

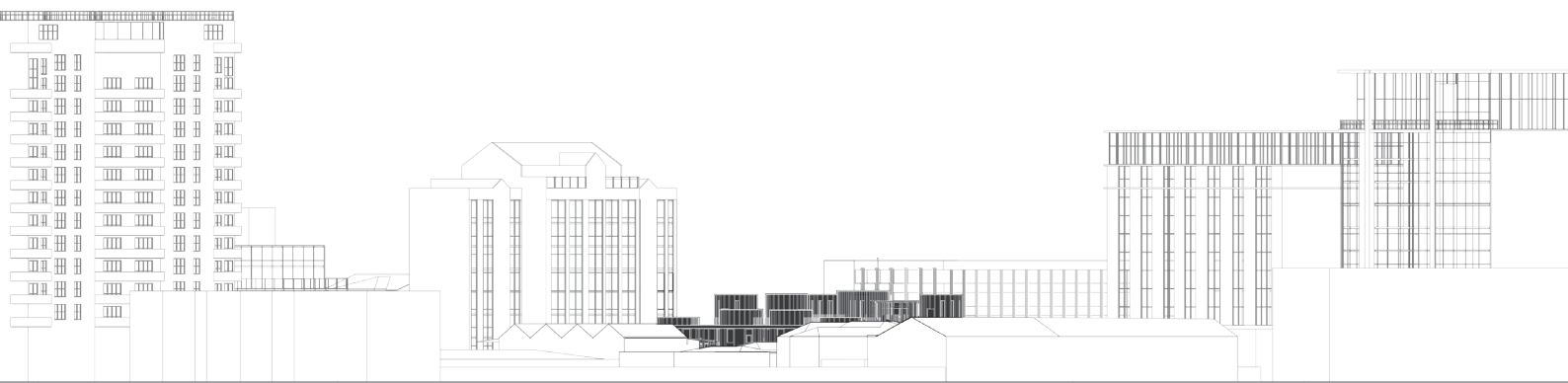
# Decolonizing Architecture in Africa

## Rethinking co-working space in Nairobi

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## Abstract

For many cultures, architecture represents more than just physical structures. It signifies culture, affiliation, and ownership within a specific society. However, in many African contexts, various coercive and assimilative historical, socioeconomic, and cultural phenomena, such as colonialism, have caused a divergence between the people's architecture, way of life, and culture. Furthermore, the impacts of these developments on theoretical and practical aspects of architecture and design remain under-researched.

Using a research-design inspired methodology, this degree project aims to link or establish a connection between pre-colonial architecture and contemporary architecture in Africa, considering the specific case of Kenya. The project begins its investigation by analyzing various African architectural and decolonial movements associated with indigenous architecture, such as recontextualizing architecture and designs that center on African concepts. In addition, the paper investigates the architectural ethnography of traditional Kenyan architecture through the careful unlearning of current architectural trends that do not directly respond to the specific context and the relearning of precolonial architecture's teachings.

The research project concludes by proposing a flexible co-working space in Nairobi, Kenya, as a demonstration (proof of concept) of the unlearning and relearning undertaken in the study. The choice of designing co-working spaces is reinforced by the observation that there is a high demand for collaborative working spaces by emerging start-ups in the city. The proposed workspace blends the collaborative local work culture and the understanding of local architectural ethnography using hybrid design techniques and building tectonics.

This research will serve as a point of departure for future decolonization-focused research. In addition, it will serve as a starting point for architects to link the past to the present and influence a sustainable future.

**Keywords:** Decolonizing architecture, vernacular architecture, African architecture, co-working, Kenya, architecture

## Table of Contents

1. Acknowledgments	3
2. Abstract	4
3. Table of contents	5
4. Introduction	6
-Problem statement and Aim	7
-Research questions	8
7. Decolonial thinking and designing tools	9
8. Method	11
9. On-going discussions about Architecture in Africa	12
- Recontextualizing	13
- Hybrid design	20
10. Rethinking the design of co-working	26
11. Project Site -	27
- Nairobi	29
- Kenyan vernacular architecture	32
12. Digital tectonic experiment	
13. Co-working	
- Co-working in Africa	34
- Co-working in Kenya	36
14. Design proposal	42
- Site analysis	43
- Design approach	46
- Drawings	53
- 3D visualizations	71
15. Summary	90
16. Reflections	91
17. References	92

## Introduction

This project is inspired by recently renewed discussions and intellectual engagements on rethinking and decolonizing systems of thought and worldviews globally. It is also undertaken with the recognition that while much has been debated critiquing the impacts of past colonialism and present coloniality of power (Quijano, 2000, 2007) in intellectual spaces such as universities and the curriculum that informs teaching and learning, little has been studied by way of rethinking contemporary architecture through decolonial theories and practices. It is worth noting that a few studies that linked architecture with decolonization focus on curriculum transformations (e.g., Fisher et al., 2017; Paul, 2020; Okofu & Fakere, 2022).

Decolonization is the process in which countries that were subjected to colonialism go through to take ownership of power. Although African countries have achieved political decolonization, the subject of decolonizing the built environment has progressed little to nothing to the level that the buildings become exotic in their own context.

In this study, decolonization refers to the ongoing process of radically and critically rethinking and interrogating the implications of Eurocentric and colonial epistemic hegemonies and the resultant epistemic injustices on the marginalization of certain kinds of knowledge (Heleta, 2016; Lange, 2019; Mbembe, 2015). It is conceptualized as a quest for critiquing and delinking from the universalizing claims of Western thought (Mbembe, 2015) in favor of a pluriversal world inclusive of marginalized and invisibilized African knowledge. Following the notions of decolonization from the seminal work of Ngugi wa Thiongo (1984), it could be seen as part of the “quest for relevance” through re-entering African worldviews, ways of life, and experiences. On the other hand, it does not mean destruction or does not refer to the idea of going back in time and romanticizing and idealizing the past (Lange, 2019).

With the growing interest in decolonization, there is a good opportunity to explore this topic in African contexts, as most of the current research and reflection focuses mainly on settler colony contexts and the indigenous people in North and South America and Oceania, especially Australia and New Zealand (e.g., Carrió & Cooper, 2022; McGaw & Pieris, 2014; Paul & Bloomfield, 2020). This paper explores an Afrocentric decolonization of Architecture in Africa.

## Problem Statement and Aim

“Amidst all the relationships it avows to politics, history, culture, social issues, technology, and much else besides, architecture has been and remains enmeshed with colonialism” (Herscher & León, 2021). Colonialism significantly contributed to the disconnection between the past and the present in Africa by designating indigenous architecture as backward and antiquated. Consequently, Africa’s distinct indigenous architectural styles can only be found in rural areas. The majority of flourishing African cities established by colonial powers have become homogenized, resulting in a disconnect with the continent’s architectural history. In addition, there have been few attempts to learn from indigenous architecture and implement it in contemporary African architecture due to its stigmatization since the colonial period. In order to encourage the incorporation of indigenous architectural styles into contemporary African architecture, this project seeks to investigate the means of connecting Africa’s architectural past and present.

## Decolonial thinking

Despite ongoing scholarly debates on the theoretical foundations of decolonial research, there is currently no standard decolonial theory, particularly in the design and planning fields. Rather than being a monolithic paradigm, decolonial thought is characterized by diverse perspectives and approaches. This project is informed by one of the relevant and often cited tenets of undertaking a decolonial project- unlearning and relearning (Ndlovu-Gatsheni, 2018; Tlostanova & Mignolo, 2012).

The decolonial process of “learning to unlearn in order to re-learn” (Tlostanova & Mignolo, 2012) and opening to various forms of knowledge and thinkers beyond those from dominant European-American contexts (Ndlovu-Gatsheni, 2018) implies engaging in “ a continuous project of undoing and unlearning colonial modes of thinking and knowledge production. Some of the key colonial modes of thinking include extractive behavior, competition over resources, valuing hierarchies, and suppressing the voiceless ..., among other things” (Shafiei et al., 2022).

To respectfully understand, learn, and incorporate the vanishing values of pre-colonial architecture while critically examining the effects of colonialism and its effects on the built environment in the African context, it is necessary to unlearn those things that are not currently serving us well and relearn those things that will improve life in the present (Herscher & León, 2021). This process begins with asking critical questions about existing situations, identifying their flaws, and acknowledging the need to unlearn certain perspectives by breaking free from the thinking programs imposed by education, culture, and social environment by hegemonic, imperial, and predominantly Western systems of thought (Tlostanova & Mignolo, 2012, p. 7). Learning to unlearn enables architects to create design responses informed by an insider’s perspective, even when working in unfamiliar contexts.

Although this research concentrates primarily on unlearning and relearning, considering Kenyan architecture from an Africa-centered perspective, it is worth stating that unlearning and relearning are for more than just decolonial research. It should be an integral part of any design research involving contexts with a disconnect from the past or where external influences have substantially altered the context.

Even though many aspects have to be unlearned, this project mainly focuses on the following five areas and tries to relearn positive aspects using the past as a resource:

## Research questions

1. How can we decolonize the architecture in Africa to create a meaningful link between the continent’s architectural past and present?
2. What lessons may be taken from Africa’s indigenous buildings to guide decolonization efforts in the continent’s built environment?

## Decolonial designing tools

Even though many aspects have to be unlearned, this project mainly focuses on the following five areas and tries to relearn positive aspects using the past as a resource:

1. Unlearn methods of construction that utilize non-sustainable building materials with large carbon footprints. Local building materials with a minimal carbon footprint can be re-learned.
2. Unlearn a fiercely individualistic and competitive capitalist work culture. Instead, we could relearn a precolonial work culture that values collaboration. We should relearn the concept of Ubuntu, which translates to "I am because we are; and since we are, therefore I am." Ubuntu will be discussed in depth in the "Coworking in Africa" section of this paper.
3. Unlearn the energy-intensive artificial cooling methods that are presently employed in cities. This offers the chance to relearn local passive climate responses, such as evaporative cooling and shading systems.
4. We can re-learn the outdoor working culture if we unlearn the indoor working style and spatial organization that modernism has introduced, in which people confine themselves in cubicles that have no contact with the external natural environment. Important learning elements are shades.
5. Unlearn the colonial architectural forms that are brought along with colonization. Since I am speculating here, I will have the chance to relearn pre-colonial African architectural forms and spaces and examine the potential applicability of pre-colonial architectural styles to contemporary architecture.

## Method

This degree project can be considered as research by design as it is a " kind of inquiry in which design is a substantial part of the research process (Hauberg, 2011, p. 51). It utilized ethnographic case studies of various vernacular architectures from different tribes in Kenya and attempted to relearn positive aspects while unlearning aspects of the existing design and construction modern trends that do not serve the context particularly well. It also examined designs by newly emergent architectural movements that base their contemporary design on the traditional architecture of various African regions.

This study uses digital models to understand how traditional materials and tectonics function prior to the spatial design phase. Without a design site, the design considered decolonial design methodologies and learned more about the spatial experience.

This thesis project employs a hybrid design approach that combines global design trends, such as sustainable design strategies and contemporary timber building design, with precolonial tectonics and spatial experience.

The site analysis was conducted through discussion and digital site research.

### **On-going discussions about architecture in Africa relevant to decolonizing architecture**

Although they did not directly address the issue of decolonization in architecture and design, ideas related to recontextualizing architecture and hybridization of architecture could be capitalized upon to undertake the process of learning and unlearning the decolonial project requires.

### **Recontextualizing**

Recontextualizing African architecture is an ongoing discussion by architects to forge links between contemporary architecture, past building styles, and spatial qualities. This movement aims to connect with people and their disappearing built environments, which have been de-contextualized throughout the century of colonization. Recontextualization seeks to reintroduce important values and styles from pre-colonial to current contexts. Using design research elements from the past, current design practices are applied.

## Edo museum

In his Edo museum design proposal, Sir David Adjaye has reimagined an African museum compared to the famous modern museums in Europe. The layout of the museum plan imitates the courtyard style of architecture that used to be the city of Benin, which was destroyed in 1897 and the place of the king. The facade of the building also reflects the local thought and straw stacking style architecture, as seen in the figure. Adjaye says that the layout of the building is based on the ruins of the old city that Benin City was built on top of.

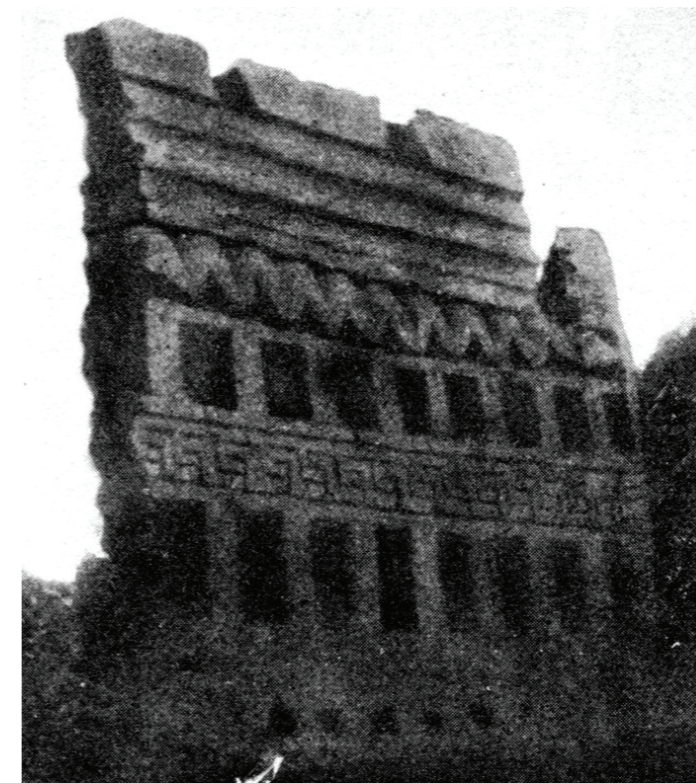
The architects researched *the ruins of the former city of Benin and its courtyard networks they reconstructed the inhabitation of this forms contemporary museum pavilions in order to recontextualize the building and the artifacts that the building will house.*

The Edo Museum of West African Art (EMOWAA) will serve as a re-teaching instrument to bring back forgotten collective memories of the past and instill in its visitors an appreciation for the vastness and relevance of these civilizations and cultures, detaching itself from the Western museum paradigm in the process.

Sir David Adjaye intended the building to be not only a traditional museum structure but more of an example of the undoing of the objectification that has happened in the West through full reconstruction."

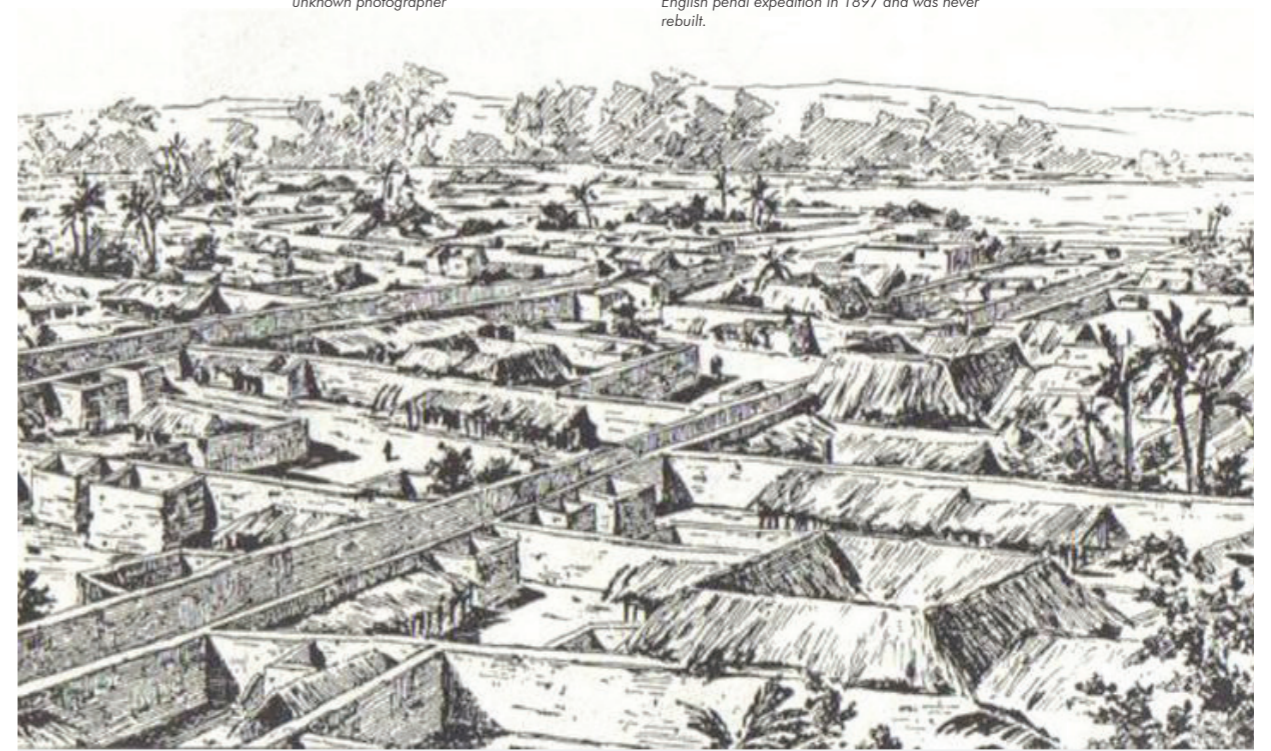
Dutch writer Olfert Dapper described Benin City at its height: *When you go into it you enter a great broad street, which is not paved, and seems to be seven or eight times greater than Warmoes Street in Amsterdam. This street is straight, and does not bend at any point. It is thought to be 4 miles long. At the gate where I went in on horseback,*

*I saw a very big wall, very thick and made of earth, with a very deep and broad ditch outside it... And outside this gate there is also a big suburb. Inside the gate, and along the great street just mentioned, you see many other great streets on either side, and these are also straight and do not bend*



Top: the benin city wall as was photographed in 1897: before its destruction. it were 4 times larger than the Great wall of China. Source: unknown photographer

Bottom: Benin City, thought to be established around 1180, located in what is now Nigeria, was completely razed to the ground during an English penal expedition in 1897 and was never rebuilt.





## Thabo Mbeki Presidential Library

Another project by Sir David Adjaye is the Thabo Mbeki Presidential Library. In the project, the architect took inspiration from the structure of granaries that are used to enable the extension of grain production and the systematization of feeding, planting, and harvesting cycles.

Using architecture as a tool, the architects reimagine storage and sustenance into form; the granary containers dictate the design of the entire building. The eight cylindrical granary-styled forms are made contemporary by adding structures with apertures that consider the solar orientation of light on the site to create a unique environment for each program housed within. The internal infrastructure of these compartments allows the building to serve various programmatic purposes. They are connected by an 'indoor den', a horizontal interstitial space extending the length of the entire structure and providing a new public space for the community.

David Adjaye stated, "The architecture of the library taps into the collective memory of the continent through the establishment of a new historical center for African consciousness in which knowledge, education, and sustenance are nurtured in the representation and intelligence of the continent" (Stevens, 2020).

In an effort to reduce the library's carbon footprint, all of the mud that will be used to construct the rammed earth structures will be sourced locally. Similarly, segments of the building's timber cladding will be harvested from native wood species, and the terrazzo flooring will be crafted from native stone.

A hallway will run the length of the building connecting the domes. A big spiral staircase will lead down to the underground level on one side.



Graneries from different regions of Africa

Thabo Mbeki Presidential Library, Courtesy of Adjaye Associates



Thabo Mbeki Presidential Library, Courtesy of Adjaye Associates



## The Hikma religious and secular complex

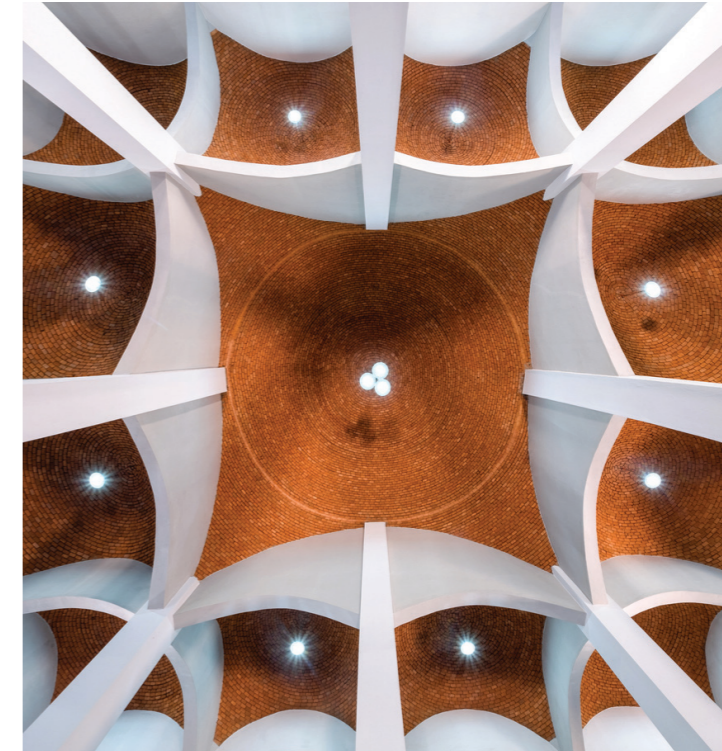
In her religious and secular complex design project located in Niger, Mariam Kamara sought to address the lack of aesthetic identity caused by colonial rule, which homogenized African cities with images of their colonial rulers rather than their indigenous history. Her work, in contrast, employs commonplace techniques and materials.

Kamara noted that due to colonization, one of the things that occurred in the 20th century was that we all came to believe that being modern and contemporary meant adhering to a particular aesthetic and abandoning indigenous materials.

In the religious and secular complex project, the architect adopted a similar approach to so-called Islamic architecture from the Middle East, which is prevalent throughout the country, resulting in all mosques resembling mosques from the Middle East but bearing no resemblance to local identity. Through research, the architects discover examples of 17th-century mosques, endeavor to understand how the spaces are organized, and then create a modern interpretation of the design.

Kamara hopes that her design will invoke the collective memory of the past and have a profound psychological effect on the residents' daily activities. She also believes that the design could influence how users perceive themselves and how the architecture represents them positively.

An essential lesson from this project is that the architects created a hybrid system of contemporary architecture and traditional masons to create something more modern and less maintenance-intensive. For instance, traditional masons affixed dome roofs to contemporary builders' concrete frame structures.



A hybrid roof structure at Hikma Center made from modern steel reinforced concrete and the traditional vault roofing technique, Source; <http://www.ateliermasomi.com> © James Wang

Hikma Community Complex - A Religious and Secular Complex / atelier masomi + studio chahar. Image © James Wang



Hikma Community Complex - A picture showing Left; the restored old mosque, which is now a library, and right; the new mosque / atelier masomi + studio chahar. Image © James Wang

## Hybridity and Critical Regionalism

In this study, the term hybrid is used to describe the combination of global and local tectonics. It refers merely to the simultaneous employment of global and local tectonics. Its meaning evolves to require a measure of mutual subversion where global and local tectonics become visually and physically inextricable. Hybridization creates a meeting point between different ways of making. It is born from both social and productive encounters between contributors from different contexts, physical encounters between the older and newer tectonics, and design approaches.

The concept of hybridity cannot be reduced to a simple 50/50 combination of local and global elements. Rather, it has the potential to generate a novel and distinct configuration that may incorporate a memory of the past but reinterprets it on the basis of its contemporary relevance.

Frampton (1983, p. 27) suggests, "the primary principle of architectural autonomy resides in the tectonic rather than the scenographic." Szacka and Patteeuw (2019, p. 93)

"in which the tactile would surpass the visual, the tectonic would win over the scenographic, and the hybrid would be favoured over the homogenous." In hybrid tectonics, the global and local are compared using the same criteria. To address structural inequality, the global and local are regarded on an equal basis and not as a center and a periphery.

Mainstream architecture is unsustainable due to insufficient attention to socio-environmental costs, traditional local ways of making, and unequal access to resources. Local tectonics often do not conform to current health and safety standards nor allow for the incorporation of emergent technologies or new tectonic encounters. A shift towards a more hybridized approach to making can help address them.

According to Frampton, The word tectonics refers to a way of making that has clearly related aesthetic, artistic, and poetic characteristics.

Critical regionalism is an architectural approach that seeks to tackle the placelessness and lack of identity of the International Style while rejecting Postmodernism's fanciful individualism and ornamentation.

## Hybridization of art

Utilizing appropriation as a method for incorporating traditional aesthetics into modern practice, hybrid aesthetics combines traditional and contemporary design aesthetics. It is a style that combines two or more cultures, styles, or techniques to produce unique art within the cultural boundaries while concurrently elevating mundane visual forms or art to a creative contemporary status. Akpang (2013, p25)

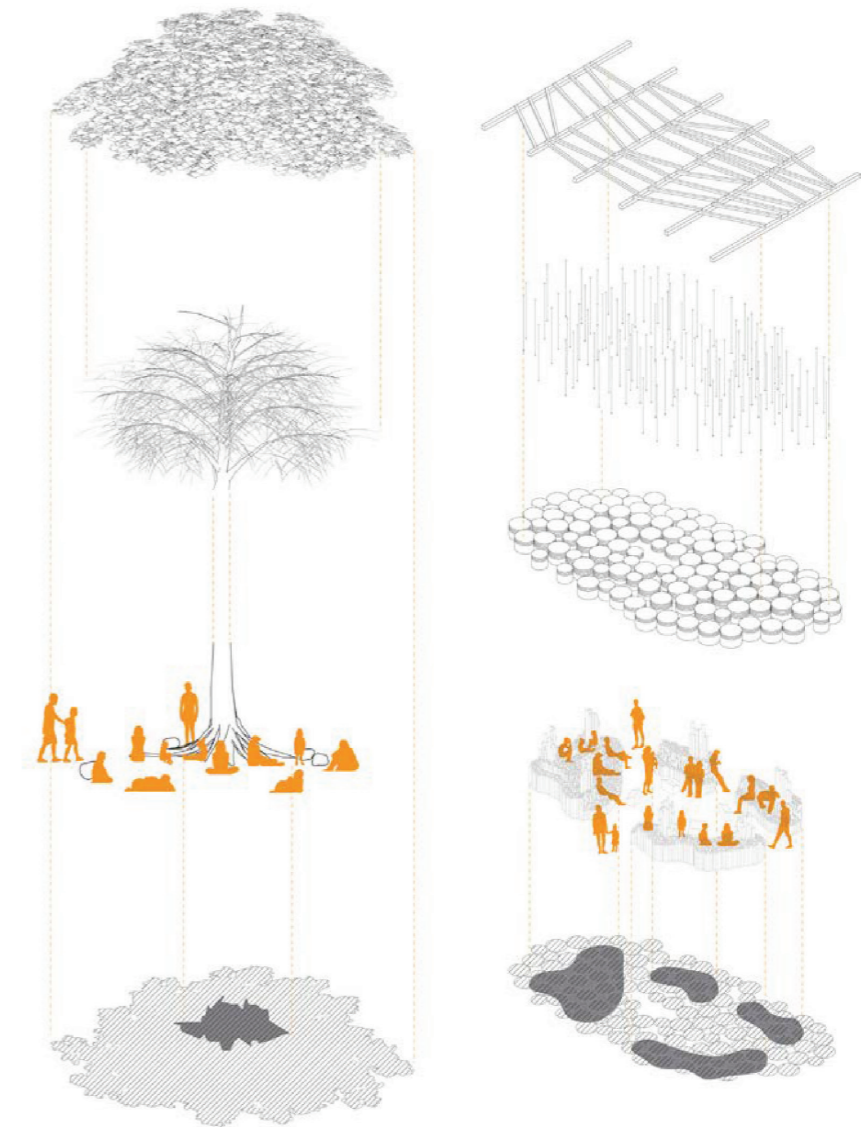
## Louisiana Canopy

Francis Kéré's design references the great tree as a connecting symbol between the seemingly disparate cultures of West Africa and Nordic mythology. In the same way that a tree's canopy protects from the elements while still allowing sunlight and air to pass through, so did the Louisiana Canopy's architects. This architectural work, inspired by Kéré's native Gando and its ancient architectural forms and practices, drew attention to the role that is shading and sheltering play in protecting people from the sun and creating natural places to congregate. Visitors can sit on the wooden ground beneath the canopy and enjoy the shade as they think, talk, and get to know one another. A programmed high-intensity daylighting system, which follows the arc and movement of the sun throughout the day, adds drama to the ceiling's flexible structure.

A modular hexagonal framework in weathering steel rests atop seven steel columns, and the canopy's logs are built in circular bundles, as described by Kéré. A circular topology that matches the surrounding hills has been sculpted into the canopy's upper surface. The large yet airy roof is modeled after the "toguna," the sacred area in every Dogon community; the "toguna" is made of wood and straw and is shaped to provide shade while allowing air to circulate underneath.

The logs come from nearby trees and are cut to uniform lengths before being tied together to simulate the dense canopies of tropical forests. Hexagonal bundles are suspended from the ceiling to form the canopy.

*Xylem, the gathering pavilion for the Tippet Rise Art Centre, photograph by Iwan Baan*



*Conceptual and spatial mimicry combined with local tectonics at Canopy, Louisiana Museum of Modern Art Denmark, 2015, Kéré Architecture. Source: Holm and Kallehauge, 2015: 162.*

## Fass school by Toshiko Mori

Toshiko Mori explains that Vernacular knowledge was incorporated into more modern engineering techniques to construct a large, institutional public building with local labor and materials. As a global tectonic strategy, the parametric design was utilized to invert the local tectonic strategy of a conventional pitched roof form to maximize the usable footprint and collect rainwater, which is collected in two 570m<sup>3</sup> reservoirs. The most prominent feature of the Thread Centre is its roof. Mori explains that the architects transformed a traditional Senegalese shanty into a large public building. Although this may sound trivial, reinterpreting the traditional vernacular form is quite sophisticated.



*The Fass School. Source: Iwan Baan/Sofia Verbolovskis [Online] Available: <https://tmarch.com/fass>*



*Impluvium houses in Senegal. Source: Holm and Kallehaug, 2015: 143 (photographer unknown). <https://tmarch.com/fass>*

## Project site

### Nairobi

Nairobi is the largest city in East Africa and the capital of Kenya. It is a major regional economic, technological, and financial center. The population of Nairobi is 4.3 million, while the population of its metropolitan area is 10 million. The city is expansive, with numerous business districts that also include residential neighborhood such as Westland, Upper Hill, and Kilimani.

Despite Kenya's location on the equator, Nairobi experiences pleasant weather throughout the year due to its elevation. Unlike most African cities, Nairobi is colder, with temperatures in July dropping to 12 and 10 °C. The average yearly temperature in Nairobi, Kenya, is 24 °C Nairobi's hottest months are February, March, September, and October, when temperatures can hit a high of 27 °C. It has two rainy seasons. The longest is from March to May, while the shorter rainy season is from October to December.

### Rethinking co-working spaces in Nairobi

This section of the project explores the two interrelated concepts on which the main part of the design undertaking focuses- Kenyan vernacular architecture and co-working spaces.



Giraffe and sky line Nairobi; source: <https://www.andbeyond.com>

## Westlands

Westlands is an affluent mixed-use neighborhood in Nairobi that has experienced significant growth in recent years. It is one of the eight administrative divisions of Nairobi County and is home to hotels and malls. Westlands has a cluster of shops, restaurants, bars, nightclubs, and, most importantly, big shopping malls. Additionally, Westlands is considered a safe and quiet place to live in the city, with schools and hospitals within 5-15 minute drive. It is also an essential business district, with many buildings containing offices and shops.

Westlands has a diverse range of buildings, from high-rise buildings to single-story buildings. The scale of the site is mixed as its mixed-use, allowing flexibility in building size and height. This mix of building types allows for flexibility in size and height. The neighborhood is a bustling hub for various activities, making it an ideal location for testing the flexible co-working building concept. The proposed building will be on an empty plot in the district, providing a prime location for individuals to come and go as they work and participate in the vibrant Westlands community. As the district is an example of design and construction trends in Kenya and Africa in general, it will open an opportunity to compare and contrast the decolonization of architecture in Africa and learn from it.



An aerial view of Westlands area, Nairobi; Photo by: Kageni Joe, Source: <https://www.istockphoto.com/se/foto/nairobi-westlands>

## Vernacular architecture

While researching pre-colonial Kenyan African architecture, and discovered that wood and clay are commonly used materials (the materials are still being used extensively in many parts of Africa). In particular, I found that in Kenya, wood is often used to frame the exterior of clay structures, creating a type of exoskeleton-like structure. This combination of wood and mud has the potential to be both structurally sound and sustainable, as well as aesthetically pleasing.

These indigenous building designs have been developed to suit the tropics and slightly cooler temperatures. The circular floor plans with conical thatched roofs are exemplary in their adaptation to the environment and extensive use of local materials with low embodied energy. Mud walls with high thermal mass and the thatched roofs ensured that the temperatures inside the building remained relatively constant throughout the day. The houses were clustered in areas with huge trees, enhancing community life and using the environment as a thermal barrier. The individual houses had very small operable windows and allowed minimum light to get into the house.

Technology can work to enhance the vernacular, and the combination should be embraced to achieve the optimum. We can learn from vernacular architecture by looking at the seemingly simple methods by which we can create a building perfectly adapted to the building's users and the building's locale. These methods have been tested over time and have evolved to fit a society's needs.

## Selected vernacular case studies

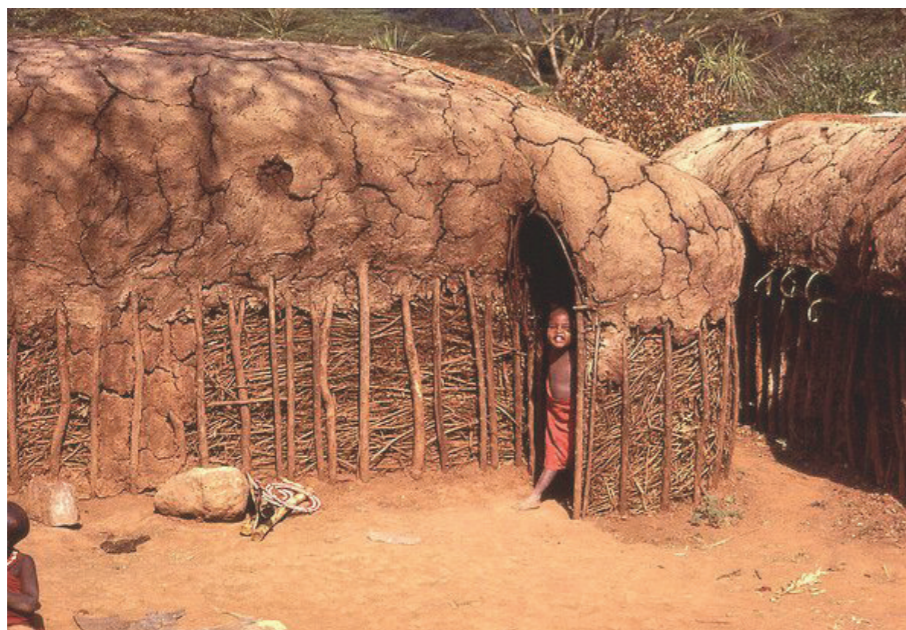
Kikuyu vernacular architecture



Taita vernacular architecture



Maasai vernacular architecture



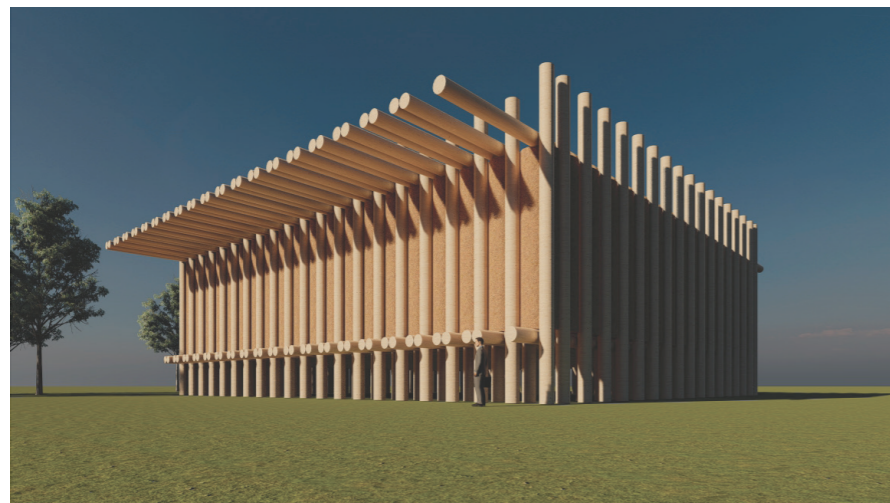
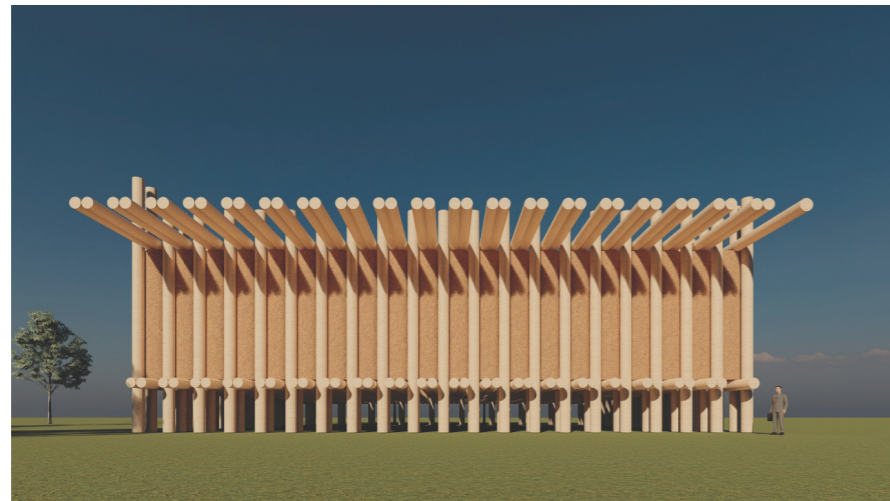
Turkana vernacular architecture





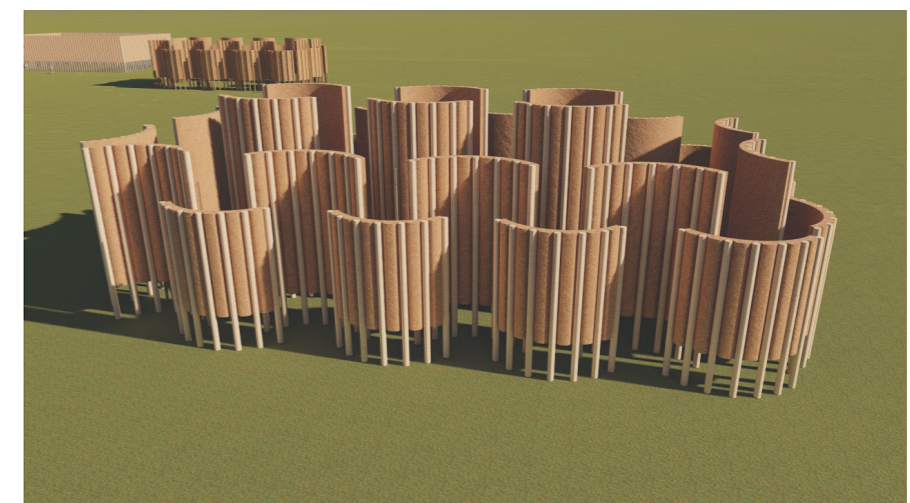
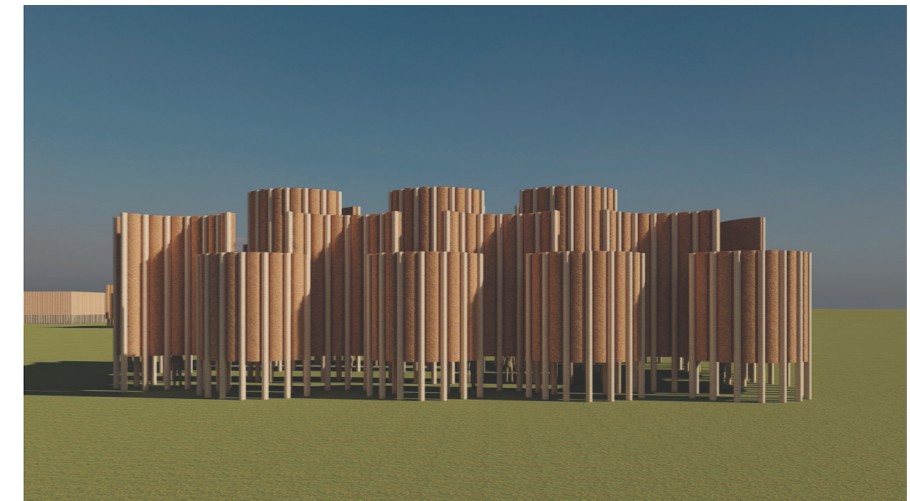
## Tectonics experiment

Using relearning and hybrid tectonics, the following formal and technical investigations have been conducted. I have primarily concentrated on investigating the mud framed by the wood. Initially, I utilized two designs to enclose a space: a straight surface and a curved surface.



*Digital experiment to explore the potential of mud and wood framing with straight walls. Self-experimentation*

The preliminary renders on the left showcase my experiments with integrating circular timber posts into a mud surface. Meanwhile, the renderings on the right depict my exploration of a curved wall constructed from mud and wood posts. Both experiments were conducted as part of my research on potential hybrid tectonics.



*Digital experiment to explore the potential of mud and wood framing with curved walls. Self-experimentation*

## **Design research and proposal**

### **Co-working in Africa, introduction**

According to Allwork Space's article *The Growing Coworking In Africa*, innovative, dynamic, and frequently youthful entrepreneurs are driving the rapid expansion of coworking across Africa. Locally founded workspaces, coexist with the world's largest coworking networks, like IWG/Regus and WeWork. Emerging in cities across the continent, these locations offer the possibility of socioeconomic benefits.

According to the same article, only 1,158 coworking spaces are available in Africa, a small fraction of the total 27,000 coworking spaces worldwide. Considering that young people make up 60% of Africa's population and are expected to account for 42% of the world's adolescents by 2030, even though the article didn't indicate the size and areas of the co-working spaces, it is clear that the current number of coworking spaces will not be adequate to meet the needs of the growing freelancer population. Therefore, there is an urgent need to establish more coworking spaces in Africa to support the increasing number of young entrepreneurs and freelancers.

Many businesses now opt for more adaptable workplaces as the nature of work changes. Such workplaces are favored by business owners because they provide adaptable settings for employees to work in without the high costs and time commitment associated with changing a conventional office. The fact that these shared offices are overseen by specialists in the contemporary work environment also contributes to their efficiency and effectiveness.

The same article points out that cooperation happens to be a commonly shared element between the most successful co-working spaces in the continent. "Value concepts such as collaboration, cooperation and Ubuntu (a Nguni term for humanity) feature on the websites of many African coworking spaces. The partnerships that exist with start-up businesses are also crucial to the success of many coworking spaces in Africa." Allwork Space's article.

## **Ubuntu value concept**

Ubuntu derives from the Nguni and Bantu languages of Africa. In the Zulu language of South Africa, the word symbolizes being human. This meaning is also expressed in other languages. In Shona, a Zimbabwe language, the word unhu means the same thing (Samkange and Samkange, 1980). The same meaning is expressed by ubuthosi in Ndebele, another Zimbabwe language. In Botswana, the word botho expresses the same meaning whilst in Tanzania, it is bumuntu. Congo, Angola, Malawi, Mozambique and Uganda use the words bomoto, gimuntu, umunthu, vumuntu and umuntu respectively. Of all these words, and many others not mentioned here, the word ubuntu has gained popularity mainly because it has been popularised in South Africa, where a simple Google search will show that ubuntu is attached to a lot of things: ubuntu schools, ubuntu conferences, ubuntu names, ubuntu loans, ubuntu child care, ubuntu awards, ubuntu counseling services, and many others (Jacob & Andrew, 2013 p. 85).

Ubuntu relates to bonding with others. This is in line with what the word expresses in most African languages: being self because of others. This is also in line with the popular Zulu saying: ubuntu ngumuntu ngabantu. Such sayings as I am because we are and I am human because I belong, express this tenet. This means that in African philosophy, an individual is human if he or she says I participate, therefore, I am. In Western aphorism, Hailey (2008) argued that the individual is expected to say I think, therefore I am.

## Co-working in Kenya

The majority of this section of the study is based on BuildX's research that explores the trends affecting offices in Nairobi and the implications of these trends in the future of workspaces based on a series of interviews with local companies and desktop research carried out during September-October 2022. Their findings shed light on several key trends in Nairobi's offices revolving around the following themes :

- Socialization plays a crucial role in building team dynamics in the workplace. Many companies try to promote personal interactions and connections between employees by encouraging their teams to go back to the office.
- There is a need for both teamwork and focused time across many sectors and organization types.
- More and more companies strive to make work enjoyable and fulfilling for their employees through a healthy work environment.
- There is an increasing emphasis on sustainability goals within the workplace.

*BuildX is a Nairobi based architecture, engineering and construction company.*

Based on these recurring patterns, the research identifies a range of design considerations to be kept in mind when creating tomorrow's workplaces:

- Offices should offer a range of workspaces and configurations to accommodate the diverse activities happening in the workplace.
- Some qualities of home can be brought into the professional environment to increase the comfort of employees at work.
- Designing offices that are friendly to the environment and that protect the physical and mental health of workers will benefit both people and the planet.
- Using natural materials in office spaces, such as timber, can lower stress and anxiety while increasing employees' satisfaction and levels of concentration and improving productivity. Timber construction also requires less time, less energy, and less polluting processes than other materials, becoming a great asset for net-zero carbon buildings (BuildX Studio Report, 2022).

## Diverse workspaces

Workspaces must accommodate a range of functions and ensure the comfortable co-existence of different tasks and activities.

The Five Work Modes concept introduces critical activities for knowledge creation and basic workplace organizing principles.

- **Focus** - Create zones for distraction-free work that power company success on an individual, team, and organizational level.
- **Collaborate** - Offer places that harness team synergy and serendipity to drive creativity and innovation.
- **Learning** - Create spaces that celebrate mentorship and learning across all levels of an organization.
- **Socialise** - Foster opportunities to build culture and social connections through environments that grow trust, meaningful work, and mental wellness.
- **Rest** - Provide purposeful spaces for respite, engagement, and positive distractions that encourage relaxation so people can let their minds wander. (BuildX Studio Report, 2022).

## From Social to Focus room

The workspace should reflect a range of tasks, with gradients of privacy to allow workers to choose the atmosphere they feel most comfortable.

Working from home is valued due to its casual atmosphere, which can be brought to offices by combining work and relaxed spaces.

- **Core private:** work and focus spaces, desktops, and private meeting rooms.
- **Reserved spaces** (often underutilized in traditional offices): board rooms, conference halls, projection rooms.
- **Communally shared** (with a curated use): gym, kitchen, library, nap, and nursing rooms.
- **Places for socializing:** lounge areas, cafés, restaurants, and game rooms. (BuildX Studio Report, 2022).

## Co-working space case studies in Nairobi

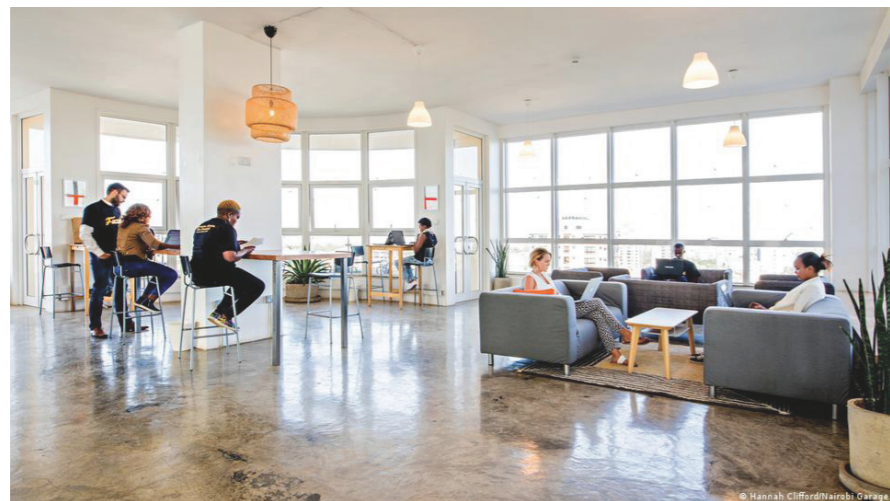
In response to the rising need for adaptable co-working space in Nairobi, a number of businesses have opened locations like Workify, Nairobi Garage, Shiriki House, and Kofisi. The following photos are of a popular coworking space in Kenya that follows the aforementioned design trends.

### Workify



A flexible co working space at Workify Nairobi, <https://www.coworker.com/kenya/nairobi/55103-workify-africa>

### Nairobi Garage



Flexible working space, Source; <https://nairobigarage.com/>

### Shiriki House



A private office and an open circulation Source; <https://www.shirikihouse.com/>

### Kofisi

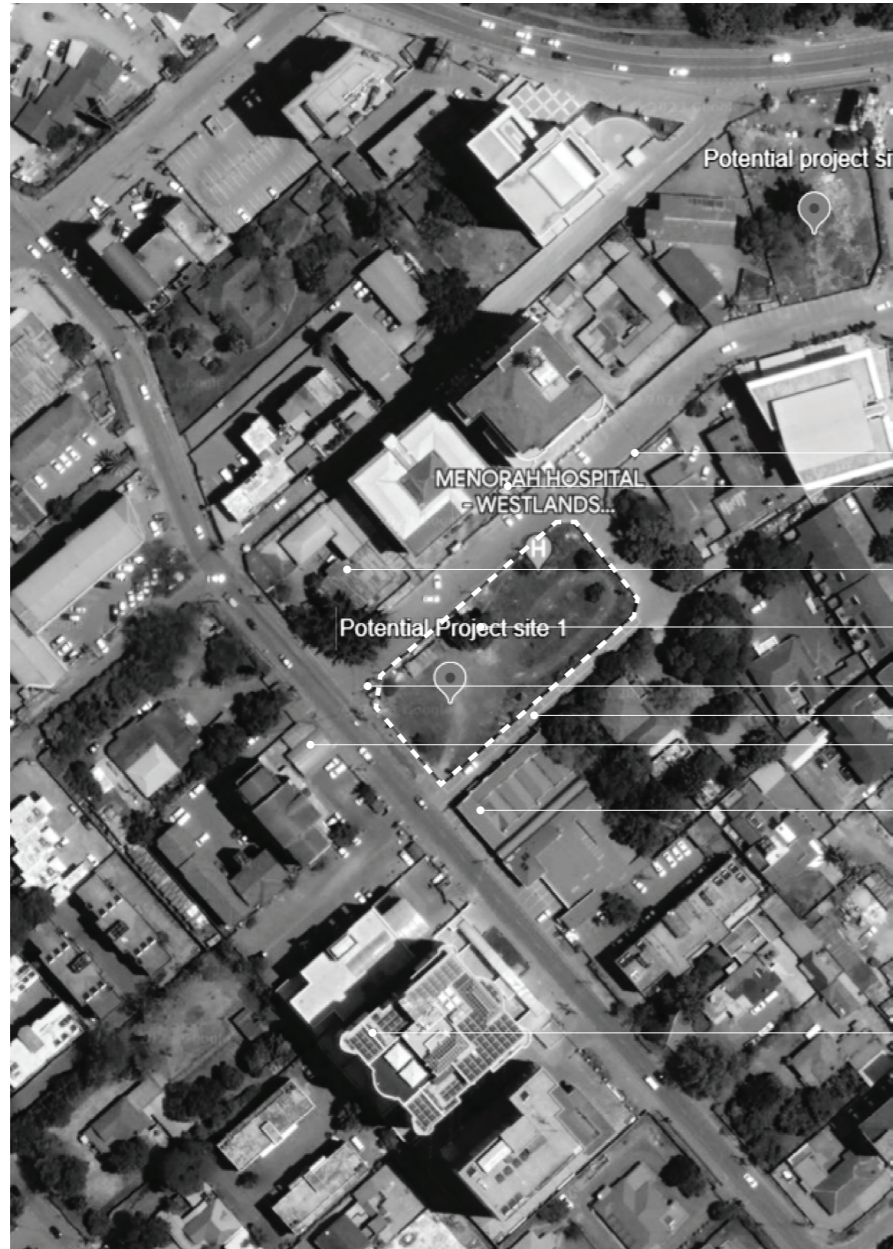


A casual atmosphere, flexible space ; <https://kofisi.africa/centres/riverside/>

## Design Proposal



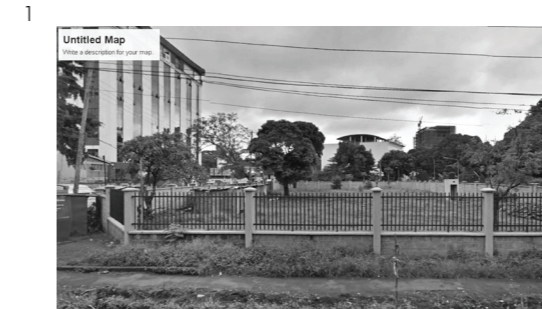
A Noll map displaying the design site's location in Westlands, Nairobi. The project location is highlighted in red.



- 7
- 8
- 5
- 1
- 2
- 3
- 4
- 6
- 1

Westlands is a rapidly developing neighborhood in Nairobi with numerous multinational corporations and large shopping malls. This location is ideal for tasting the approaches reflected in this thesis.

Source: google maps



The Design site



Small cafe and kiosk



Car parking



Buildings across the main road



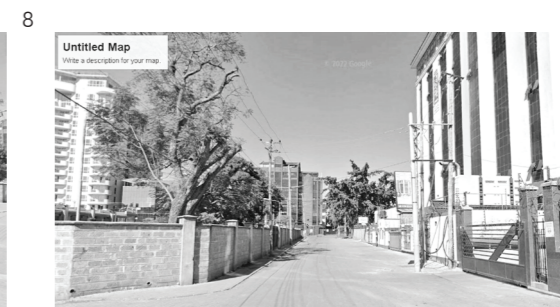
Northern part of the site



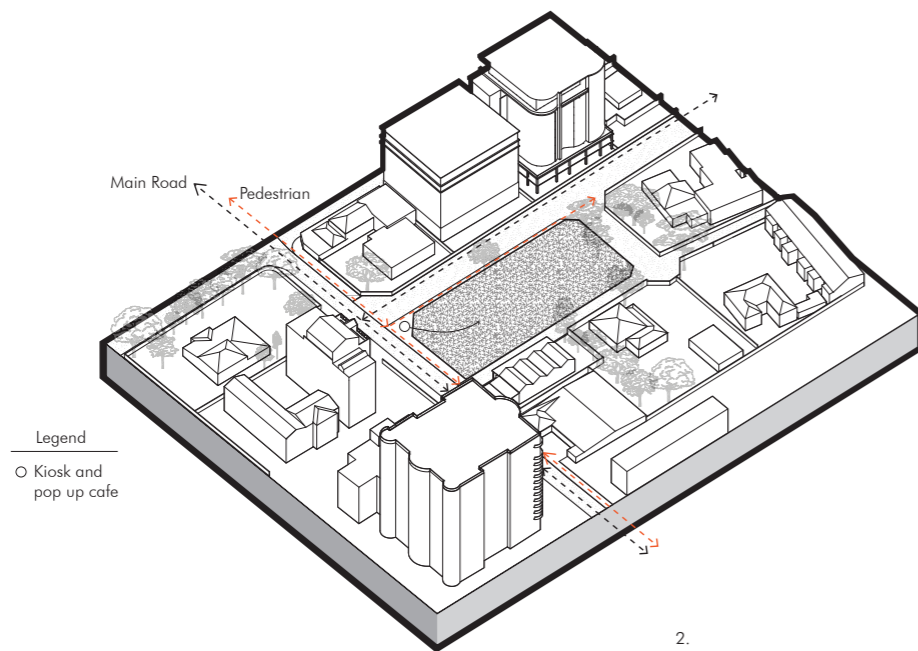
Southern border part of the site



Low rise buildings

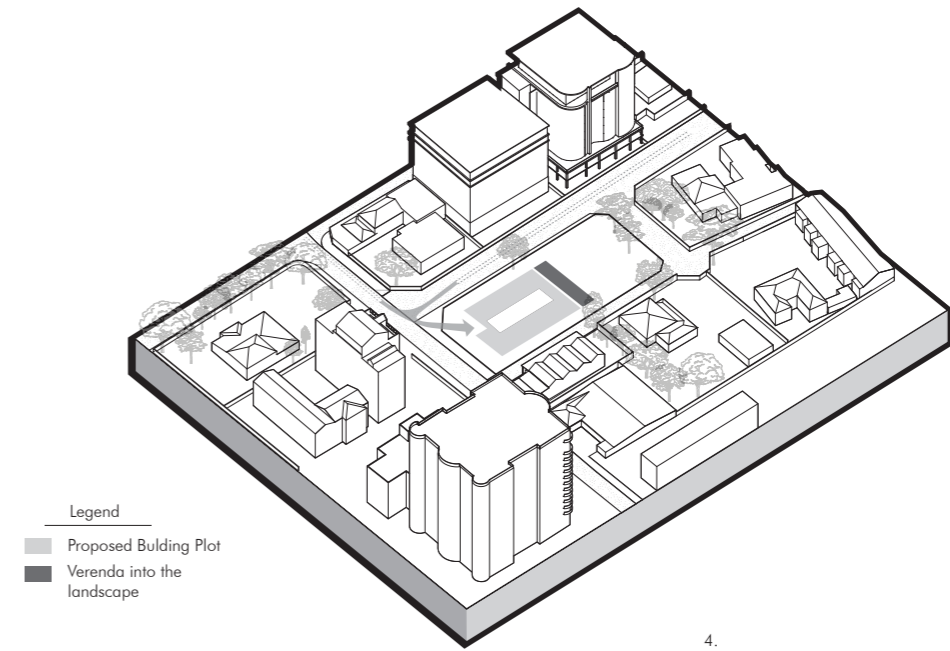


Northern part with low and high rise buildings



1. Compared to the surrounding building plots, the site's relative length allows for both a built co-working space and an open outdoor working space. The proposal divided the plot into two parts.

2. The plot has roadways on all sides and is 81 meters in length and 31 meters in width. The southwest part of the land is where the main asphalt road provides access, while the southeast portion is used for parking cars.



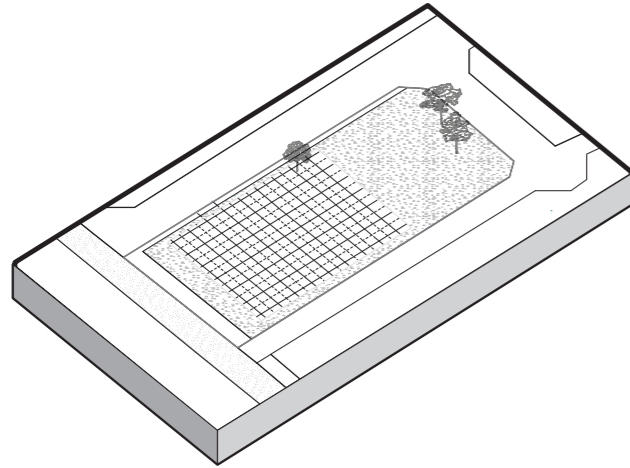
3. The northwestern part of the plot is an intersection point for two roads. This corner contains a tiny cafe and a kiosk. The design proposes relocating the small cafe and kiosk inside the building and transforming the site's active corner into the primary entrance.

4. In the center of the built area, a courtyard is introduced; this space will take advantage of the pleasant weather in Nairobi, making it ideal for outdoor and semi-outdoor activities. The open space will also serve as a meeting area for coworkers and will host a pop-up cafe that is relocated from the street into the building.



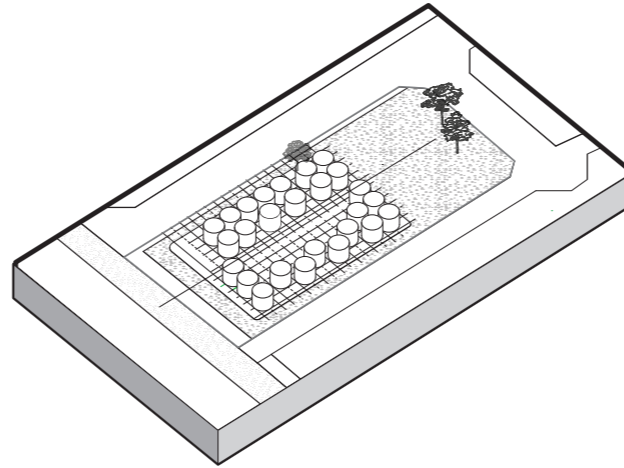
## Conceptual Approach

1.



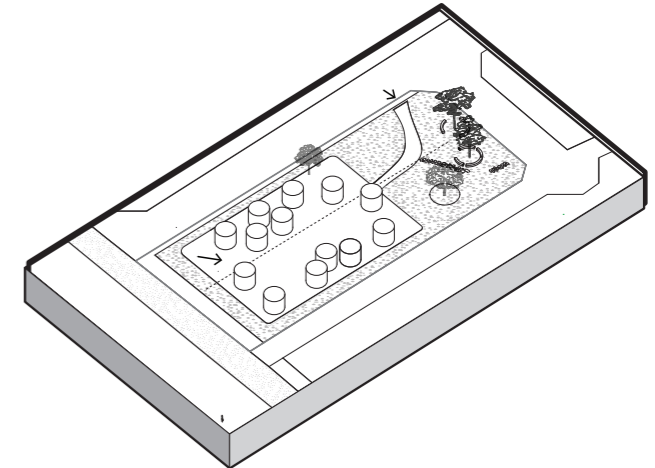
The site is divided into an organizational grid

2.



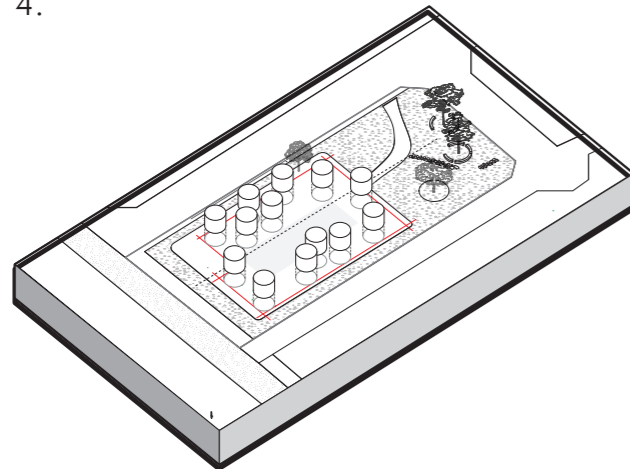
Cylindrical volumes are structured in a grid, drawing inspiration from the circular building typology in Kenyan vernacular architecture.

3.



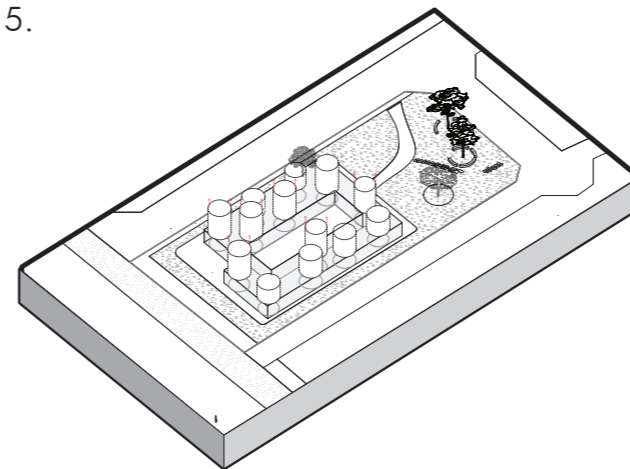
Remove volumes to create an open, flexible and adaptable space with sufficient room for movement.

4.



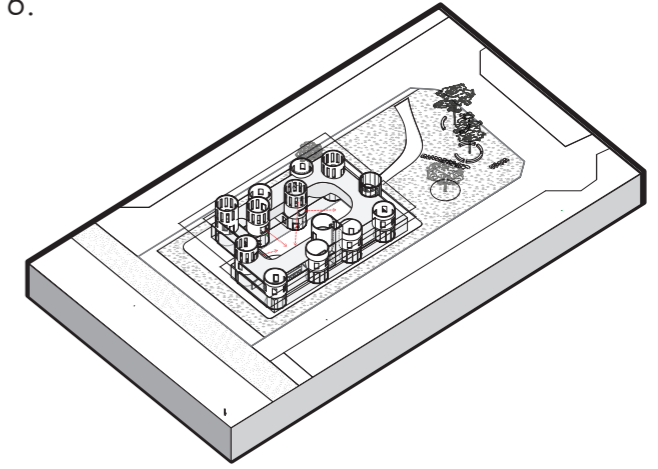
Elevate the volumes to produce a flexible, open ground floor that complements the courtyard. This will allow users to freely occupy and adapt to their preferred working space.

5.



Different heights are assigned to the raised volumes to disrupt the symmetry. The ones closest to the entrance are elevated to emphasize the main entrance.

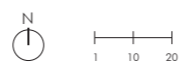
6.



Introducing floors that connect the volumes results in multiple storeys while leaving the courtyard open.



Situation Plan



## Building Program

### Ground Floor

- Entrance
- Reception
- Administrative Office
- Restrooms
- Locker
- Printing room
- Store

### Open Working area

- In door Pop-up cafe
- Pedestal Working area around the pop-up cafe
- Central workspace in the manner of a living room
- Open auditorium Cafe style working space
- Conference room
- Rentable office
- Personal, Partially-Communal Office Space
- Shared working space
- Private working spaces
- Small meeting spaces
- Game room
- Indoor plants

### First floor

- Hidden working spaces
- Private working rooms
- Exterior nooks
- Sofa working areas
- Group working areas
- Pedestal
- Restrooms
- Private working rooms
- Shared but private working areas
- Rentable working spaces
- Small meeting spaces
- Larger meeting spaces

### Second floor / Roof terrace.

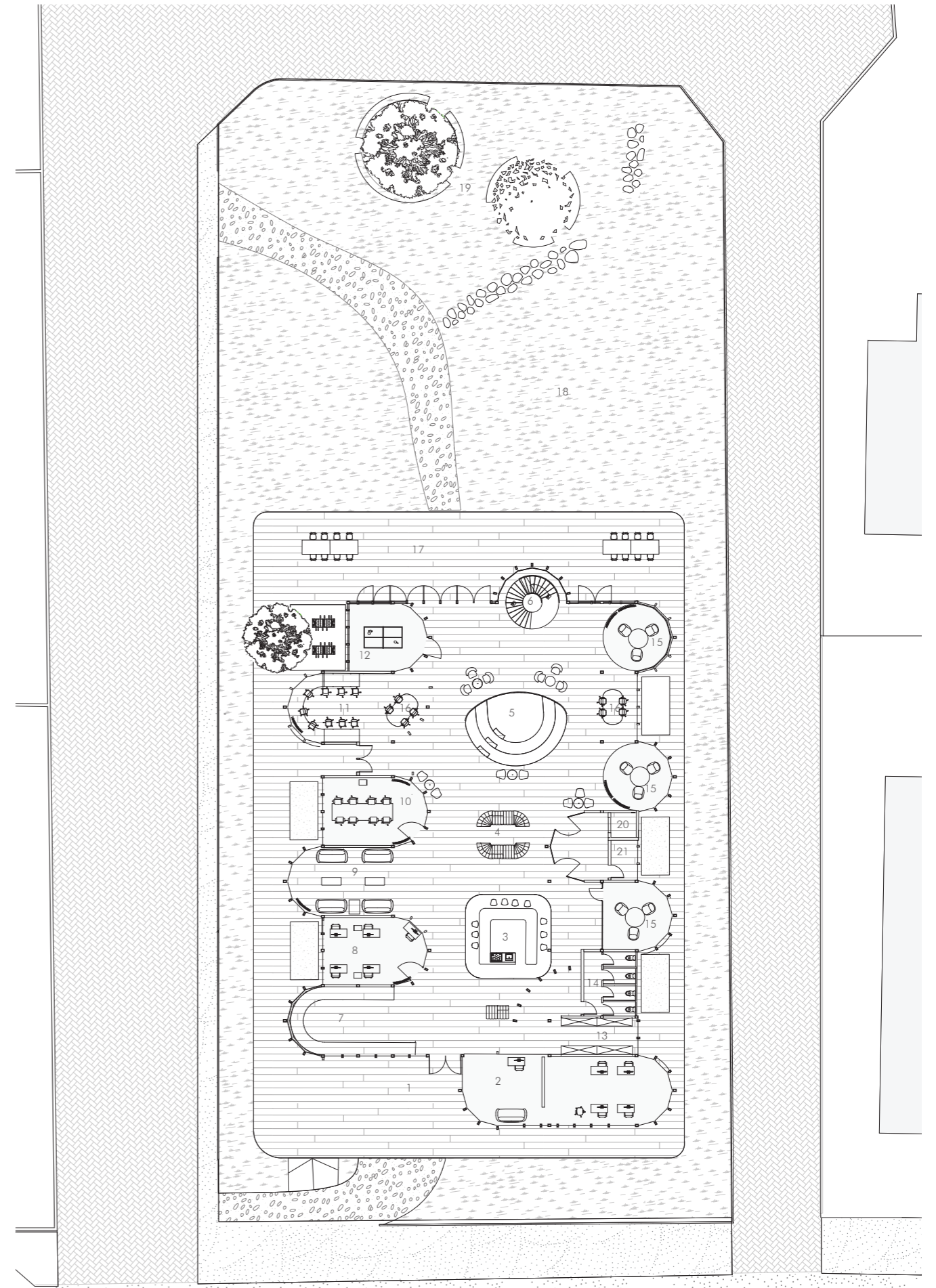
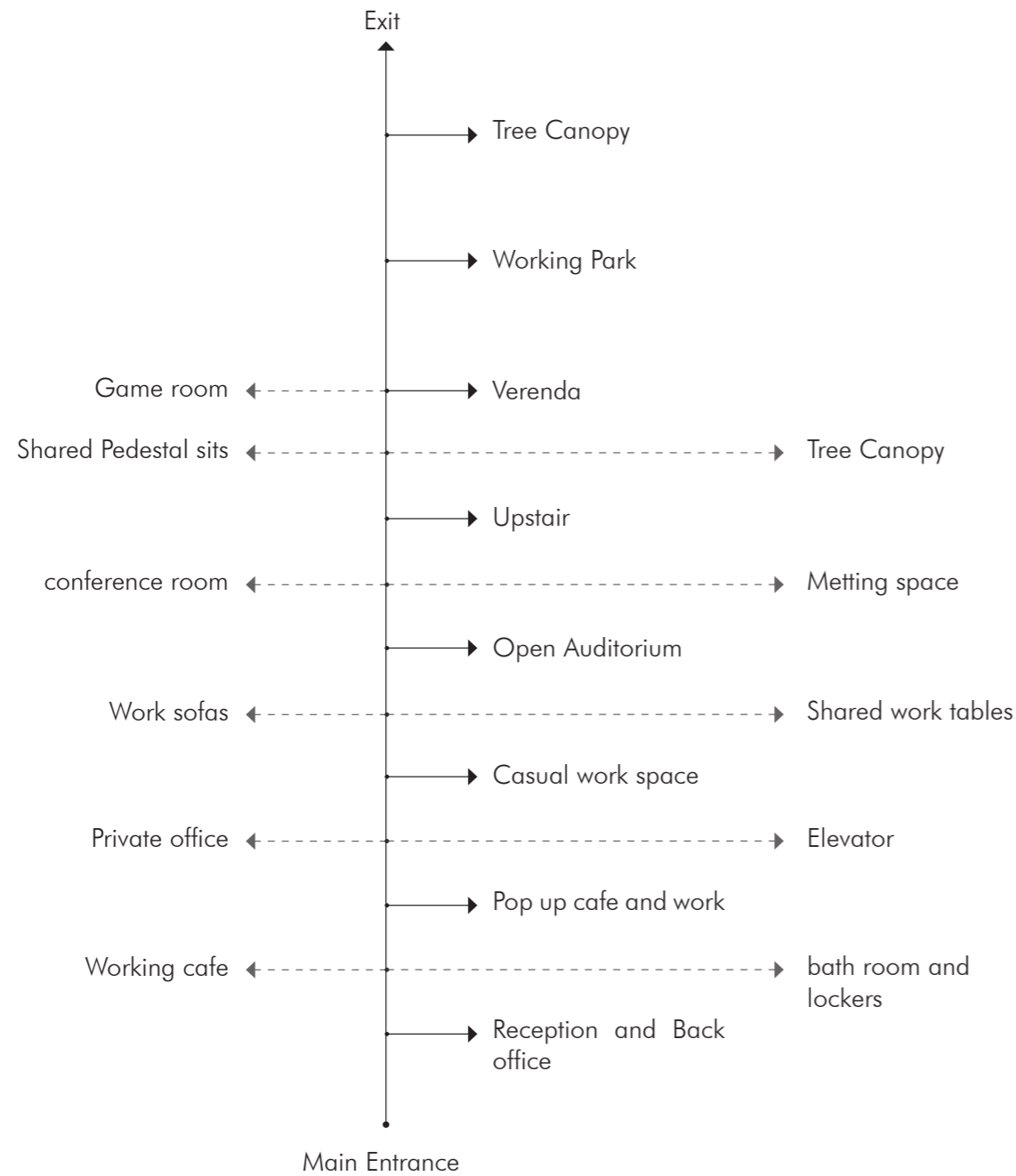
- Large socializing shared spaces with tables.
- Private spaces
- Restrooms
- Rentable working spaces

### Outdoor

- Verandah working and meeting area
- Garden
- Tree canopy meeting place

### Building Program arrangement

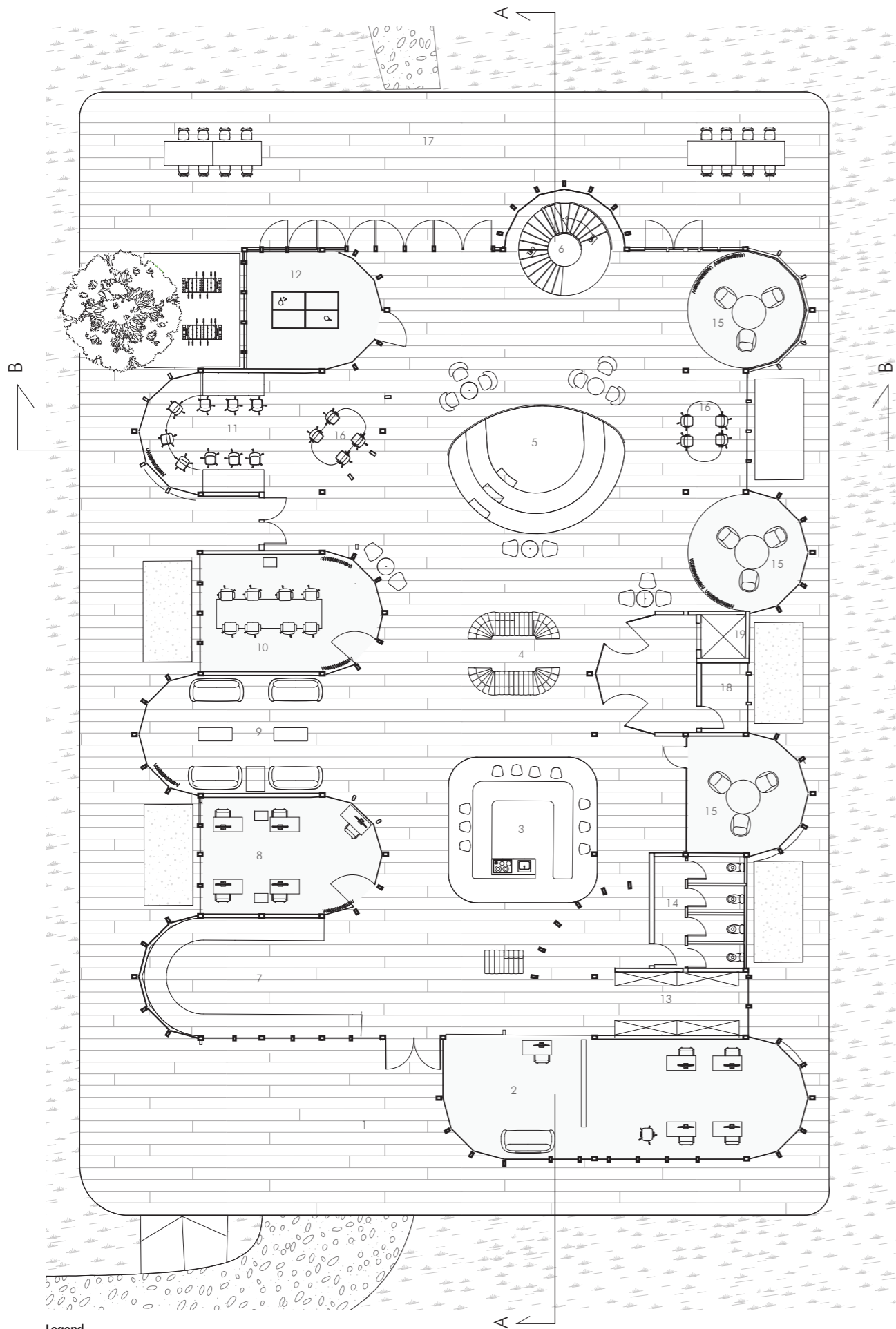
The ground floor is organised into private, semi-private, and shared working areas. Openings are introduced in a way that overlooks the open courtyard working area.



**Legend**

- |                              |                                |                               |
|------------------------------|--------------------------------|-------------------------------|
| 1. Main Entrance             | 8. Private office              | 15. Discussion Spaces         |
| 2. Reception and back office | 9. Sofa seats - shared         | 16. Open shared tables        |
| 3. Pop up Kitchen - Pedestal | 10. Conference room - flexible | 17. Veranda                   |
| 4. Casual Work space         | 11. Silent shared working area | 18. Work Park                 |
| 5. Open Auditorium           | 12. Game room                  | 19. Tree canopy meeting space |
| 6. Spiral Stair              | 13. Lockers                    | 20. Elevator                  |
| 7. Cafe sit working area     | 14. Bath rooms and             | 21. Store                     |

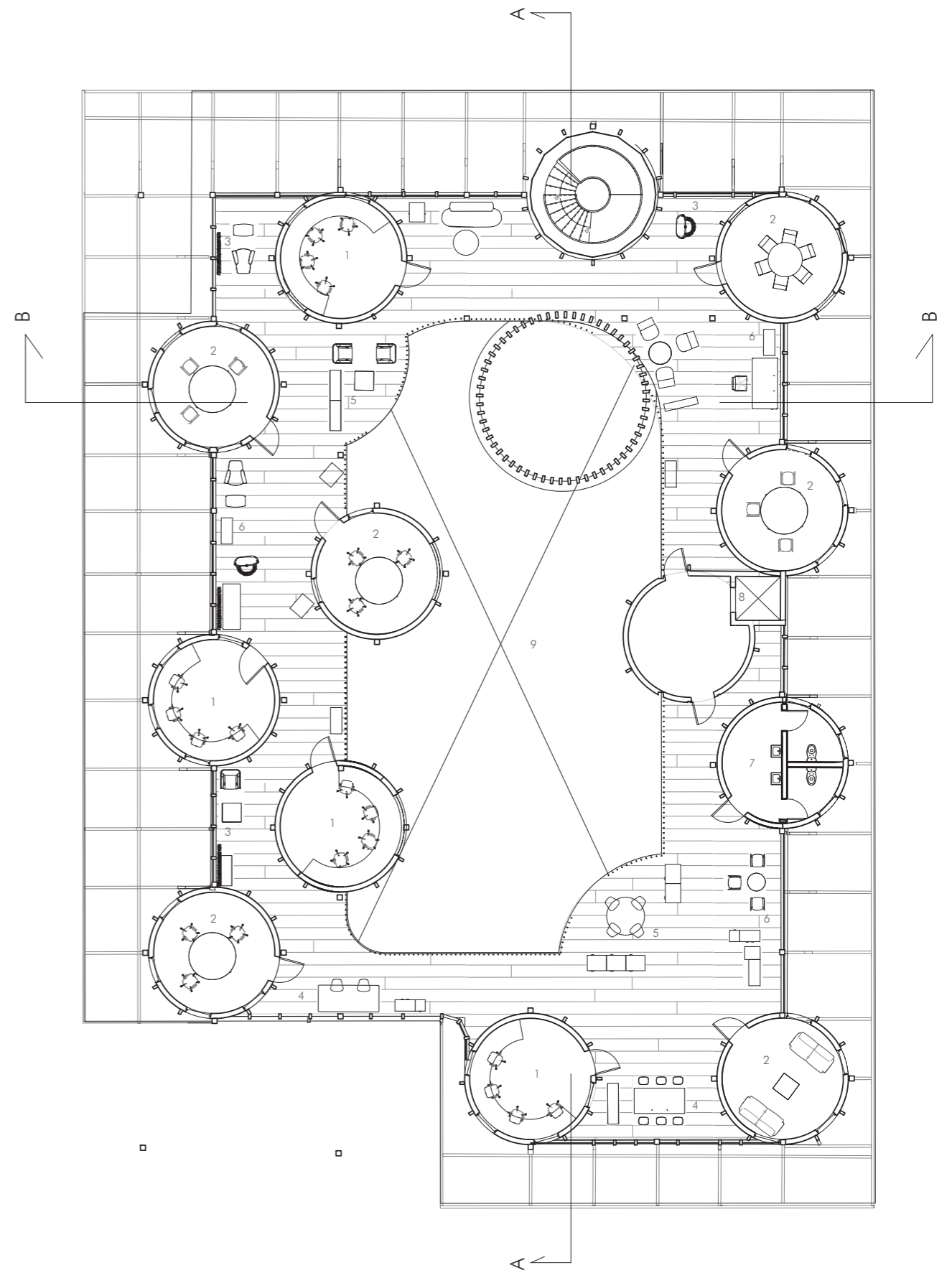
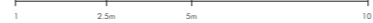




**Legend**

- |                              |                                |                        |
|------------------------------|--------------------------------|------------------------|
| 1. Main Entrance             | 7. Cafe sit working area       | 13. Lockers            |
| 2. Reception and back office | 8. Private office              | 14. Bath rooms and     |
| 3. Pop up Kitchen - Pedestal | 9. Sofa seats - shared         | 15. Discussion Spaces  |
| 4. Casual Work space         | 10. Confrence room - flexible  | 16. Open shared tables |
| 5. Open Auditorium           | 11. Silent shared working area | 17. Veranda            |
| 6. Spiral Stair              | 12. Game room                  | 18. Store              |
|                              |                                | 19. Elevator           |

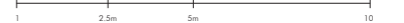
First Floor Plan

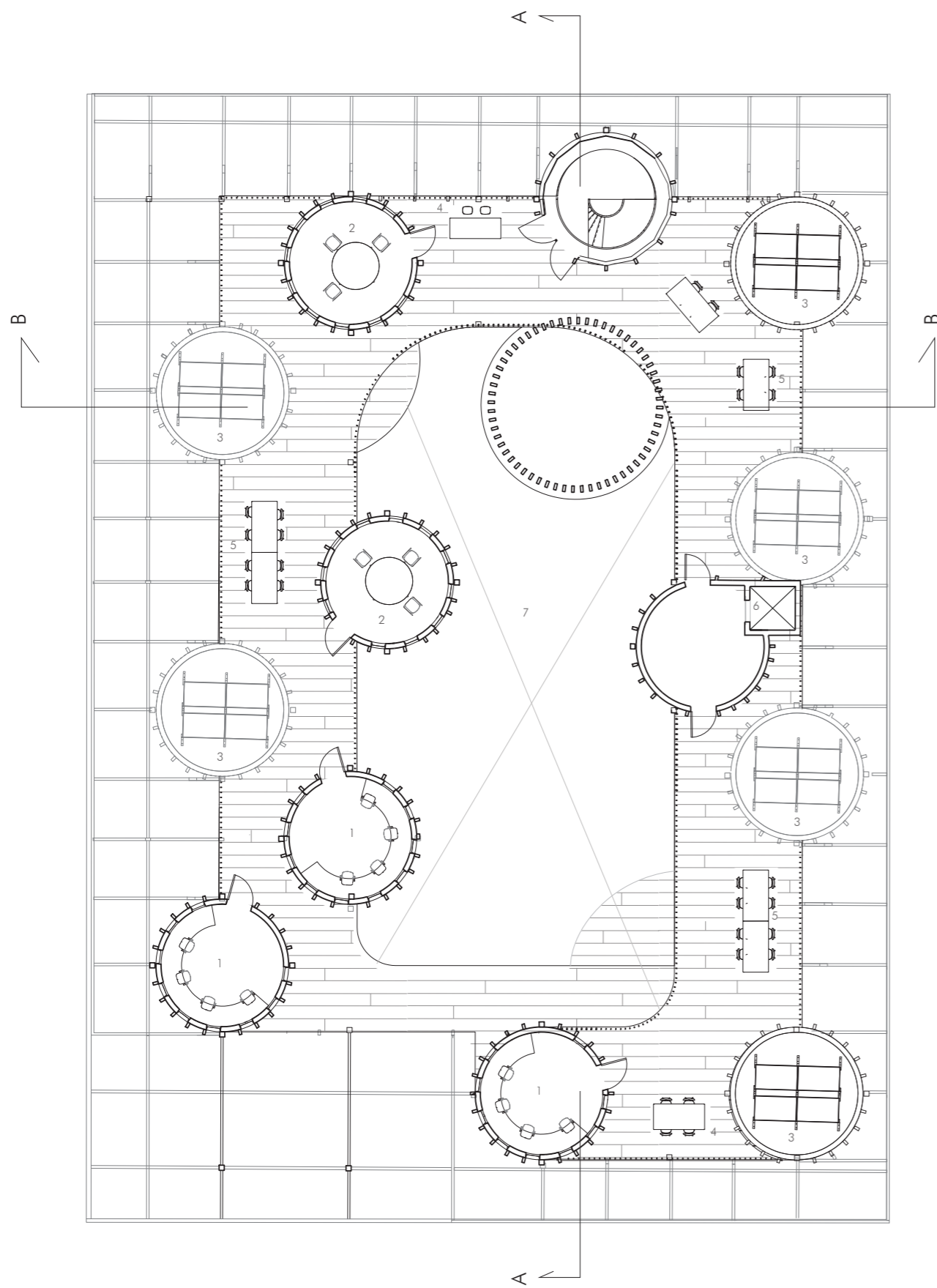


**Legend**

- |                            |                          |
|----------------------------|--------------------------|
| 1. Core private            | 5. Internal balcony      |
| 2. Silent discussion rooms | 6. Casual meeting places |
| 3. Hideouts                | 7. Rest rooms            |
| 4. Pedestals               | 8. Elevator              |
|                            | 9. Atrium (Open Down)    |

Second Floor Plan





**Legend**

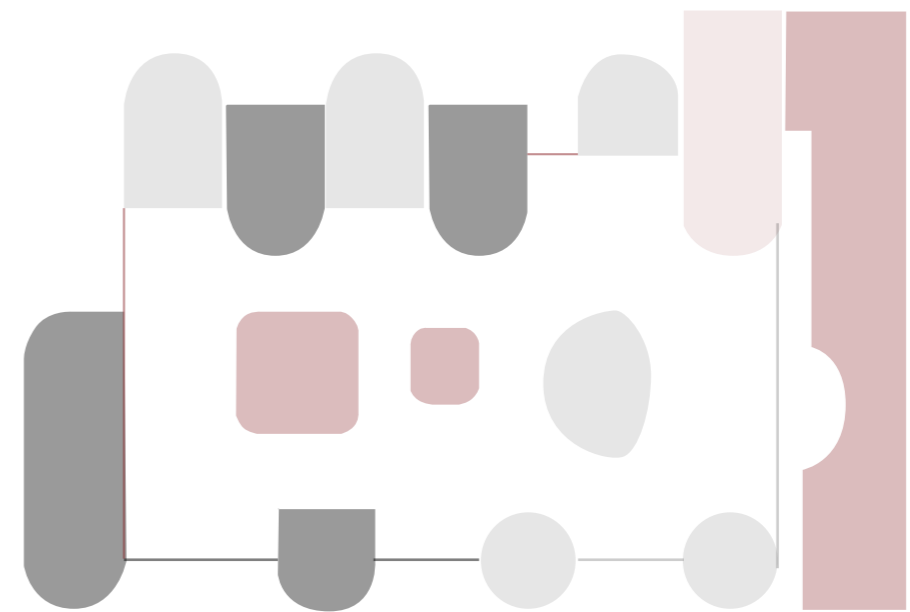
- 1. Core private
- 2. Silent discussion rooms
- 3. Solar panels
- 4. Pedestals
- 5. Shared working/meeting tables
- 6. Elevator
- 7. Atrium (Open Down)



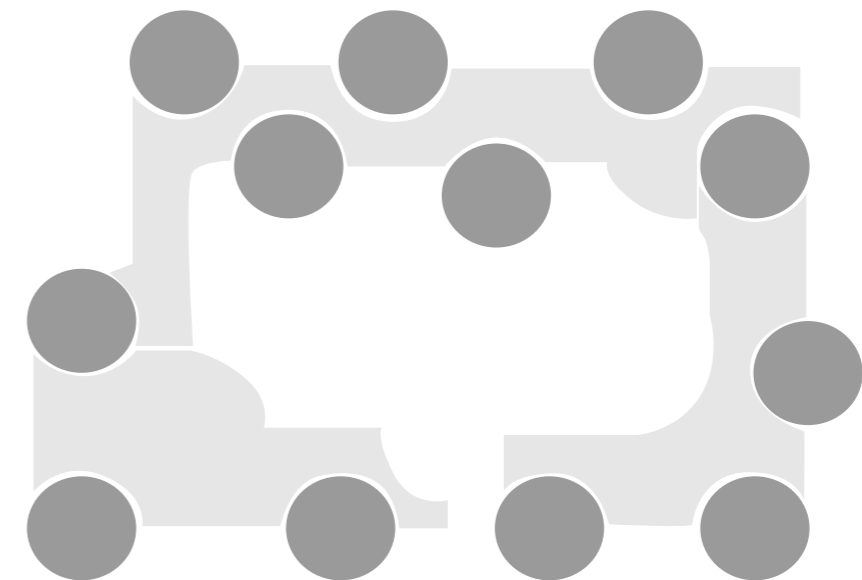
Third Floor Plan



**Functional Zoning**



First floor functional Zoning



Second floor functional Zoning

**Legend**

- Core private
- Shared working
- Socializing and working
- Reserved - Game area



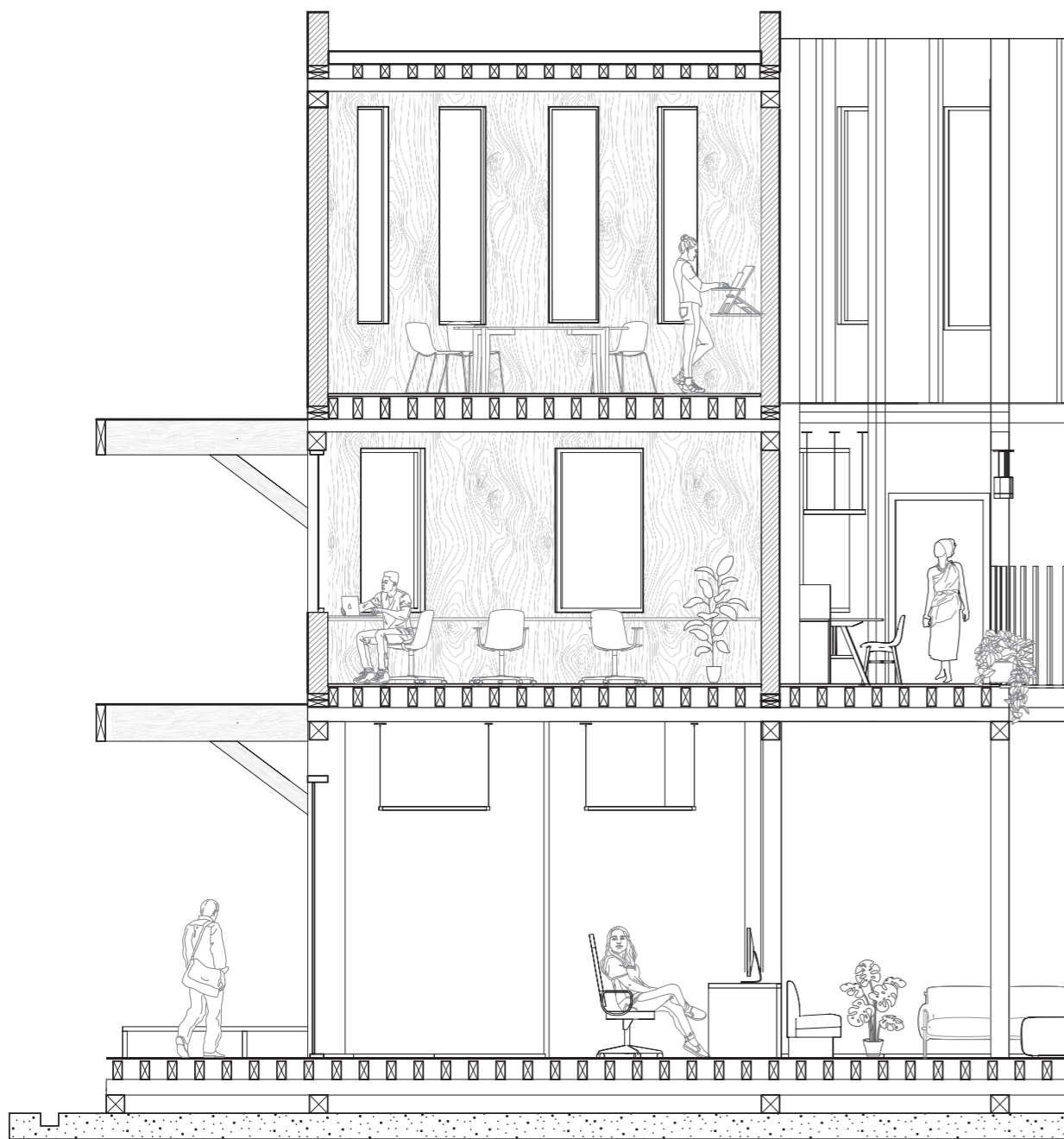


Section A-A  
1:100



Section B-B  
1:100

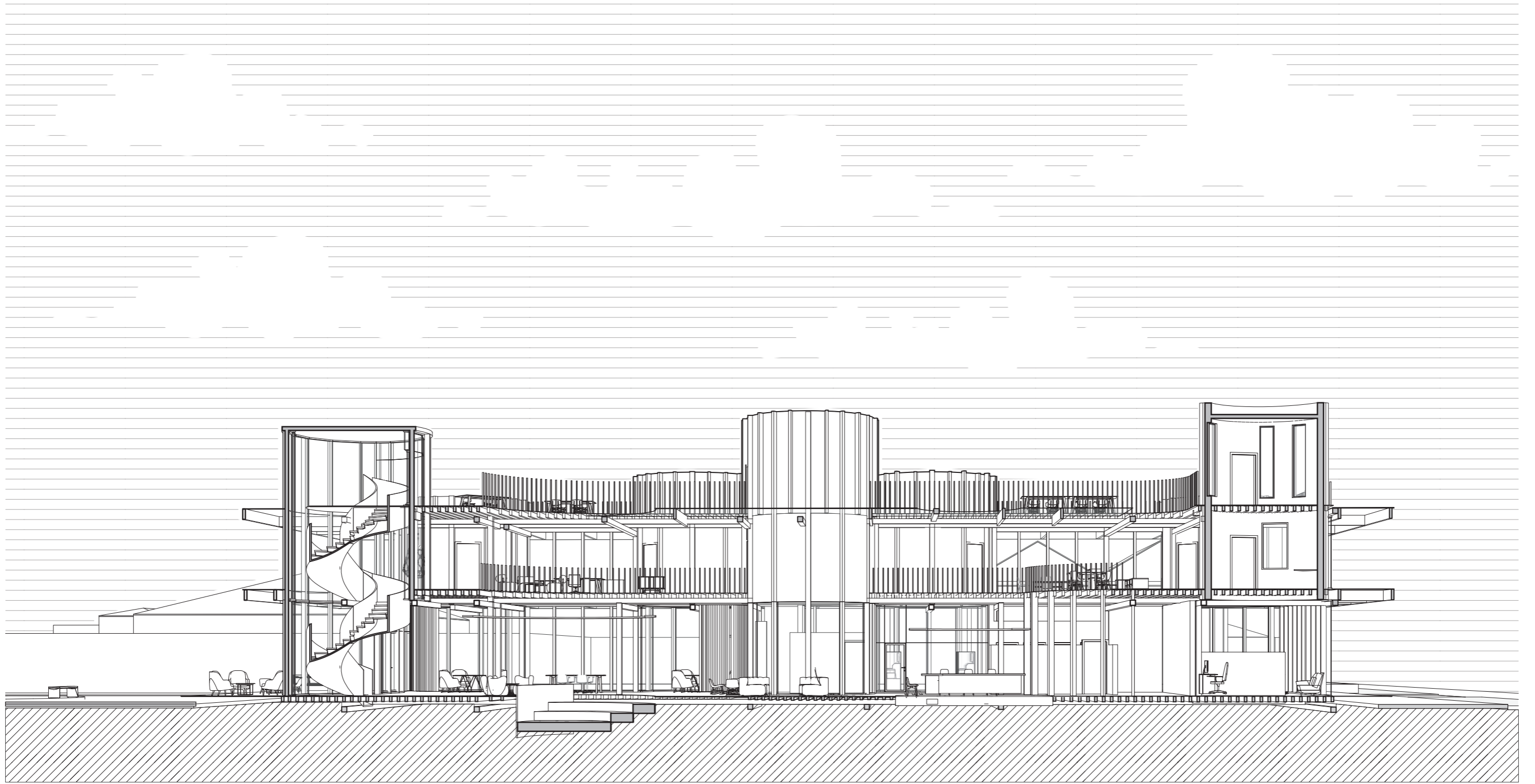




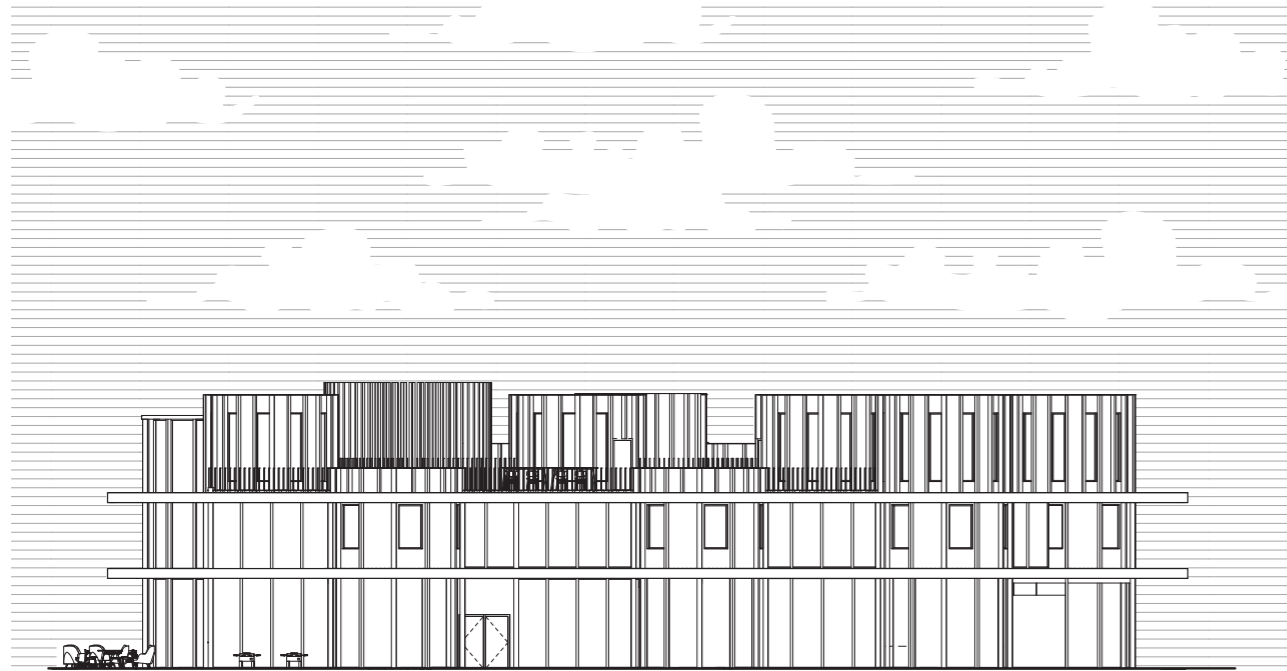
Facad Section A-A



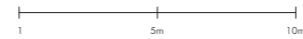
Entrance



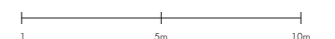
Perspective Section



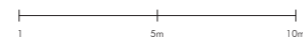
South East Elevation



North West Elevation



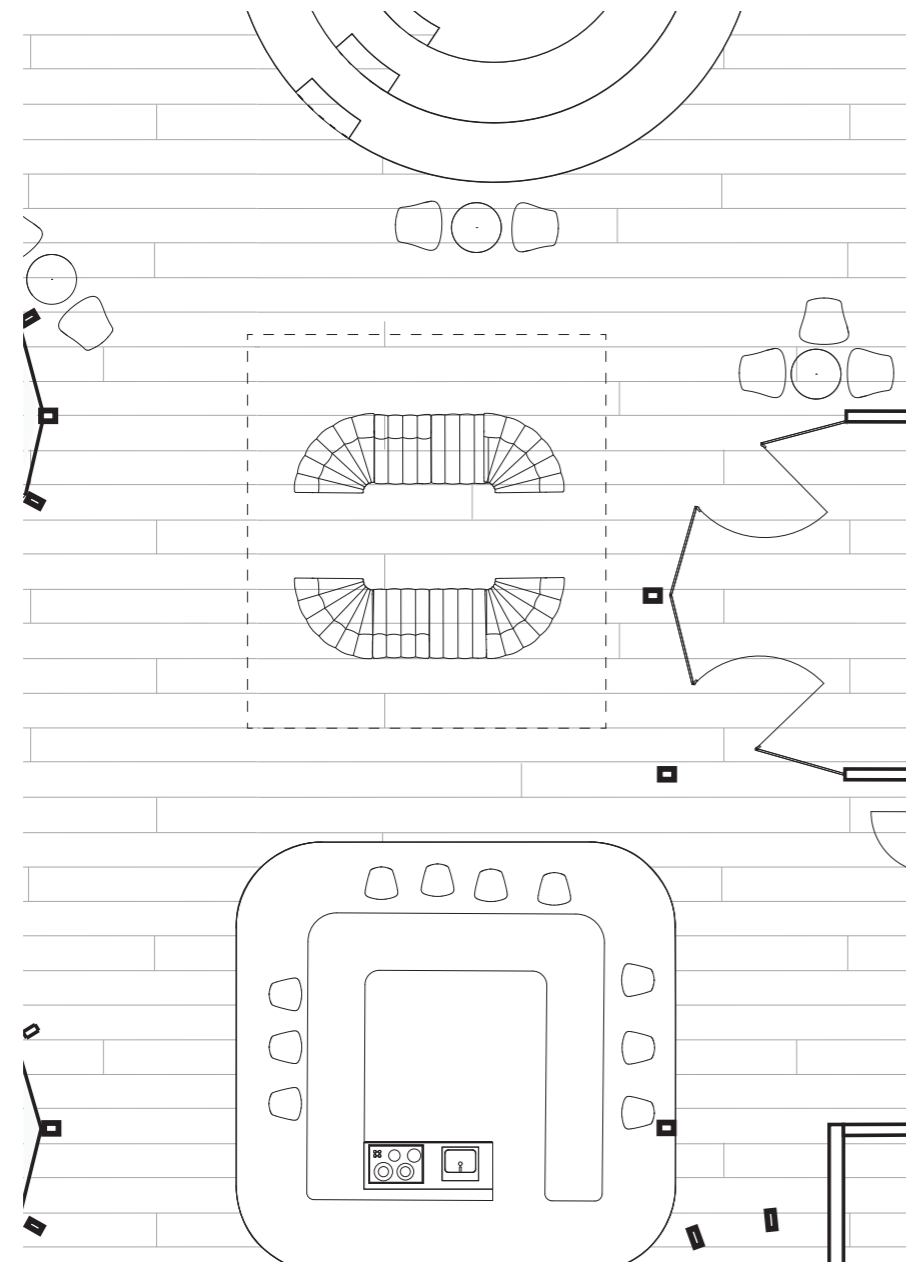
South West Elevation



North East Elevation





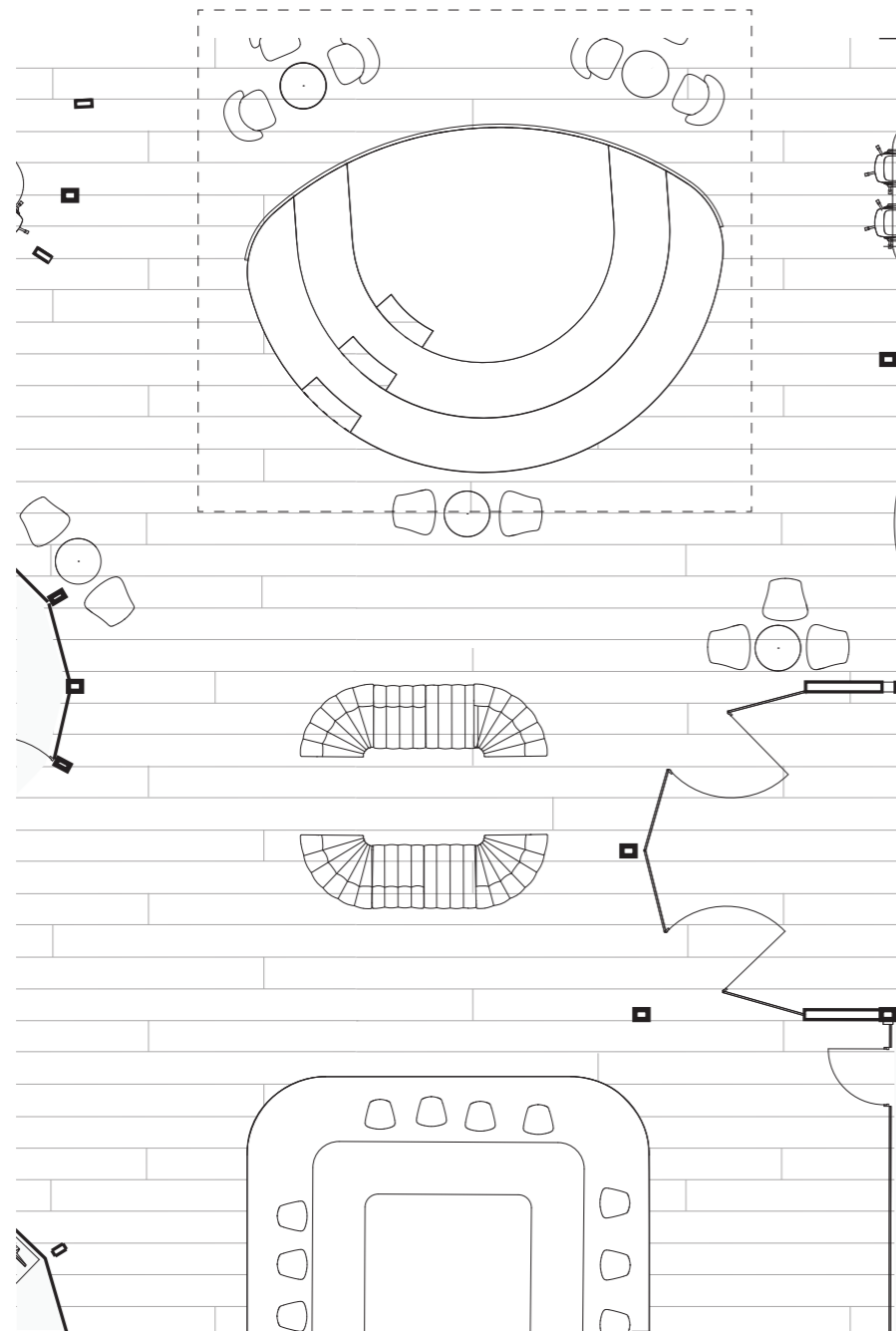


**Living Room**

The center of the courtyard is a living room-style casual working area that provides users with a home-like environment and a flexible meeting and working space. Additionally, the encircling vegetation adds biophilia while separating it from its surroundings.



Living Room

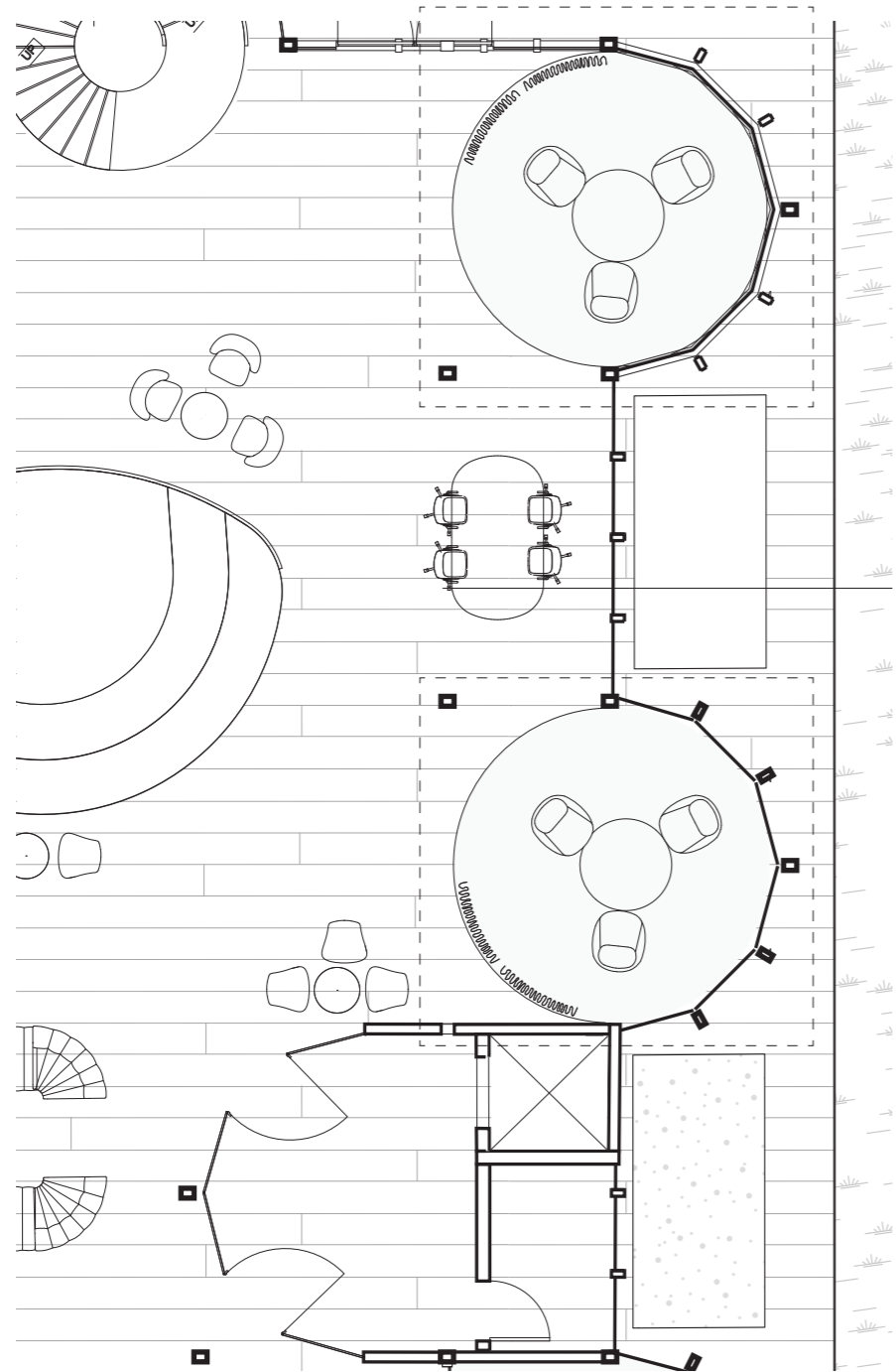


### Open Auditorium

The open auditorium can be used for formal and casual gatherings, making it versatile. People could also use the space to work by sitting on the stairs. The fact that it is visible from the upper floor of the building creates a greater potential for it to serve the entire establishment.



Open Auditorium

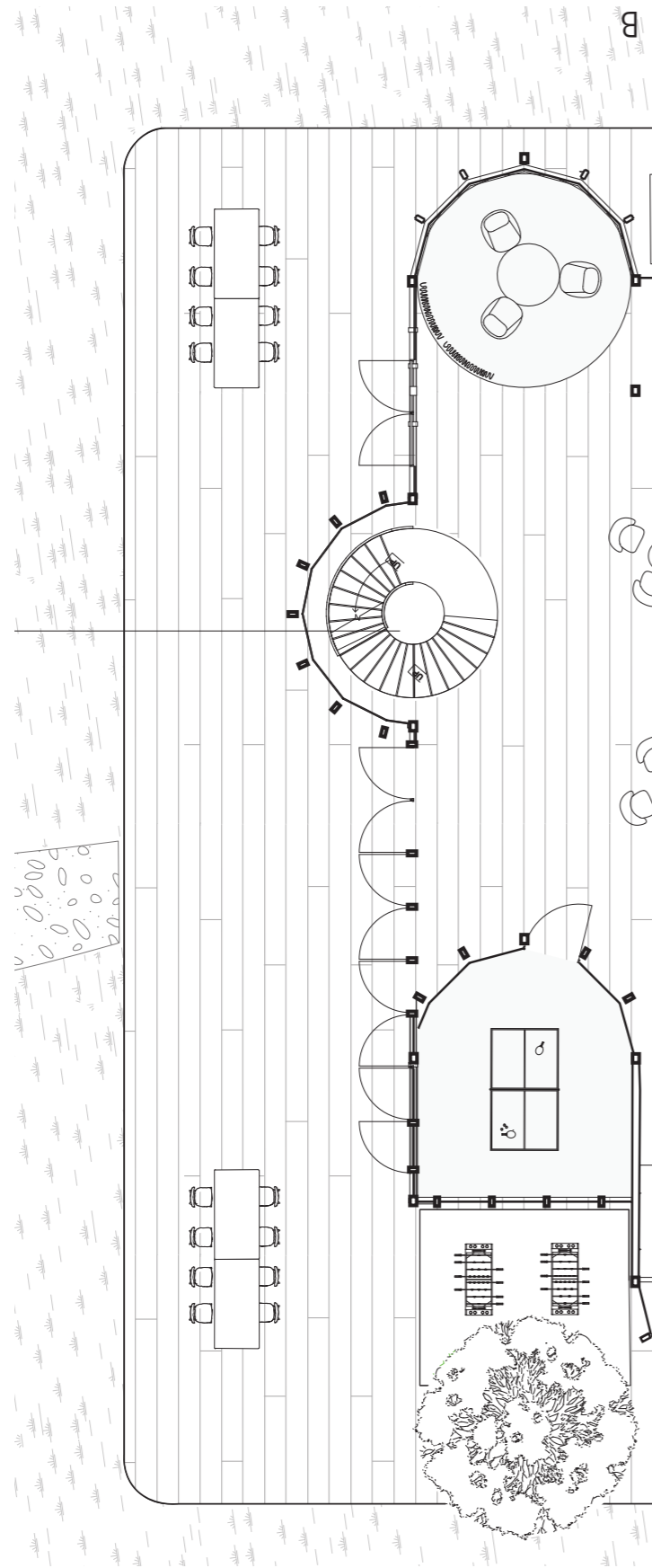


### Discussion rooms

Small, circular meeting spaces that can be used privately or shared are located close to the central courtyard. Curtains are used to regulate the user's seclusion and visibility.



Discussion room



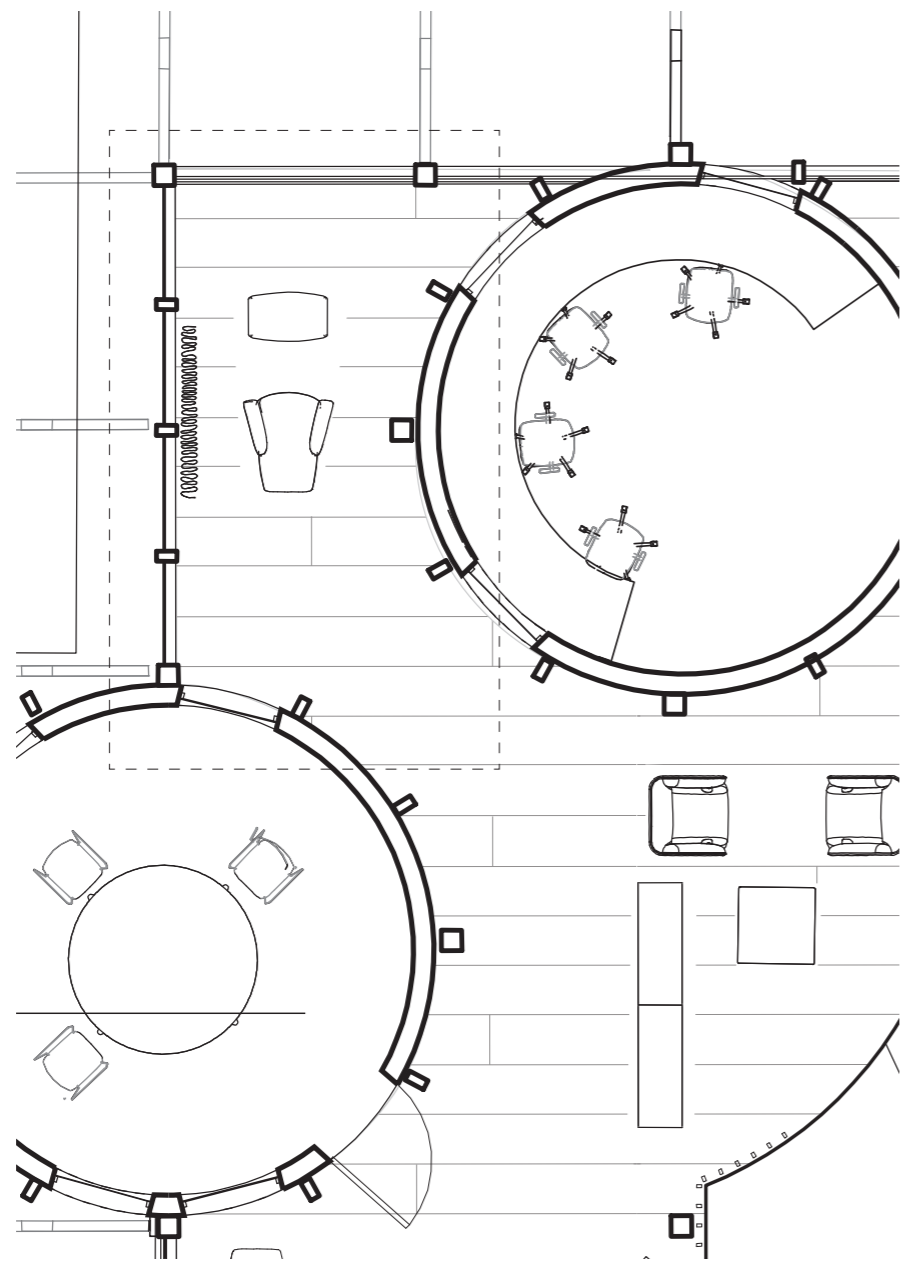
**Veranda**

Multiple doors and a veranda that floats into the grassy landscape on the ground floor provide access to the landscape in the rear. This creates an opportunity to use the area as an open outdoor gathering space for hosting events or as a workspace overlooking the land's cape.



**Veranda**



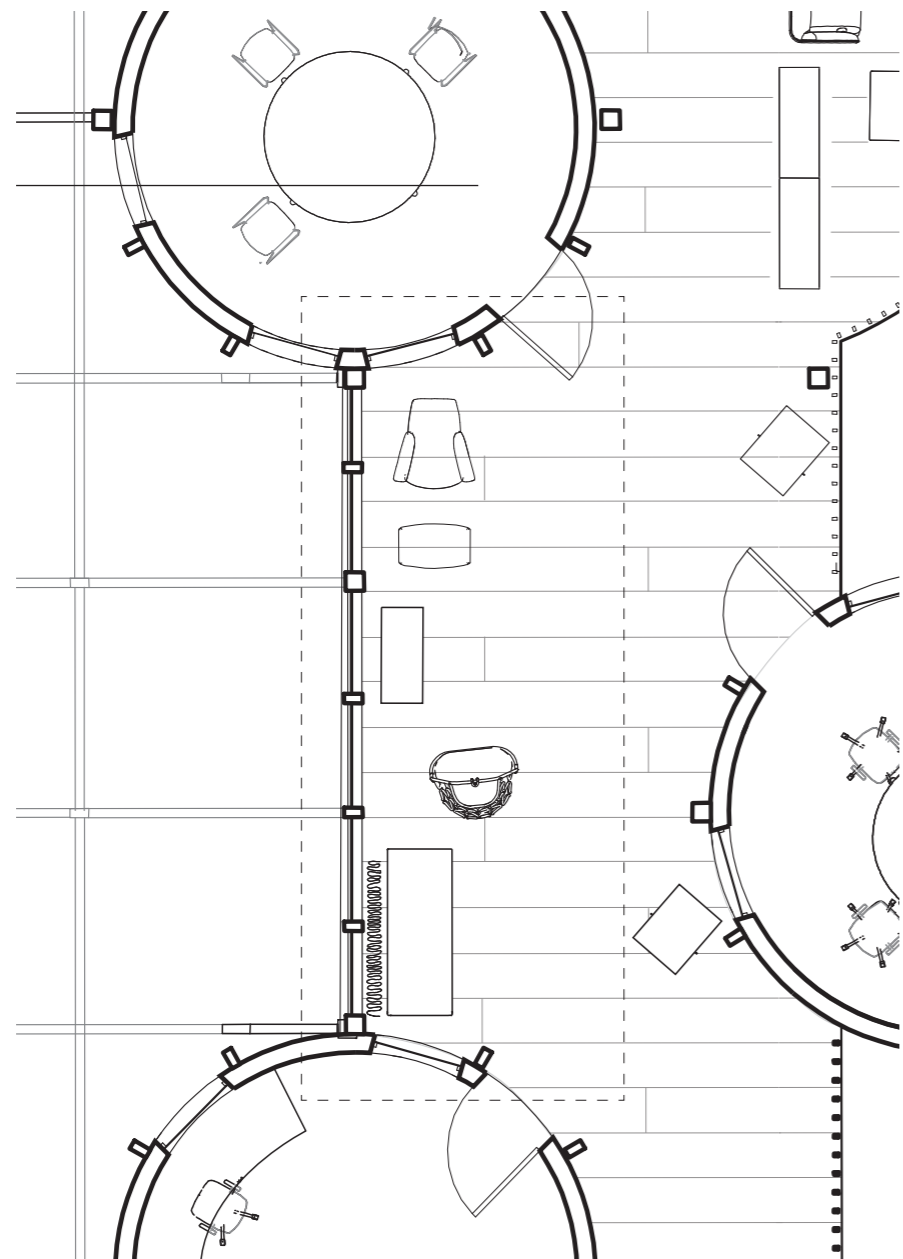


### Hideouts

Hidden between private rooms are secluded hideout working spaces. These spaces, located on the second level, enable users to retreat and concentrate.

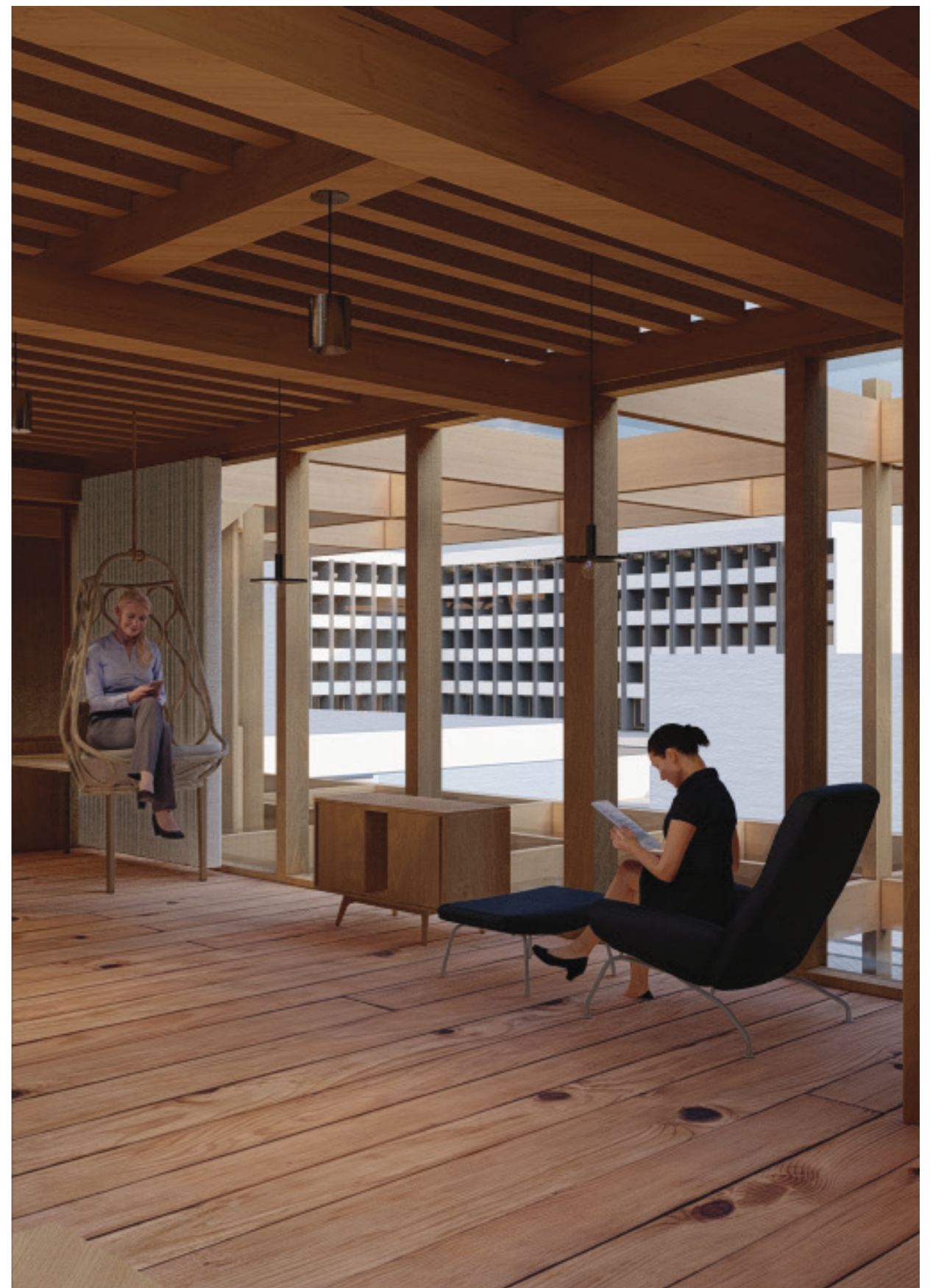


Hideouts

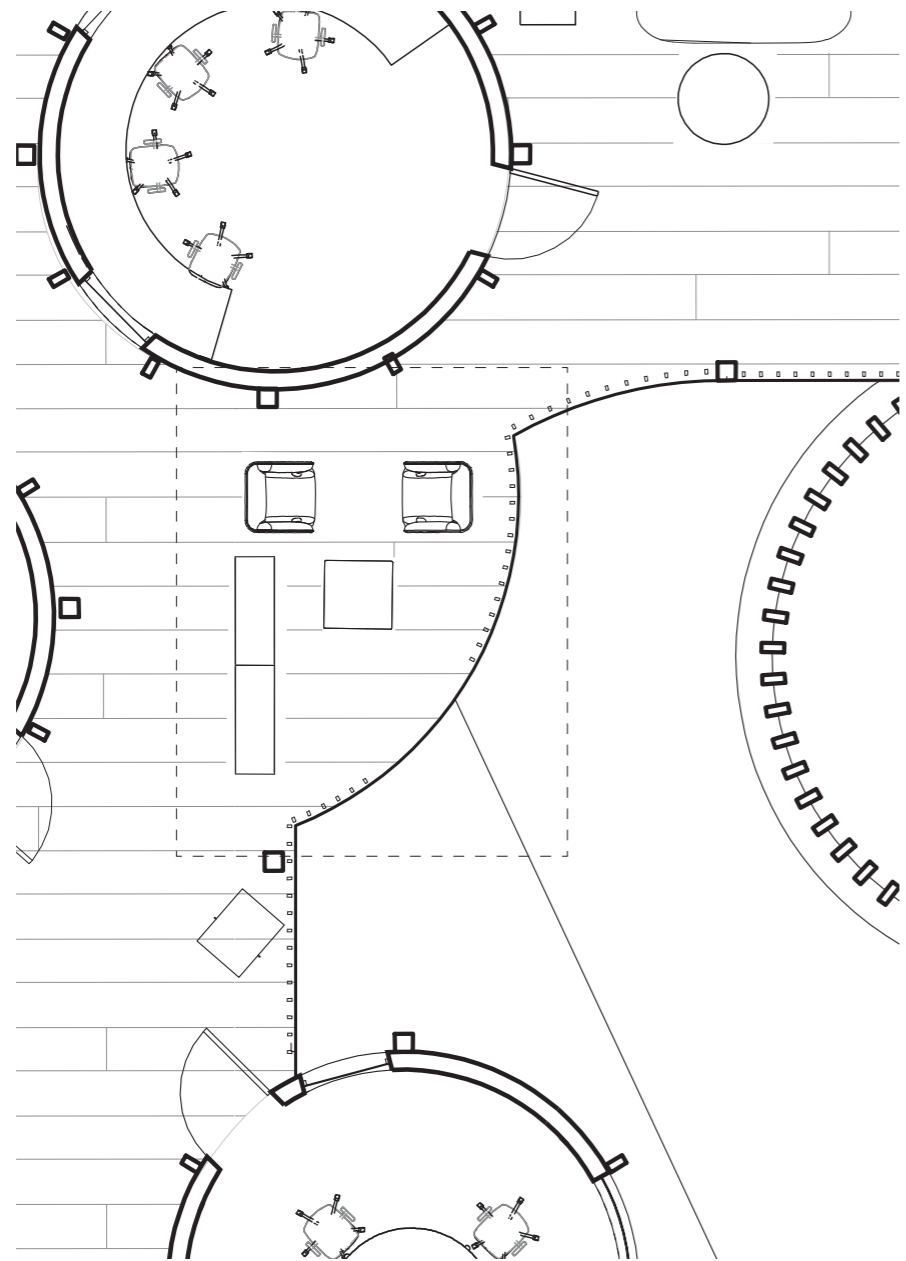


**Casual meeting places**

Casual work meetings and conversations that require less formal settings can be held on the first floor adjacent to the core private work rooms.



Casual meeting place



**Internal balconies**

Users can work or have meetings on the inward-facing balconies, which look out over the internal courtyard.



Internal balcony



**The cafe**

The cafe in the interior courtyard functions as a gathering spot and a workplace. The café offers refreshments to those who enter the building prior to the beginning of the workday.

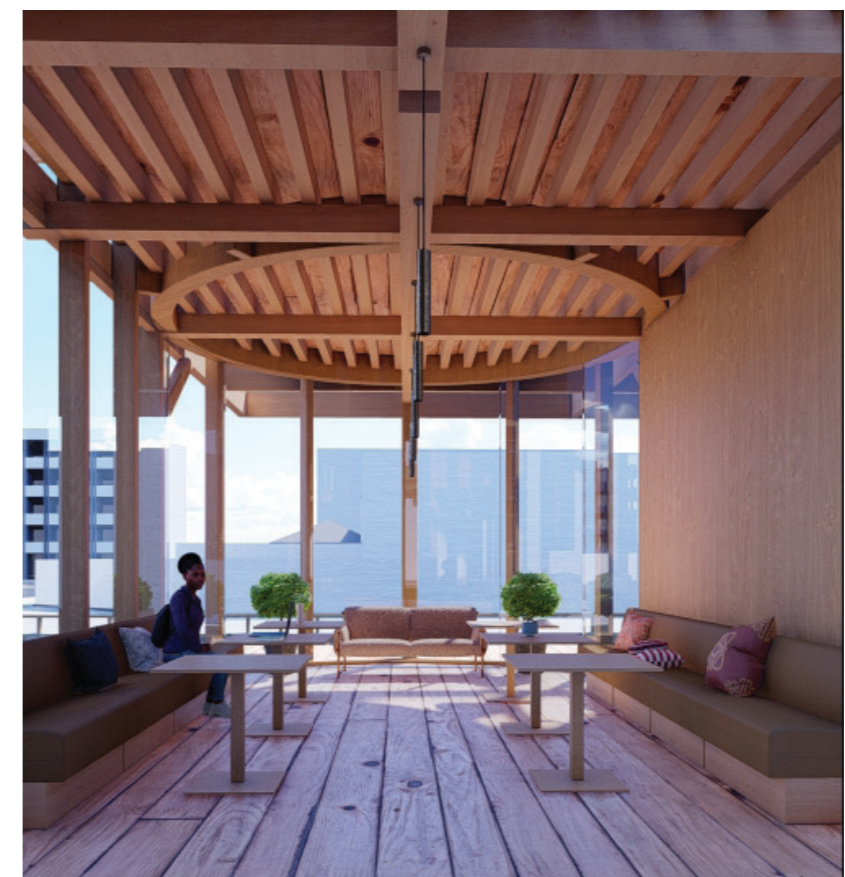


**Shared silent working areas**

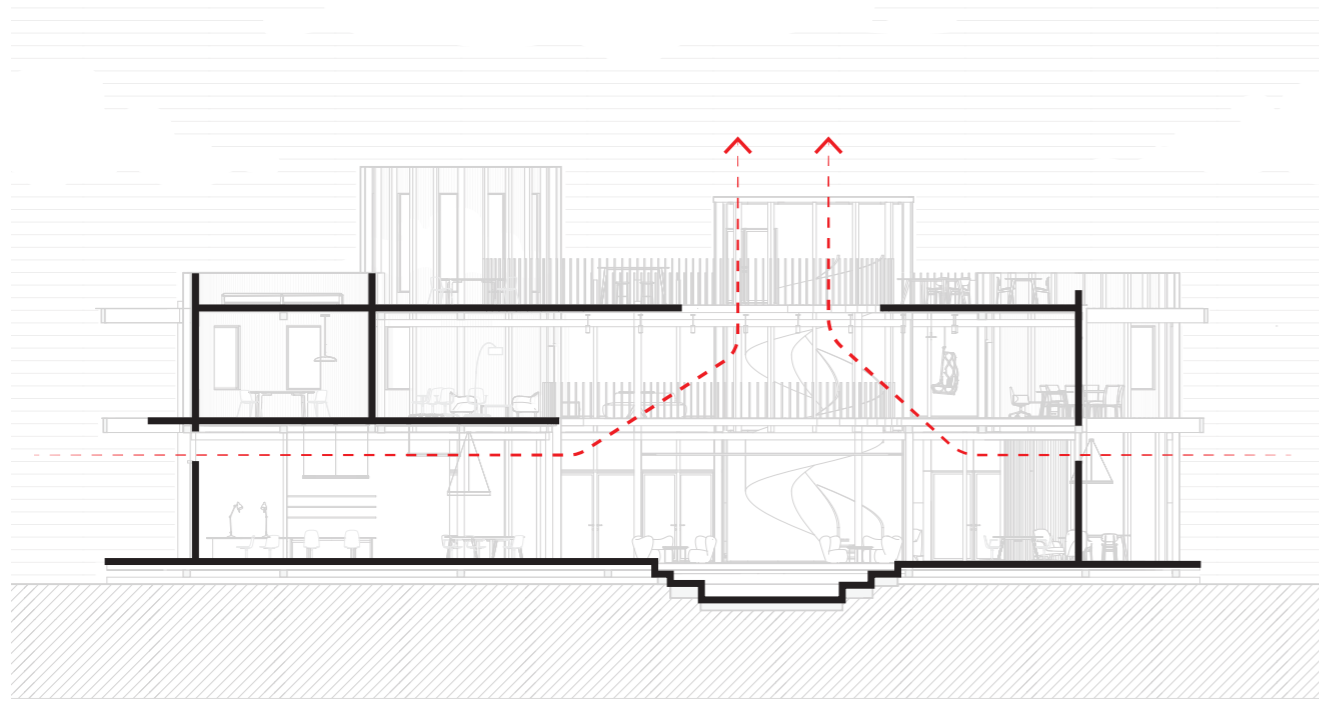


**Open auditorium**

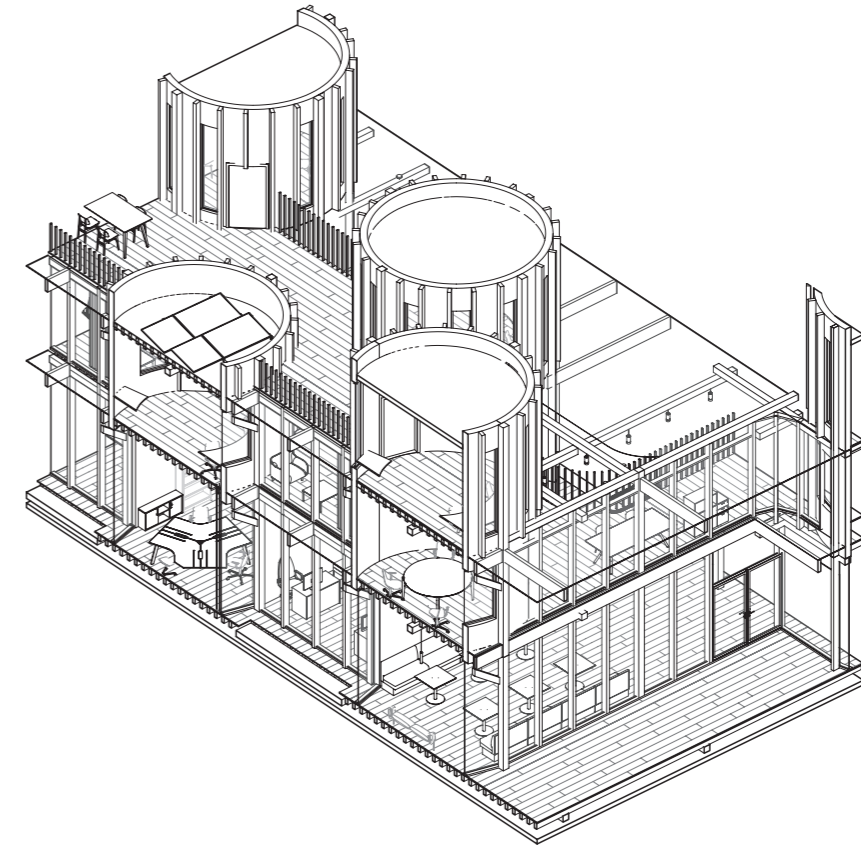
The open auditorium can be used for formal and casual gatherings, making it versatile. People could also use the space to work by sitting on the stairs.



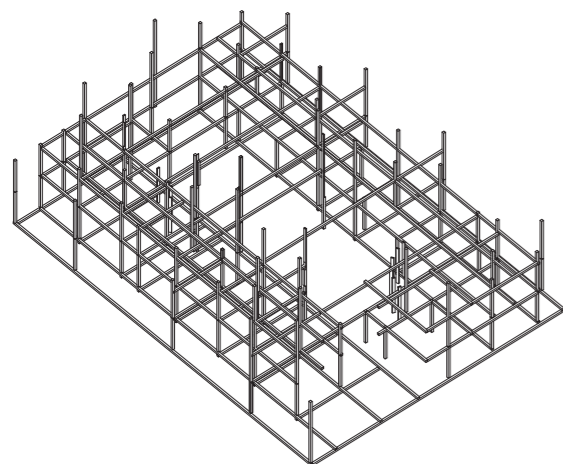
**Working cafe near the entrance**



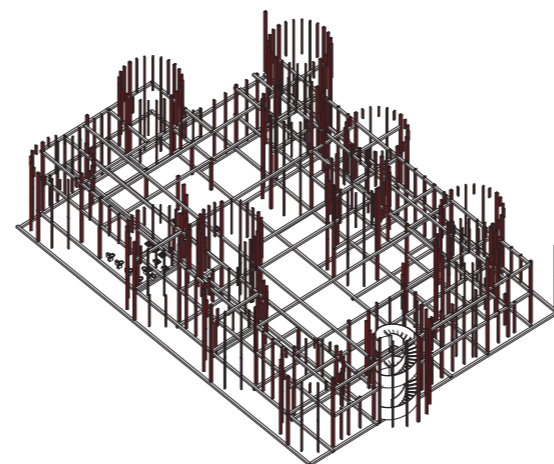
Cross Ventilation



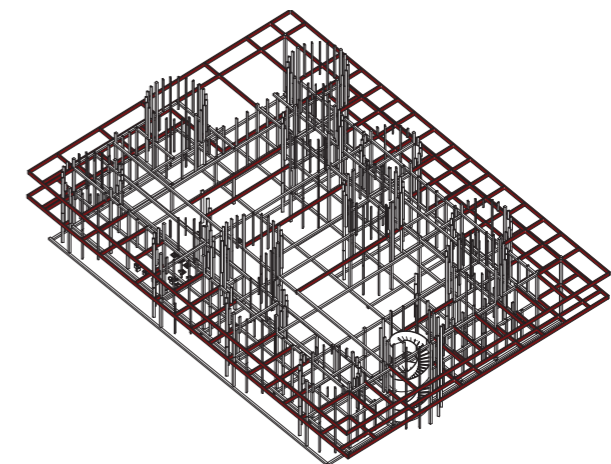
Structure



Primary structure



Secondary structure



Overhang structure

## Summery

1. The design unlearns construction materials with a large carbon footprint and relearns sustainable local construction materials.
2. The design unlearns an individualistic competitive working culture, relearns cooperative working, and applies it to the creation of a flexible coworking space.
3. The design unlearns energy-intensive cooling strategies and relearns passive cooling strategies.
4. The initiative relearns the outdoor working culture by unlearning the indoor confined work culture.
5. The project unlearns the colonial architectural forms introduced by colonization and relearns circular typologies and methods of construction.
6. The design employs hybrid tectonics by incorporating sustainable timber construction and regional vernacular architecture.

## Reflection

Many African decolonial intellectuals are cited in the degree project to contextualize decolonial ideas. The project assembles this idea into a logical procedure that may be used to design buildings in formerly colonized places. This work demonstrates the practicality of speculating on unlearning architecture to re-learn and forge connections among the past, present, and future.

This research suggests decolonial thinking as an ideal tool to learn and comprehend in a highly globalized world where architects are tasked with international projects in previously colonized territories and unfamiliar locations.

This research hopes to inspire architects to engage in decolonial architectural thoughts and discussions and may serve as a reference for Architectural researchers in the future as well.

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