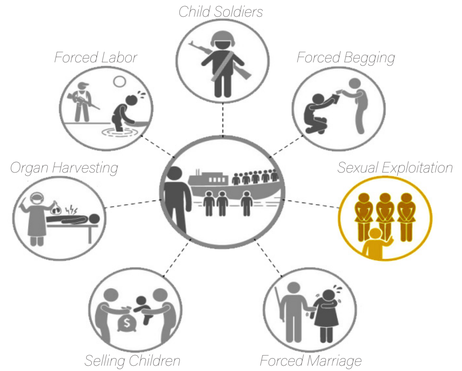
MIDTOWN RECOVERY CENTER

Rehabilitating teenage girls who are survivors of human trafficking...

What is human trafficking?

CYCLE OF SEX TRAFFICKING

Human trafficking is the illegal exploitation of a person of any age. It may take the form of forced labor, child soldiers, or forced begging. The midtown recovery center focuses on survivors of sex trafficking, which is the most common type of trafficking in the world. Traffickers exploit 1 million children per year.



Sex trafficking disproportionately affects women and children and involves forced participation in commercial sex acts. In the United States, any child under the age of 18 who has been involved in a commercial sex act is considered a trafficking victim. **Women and girls make up 80% of the people trafficked transnationally. Yearly, traffickers exploit 1 million children in the commercial sex trade.**

A child is either born, sold, or manipulated into the sex trade. The average age is 12 years old. Sadly, Homeless youth and other vulnerable teens are targeted by traffickers, and suffer various forms of sexual abuse. After being rescued or escaping, survivors are more likely to fall-back into the system or have children who repeat this cycle of trauma. Intervention is required in order to help teens heal and prepare for adulthood.

A child is child is either born, sold, or manipulated into the sex trade.

12

12 years old is the average age a child enters sex trafficking.

various forms of abuse

Homeless youth or other vulnerable youth are targeted by traffickers.

rescue or escape

Without intervention a survior of sex trafficking is likely to return or have children who fall prey to this sytem.

cycle continues.

Breaking the cycle.

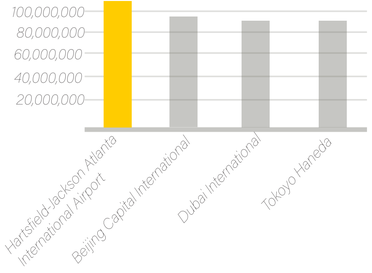
Midtown Recovery Center would help teen girls who have survived this trauma to heal and prepare for adulthood.

ATLANTA

Atlanta was named by the FBI as one of the 10 US cities with the highest rate of human trafficking.

ATLANTA

Atlanta is one of the highest rated cities for human trafficking due to the constant overflow of traffic that goes through Harts field-Jackson International Airport. The city is aware of these crimes, but they still go undetected. These statistics are shocking and sadly Atlanta lacks resources for these victims.

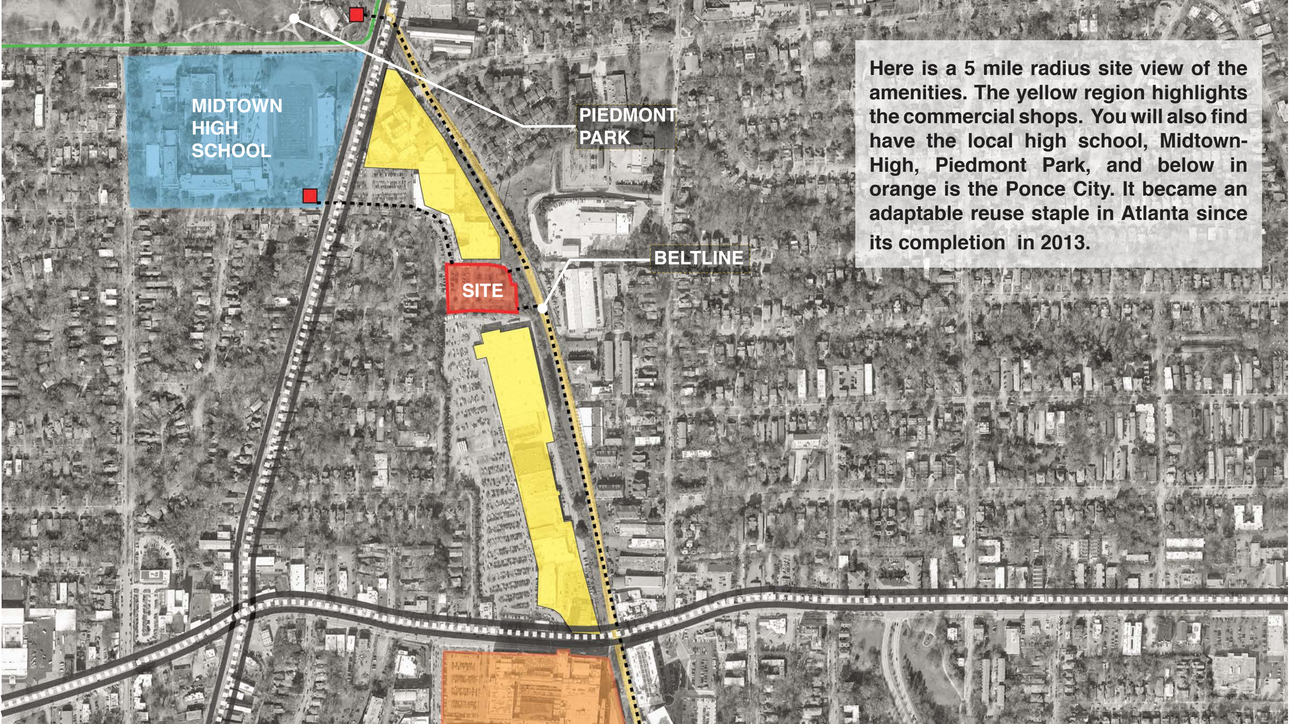


Hartsfield-Jackson Atlanta International Airport is world-leading in human trafficking cases.

Why Midtown, Atlanta?

COMMUNITY

The “heart of the arts” is a nickname for Midtown, which has the largest concentration of arts and cultural attractions in the southeast. Our site is located in Midtown Atlanta. This site is a prime location for teens because it is next to the beltline and shops. The secluded site and local atmosphere make Midtown a good place for the teens to heal, go to school, and make friends.



Here is a 5 mile radius site view of the amenities. The yellow region highlights the commercial shops. You will also find have the local high school, Midtown-High, Piedmont Park, and below in orange is the Ponce City. It became an adaptable reuse staple in Atlanta since its completion in 2013.

FOCUS GROUP

Girls,
Age 14-18

Survivors of human trafficking...

Our focus group is teen girls aged 14-18. Focusing on this age group will help to promote feelings of safety in the facility.

48 HRS

is how long it takes for a runaway youth to be approached by a sex trafficker.

12 YRS

is the average age a person enters human trafficking.

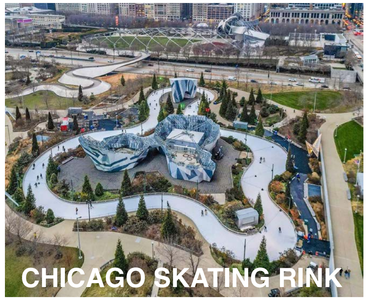
374 TEENS

Approximately 374 teens are commercially sexually exploited each month in Georgia.

How can Architecture reintegrate broken teens back into society?

These girls have survived a severe amount of trauma that most of us can't even imagine, and we researched ways architecture has the ability to heal. We looked into the ways that light and nature when integrated into architecture can have a healing effect. We were inspired by the concrete use of Marcel Breur, the use of light by Steve Holl and the landscaping design of Roberto Burle Marx, especially his use of pattern and color in the pathways.

PRECEDENTS



Atlanta, like many large cities in the US, has felt the effects of gentrification. Our response to that is understanding what makes Atlanta, Atlanta. Skating is a popular part of the black community culture in cities like Chicago, Detroit and of course Atlanta. In the film ATL, rapper T.I expressed how important skating rinks were and how they allowed you to express yourself. Based on this, we felt the need to design a public skating rink that could connect local rollers through the beltline.

SITE STRATEGY

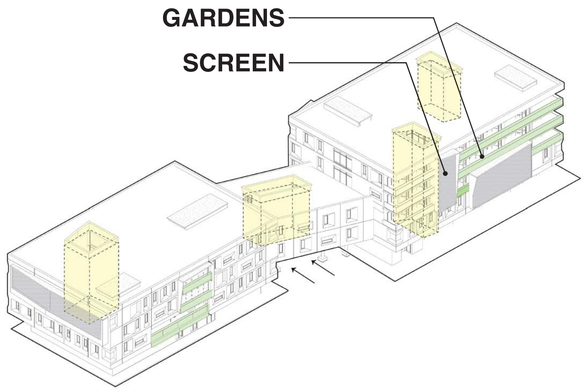
A <u>connection</u> to the Beltline.

<u>Threshold</u> for Privacy


HOME DEPOT
HISTORIC
RESIDENTIAL
DISTRICT
BELTLINE
CINEMA

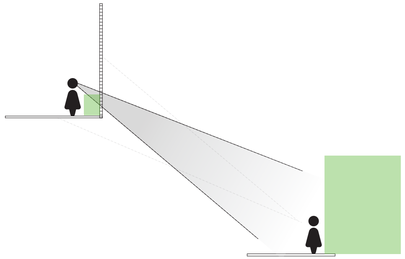
This is a south elevation that cuts through the topography and into the beltline. The east side of the site sits in a flood zone, and we decided to elevate the building and allow the ground floor to serve as an open area for gathering, and a swap shop.

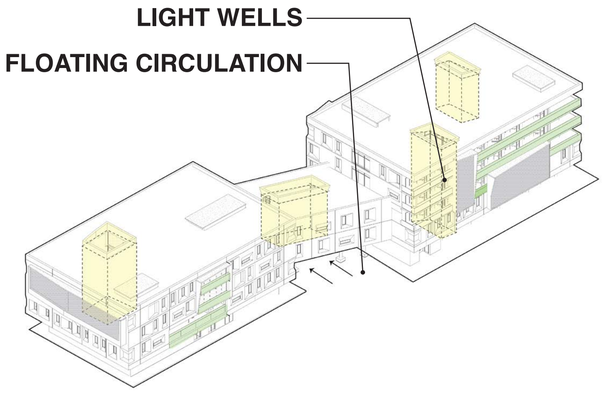
DESIGN STRATEGY



Biophilic Design

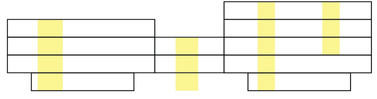
The screens allow for the user to reconnect with the outside without being seen.

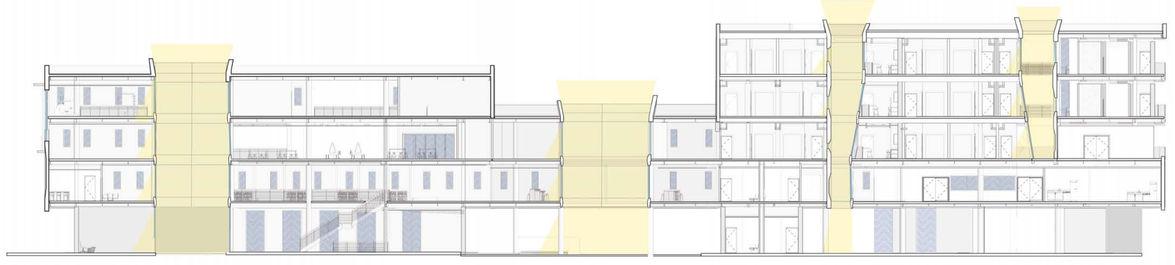




Light

There are light wells and pockets of green space that carve into the form and that allows light and views to nature to be in virtually every space of the building.

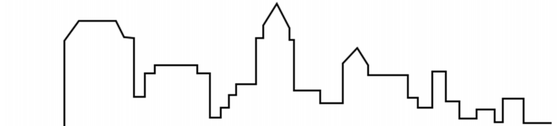




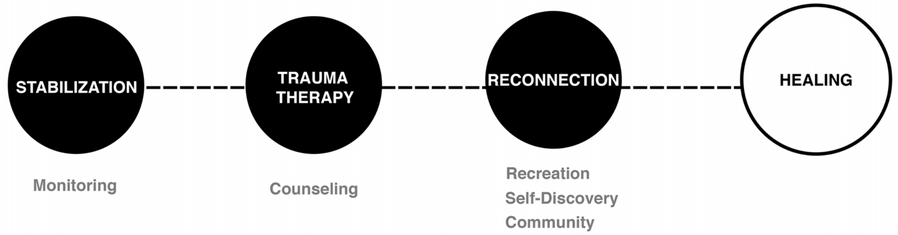
How can Architecture heal broken teens?

This type of tragedy requires a multi-step process that we wanted to incorporate in every aspect of the design. The first step is monitoring mental state, the second is counseling, and maybe the most important, is the ability to reconnect. This can happen through recreation, self-discovery and community.

PROGRAM



Human trafficking survivors require a multi step recovery process that is reflected in every aspect of the design and site of the Midtown Recovery Center.



PROGRAM

EDUCATION

Academic: which focuses on general education, **tutoring, GED, adult basic *education*** and ***college preparation***

1

SELF-DISCOVERY

Part of the healing process is to have time and **space to exist** and reflect in order to **find themselves** again. Children can participate in activities that they were deprived of as a child can **take an art class, or learn an instrument.** Something to get there mind off of their trauma and school.

2

JOB READINESS

Prepares youth for **entering the job market.** Resources are provided on how to **find a job, resume building, interview skills, and professional behavior.**
Personal budgeting and financial planning is another skill that would help each youth throughout their lifetime.

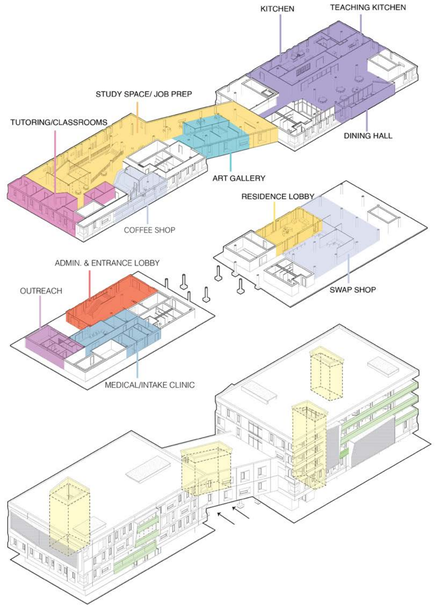
3

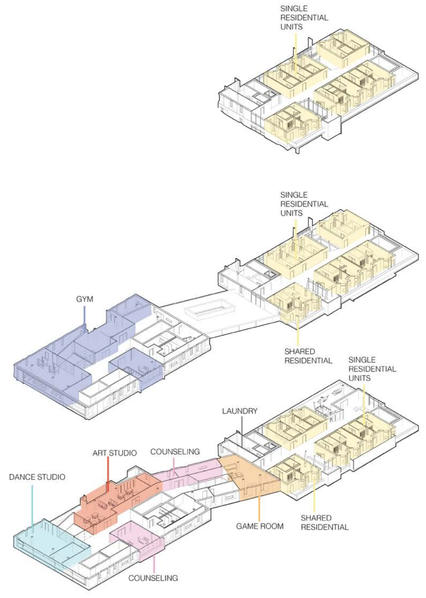
HOMELESS OUTREACH

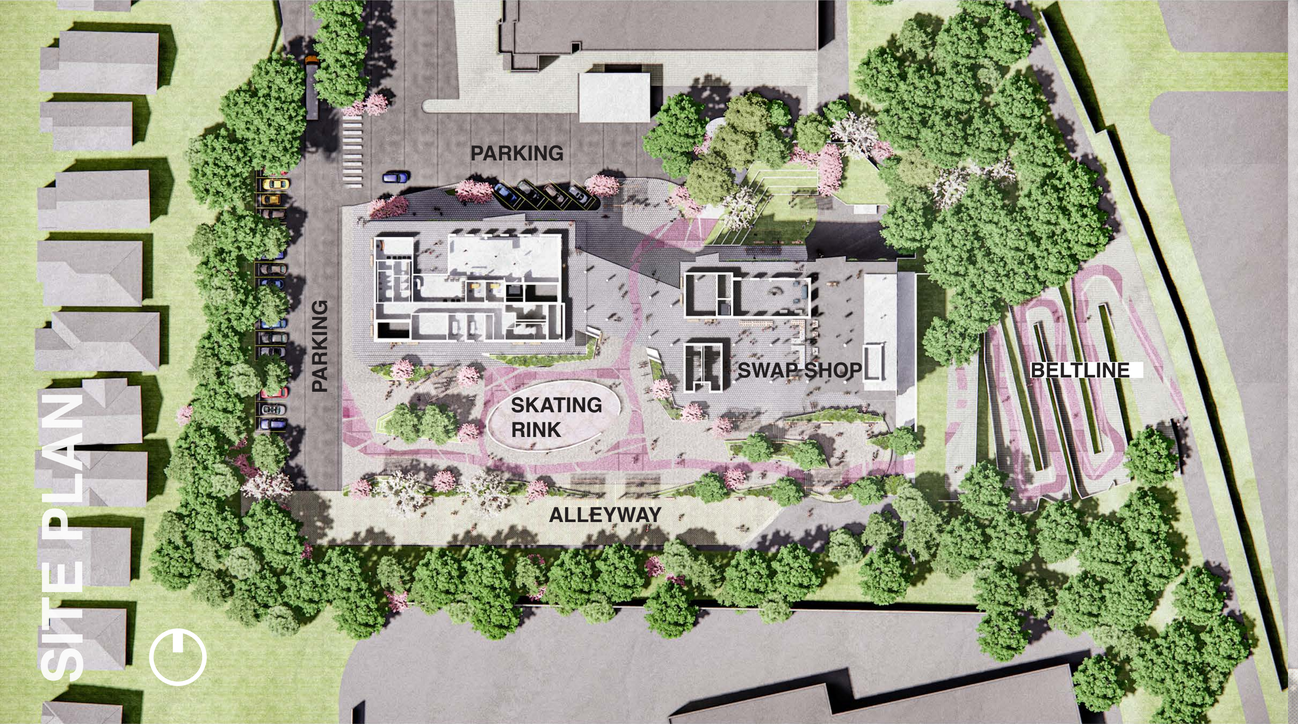
The **homeless youth** in the area can use the facilities as a preventative measure. This is the centers way of helping children at **risk of being trafficked,** They can **use facilities** and **speak to staff member.**

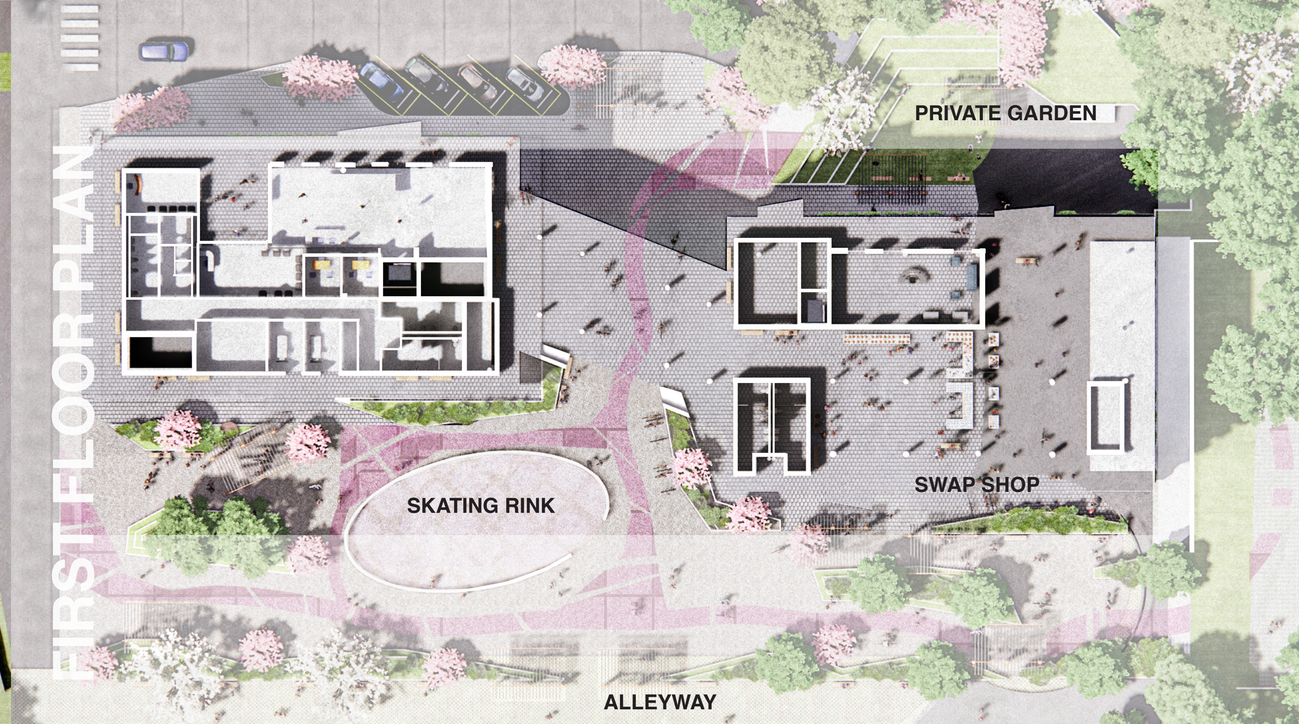
4

PROGRAM





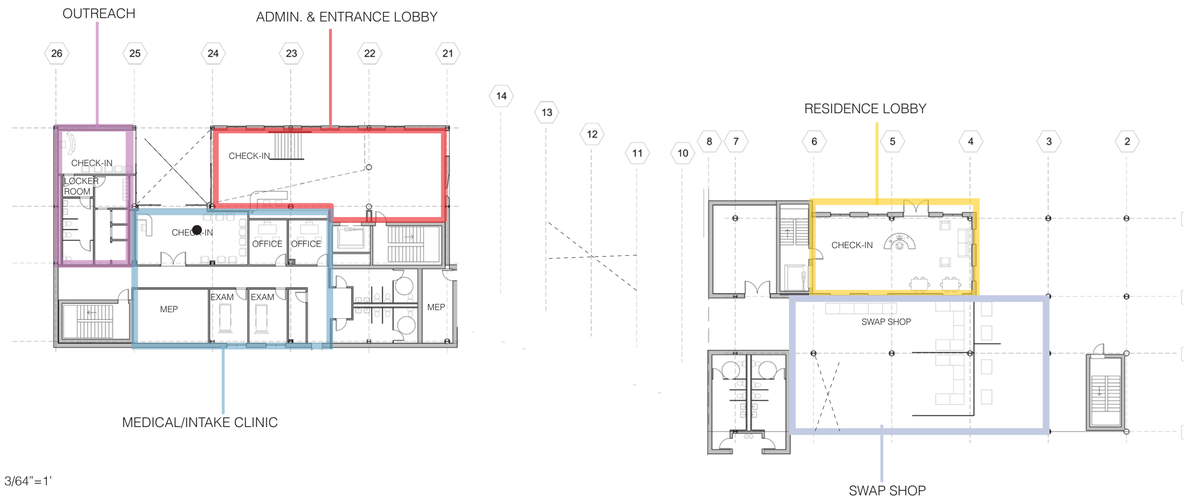

SITE PLAN
PARKING
PARKING
SKATING RINK
SWAP SHOP
BELTLINE
ALLEYWAY


FIRST FLOOR PLAN
PRIVATE GARDEN
SKATING RINK
SWAP SHOP
ALLEYWAY


MAIN ENTRANCE


SOUTHWEST CORNER

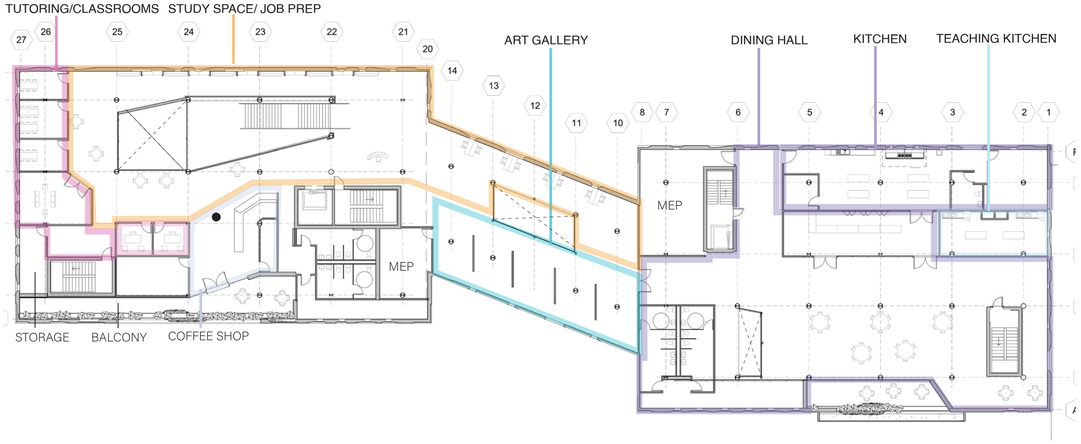
FIRST FLOOR



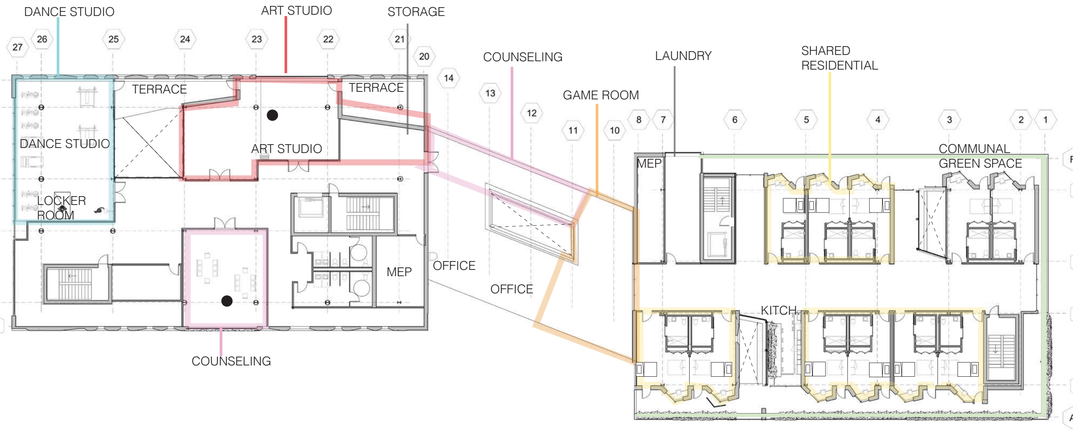
3/64"=1'

The Administration lobby uses a wooden ceiling to floor baffle that gives a feeling of unfolding its layers as you enter. Giving a sense of opening- to welcome users. The imperfection of the

SECOND FLOOR



THIRD FLOOR


DANCE STUDIO
ART STUDIO
STORAGE
COUNSELING
LAUNDRY
SHARED RESIDENTIAL
GAME ROOM
TERRACE
TERRACE
DANCE STUDIO
ART STUDIO
LOCKER ROOM
MEP
OFFICE
OFFICE
COUNSELING
MEP
COMMUNAL GREEN SPACE
KITCH
27
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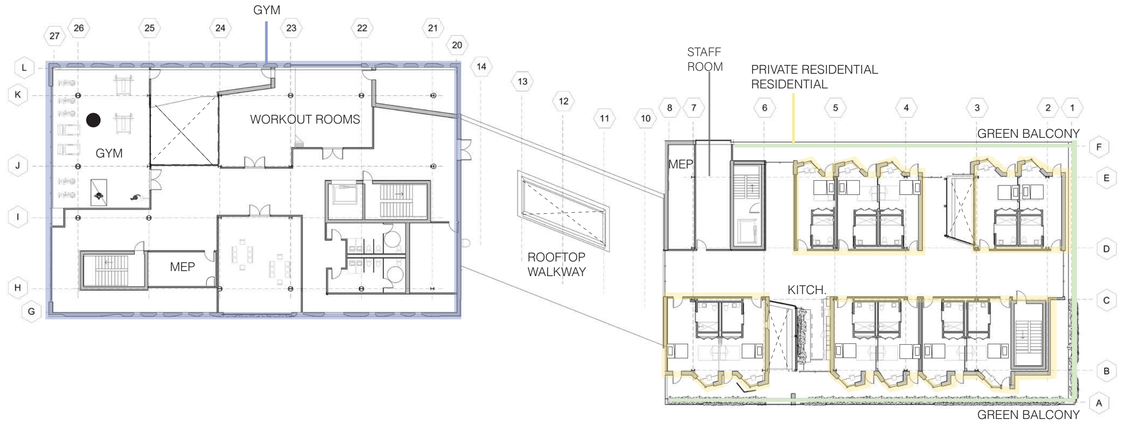
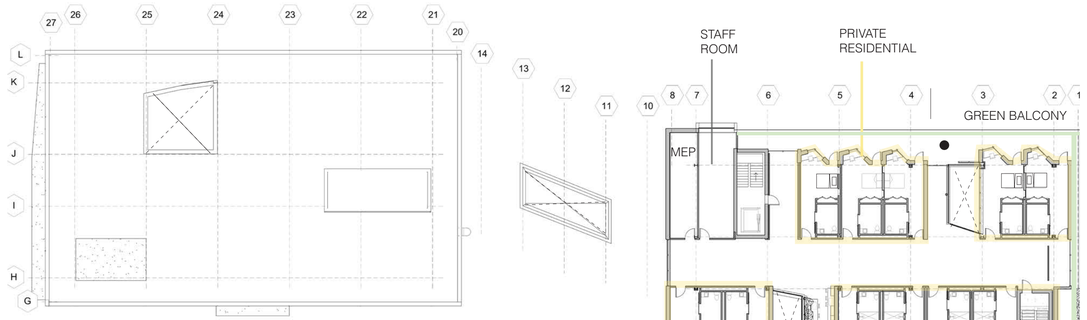
1

FOURTH FLOOR



FIFTH FLOOR


27
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13
12
11


STAFF ROOM
PRIVATE RESIDENTIAL
10
8
7
6
5
4
3
2
1
GREEN BALCONY
MEP
GREEN BALCONY


Everything that is on ground level or that you can touch is wood or has a wood texture.

VIEW FROM BELTLINE

There is an accessible path and ada ramp that leads you down into the site.

VIEW FROM ALLEYWAY


SOUTH


SKATING RINK

SECTION THROUGH UNITS

PRIVATE ROOMS

SHARED ROOMS

These axons break down the residential units. The 5TH floor is the most private and each floor below becomes more public as it reaches the ground floor. Shared rooms are located on the third floor. We've dedicated these rooms to become more open and flexible by using moveable partitions that allow users to decide if they want to be social or not. The units will have bookshelves integrated through the walls and a desk in a window nook.

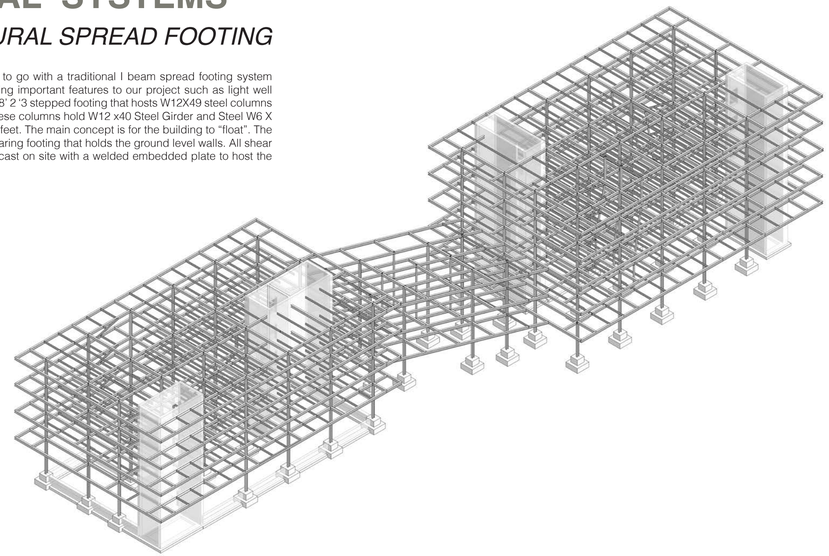
Comprehensive Developement

STRUCTURAL SYSTEMS

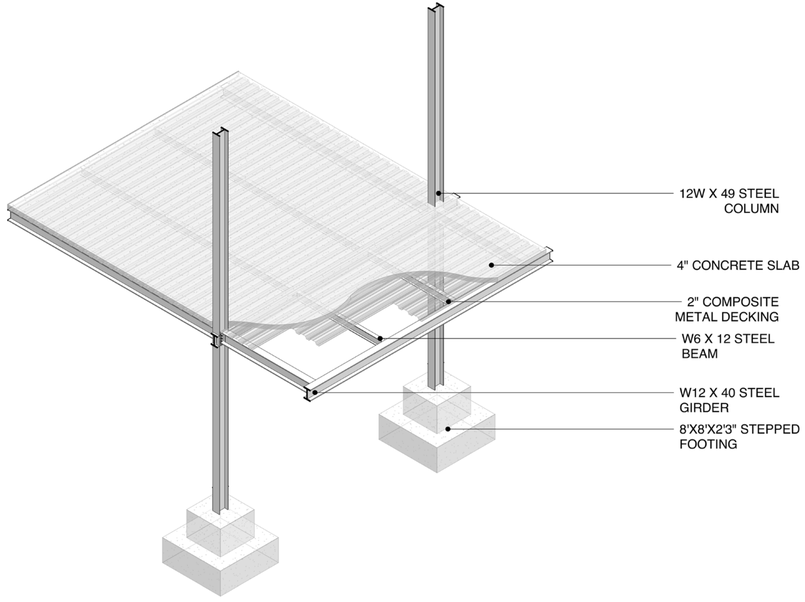
STEEL STRUCTURAL SPREAD FOOTING

For our structural system we decided to go with a traditional I beam spread footing system that would allow us the freedom to bring important features to our project such as light well openings and cantilevers. We used 8'x8' 2 '3 stepped footing that hosts W12X49 steel columns that are spread every 22 ft by 16 ft. These columns hold W12 x40 Steel Girder and Steel W6 X 12 Steel beams that spread every 7 ½ feet. The main concept is for the building to "float". The ground level is held by a traditional bearing footing that holds the ground level walls. All shear walls will be precast. All slabs will be cast on site with a welded embedded plate to host the exterior openings.

AXON

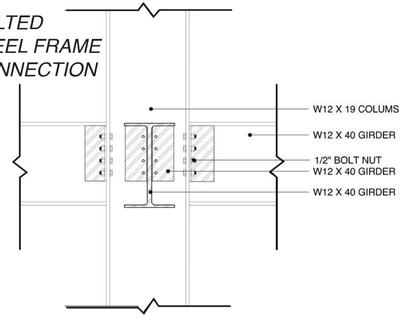


AXON DETAIL

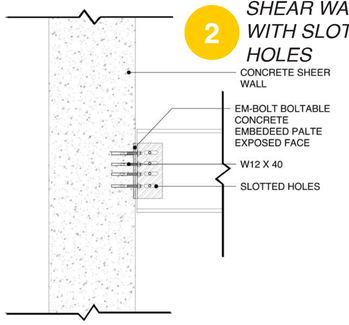


DETAILS

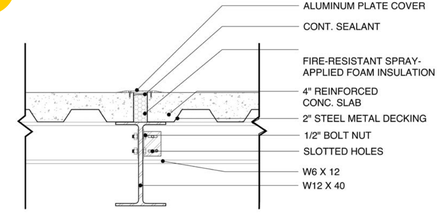
1 *BOLTED STEEL FRAME CONNECTION*



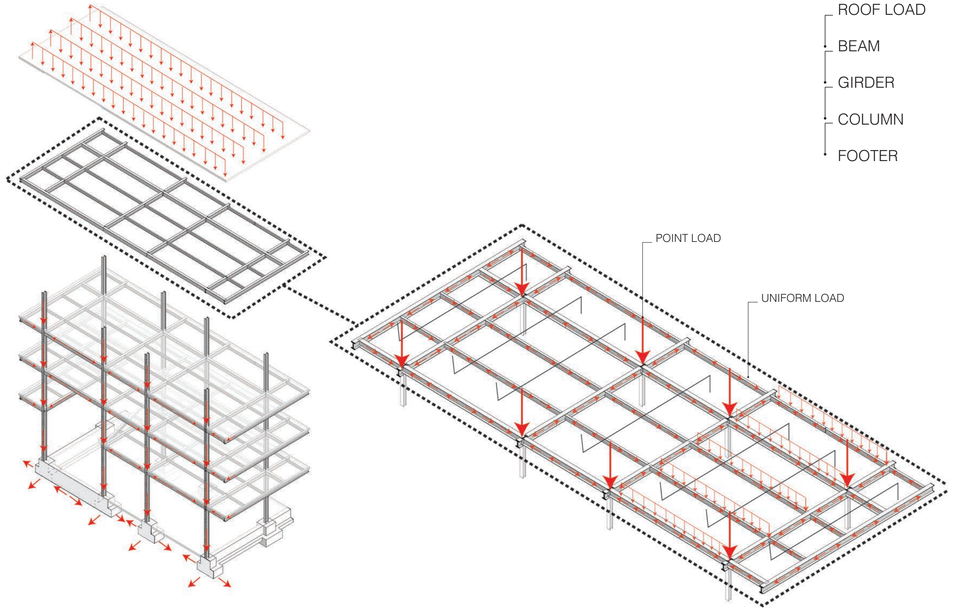
2 *SHEAR WALL WITH SLOTED HOLES*



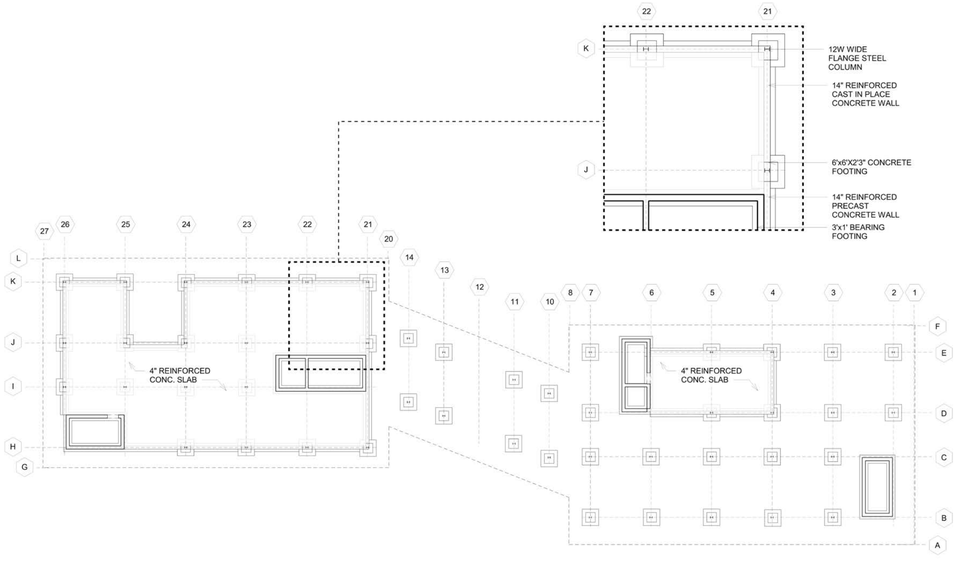
3 *JOINT EXPANSION*



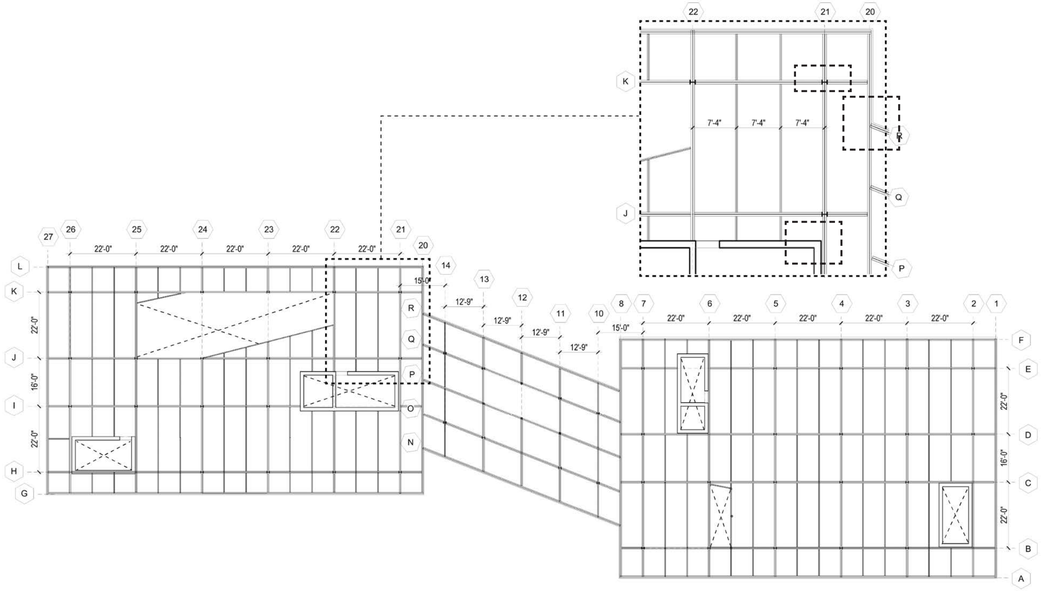
LOAD TRACING



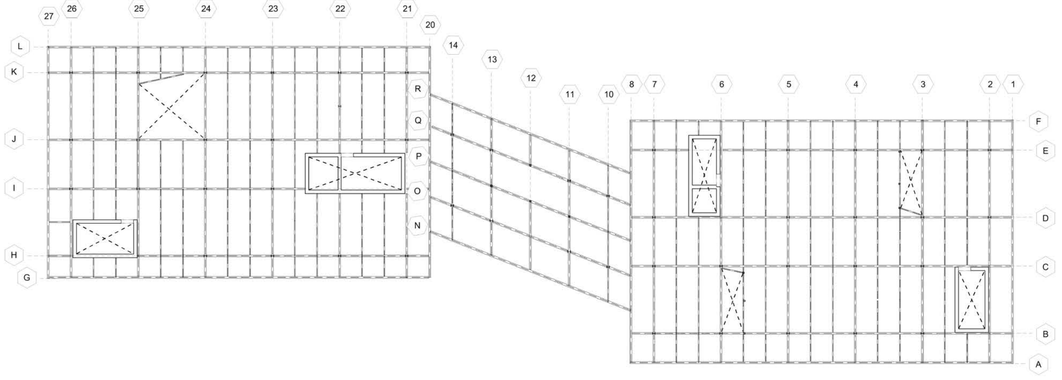
FRAMING



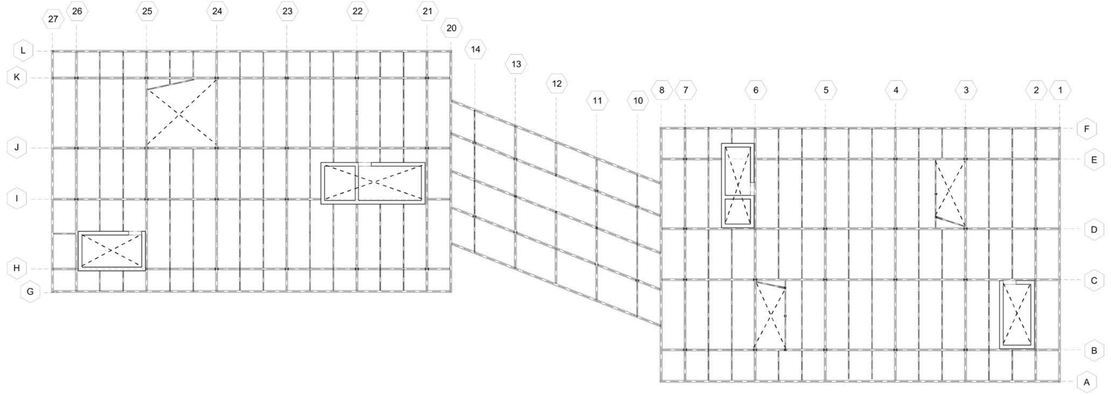
1ST FLOOR



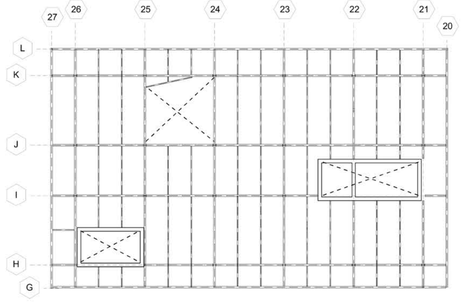
2ND LEVEL

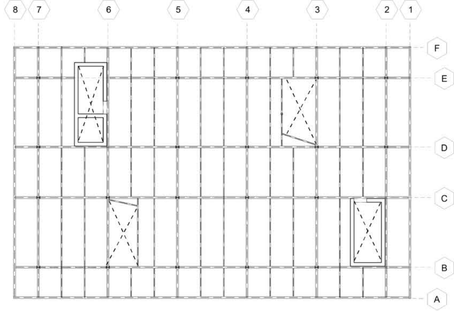


3RD LEVEL

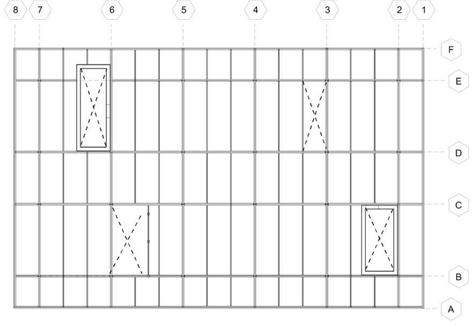


4TH LEVEL

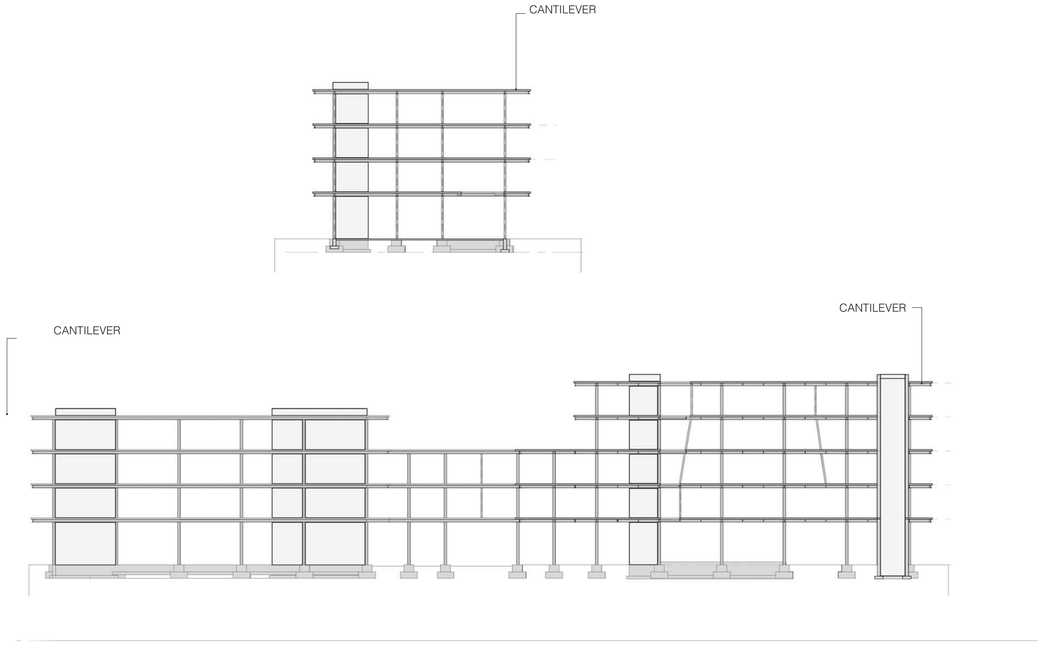




5TH LEVEL



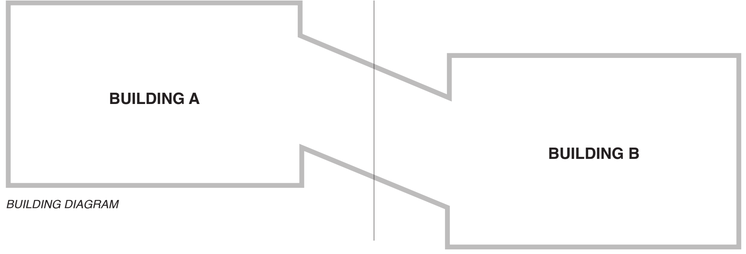
SECTION



MECHANICAL SYSTEMS

SYSTEM BREAKDOWN

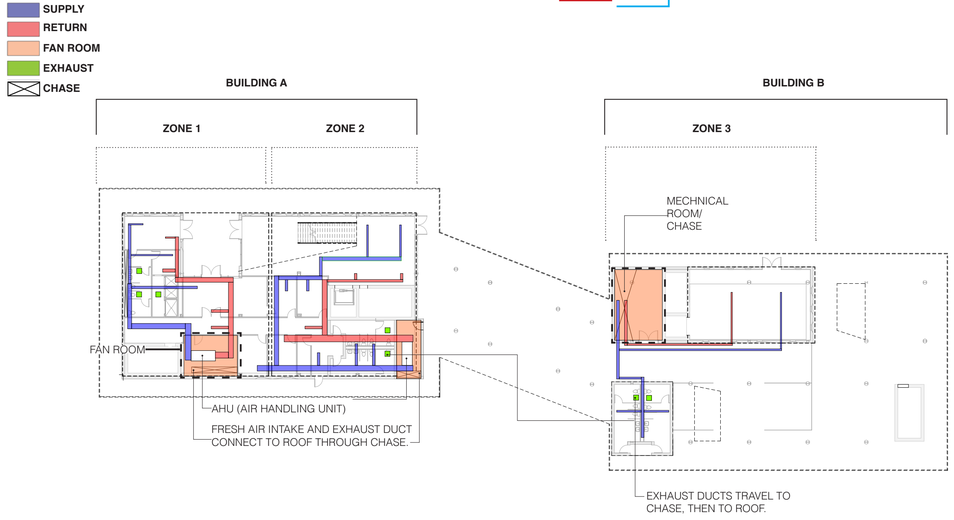
SYSTEM TYPE	**VARIANT AIR VOLUME SYSTEM** WITH A BOILER, CHILLER, AIR HANDLING UNIT, AND COOLING TOWER.	**VRF (VARIABLE REFRIGERANT FLOW) DUCTLESS MINI SPLIT SYSTEM** FOR RESIDENT'S ROOMS, WITH A VAV SYSTEM CONNECTED TO A PACKAGED ROOF TOP UNIT FOR COMMON SPACES.
LOCATION	**FLOOR 1A:** CLINICAL SERVICES **FLOOR 2 A&B:** EDUCATIONAL SERVICES, DINING HALL **FLOOR 3A:** ARTS **FLOOR 4A:** GYM	**FLOOR 1B:** RESIDENT'S ENTRY **FLOOR 3B:** RESIDENTIAL **FLOOR 4B:** RESIDENTIAL **FLOOR 5:** RESIDENTIAL

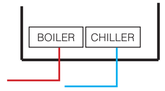


BUILDING DIAGRAM

GROUND LEVEL

FLOOR 1



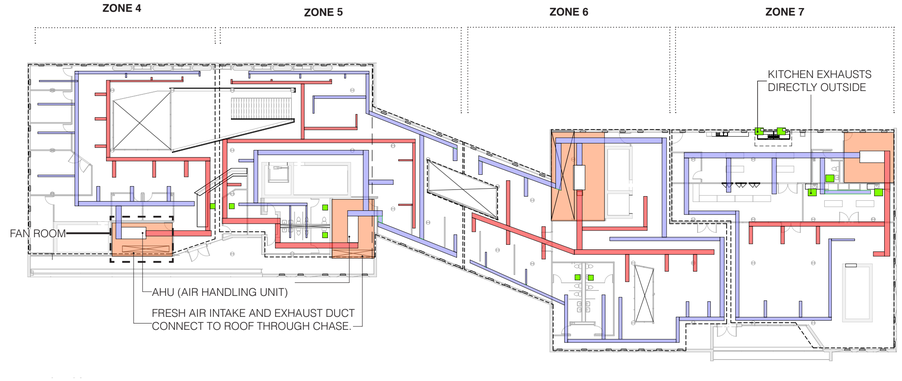


BOILER AND CHILLER CONNECT TO AHU AND COOLING TOWER ON ROOF. THEY ARE HIDDEN BY A PRIVACY FENCE IN PARKING LOT.

SECOND LEVEL

FLOOR 2

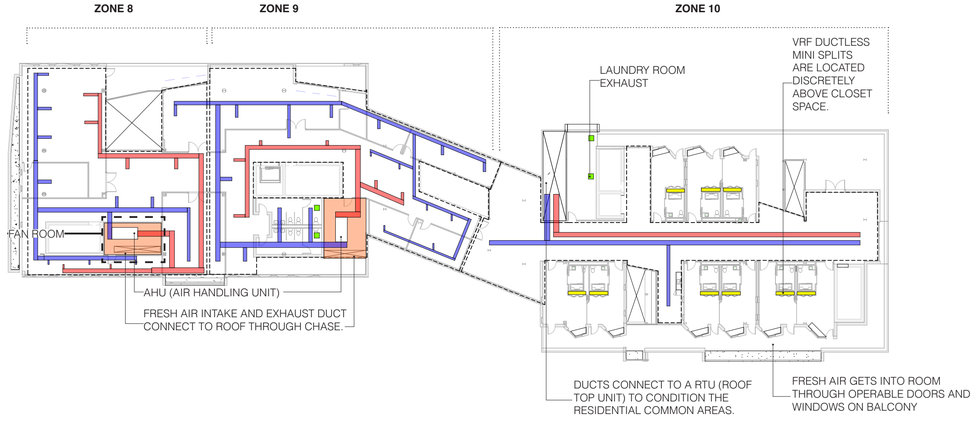
SUPPLY
RETURN
FAN ROOM
EXHAUST
CHASE



THIRD LEVEL

FLOOR 3

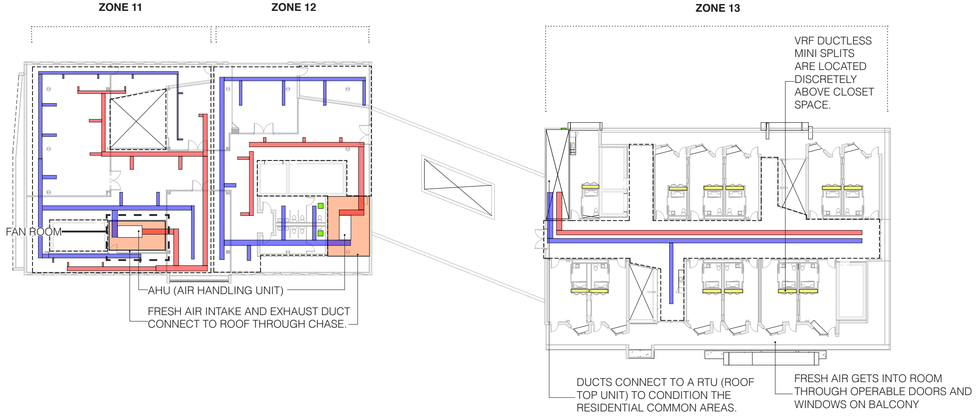
SUPPLY
RETURN
FAN ROOM
MINI-SPLIT
EXHAUST
CHASE



FLOOR 4

FOURTH LEVEL

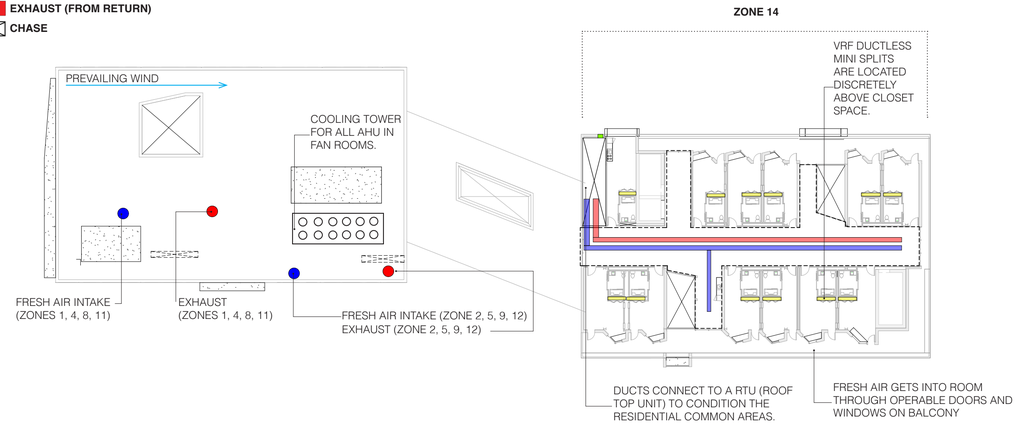
SUPPLY
RETURN
FAN ROOM
MINI-SPLIT
EXHAUST
CHASE



FLOOR 5

FIFTH LEVEL

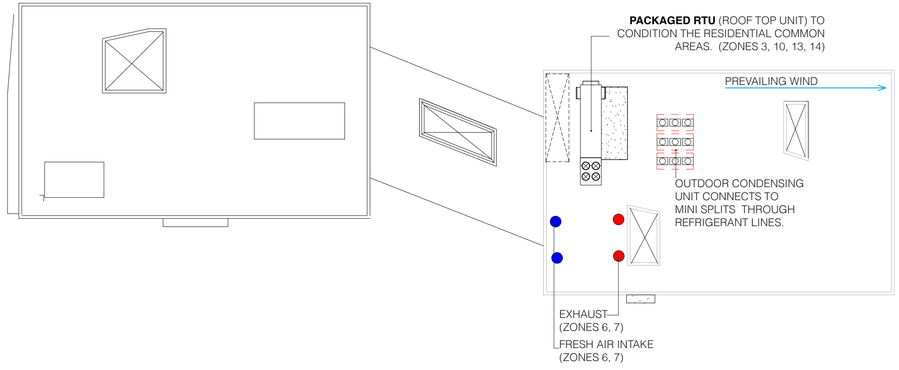
SUPPLY
RETURN
FAN ROOM
MINI-SPLIT
EXHAUST
FRESH AIR INTAKE
EXHAUST (FROM RETURN)
CHASE



ROOF LEVEL

ROOF

- **FRESH AIR INTAKE**
- **EXHAUST (FROM RETURN)**
- **CHASE**

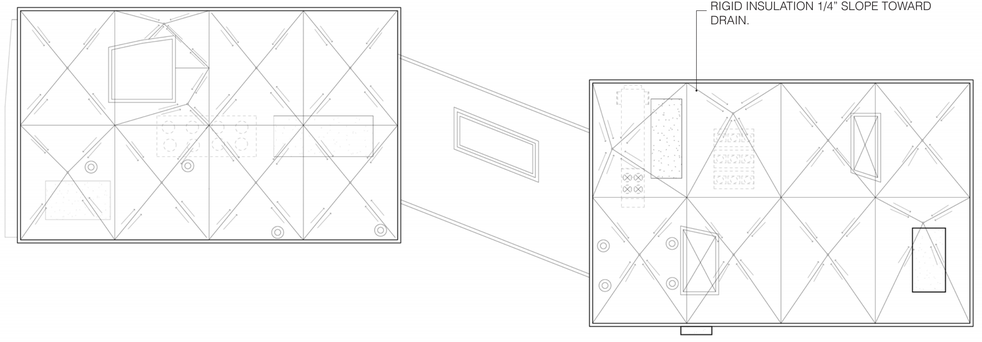


ROOF PLAN

ROOF DRAINAGE

RAINFALL INTENSITY (IN/HR): 9.9 IN ATLANTA, GEORGIA (100 YEARS)

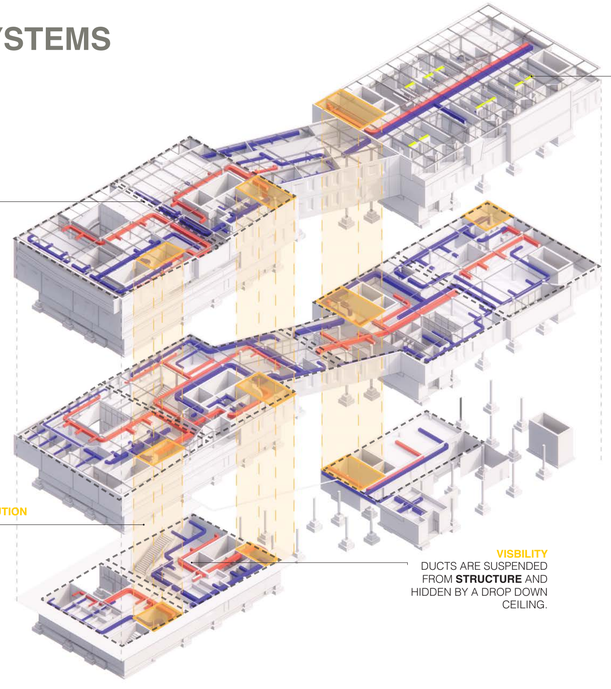
ROOF RAINFALL DESIGN AREA: 9,500.00 (FT^2)
NUMBER OF DRAINS: 8
DIAMETER OF LEADER: 4”



MECHANICAL SYSTEMS

3D AXON

SUPPLY
RETURN



FAN ROOMS
CONTAIN
PROVIDE FOR A
SPECIFIC ZONE.

VERTICAL DISTRIBUTION
FAN ROOMS
CONTAIN
CHASES THAT
TRAVEL TO ROOF.

ADAPTABILITY
VRF DUCTLESS
MINI SPLITS
ARE LOCATED
DISCRETELY
ABOVE CLOSET
SPACE.

FLOOR 3

FLOOR 2

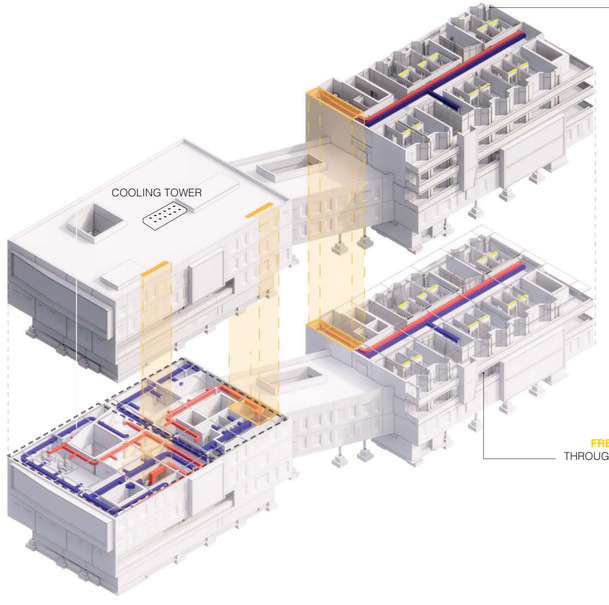
FLOOR 1

VISBILITY
DUCTS ARE SUSPENDED
FROM **STRUCTURE** AND
HIDDEN BY A DROP DOWN
CEILING.

MECHANICAL SYSTEMS

3D AXON

SUPPLY
RETURN



ADAPTABILITY
VRF DUCTLESS
MINI SPLITS ARE
LOCATED
DISCRETELY
ABOVE CLOSET
SPACE.

FLOOR 5

FLOOR 4

FRESH AIR GETS INTO ROOM
THROUGH OPERABLE DOORS AND
WINDOWS ON **BALCONY**

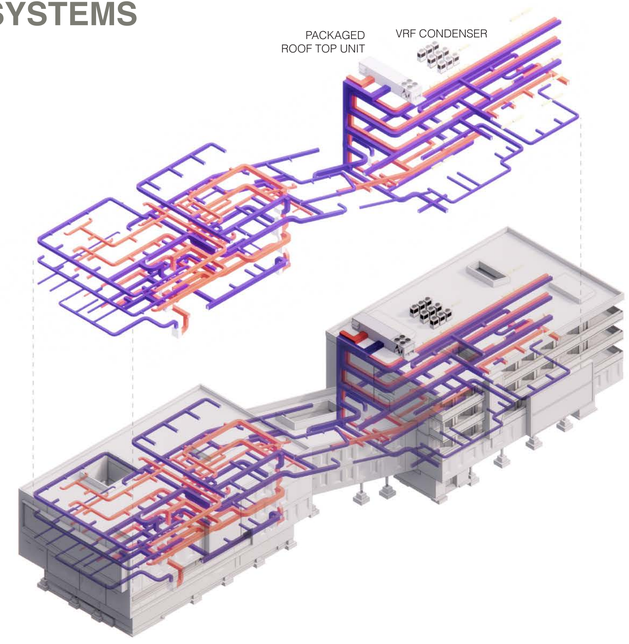
MECHANICAL SYSTEMS

TWO STRATEGIES

T

VAV SYTEM WITH A BOILER, CHILLER, AIR HANDLING UNIT, AND COOLING TOWER.

We have a VAV (Variable Air Volume) system. Fan Rooms are located on each floor in 4 different locations. The fan rooms contain air handling units that supply and exhaust air to their corresponding zone through ducts that are hidden above a suspended ceiling. Each zone has its own VAV box and Thermostatic control. We chose this system for its ability to provide local temperature control. The residential rooms are served by roof top condenser unit that splits into many mini split evaporator units.

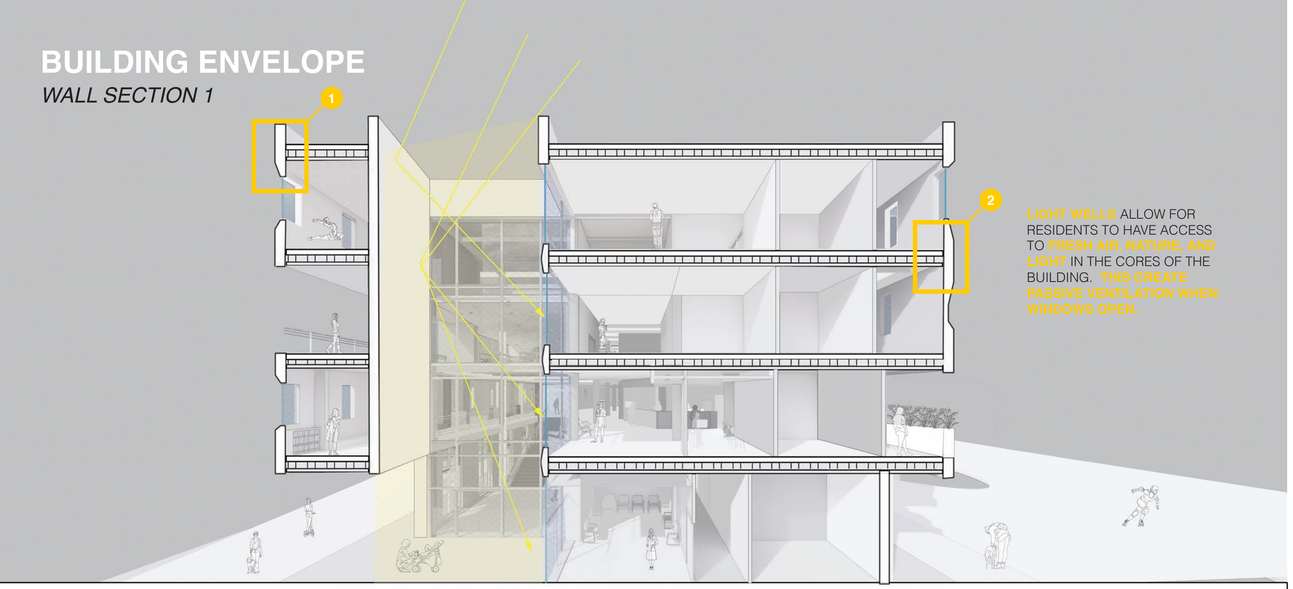


VRF (VARIABLE REFRIGERANT FLOW) DUCTLESS MINI SPLIT SYSTEM FOR RESIDENT'S ROOMS, WITH A VAV SYSTEM CONNECTED TO A PACKAGED ROOF TOP UNIT FOR COMMON SPACES.

With a VRF system, the residential building will have multiple indoor units controlled by a single outdoor condensing unit. VRF systems can heat and cool different zones within a building and residents can customize the temperature settings. This system is 30% more efficient than conventional HVAC systems. It provide energy savings by the varied compressor speed and only delivering the required temperature. Additionally, energy loss through ductwork is obsolete.

BUILDING ENVELOPE

WALL SECTION 1

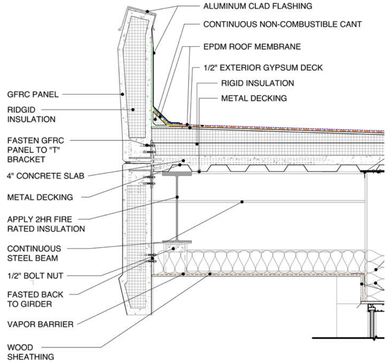


LIGHT WELLS ALLOW FOR RESIDENTS TO HAVE ACCESS TO **FRESH AIR, NATURE, AND LIGHT** IN THE CORES OF THE BUILDING. **THIS CREATE PASSIVE VENTILATION WHEN WINDOWS OPEN.**

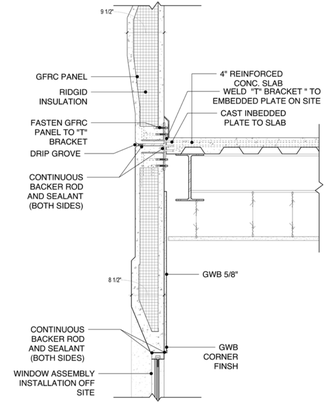
BUILDING ENVELOPE

WALL SECTION 1 DETAILS

1 *TYP. PARAPET*



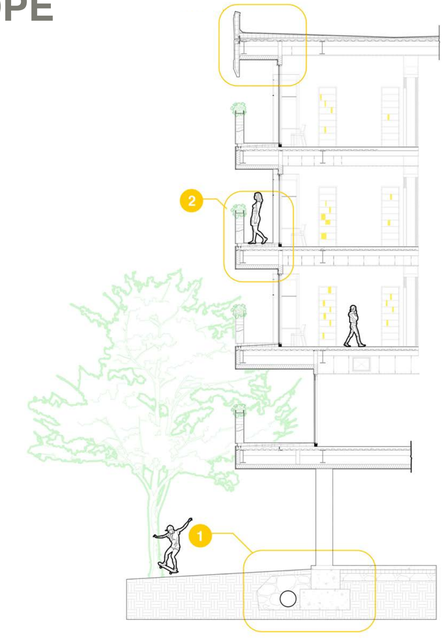
2 *GFRC PANEL CONNECTION*



BUILDING ENVELOPE

WALL SECTION 2

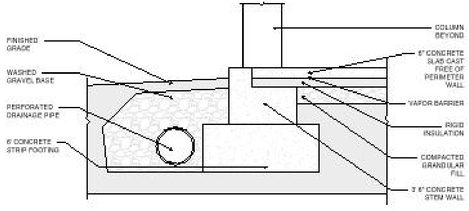
RESIDENT **BALCONIES** ALLOW FOR RESIDENTS TO HAVE ACCESS TO **FRESH AIR, NATURE, AND VIEWS TO THE ACTIVITIES ON SITE,** SUCH AS THE ROLLER SKAING RINK.



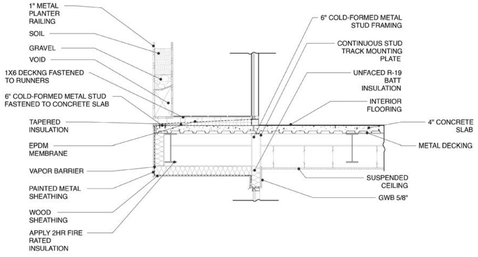
BUILDING ENVELOPE

WALL SECTION 2 DETAILS

1 *TYP. FOOTING*

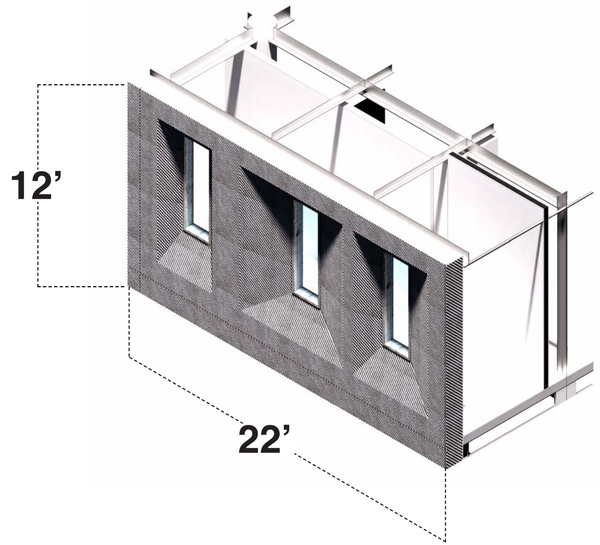


2 *TYP. BALCONY*



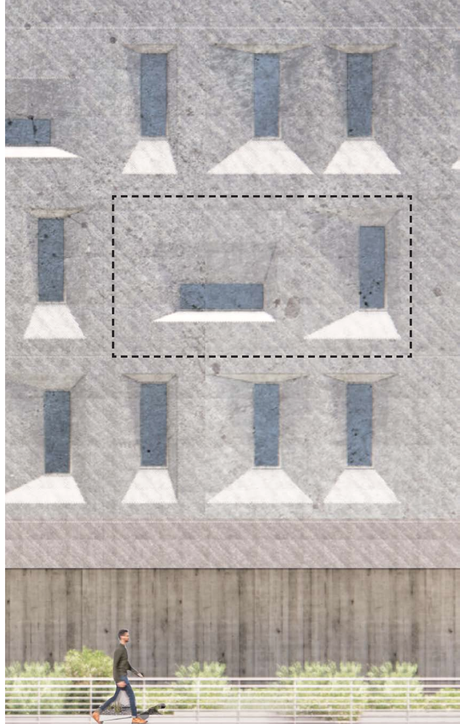
BUILDING ENVELOPE

GFRC PANELS



PROS

- Design Freedom
- Highly Durable
- Requires little Maintenance
- Quick Installion
- Weather/Fire Resitant
- Energy Efficient
- Economical



CODE ANALYSIS

APPLICABLE CODES:

BUILDING CODE: IBC 2021
LIFE SAFETY: NFPA 101 LIFE SAFETY
FIRE: INTERNATIONAL FIRE CODE
MECHANICAL: INTERNATIONAL MECHANICAL CODE
PLUMBING COHEN INTERNATIONAL PLUMBING CODE
ELECTRICAL: NATIONAL ELECTRICAL CODE
GAS: INTERNATIONAL GAS CODE
ENERGY: INTERNATIONAL ENERGY, CONSERVATION CODE
ACCESSIBILITY: 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

OCCUPANCY CLASSIFICATIONS

CLASSIFICATION	OCCUPANT LOAD CALCULATION
A ASSEMBLY- FIXED SEATING	# OF SEATS
A2 DINING HALL	# OF SEATS
A2 CAFE	# OF SEATS
A 2 KITCHEN, COMMERCIAL	100
A3- LIBRARY	100
A3 GYM- WITHOUT EQUIPMENT	50
A3 GYM- WITH EQUIPMENT	15
A3 GALLERY	7 NET
A3 LOCKERS (ASSESORY)	15 NET
A3 DANCE STUDIO	20 NET
B BUISNESS- OFFICES/COUNSELING CLINICAL SERVICES	15 20 NET
E EDUCATIONAL-CLASSROOM	20 NET
I-1 LOBBY	15 NET
I- 1 RESIDENTIAL	200

BUILDING DATA

LOCATION: ATLANTA, GEORGIA
PROGRAMMATIC DESCRIPTION: HOUSING FOR SURVIVORS OF HUMAN TRAFFICKING
CLASSIFICATION: I-1 INSTITUTIONAL, RESIDENTIAL CARE TYPE I-B
CONSTRUCTION TYPE: TYPE I-B

NUMBER OF STORIES: 5 (5 SPRINKLED)
STANDPIPES- YES
FIRE ALARM-YES

BUILDING HEIGHTS

BUILDING HEIGHT: 70FT

ALLOWABLE BUILDING HEIGHT: 85FT

BUILDING AREAS

FLOOR	PROGRAM	OCCUPANCY CLASSIFICATIONS	SQ FOOTAGE	ALLOWABLE AREA (SF)
FLOOR 1	CLINICAL SERVICES, LOBBY, OFFICES	**B, I-I**	7,188 SQ FT	495,000 SF
FLOOR 2	EDUCATION CLASSROOMS, CAFE, DINING HALL, KITCHEN, GALLERY WALLS, LIBRARY, RESIDENTIAL	**E, A2, A2, A-2, I-1**	20, 194 SQ FT	
FLOOR 3	ART/DANCE CLASSROOMS, RESIDENTIAL, OFFICES	**E, I-1, B**	21, 544 SQ FT	
FLOOR 4	GYM, RESIDENTIAL	**A3, I-1**	21, 544 SQ FT	
FLOOR 5	RESIDENTIAL	**I-1**	21, 544 SQ FT	
			TOTAL: **92,014 SQ FT**	495,000 SF

FIRE RESISTANCE RATINGS

TYPE I-B	HOURS	
PRIMARY STRUCTURAL FRAME	3-HOUR	NOTE: SEPERATION BETWEEN A-3 AND I-1 MUST BE 2-HOUR FIRE WALL (TABLE 508.4)
BEARING EXTERIOR WALLS	2-HOUR	
BEARING INTERIOR WALLS	1-HOUR	
NON BEARING INTERIOR WALLS	1-HOUR	
NON BEARING EXTERIOR WALLS	2-HOUR	
FLOOR CONSTRUCTION	2-HOUR	
ROOF CONSTRUCTION	2-HOUR	

FIRE RESISTANCE RATINGS

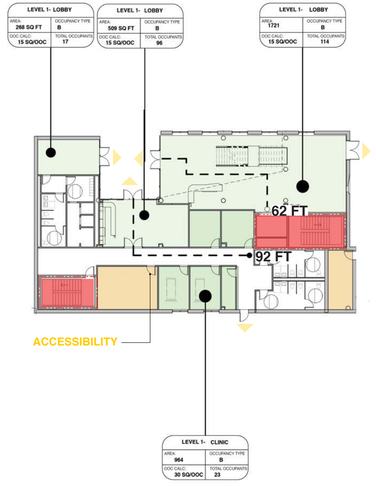
FLOOR LEVEL	OCCUPANT LOAD PER STORY	MINIMUM # OF EXITS OR ACCESS	PROVIDED
FLOOR 1	304	2	10
FLOOR 2	462	2	4
FLOOR 3	222.6	2	4
FLOOR 4	139	2	4
FLOOR 5	35	2	4

REGULATORY

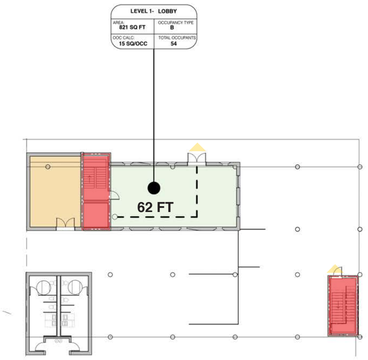
LIFE SAFETY PLAN

- PATH OF EGRESS
- 2HR RATED FIRE STAIRS
- MEP
- GROUND EXIT

GROUND LEVEL



IMPORTANT NOTES:
MAIN ENTRANCES ARE ACCESSIBLE ON GRADE.
EXTERIOR MAIN ENTRY WAYS ARE 72 INCHES WIDE.
ALL INTERIOR DOORS ARE 36 INCHES WIDE. ALL STAIR DOORS SWING IN THE DIRECTION OF EGRESS TRAVEL.



REGULATORY

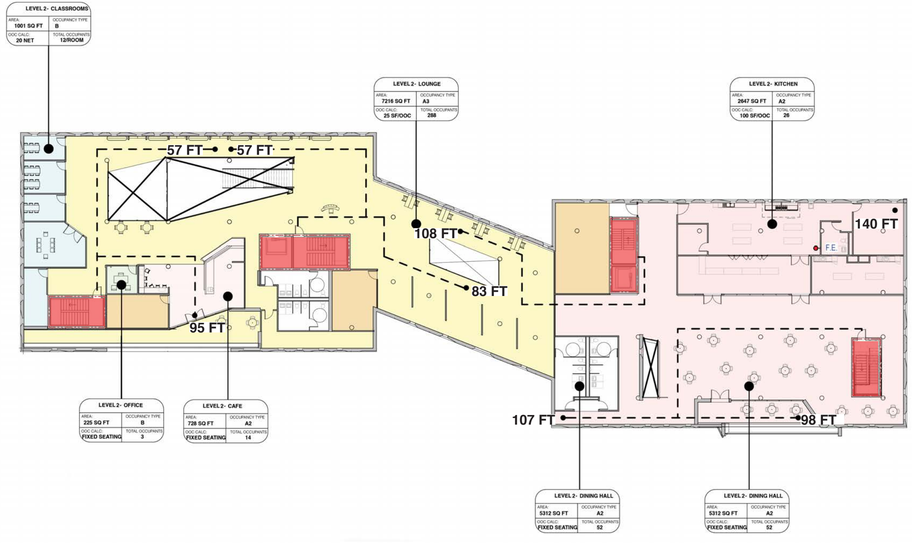
LIFE SAFETY PLAN

PATH OF EGRESS

2HR RATED FIRE STAIRS

MEP

2ND LEVEL



REGULATORY

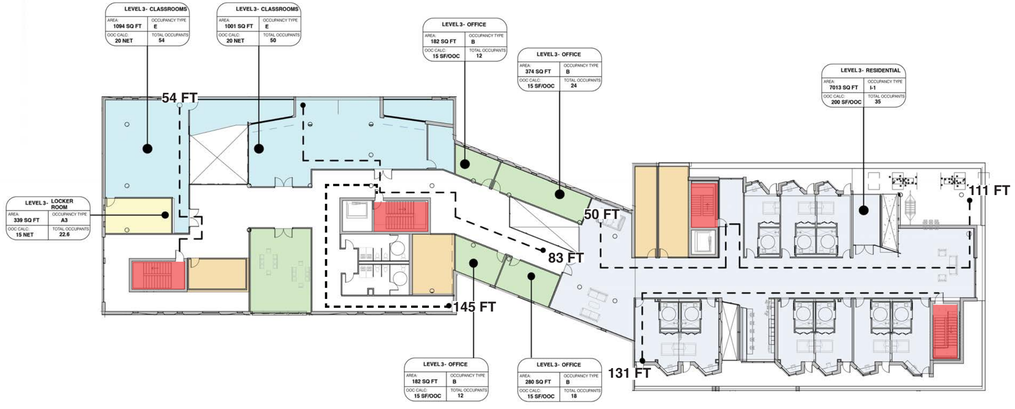
LIFE SAFETY PLAN

PATH OF EGRESS

2HR RATED FIRE STAIRS

MEP

3RD LEVEL



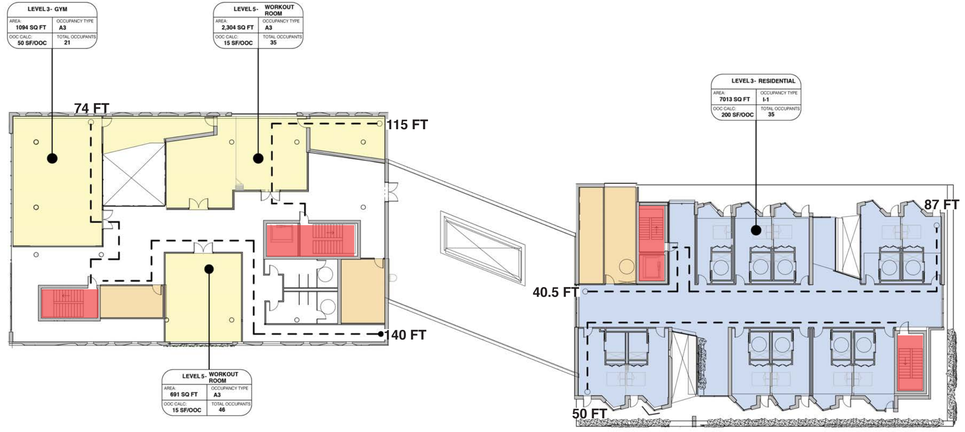
REGULATORY

LIFE SAFETY PLAN

PATH OF EGRESS

2HR RATED FIRE STAIRS

MEP



4TH LEVEL

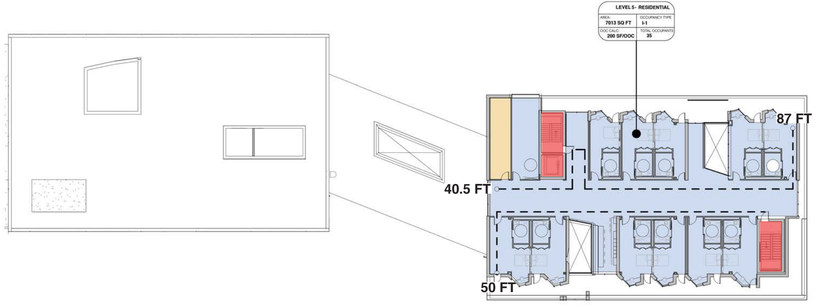
REGULATORY

LIFE SAFETY PLAN

PATH OF EGRESS

2HR RATED FIRE STAIRS

MEP



5TH LEVEL

ENVIRONMENTAL SYSTEMS