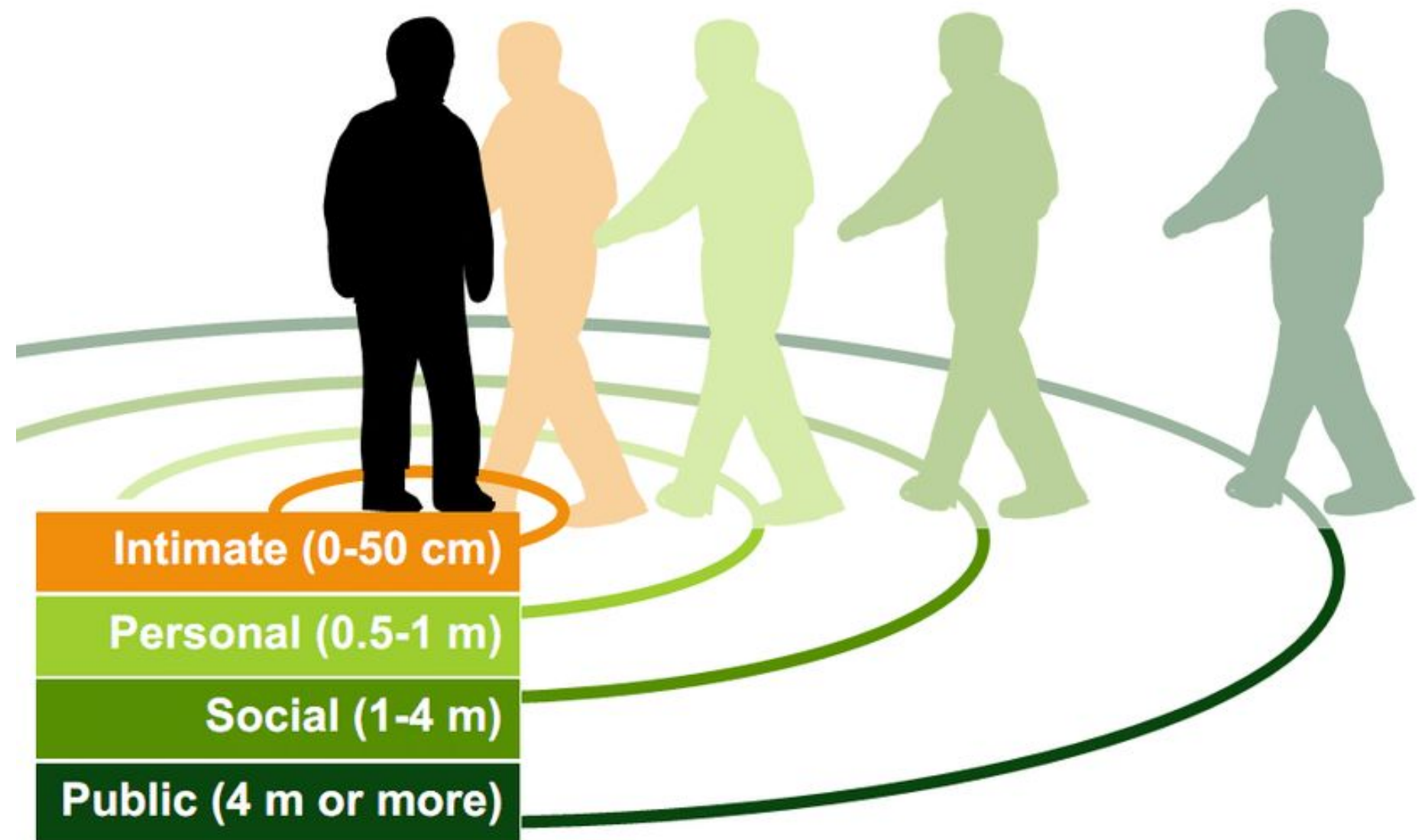
WHAT MAKES A GREAT PLACE?



Theory

Proxemics

Classical proxemics theory was started in the 1960s by anthropologist Edward T. Hall.



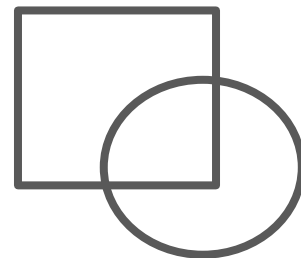
- 6 feet social distancing
- Contact free communication

Design Drivers



○ Covid

- 6 feet social distance
- Contactless communication



○ Attention restoration

- Hard fascination is needed for the child care designed space and workshop
- The yoga room will be designed as soft fascination



○ Placemaking

- Accessibility of baby strollers and other equipment
- As much space for communication as possible to ensure socialization
- A warm and soft interior provides a sense of security



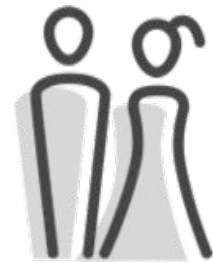
○ Technology

- Parents record their baby's growth through parenting Apps
- Smart screens can be placed in the family room to give guidance when breastfeeding or changing diapers
- Staff create a social account to share schedule and memories
- Members post or answer questions on the social accounts

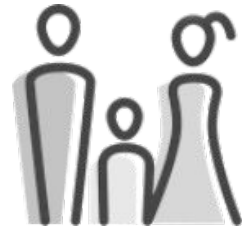
Users & Needs



New Parents
(under 35)



Preconception Couple
(under 35)



Second Time Parents



Toddlers
(3-6)



Baby
(0-3)



Tutors/Staffs/Professionals

Users' needs

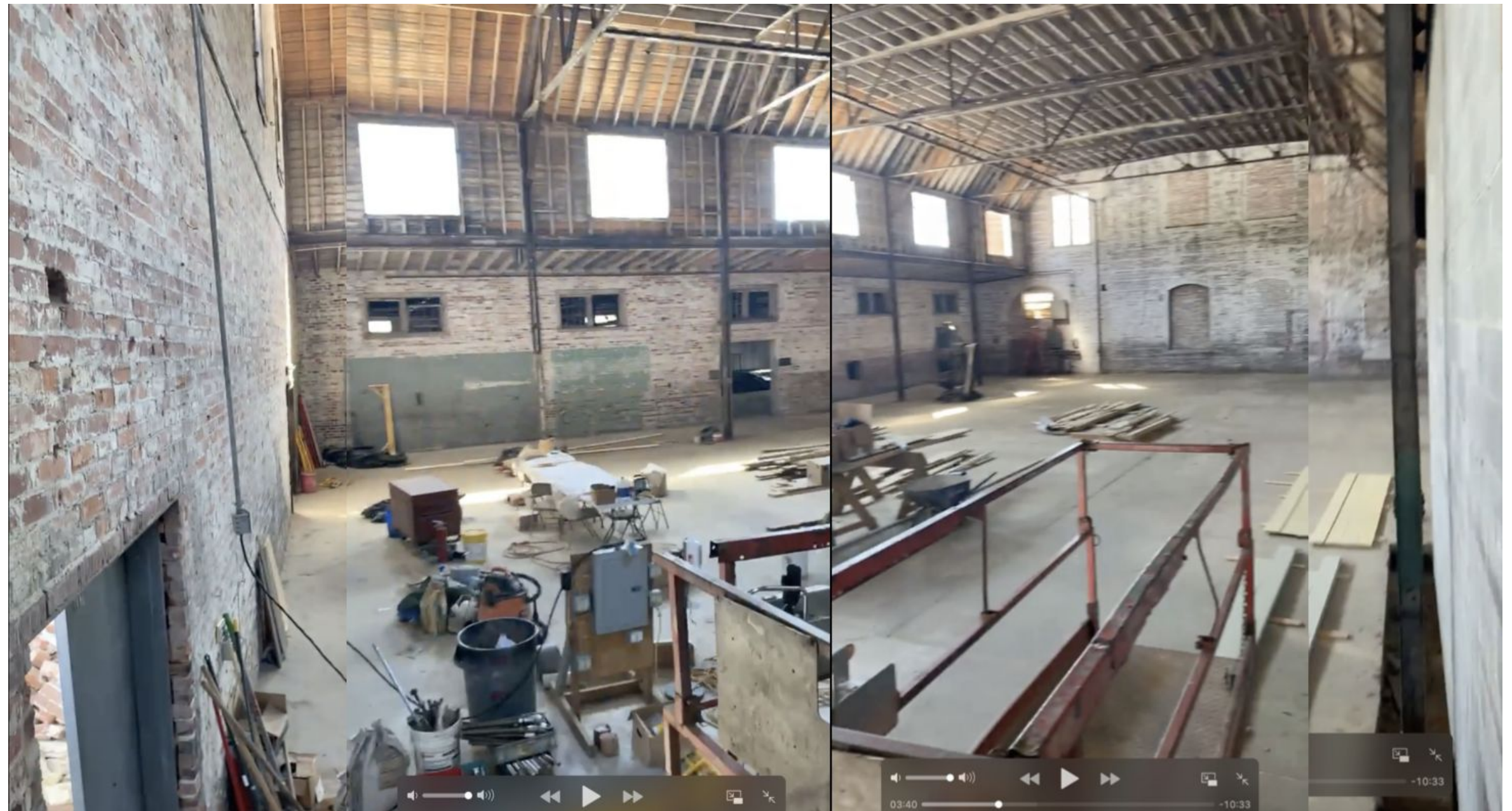
1. Social after work/study
2. establish parent-child relationship
3. Learn the knowledge and skills of raising children
4. Extracurricular exercise
5. Entertainment

Space Types

Occupancy type: B + I-4 (baby room)

Area: 8730 sqf

Floor: 2



Spaces

space	area	load	equipments	Activities inside
Child care	1309sf	14	Sanitation station; Sink; Remote monitoring	
Baby room	175sf	5	Stroller parking	
Workshop	873sf	9	Sanitation station	Parenting skill (CPR, breast feeding; diaper changing)
Resource space	874sf	9		Professional information lecture
Yoga Room	698sf	7		
Meditation Room	437sf	5		
Dining Area	1309sf	14	Sanitation station; Sink	Social dining
Communal Kitchen	437sf	5		Meal prep
Self coffee bar	88sf	1		
Kitchen	262sf	3		
	60% of total area			
Restroom (2men’s + 2women’s + 2family)	500sf		Drinking fountain; Toilet; Sink; Grab Bar and so on	
Lounge	800sf			
Reception	100sf			
Janitor closet	50sf		Utility sink	
Storage Space	100sf			
Circulation(25%)	2550sf			
	100%=11100sf			

Occupancy Load Factor

Typical Maximum Floor Area Allowances Per Occupant	
Function of Space	Floor Area in Square Feet Per Occupant*
Agricultural building	300 Gross
Aircraft hangar	500 Gross
Airport terminal	20 Gross
	300 Gross
	100 Gross
	15 Gross
	Baggage Claim
	Baggage handling
	Concourse
	Waiting area
Assembly	11 Gross
Assembly without fixed seats	7 Net
Concentrated (chairs only – not fixed)	5 Net
Standing Space	15 Net
Unconcentrated (tables and chairs)	
Bowling Centers, allow 5 persons for each lane including 15 feet or runway, and for additional areas	7 Net
Business areas	100 Gross
Courtrooms – other than fixed seating areas	40 Net
Day care	35 Net
Dormitories	50 Gross

Plumbing Fixtures

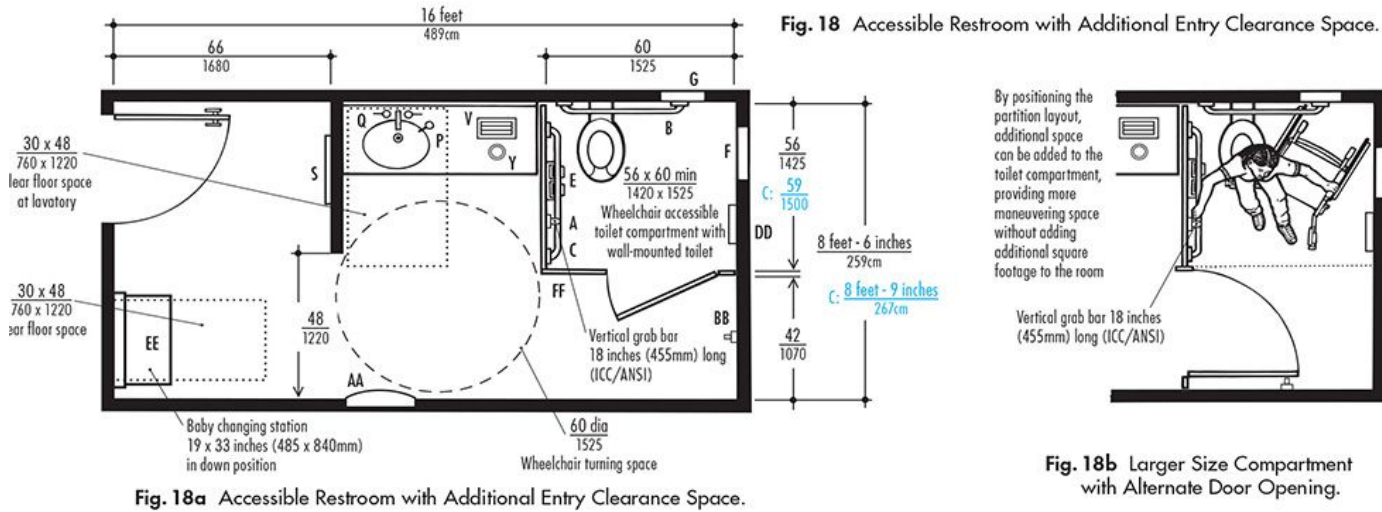
Business (see Sections 2902.2, 2902.4 and 2902.4.1)	B	Buildings for the transaction of business, professional services other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 for 50 for the remainder exceeding 50	1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80	—	1 per 100	1 service sink
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PERTINENT SECTIONS FROM THE CITY ORDINANCE:

SEC. 17-698.

- (1) The historic character of a property shall be retained and preserved; the removal of historic materials or alterations of features and spaces that characterize each property shall be avoided.
- (2) Each property shall be recognized as a physical record of its time, place and use; changes that create a false sense of historical development shall not be undertaken.
- (3) Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- (4) Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property should be preserved.

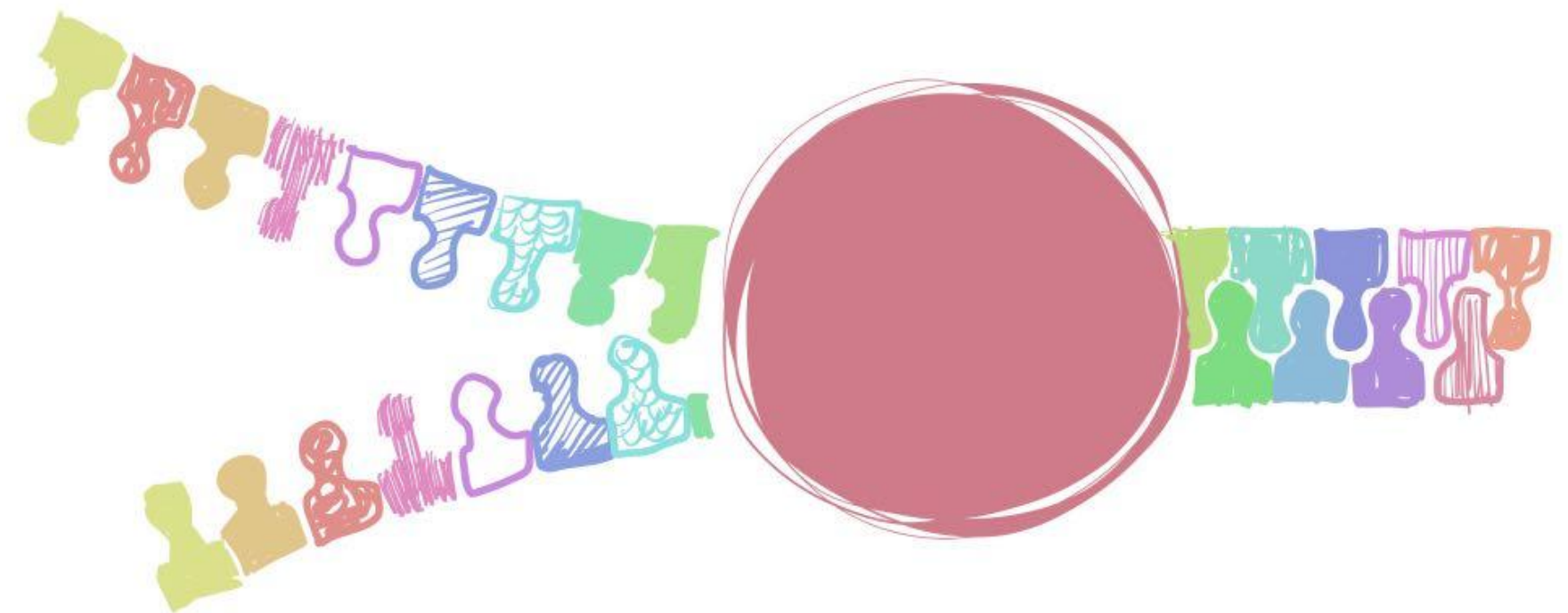
Family Restroom Prototypical Sizes



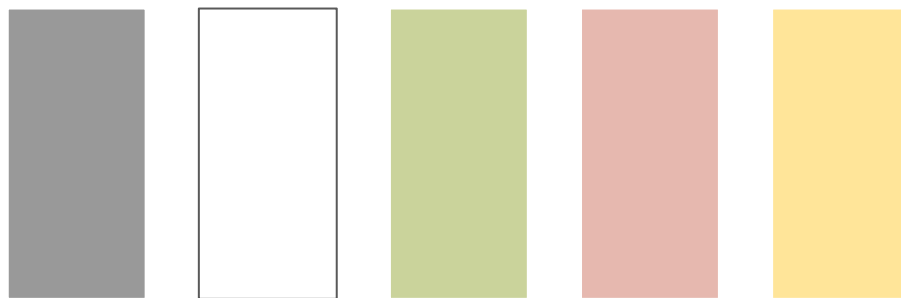
Concept

Embracing kindred connections

Embracing is a way for people to build intimacy. It refers to acceptance and protection. Embracing the community means integrating into the community culture: embracing nature means protecting nature.



Color palette



Lighting

- **Embracing** - Decorative lights are installed on the walls, the circular shape echoes the concept of embrace, and also an active space.
- **Kindred** - Soft and warm lighting gives people a sense of home, allowing parents and children to interact more in a more relaxed and intimate environment.
- **Connection** - The use of luminaires with the same circular elements in different spaces enhances the unity of the space and the connectivity of different functional areas.



Natural light

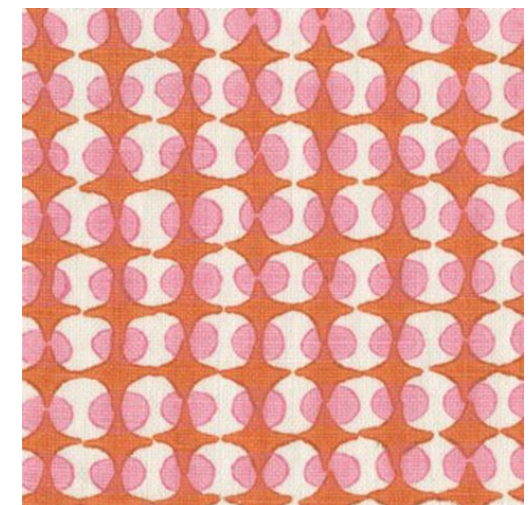
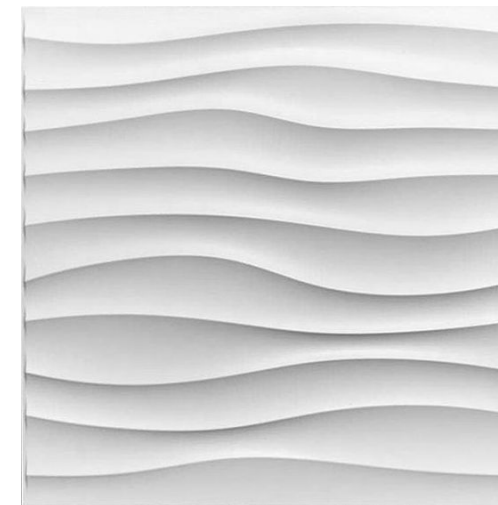
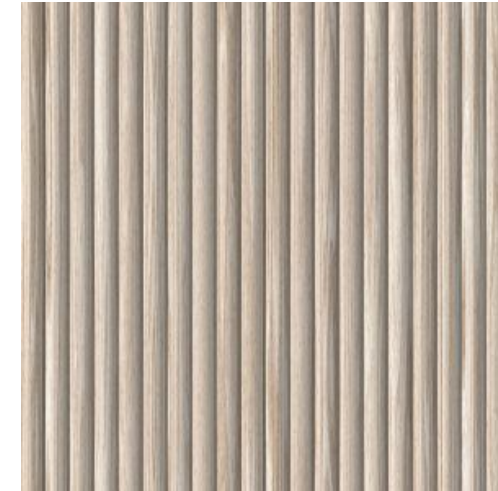


Soft and warm lighting



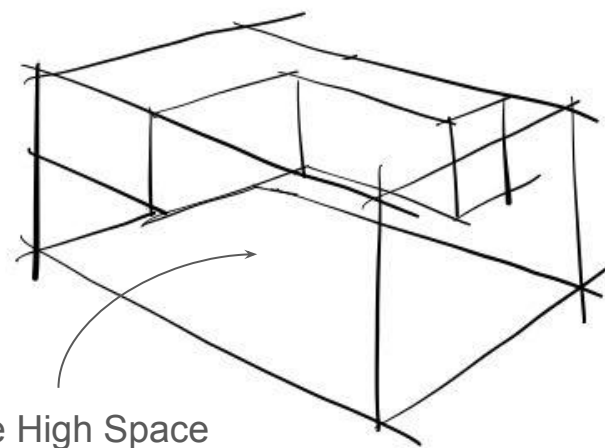
Materials

- **Embracing** - Interwoven textures express the design concept of mutual embrace and communication.
- **Kindred** - Soft materials and curved furniture are used to protect the safety of users and to enhance the relaxation and happiness of parents and children in the space.
- **Connection** - Use part of the same material in different spaces to enhance the unity and connectivity of the space.

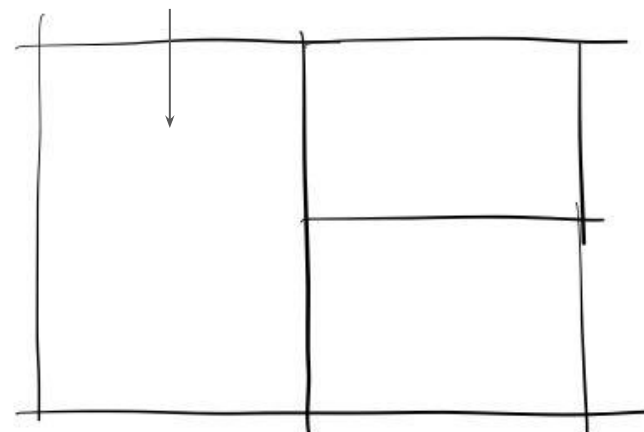


Volume

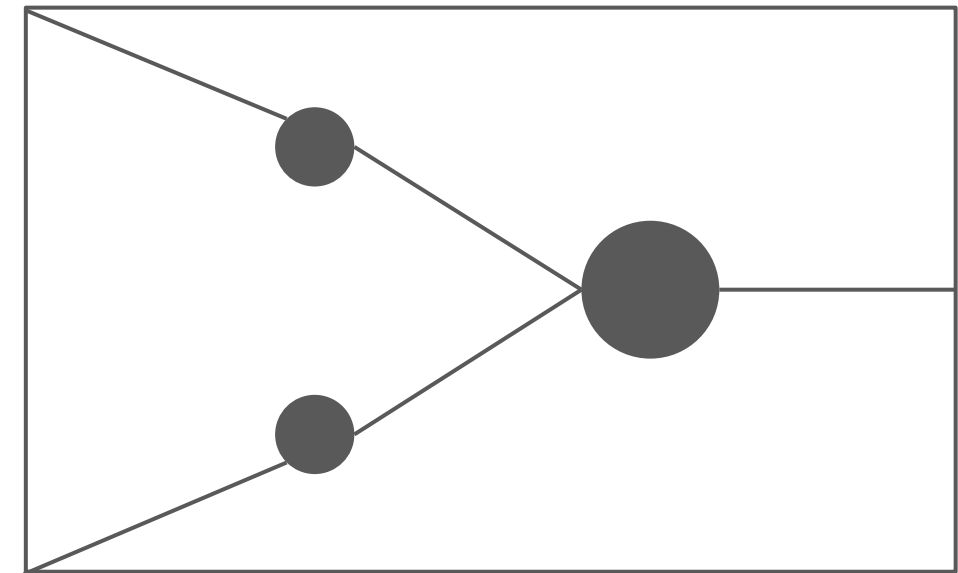
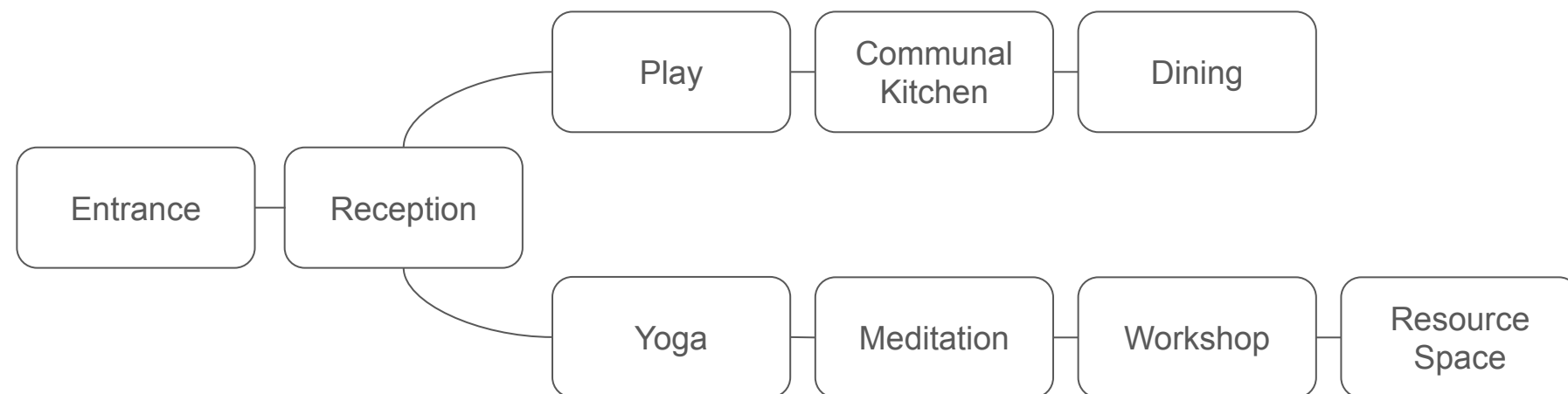
- **Embracing** - A large number of curved structures make the atmosphere of the space more inclusive and warm, echoing the concept of embracing.
- **Kindred** - The double-height structure increases the openness and diversity of the space, and the large area ensures that the functional areas are evenly distributed and socially distant, encouraging interaction while ensuring health.
- **Connection** - The staggered high and low structure makes the space more dynamic and enhances the connectivity of different floors and areas. Even on different floors, people can easily interact.



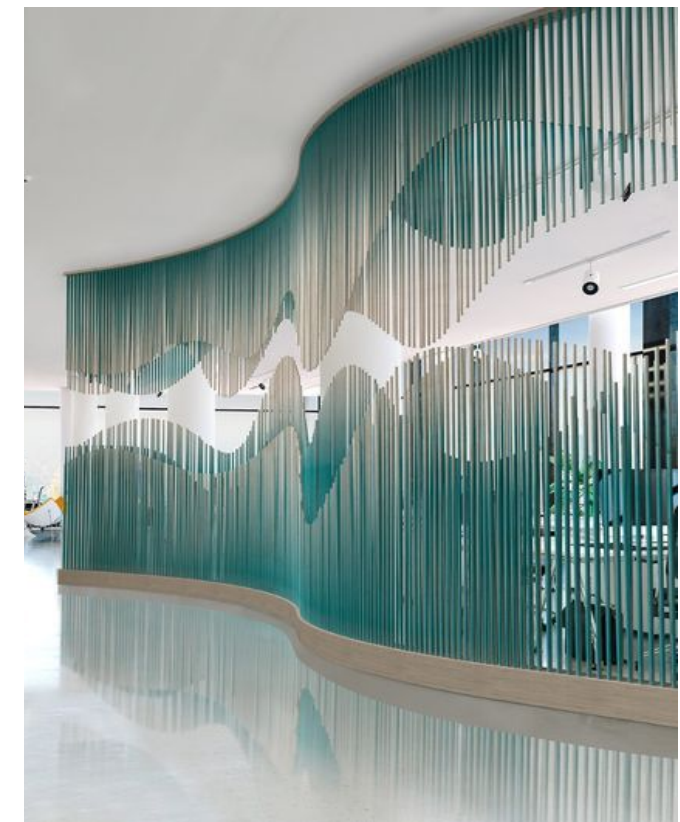
Double High Space



Organization

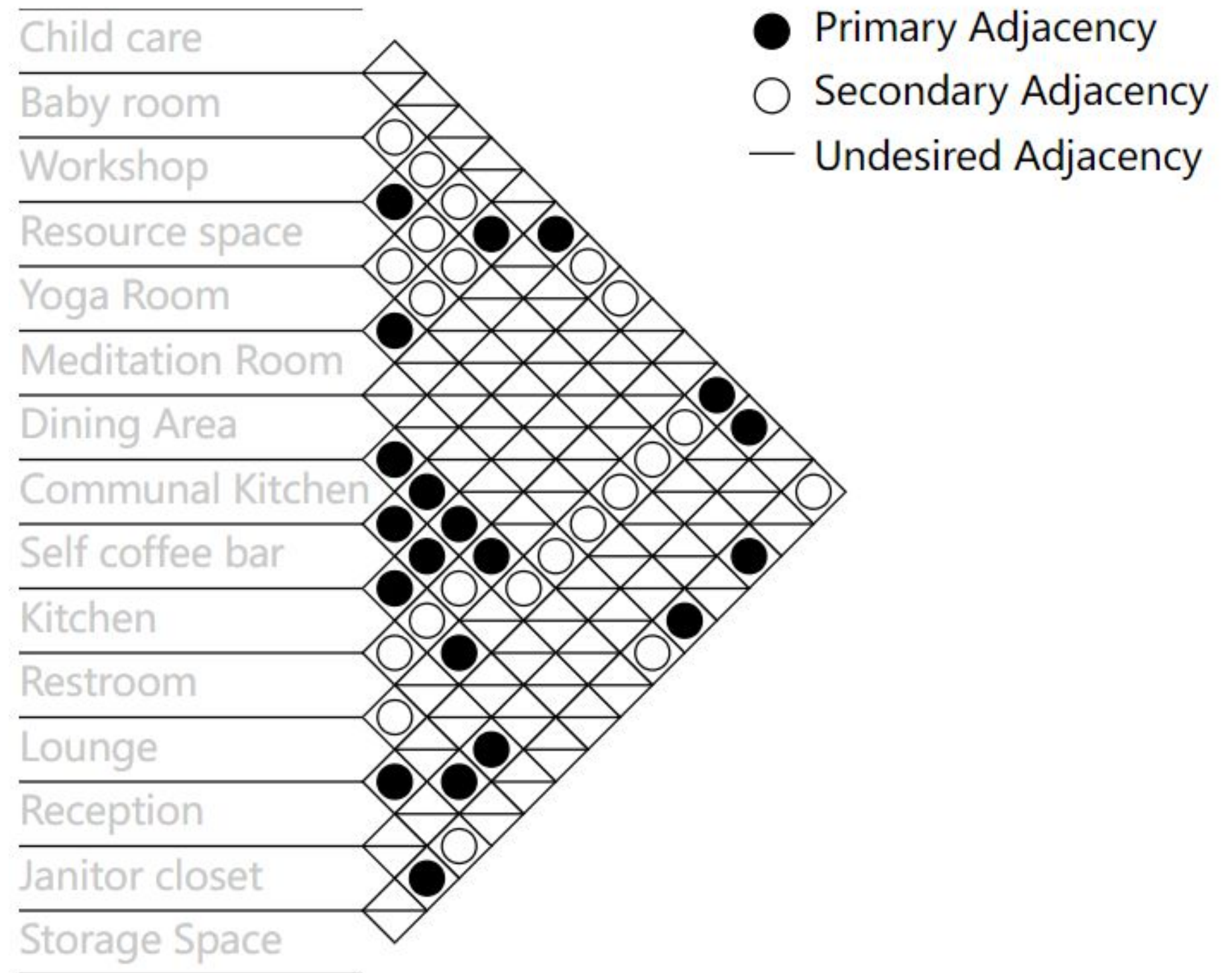


- **Embracing** - The movement line from division to closure brings people together in the end, echoing the word embracing and promoting interaction.
- **Kindred** - From a space where children play independently and adults move independently to a space where children and parents experience together, promoting communication within the family and enhancing parent-child relationships.
- **Connection** - Different functional areas in the space have mutually integrated parts, and these mutually integrated functional areas help users to carry out more free and in-depth social activities.



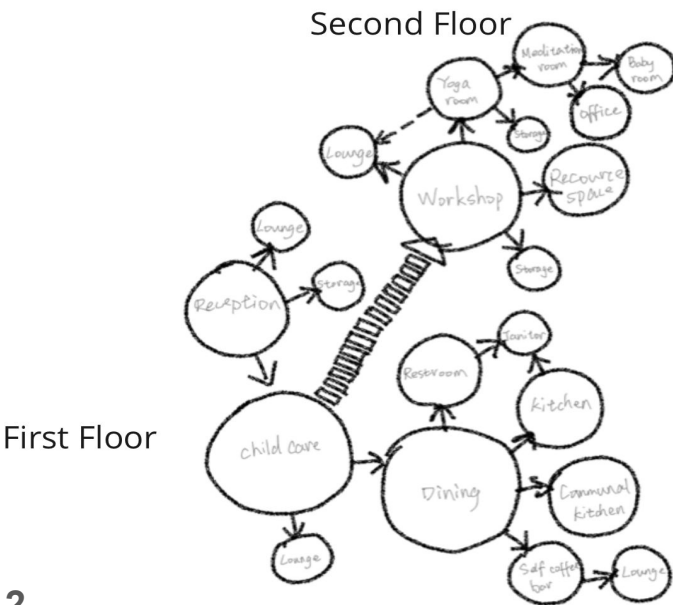
Design Development & Final Deliverables

Adjacency Matrix

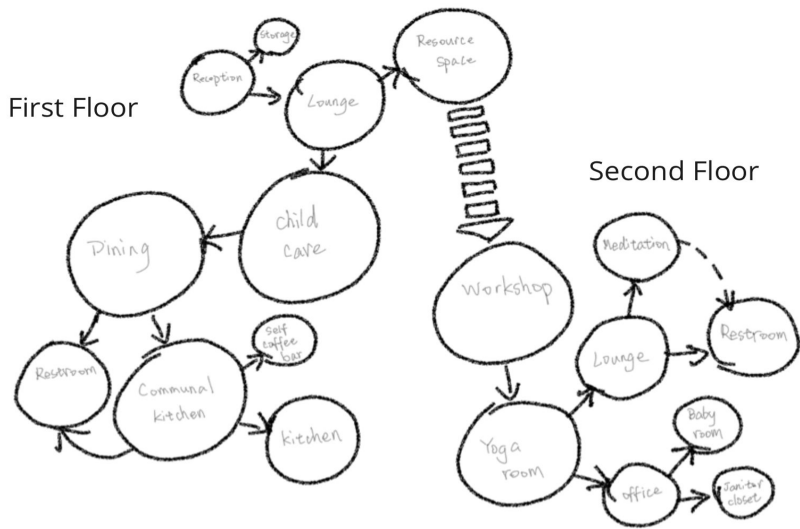


Floor Plans

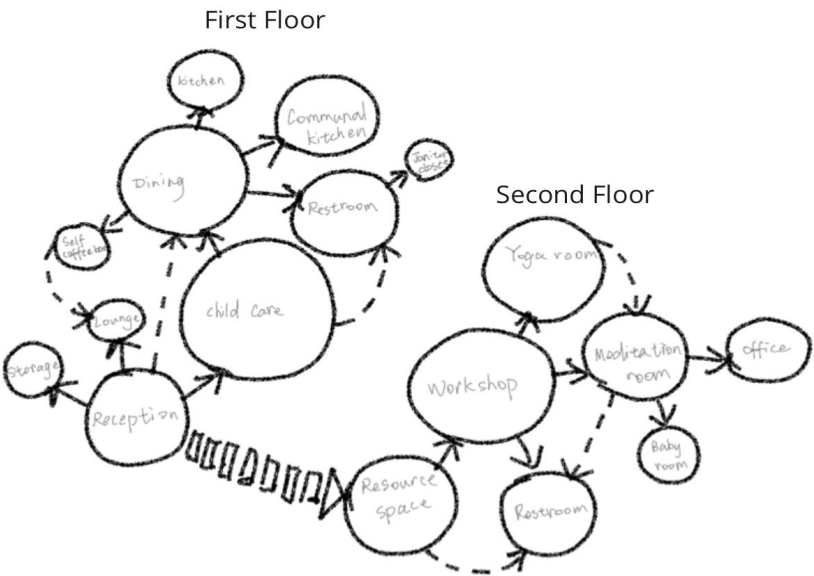
Bubble Diagram 1



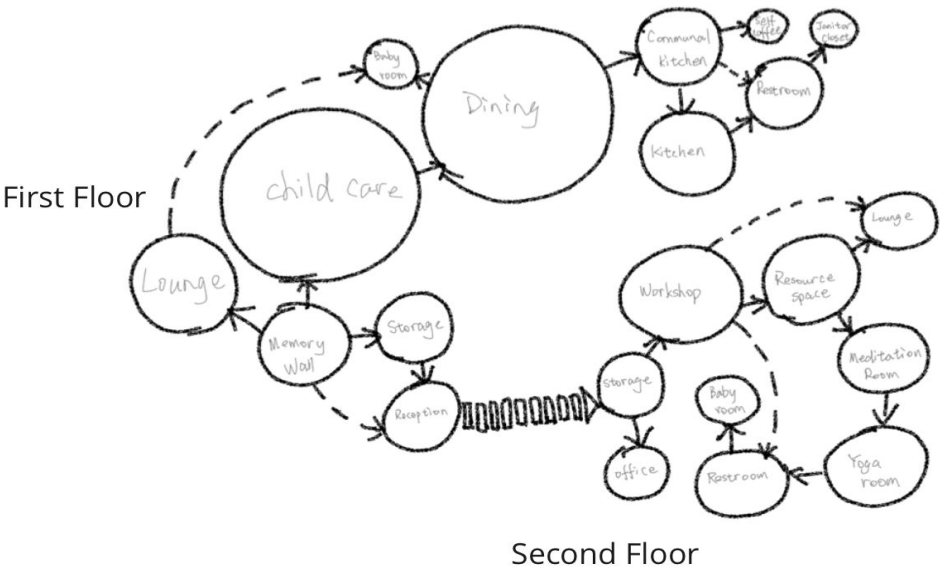
Bubble Diagram 2



Bubble Diagram 3

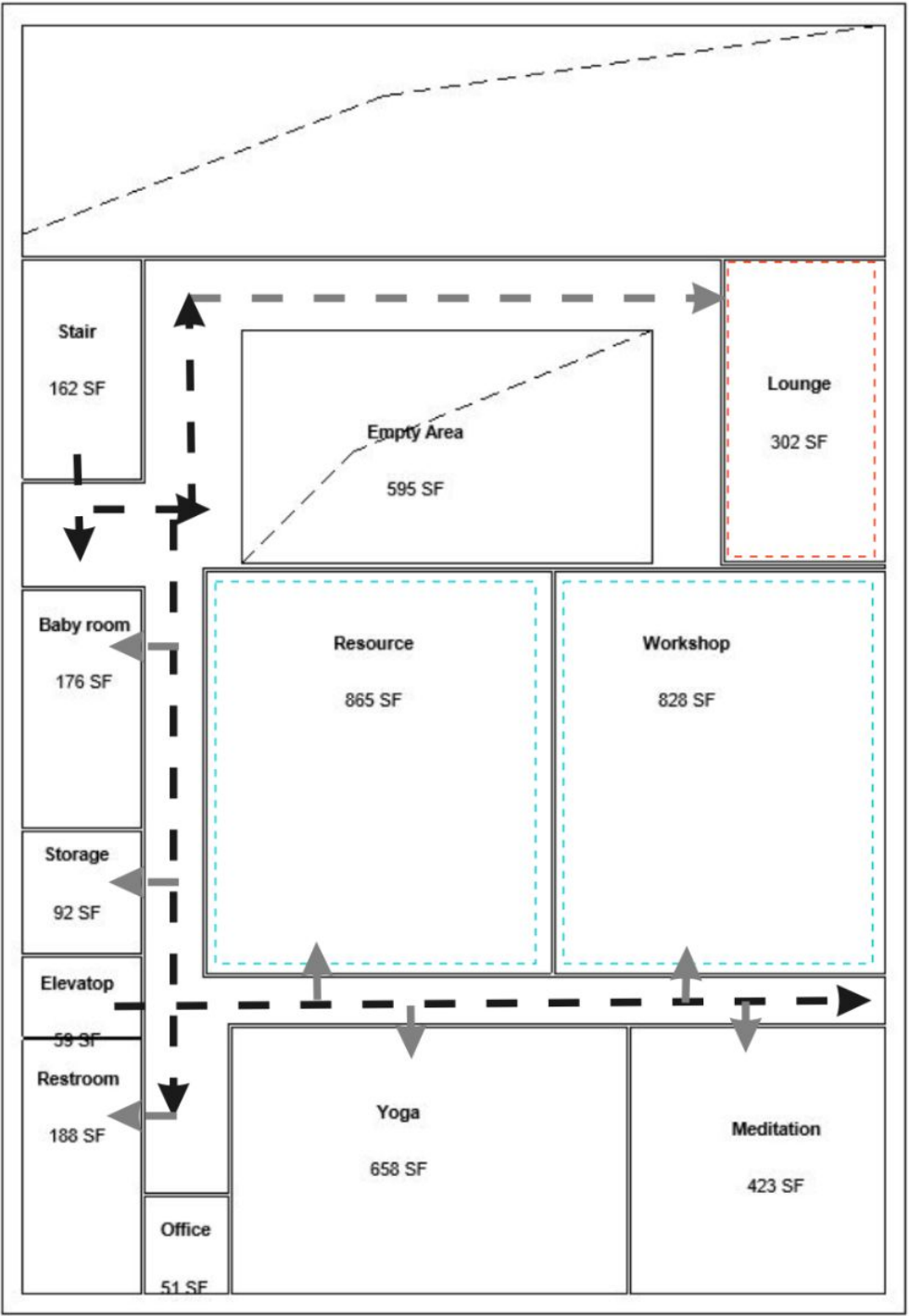
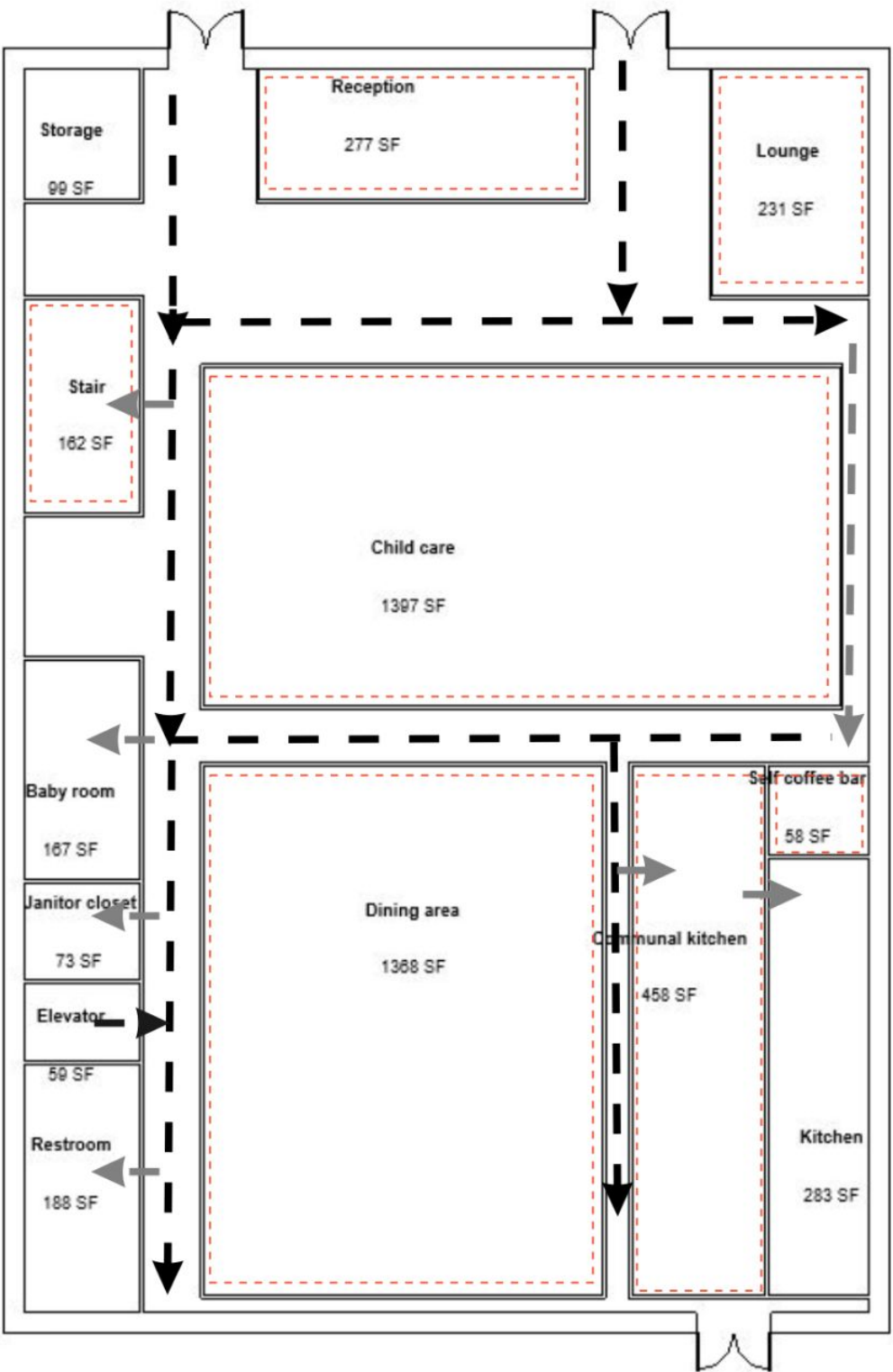


Bubble Diagram 4



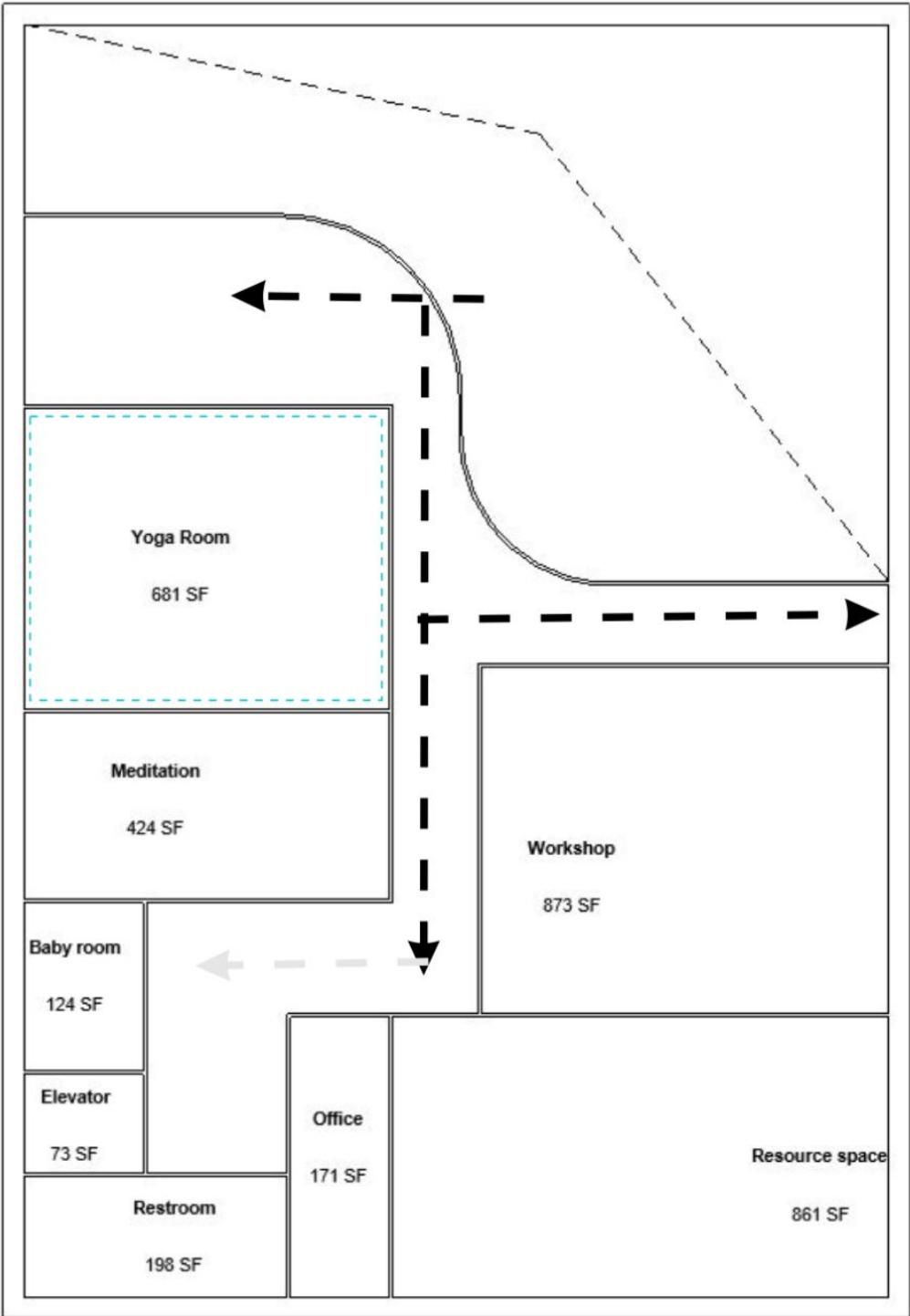
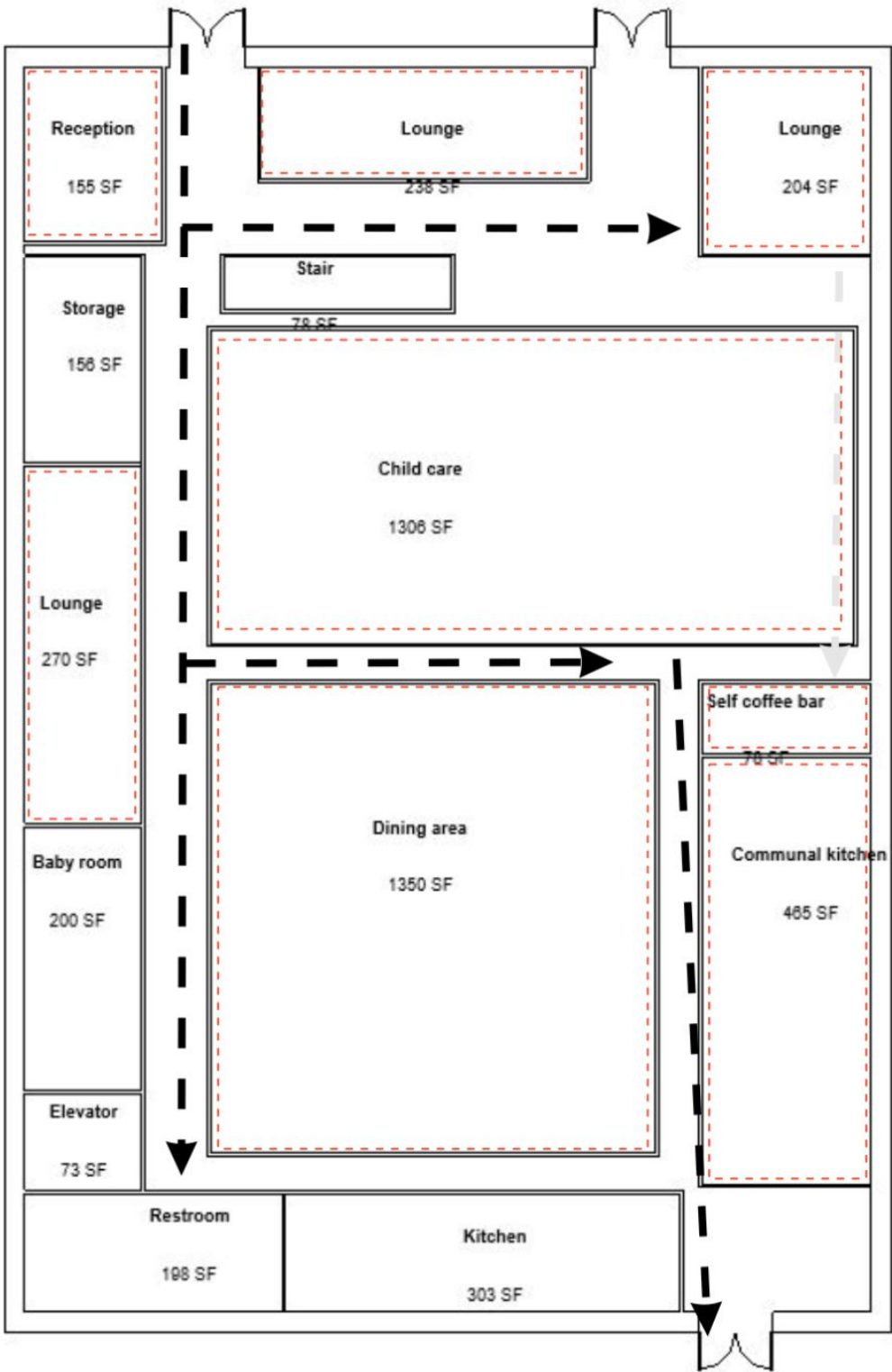
Floor Plans

Block Diagram 1



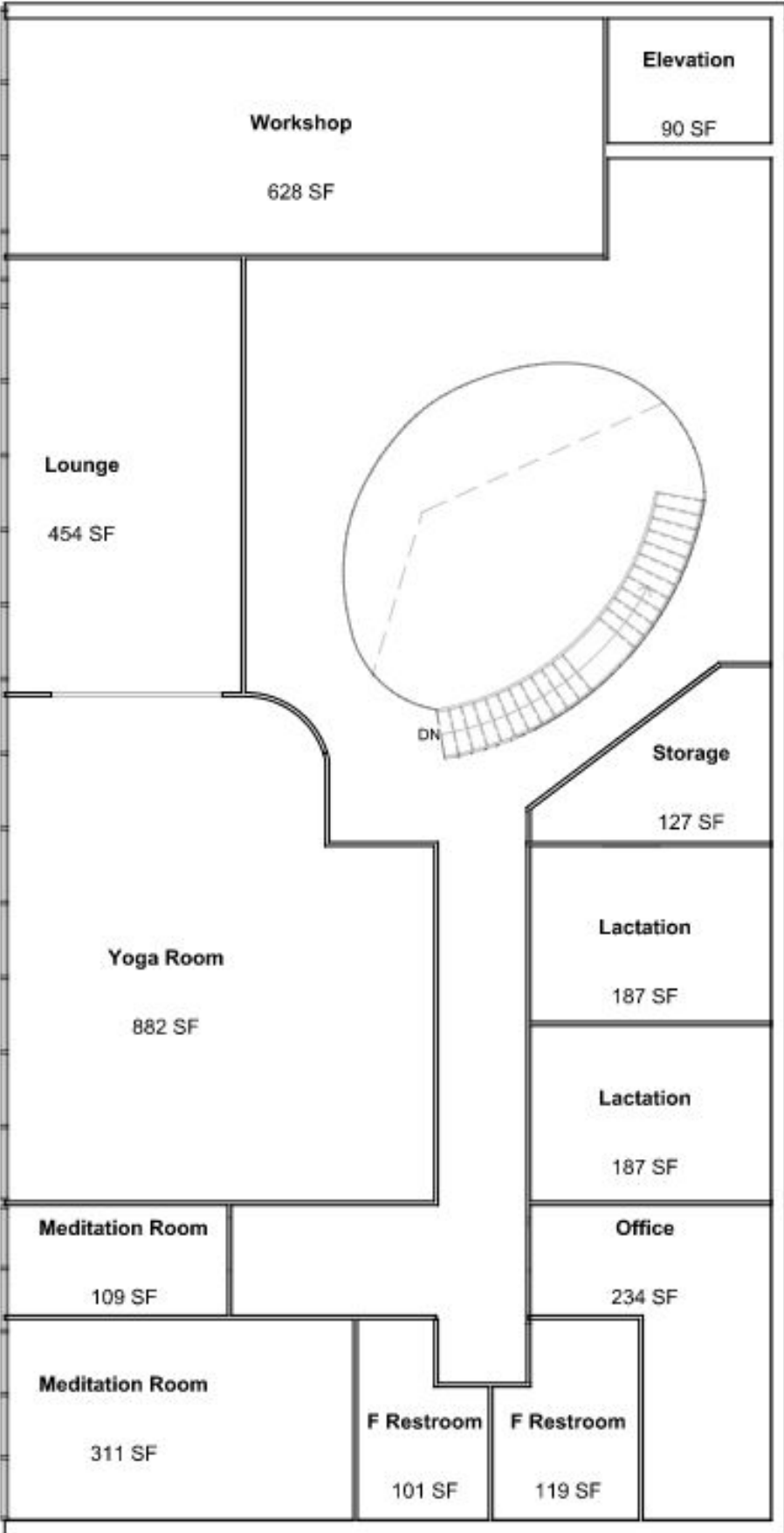
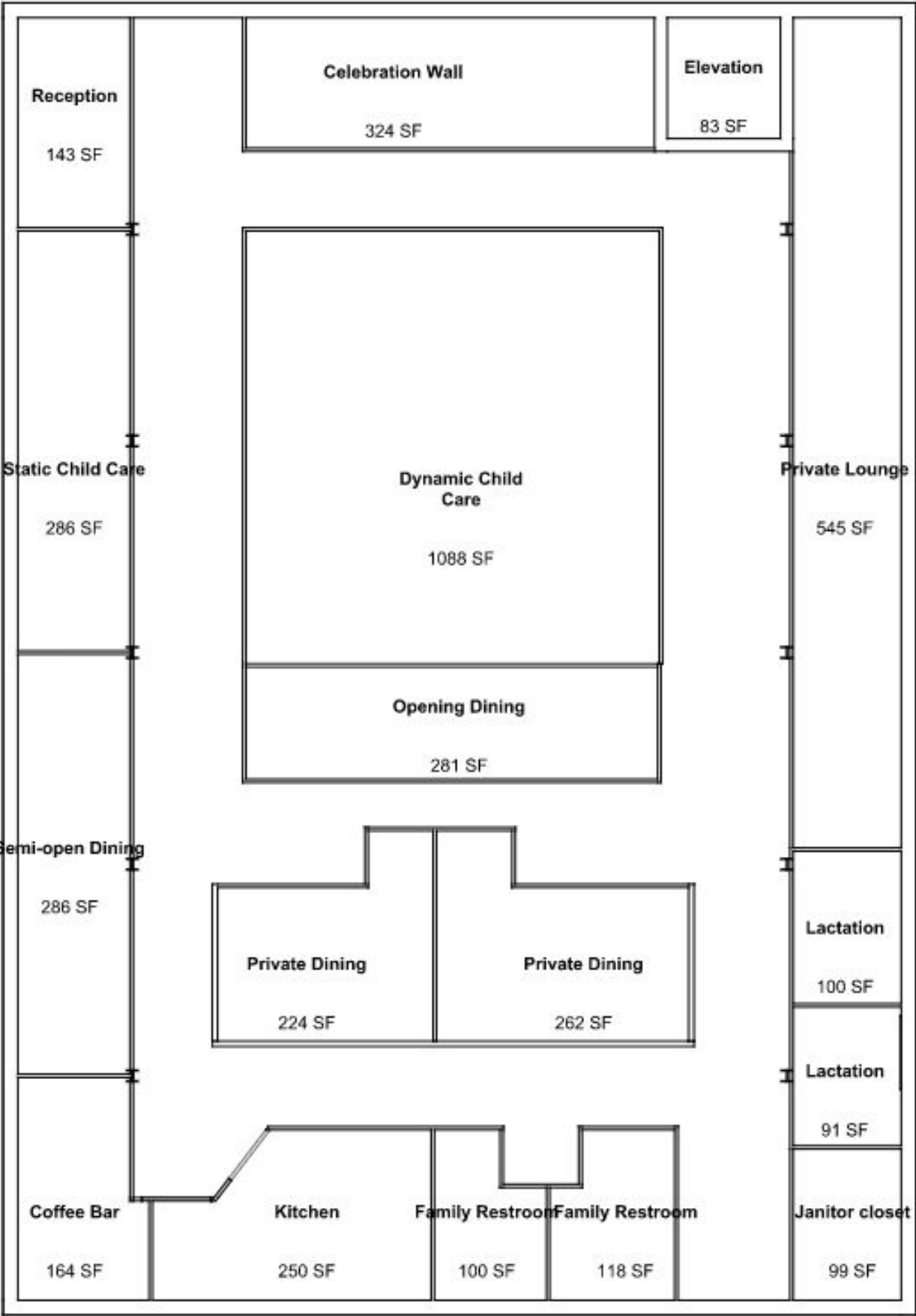
Floor Plans

Block Diagram 2



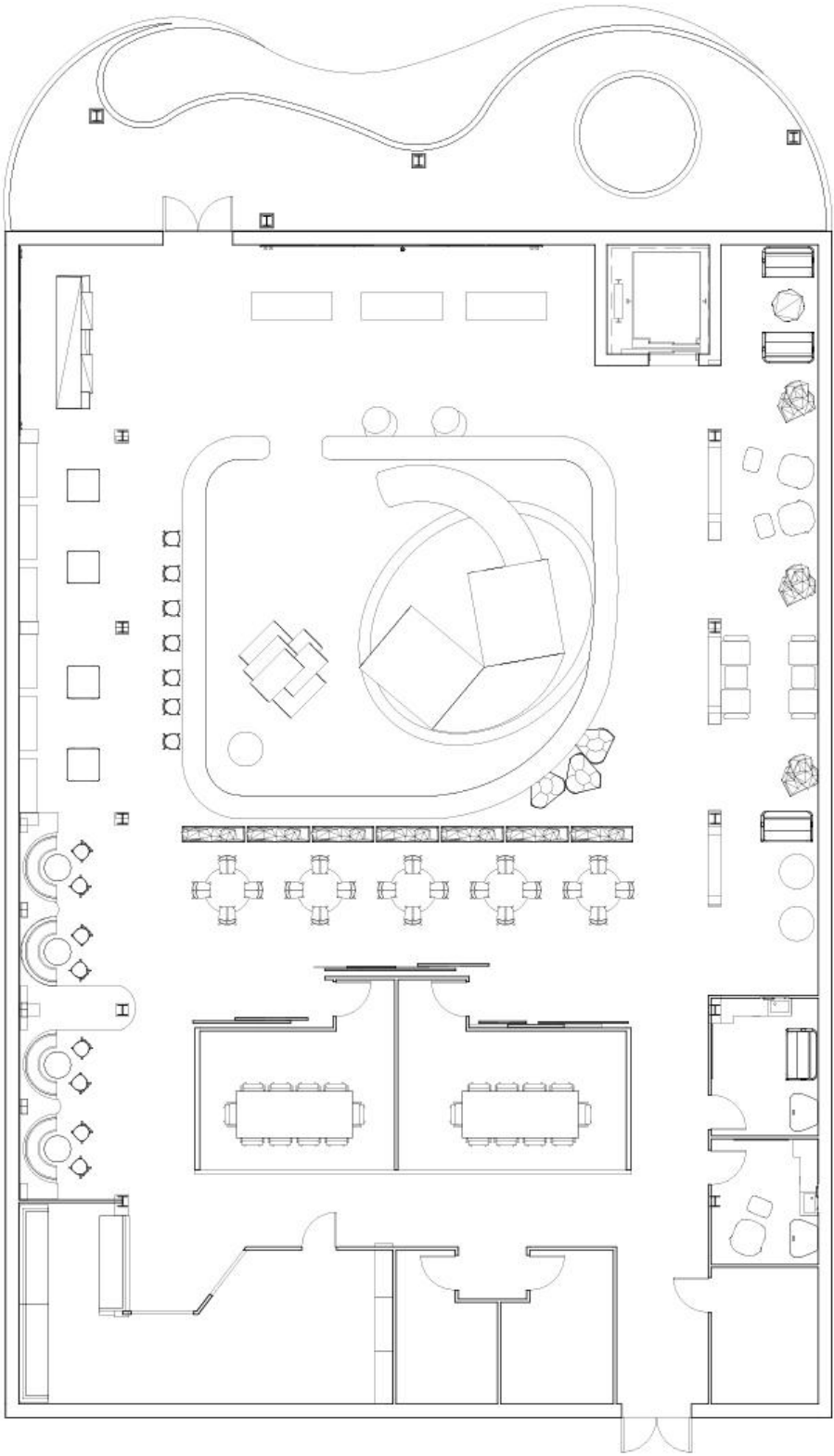
Floor Plans

Block Diagram Final

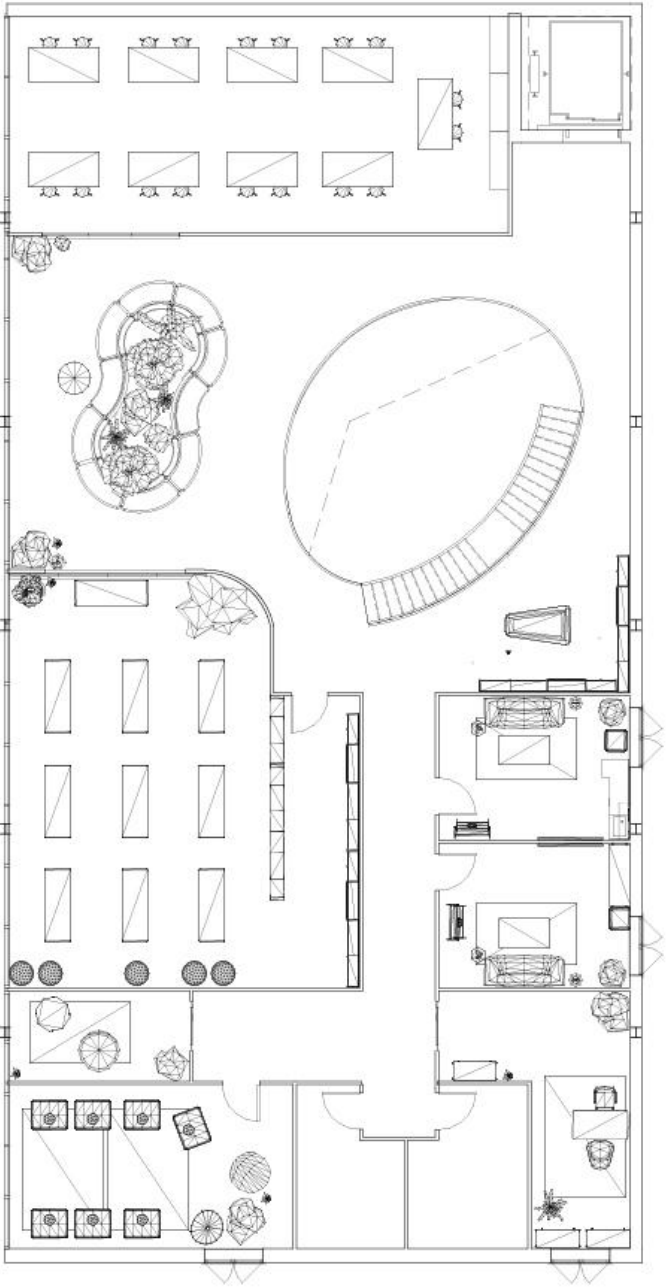


Floor Plans

Furniture plan



First Floor



Second Floor

Floor Plans

Family Restroom

Office

Lactation Room

Storage

Family Meditation Room
Private Meditation Room

Yoga Room

Lounge

Workshop Room

Family Restroom

Janitor Closet

Lactation Room

Semi-Open Lounge

Elevator

Coffee Bar & Kitchen

Private Dining Room

Semi-Open Dining Area

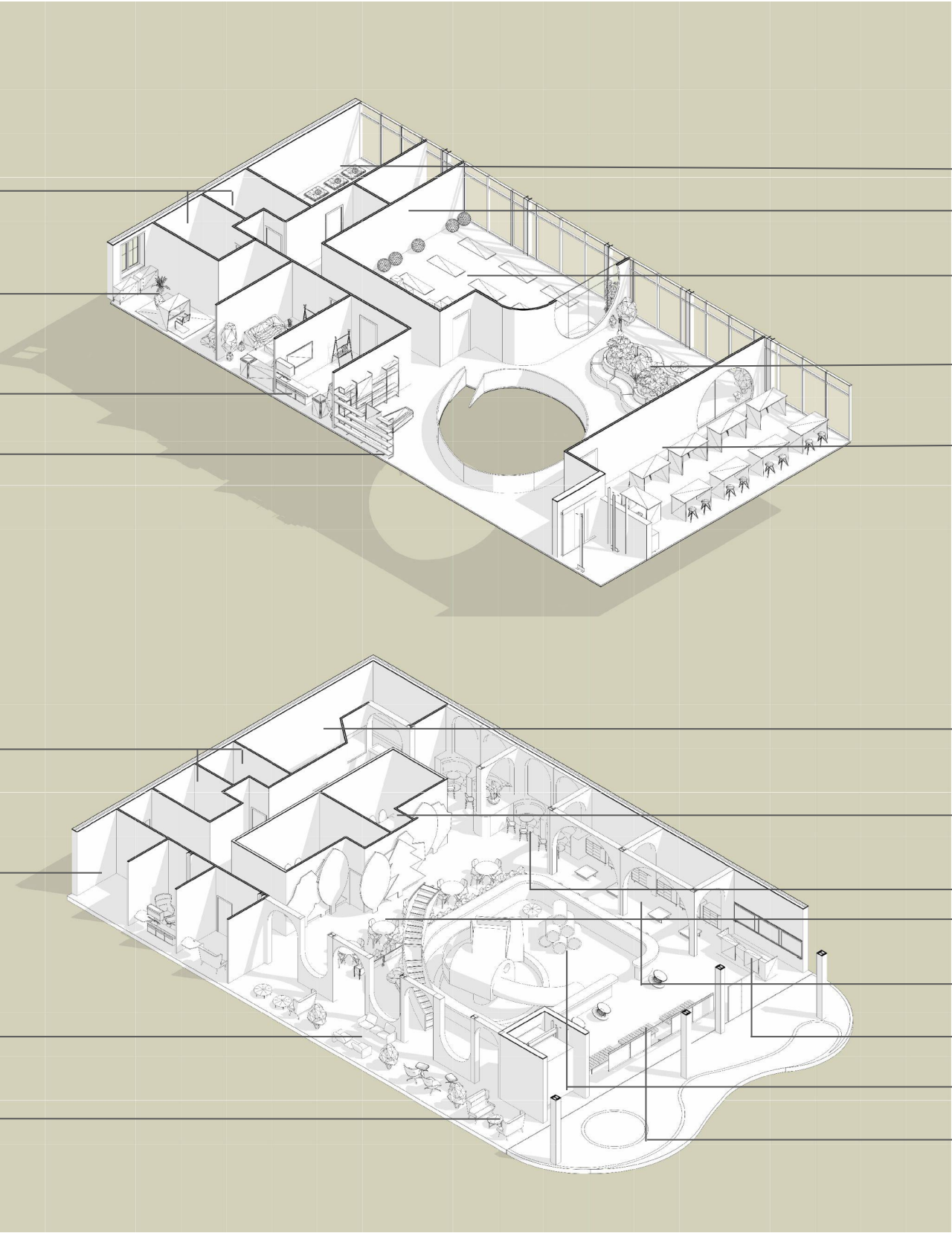
Open Dining Area

Child Care

Reception

Child Care

Celebration Wall



Section



Key Experiences



Child Care

- The play area provides independent play space for children. Different climbing facilities meet the children's active characteristics. Children can make new friends while playing.
- This area is located in the center of the space and is easy to reach. In addition, when children are playing here, adults can easily see the children from the upper floor without disturbing them.



Open Dining

- Communication is an important design direction in the space. Open or semi-open spaces provide the possibility for a variety of exchanges.

Key Experiences



Semi-open Lounge

- The concept of embracing is expressed as many arches in the space. The arched partitions and the arches in the amusement facilities create an atmosphere of space embrace for users. The different proportions and directions represent mutual care and communication between user groups of different ages and genders.



Semi-open Dining

- Furniture fabrics and lighting fixtures continue this theme to the details of the space.

Key Experiences



Yoga Room

- Parents also need private space. According to our study, marital relationships after the birth of a child are also one of the problems that plague new parents. We want to promote relationships between couples through social activities and they can also socialize with other parents here



Lactation Room

- The needs of pregnant women were an important consideration in our project, and we designed the lactation room to provide a comfortable space for mothers, with a refrigerator, a sink, and a crib. They can breastfeed, soothe the baby, and take a short break here. According to our previous research, parents are now using social media or the internet to learn parenting skills. We have designed an interactive smart screen in each lactation room. Mothers can learn parenting skills through this screen.