

The HIVE:

Sustainable LGBTQIA+ Community Center



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THE HIVE: PROBLEM

LGBTQIA+ INDIVIDUALS ACROSS THE WORLD ARE FACING SOCIO-ECONOMIC AND COMMUNITY-BASED ISSUES. THESE INCLUDE: JOBLESSNESS, HOMELESSNESS, MENTAL HEALTH DISPAIRITY, LACK OF COMMUNITY ENGAGMENT, AND MORE WHICH AFFECT THEIR QUALITY OF LIFE.

IN ADDITION TO, THE ENVIRONMENTAL ISSUES FACING THE WORLD ARE MORE PRESENT NOW THAN EVER BEFORE, INCLUDING BUILDING ENERGY OVER-USAGE, LACK OF WATER RENEWABILITY, AND MORE WHICH CONTRIBUTE TO THE ONGOING ENVIRONMENTAL CRISIS.

USING THE CITY OF ATLANTA AS THE BASIS FOR ALL SURVEY, RESEARCH DATA, AND DESIGN

THE HIVE: CONCEPT

IN HOPE OF MAKING THE LGBTQIA+ COMMUNITY AND ENVIRONMENT THRIVE, WHILE ULTIMATELY IMRPOVING THEIR QUALITY OF LIFE, THE INTENDED USERS OF THE HIVE WILL BE CONNECTED TO A VARIETY OF SERVICES, RESOURCES, AND OTHER LGBTQIA+ INDIVIDUALS IN A SUSTAINABLE SITE.

AFTERALL, A CONNECTED COMMUNITY THRIVES.

DESIGN THEORIES:



ENVIRONMENTAL SUSTAINABILITY



SOCIAL SUSTAINABILITY



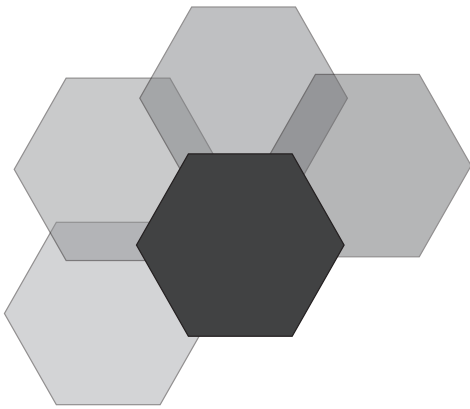
BIOPHILIA



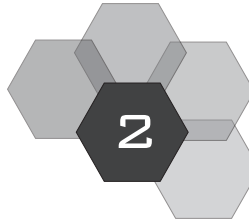
COMMUNITY-BASED DESIGN



EVIDENCE-BASED DESIGN



PARTI DIAGRAM



THE HIVE: CASE STUDY ANALYSIS - LOS ANGELES LGBT CENTER



L.A. LGBT CENTER - THE PROGRAM

- SENIOR CENTER - MAIN BUILDING - YOUTH CENTER - BUILDING SERVICES
- ARTS CENTER - EOB DORM - TLP HOUSING - GENERAL ADMIN
- RETAIL CENTER - SENIOR HOUSING - YOUTH HOUSING
- THE VILLAGE PLAZA - OUTDOOR SPACE



IN RELATION WITH THE HIVE

THE LOS ANGELES LGBT CENTER IS A PROJECT THAT INCORPORATED A LOT OF RELEVANT ELEMENTS TO THIS THESIS. IT'S USE OF STRUCTURE AND PROLIFIC PROGRAM PROVIDE GREAT INSIGHT ON HOW MUCH COMMUNITY CENTER DESIGN CAN PROVIDE. THE USE OF HOUSING ON SITE IS NOT A COMMON PRACTICE, IN FACT, IT IS THE FIRST CENTER TO IMPLEMENT ON-SITE HOUSING WITHIN THE CASE STUDY RESEARCH.

HAVING THE VARIOUS PROGRAMS EASY TO NAVIGATE AND USE BECAUSE OF THE PRECISELY CALCULATED CIRCULATION ALLOWS FOR A MORE OPTIMAL CENTER. THE LALGBTC IS AN INTEGRAL PIECE TO THIS THESIS RESEARCH AND DESIGN, PROVING AGAIN, THAT COMMUNITY CENTER DESIGN CAN BE BOTH BEAUTIFUL AND A COMMUNAL NECESSITY. ON THE OTHER HAND, THE CENTER FOCUSES MOST OF ITS HOUSING PROGRAM TO THE SENIOR DEMOGRAPHIC, IF A COMMUNITY CENTER WISHES BENEFIT MORE PEOPLE, IT COULD BE BEST TO NOT SEPARATE THE ADULT HOUSING BY AGE AT ALL.



LOS ANGELES LGBT CENTER, EXTERIOR STREET VIEW. ADAPTED FROM METROPOLIS MAG, KATIE OKAMOTO

5 MIN

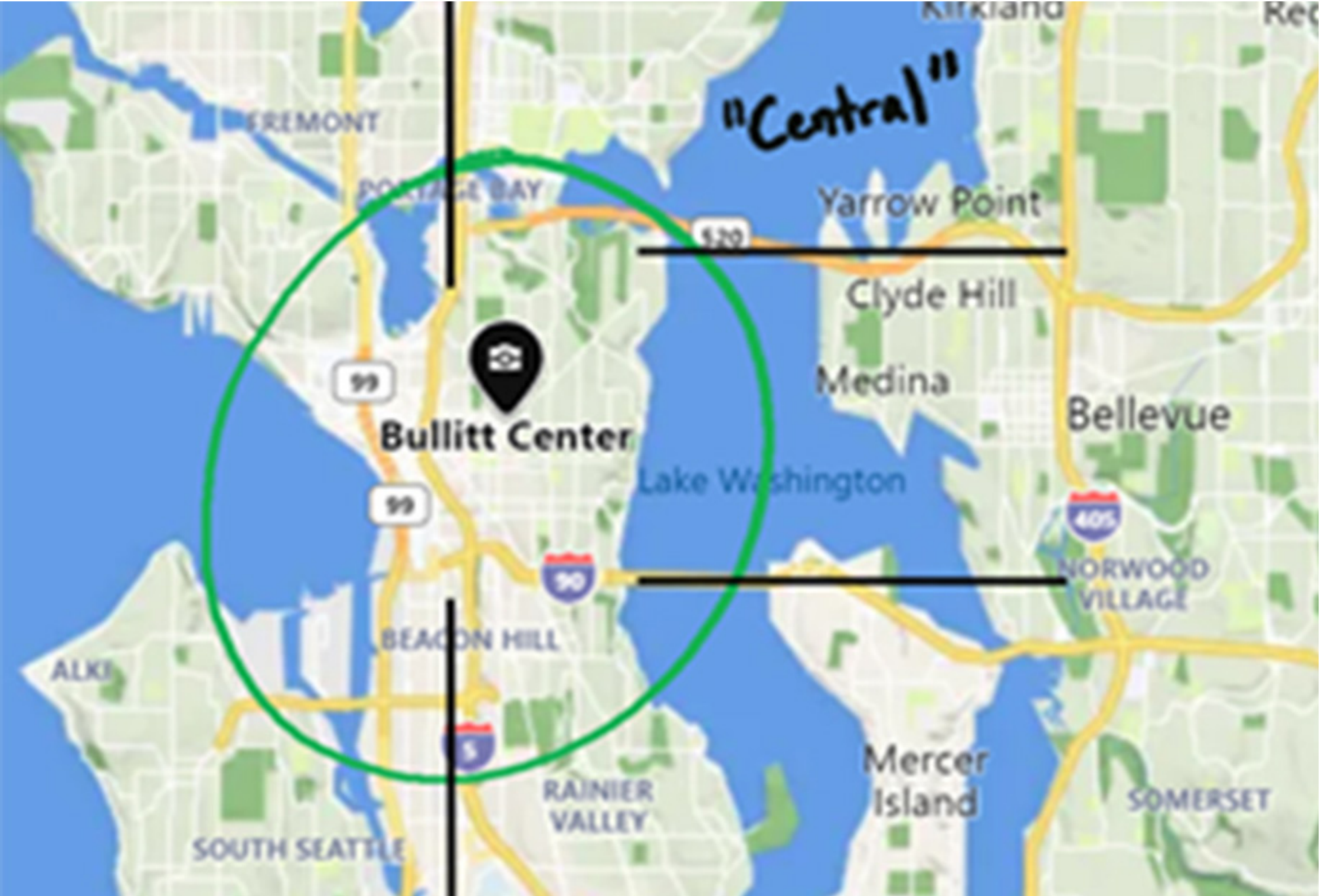
WALK FROM FIVE BUS STATIONS AND A MAIN HIGHWAY

2 LINES

OF CONNECTED TRANSIT ON BOTH STREET SIDES

2 TYPES

OF URBAN LIVING: CITY & SUBURBAN FOR USER VARIATION WITHIN LALGBTC PROXIMITY



THE BULLITT CENTER - THE PROGRAM

- RAINWATER COLLECTION - GREYWATER SYSTEM - WASTE COMPOST SYSTEM
- MECHANICAL - NATURAL VENTILATION - BUILDING ENERGY - INTERNAL CAP & TRADE
- IRRESISTABLE STAIR - 250 YEAR STRUCTURE - 25 YEAR TECHNOLOGY

IN RELATION WITH THE HIVE

THE BULLITT CENTER NOT ONLY PROVIDES A HIGHLY SUCCESSFUL SUSTAINABLE PROGRAM CONSISTING OF ENERGY/ WATER SYSTEMS, OCCUPANCY IDEALS, BUILDING LIFE CYCLE ANALYSES, ETC., BUT ALSO A FITTING LAYOUT FOR THE HIVE'S EXISTING SITE.

THE BULLITT CENTER IS ONE OF THE MOST SUCCESSFUL SUSTAINABLE BUILDINGS EVER MADE, WITH THE ABSOLUTE BEST FOR THE COMMUNITY.

THUS, THIS ALIGNS WITH THE HIVE'S INITIATIVE TO NOT ONLY MAKE A POSITIVE NET-ZERO IMPACT ON THE PLANET, BUT ALSO HOW THAT CAN CHANGE A COMMUNITY FOR THE BETTER.

THE HIVE TAKES THESE SYSTEMS AND IDEALS DIRECTLY (SEE FIGURE 3) INTO IT'S DESIGN, FROM WHERE THE SUSTAINABLE SYSTEMS RESIDE TO HOW THEY WORK WITH THE BUILDING.



4 MAJOR

HIGHWAYS WITH CONNECTIONS TO DIFFERENT CITIES, WHERE ITS USERS RESIDE

2 PRIMARY

STREETS OF ACCESS, WITH A PRIME CORNER LOT FOR EASY NAVIGATION

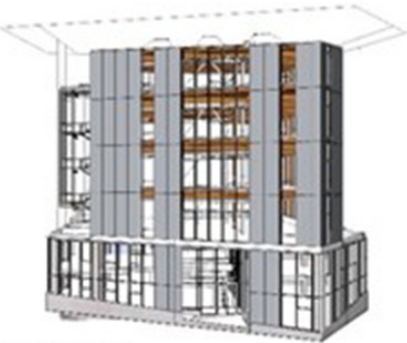
1 BUILDING

OF USE, PROVIDING ALL NECESSARY EQUIPMENT AND PROGRAM IN ONE COHESIVE SITE

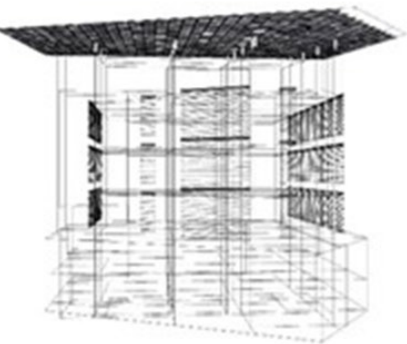
BUILDING LIFE CYCLE



250 YEAR STRUCTURE
HEAVY TIMBER, CONCRETE & STEEL

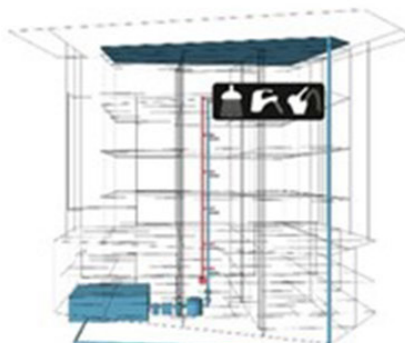


50 YEAR SKIN
HIGH PERFORMANCE ENVELOPE

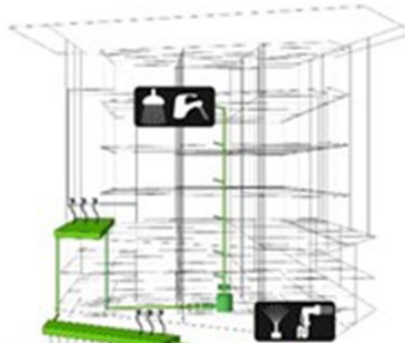


25 YEAR TECHNOLOGY
ACTIVE SOLAR CONTROL
PHOTOVOLTAICS

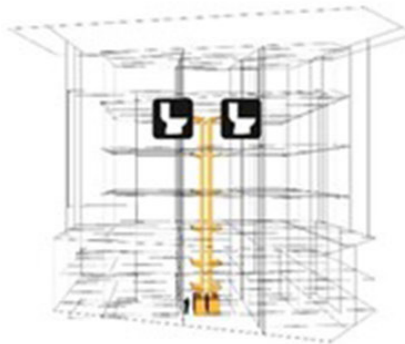
NET ZERO WATER



RAINWATER COLLECTION
100% DEMAND MET ON SITE
50,000 GALLON CISTERN

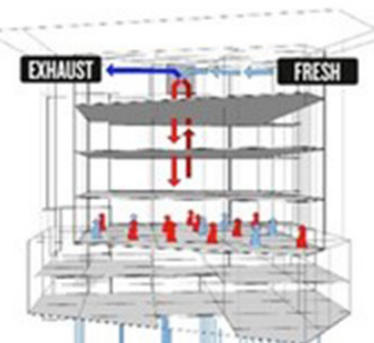


GREYWATER
100% TREATMENT ON SITE
EVAPOTRANSPIRATION & INFILTRATION

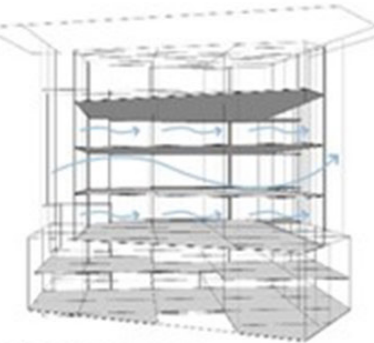


WASTE COMPOST
100% TREATMENT ON SITE

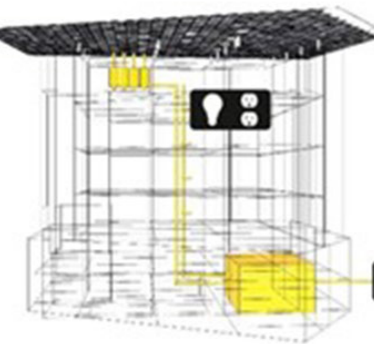
NET ZERO ENERGY



MECHANICAL
GROUND SOURCE HEAT EXCHANGE
RADIANT HEATING/COOLING
HEAT RECOVERY AIR SYSTEM

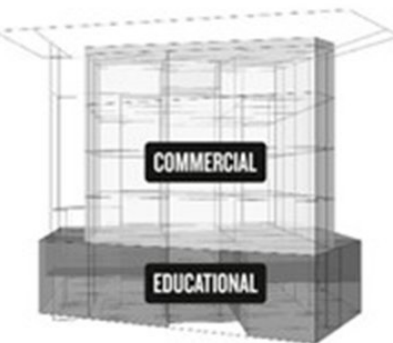


NATURAL VENTILATION
NIGHT FLUSH & OPERABLE WINDOWS

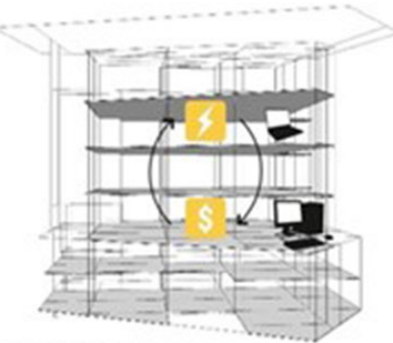


ENERGY
100% RENEWABLE ON SITE
GRID USED AS BATTERY

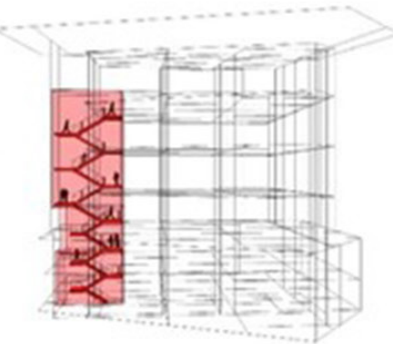
OCCUPANT



PROGRAM
OCCUPANCY
PRIVATE USERS ABOVE, PUBLIC FOCUS
USERS AT GRADE



INTERNAL CAP & TRADE
EACH TENANT HAS AN ENERGY BUDGET;
UNUSED ENERGY CAN BE TRANSFERRED



IRRESISTIBLE STAIR
ELEVATOR ALTERNATIVE, HEALTHIER
OCCUPANTS, ENGAGEMENT WITH STREET

THE HIVE: EXISTING BUILDING [ATLANTA CENTRAL LIBRARY]



EXISTING BUILDING - LOCATION

THE EXISTING BUILDING IS LOCATED IN DOWNTOWN ATLANTA, GEORGIA, WHICH IS THE MOST LGBTQIA+ POPULATED CITY IN GA. SURROUNDED BY LOCAL DENSELY POPULATED LGBTQIA+ UNIVERSITIES, LIKE GEORGIA STATE UNIVERSITY. THE BUILDING'S CURRENT LOCATION PROVIDES ACCESS TO TWO MAJOR MARTA TRAIN STATIONS WITHIN A TEN-MINUTE WALK AND MULTIPLE BUS/ RAILCAR STOPS NEARBY.

EXISTING BUILDING - NEGATIVES + POSITIVES

NEGATIVES:

- LACK OF DAYLIGHT
- LACK OF INTERIOR INTEREST
- CONFUSING CENTRAL STAIRWELL
- LACK OF VARIETY IN BUILDING USES

POSITIVES:

- ARCHITECTURAL OPPURTUNITY
- ABUNDANCE OF USEABLE SQUARE FOOTAGE
- EXISTING CONCRETE IS HIGHLY SUSTAINABLE
- UNTOUCHED BELOW GROUND LEVEL VOLUME
- CENTRALLY LOCATED WITH CORNER CITY SITE



IN RELATION WITH THE HIVE

THE EXISTING BUILDING IS CURRENTLY A WELL KNOWN BUILDING DESIGNED PREVIOUSLY BY RENOWNED ARCHITECT MARCEL BREUER. THUS, IT IS A HIGHLY-RECOGNIZABLE BUILDING.

A COMMUNITY CENTER MUST BE RECGONIZABLE APART FROM THE CITY SCAPE IT LIVES IN. THE INTENDED USERS WILL BE ABLE TO NOT ONLY RECOGNIZE THE HIVE, BUT REMEMBER IT.

AS WELL AS, THE BUILDING PROVIDES MORE THAN ENOUGH SF AND ARCHITECTURAL INSPIRATION TO BECOME A LIVING BUILDING, FIGURATIVELY AND LITERALLY, WITH THE ENVIRONMENTAL SUSTAINABILITY INITIATIVES WITHIN.

MOREOVER, IT NOT ONLY WILL MAKE FOR A PERFECT CENTER TO ALLEVIATE LGBTQIA+ ISSUES, BUT THE POTENTIAL FOR GROWTH IS INEVITABLE WITH A DESIGN CAPABILITY AS SUCH.

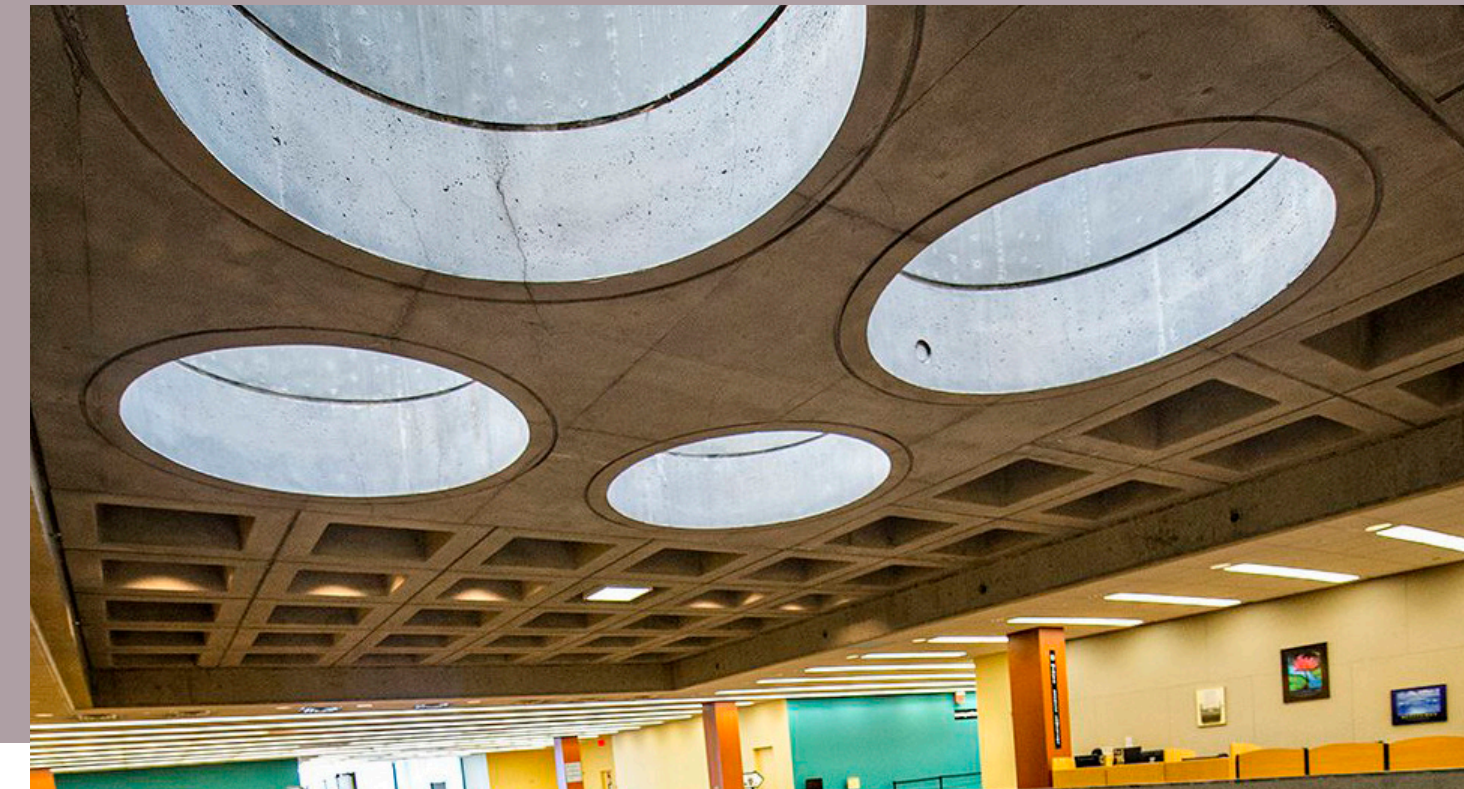


Figure 2: Percentage by Racial Category, 2017

(Source: Gallup)

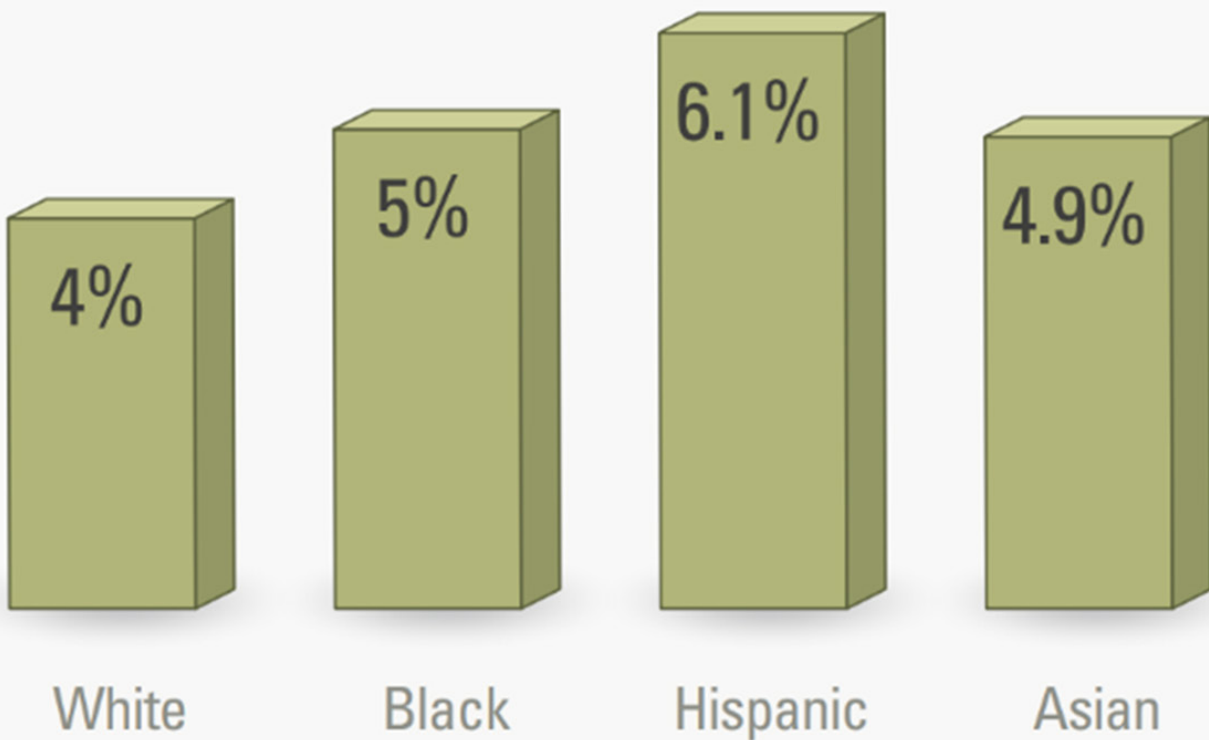
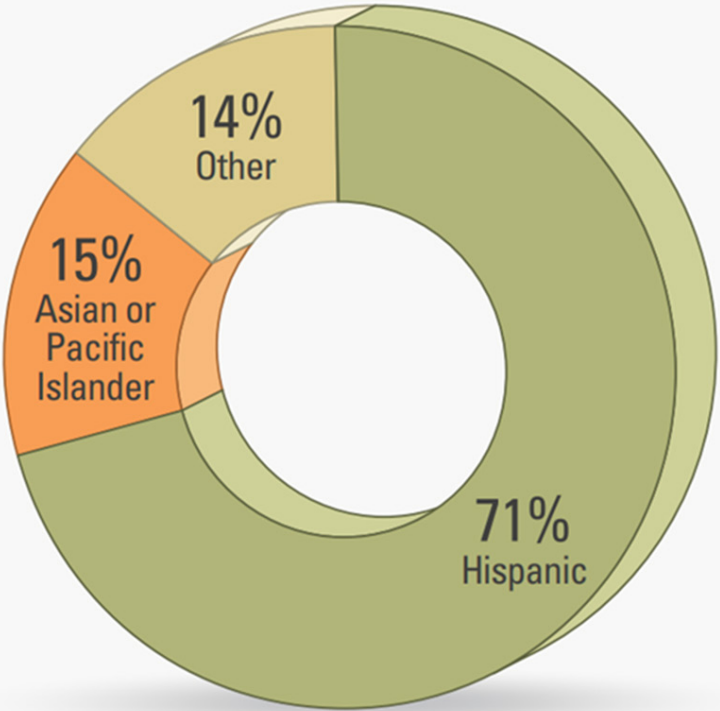


Figure 3: Percentage of LGBT undocumented U.S. immigrants, by racial category, 2013

(Source: Williams Institute)



20 states

EXPLICITLY PROHIBIT
WORKPLACE DISCRIMINATION
BASED ON SEXUAL ORIENTATION
& GENDER IDENTITY (APA, 2021)

18 states

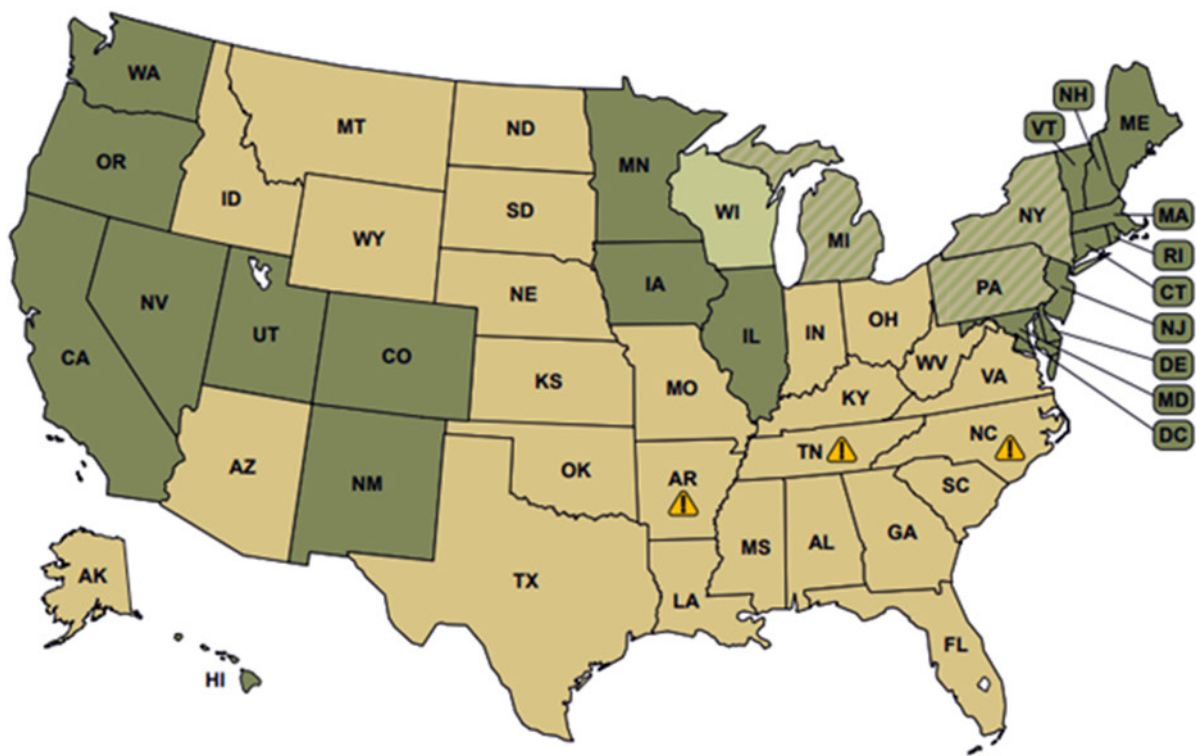
HAVE ZERO LAWS PREVENTING
WORKPLACE DISCRIMINATION
BASED ON SEXUAL ORIENTATION
& GENDER IDENTITY (APA, 2021)

19%

OF TRANSGENDER INDIVIDUALS
FROM RESEARCH HAVE BEEN
REFUSED A HOME/ APARTMENT
(APA, 2021)

11%

OF TRANSGENDER INDIVIDUALS
REPORT EVICTION DUE TO
“GENDER IDENTITY OR
EXPRESSION.” (APA, 2021)



- State law explicitly prohibits discrimination based on sexual orientation and gender identity (20 states + D.C.)
- State explicitly interprets existing prohibition on sex discrimination to include sexual orientation and/or gender identity (3 states)
- State law explicitly prohibits discrimination based on sexual orientation only (2 states)
- No explicit prohibitions for discrimination based on sexual orientation or gender identity in state law (26 states)
- State has law preventing passage or enforcement of local nondiscrimination laws (3 states)

COVID-19 IMPACT ON LGBTQIA+ POPULATION TABLE (BOTTOM-LEFT),

FEAR AMONGST LGBTQIA+ IDENTITY TABLE (TOP-LEFT),

LGBTQIA+ WORKPLACE HOSTILITY (BOTTOM-RIGHT).

ADAPTED FROM CATALYST (JULY 26 2021)

LGBT PEOPLE IN THE WORKPLACE USA DIAGRAM (LEFT)

ADAPTED FROM LGBTMAP.ORG

USER - WORKPLACE ISSUE FACTORS

OTHER FACTORS THAT FACE THE LGBTQIA+ COMMUNITY IN THE WORKPLACE INCLUDE:

- WORKPLACE HOSTILITY
- FEAR WITHIN THE WORKPLACE
- COVID-19

| Issue | Percentage |
|--|---|
| Exhausted from hiding sexual orientation | 17% |
| Exhausted from hiding gender identity | 13% |
| Fear hiding their authentic self (UK) | 35% of LGBTQIA+ employees (51% are transgender employees) |

| Issue | Percentages |
|---|---|
| Exposure to infection/ and or economic security | 40% (2 million in restaurants/ food services, 1 million in hospitals) |
| Reduced work hours | 30% |
| Became unemployed | 12% |

| Issue | Percentage |
|----------------------------|---|
| Hostility in the Workplace | 32% (LGBTQIA+ people of color) |
| Hostility in the Workplace | 13% (LGBTQIA+ who are white) |
| Equal Pay | 22% LGBTQIA+ Americans not paid equally or promoted same rate |
| Biased Jokes | 53% have heard lesbian or gay jokes |
| Biased Jokes | 37% have heard bisexual jokes |
| Biased Jokes | 41% have heard transgender jokes |

48%

FEEL UNABLE TO INFLUENCE THEIR
THOUGHTS, IDEAS, AND ACTIONS
TO OTHER LGBTQIA+ INDIVIDUALS

53%

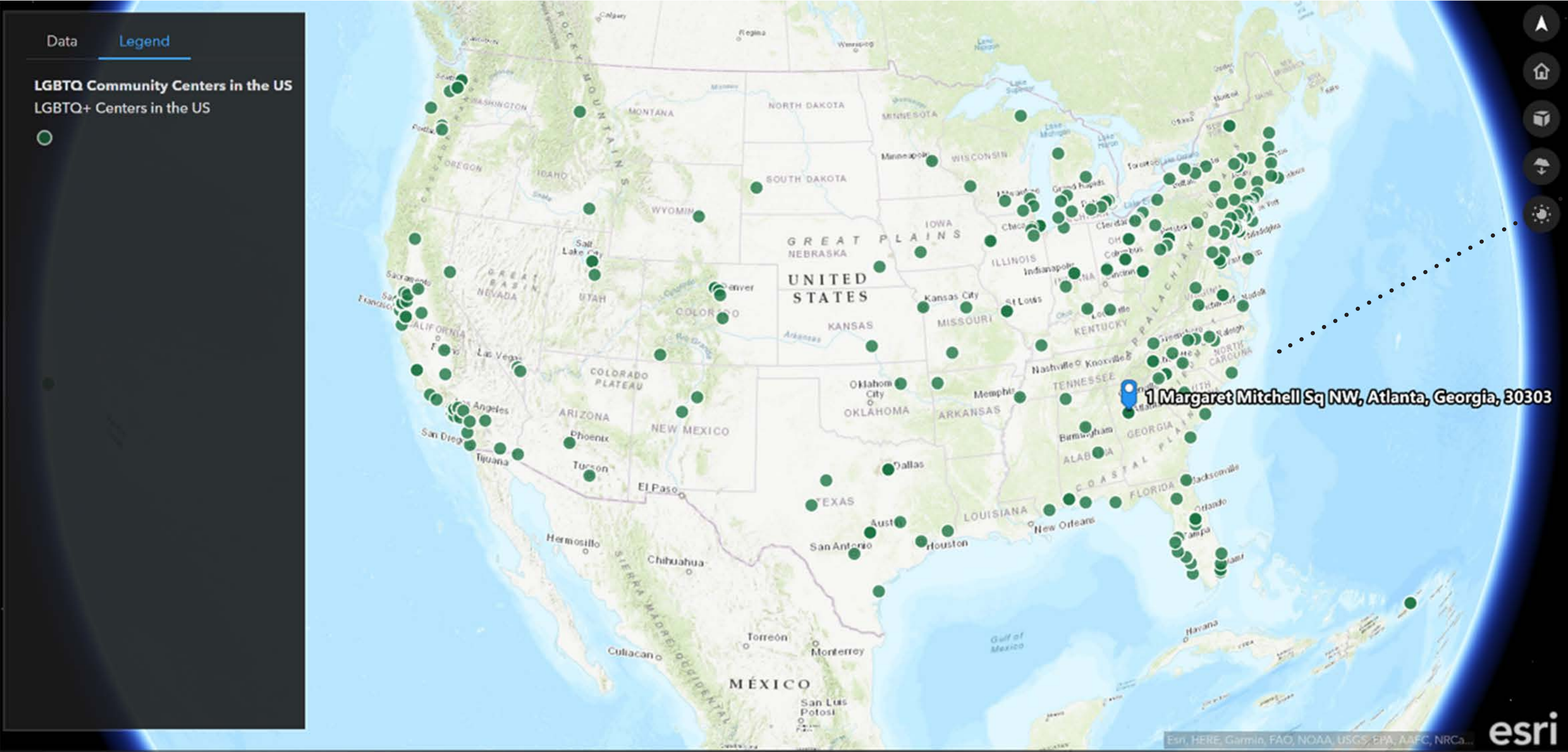
OFTEN FEEL UNABLE TO RECIEVE
HELP FROM THE LGBTQIA+
COMMUNITY, IF NEEDED

9%

FEEL THERE IS A COMMUNITY
CENTER TO GO TO, IN HELP OF
LGBTQIA+ RELATED ISSUES

92%

FEEL THAT IF THE HIVE EXISTED,
WITH ITS INTENDED SERVICES/
DESIGN, IT WOULD BE BENEFICIAL



LGBTQIA+ COMMUNITY CENTERS ACROSS THE UNITED STATES

- # OF LGBTQIA+ COMMUNITY CENTERS ACROSS THE U.S: 196 TOTAL
- ESTIMATED 6 OF THE 196 ARE ACTUAL COMMUNITY CENTERS

LGBTQIA+ COMMUNITY CENTERS IN THE STATE OF GEORGIA

- ONLY 1 IS DEFINED AS A CENTER IN GEORGIA

HOWEVER, AFTER MORE RESEARCH, THE NOTED CENTER IS ACTUALLY JUST AN LGBTQIA+ COMMITTEE BUILDING, MEANING ESSENTIALLY THERE IS ZERO COMMUNITY CENTERS DEDICATED TO THE LGBTQIA+ POPULATION IN GA.

THE HIVE WOULD BE ONE OF A KIND, A 1/196 TOTAL CENTERS ACROSS THE UNITED STATES PROVIDING A MULTITUDE OF SERVICES, SPACES, ETC THAT IS CURRENTLY UNAVAILABLE IN THE STATE OF GEORGIA, AND PROVIDED ILL-EQUIPED ACROSS THE MAJORITY OF THE UNITED STATES, EXCLUDING CALIFORNIA AND THE NE.

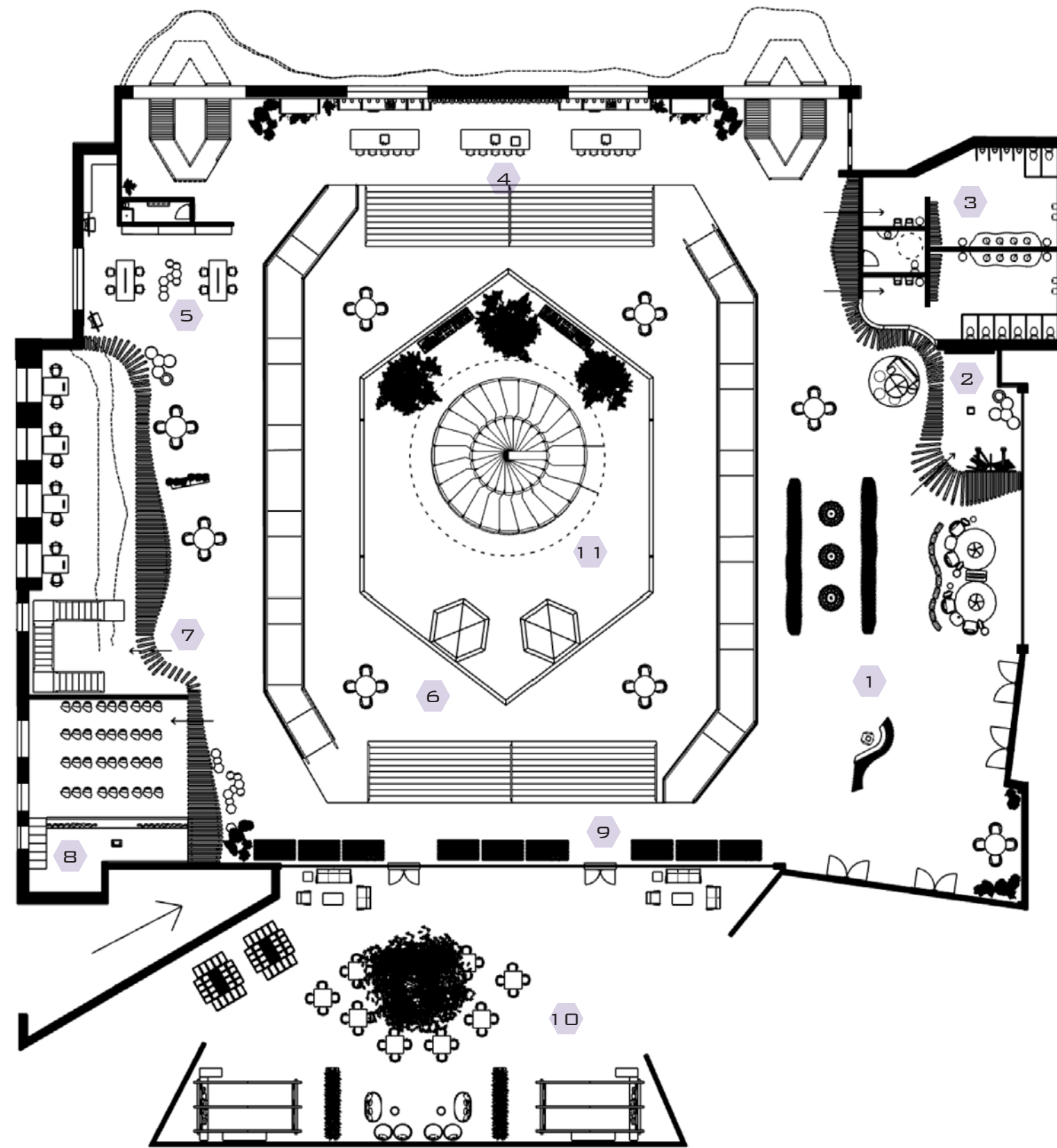
COMMUNITY ENGAGEMENT, ENVIRONMENTAL SUSTAINABILITY

HOMELESSNESS OUTREACH

HOMELESSNESS OUTREACH

SOCIAL ISSUES, JOBLESSNESS/ HOMELESSNESS OUTREACH





THE HIVE: CULTURAL CENTER

INCLUDES:

- 1 - RECEPTION/ LOBBY
- 2 - LGBTQIA+ HISTORY SPACE
- 3 - PUBLIC RESTROOM
- 4 - BREAK AREA/ KITCHEN
- 5 - VOLUNTEER/ MAKER SPACE
- 6 - PUBLIC MEETING SPACE
- 7 - PRIVATE MEETING SPACE
- 8 - AUDITORIUM
- 9 - FRESH MARKET
- 10 - OUTDOOR COURTYARD
- 11 - CENTRAL ATRIUM

NOTABLE ATTRIBUTES:

- RAIN CHAIN
- HEXAGONAL RAMP
- 6' DROPPED CENTRAL FLOOR
- PARAMETRIC RECLAIMED WOOD WALL SYSTEM

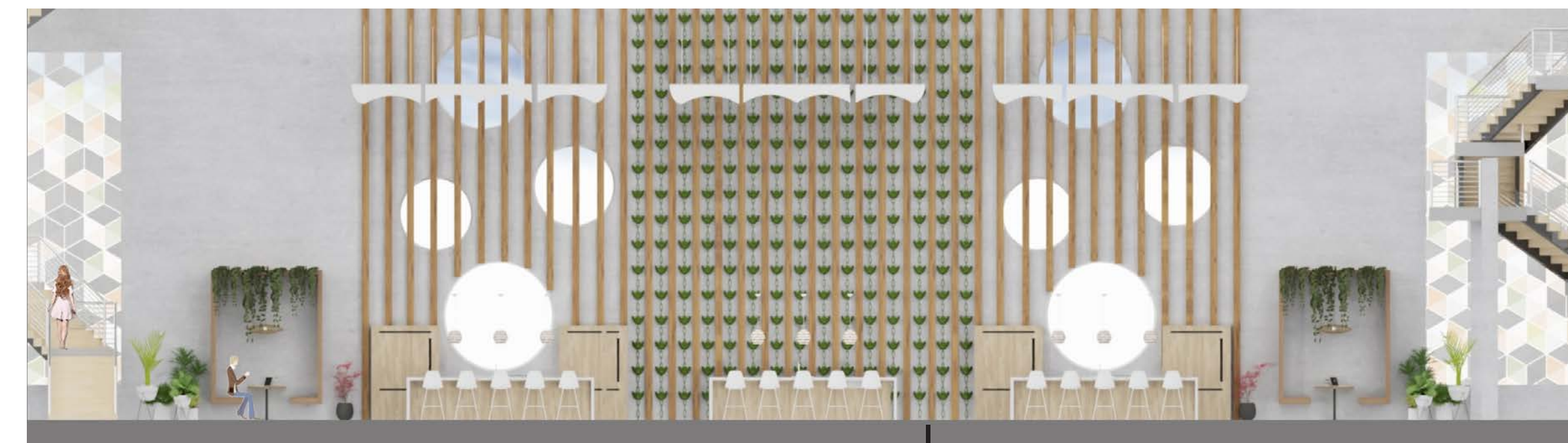
GROUND LEVEL PLAN



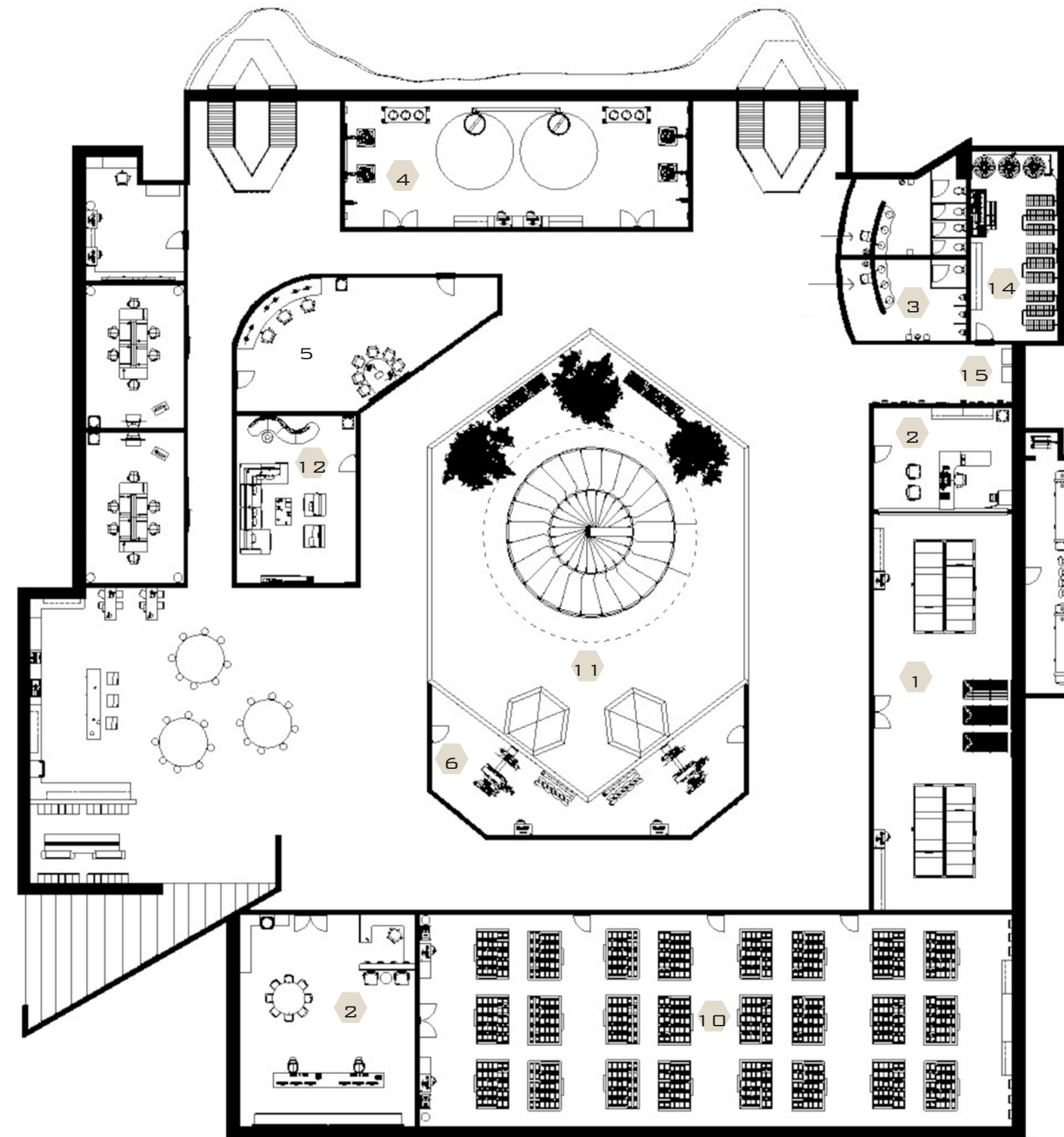
GROUND LEVEL ENTRY



RECEPTION/ LOBBY/ CENTRAL ATRIUM



KITCHEN/ BREAK AREA (TOP) + SOUTH WALL (BOTTOM)



BELOW-GROUND LEVEL PLAN

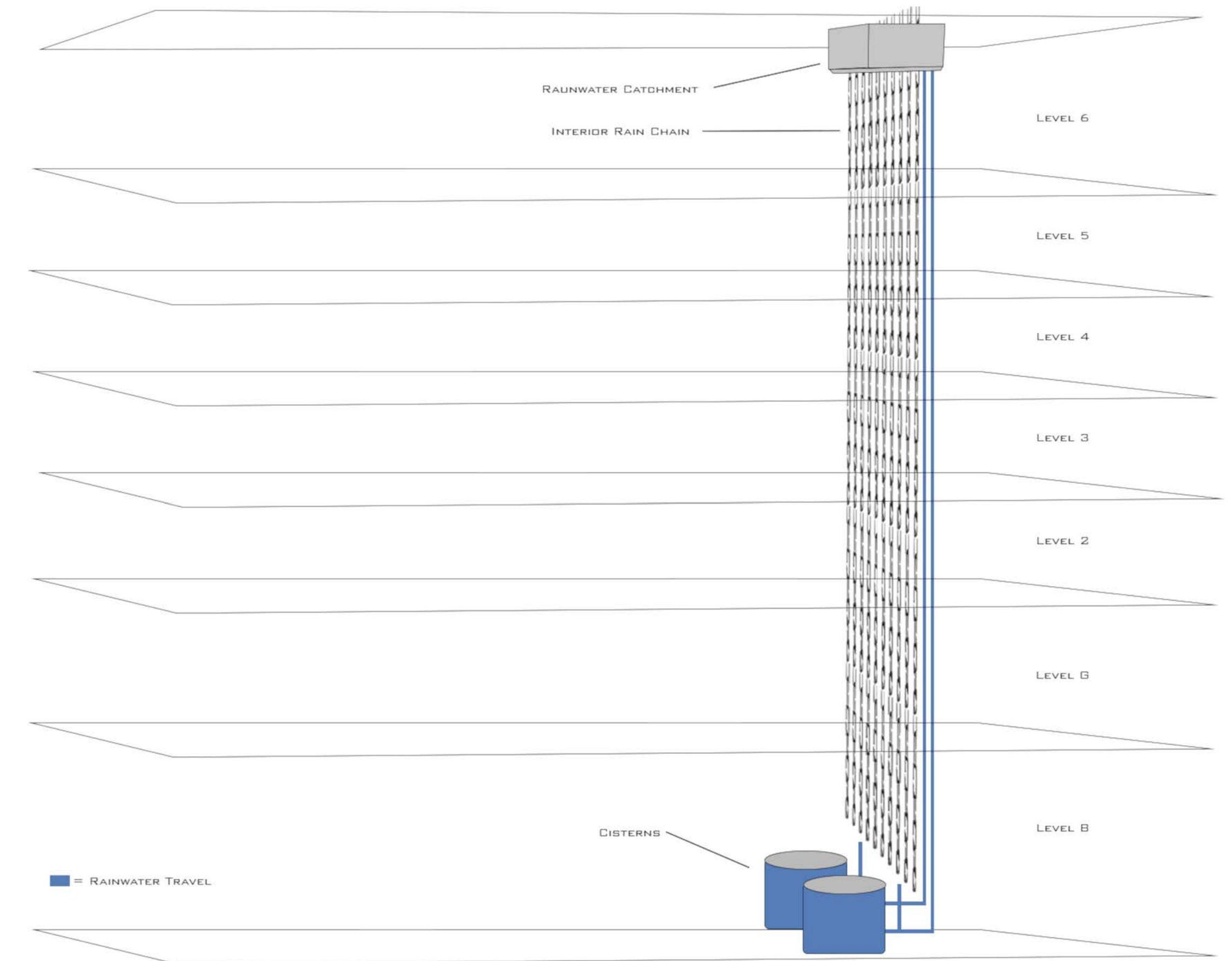
THE HIVE: SUSTAINABLE CENTER

INCLUDES:

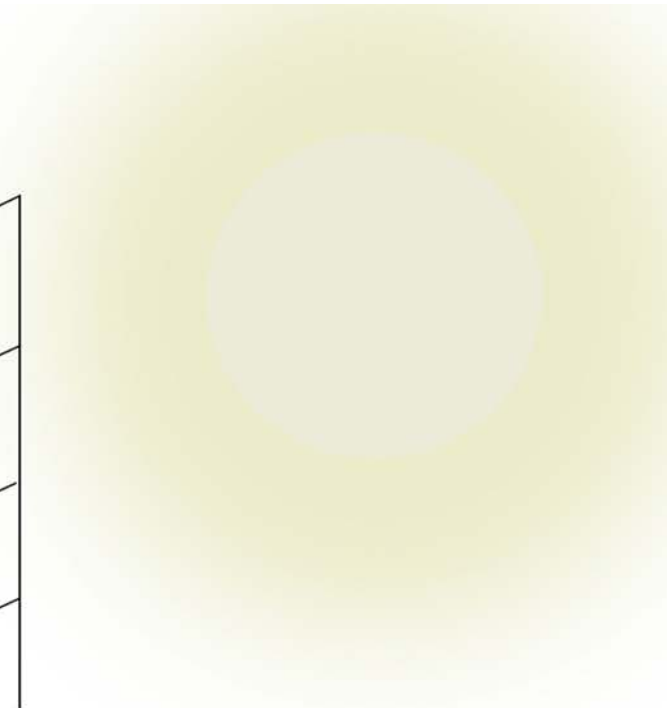
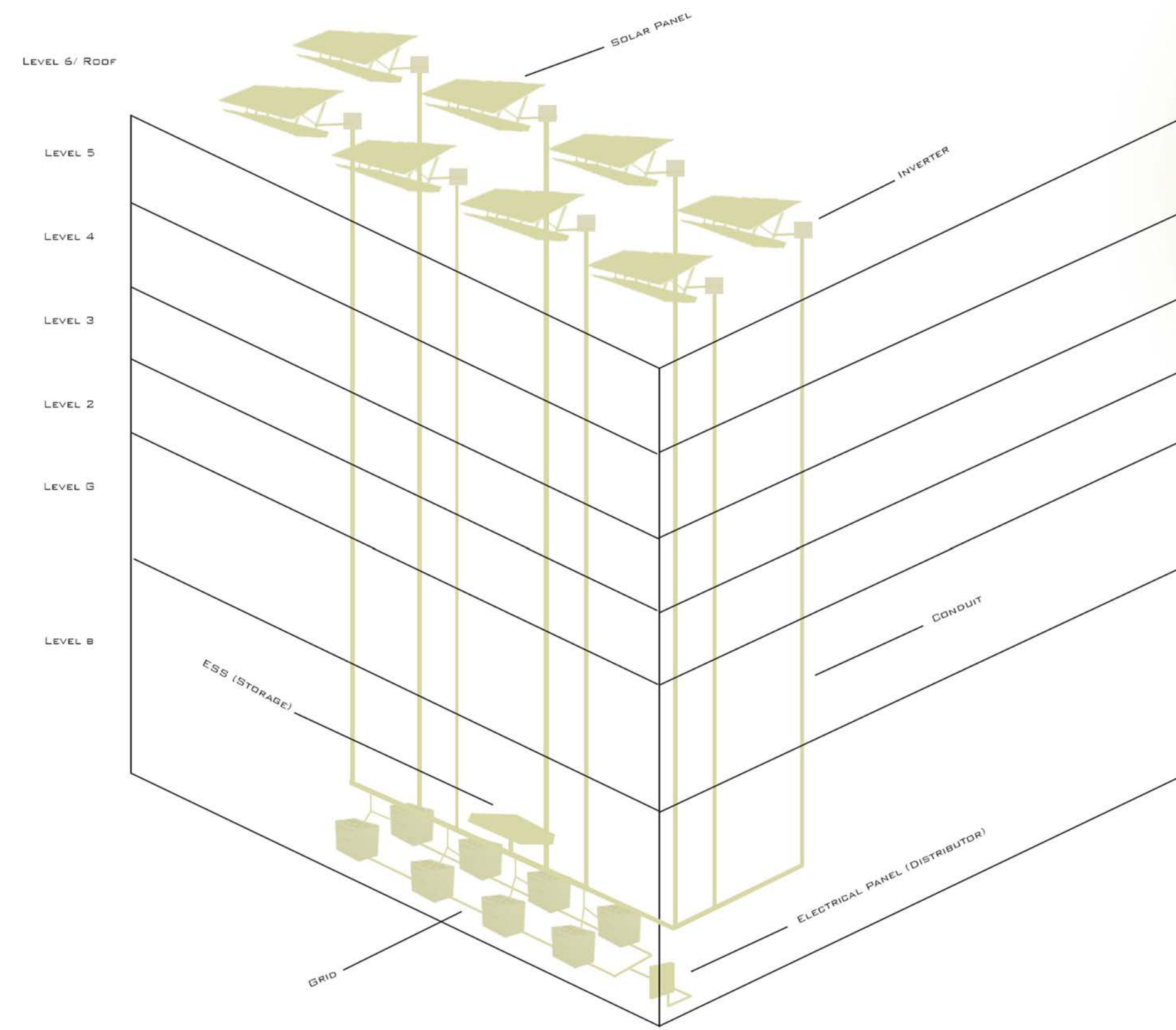
- 1 - GROUND SOURCE HEAT EXCHANGE
- 2 - MAINTENANCE OFFICE
- 3 - PUBLIC RESTROOM
- 4 - RAINWATER MANAGEMENT
- 5 - LEED CONTROL CENTER
- 6 - ELEVATOR MAINTENANCE
- 7 - KITCHEN/ BREAK AREA
- 8 - LOCKER/ PERSONAL STORAGE
- 9 - MAINTENANCE OFFICE
- 10 - ENERGY GRID/ MANAGEMENT
- 11 - CENTRAL ATRIUM
- 12 - WELLNESS SPACE
- 13 - MEETING SPACE
- 14 - GREYWATER/ WASTE MANAGEMENT
- 15 - MECHANICAL STORAGE

NOTABLE ATTRIBUTES:

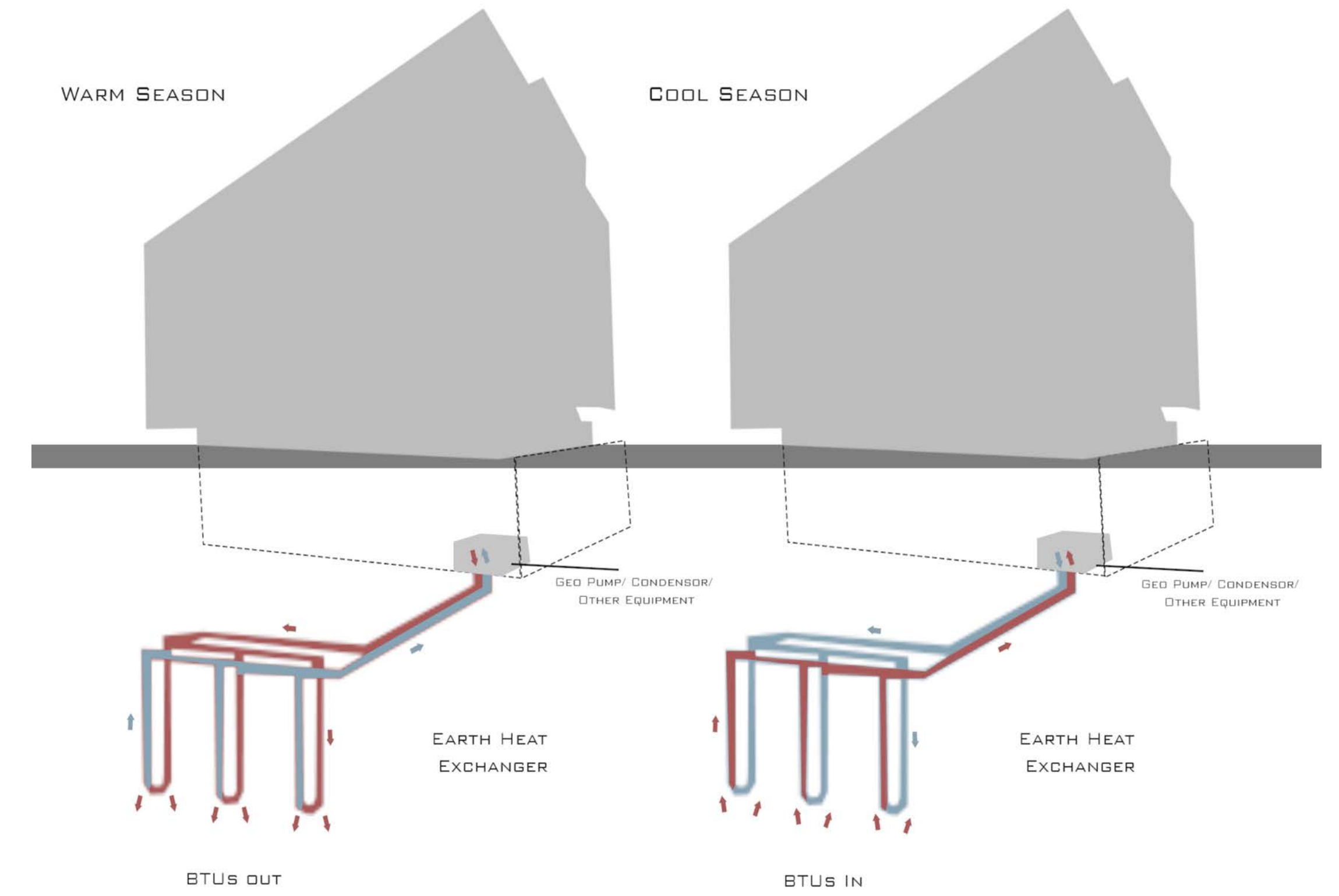
- WELLNESS ROOM



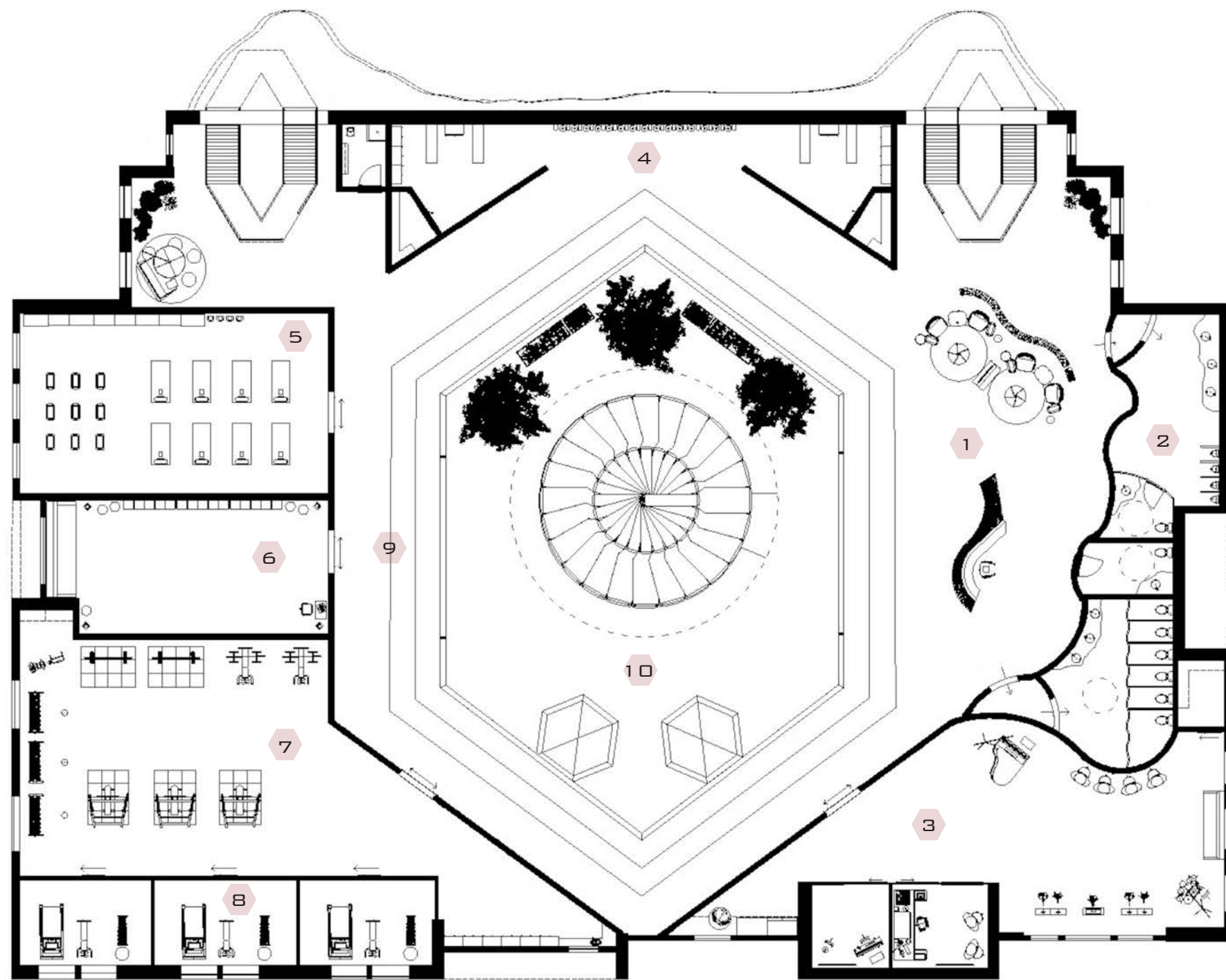
RAINWATER SYSTEM



SOLAR ENERGY & GRID SYSTEM



GROUND SOURCE HEAT EXCHANGE



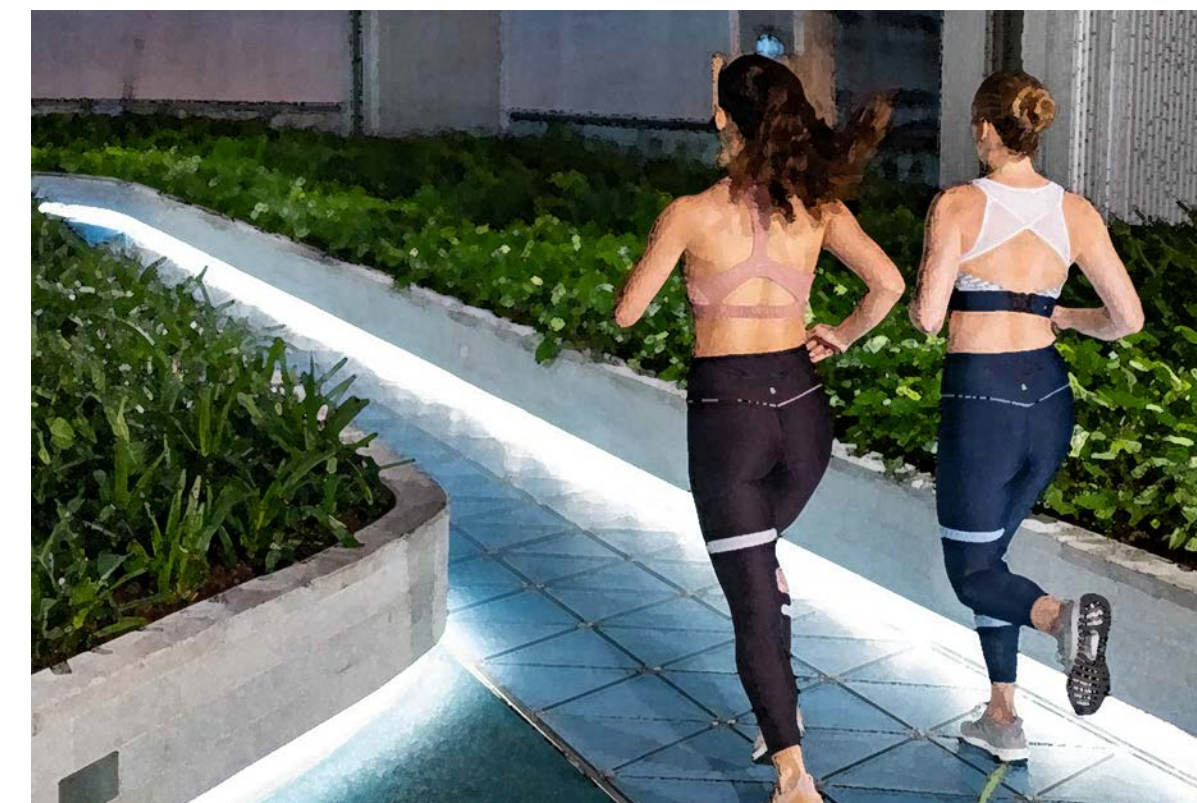
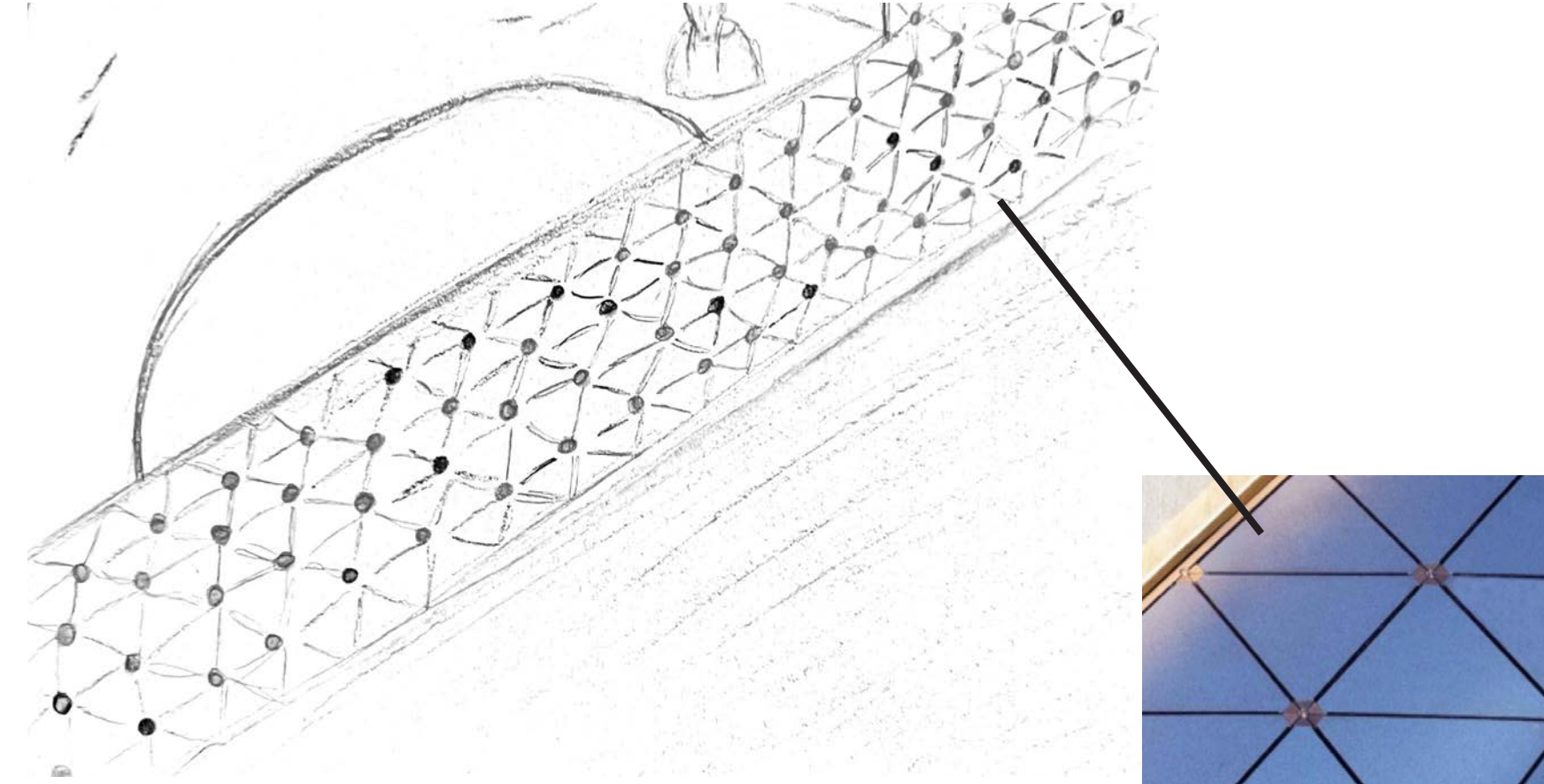
THE HIVE: PHYSICAL CENTER

INCLUDES:

- 1 - RECEPTION/ LOBBY
- 2 - PUBLIC RESTROOM
- 3 - MUSIC EXPRESSION STUDIO
- 4 - LOCKER/ PERSONAL STORAGE
- 5 - YOGA STUDIO
- 6 - DANCE STUDIO
- 7 - PUBLIC GYM
- 8 - PRIVATE GYM SPACE
- 9 - PAVAGEN ENERGY TRACK
- 10 - CENTRAL ATRIUM

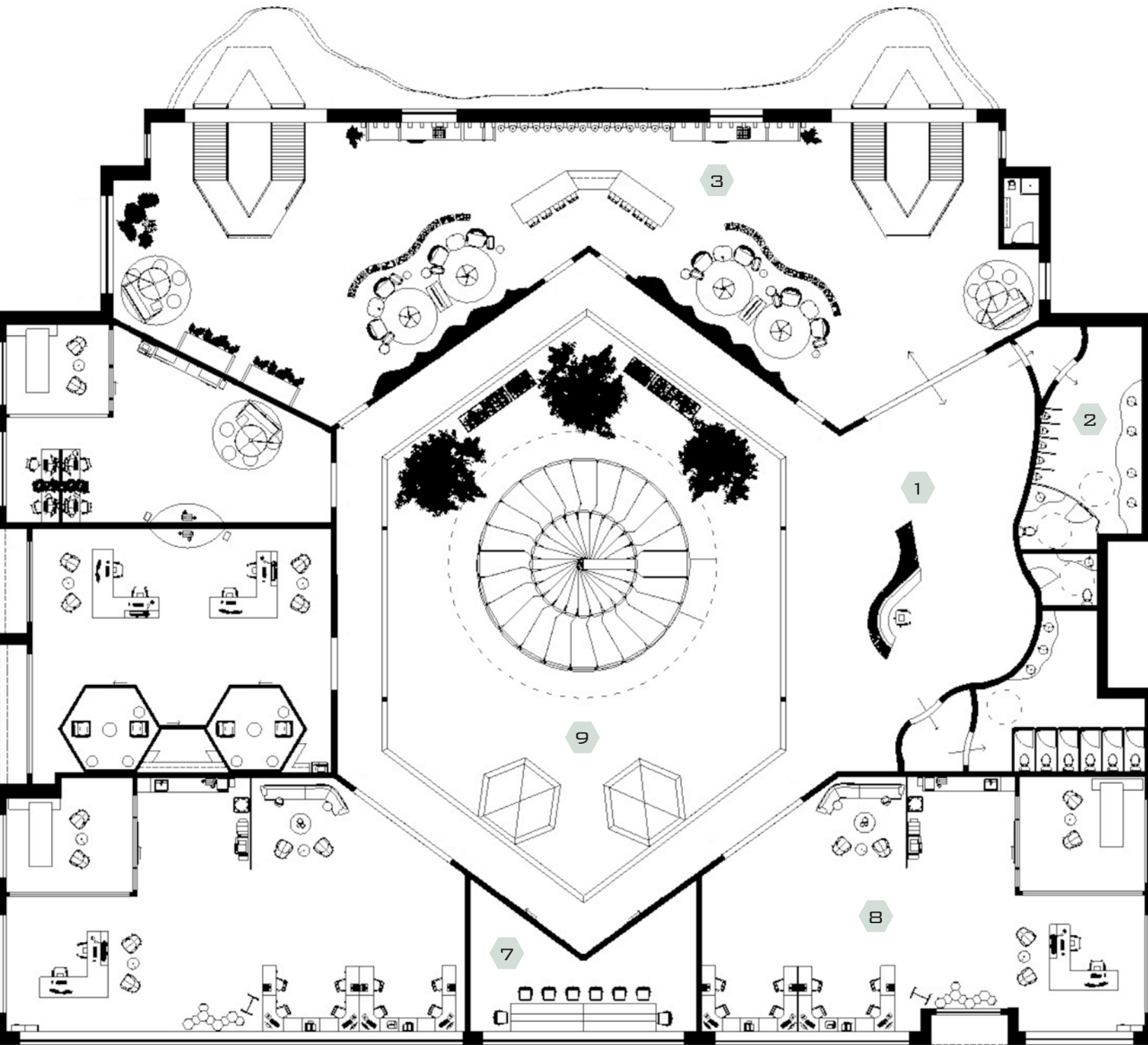
NOTABLE ATTRIBUTES:

- RAIN CHAIN
- RECORDING STUDIO
- PAVAGEN ENERGY TRACK
- PARAMETRIC RECLAIMED WOOD WALL SYSTEM



LEVEL TWO PLAN

PAVAGEN ENERGY TRACK (LEFT) + PRELIMINARY PUBLIC RR (RIGHT)



THE HIVE: OFFICES CENTER

INCLUDES:

- 1 - RECEPTION
- 2 - PUBLIC RESTROOM
- 3 - KITCHEN/ LOBBY/ BREAK AREA
- 4 - IMMIGRANT/ P.O.C RESOURCES
- 5 - MENTAL HEALTH OFFICE
- 6 - JOB OUTREACH OFFICE
- 7 - CONFERENCE ROOM
- 8 - HOMELESSNESS OUTREACH OFFICE
- 9 - CENTRAL ATRIUM

NOTABLE ATTRIBUTES:

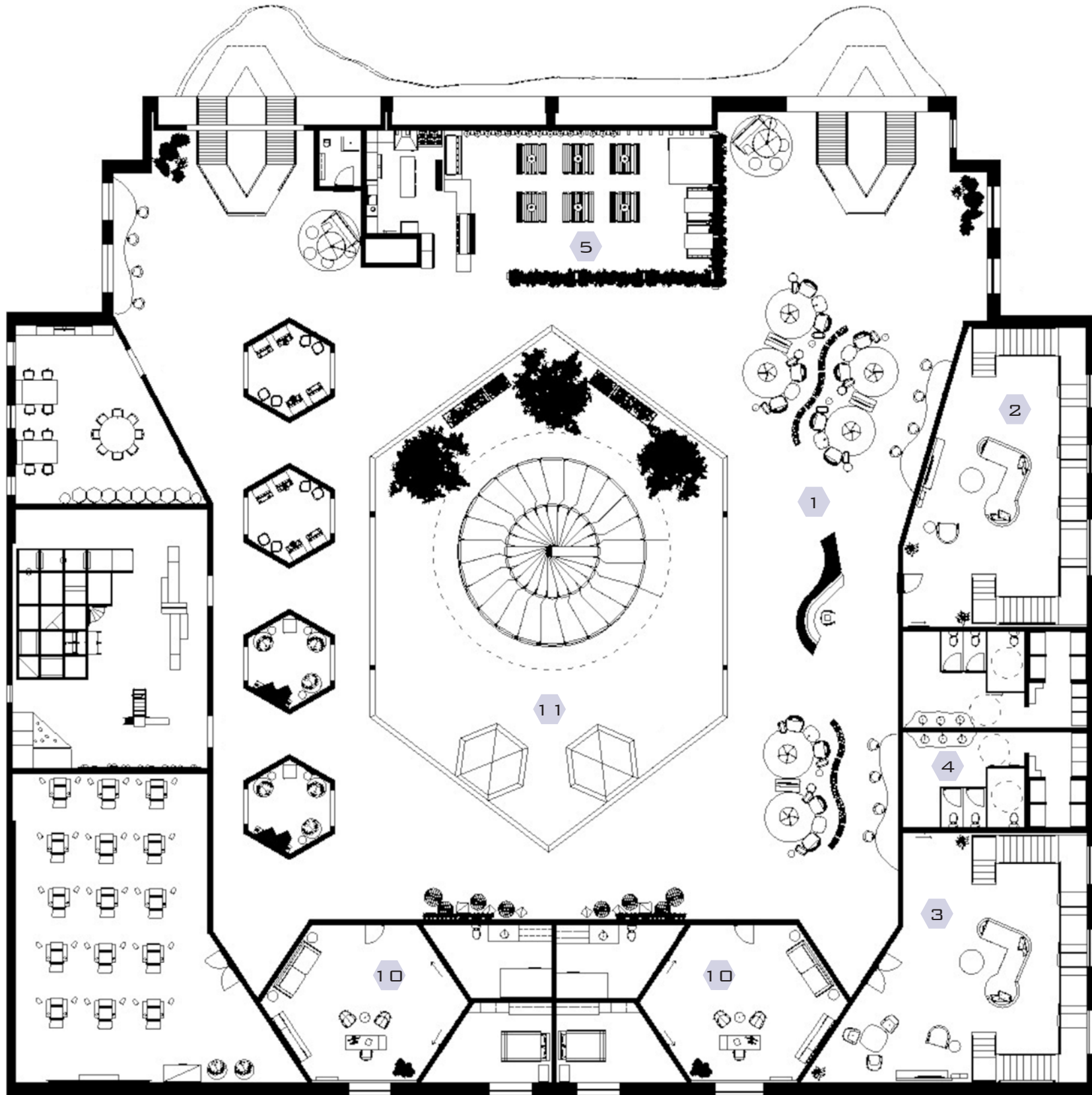
- RAIN CHAIN
- HEXAGONAL CORRIDOR
- PARAMETRIC RECLAIMED WOOD WALL SYSTEM



LEVEL THREE PLAN

KITCHEN/ BREAK AREA/ LOBBY

THE HIVE: YOUTH HOUSING



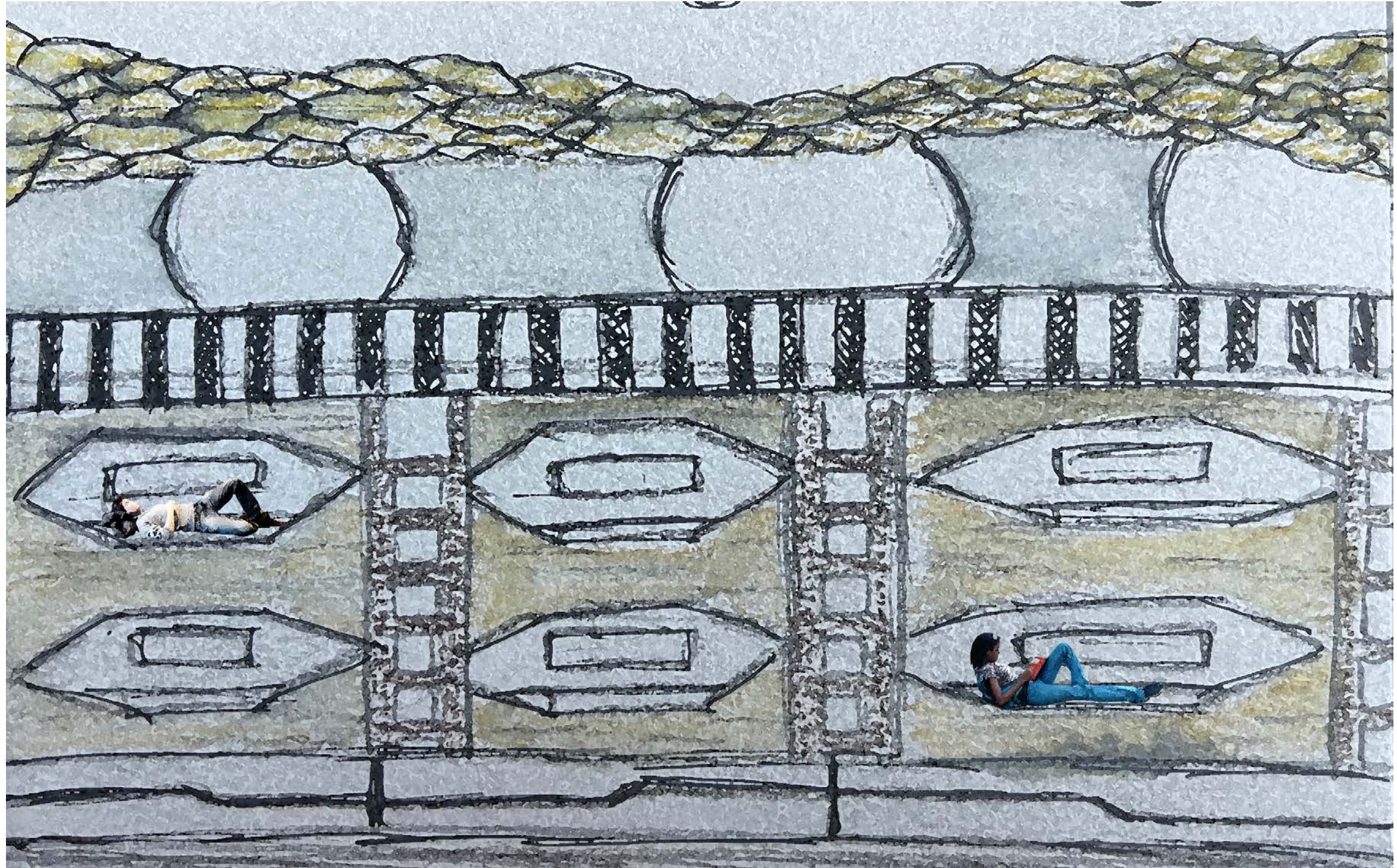
LEVEL FOUR PLAN

INCLUDES:

- 1 - RECEPTION
- 2 - HOUSING SIDE A
- 3 - HOUSING SIDE B
- 4 - RESTROOM/ SHOWERS/ LAUNDRY
- 5 - DINING HALL/ KITCHEN
- 6 - MAKER SPACE
- 7 - PLAYGROUND/ ROCK CLIMBING
- 8 - GAME/ SOCIAL POD
- 9 - THEATER ROOM
- 10 - CARETAKER LIVING UNIT/ OFFICE
- 11 - CENTRAL ATRIUM

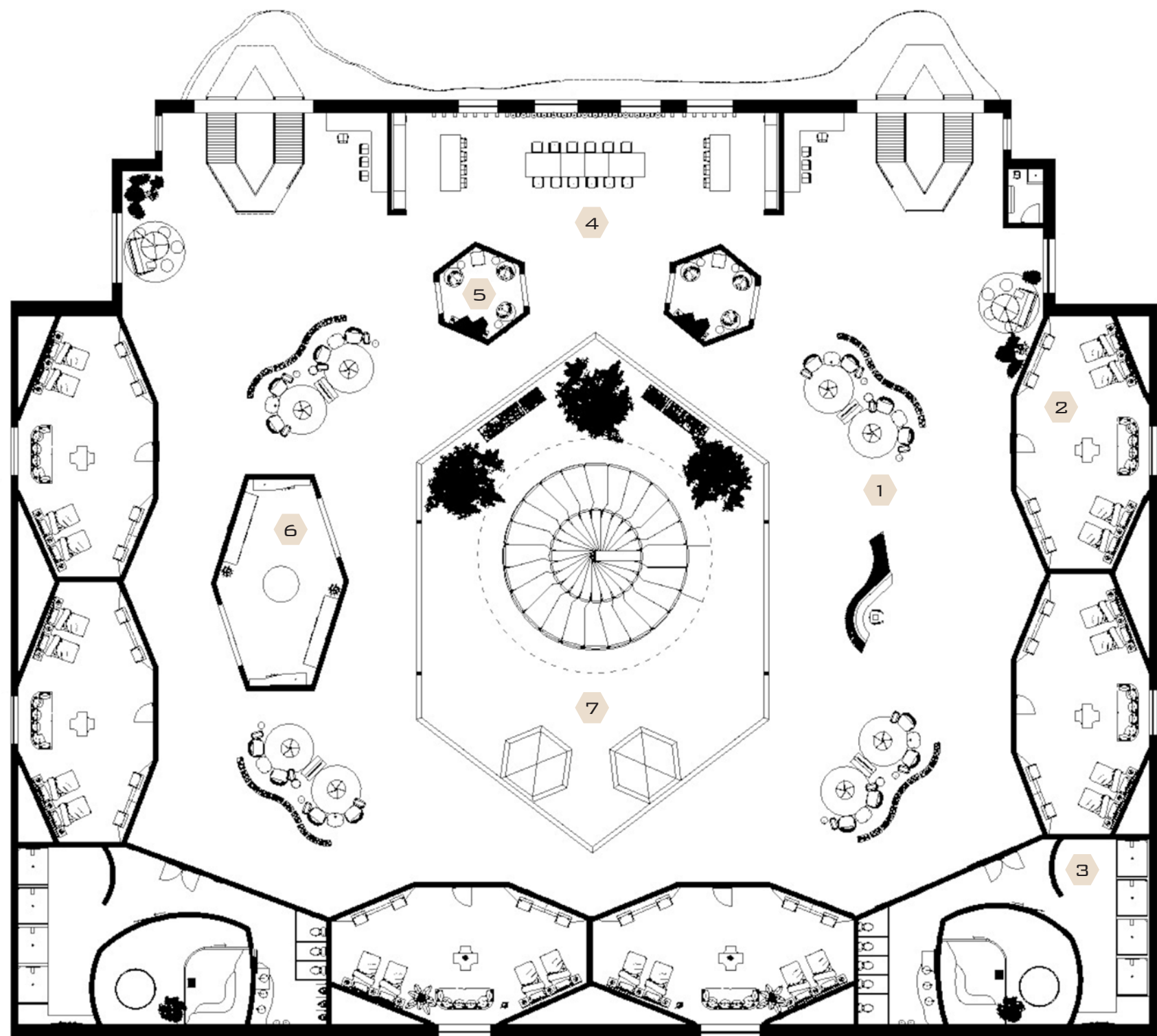
NOTABLE ATTRIBUTES:

- RAIN CHAIN
- LOFTED HANGOUT SPACE
- HEXAGONAL GAME/ SOCIAL PODS



SLEEPING POD SYSTEM + LOFTED HANGOUT SPACE

THE HIVE: ADULT HOUSING



INCLUDES:

- 1 - RECEPTION
- 2 - HOUSING UNIT
- 3 - RESTROOM/ SAUNA/ SHOWERS
- 4 - KITCHEN/ LOUNGE
- 5 - SOCIAL POD
- 6 - LAUNDRY
- 7 - CENTRAL ATRIUM

NOTABLE ATTRIBUTES:

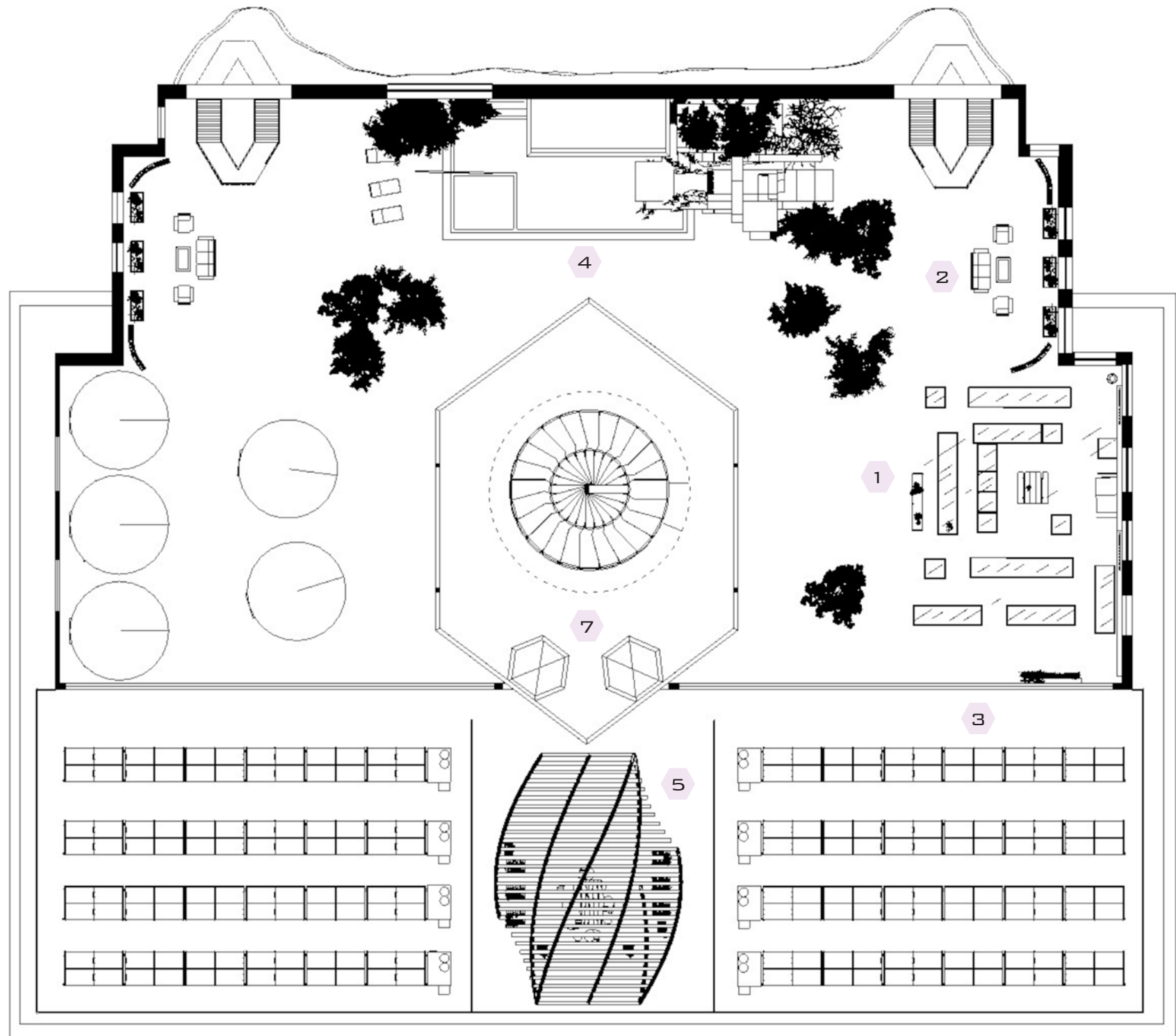
- SAUNA
- RAIN CHAIN
- HEXAGONAL GAME/ SOCIAL PODS

LEVEL FIVE PLAN



HOUSING UNIT + RESTROOM, SAUNA, SHOWER ROOM

THE HIVE: GARDEN CENTER/ ROOFTOP



INCLUDES:

- 1 - VEGETABLE GARDEN
- 2 - LOUNGE
- 3 - SOLAR PANEL SYSTEM
- 4 - POOL & WATERFALL
- 5 - GREENHOUSE
- 6 - BEEHIVE GARDEN EXPERIENCE PODS
- 7 - CENTRAL ATRIUM

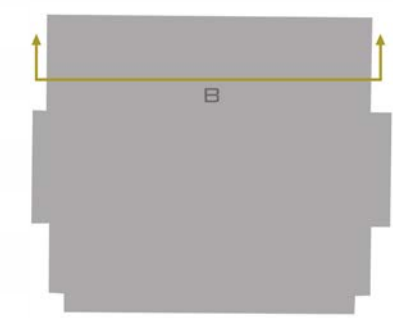
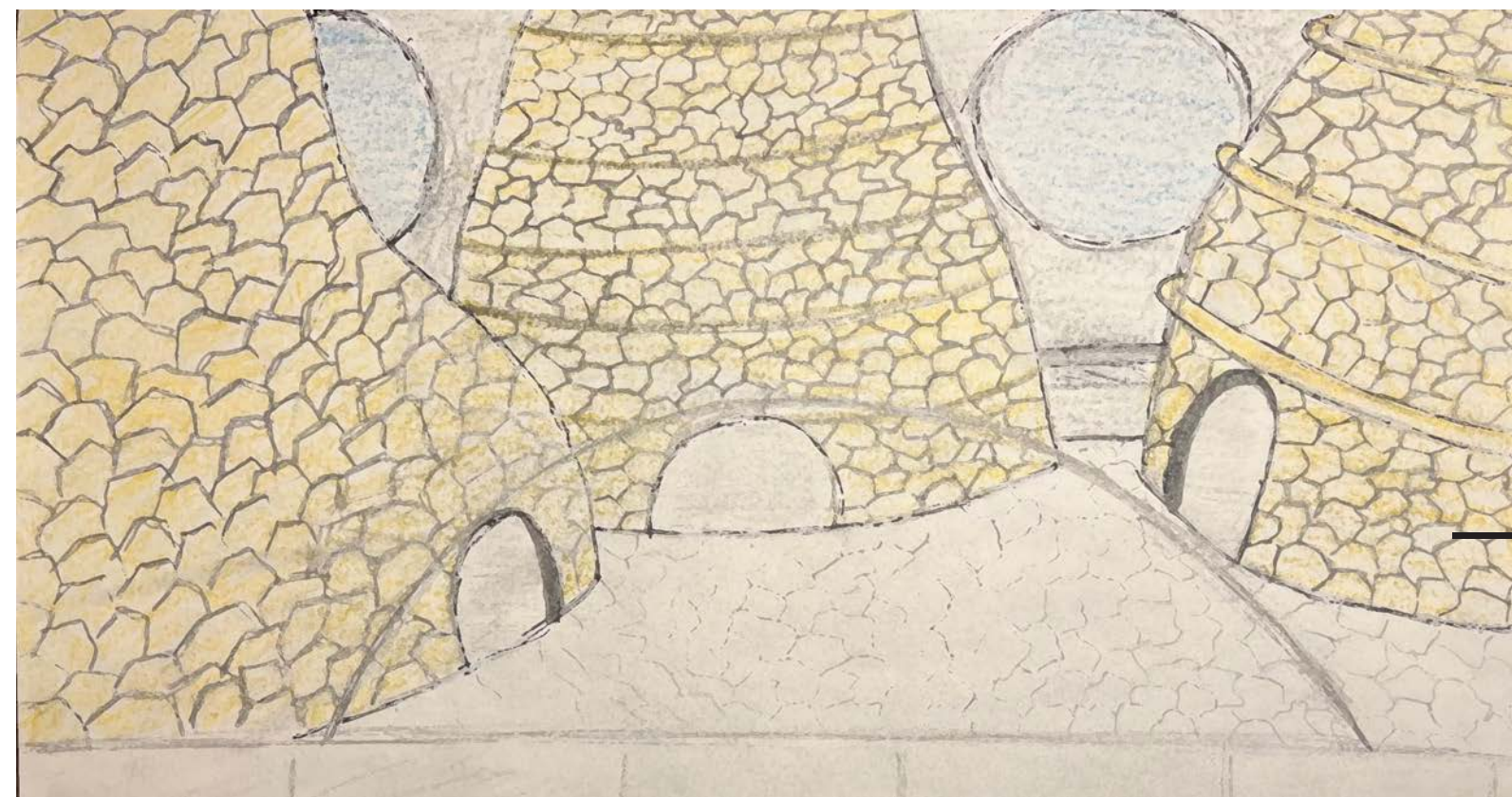
NOTABLE ATTRIBUTES:

- POOL
- RAIN CHAIN
- BEEHIVE INSPIRED GARDEN PODS

LEVEL SIX PLAN



POOL + WATERFALL



BEEHIVE INSPIRED GARDEN PODS (LEFT) + VEGETABLE GARDEN + SKYLIGHTS (RIGHT)

SECTION B



THANK YOU!