ADDIS ABABA LIVING LAB

RESPITE

A breathing space in a city of acrimony

Yadie Kenno Meko

"You have two choices, you can say, 'I'm a pessimist, nothing's going to work, I'm giving up, I'll help ensure the worst can happen'. Or, you can grasp onto the opportunities that do exist, the rays of hope that exist and say, 'Well, maybe we can make it a better world'. It's not much of a choice."

— Noam Chomsky

RESPITE

A breathing space in a city of acrimony

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Img. 1 Aerial View of Addia Ababa, 1934

MOTIVATION

I've often described my graduation studio experience as serendipitous.

As someone who was born in Addis Ababa, Ethiopia and spent my formative years there, I had many pleasant memories and attachments to the city. I enjoyed the liveliness of the neighbourhoods, the friendliness of the people as well as the chaos and friction that have been present throughout its history and which shaped its peoples' character. The city itself is characterized by a patchwork of neighbourhoods which have organically formed close-knit communities which the locals refer to as 'sefers.' After years of living in diaspora, I had lost these connections, and when I found this graduation program, I reveled in the thought of having the opportunity to regain them.

Yet, my trip to Addis Ababa was informed by multiple incidents I had not expected. The ethnic tension that culminated in mass protests in Addis Ababa and other cities in Ethiopia just prior to our trip added personal complications. As a descendent of the Oromo ethnic group, and therefore a person seen by some as an antagonist in this crisis, I had to make adjustments while staying in the city, attending workshops, and conducting interviews in the neighbourhoods. I found myself evading questions about my identity and my obvious Oromo name in order to avoid unwanted tension. I noticed stares as I spoke in my native language with family members. I tolerated occasional unpleasant remarks or jokes directed at the Oromo community. Although these experiences were devastating for me as someone who wanted to help and was attempting to reconnect to the city, they allowed me to reflect on wider issues and my place among them. I grappled with the notion of working on a project with and for people who may distrust me simply because of my ancestry. Ultimately, I found solace in the realization that I would be helping to solve a major source of this tension - the housing insecurity crisis present in the city and the rift amongst different income groups – often divided, or portrayed as being divided, along ethnic lines – which has been intensified by how the government has approached housing. I understood that I could be part of an endeavour to make the situation better for all the people.

Yadie Kenno Meko





Img. 2 Woman Walking in 'Bete Giyorgis',
One of the Rock-hewn Churches in Lalibela,Ethiopia

"Ethiopia is the cradle of humanity, where we first walked on two legs…It is also the source of the Blue Nile, the great river whose power and fertility nurtured the origin of civilisation itself…And it is the origin of one of life's greatest pleasures – coffee, Ethiopia's gift to the world."

— Embassy of Ethiopia, London, UK

II

BACKGROUND



Img. 3 Konso Village

INTRODUCTION

"ETHIOPIA IS A HIDDEN GEM, UNKNOWN TO MOST PEOPLE AND PRAISED BY ANYBODY WHO HAS BEEN THERE..."
(ASHANTI AFRICAN TOURS)

Ethiopia is said to be one of the oldest countries in the world with its diverse geographical, historical, and cultural backgrounds. It is well known for its ancient capital in Aksum about 160 km from the Red Sea in the Northern part of the country (Crummey, D.) and the multiple UNESCO Heritage sites such as the rock-hewn churches in Lalibela. The country first gained international prominence after its defeat of facist Italian power at the Battle of Adwa in 1896 then again in 1935. Although Italy occupied Ethiopia between 1936 to 1941, their attempts to colonize the country were unsuccessful. Therefore, Ethiopians pride themselves in being one of the two uncolonized countries in Africa. The country has been viewed by most African countries as a beacon of hope and freedom, and is currently home to the headquarters of the United Nations Economic Commission for Africa (UNECA) and African Union.

Ethiopia is also known for its early hominid fossil finds in the Afar region (Northern Ethiopia) including 'Lucy', the most complete early human remains discovered in 1974 by paleoanthropologist Donald Johanson. (Hogenboom, 2014) Lucy – also known as 'Dinknesh' in Amharic – is an Australopithecus afarensis who lived about 3.2 million years ago. Her discovery was pivotal to disproving the previous theory of human origin in Europe and Asia.

Ethiopian culture is diverse and is structured along the ethnolinguistic lines. Although each ethnic group has its own culture, customs, and traditions, they all share some common values. For instance, respect for elders is deeply rooted in the culture and is expected of every individual throughout the country. Simple things such as not getting up and offering one's seat to elders (or even someone slightly older) is highly frowned upon. Parents are seen as nurturers of the younger generation – people might even discipline a neighbor's child if the parents are not around to do so which is a testament to the deeply-rooted communal living culture – and there is great pride in childbearing. Ethiopians are widely known for being hospitable, friendly, and respectful of others. It is customary to use titles such as 'Ato' (Mr.), "'Weyzero' (Mrs.), and 'Weyzerit' (Ms) to show respect.



Img. 4 Fasilides' Castle from the Solomonic Dynasty in Gondar

HISTORICAL BACKGROUND

Kingdom from the North

Ethiopia's historical literature has always been influenced by oral traditions. One of these oral traditions which still infiltrates into historical literatures is the book of 'Kebra Nagast' (Glory of Kings) – a story based on the oral traditions of the birth of Menelik who is believed to be the son of King Solomon and Queen Sheba from Ethiopia who later became the first emperor of Ethiopia. Menelik created the Solomonic Dynasty of the north which represents the majority of Ethiopia's emperors from its history (Group Research, 2019). The book was written from 1314 to 1322 in Geʻez – an ancient literary language from Northern Ethiopia. Consequently, the derivatives of the Ge'ez language – Amharic – became the most commonly used language for political and religious reasons.

The Solomonic dynasty became the ruling house starting in the 10th Century BC with members of the dynasty claiming family descent from the Biblical King Solomon. The emperors stationed mostly in the northern highlands and had what were known as the moving capitals with their army, nobles and cabinet members living in tents and moving constantly once they depleted the resources at the different sites (Group Research, 2019). Orthodox Christian became the main religion of the dynasty and the emperors often were in conflict with Muslim empires coming from the coast fighting for the trade routes. Even though Emperor Susyneyos declared Roman Catholic as the state religion in the early 17th Century influenced by Spanish Jesuits, he later reinstated Orthodox (Coptic) Christian as the state religion after mass disapproval by the people (Marcus, 2002). On the other hand, the Oromo society started to advance north into the territory from the south. The Oromos used an "age-set" system called 'Gada' where the warrior classes often proved themselves by raiding nearby cities which encouraged the long-distance north expeditions in the 1600 (McKean, 2011). Between the 16th and 19th C, pressured by the expansion of the Oromos – pastoral society from Genalē (Jubba) River in southern Ethiopia – and conflict with the Musilm traders, the Solomonic Dynasty was heavily weakened and contained to present day Eritrea until the time of Menelik II.



Img. 5

Menelik II 1886 - 1936

Originally called Sahle Mariam, Menelik II was held hostage and raised as a prince after his father died fighting against Tewodros II. In 1865, after marrying one of Tewodros' daughters, he escaped and reached Entoto, Shewa where he was crowned Menelik II, King of King of Ethiopia. Menelik succeeded in unifying most of the country and became the first king in Ethiopia to form an alliance with the Italian forces to purchase and use guns which he later used to fend off Italian invasion in 1895. He marked the history or Ethiopian freedom with the Battle of Adwa in 1896 where his army defeated the Italians (BeaureGard, 1976). This victory helped him forge new relations with Western powers and foreing diplomats.

Menelik practiced imperialism in the south and particularly in the state of Wollega and used his superior arms to expand southward and conquer the lands. Although he made agreement with the King of Wollega to not change land ownership, he later broke his deal and enforced a feudalist and tribute system called 'gabar' system (BeaureGard, 1976) which created the anti-Menelik (or anti-Shewan) sentiment among the people from the south still present to this day. His expansion was particularly made easier by the 1888 famine in Ethiopia which, coiled with the feudalist system, weakened the regions. His expansion and unification was met with a stronger force in the east Muhammad Abdullah Hassan from Somaliland wihich he eventually successed in conquering and adding to his Kingdom of Shewa.



Img.6 First Palace of Menelik, Entoto, Shewa II



Entoto Maryam Church in Addis Ababa

https://commons.wikimedia.org/wiki/File:Entoto_Maryam_Church_in_Ad-



Img. 7 Empress Taitu

‘New Flower’

Empress Taitu was the third wife of Menelik II and the descendant of Emperor Susenyos from the northern ruling class. Empress Taitu is known to have owned 70,000 personal slaves and was highly politically active in the courts before and after being crowned empress.

Empress Taitu also frequented the hot springs – “Filwoha” – during her stay in Intoto. She became so fond of the place that she convinced her husband, Menelik II to make the small town at the foothill of the Intoto Mountain to become home to his new palace. While Menelik was in Harar fighting to make the town his new addition to his empire, the empress devised a plan to make Addis Ababa the new capital of Ethiopia in 1886.



Img. 8 Haille Salassie Enters Addis Addis



HAILE SELASSIE I

Born Lij Tafari Makonnen, he later became one of the most famous Ethiopian leaders and the Emperor of Ethiopia from 1930 to 1974. Haile Slase I is a defining figure in modern Ethiopian history. He was a member of the Solomonic dynasty who traced his lineage to Emperor Menelik I.

Selassie's internationalist views led to Ethiopia becoming a charter member of the United Nations (Graduation Research Booklet, 2019). Haile Silase heavily criticized Italy at the League of Nations in 1936 for sing chemical weapons against the people during the Second Italo-Ethiopian War. Yet, the Emporor has been criticized himself by some historians for his suppression of rebellions among the landed aristocracy for Ethiopia's failure to modernize fast enough. During his reign, some ethnic groups such as the Harari people were ill-treated which led to their migration (mostly to the capital city).

Haile Silase is viewed as the returned messiah and the incarnation of god by the followers of the Rastafarian movement. This movement became popular after his coronation in 1930 during the time when most African countries were dealing with colonizations. "[T]he Rastafari movement perceives Haile Selassie as a messianic figure who will lead a future golden age of eternal peace, righteousness, and prosperity" (Sullivan, 2005).



Img 9. Addis Ababa Inner City

DEMOGRAPHICS

According to the World Population Review, only 25% of the population live in the urban cities, mainly the capital city, Addis Ababa. Although the ethnic distribution in the city has been changing in recent years, “half of the population is of the ethnic group Amhara, while the majority of the remaining population is split among the groups Oromo, Gurage, and Tigray” (World Population Review).

Addis Ababa is as much of a blend of different religious groups as it is of ethnic groups. About 82 % of the urban population is Orthodox Christian, 12.7% Muslim, 3.9%, Protestant, 1% Catholic, and the rest is distributed among the less common religious groups in the country.

Although Ethiopia is praised for its variety of languages and dialects – more than 80 – more than half of the population in the country speaks Amharic while the majority of the remaining population speaks Oromo. This coupled with the ethnic distribution and its tumultuous history, the city of Addis Ababa becomes the battle ground for some frictions and tensions from time to time.

In line with the low industrialization and modernization, the economy predominantly relies on agriculture. Adult literacy is still very low throughout the country which drives the educated young population to the capital city where the numbers are the highest – 93% for males and 80% for females. A major persisting issue other than housing scarcity in the capital city has been water scarcity with more than 90% of the households frequently suffering from clean water scarcity.



Img. 10 Addis Ababa Condominium Construction Site

HOUSING

Addis Ababa is one of the Sub-Saharan cities struggling with rapid urbanization and ethnic unrest. More than a million Ethiopians were forced from their homes by ethnic violence in 2018. The worst of it took place in the south, where an estimated 800,000 This is a higher number, and over a shorter period of time, than occurred at the height of Myanmar's Rohingya crisis in 2017. Provision of housing has concentrated on cheap, fast, and efficient solutions. Often, this approach has been used as a tool to drive out the low-income group from the inner city of Addis Ababa.

The housing supply of the last 30 to 40 years has not managed to cope with the fast rise in need. "In addition the government tenure system drives more than 40% of the housing stock to non-repairable and inhabitable states" (Bihon, 2006). Infrastructure and basic facilities are scarce in the city and are scarcely available which adds to the problem at hand. Since 2005, the city has carried out a lottery system under the Integrated Housing and Development Plan mass housing, but this has also failed to resolve the housing and rapid urbanization crisis which is estimated to be somewhere from 4-6% per year (The Guardian, 2017).





Top View of Communal Courtyard, 'China Sefer' Condominium, Shola Gebeya, Addis Ababa



Img. 11 Tilu Dimtu Housing Complex

PROBLEM STATEMENT

THE TOP-DOWN, ONE-SIZE-FITS-ALL APPROACH TO MASS HOUSING IN ADDIS ABABA...HAS FAILED TO PROVIDE FOR THE SPECIFIED TARGETED GROUP – THE LOW-INCOME INDIVIDUALS OF THE SOCIETY.

Addis Ababa – a diplomatic hub of the Ethiopian nation – has been praised as a safe haven for many traveling into the city looking for work or fleeing conflict from neighboring regions. Similar to other Sub-Saharan cities struggling with rapid urbanization and economic growth, the city boundaries of Addis have expanded arbitrarily to accommodate the influx of immigrants flocking into the city everyday. The specious housing policy and resettlement process implemented with little to no regard for existing communities and livelihood have exacerbated the tenuous housing stability of the urban poor. Despite some of the positive impacts on the informal settlement issues of the city, Addis Ababa's mass housing scheme is an embodiment of how poorly planned and implemented urban growth can have economic and social costs causing "conflict and disorder".

Since initiating the Integrated Housing and Development Plan (IHDP) mass housing scheme in 2005, the government has championed the construction of hundreds of condominium buildings, mostly at the peri-urban areas of the city. These tightly packed buildings have gobbled up land at the periphery of the city acquired by force-evicting farmers from lands which have been in their families for generations. The top-down, one-size-fits-all approach to mass housing in Addis Ababa resembles the postwar Western modernist housing estates and – despite statements reminiscent of George Orwell's Ministry of Truth – has failed to provide for the specified targeted group – the low-income individuals of the society. Although the project's initial aim was to upgrade slums without relocating residents and reducing informal settlement by 50% within ten years, this plan has proven to be unsustainable due to lack of resources and recent interests in clearing prime real estate to be sold to the highest bidders. It is clear that the urban poor have no place in the new Addis. In his intuitive article regarding the "street hustlers" of Addis Ababa, Di Nunzio

THERE ARE GREAT OPPORTUNITIES FOR A CITY DEVELOPMENT TO IMPROVE THE LIFE OF ITS INHABITANTS DURING RAPID GROWTH.

points out that the very people who "made the area desirable in the first place are being pushed out." Inner city slum dwellers who depended on informal income generation were located in condominiums at the outskirts with minimal facilities around where they struggle to survive – if they somehow managed to afford the units – or ended up relinquishing the units or renting them out to others. If anything, the process has intensified land related conflicts, the enthic tension and housing insecurity among the impoverished in the city. Today, the large-scale condominium housing of Koye Fiche which was once anticipated to become the "sub-Saharan Africa's largest housing project" now stands nearly empty after completion due to multiple protests regarding the expansion which spilled over into the Oromia region.

There are great opportunities for a city development to improve the life of its inhabitants during rapid growth. Addis Ababa's growth has mostly been horizontal and it failed to take the opportunity to explore a balanced and integrated way of densifying the city which accounts for the existing symbiotic relationship between neighborhoods and their cultural heritage. Additionally, the urban sprawl has contributed to the increase of single-user cars in the city which in turn has worsened the air quality of the city. In a process where provision of housing has concentrated on merely providing cheap and efficient shelter and, at times, been used as a tool to drive out low income group from the inner city, the sense of security and quality of life of the urban poor have been considerably overlooked. Encouraging real estate development and the middle-income economy in the city might be one way of reducing poverty and creating a middle-income country, but at what cost?



Img. 12 Addis Ababa Condominium Aerial View





Img. 13 A slum in the old Piassa neighbourhood of Addis Ababa, slated for demolition



Fasilides' Castle in Gondar

https://www.visitethiopia.org/ethiopia/learn-about-ethiopia/

IN MANY LOW-INCOME COMMUNITIES, THE ACTIVITIES IN THE OPEN COMMUNAL SPACES DEVELOP AS AN ORGANIC RESULT OF COEXISTENCE IN THE NEIGHBOURHOODS.

Ferdinand Tönnies described 'neighbourhoods' as "friendly or hostile [interactions] in daily relations with people not part of [one's] immediate family." In many low-income communities, the activities in the open communal spaces develop as an organic result of coexistence in the neighbourhoods. In the case of Addis Ababa's inner city neighbourhoods, shared spaces have accommodated morphing social patterns and "supported...the domestic life of low-income households." During the 1933 CIAM assembly to draft a new toolkit for urban planners, the charter suggested that open spaces should be developed formally instead of informally, and that they should include well-defined facilities. These propositions still remain plausible for contemporary urbanists.

When considering the conditions in the condominium buildings, families from different cultural and ethnic backgrounds struggling to survive are pitted against each other in highrise, dystopian buildings and are forced to recreate their previous "neighborhoods" in tightly packed environments. In contrast, urban dwellers who relocate to the city for work are normally competent at adjusting to new environments and acclimating to the shifting policies which inevitably affect their living conditions. Regardless, the social impacts of these new and unpleasant environments are inescapable for most.

Urbanization is an inevitable phenomenon, and relentless rapid urbanization seems to be running rampant in developing countries like Ethiopia. An often poorly planned and frantic expansion has caused cities like Addis Ababa to expand into fertile lands which affects the ecological and economical conditions of the country. Yet, according to Keller and Mukudi-Omwami, only about 20 percent Ethiopia's population lives in urban areas, and most researchers believe that the majority of the city still has a fairly low density.

'Gemeinschaft' ~ communal society



- close social relations between individuals
- direct personal contact
- actively work together to maintain their bond

- Ferdinand Tönnies

‘NEIGHBOURHOOD’ CONVEYS HOW *GEMEINSCHAFT* FEELS – “FRIENDLY OR HOSTILE [INTERACTIONS] IN DAILY RELATIONS WITH PEOPLE NOT PART OF [ONE’S] IMMEDIATE FAMILY.”

AS CONDITIONS IN THE CITY BECOME MORE TENSE, IT IS EVIDENT THAT PEOPLE NEED SPACES TO CREATE **ORGANIC AND WELCOMED INTERACTIONS** INSTEAD OF BEING FORCED TO FACE THEIR NEIGHBORS IN WASTED SPACES APPROPRIATED AS "PUBLIC SPACE".

THE SENSE OF COMMUNITY AND SOCIAL LIFE CAN DISSOLVE DUE TO LACK OF PUBLIC SPACES WHICH CAN LEAVE ROOM FOR **PEACEFUL AND SPONTANEOUS INTERACTIONS** WHICH ACT AS BUFFER ZONES IN A CITY OF INCREASING ACRIMONY.





Kolfe Inner Street

THE FATE OF THE CURRENT INHABITANT REMAINS TO BE UNCLEAR...

For instance, Kolfe – the chosen site for this project – is a residential site of about thirty-two hectares and predominantly with low-income dwellers living in rental homes owned by the Federal Housing Commission (FHC). It was a resettlement site for more than three hundred households from the two neighbourhoods – Filwoha and Estifanos – during the construction of Sheraton Addis in the 1990's. Even though there have been several informal additions by the renters throughout the years, the neighbourhood has maintained its low density. Kolfe is currently one of the neighbourhoods in the inner city of Addis Ababa earmarked for redevelopment and densification, but the fate of the current inhabitant remains to be unclear.



Kolfe Open Market



Kolfe Communal Space

HOW CAN RAPID URBANIZATION RESULT IN **POSITIVE OUTCOMES WITHOUT THE DENIAL OF NEIGHBOURHOODS** AND CAUSING TENSION BETWEEN COMMUNITIES?

HOW CAN A CITY ACHIEVE **EFFICIENT DENSIFICATION** WITHOUT HAVING **NEGATIVE ECOLOGICAL AND ECONOMIC IMPACTS**?

WHAT WOULD **BALANCED, HUMAN-SCALE DENSIFICATION** FOR A NEIGHBOURHOOD SUCH AS KOLFE WITH LOW-INCOME INHABITANTS AND **EXISTING STRONG SOCIAL TIES** LOOK LIKE?

WHAT IS ARCHITECTURE'S PLACE IN **A CONFLICT-STRICKEN PLACE** AND HOW CAN IT BE USED TO **INTRODUCE SECURITY?**



Addis Ababa Inner City Neighbourhood

http://www.booqify.com/guide/addis-ababa

RELEVANCE

SHELTER IS ONE OF THE BASIC NEEDS FOR HUMAN BEINGS

Shelter is one of the basic needs for human beings, yet, like most countries around the world, Ethiopia is struggling with a severe shortage of housing. Ethiopia has one of the fastest growing economies in East Africa which has caused Addis Ababa to expand at a rapid and unbalanced rate to accommodate for the influx of migrants traveling into the city from the rural areas. Addis Ababa's resettlement program has mostly focused on fast and short-term solutions resulting in a patchwork of buildings and regulations. The inadequate affordable housing and lack of coherent plan for the issue has also exacerbated land related conflicts in the city.

Addis Ababa's growth has mostly been horizontal and has failed to take the opportunity to explore a balanced and integrated way of densifying the city which accounts for the existing symbiotic relationship between neighborhoods and their cultural heritage. If anything, the process has intensified land related conflicts and the housing insecurity among the impoverished in the city. Inner city slum dwellers who depended on informal income generation were relocated to condominiums at the outskirts with minimal facilities around where they struggle to survive.

In the past, architecture and urban design have, at times been used to benefit the affluent groups of the society while excluding the impoverished. They have also had political implications in certain societies. It is time for architecture to be used for peacebuilding and improving social relations within a society. Housing deficit is a global issue, and in most societies, it has caused conflicts between different groups. In a society affected by conflicts and sense of insecurity, architecture can be used as a tool to introduce cohesion and inclusion, and institute some stability into the neighborhoods.

"Instead of architects assuming we know what is right and jumping in to assert our experience, expertise and good intentions, we need to step back, listen and be ready to learn, unlearn, and adapt."

—Karen Lu & Mary-Margaret Zindren, Dezeen

III

RESEARCH

ETHNOGRAPHIC RESEARCH

Group Analysis and Graphic Novel of Two Contexts

SOCIAL SPACES IN BLIJDORP, ROTTERDAM

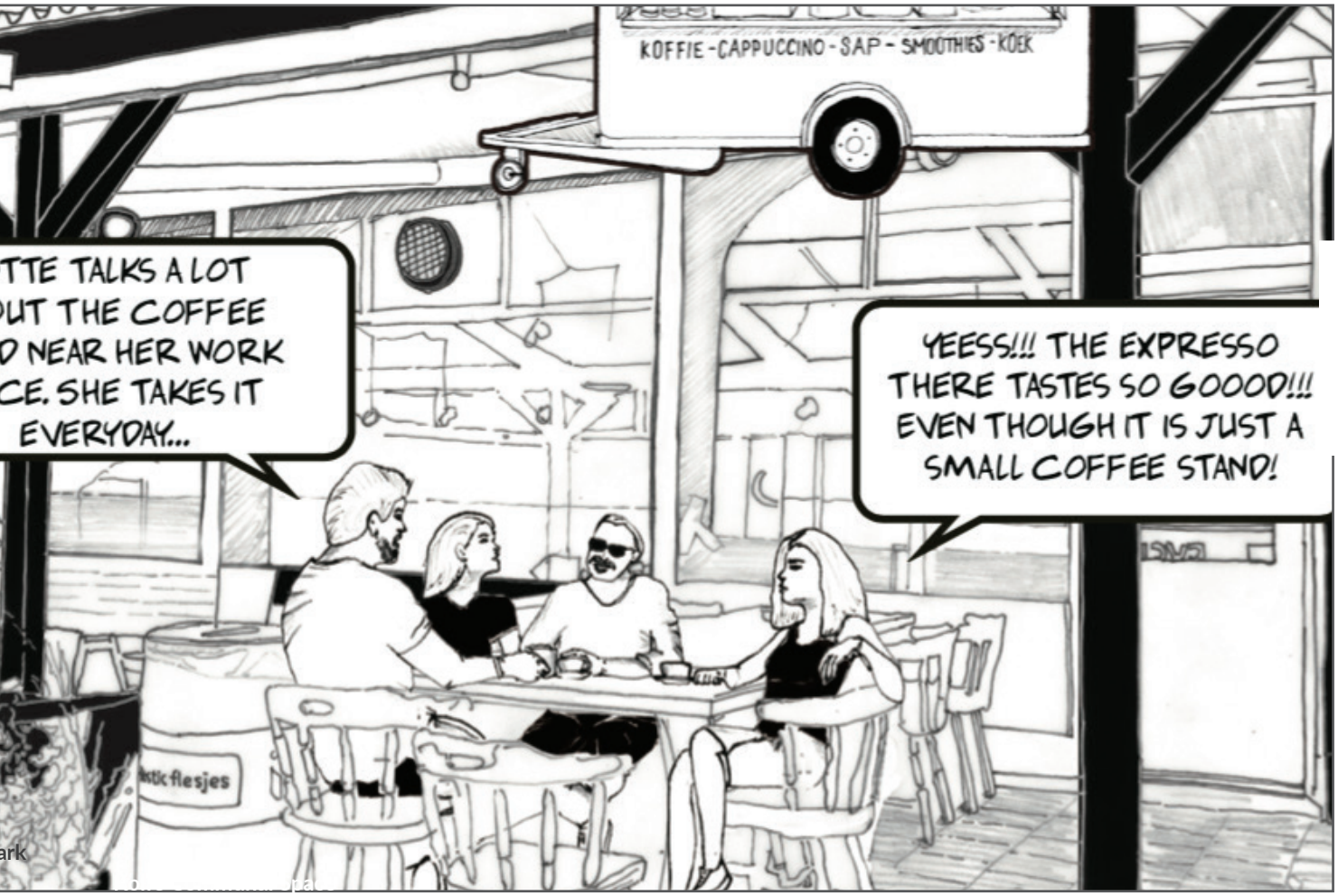


Morning jog in Vroesenpark



Brunch with freinds in Vroesenpa




KOFFIE - CAPPUCCINO - SAP - SMOOTHIES - KOEK
TTE TALKS A LOT
UT THE COFFEE
D NEAR HER WORK
CE. SHE TAKES IT
EVERYDAY...
YEESS!!! THE EXPRESSO THERE TASTES SO GOOOD!!! EVEN THOUGH IT IS JUST A SMALL COFFEE STAND!

SOCIAL SPACES IN SUMMIT, ADDIS ABABA

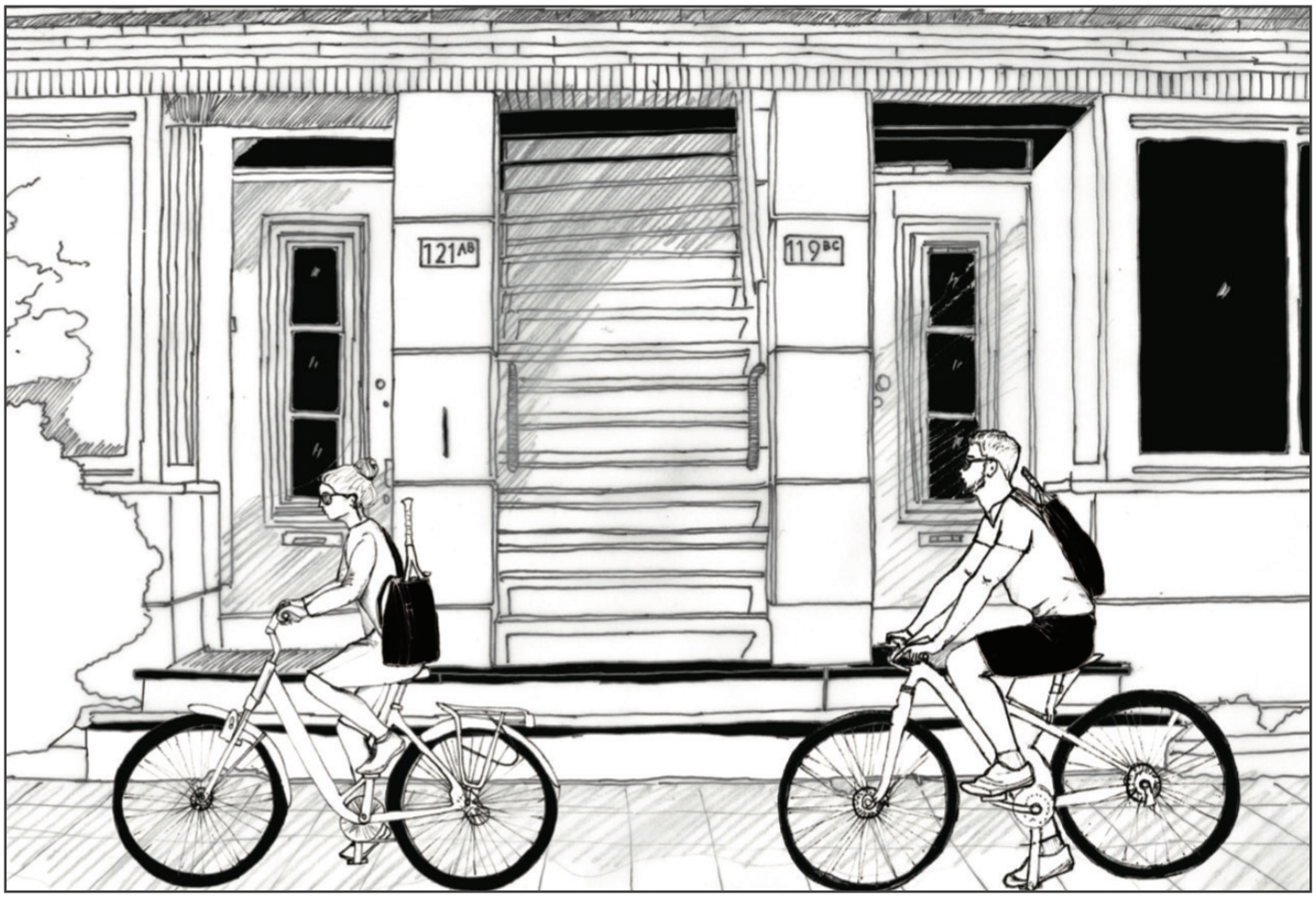








Kolfe Communal Space


121AB
119BC



BORDERS IN BLIJDORP

PORTICOS AS BORDERS

BORDERS IN SUMMIT

Most gated neighbourhoods with middle and high-income households often have guards. This is due to the urban insecurity that is prevalent in Addis Ababa. The increase in income disparity and recent conf licts has exacerbated the security issue.

Additionally, the shortage of resources such as affordable housing has not helped the issue. In Summit, guard posts can be seen placed sporadically throughout the neighbourhood. Although some of them are left dilapidated and empty, some are still in use.




THAT MUST BE SABA RETURNING HOME FROM THE STORE



INCOME GENERATION

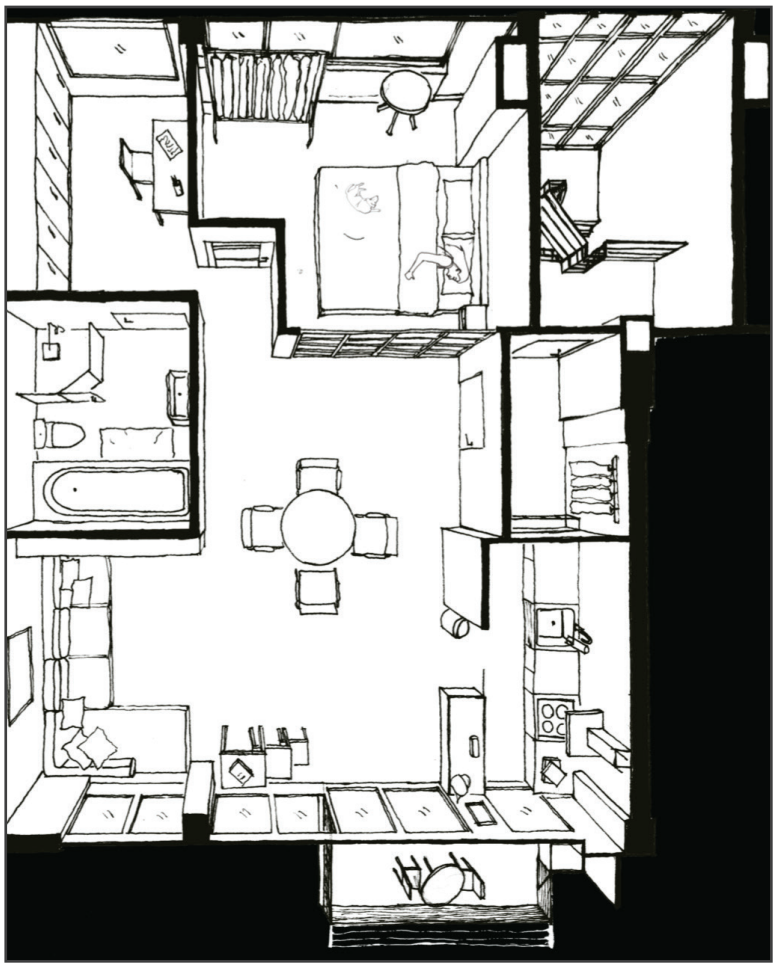
SMALL COFFEE STANDS (BLIJDORP) VERSUS NEIGHBOURHOOD

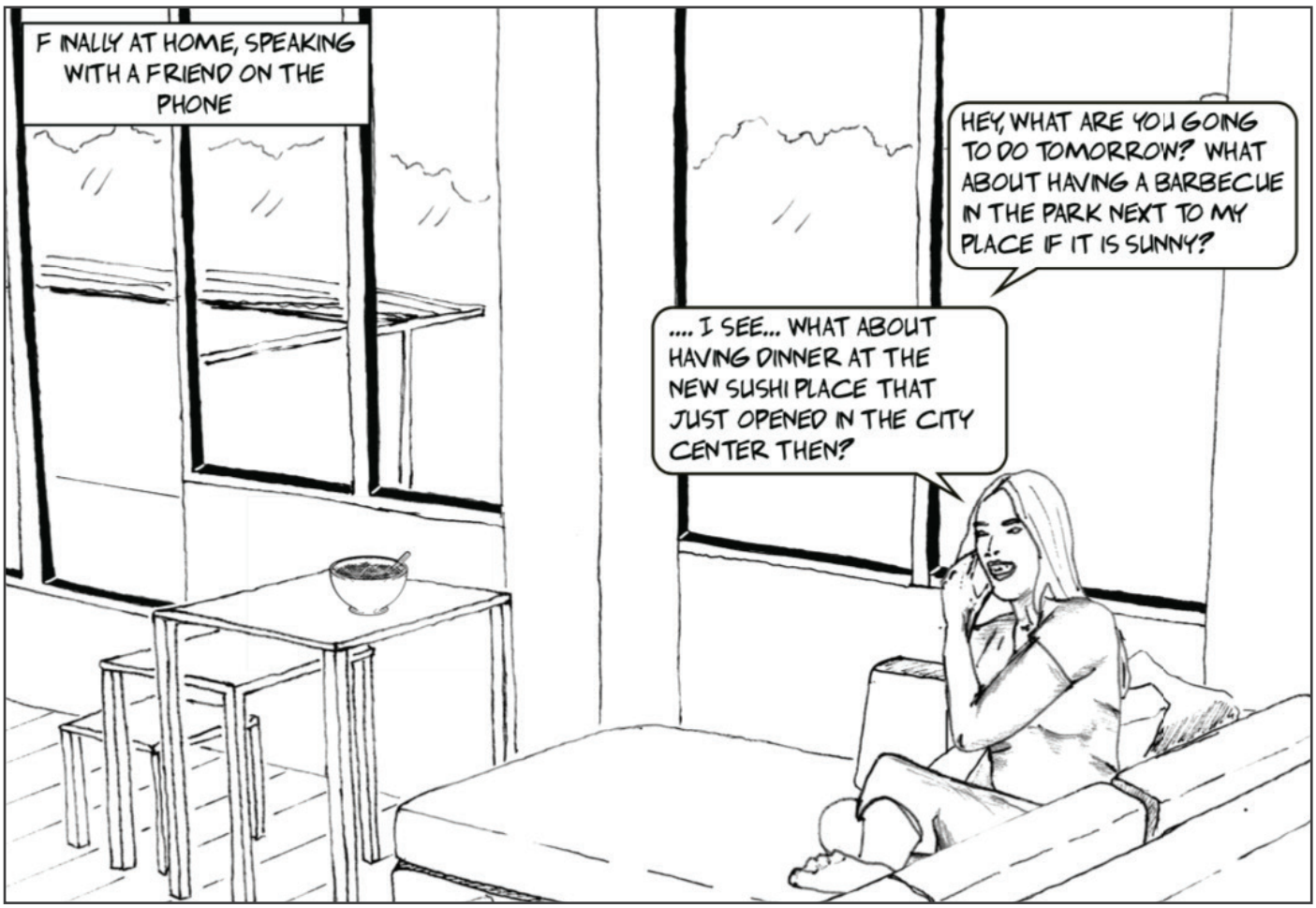
VEGETABLE STORES (SUMMIT)

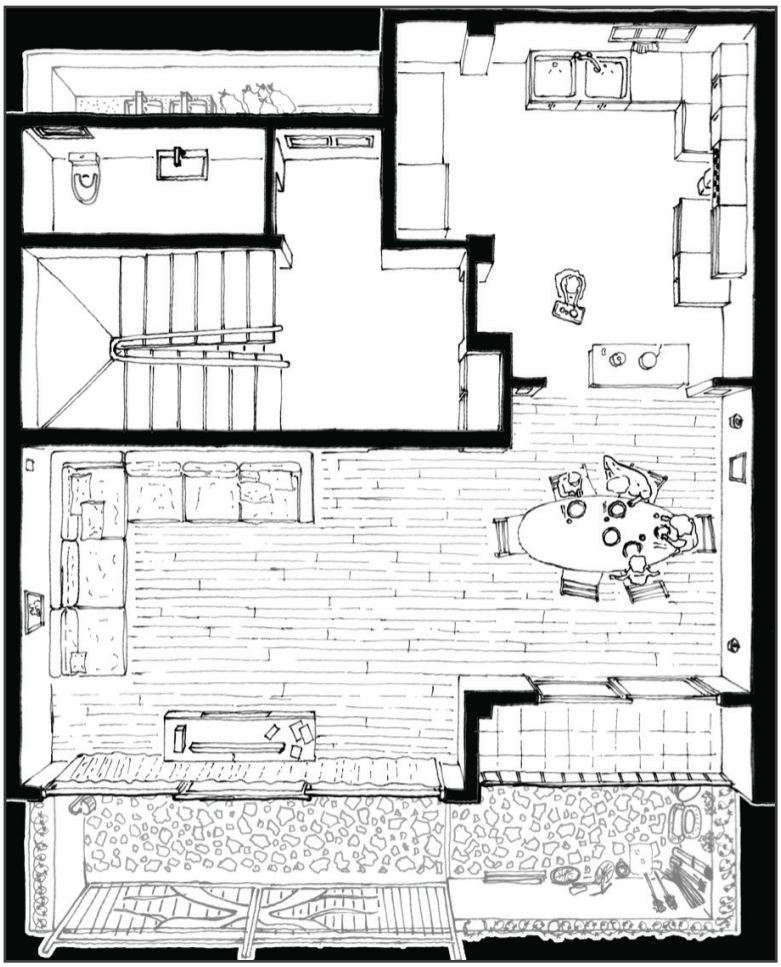



AT THE COFFEE STAND
KOFFIE - CAPPUCCINO - SAP - SMOOTHIES - KOEK


JUST ONIONS TODAY... IS BUSINESS PICKING UP FOR THE HOLIDAY?
I HOPE THAT I CAN OPEN MY OWN ONE DAY
BIRTUKAN MANAGED TO SAVE ENOUGH MONEY TO OPEN UP A SHOP IN THE GOUND FLOOR OF A CO-OPERATIVE BUILDING. NEVERTHELESS, SHE ASPIRES TO MOVE TO A BIGGER PLACE BECAUSE THERE IS ONLY SPACE IN THE BACK FOR A BED AND A TOILET FOR HER AND HER DAUGHTER.




F INALLY AT HOME, SPEAKING WITH A FRIEND ON THE PHONE
HEY, WHAT ARE YOU GOING TO DO TOMORROW? WHAT ABOUT HAVING A BARBECUE IN THE PARK NEXT TO MY PLACE IF IT IS SUNNY?
.... I SEE... WHAT ABOUT HAVING DINNER AT THE NEW SUSHI PLACE THAT JUST OPENED IN THE CITY CENTER THEN?





HOME LIFE DIARIES

INDIVIDUAL RESEARCH AND INTERVIEW OF DOMESTIC PRACTICES IN ETHIOPIA

DOMESTIC PRACTICES IN A TRADITIONAL 'TUKUL' HOUSING IN WESTERN ETHIOPIAN



peaceful and spontaneous interactions with neighbours happen outdoors in the shade under the shade, at the main entrance

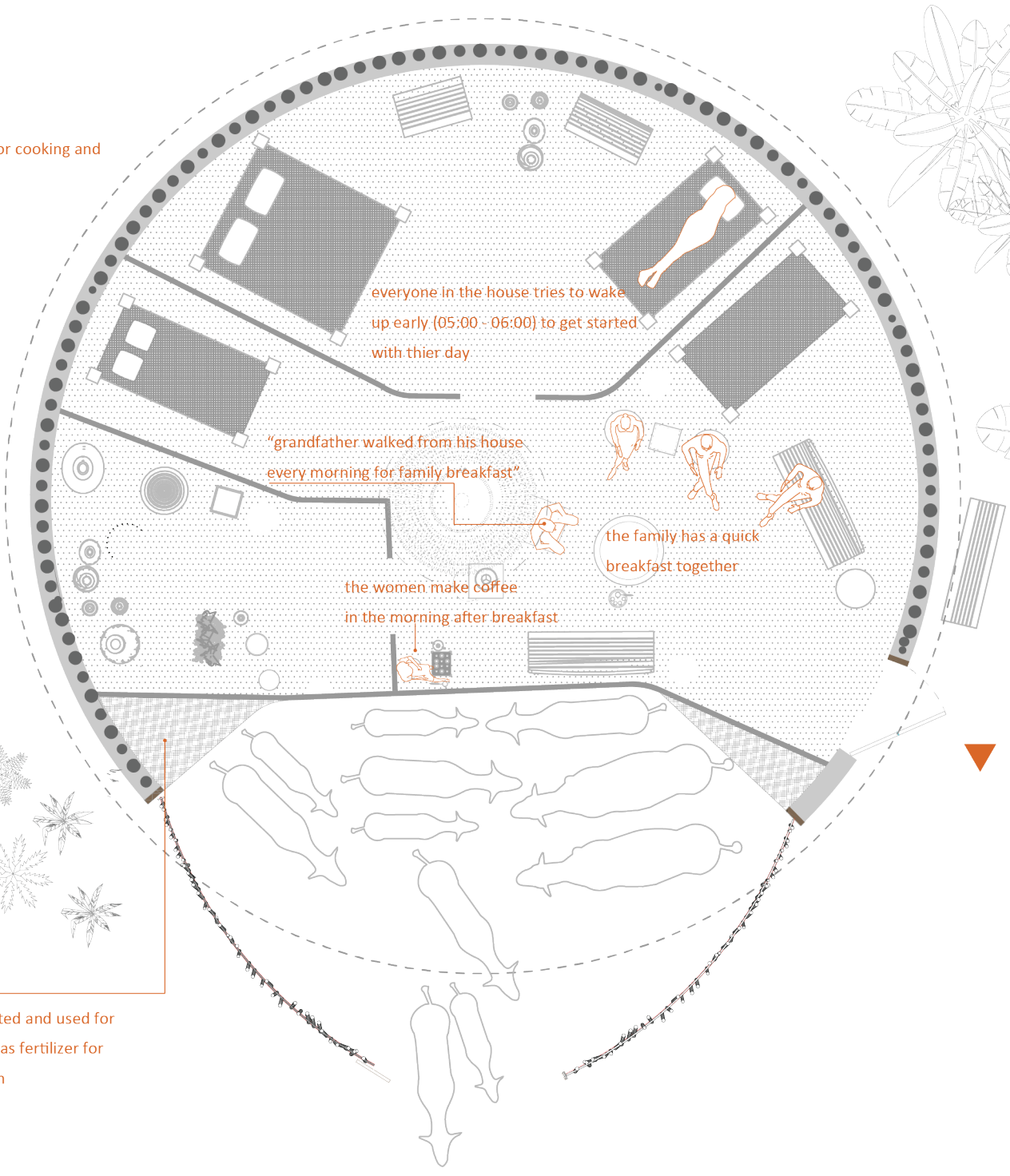
false banna
for fibers

Cow d
cookin
vegeta

Pros:

-symbiotic relationships between different domestic practices
-balance between privacy and commal life achieved by layou

Cons:
- minimal light and ventilation


na plant for cooking and
everyone in the house tries to wake
up early (05:00 - 06:00) to get started
with thier day
“grandfather walked from his house
every morning for family breakfast”
the family has a quick
breakfast together
the women make coffee
in the morning after breakfast
ung collected and used for
g fire and as fertilizer for
ble garden

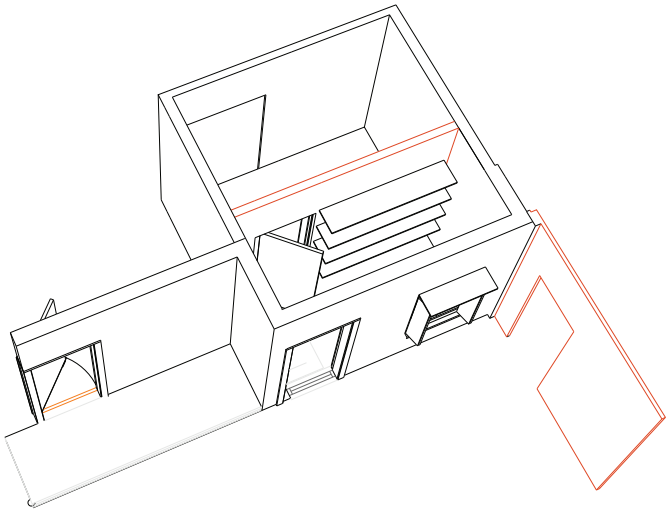
CASE STUDIES

SUMMIT COOPERATIVE HOUSING - '20 X20'

CASE STUDY - Summit
Cooperative Housing- 20x20

Original
=1 ground Floor
Commercial space

Existing w/ Additions -
Back room bedroom (~ 3mx4m),
Adjacet kitchen for making 'injera'
-wood with plastic covers








ADDIS ABABA
A2
A3
ARADA
YEKA
A2
KIRKOS
Goro
Summit condominium
Addis Ababa
አዲስ አበባ
BOLE
ADDIS ABABA




SUN CHIPS
JUSTICE



2000 - 2004 HOUSING STRATEGY FOCUS IN

ADDIS ABABA



Home ownership



CO-OPERATIVE HOUSING



PRIVATE DEVELOPERS



FIRST COOPERATIVE HOUSING IN ADDIS - 1992

1992 Cooperative Housing,

"...model cooperative society...organized in 1992 with a membership of 20...
government employees with middle-income..."

-1190 sqm of land
-Kebele 12 (sub-district)/ center city
-close to facilities

-original five storey design changed to six storey -> increased cost -> 50% cost covered by investors



No.	Function / one family	Area/m²
1	Living/Dining room	25.00
2	Master bedroom with bath	24.00
3	Children's bedroom	12.00
4	Toilet & shower	3.00
5	Kitchen & Laundry	9.00
6	Lobby	2.00
7	Maid's room or Store	3.00
8	Circulation	5.00
	Total Area	83.00

Table 2 Ground & Basement

9	Super market	350.00
10	Store	350.00

CO-OPERATIVE HOUSING MAJOR OBSTACLES

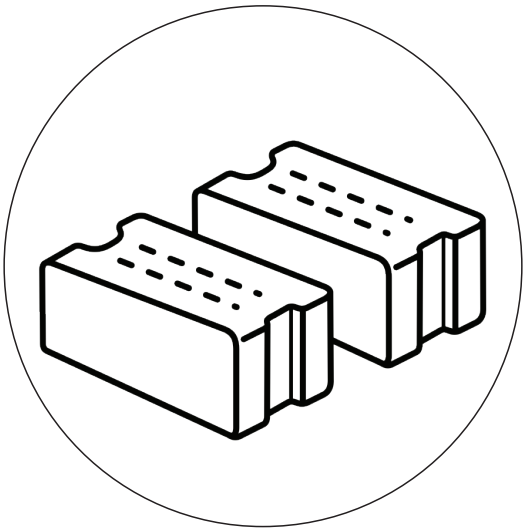


Funds

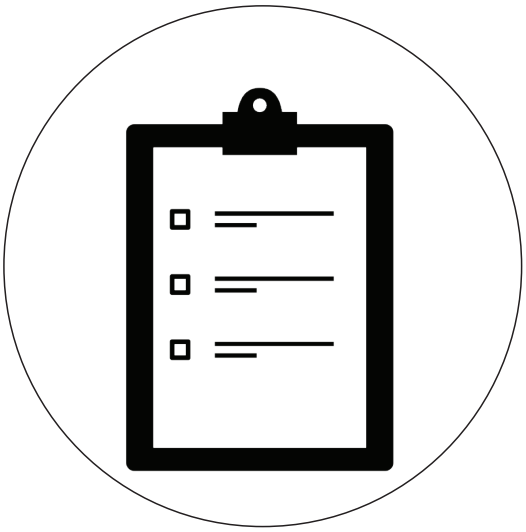


Infrastructure

(6-12 months delivery delayed to 2 years)



Materials



Regulations

Humanscapes Habitat in Auroville



“Humanscapes Habitat is an investigative project which explores environmentally friendly housing with in-situ construction methods and introduces a human ecology by using the “principles of cohousing concept of living, facilitating interaction among neighbors for inclusive social development, economic and environmental benefits”



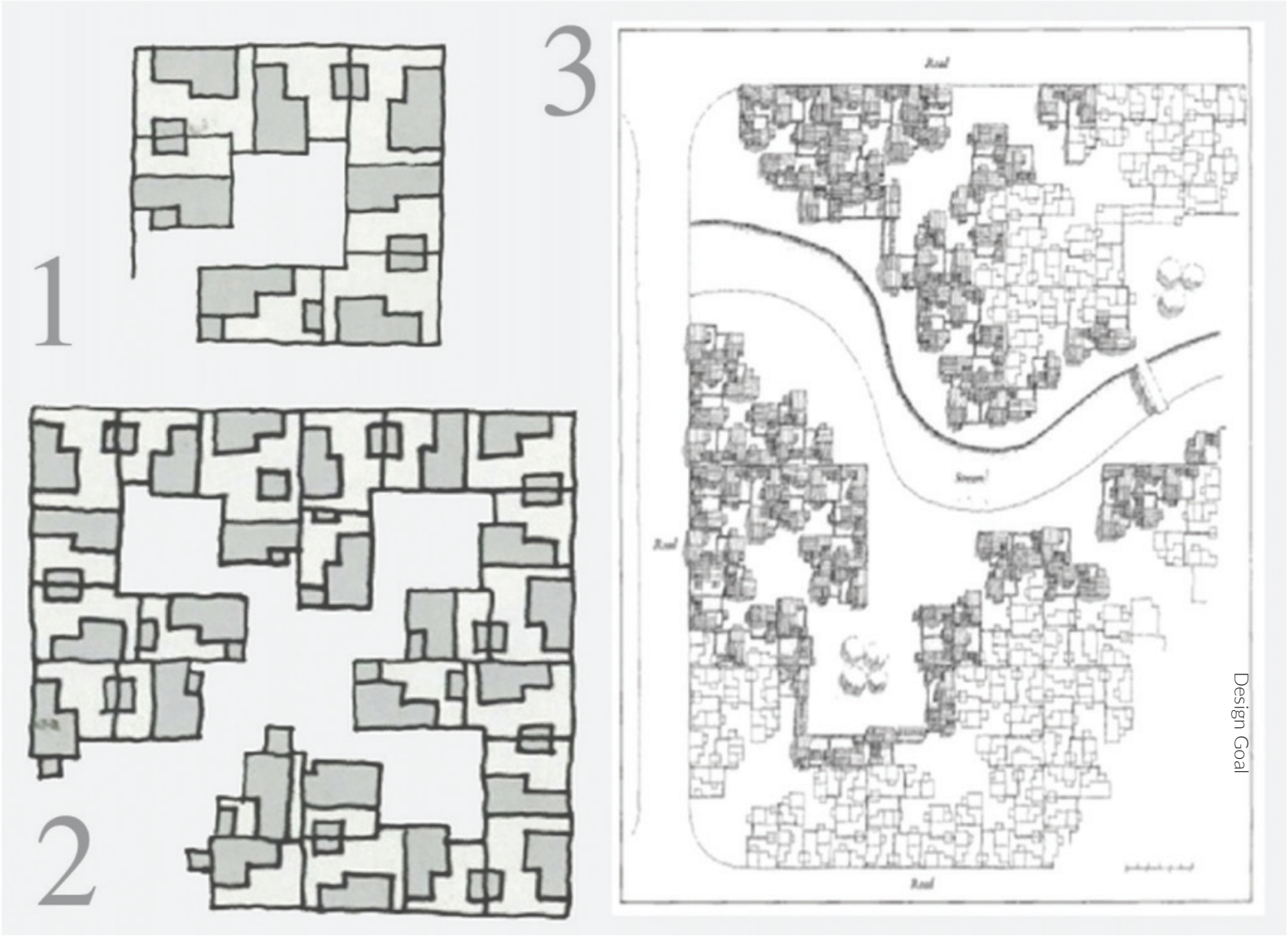
Design Goal

Belapur Housing in Mumbai by Charles Correa.

Figure 1
1. Belapur housing development: 1.7 housing units around a courtyard 8m x 8m; 2. bigger module of 21 houses, surrounding a community space of 12m x 12m; 3. Sitting plan (Correa, 1989).

A “low-income housing development takes the traditional Indian settlement patterns and applies it the spatial hierarchical configurations at the private dwellings scale “through

the ‘doorstep’



-Computation and Performance - Volume 2 - Languages of Design

“....

—D. Shiferaw, 1998

KOLFE - THE CHOSEN SITE

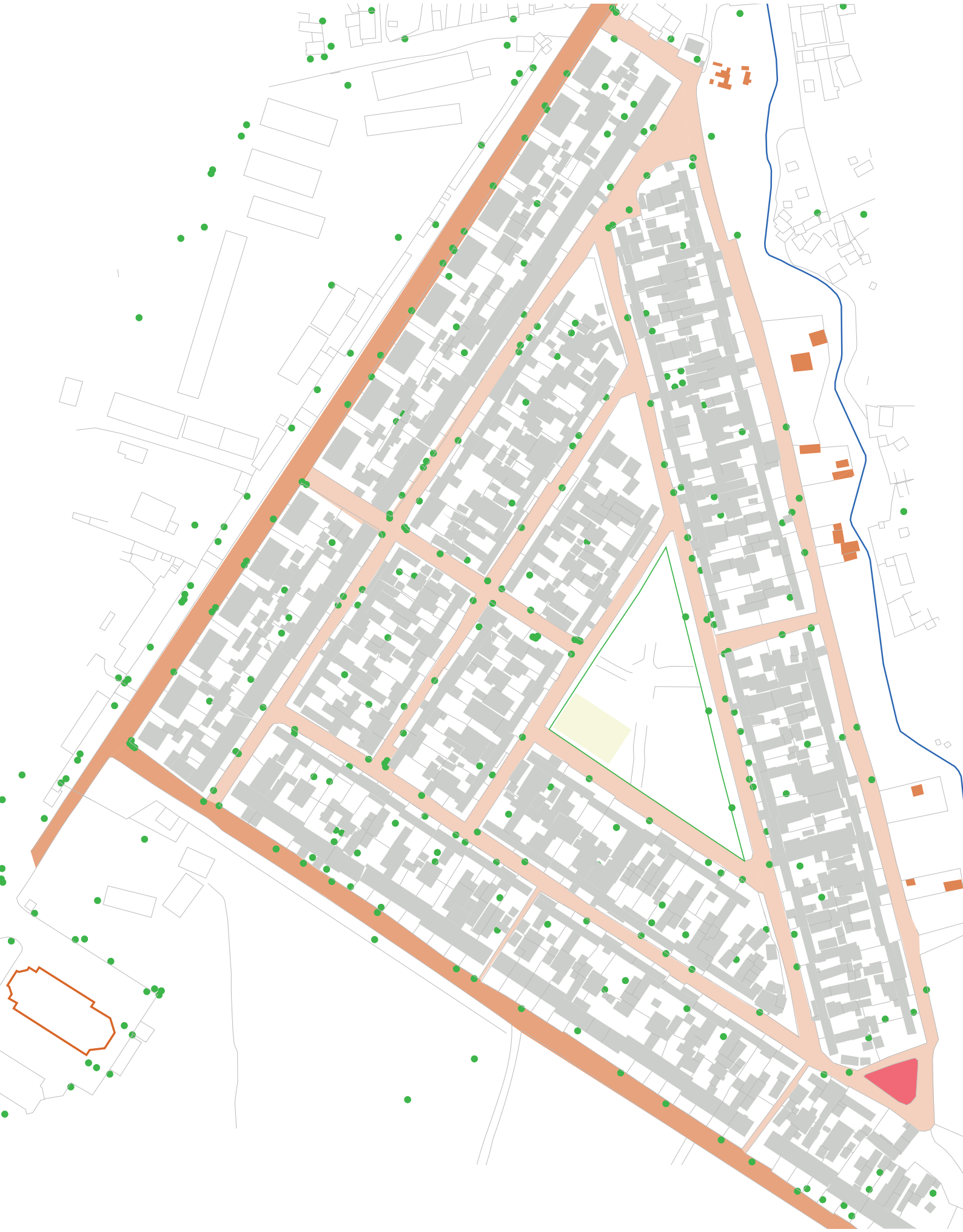

Addis Ab
Alem Gena
Sebeta
Dalet


YEKA
ADDIS ADABA
OROMIA
Goro
BOLE
ADDIS ADABA
OROMIA

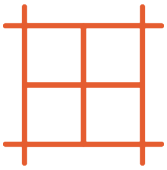




Kolfe is a neighbourhood within the Kolfe Keranio sub-city – one of the ten sub-cities of Addis Ababa. It was originally a resettlement site for about 300 households from the inner city slums of Filwoha and Estifanos during the Sheraton Addis construction that started in the 1960s. The units were low-cost core housing scheme housings built and assigned to the families by FHC. The original renters are either retired and still living in the units after multiple alterations or have passed on and left the units to family members. The current inhabitants are predominantly from low and low-middle income households.



Kolfe is a triangular site flanked by busy main streets on two sides and by a stream on the longer side running from north to south. The stream can be accessed at the bottom edge of the site and is mostly neglected which has led to it becoming a trash dumping location. The stream also poses a problem once in a while during the rainy season when it fills up and overflows into the neighbourhood. The site has a well defined grid of cobblestone secondary/ pedestrian streets which accommodate most of the neighbourhood activities. The majority of the inhabitants have lived at this site for over thirty years and have managed to expand their original units with multiple alterations over the years. Consequently, although the site has a low density, the individual lots have insufficient open spaces due to the horizontal expansion. The inhabitants have also managed to maintain their original sense of community which has helped them create a community cleaning system to maintain the inner streets. Aside from the lively market on the main streets at the periphery of the site and the weekly local market at the southernmost part, the site lacks adequate amenities that can be used by the community.



street grid



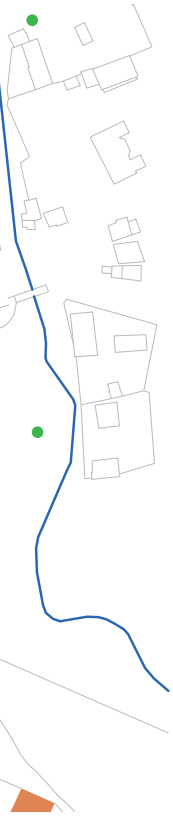
unmaintained stream



cobblestone pavement



horizontal expansion



-Informal Settlement

Primary/VehicularStreet

- Secondary/Pedestrian Street

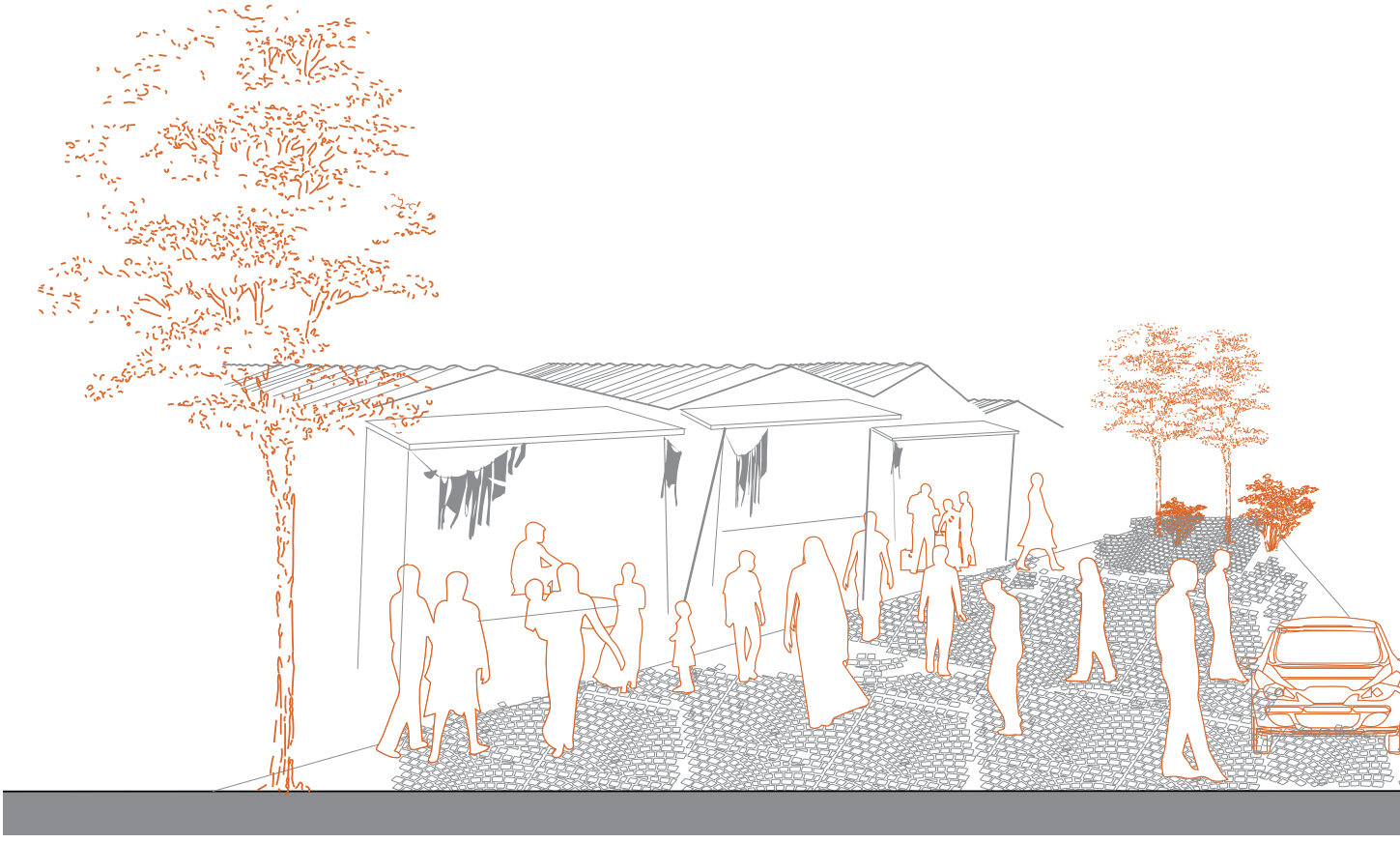
- Neighbourhood Church

Neighbourhood Market

PRIMARY STREET ACTIVITIES



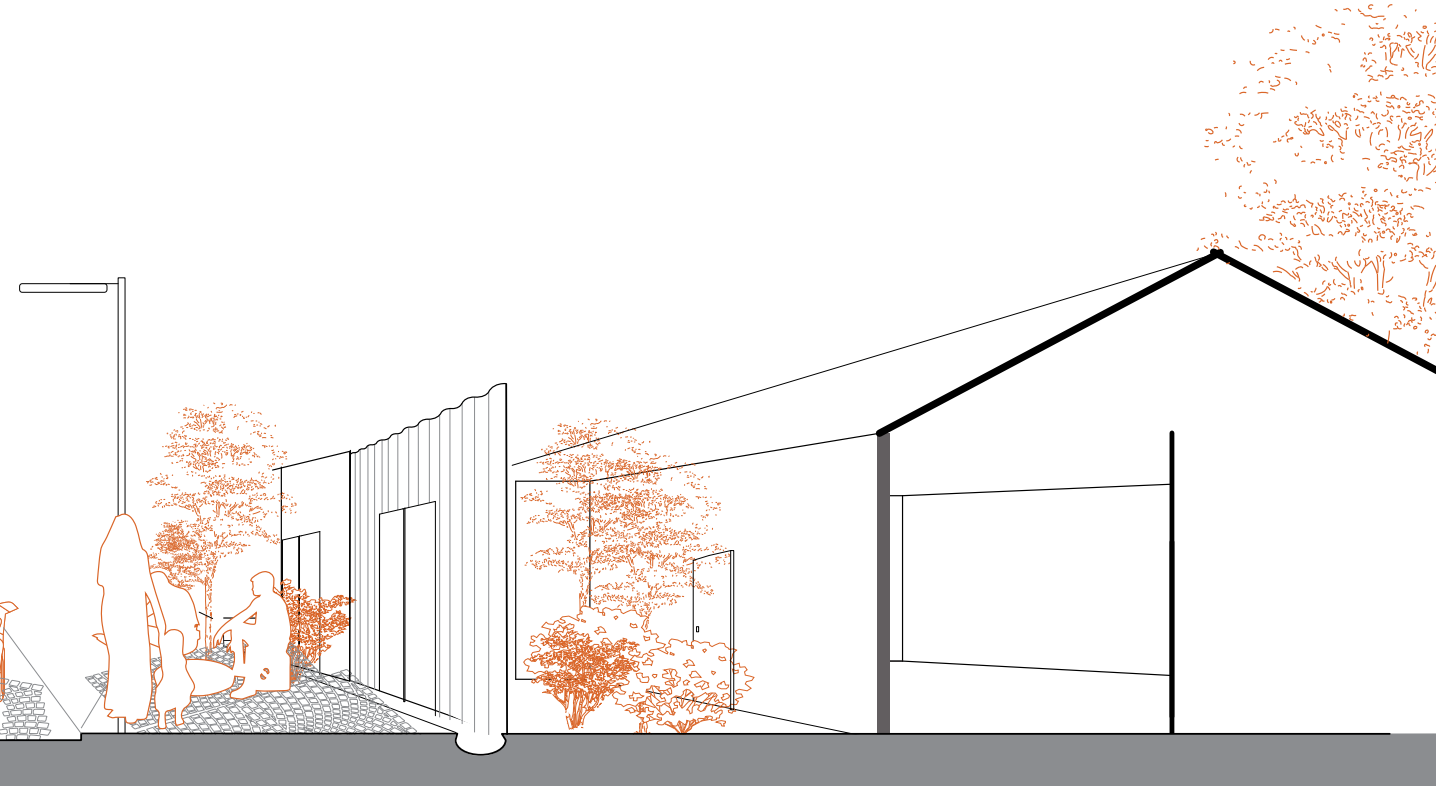




The primary streets are located on the western part of the site. The north-west primary street is home to a busy local market which invites a lot of lively activity to the area. Although this market keeps the area very busy and crowded, most foot traffic is kept to the edge of the chosen site.



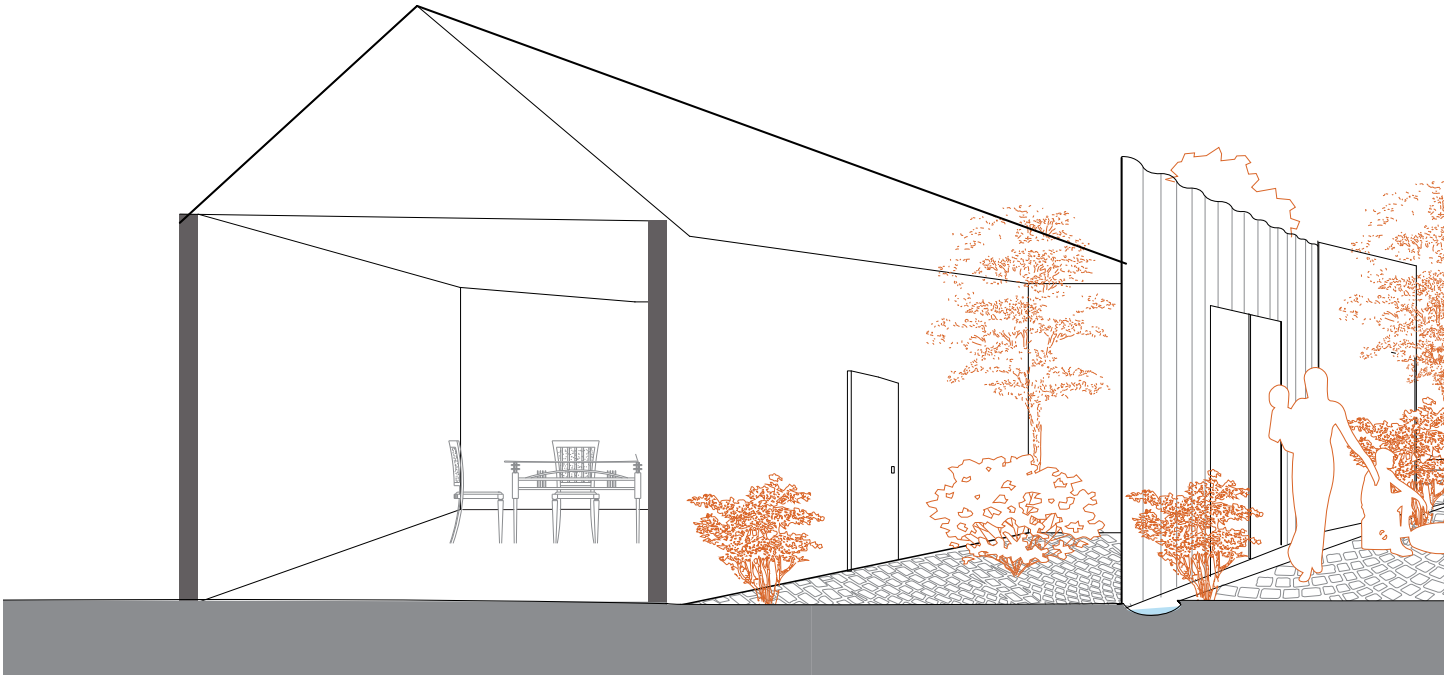




SECONDARY STREET ACTIVITIES



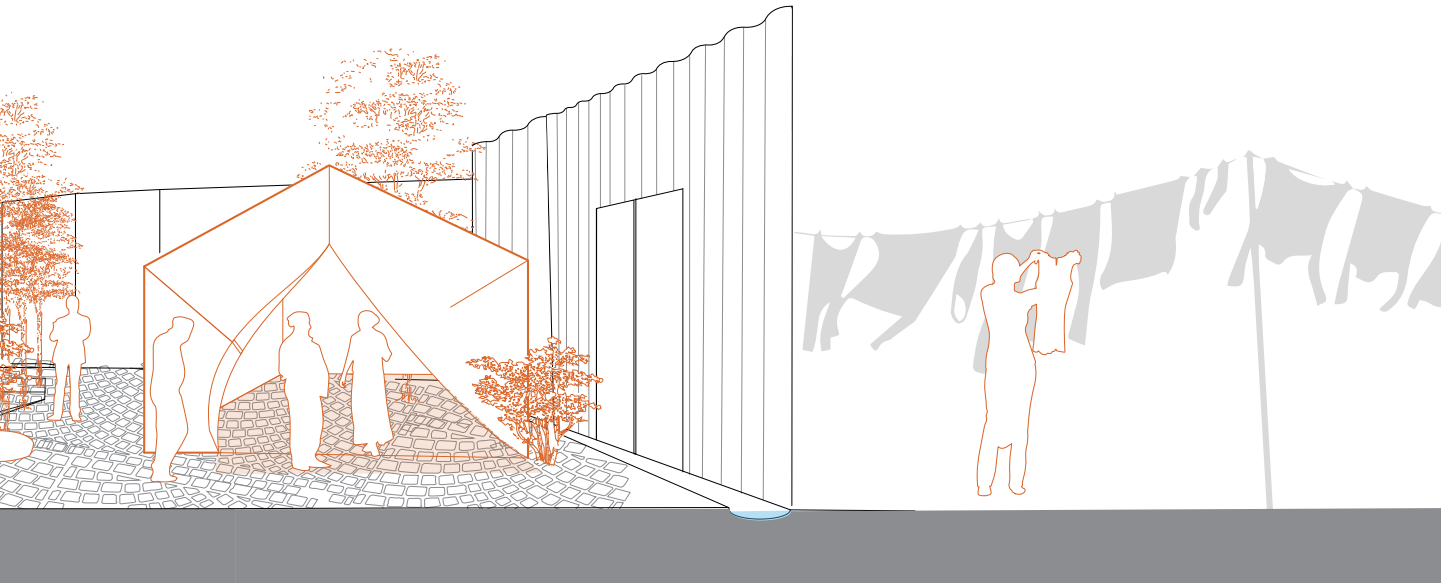




The secondary streets are mostly clean and nicely paved with cobblestones. The site offers a sense of calm and quietness from the busy street just outside of the neighbourhood. These pedestrian streets accommodate most of the community activities such as traditional mourning rituals and festivities such as the lighting of 'chibo' – traditional bonfire during the Meskel holiday – throughout the year. Even though the inhabitants have some plants by their gates just outside their homes, the area lacks adequate permeable surfaces which could factor into the flooding issues they have experienced in the past.



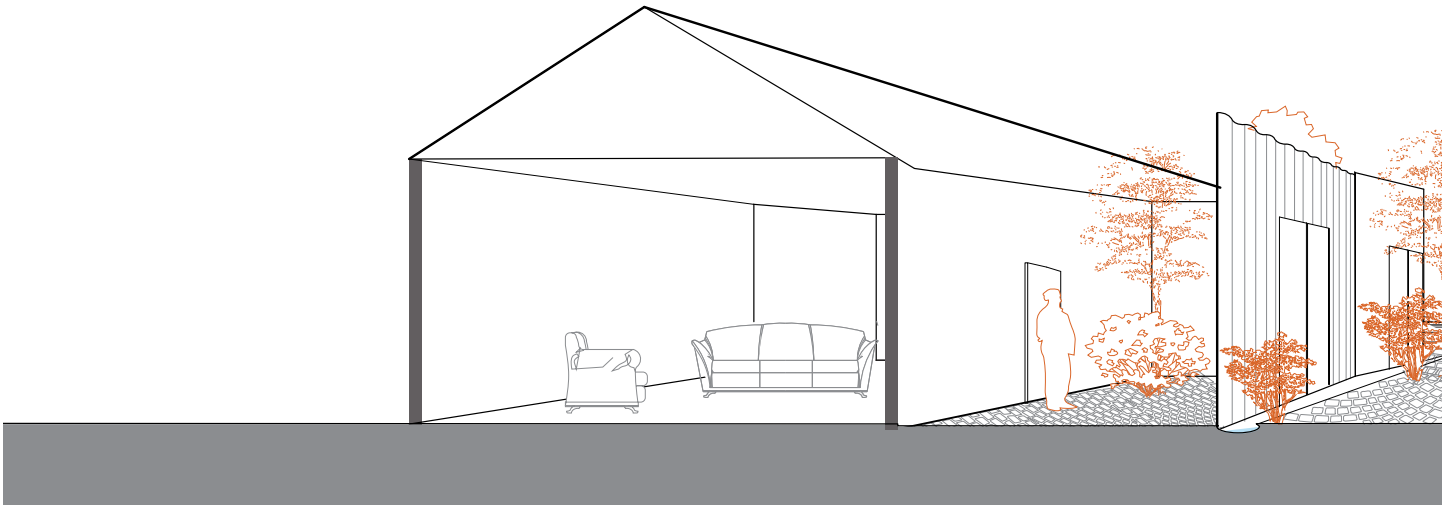




MARKET STREET ACTIVITIES



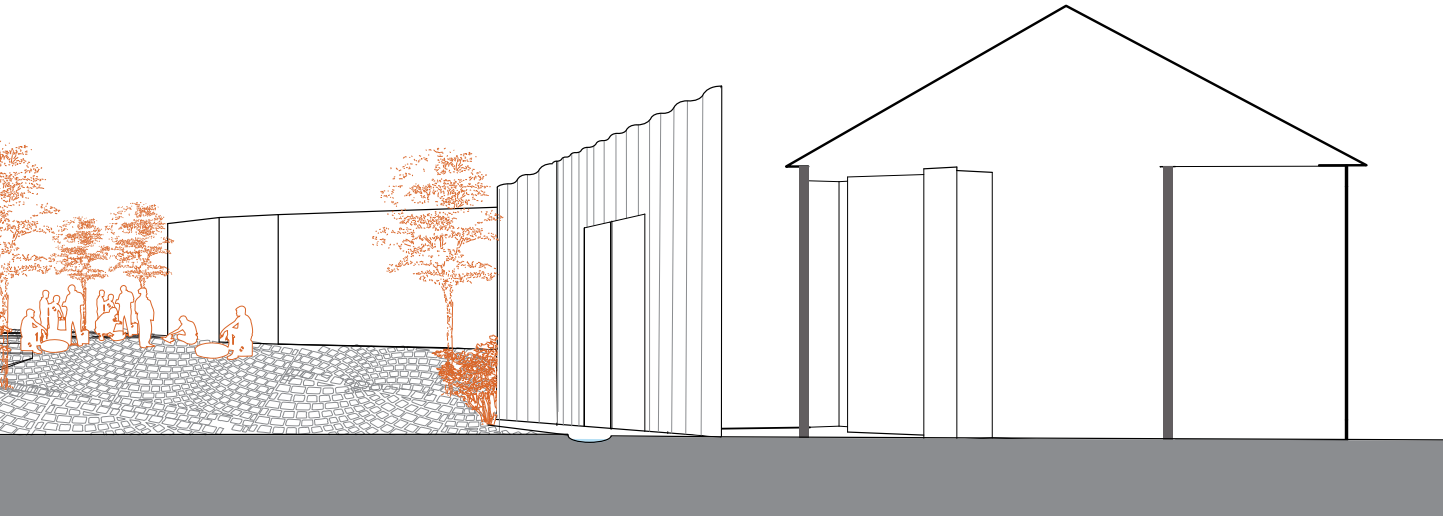




The neighbourhood market at the southernmost part of the site is a place allocated for informal market activities by the FHC. Regardless, the location of the market is highly criticised by the people because it is far away from everything and is therefore very rarely used. Instead, most informal market activities still take place in the streets where they are easily accessible by the inhabitants.



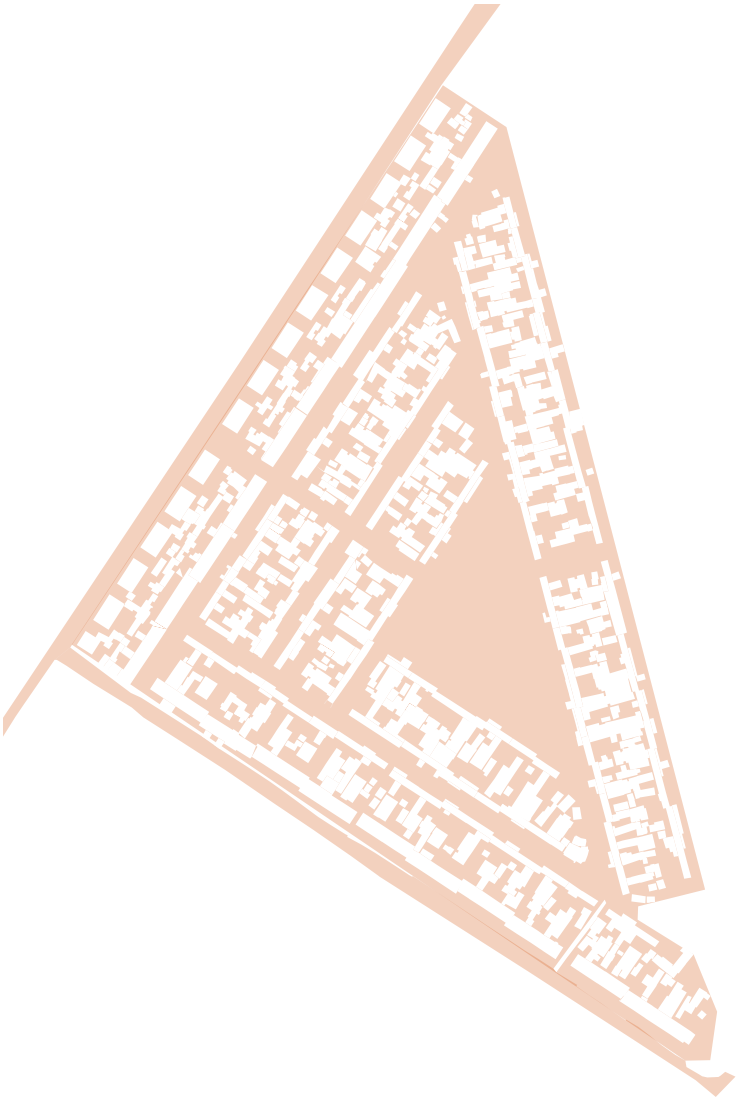






Built Space

Private

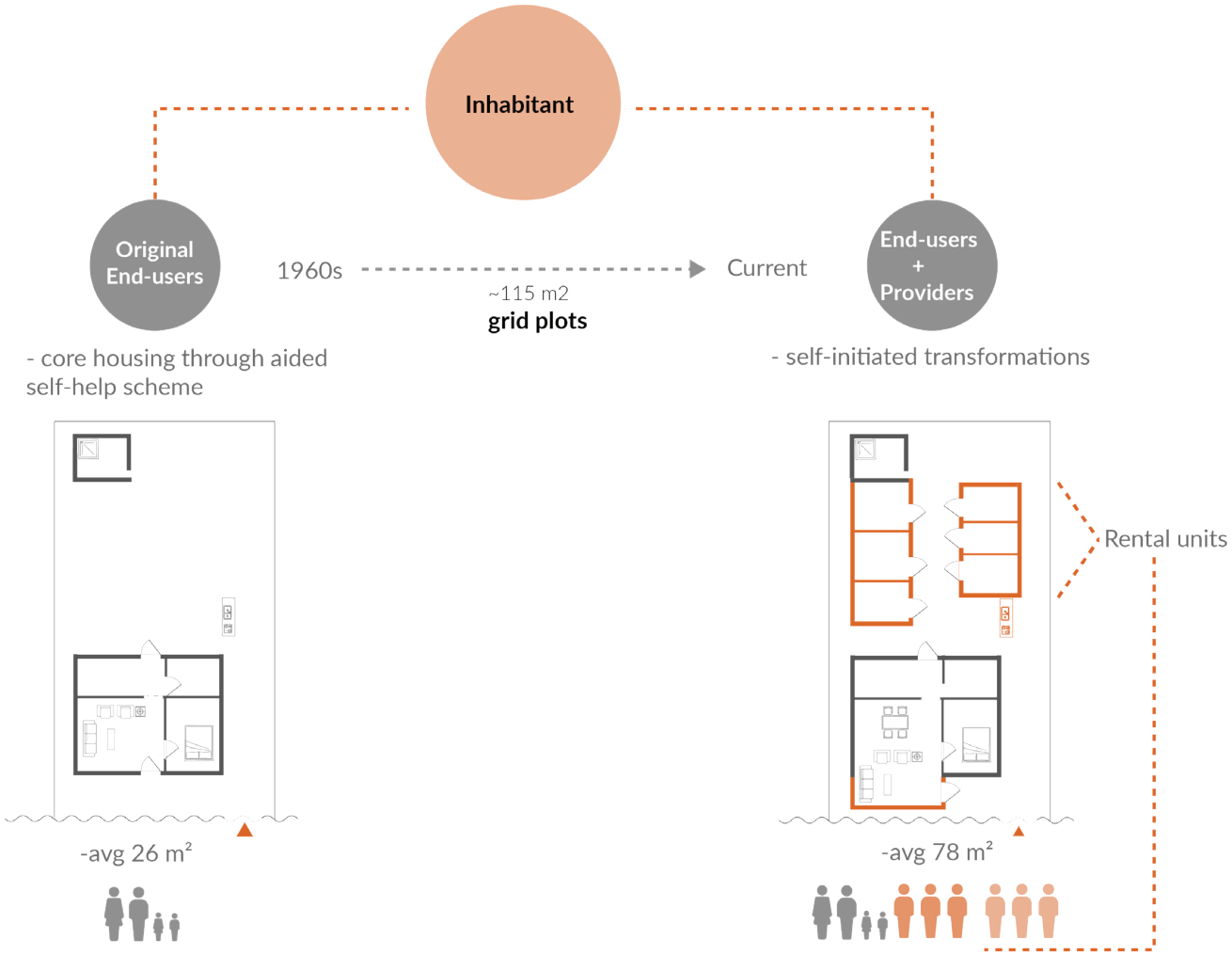


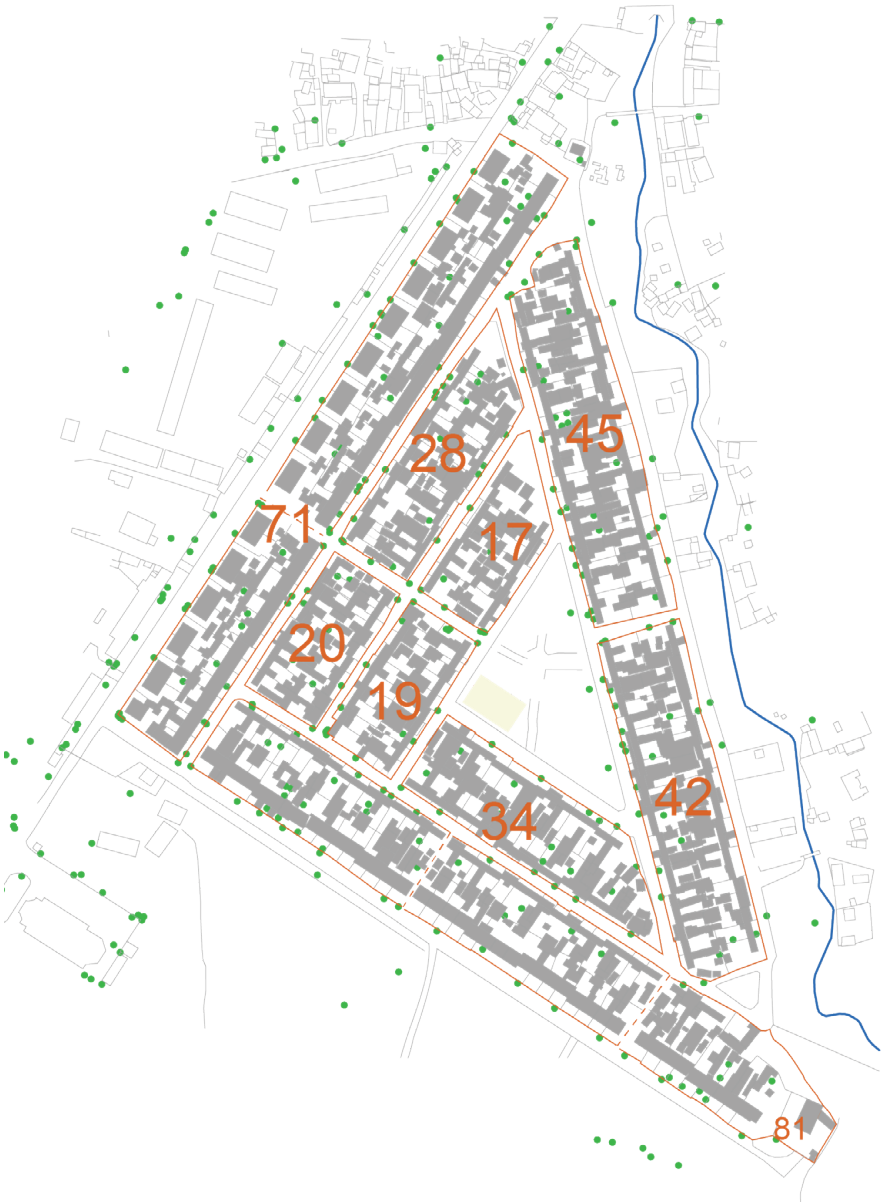
e Open Spaces

Public Space= Buffer Zones

* mostly impermeable surfaces *

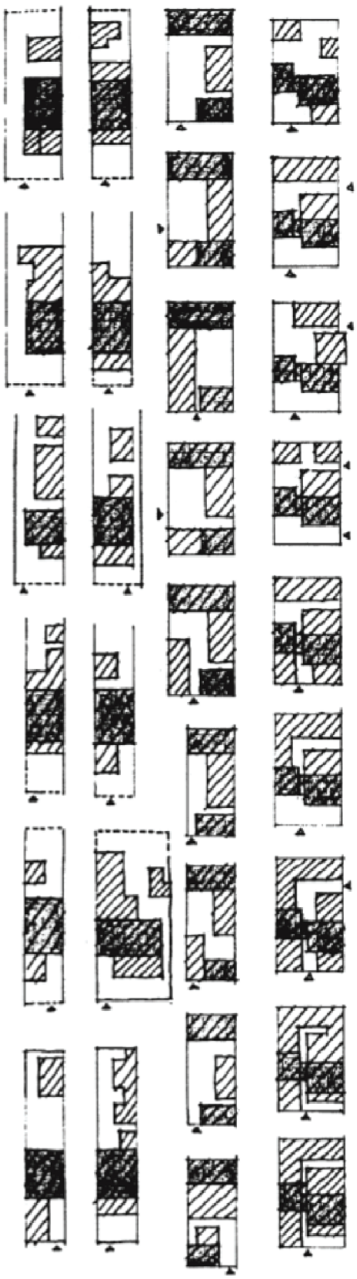
SELF- INITIATED TRANSFORMATIONS - KOLFE





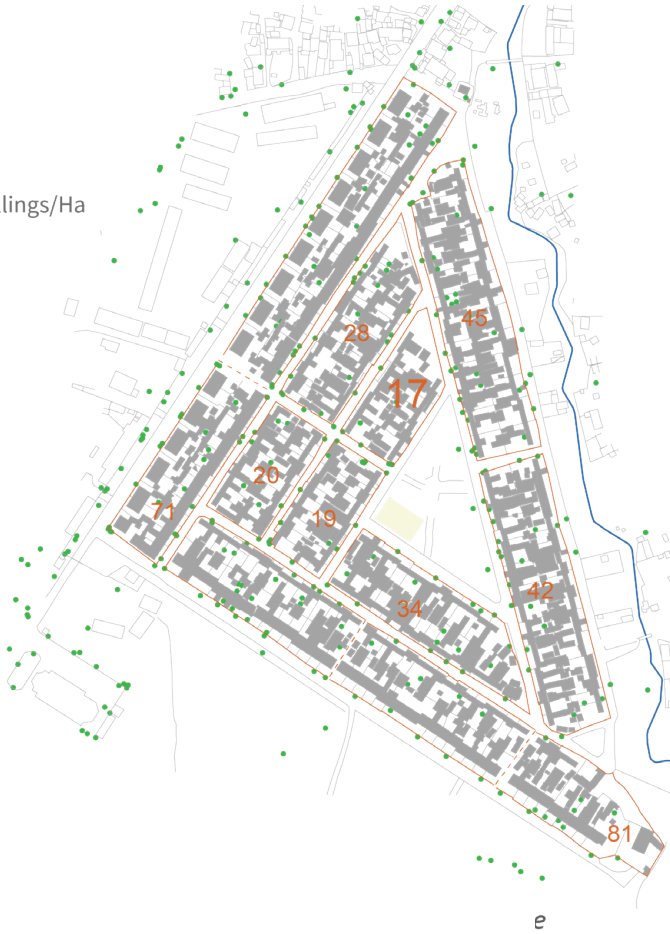
Number of Households

Self-initiated transformations in Kolfe



Schematic presentation of extension models (D Shiferaw).

357 HHs
2,540 inhabitants
~ FSI= 0.55, 55 dwellings/Ha



For "traditional and spontaneous urban houses of Ethiopia...the habitable rooms are surrounded by subordinated functions and open spaces. It is very difficult to draw up a tpical transformation morphology...because it is the core house and tenure status that mainly dictated the extension patterns". The transformation patterns mostly resulted in enclosing the inner courtyards. (D Shiferaw).

- 63% ‘chika’ wall extension
- improvements funded by private savings, informal activities and ‘ikub’
- ownership -> improvements

“Transformation motives:
- socio-culturally determined aspirations,
- growth of family size,
- desire of generating income
- response to harsh climatic conditions
- desire to copy prevalent housing forms”
(Shiferaw, 447)

- improvements funded by private savings, informal activities and ‘ikub’
- ownership -> improvements

“Transformation motives:
- socio-culturally determined aspirations,
- growth of family size,
- desire of generating income
- response to harsh climatic conditions
- desire to copy prevalent housing forms”
(Shiferaw, 447)

Transformation trends: (a) extension systems within given plot; (b) formation of accesses; (c) subdivision of outdoor spaces (D Shiferaw).

In Kolfe, 63% of the householders used traditional construction method while the rest used hollow concrete blocks and natural stones.
“Materials used in such spontaneous extension processes are not durable and sustainable and householders can not afford to buy durable ones. (D Shiferaw).
For instance, wood is a construction material that is becoming scares in Ethipia and contributing ” resulting in desertification. This

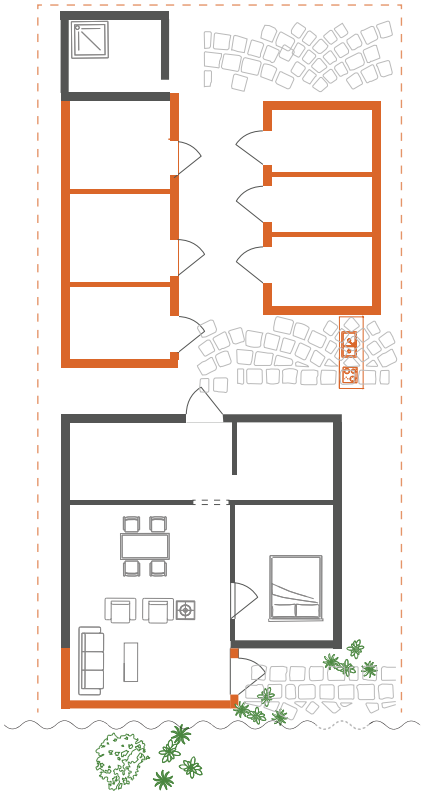
SELF- INITIATED TRANSFORMATIONS - CASE STUDY OF MR. M'S DWELLING

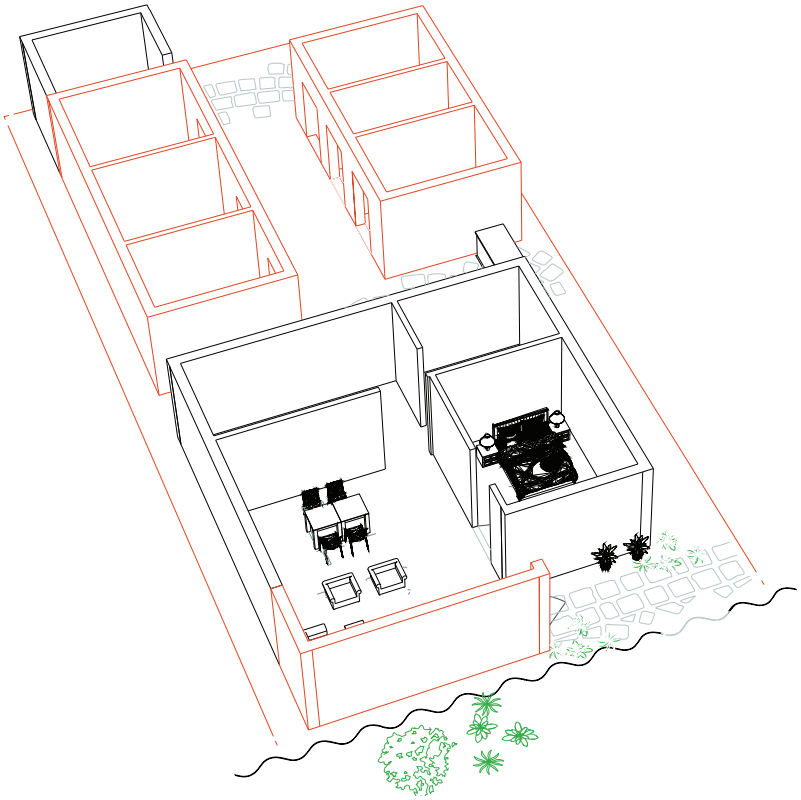


Original
=1 Living Room, 1 Bedroom, 1 Kitchen
=HCB construction
= 13 Birr/month

Existing w/ Additions
=4 Bedrooms, Outdoor **Kitchen, and 3 rental units**
='Chika' with wood construction
=380 Birr/month
= 4 households







INTERVIEWS WITH THE PEOPLE

		Aspirations/ Desires
Mr. M. -retired (79 yo) - 6 children -original 'settler' -likes to garden 	sub-renting -3 renters	maintain income WILLING TO SUBSTITUTE W/... own a store veg. garden
Ms. S. ~40's - 2 sons - one injured & at home - caregiver of mother (Ms. K) 	-washing clothes (at home with mother)	maintain income children activity for son better quality housing WILLING TO ... live in high-rise
Mr. T. -retired - 3 sons -original 'settler' -crowded house -likes to socialize with friends 	-retirement + funds from diaspora	live with family- spacious unit elderly/ game center shaded leisure area neighbourhood market - formal

domestic practices

and housing layouts

Mr. M.'s daily routine:
(retired)



-4:00 -wake up for church
-breakfast
-walk
-socialize
-12:00 - garden
- 16:00 walk



Fig. Existing Site Plan of Kolfe

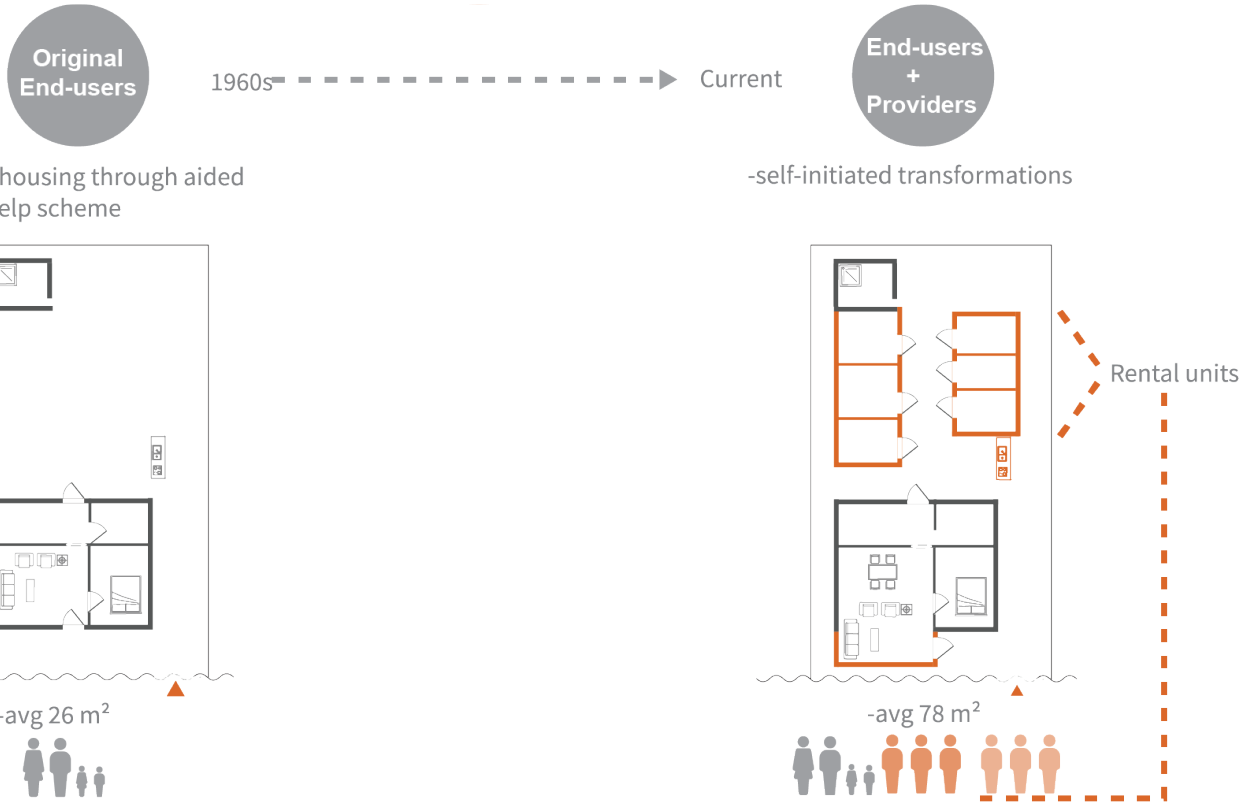
Pros:

-ability to expand horizontally
(if one can afford)
-Privacy
-Close proximity to neighbours and communal spaces (ex. church)

Cons:

-doesn't own dwelling = lack of housing security
- very minimal open/communal space
-lack of green space for gardening
-limited opportunities for income generation activities

EXISTING - DWELLING OF MR. M IN KOLFE



Original layout of two- rooms typology in Kolfe

Original layout of two- rooms typology in Kolfe with alterations 1



"...HUMAN SCALE IS ESTABLISHED NOT SIMPLY BY MOVING, BUT BY **MOVING IN A WAY WHICH IS PUZZLING**, AS IN A MAZE; WHICH **ENCOUNTERS OBSTACLES**, AS IN **MOVING SLOWLY** IN A CROWD; WHICH HAS TO DEAL WITH HEAVY SENSORY LOAD, AS IN LATERAL VISION. THE URBAN PLANNER WHO WOULD CREATE AN UNOBSTRUCTED PEDESTRIAN ENVIRONMENT IS DOING THE PEDESTRIAN NO EXPERIENTIAL FAVOURS.... **PEOPLE EXPERIENCE HUMAN SCALE IN TERMS OF COPING WITH RESISTANCES**."

— Richard Sennett, 2019

III

DESIGN

Design Goal

The goal of this project is to explore how "buffer zones" or open spaces can be implemented at different scales: a neighborhood or urban scale with different facilities; a cluster or building scale, such as a courtyard; and at unit scale as a "porch" at one's entrance which can also accommodate informal income generation activities. Many community development activists advocate for the inclusion of various facilities which take the elderly, youth, women, and children into account when designing new neighborhoods. These facilities can also act as areas where communal events take place and, for instance, the grandparents can enjoy greater freedom with opportunities to spend time with their own grandchildren or interact meaningfully with other young children in the center – an activity proven to elevate health and quality of life. Public spaces need to be formally designed with the inhabitants' best interests at heart, and they should respond to different site conditions and accommodate for different user groups that enhance neighborhoods and communal life. As Gerd Junne points out in his article, the built environment "influences social relations." Therefore, it can be used to introduce inclusion and stability in a society. This project will explore how different typologies can be used to include – and introduce – different income groups on the site of Kolfe while providing equitable quality of life to the different groups of the society.





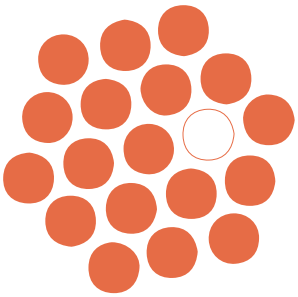
Kolfe Open Market

DESIGN FOCUS

social mixity /
mixed income



social inclusion



in situ redevelopment

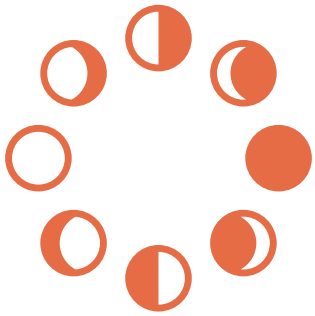
inhabitants



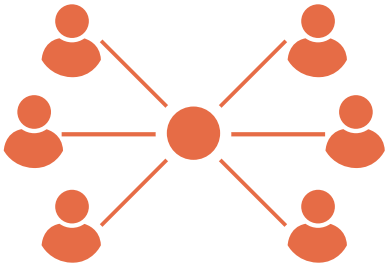
materials

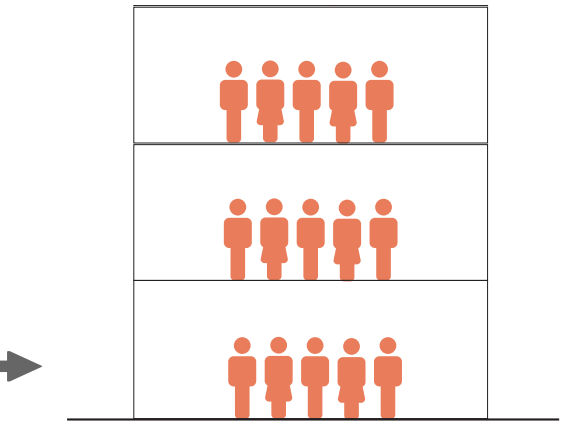


phasing



communal space





existing + new

TThe built environment “influences social relations.” Therefore, it can be used to introduce inclusion and stability in a society. This project will explore how different typologies can be used to include – and introduce – different income groups on the site of Kolfe while providing equitable quality of life to the different groups of the society.



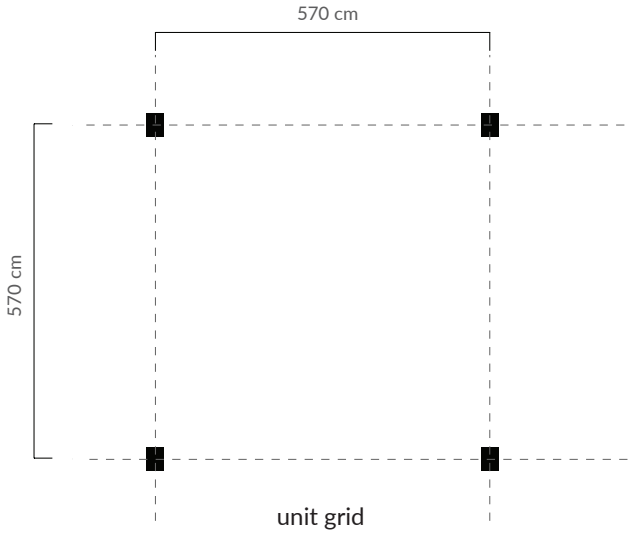
The built environment influences social relations ...it can be used to introduce inclusion and stability in a society (Meko, Gradutation Thesis, 2019).

Open spaces can be implemented at different scales:.

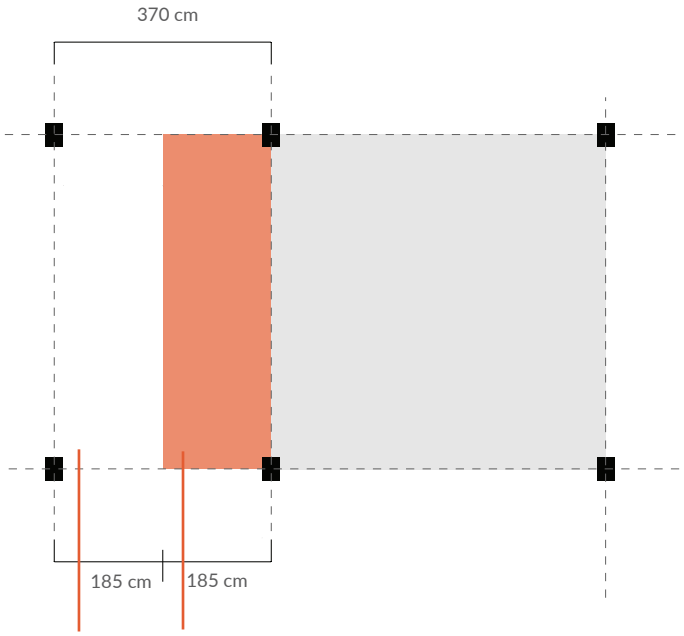
		Aspirations/ Desires
Mr. M. -retired (79 yo) - 6 children -original 'settler' -likes to garden	sub-renting -3 renters	maintain income WILLING TO SUBSTITUTE W/... own a store veg. garden
Ms. S. ~40's - 2 sons - one injured & at home - caregiver of mother (Ms. K)	-washing clothes (at home with mother) **UNIT SCALE**	maintain income children activity for son better quality housing WILLING TO ... live in high-rise
Mr. T. -retired - 3 sons -original 'settler' -crowded house -likes to socialize with friends	-retirement + funds from diaspora	live with family- spacious unit elderly/ game center shaded leisure area neighbourhood market - formal

UNITS GRID AND STACKING

The lower level floors house the units suitable for low-income households with open spaces facing the central courtyard to accommodate household activities that can be performed in semi-public space at one's front door and altered for future expansion. Most low-income households traditionally practice a more communal lifestyle and, according to Shif-eraw, performed household chores in semi-public spaces. These open spaces can also be appropriated to accommodate income generating activities.The balconies (which face the streets) are also vital since they are often used by inhabitants to dry spices, clothes, etc.

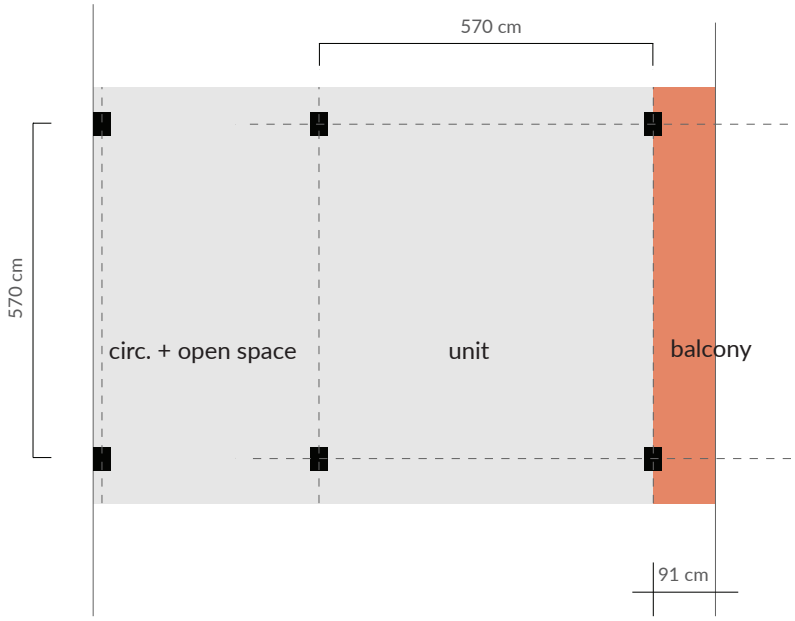


unit grid

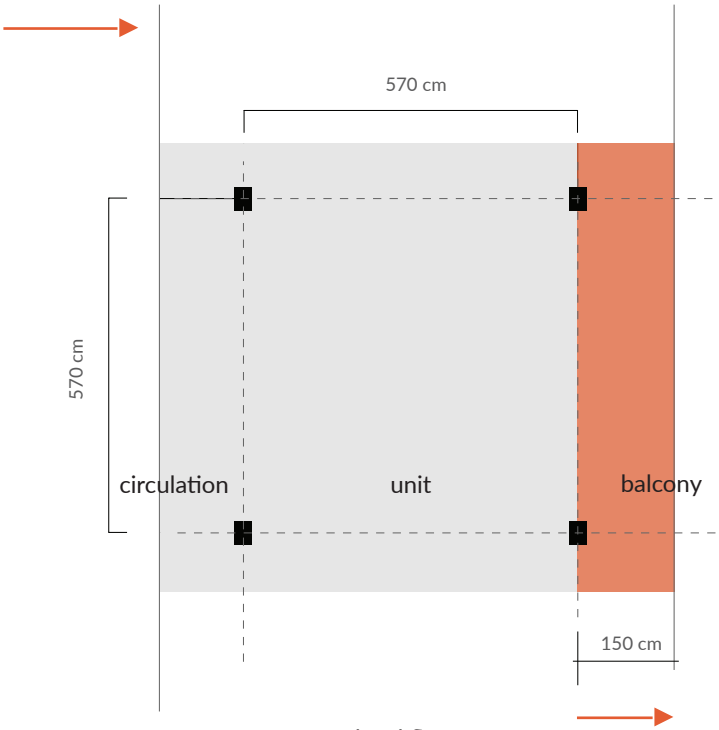


circulation

open space for future alterations



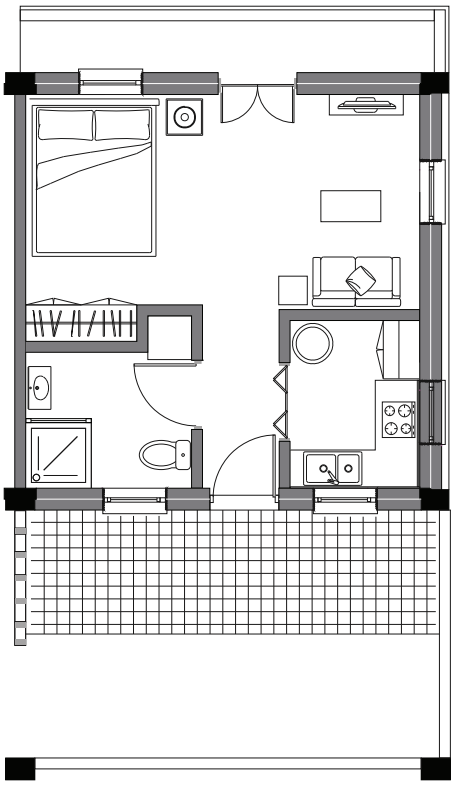
lower level floors
(26 - 60 sqm units)



upper level floors
(+ 70 sqm units)

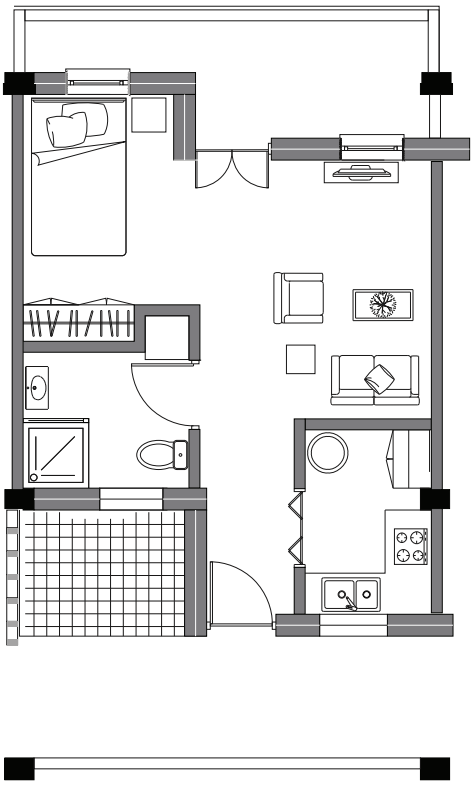
UNIT TYPES - LOW INCOME

The lower level floors house the units suitable for low-income households with open spaces facing the central courtyard to accommodate household activities that can be performed in semi-public space at one's front door and altered for future expansions. Some and balcony facing the streets. These open spaces can also be appropriated to accommodate income generating activities. The balconies are often used by inhabitants to dry spices, clothes, and other household chores.



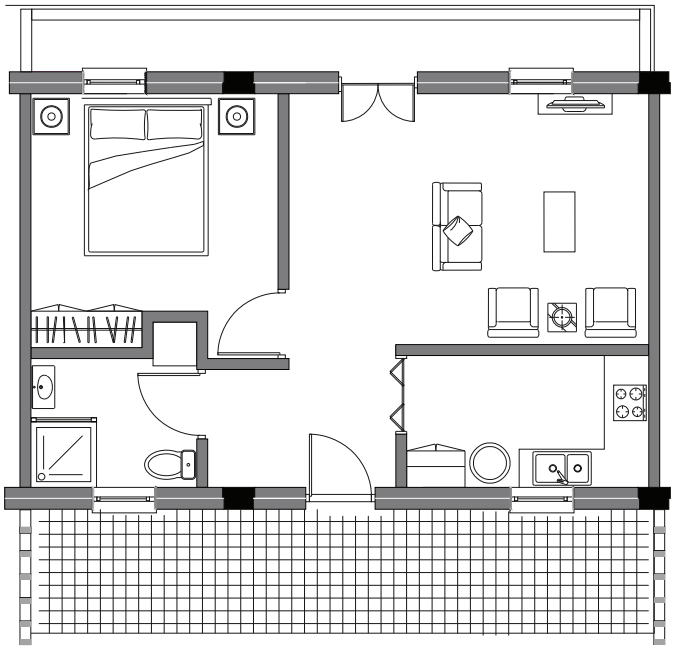
Studio

unit:	29 sqm
open space:	9.5 sqm
balcony :	5 sqm



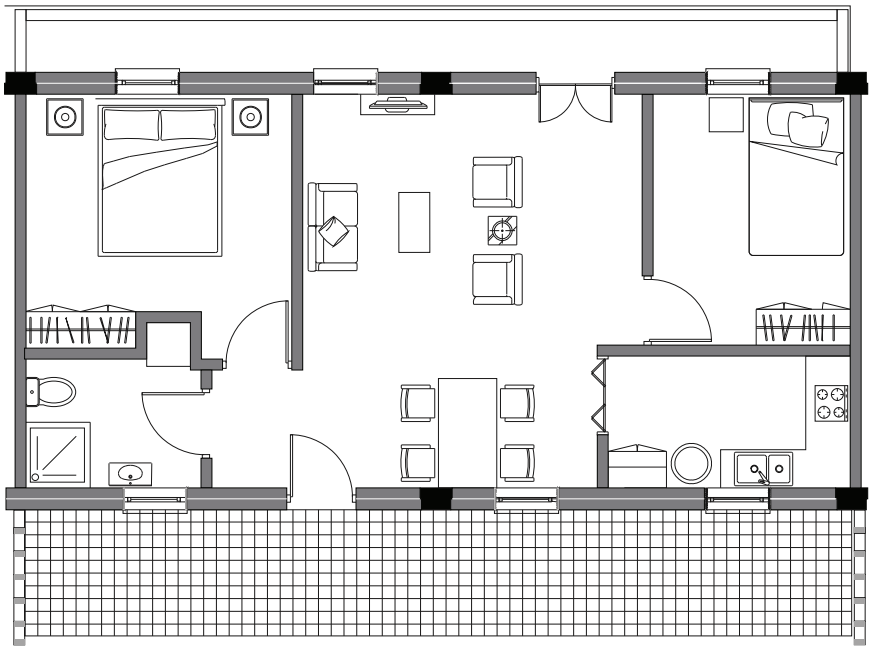
One Bedroom w/ inset balcony

unit:	32 sqm
open space:	4 sqm



One Bedroom

unit:	46 sqm
open space:	15 sqm
balcony :	8 sqm

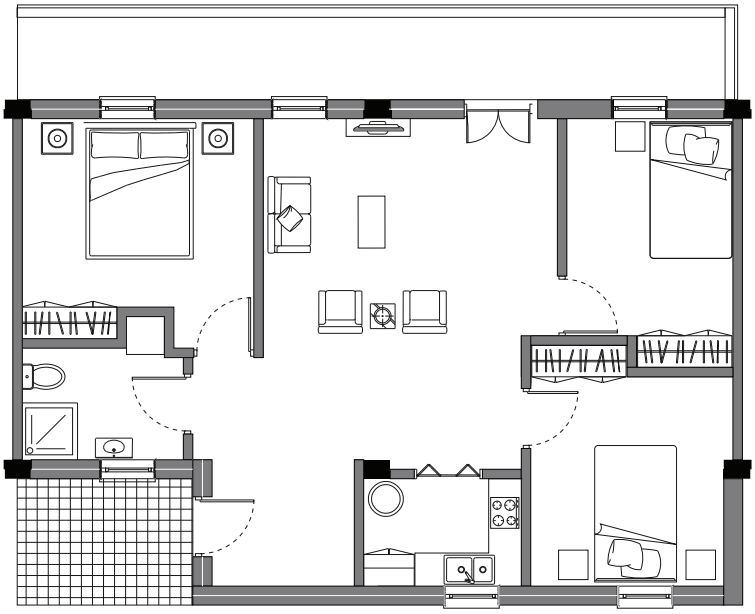


Two Bedroom

unit:	61 sqm
open space:	19 sqm
balcony :	10 sqm

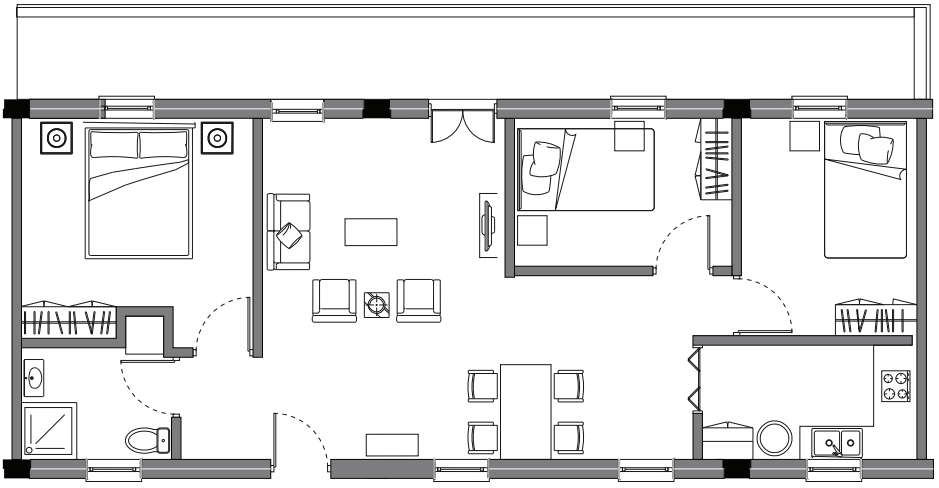
UNIT TYPES - MIDDLE INCOME

The upper level floors house the units suitable for middle-income households. These units have larger open balcony units that the lower levels achieved by cantilevering. Instead of having the open spaces divided into either side of the utis, the balconies accommodate most of the private activities and can be appropriated by the owners as desired in the future.



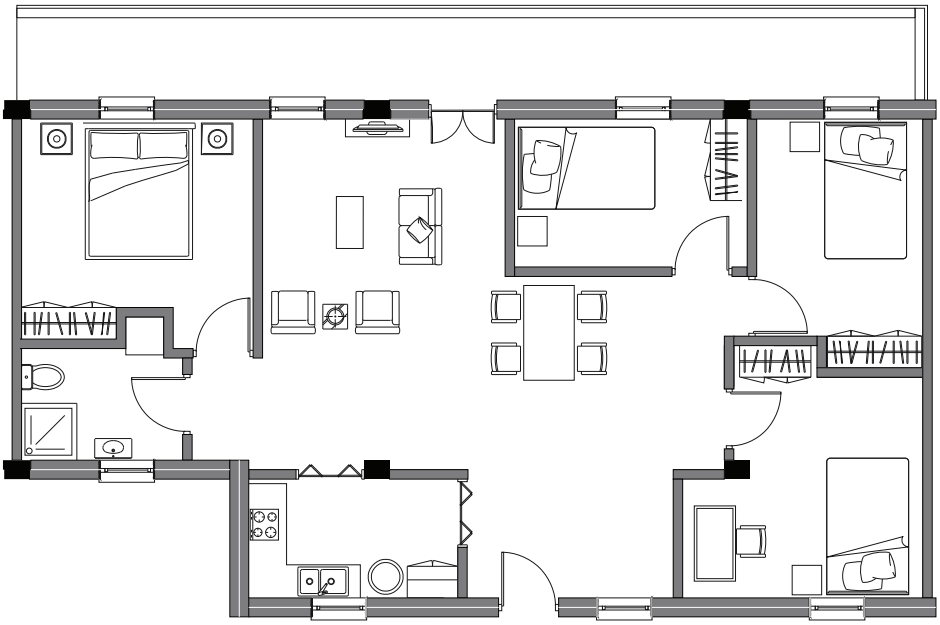
Three Bedroom

unit:	77 sqm
open space:	5 sqm
balcony :	15 sqm

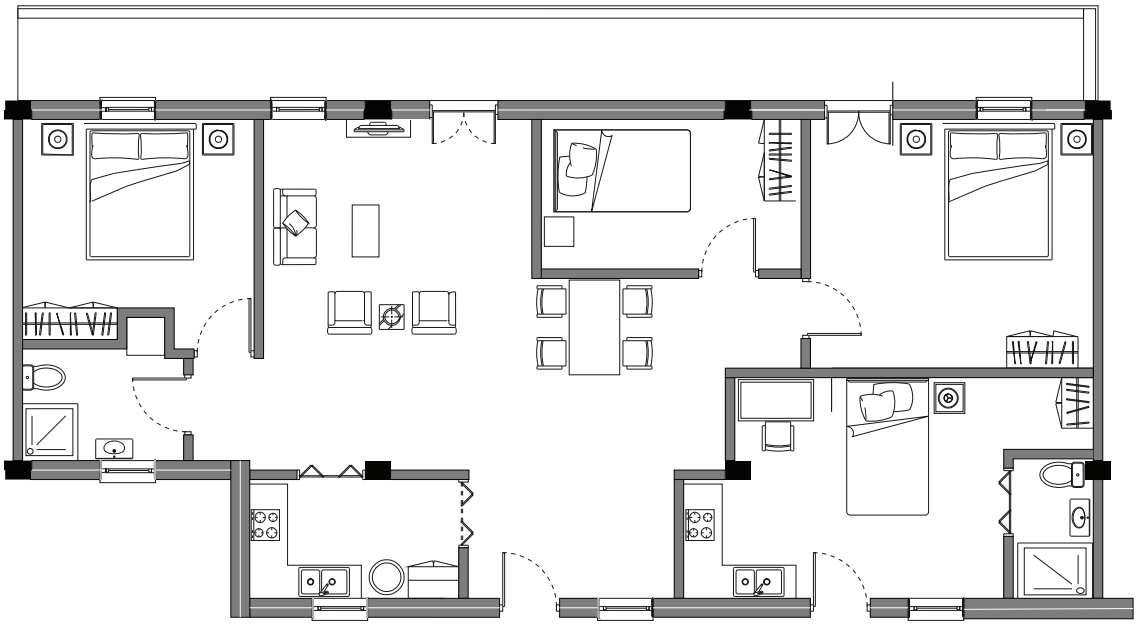


Three Bedroom

unit:	81 sqm
open space:	-
balcony :	21 sqm

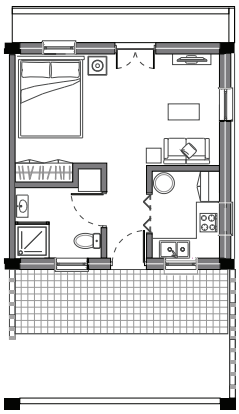


Four Bedroom
unit: 100 sqm
open space: - sqm
balcony : 21 sqm



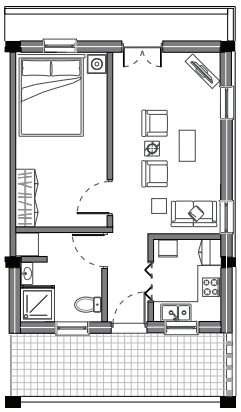
Four Bedroom or Three Bedroom w/ Rentable unit
unit: 120 sqm
open space: -
balcony : 25 sqm

UNIT TYPES - CORNER



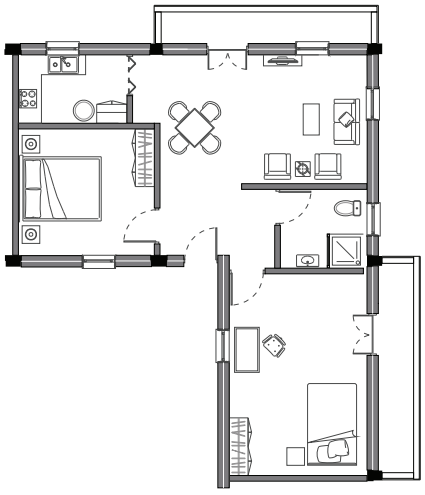
Studio

unit:	30 sqm
open space:	9 sqm
balcony :	4 sqm



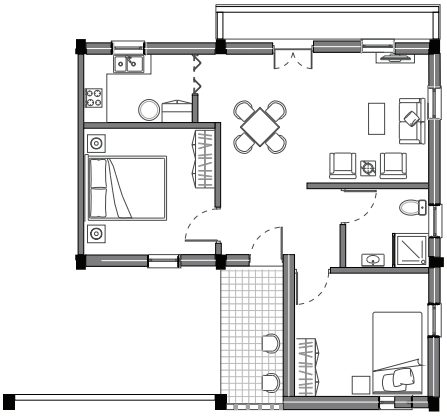
One Bedroom

unit:	38 sqm
open space:	5 sqm
balcony :	4 sqm

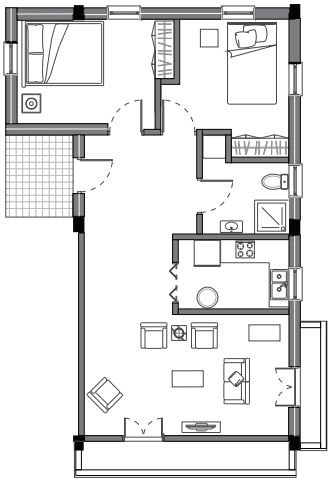


Two Bedroom

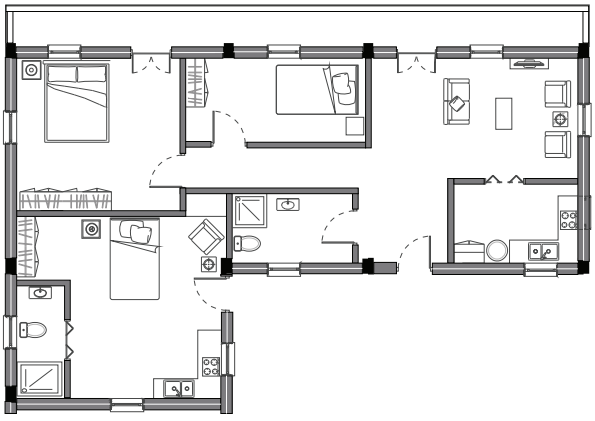
unit:	70 sqm
balcony :	min. 6 sqm



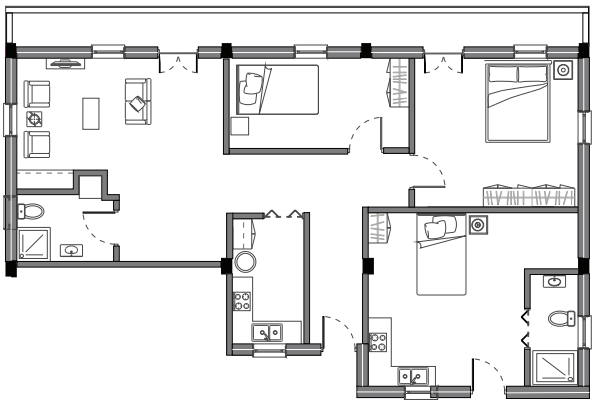
Two Bedroom
unit: 61.5 sqm
open space: 5 sqm
balcony : 5 sqm



Two Bedroom
unit: 65 sqm
open space: 3.5 sqm
balcony : 6 sqm

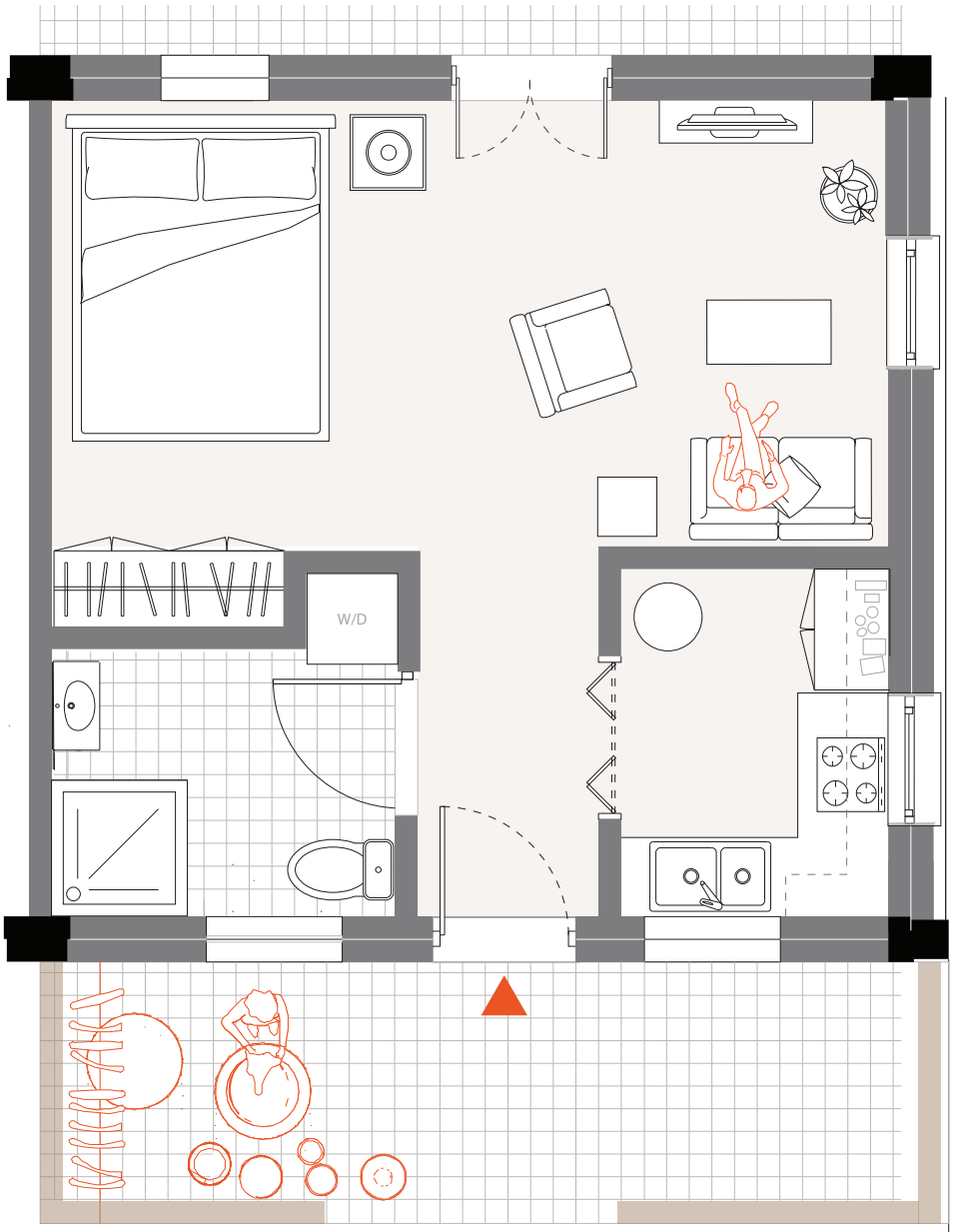


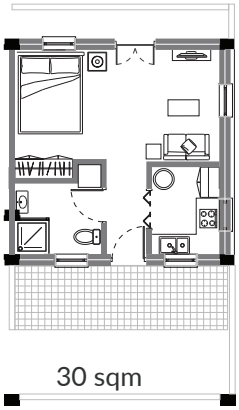
Four Bedroom or Three Bedroom w/ Rentable unit
unit: 100 sqm
balcony : variable (min. 6 sqm)
rentable unit : 27sqm



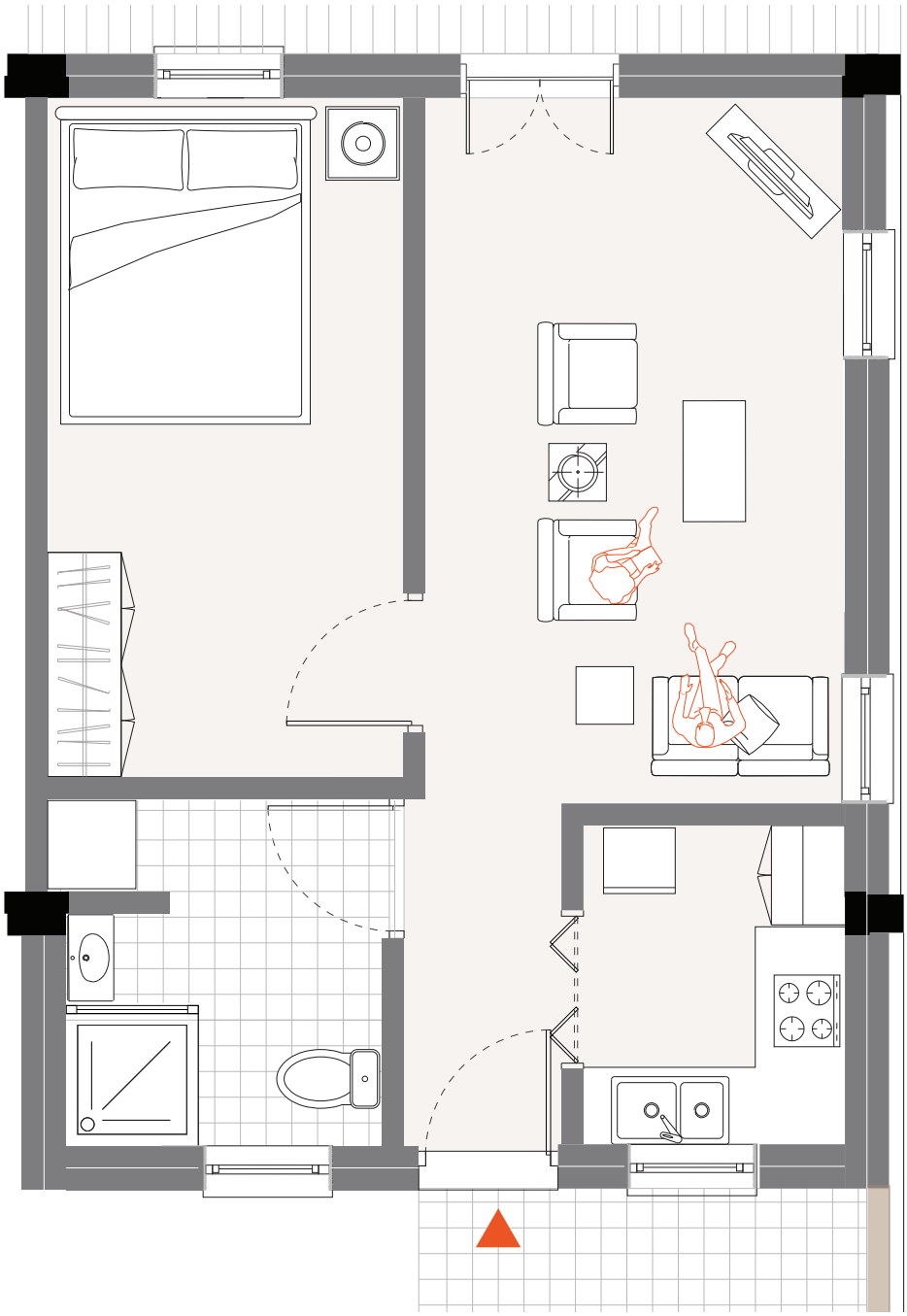
Four Bedroom or Three Bedroom w/ Rentable unit
unit: 105 sqm
balcony : variable (min. 5 sqm)
rentable unit : 25 sqm

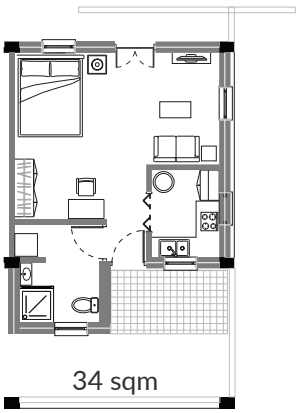
POSSIBLE FUTURE ALTERATIONS - STUDIO UNIT WITH OPEN SPACE

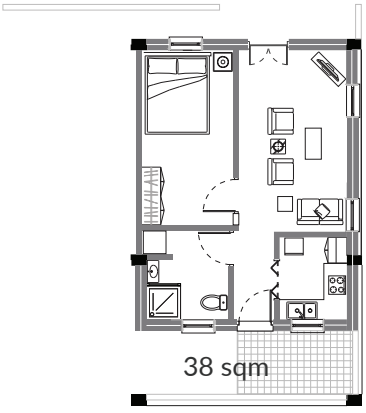




TRANSFORMED

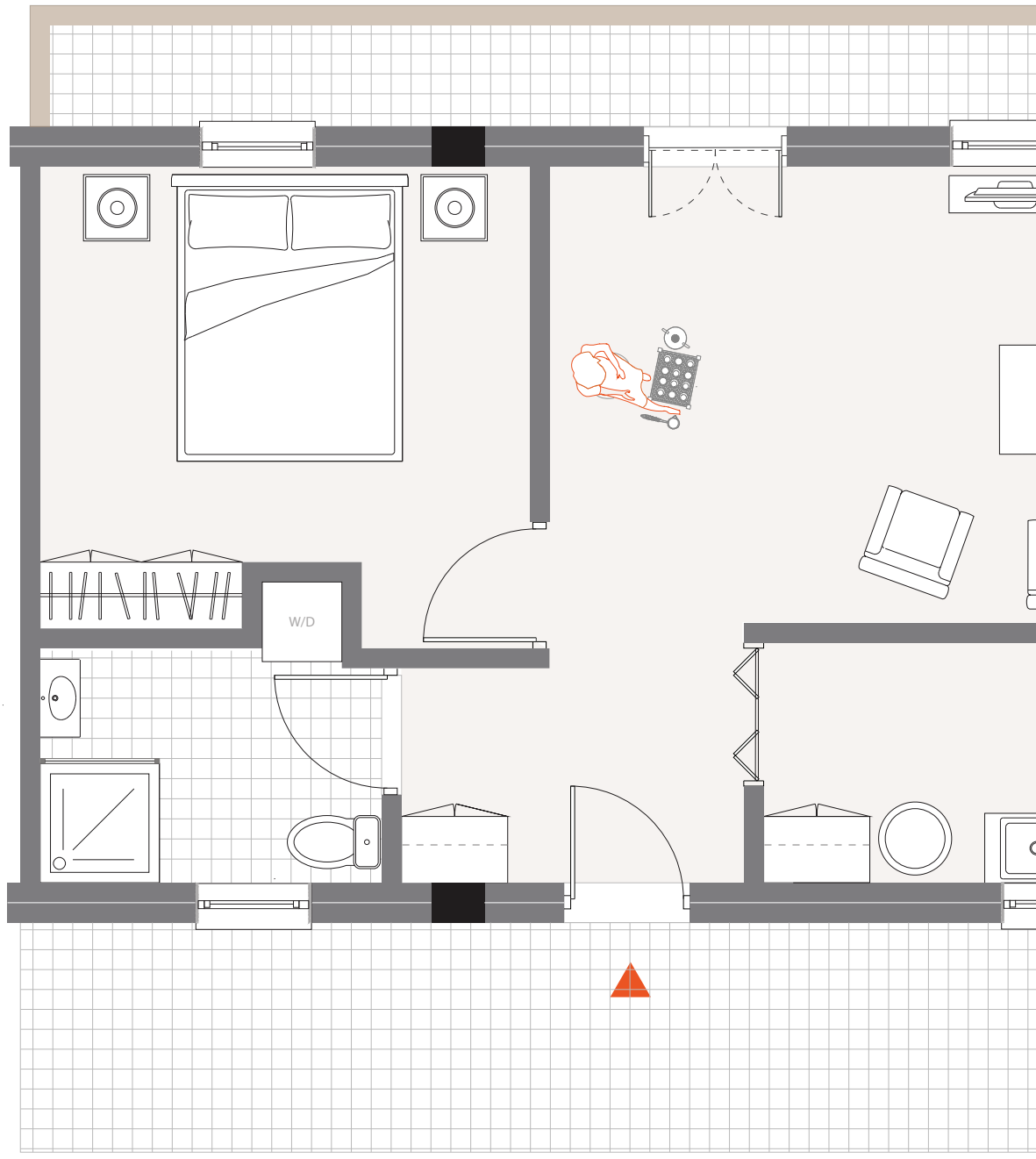




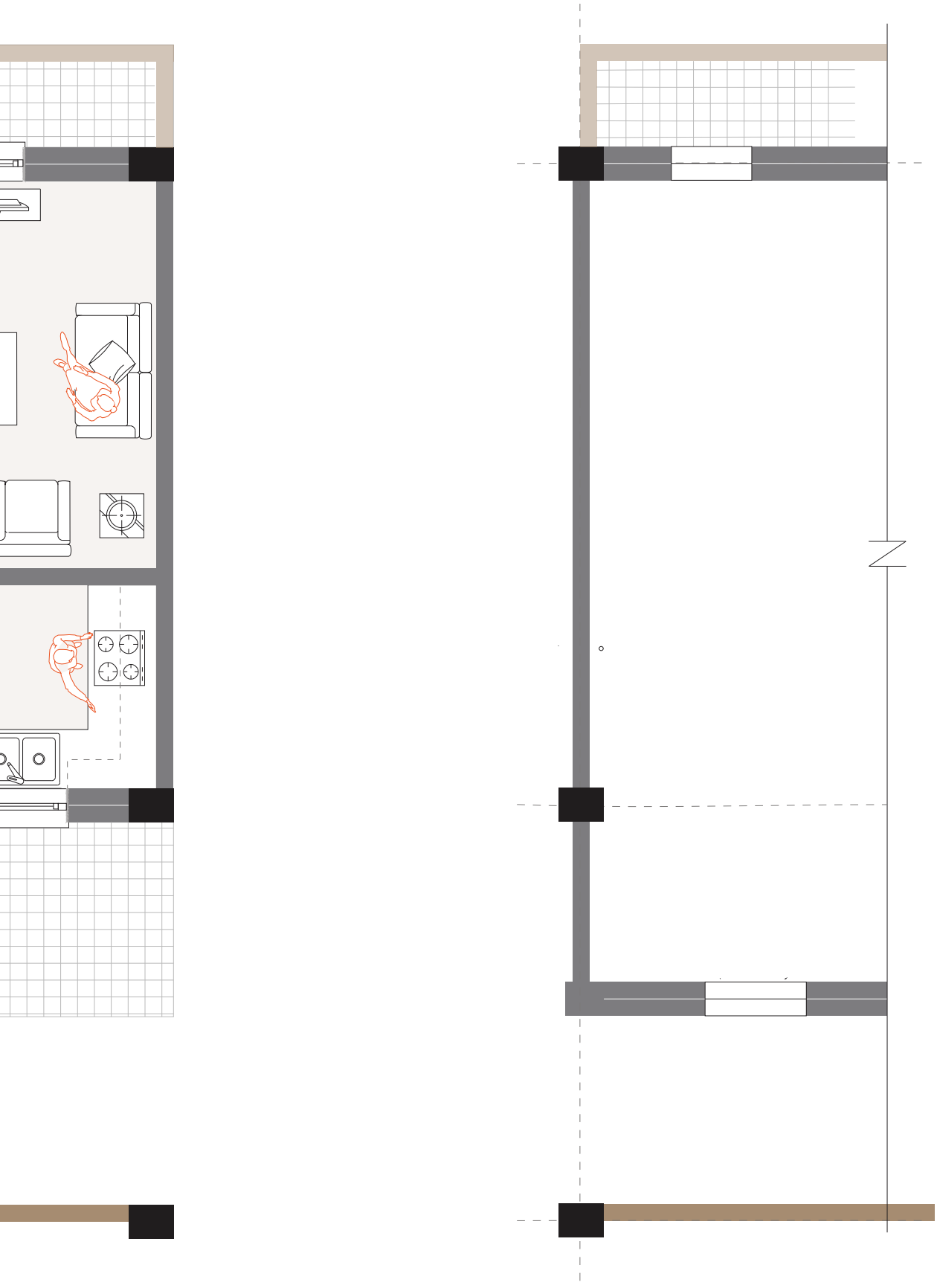


1:50

POSSIBLE FUTURE ALTERATIONS - ONE BEDROOM UNIT WITH OPEN SPACE



50 sqm

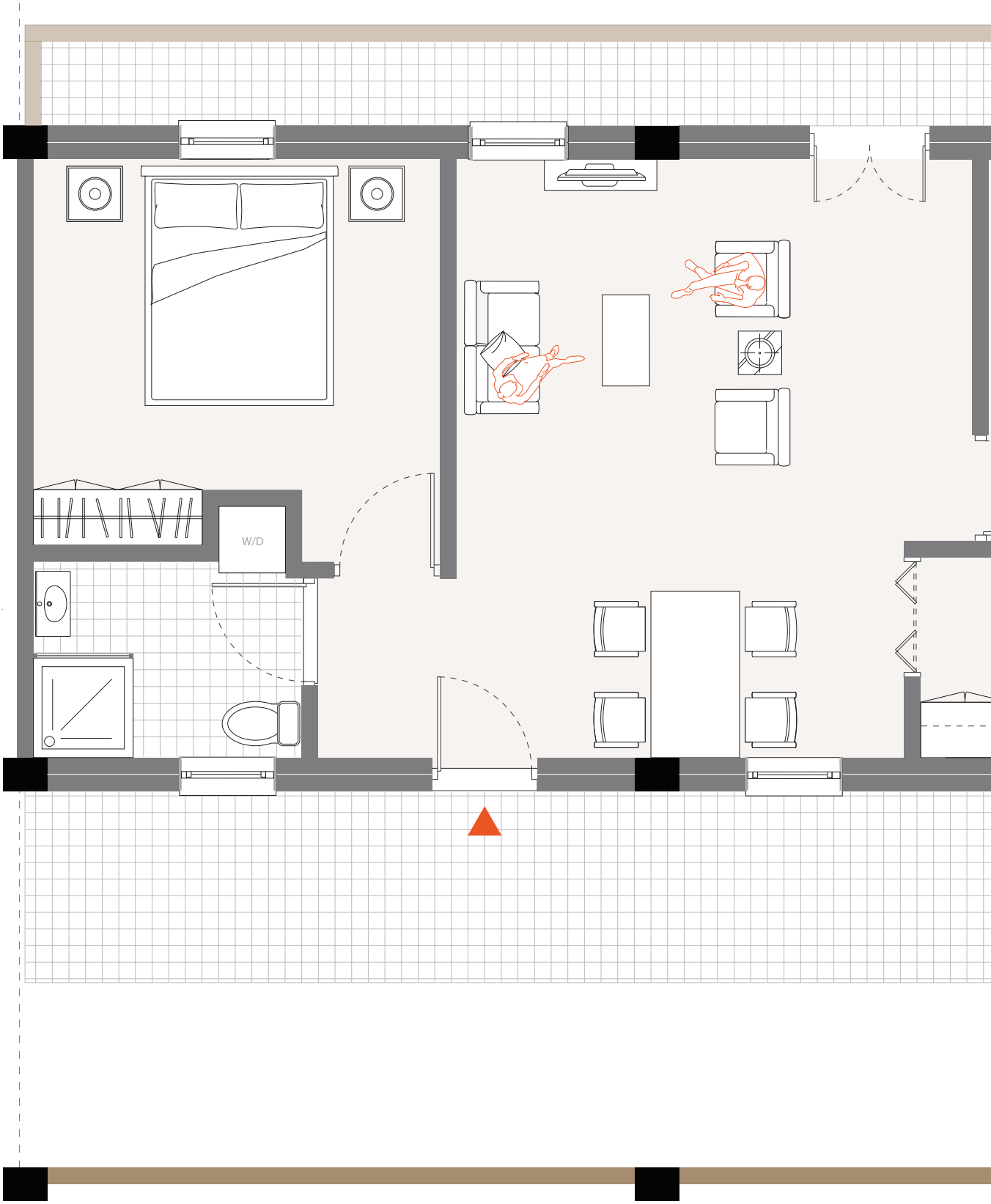


TRANSFORMED

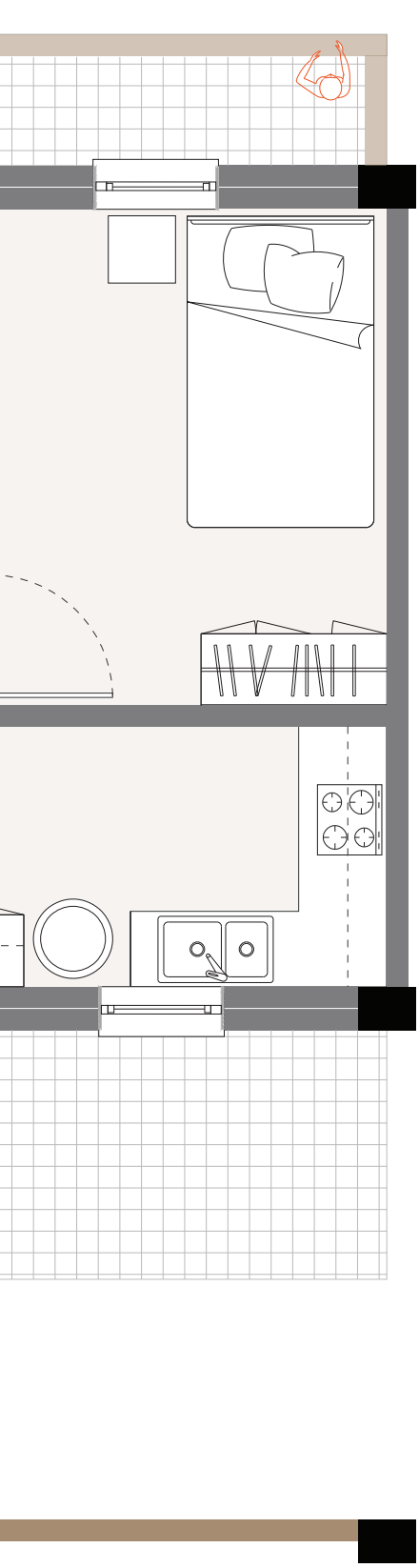
63 sqm

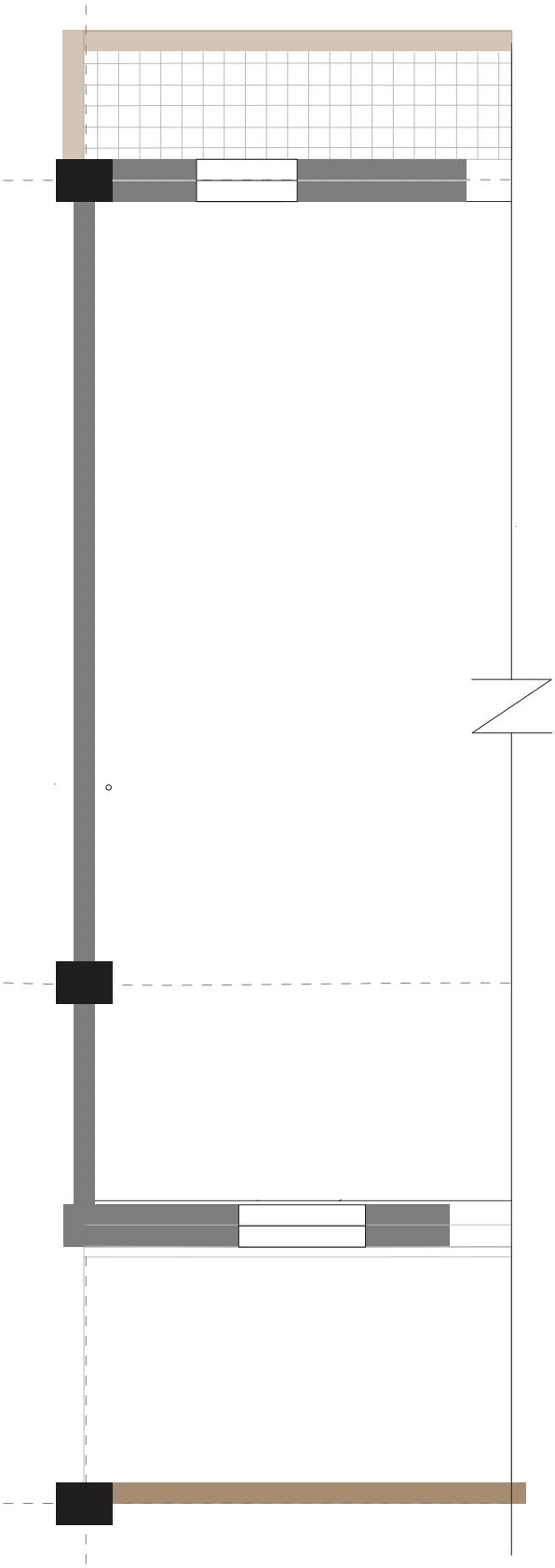
1:50

POSSIBLE FUTURE ALTERATIONS - TWO BEDROOM UNIT WITH OPEN SPACE



61 sqm



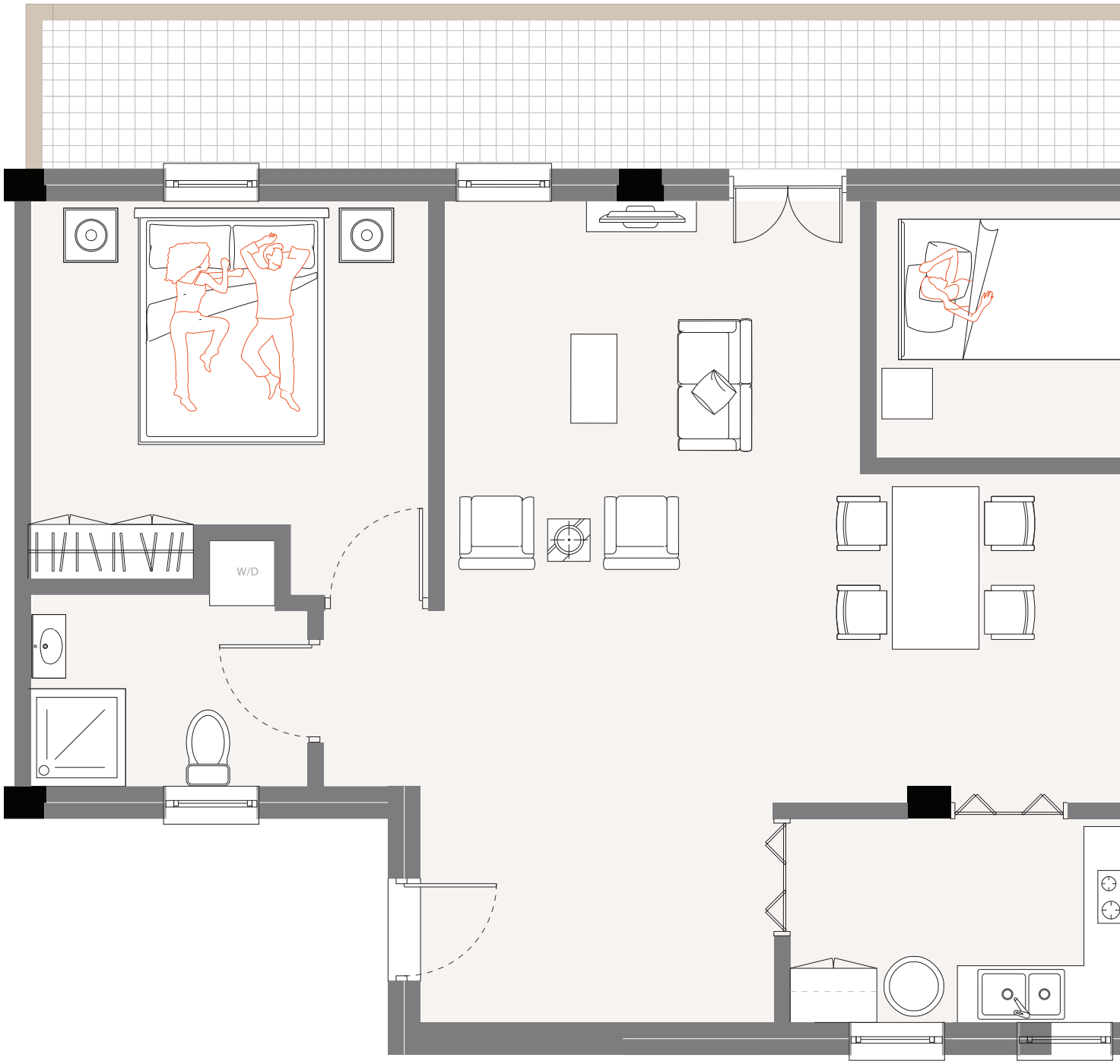


TRANSFORMED

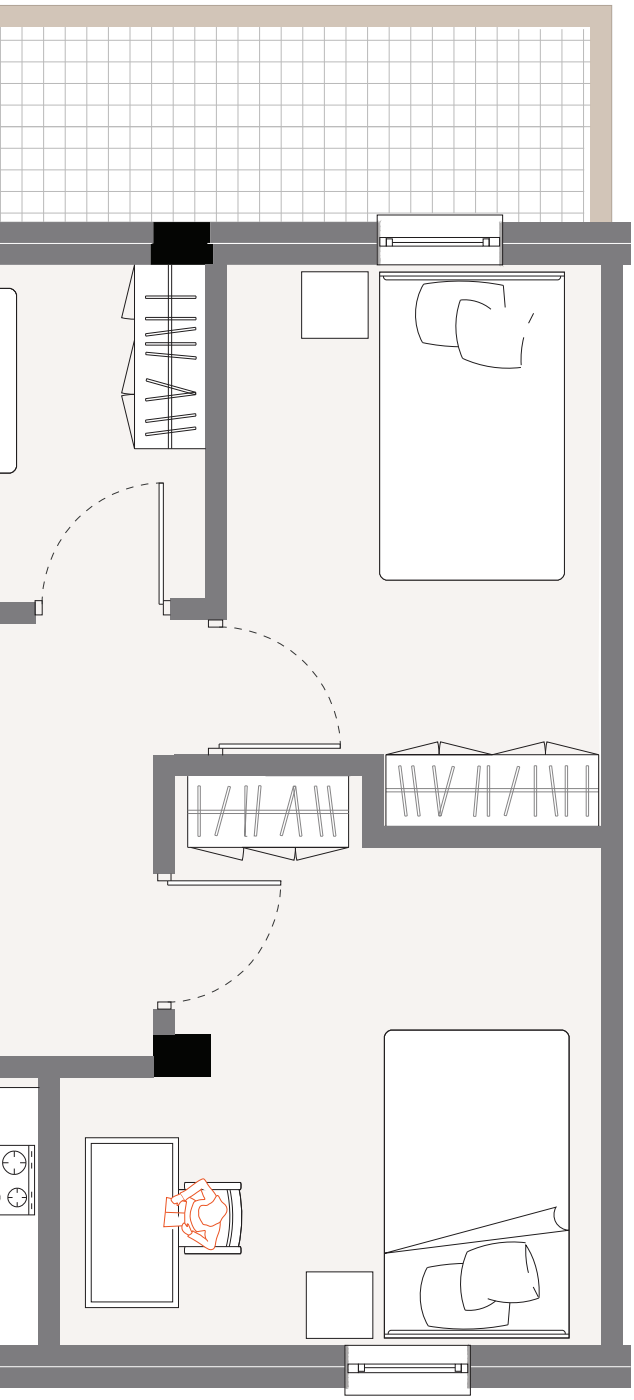
80 sqm

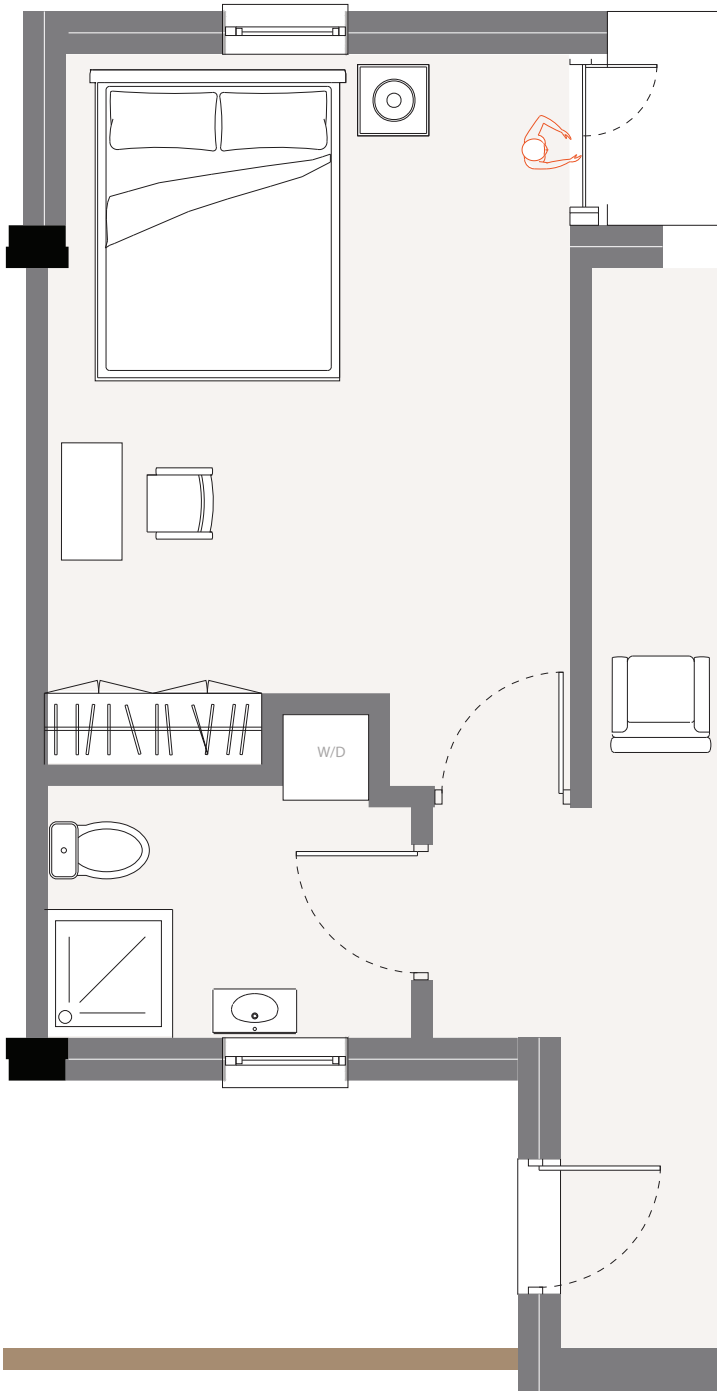
1:50

POSSIBLE FUTURE ALTERATIONS - THREE BEDROOM CORNER UNIT



100 sqm





TRANSFORMED

101 sqm
*access to balcony from master bedroom

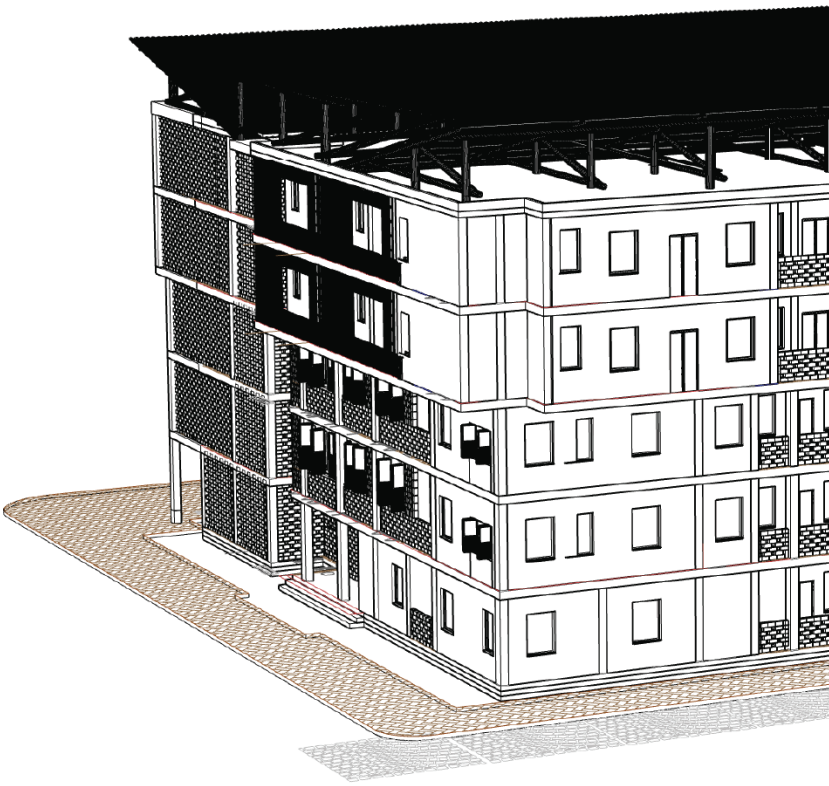
X

BLOCK SCALE

BUILDING TYPOLOGY



C - Courtyard Block



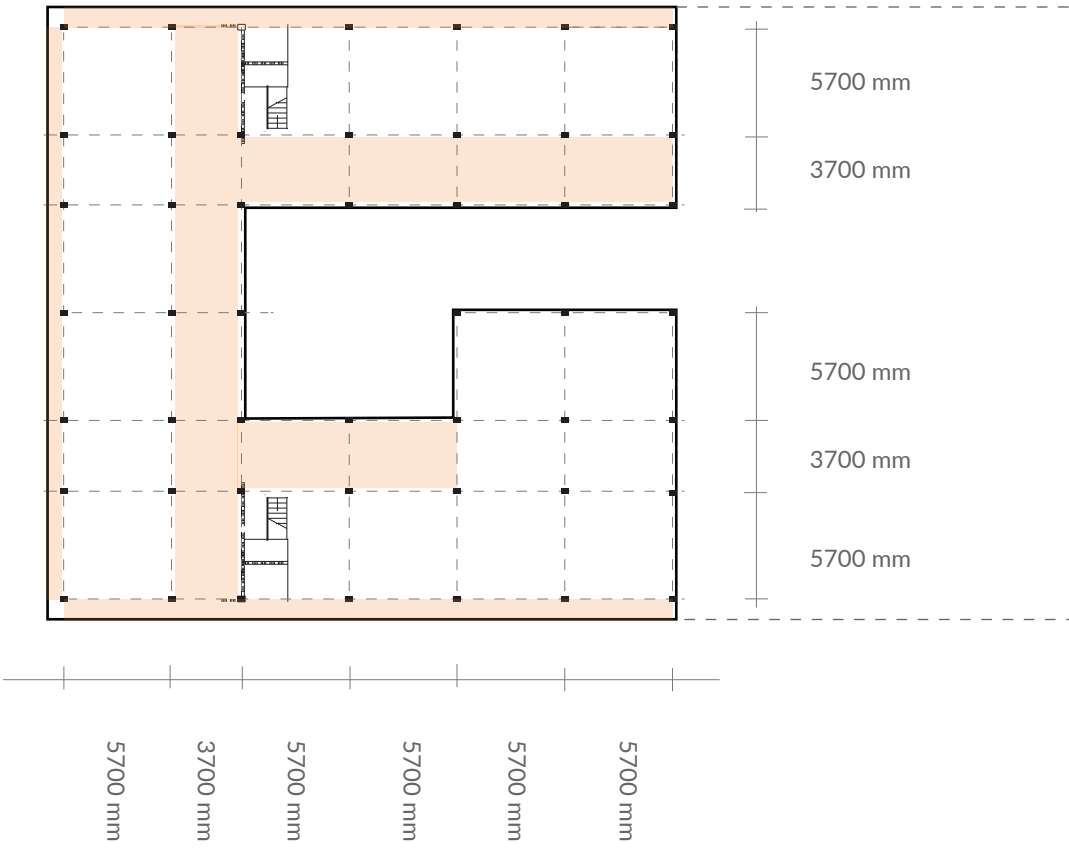


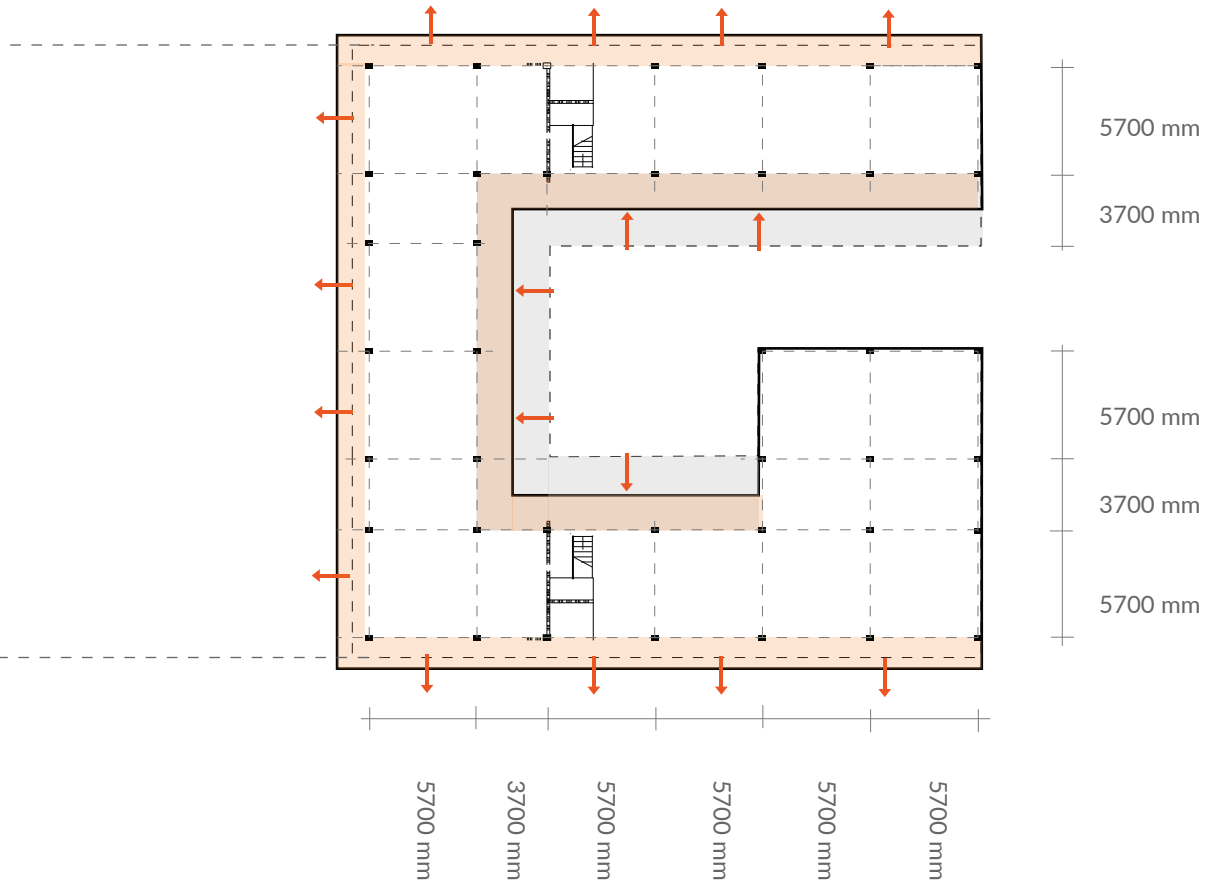
L - Courtyard Block



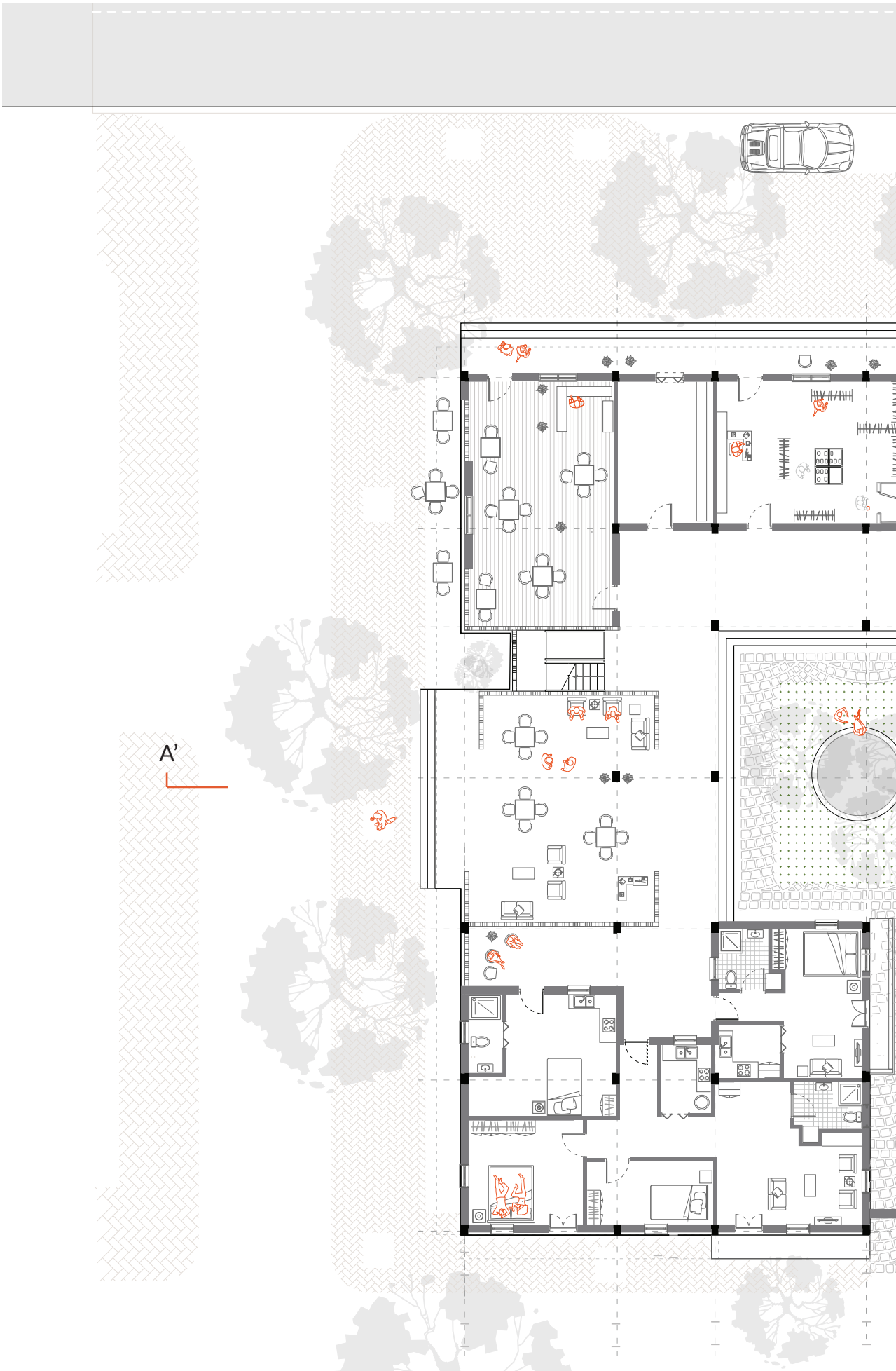
COURTYARD

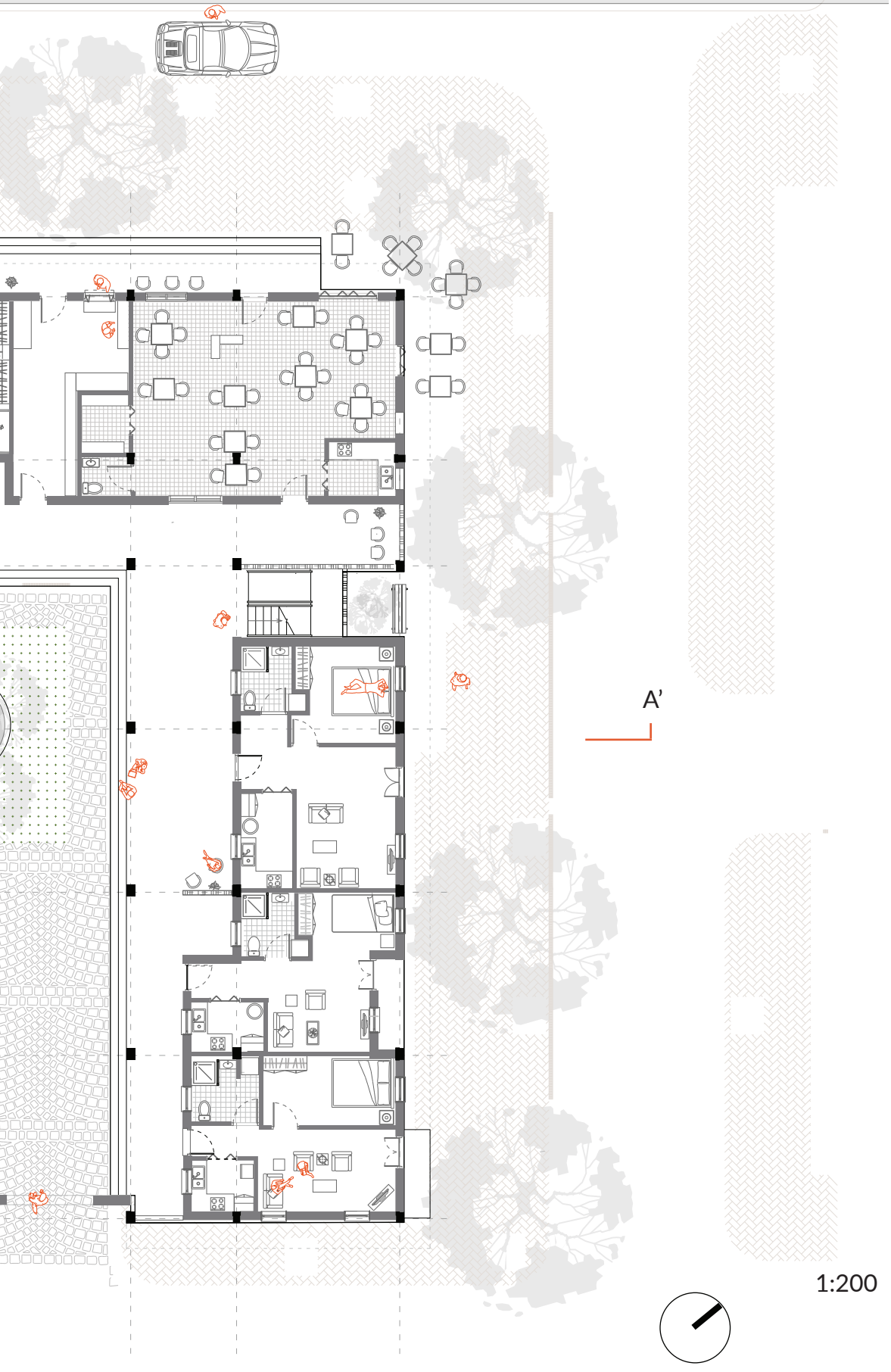
BLOCK STRUCTURAL GRID




5700 mm
3700 mm
5700 mm
3700 mm
5700 mm
5700 mm
3700 mm
5700 mm
5700 mm
5700 mm

‘C’ - COURTYARD - GROUND PLAN

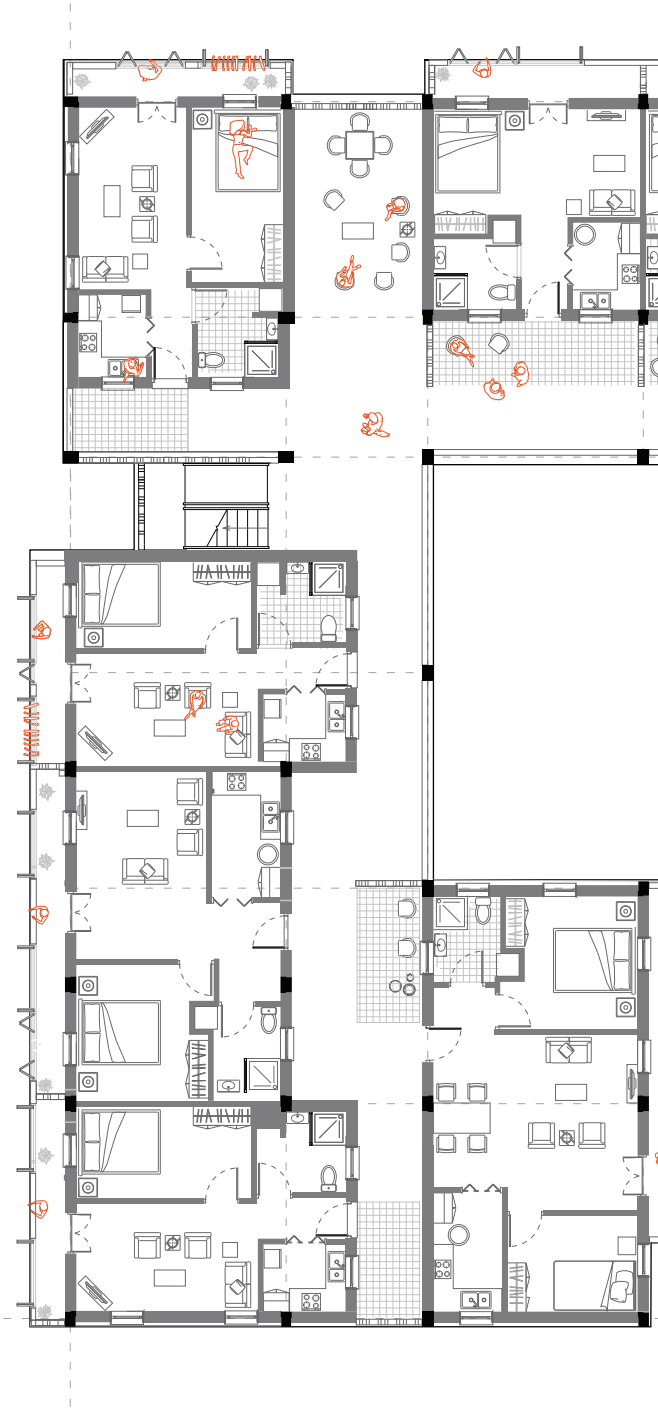


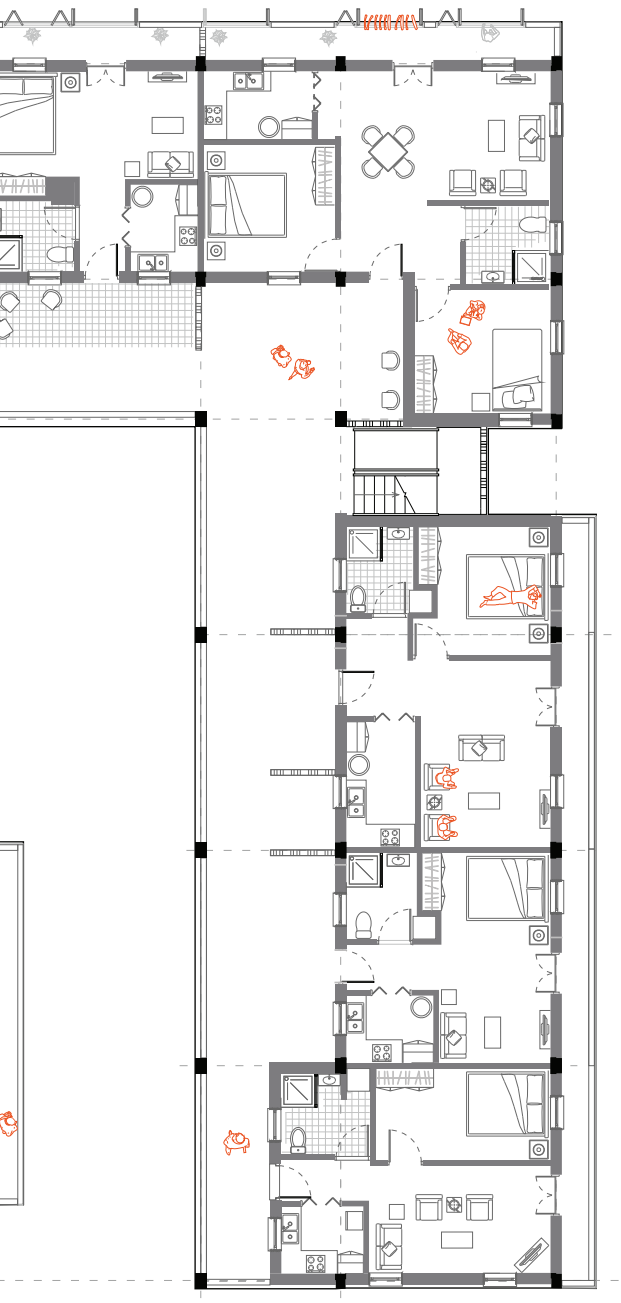


1:200

‘C’- COURTYARD - FIRST FLOOR

A’



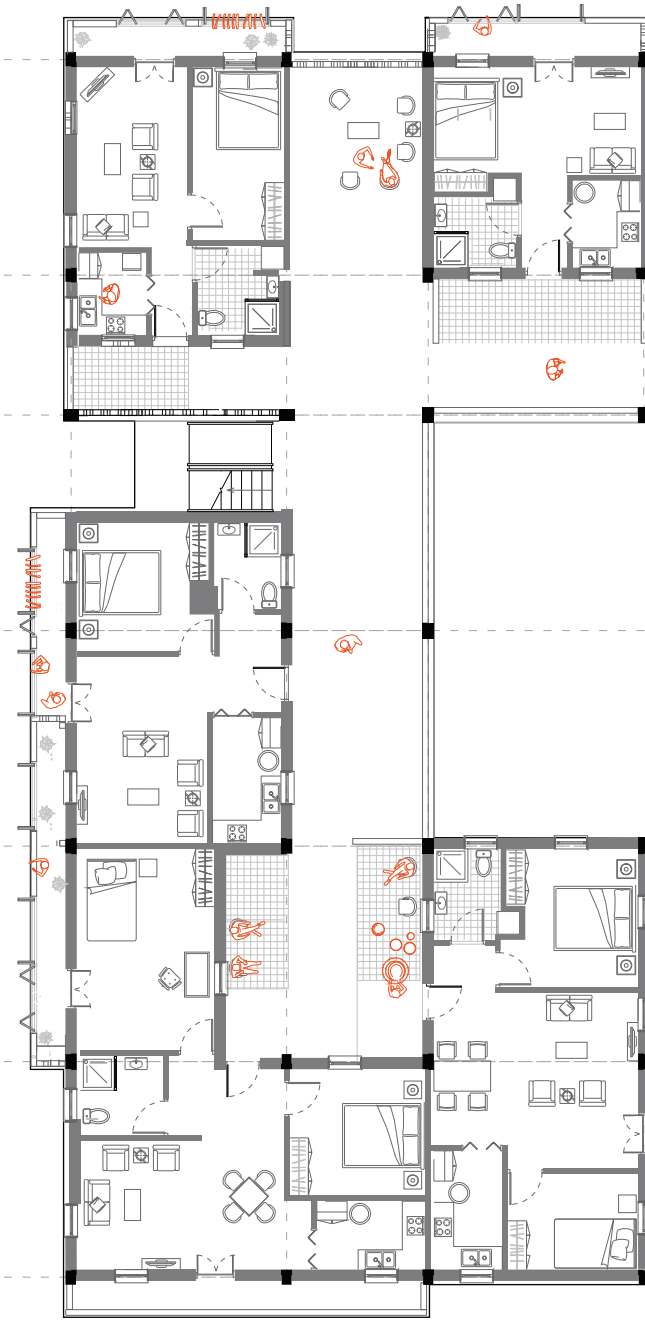


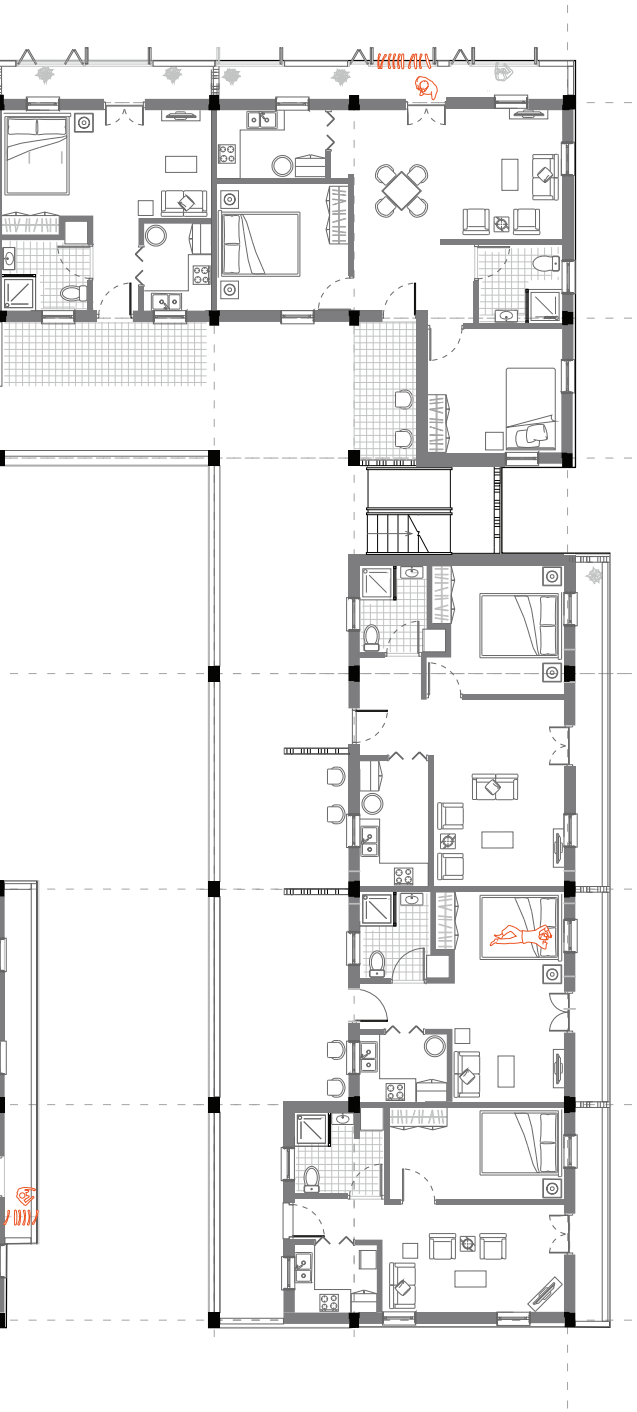
A’

1:200

COURTYARD - SECOND FLOOR PLAN

A’





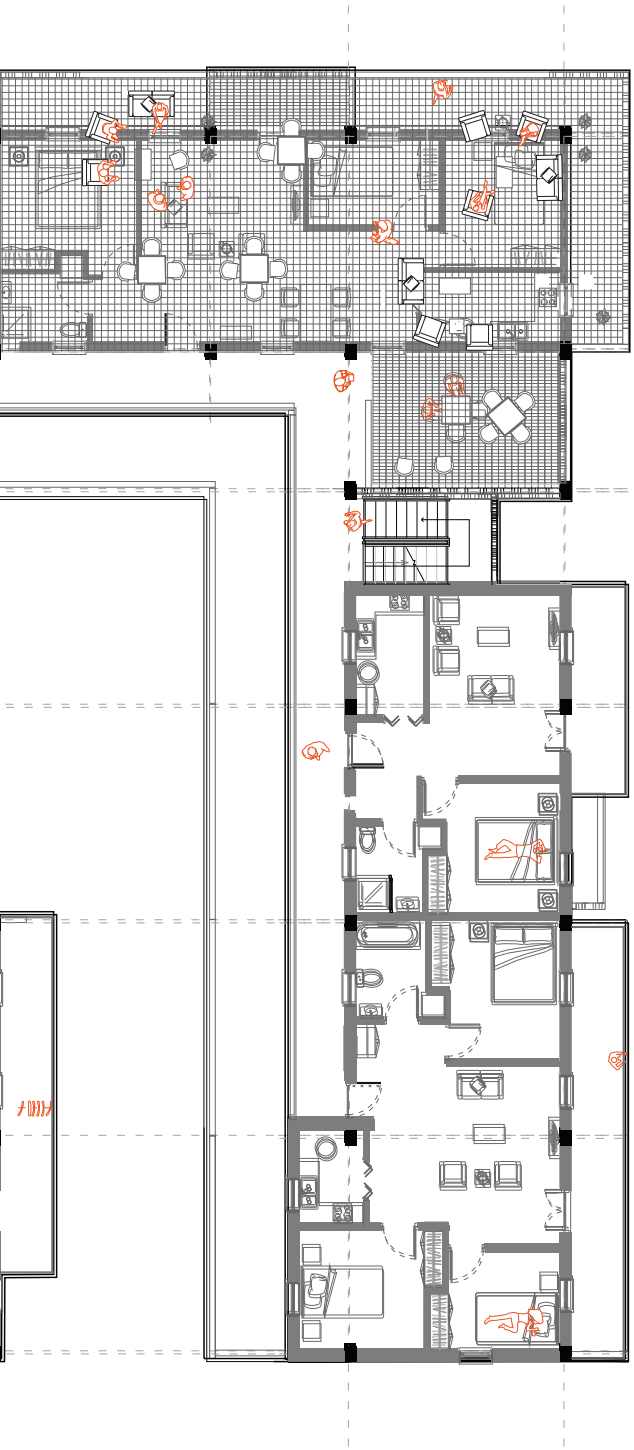
A’

1:200

COURTYARD - THIRD FLOOR PLAN

A’



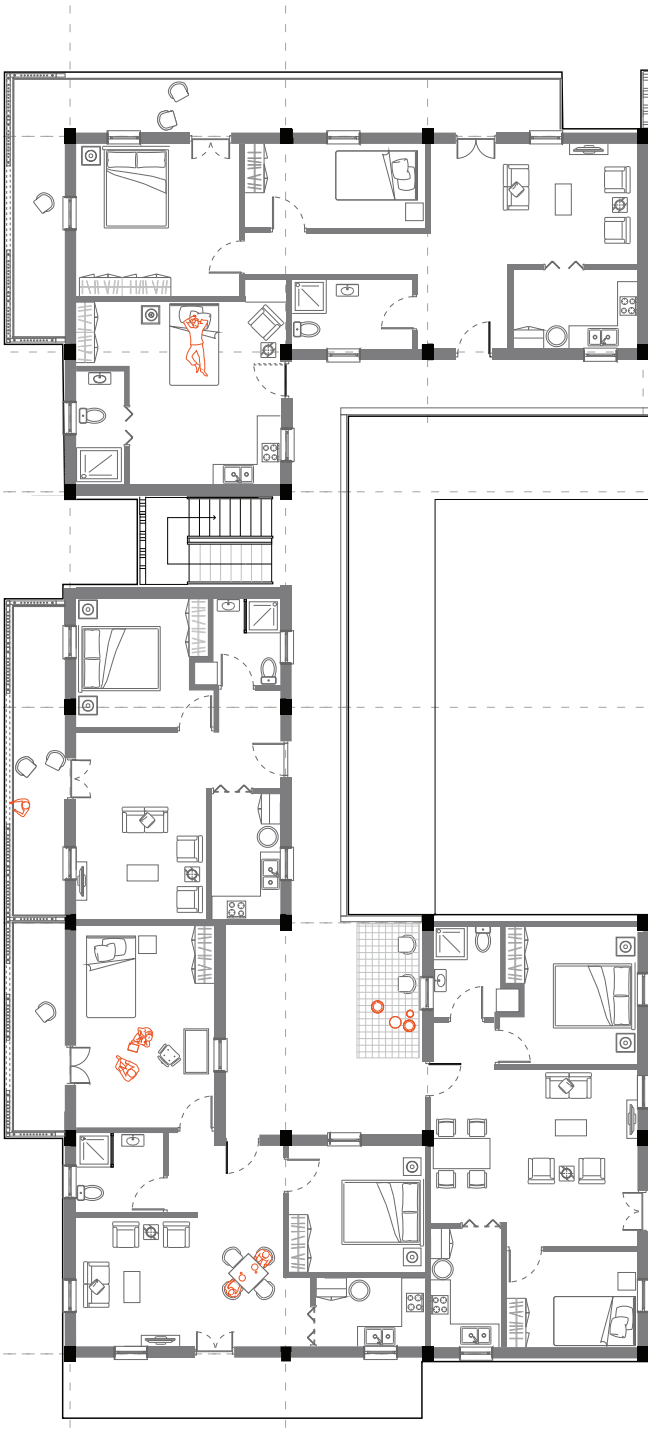


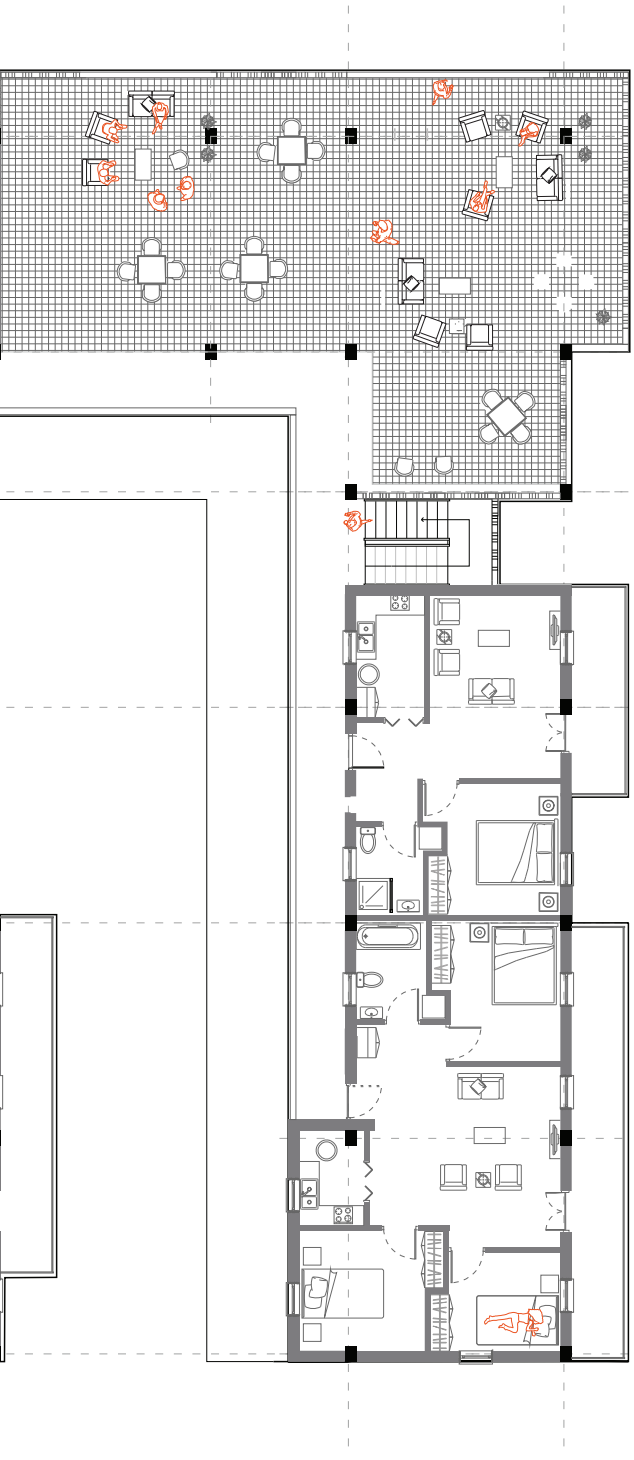
A’

1:200

COURTYARD - FOURTH FLOOR

A’



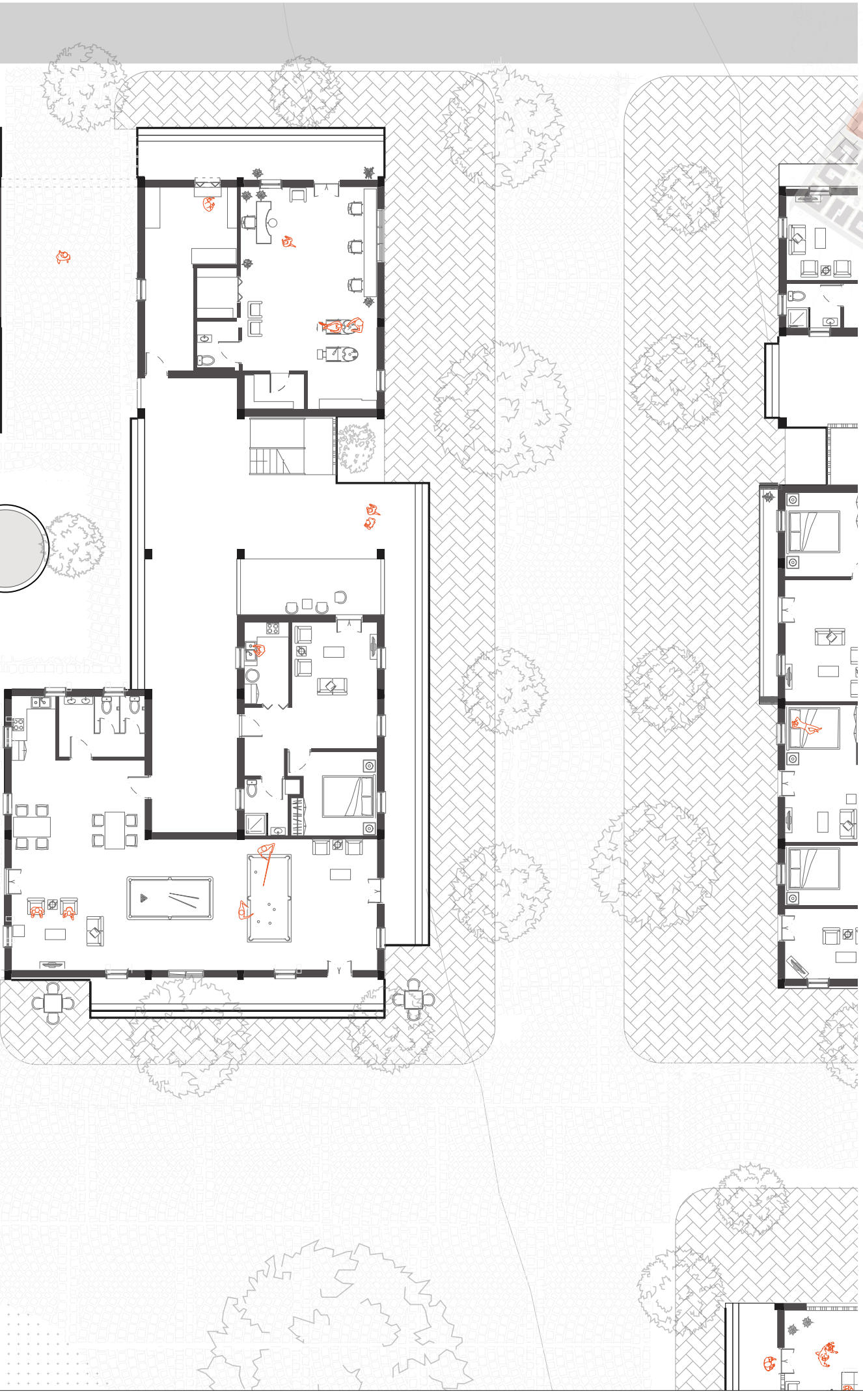


A’

1:200

'L' - COURTYARD - GROUND FLOOR PLAN





1:200

COURTYARD CROSS SECTION

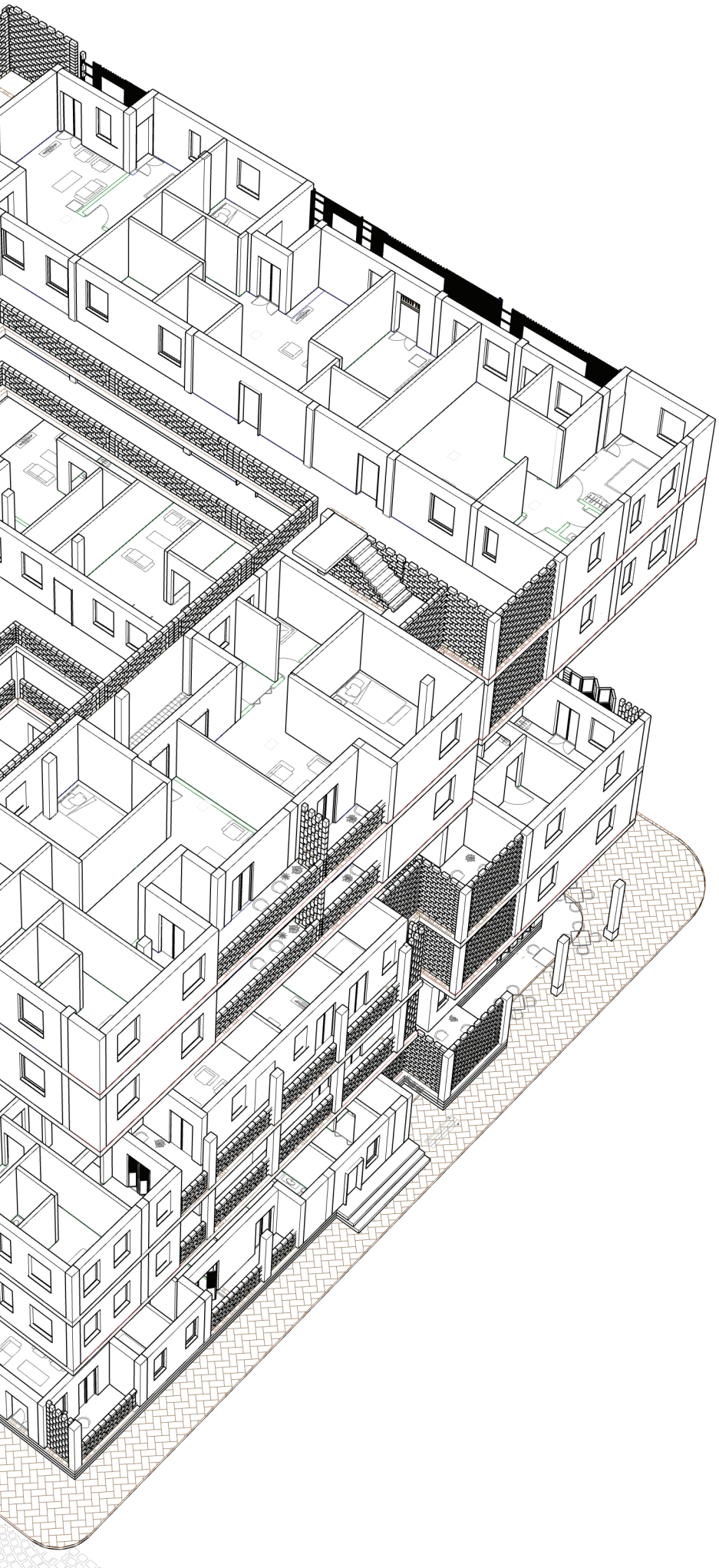




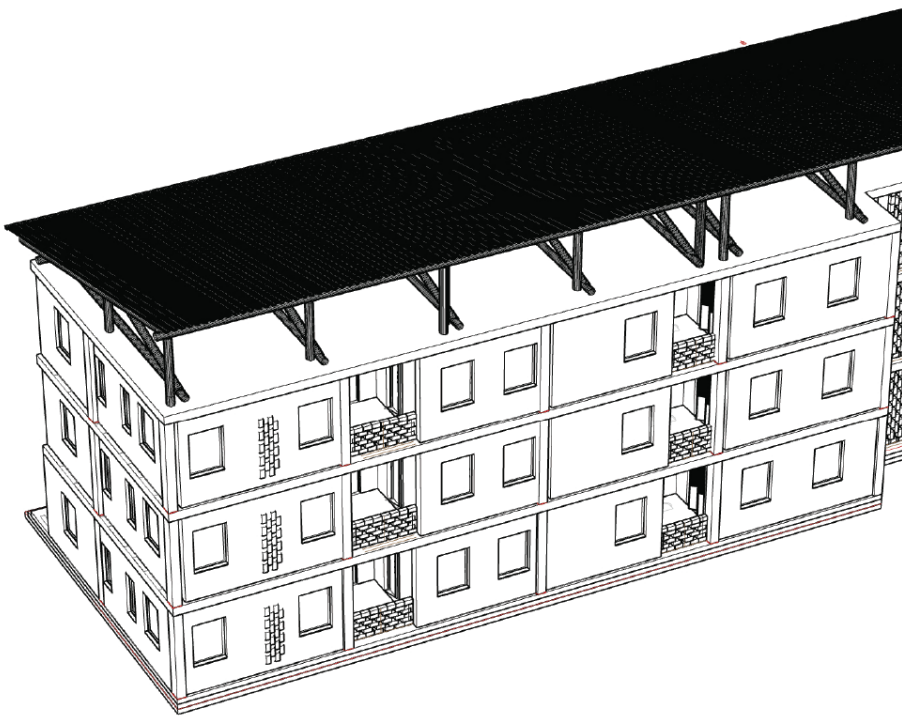
1:100
A’ - A’

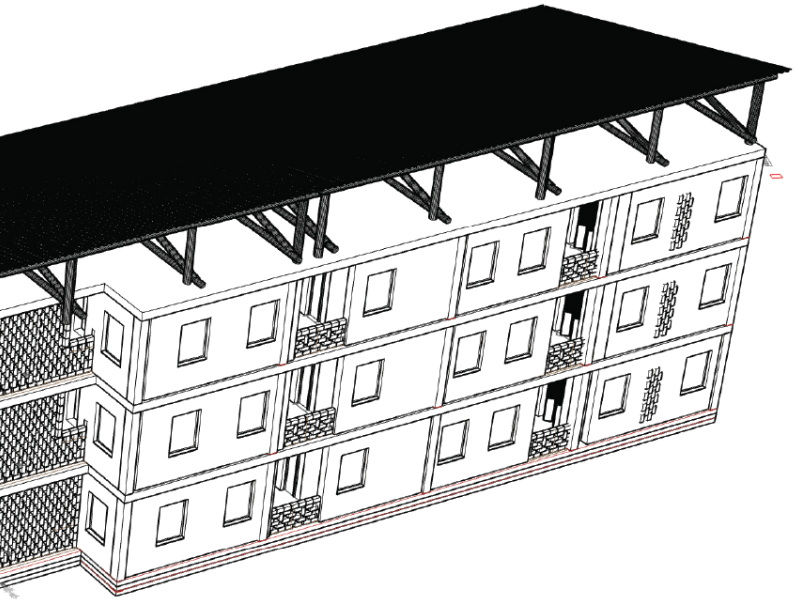
CORTYARD BLOCK EXPLODED AXON





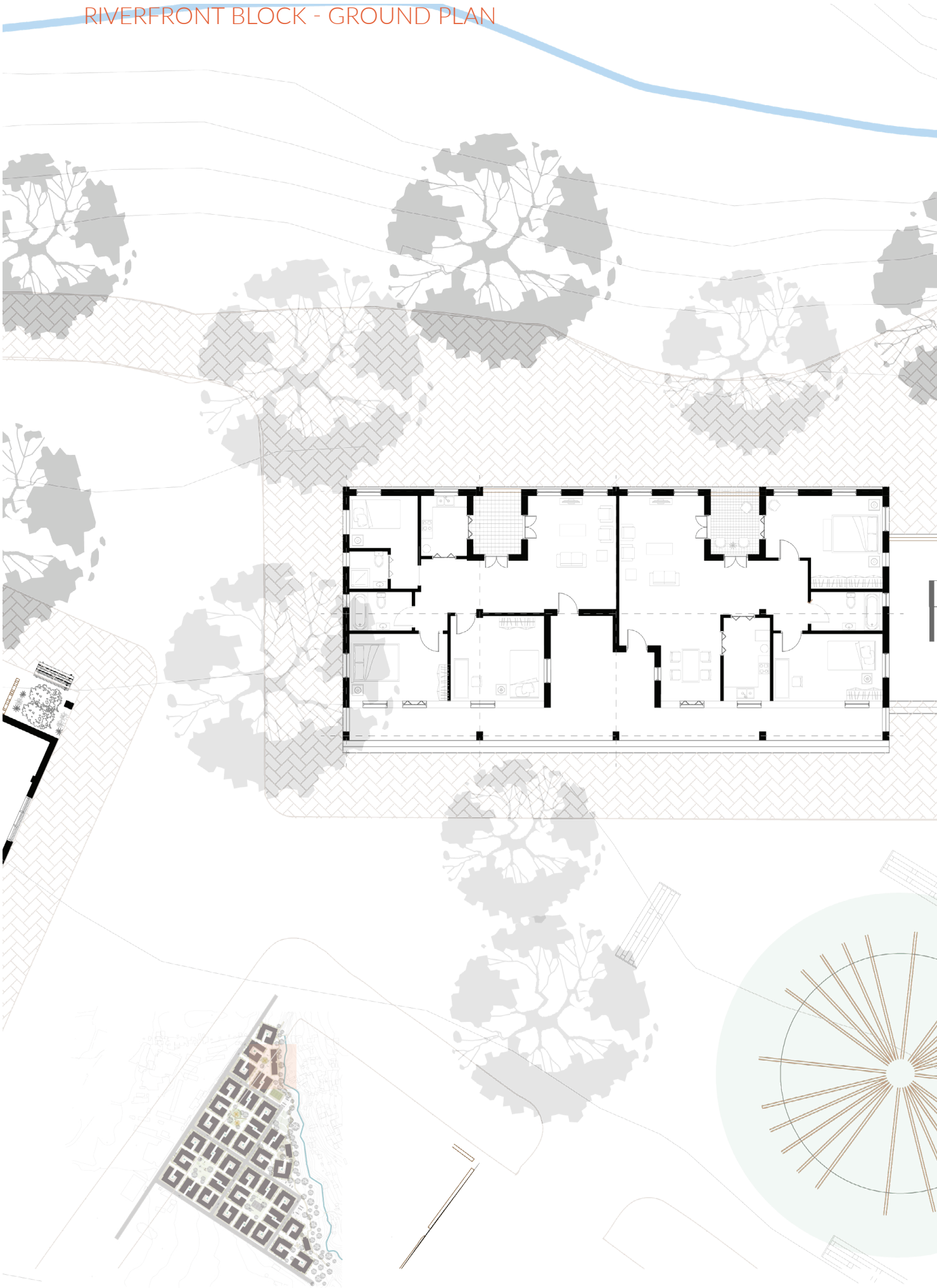
BUILDING TYPOLOGY - WATERFRONT

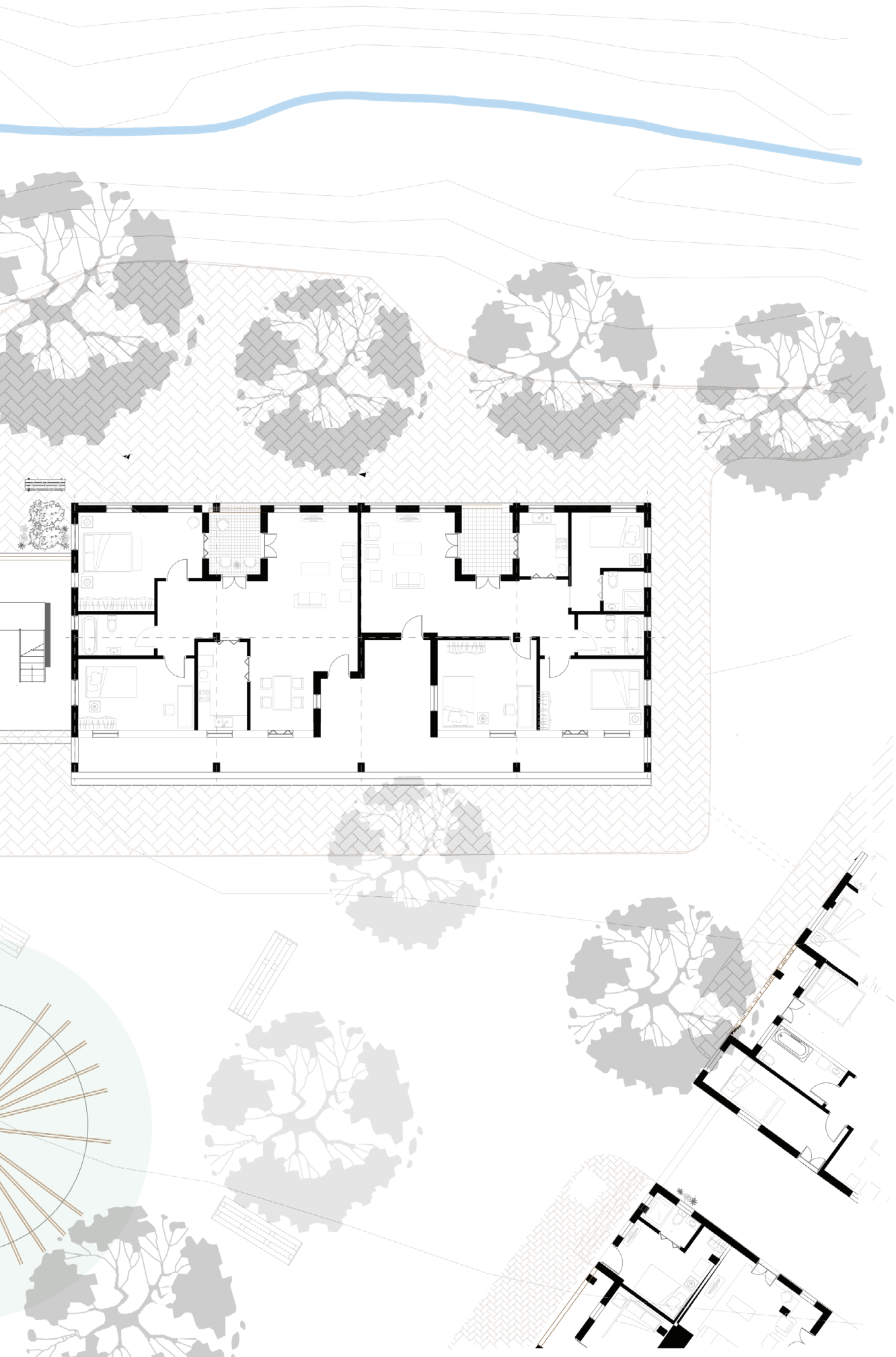




RIVERFRONT

RIVERFRONT BLOCK - GROUND PLAN





1:200

X

CLUSTER

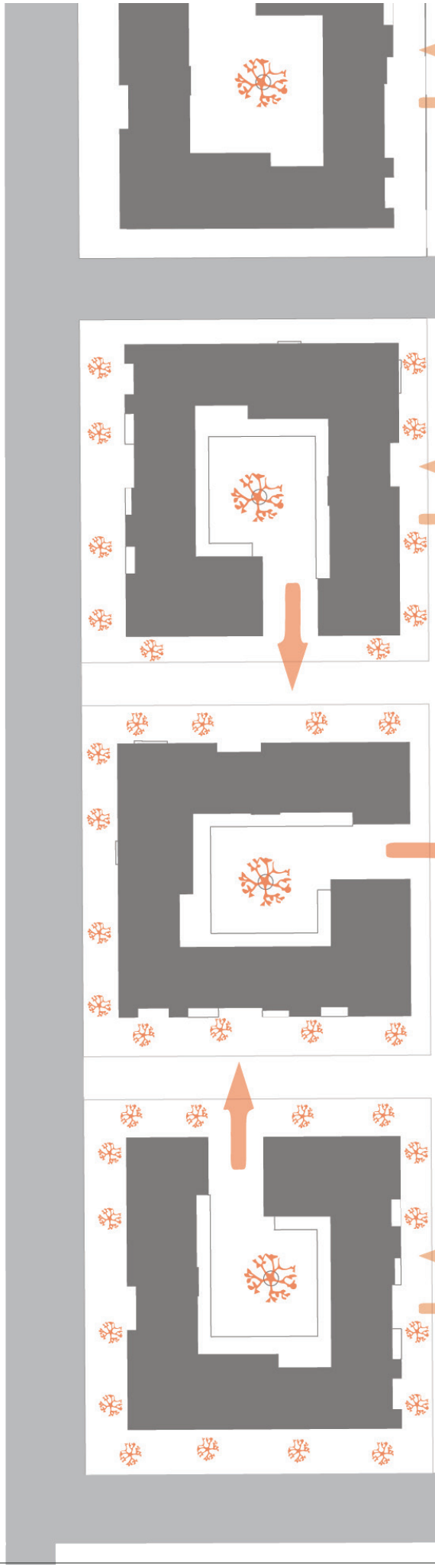
CLUSTERING

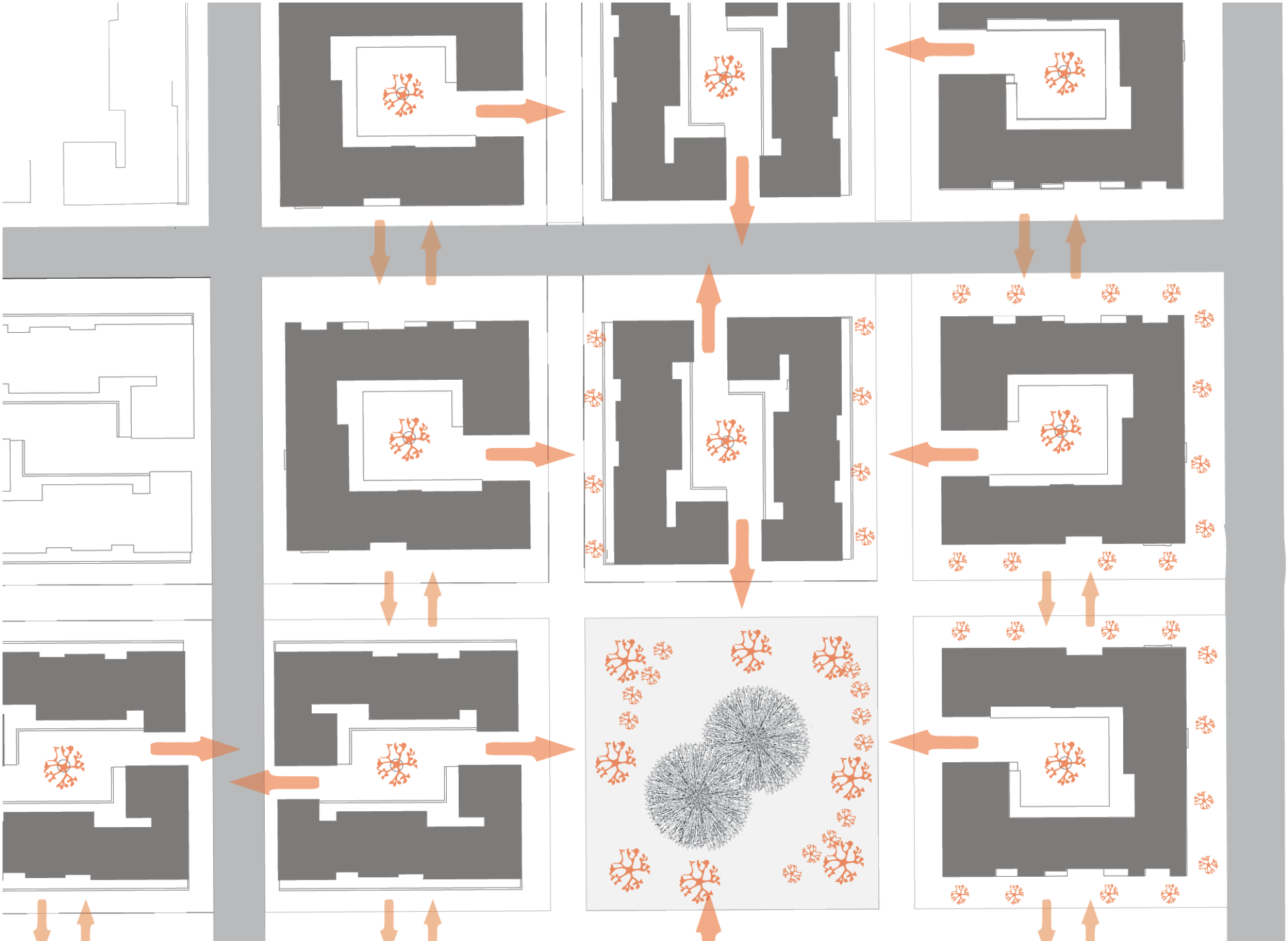
-central communal space = social and environmental buffer

-courtyards = intimate space and as a means of interaction => monastery cloister.

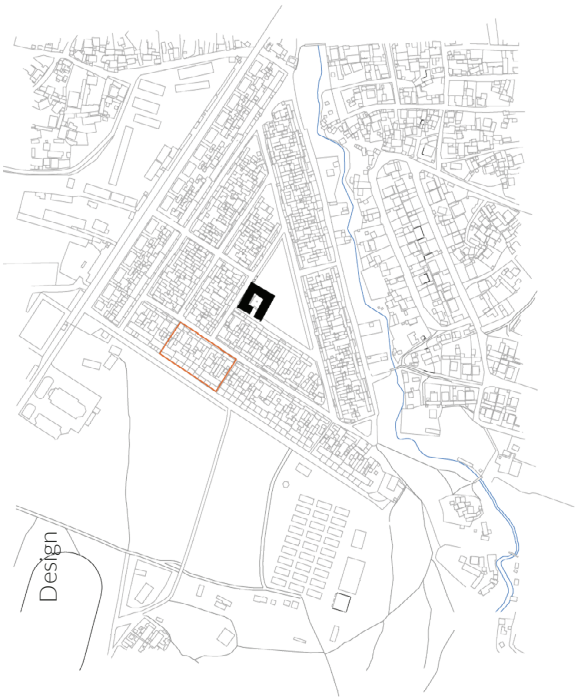
-inhabitants from the same 'sefer' into the same block/building

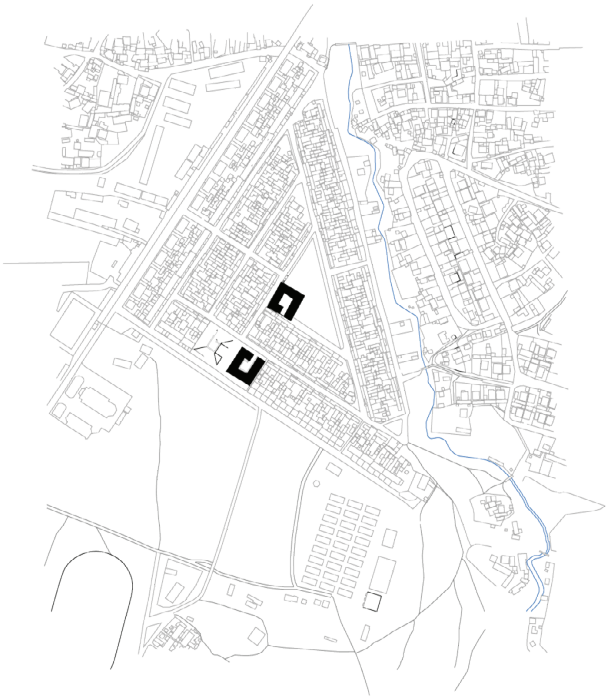
-preserve the intimate relationships they developed over





PHASING





Phase I

Phase II

Phase I - G+4

Relocate 17 households

Internal cross-subsidization

40% Low- income Core Housing

+

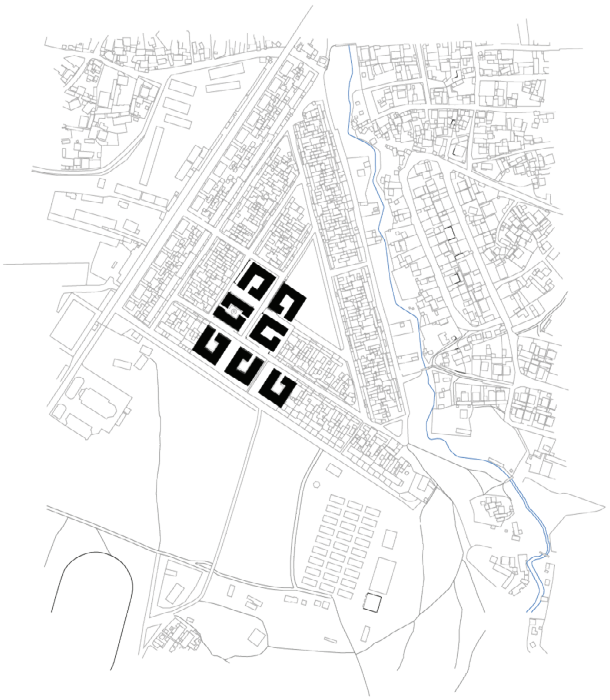
60% Middle-income Housing=OwnershiP

~ Ground FloorRetail Units

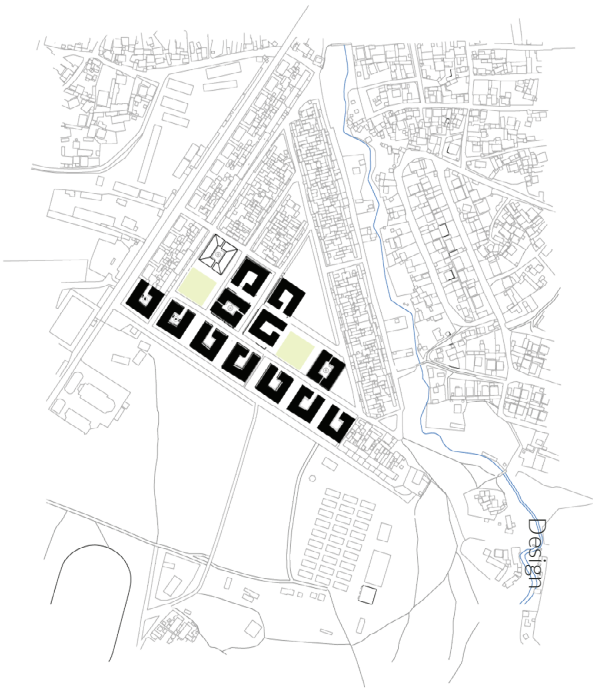
8 Low-income units

10 Middle-income units

160 respite



Phase III



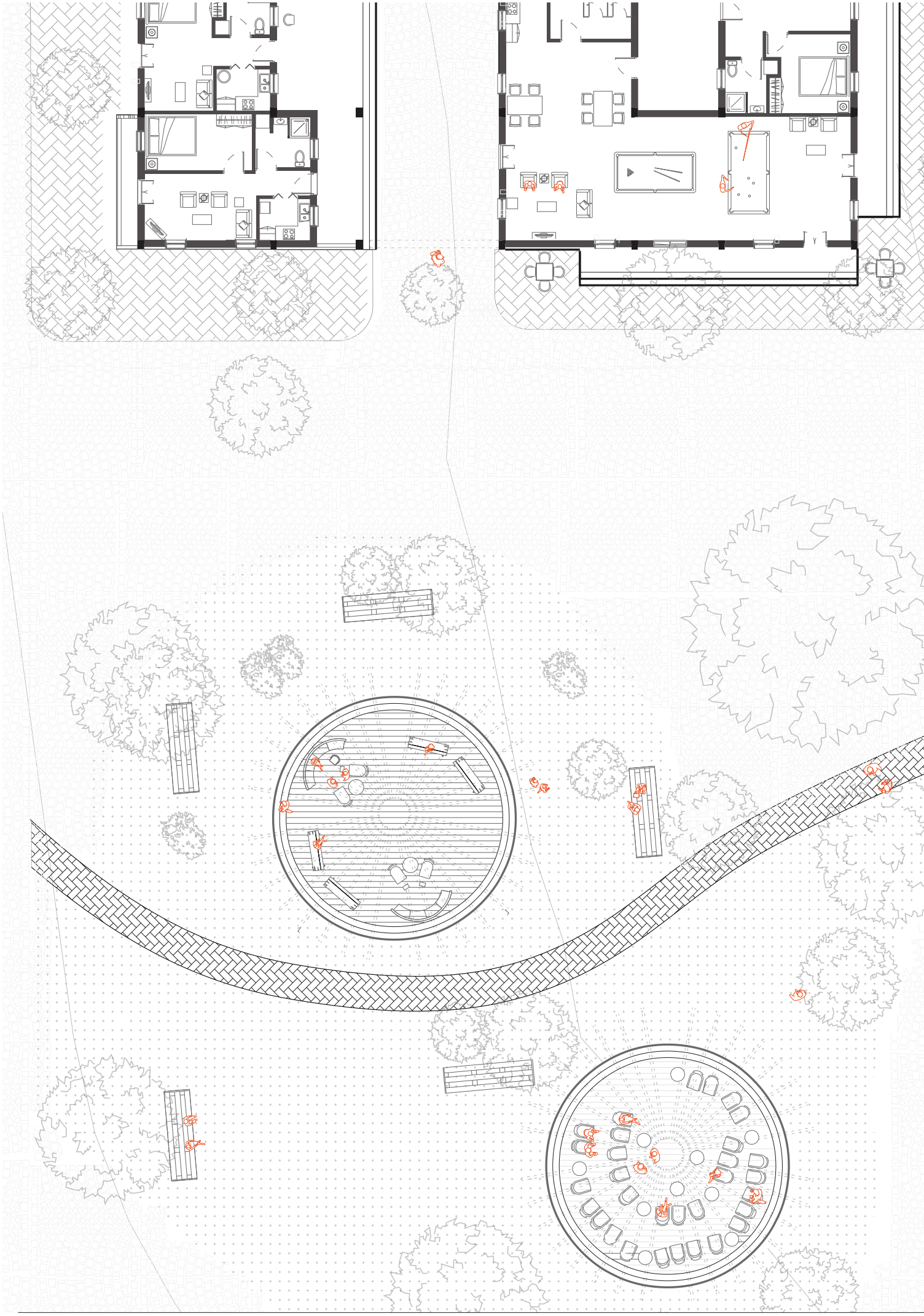
Phase IV
Complete Cluster 1 & 2

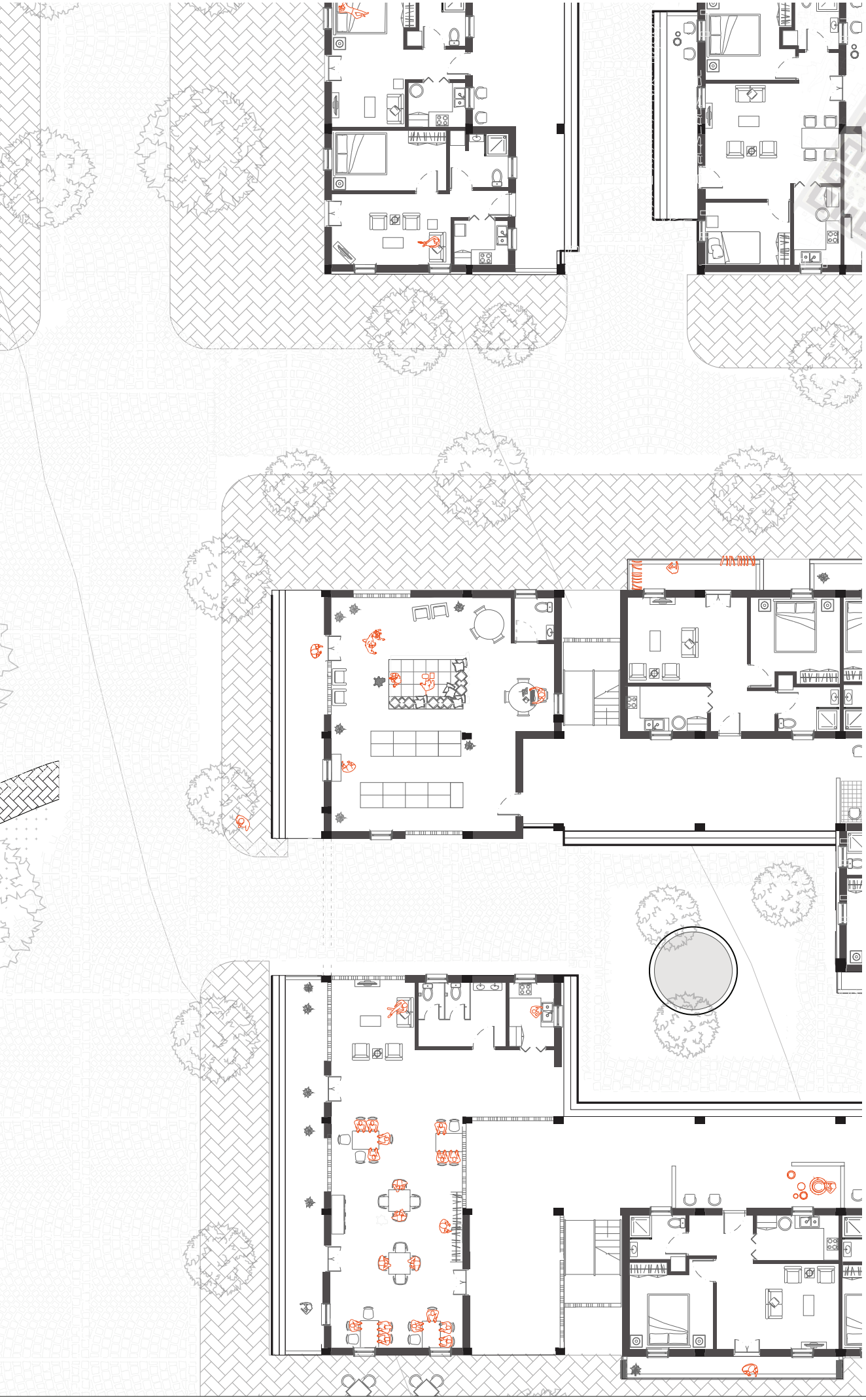
CLUSTER - GROUND PLAN



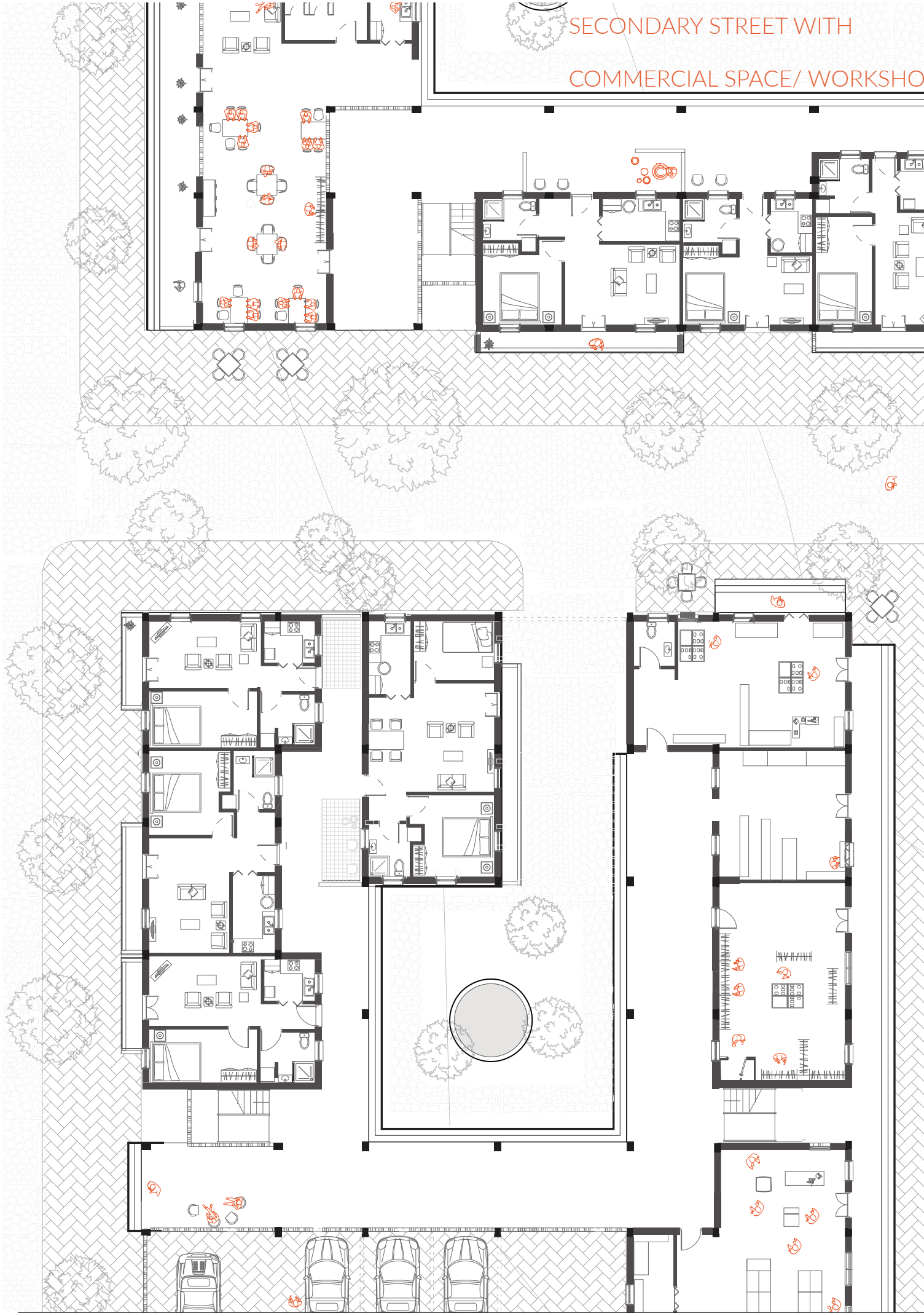


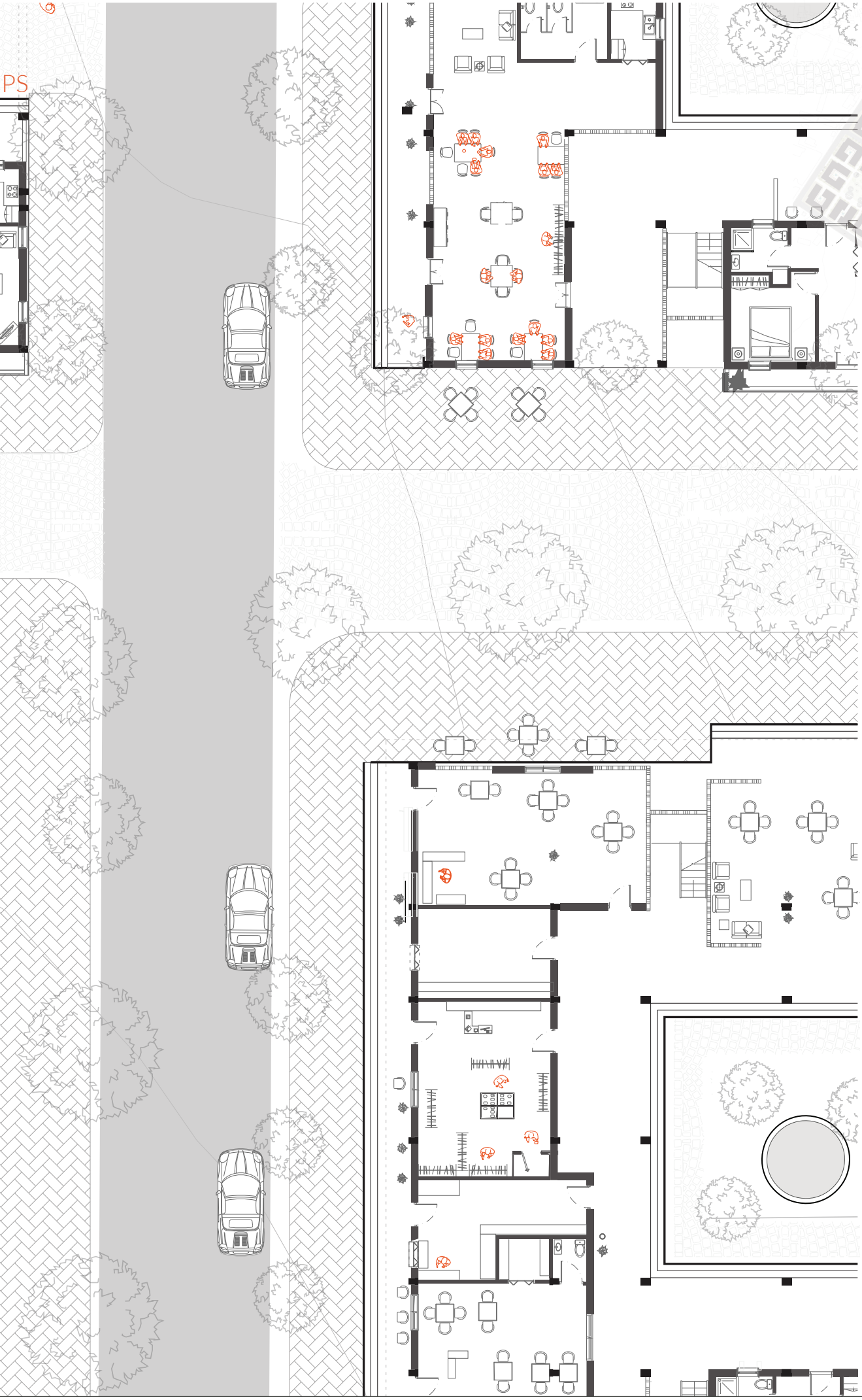
1:500





1:200


SECONDARY STREET WITH
COMMERCIAL SPACE/ WORKSHO



1:200

COMMUNAL SPACE ELEVATION



Design



1:200

PEDESTRIAL STREET ELEVATION





1:200

X

URBAN SCALE

SITE PLAN





1:2000

URBAN STRATEGY

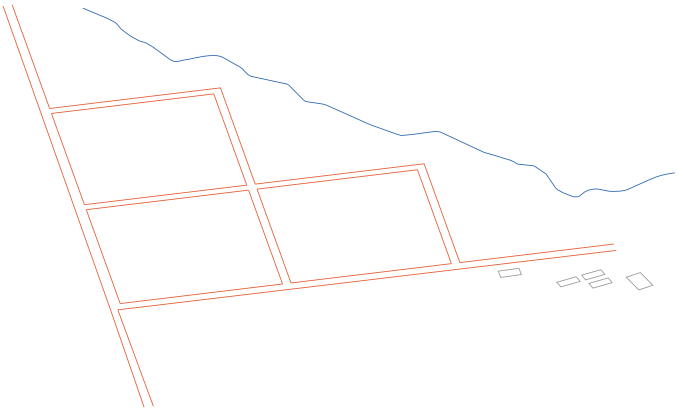
According to Richard Sennett, designing an urban plan without **obstacles or "surprise encounters" and findings** isn't really beneficial to pedestrians and it actually negates the **natural and human-scale way people experience their surroundings**... there should be obstacles or "resistance" to help people have a more natural experience in an open space.

The urban plan srategy of the site commenced with the **extraction of the base road structure**. This will help make the redevelopment plan more efficient and cost-effective. This also becomes the springboard for the new **site grid which was achieved by extending the road lines**. The main 'arteries' of this grid are used as vehicular roads.

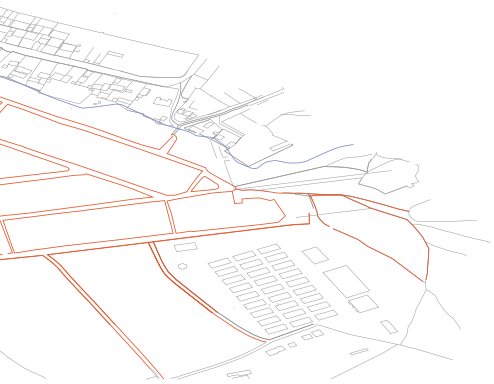
To add a more human-scale experience and **permeability within the site, pedestrian road grids were added** withing the confines of the vehicular roads. Next, the **new blocks and programs** were introduced which will be built in phases and create **more obstacles and seamless connections** between the built structures and within the open spaces.



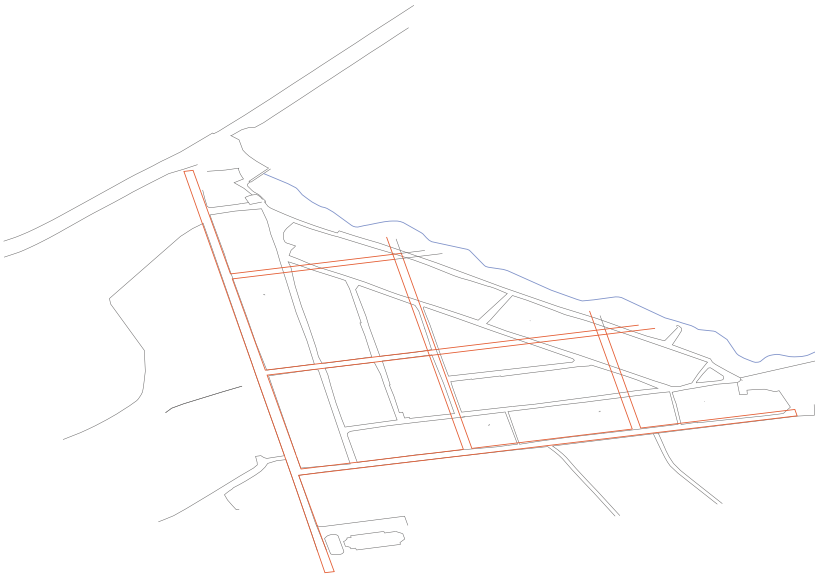
Start from base structure



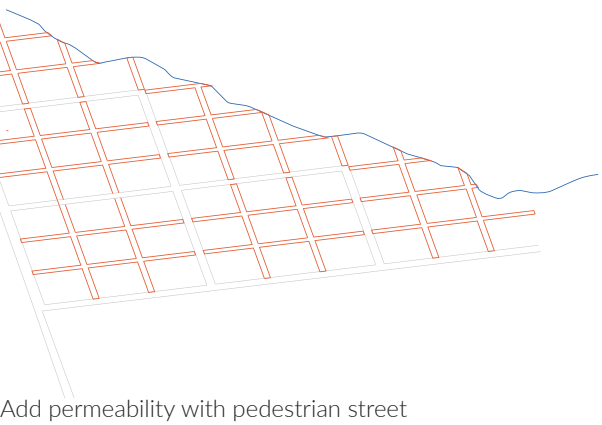
Vehicular road enclosing each cluster



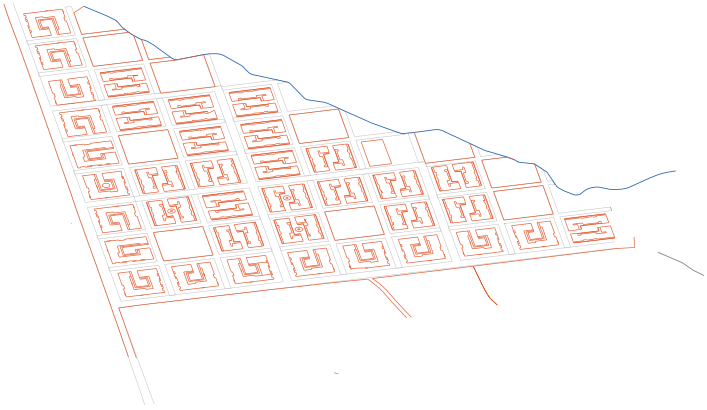
e - in situ infrastructure



Extend street lines and apply a new grid

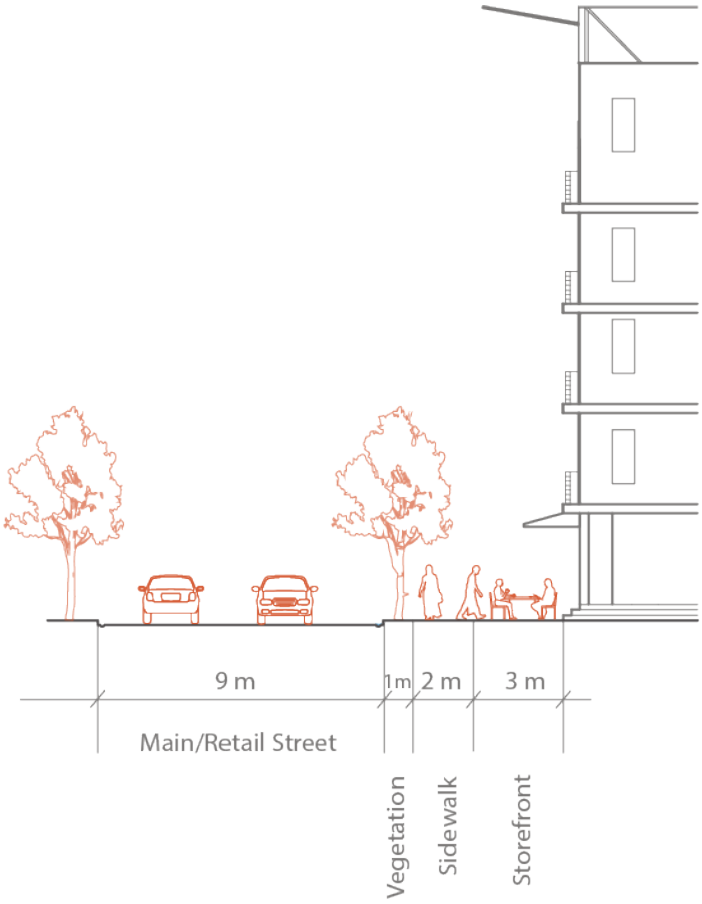


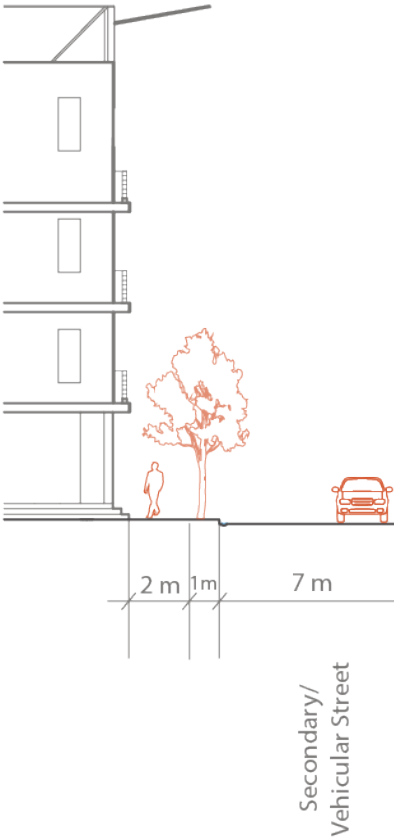
Add permeability with pedestrian street

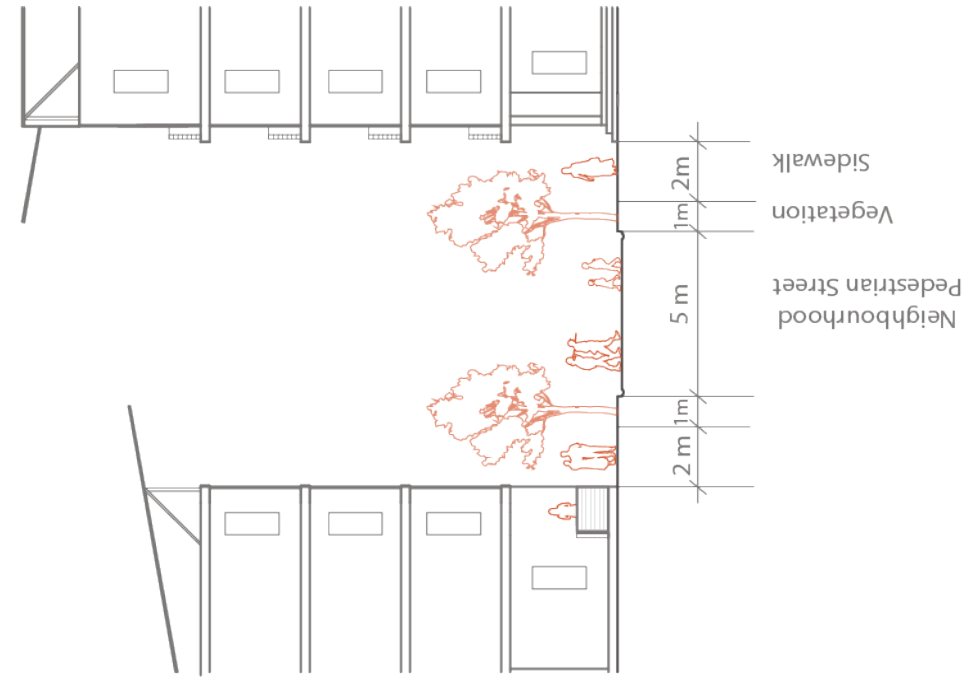


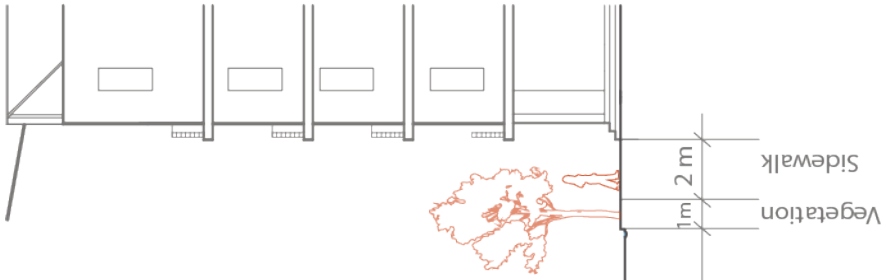
Add permeability with pedestrian street

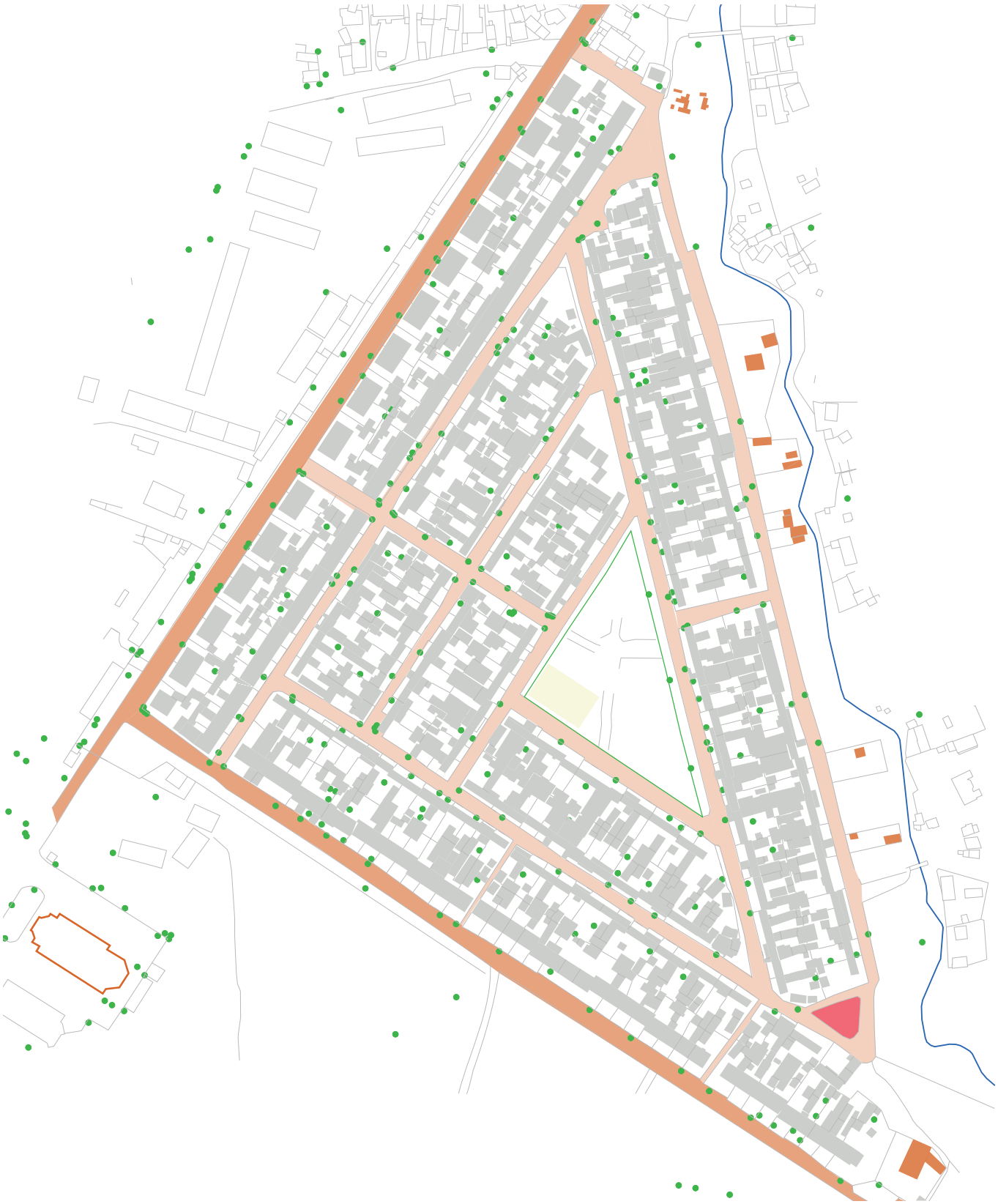
Street Profiles






Sidewalk
2m
Vegetation
1m
Neighbourhood
Pedestrian Street
5 m
1m
2 m


Sidewalk
2 m
Vegetation
1m



Existing Density

FSI= 0.55

~55 dwellings /Hectare

357 plots/ ~2,540 Inhabitants



FSI= 1.76

avg. 64 dwellings /Hectare

6 clusters/ communities
36 blocks

X

BUILDING TECHNOLOGY

MATERIALITY

Earth has been used as building material in Ethiopia (and other regions) for centuries. It is a material well suited for low-income housing, but with modern technologies such as **Compressed Stabilized Earth Blocks (CSEB)**, this material can be adopted into the construction method of other income groups (middle and high) as well.

Some of the benefits of using CSEB are low construction cost and carbon emission, improved energy efficiency due to its low thermal conductivity, easy to train, and reduced use of cement. Fired [benefits CSEB brick creates 22 kg CO2/tonne compare to that of concrete blocks (143 kg CO2/tonne), common fired clay bricks (200 kg CO2/tonne) and aerated concrete blocks (280 – 375 kg CO2/tonne) – about 40% less carbon emission on average (Rigassi, 1985). A mixture with 5% cement will suffice for the strength and durability requirement whereas 7% will satisfy most building code requirements.

Building Technology

Reusing and using local materials is a tradition well known and worth preserving in Addis Ababa. **Cobblestone & corrugated sheet metal**- the existing cobblestone pavers and corrugated sheet metal used for gates and roofing in the Kolfe site can be reused and repurposed as pedestrian pavers and roofing for the blocks

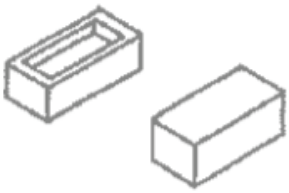
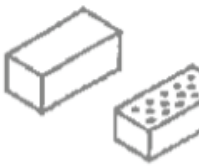
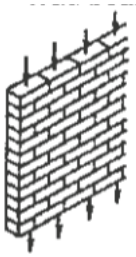
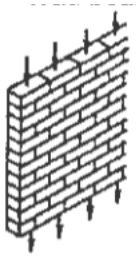


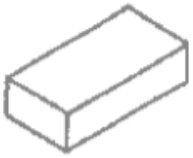
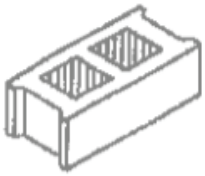
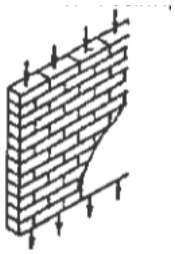
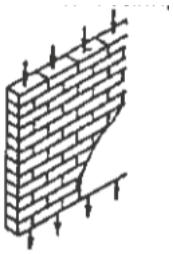
Currently, **bamboo** is mostly used in Addis Ababa for designer furniture which are more suitable for the high-income households. Bamboo is otherwise widely used as household and construction material in the Southern and some Western part of Ethiopia. By integrating bamboo poles for sun shading and exterior finishing as needed this sustainable material can be introduced as a building material in the Addis Ababa content as well.



Pottery in Ethiopia has a long history. According to some sources, pottery, similar to other crafts, dates back to the Axumite Empire (100 BC - 400 AD). Pottery is normally made by the women out of clay collected from the riverside. These pots are often still used in the household for , for example coffee making. This local knowhow can be harvested and integrated into the construction process.



	CED/ CSEB	Fired bricks
Type	 29.5 14 X 9	 22 X10.5 X 6.5
Appearance	smooth/ medium to good	rough to smooth, good to excellent
Performance	low to very good	low to excelle
Use (in masonry)	load-bearing  without render	load-bearing  without rende

	Adobe blocks	Concrete blocks
		
	40 X 20 X 10	40 X 20 X 15
/ t	irregular/ poor	rough/ average
ent	poor	low to very good
g	load-bearing	infil
		
er	with render	with render

Source: Rigassi, 1985.

CONSTRUCTION SCHEME

CSEB has three stages of process during production: soil **preparation**, mix **compression** and the **curing**. Soil on site can normally be utilized after the quality test. Training local labourers can be done easily with minimal instructions.

Handmade pottery can be used as filler material for site-cast concrete floor slabs. Filler slab can save up to 17 % in cost, 16% - 33% in cement, and up to 45% in steel used.

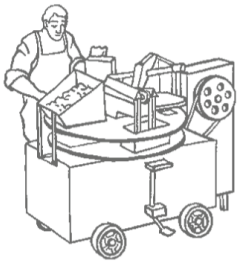
preparation



compression



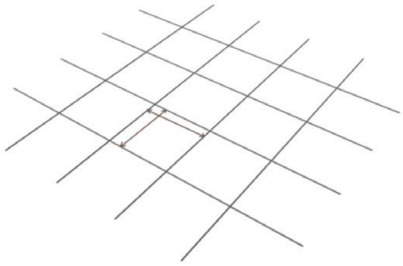
Manual = 700 - 1500/ day



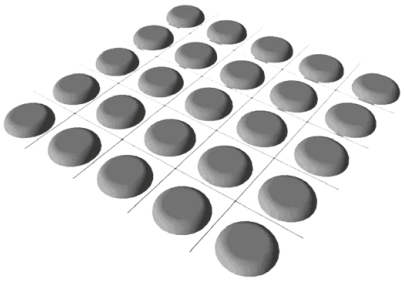
Motorized = 1000 - 5000 / day

curing

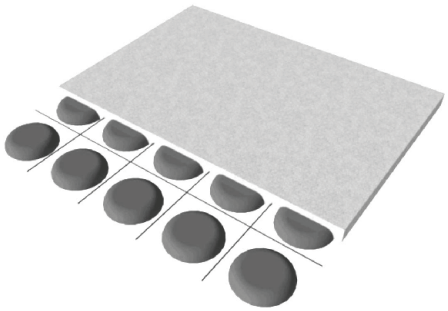




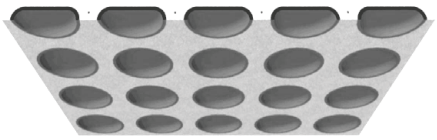
45 cm x 45 cm grid (8mm Th.) steel reinforcement

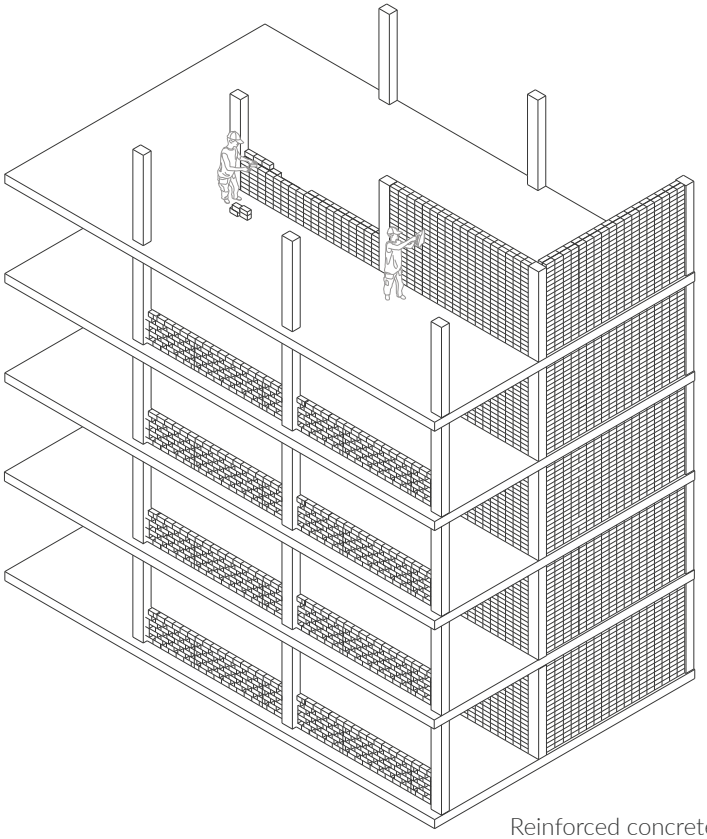


Laying filler material - handmade clay pots



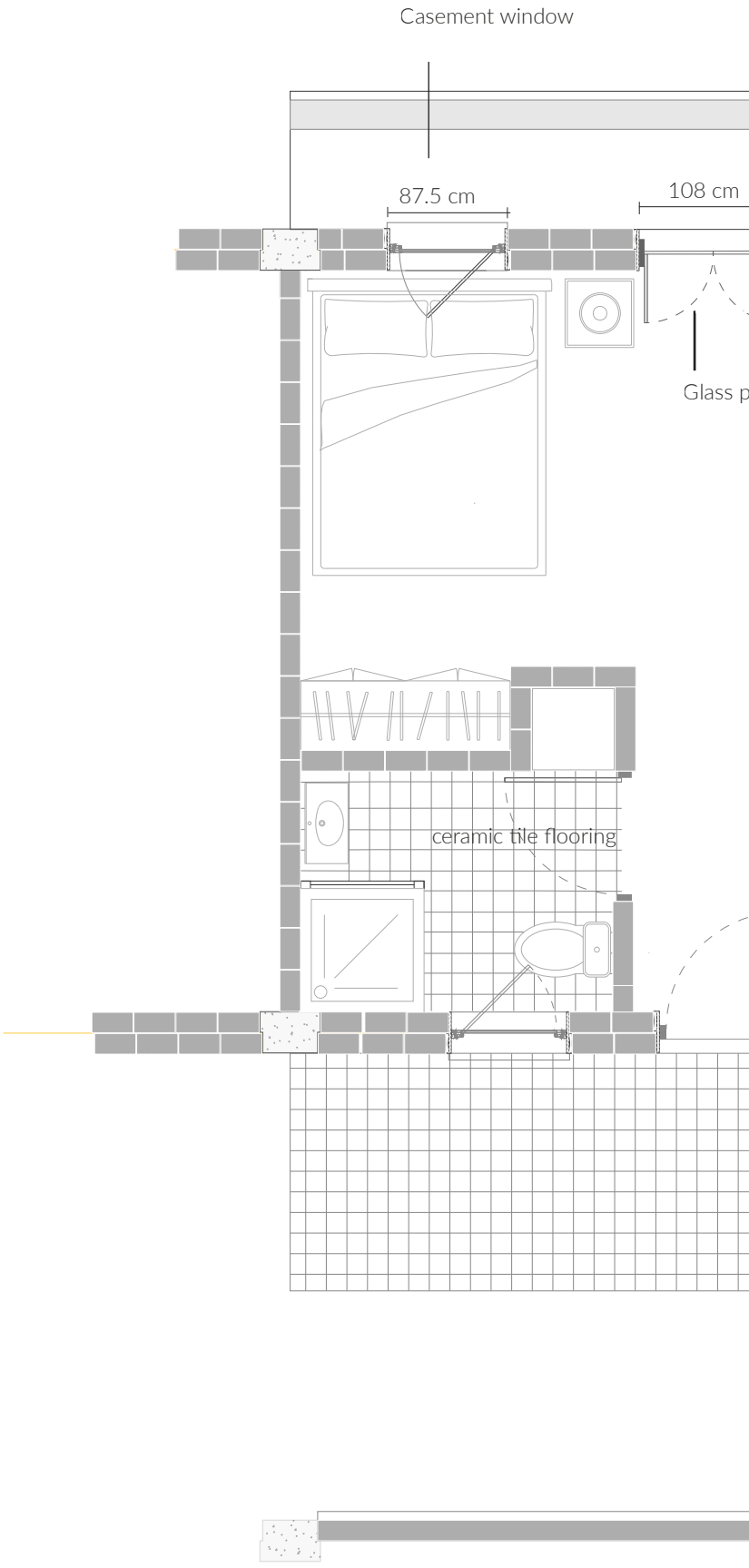
Casting concrete slab

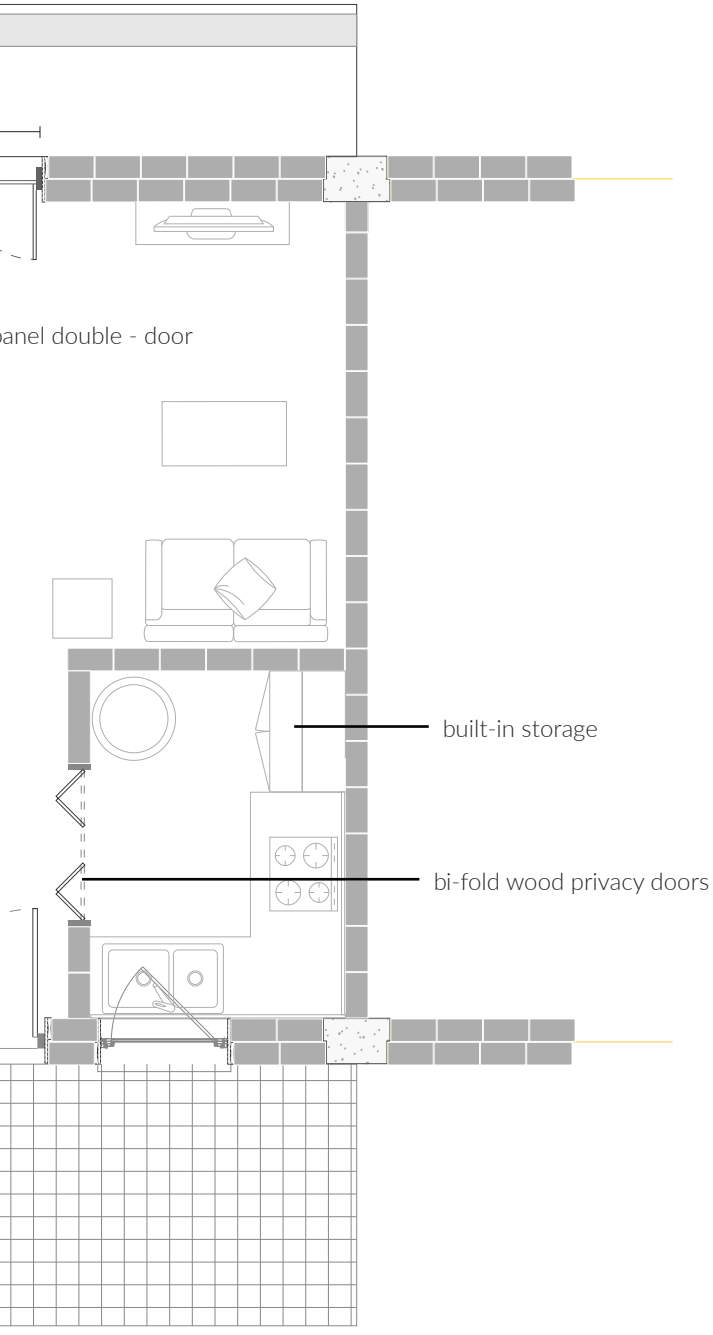




Reinforced concrete (RCC) frame with CSEB infil

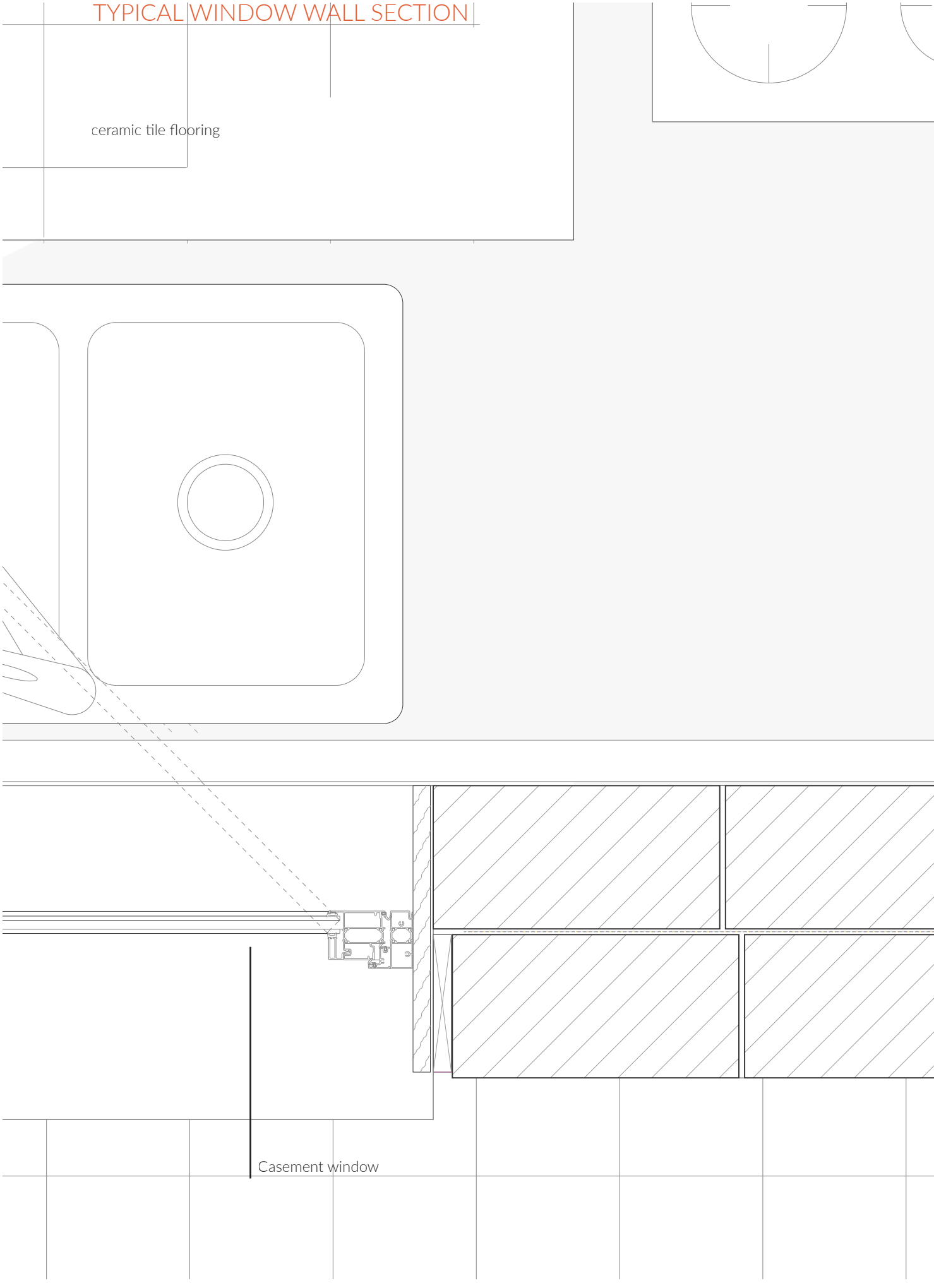
TYPICAL STUDIO UNIT

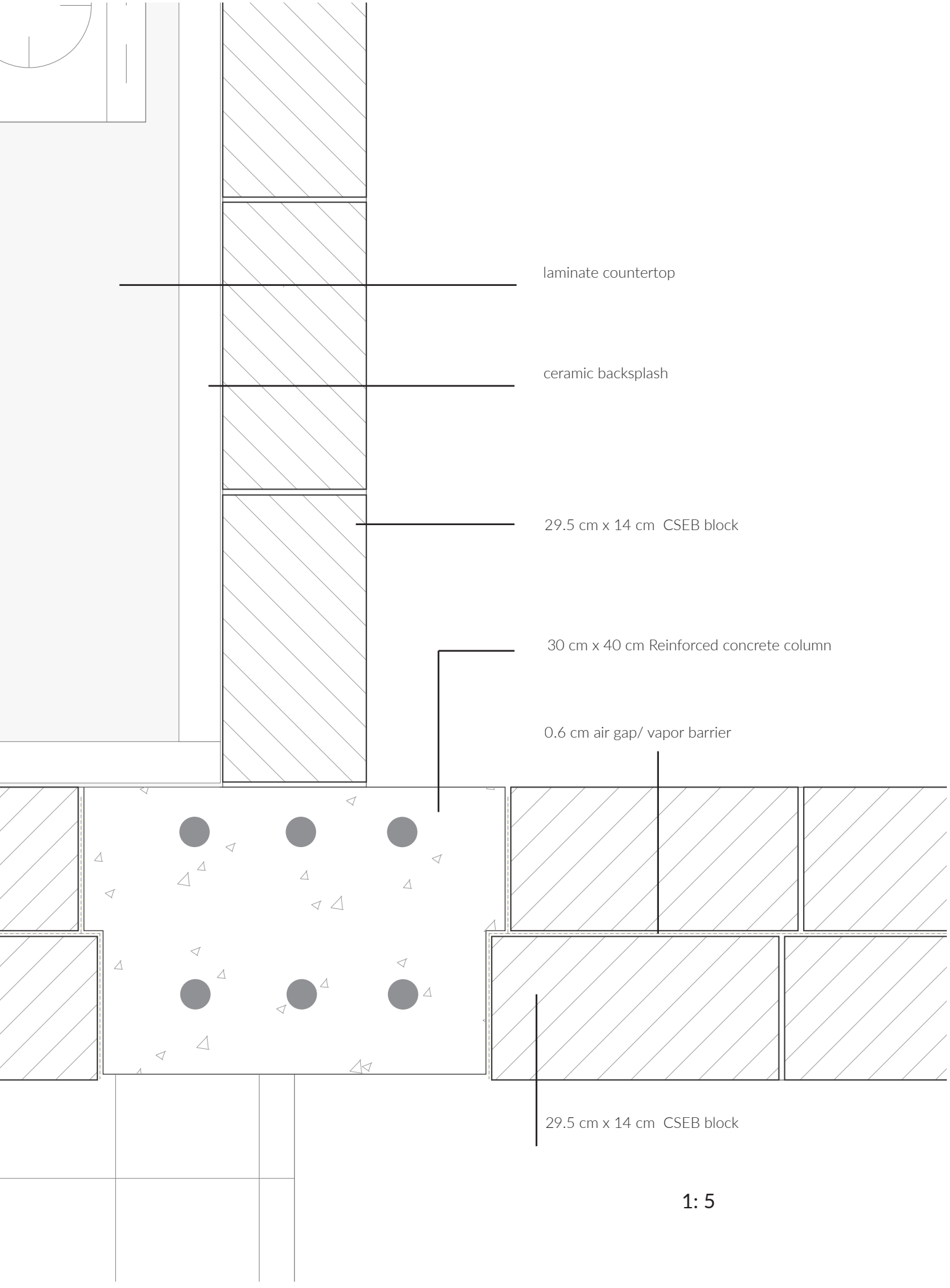



anel double - door
built-in storage
bi-fold wood privacy doors

1: 50

TYPICAL WINDOW WALL SECTION




laminate countertop
ceramic backsplash
29.5 cm x 14 cm CSEB block
30 cm x 40 cm Reinforced concrete column
0.6 cm air gap/ vapor barrier
29.5 cm x 14 cm CSEB block

1: 5




LADA
C6255A

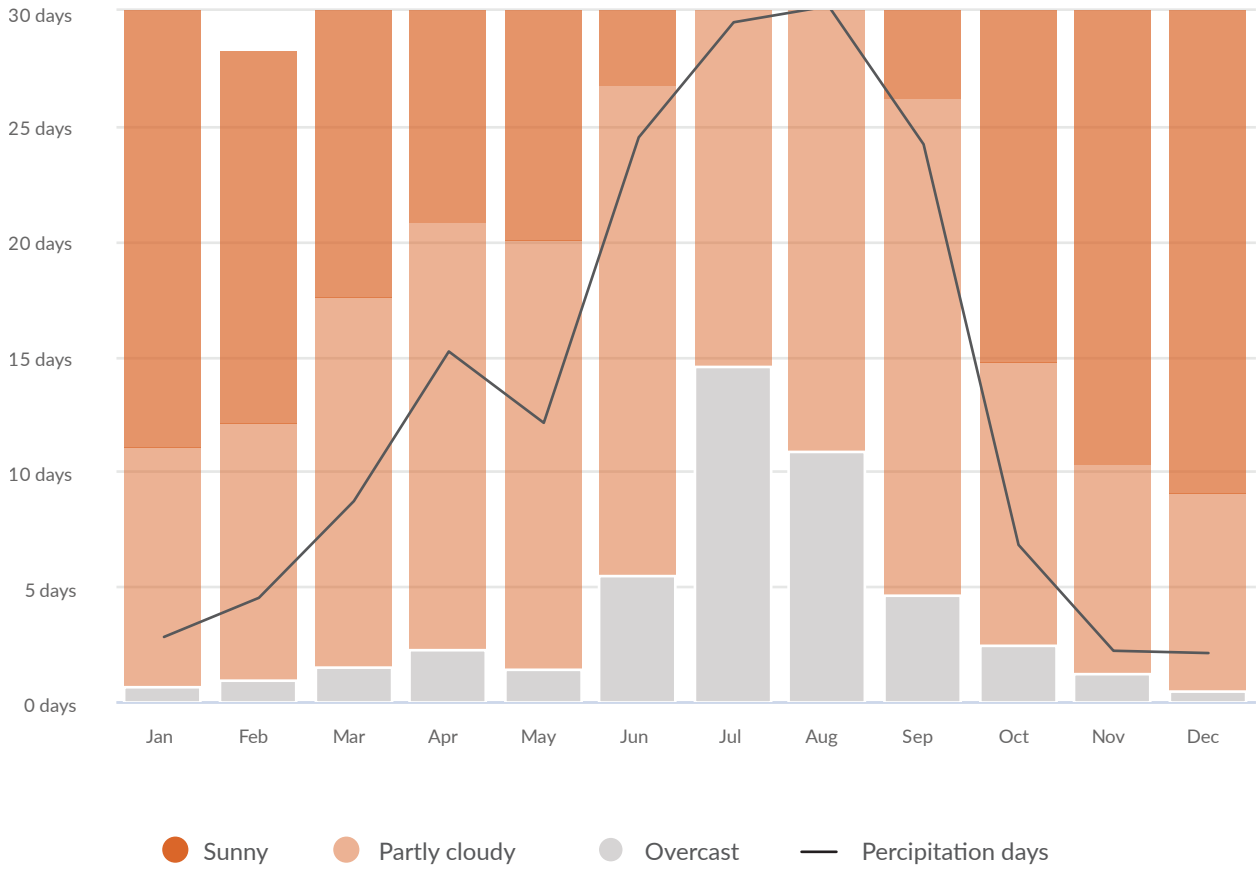
CLIMATE

The climate in Addis Ababa is normally sunny with a temperature ranging between 25 and 18 degree celsius. Because it has a very comfortable temperature year round, most of life in Addis Ababa is spent outdoors. Despite common misconceptions, Addis Ababa receives ample rainfall throughout the year with an average rainfall days of 132.

The warmest and longest daylight hours are between March and May while the cold months are usually during the rainy season from July to September. Due to its location close to the equator, Addis Ababa has a high sun angle during the day which can be beneficial to lighting intimate spaces such as the courtyards.

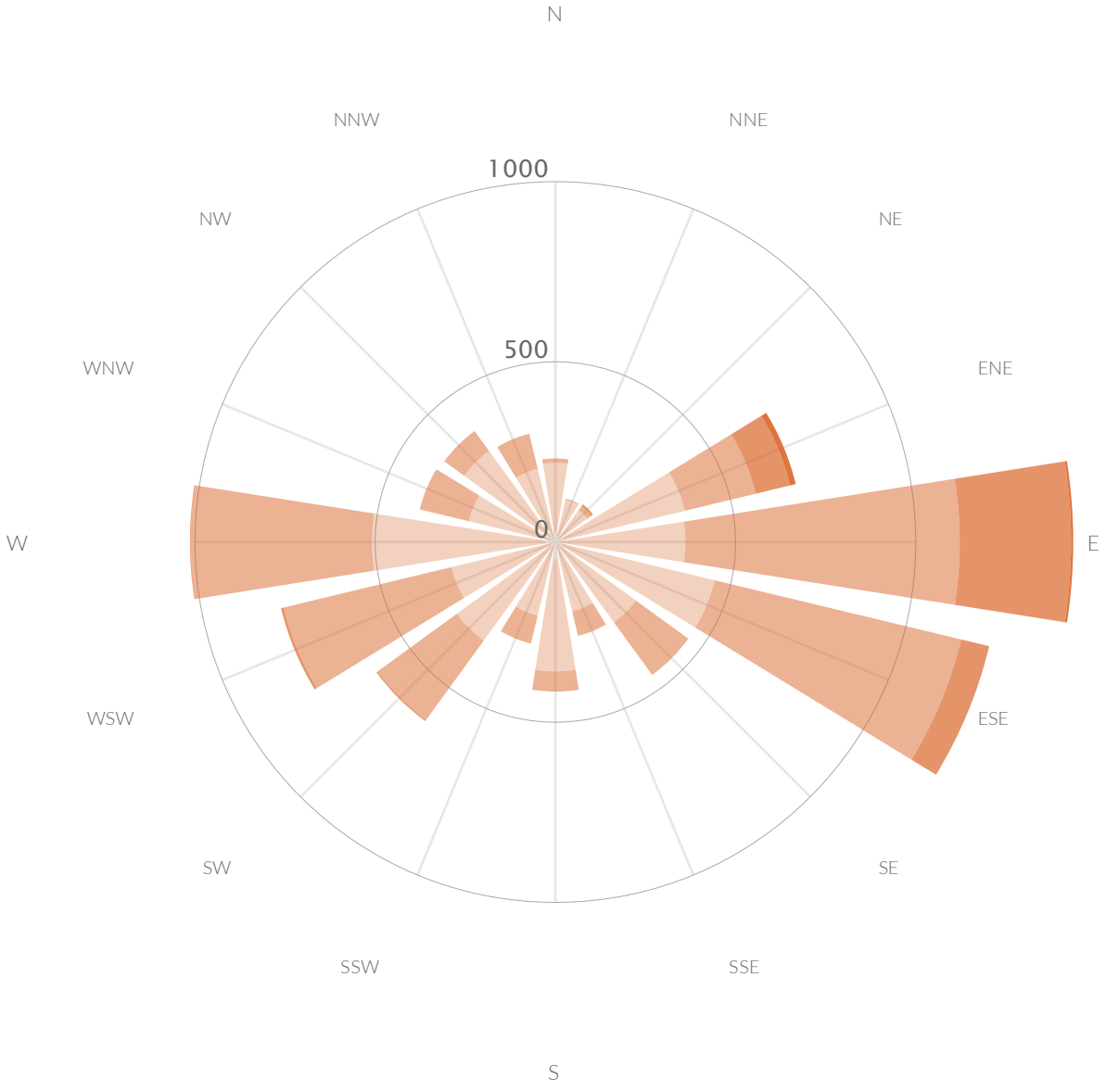
The prevailing wind directions in Addis Ababa are from the East and Southeast direction.

Cloudy, sunny, and precipitation days



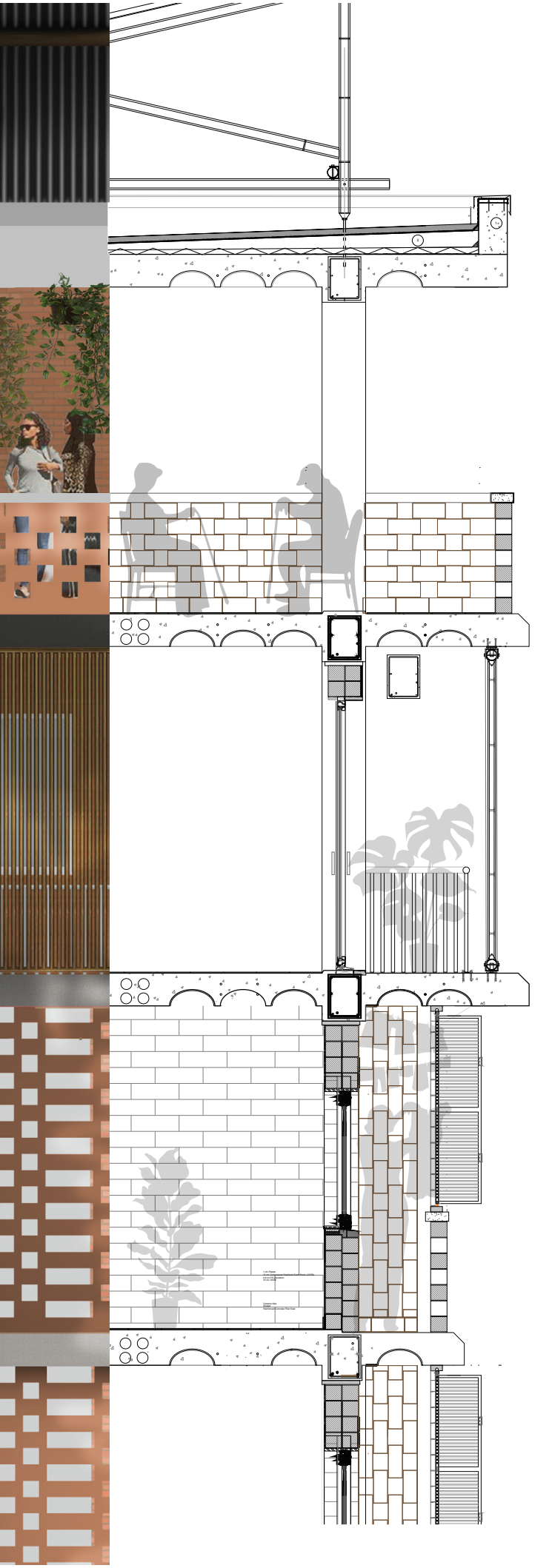
Dominant wind direction

E E ESE E ESE S SSW SSW SE E E E



Source: meteoblue.com





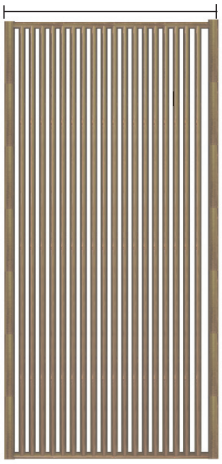
Corrugated sheet metal roof

Bamboo roof truss

CSEB perforated handrail

Third Floor
+9.9 m

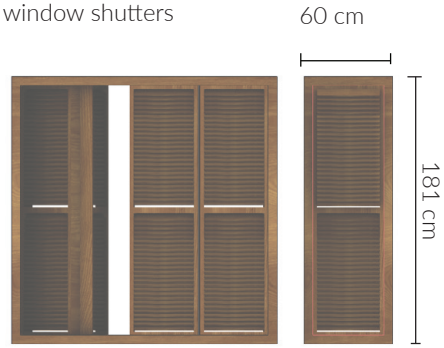
Bamboo poles
vertical louvres



Steel handrail

Second Floor
+9.9 m

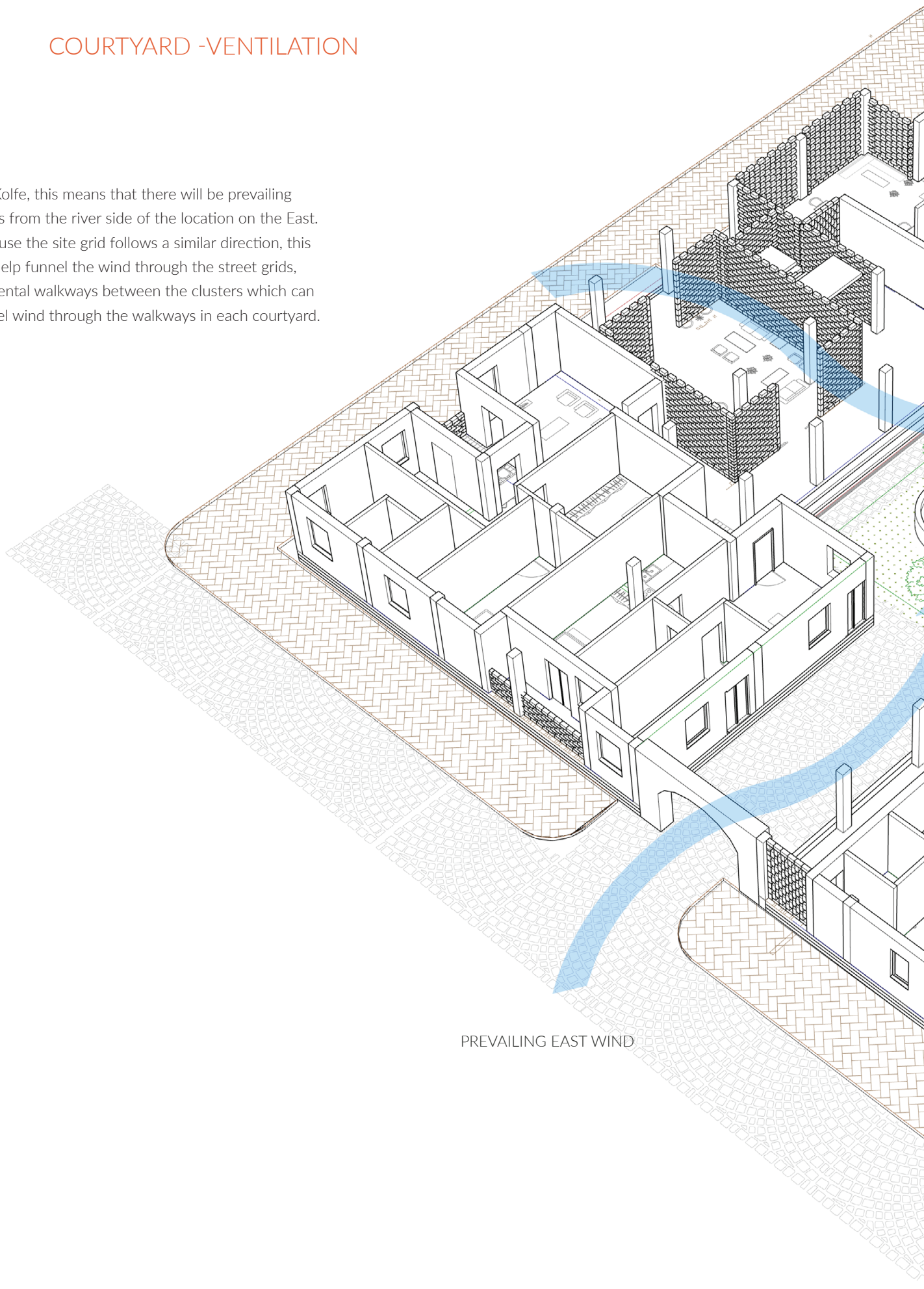
Wood window shutters



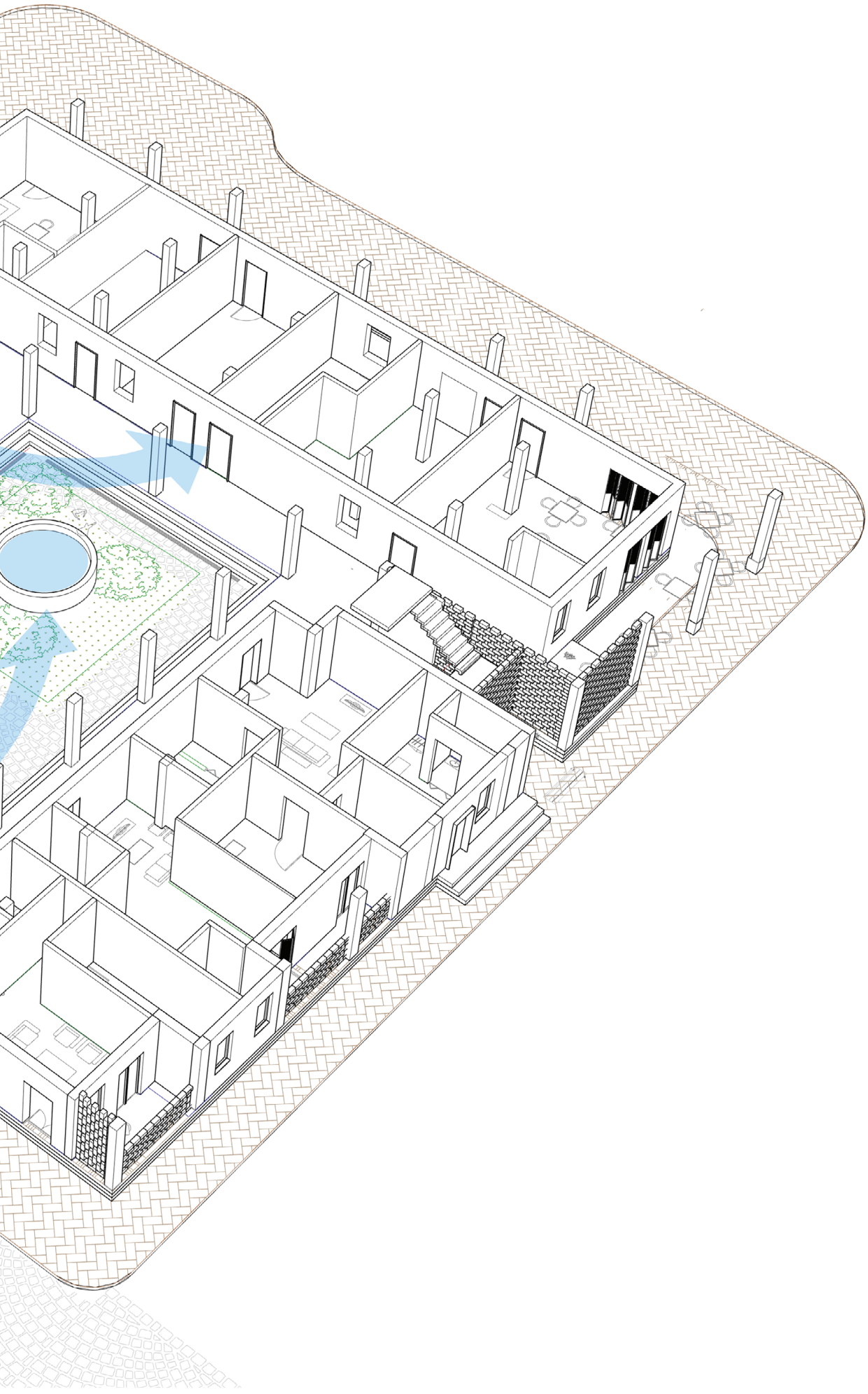
First Floor
+6.6 m

COURTYARD -VENTILATION

For Kolfe, this means that there will be prevailing winds from the river side of the location on the East. Because the site grid follows a similar direction, this will help funnel the wind through the street grids, incidental walkways between the clusters which can funnel wind through the walkways in each courtyard.

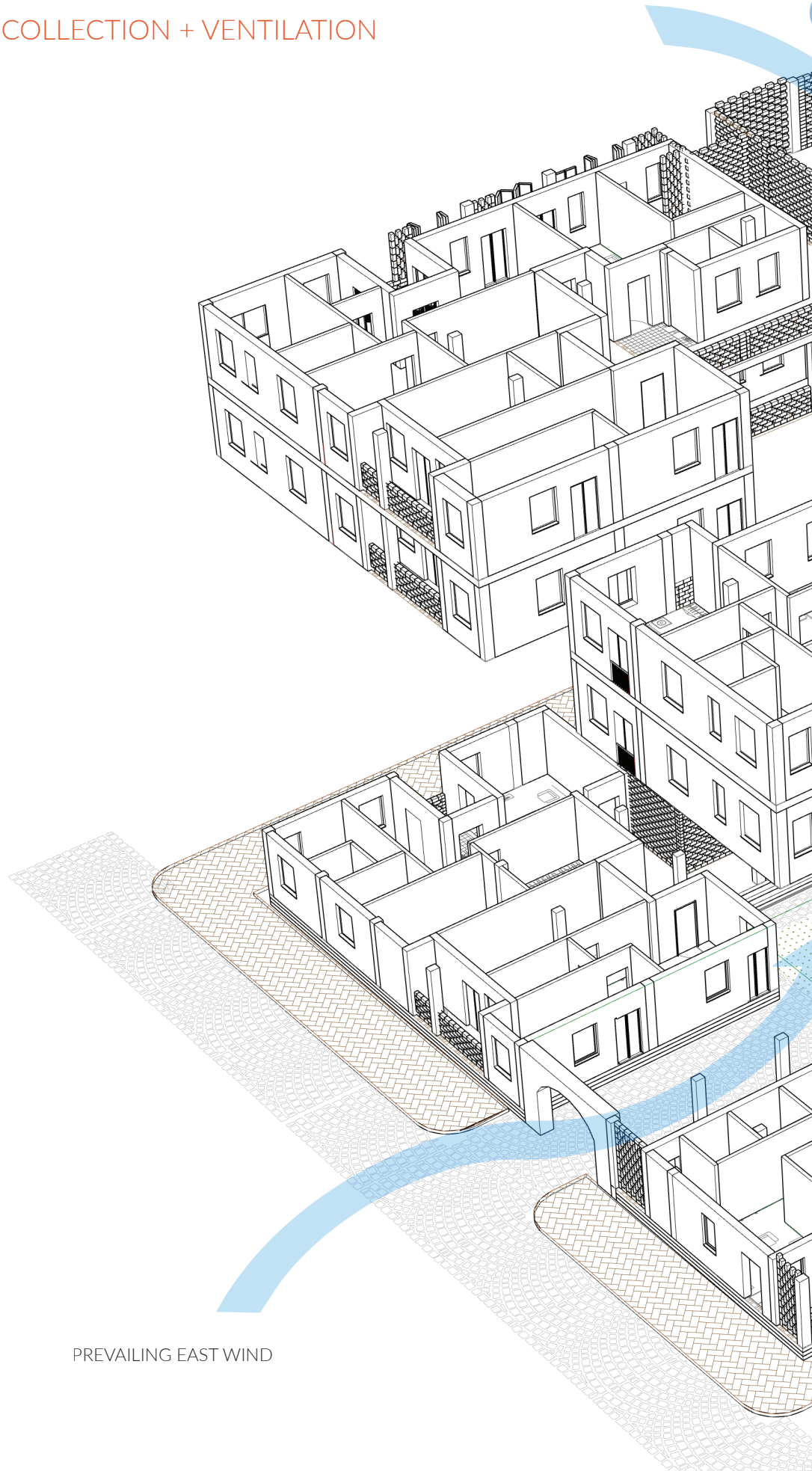


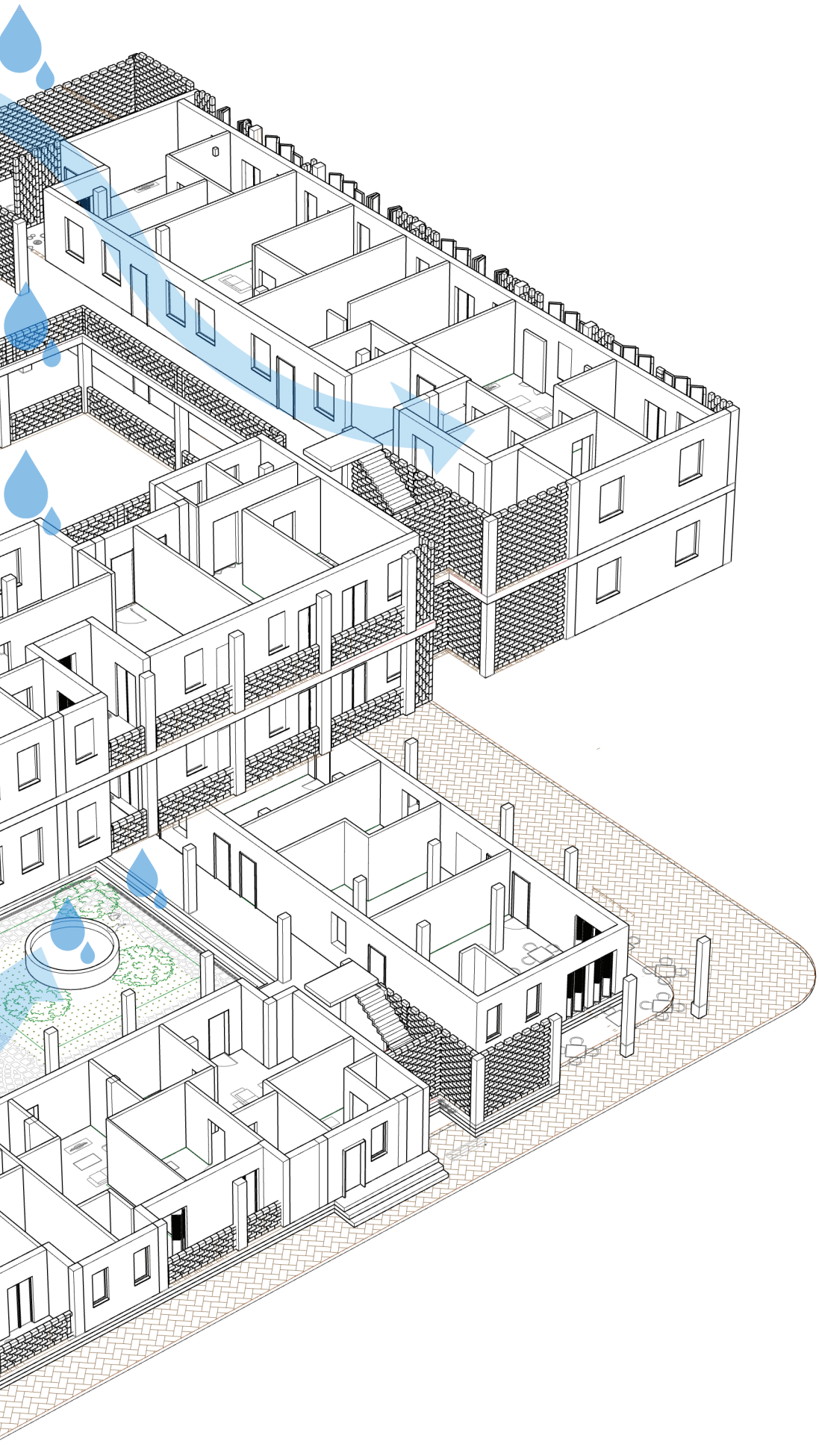
PREVAILING EAST WIND



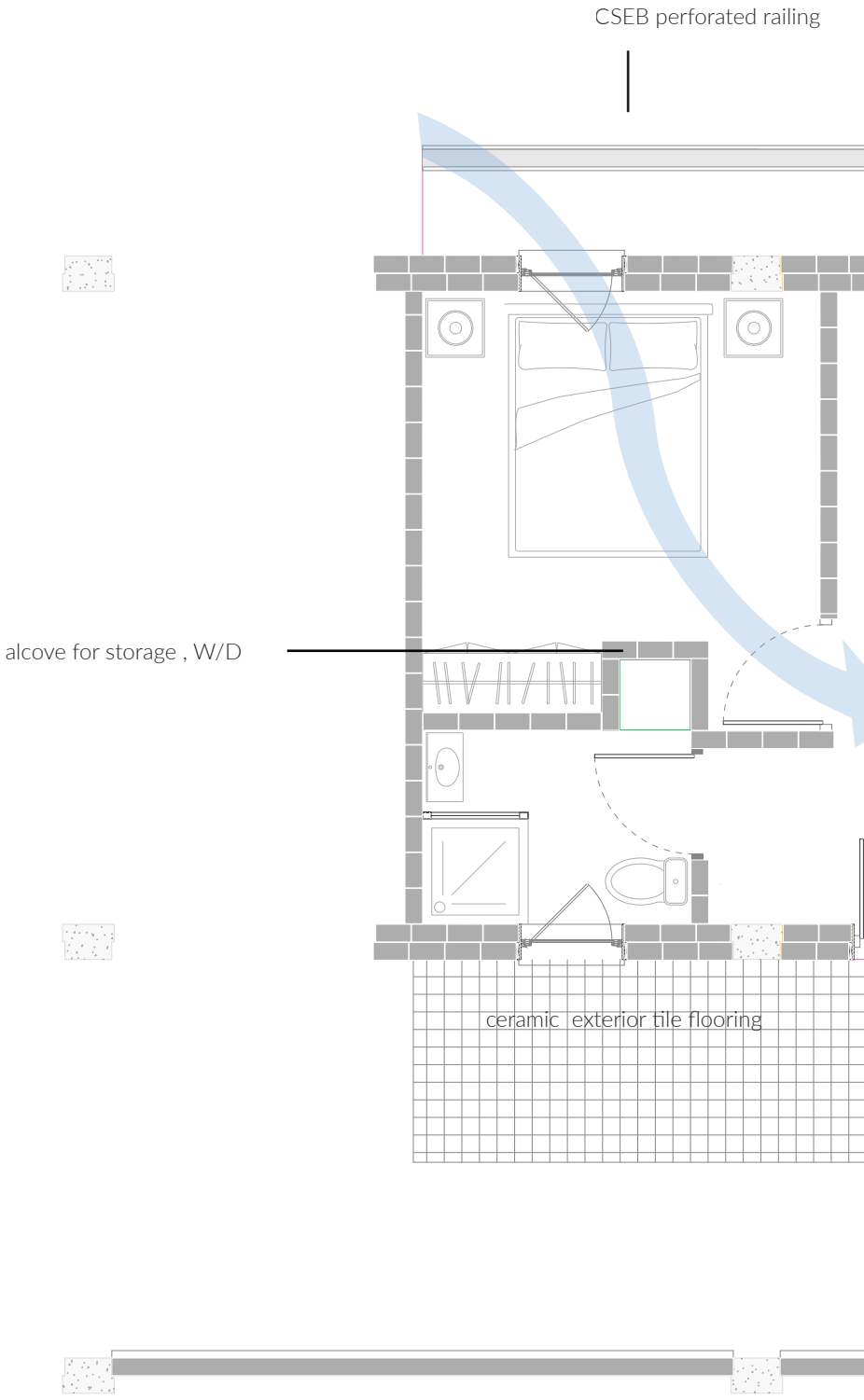
GROUND + FIRST + SECOND AXON

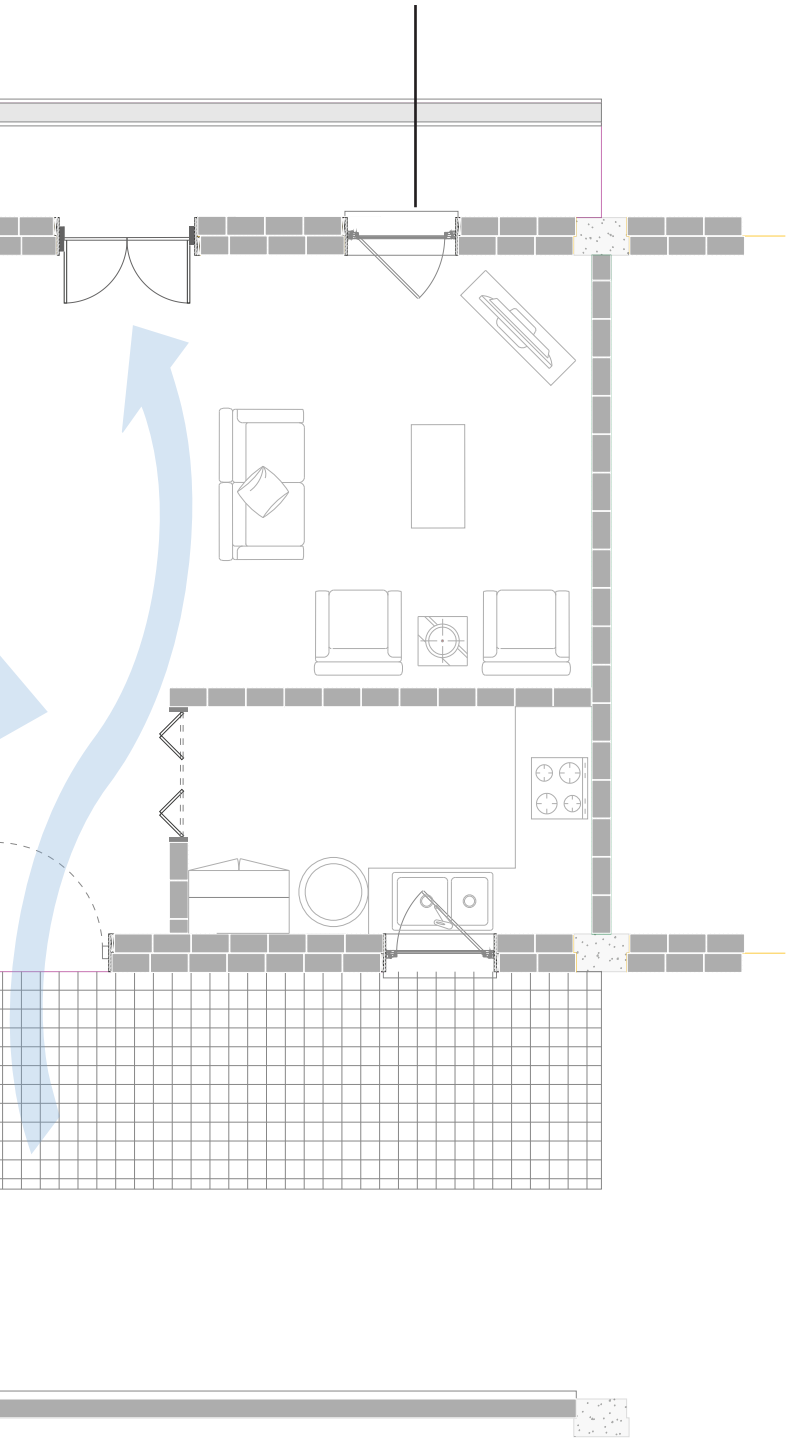
BLOCK WATER COLLECTION + VENTILATION





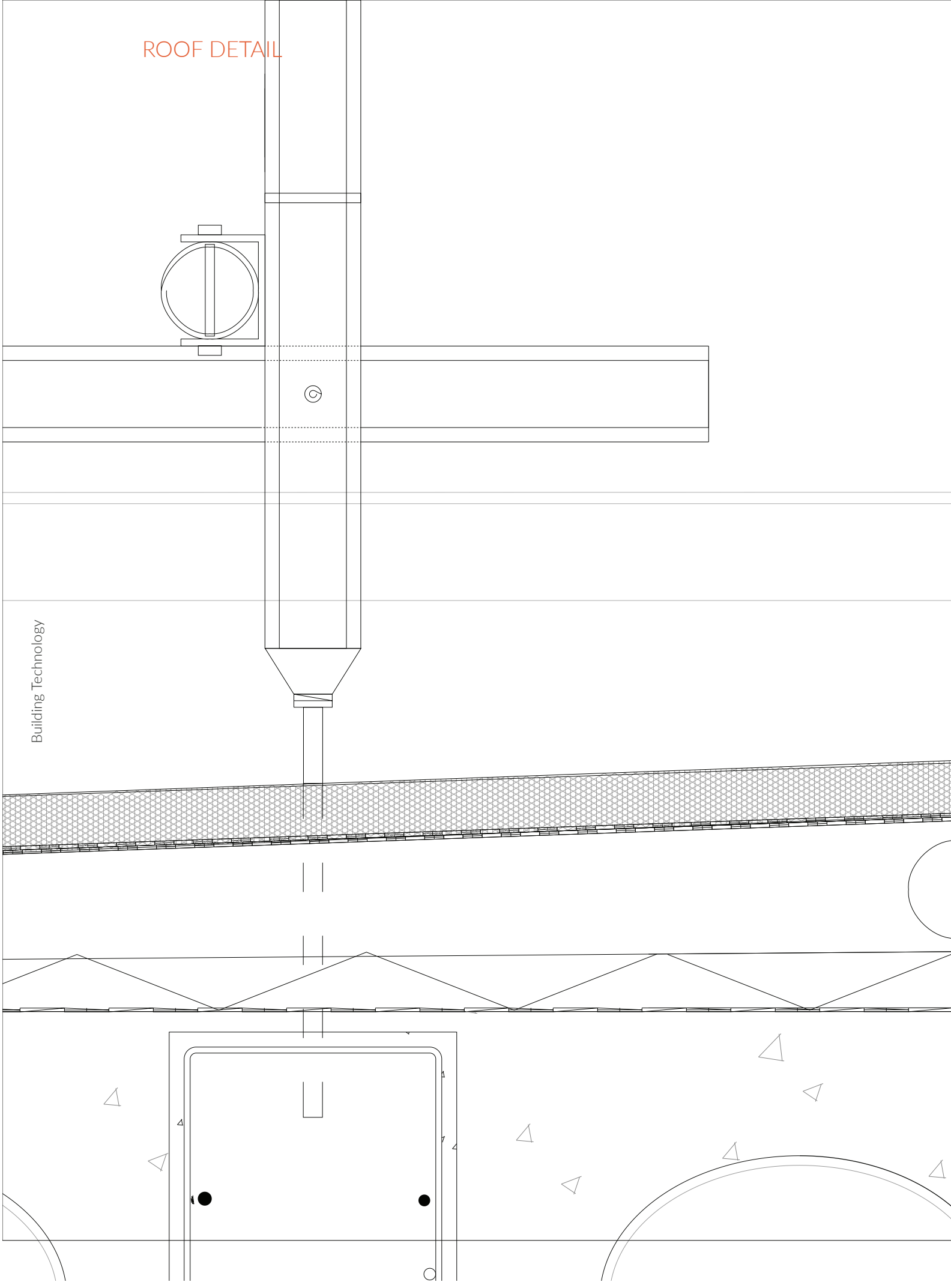
TYPICAL ONE BEDROOM UNIT - VENTILATION





1: 50

ROOF DETAIL

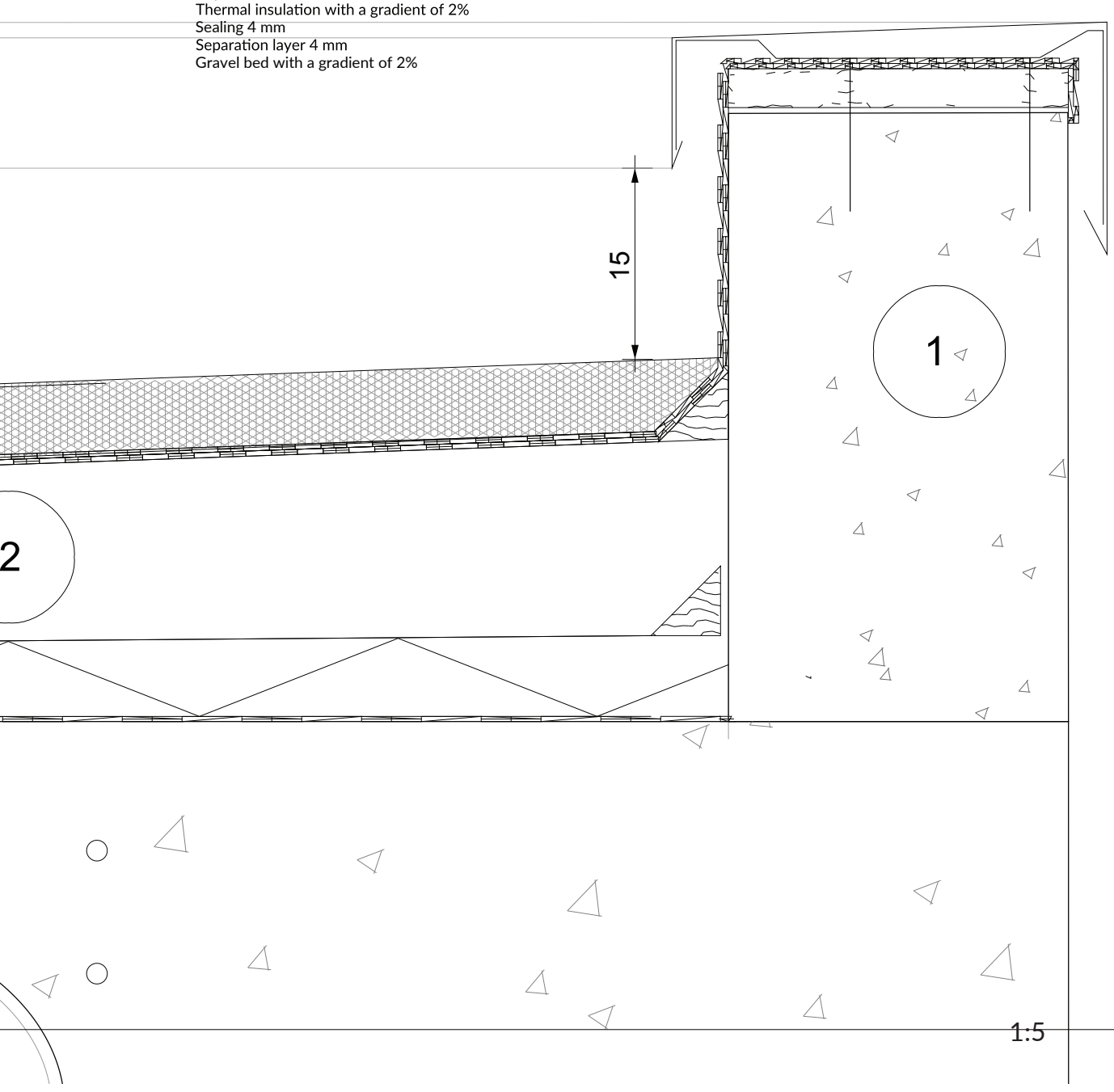


1 . Parapet

Metal coping plate with 2% gradient
Flex-flashing
Separation layer 4 mm
Bonding adhesive 4 mm
Compensation wood
Vapor barrier 4 mm
Exterior plaster 20 mm
Reinforced concrete 0.20 m

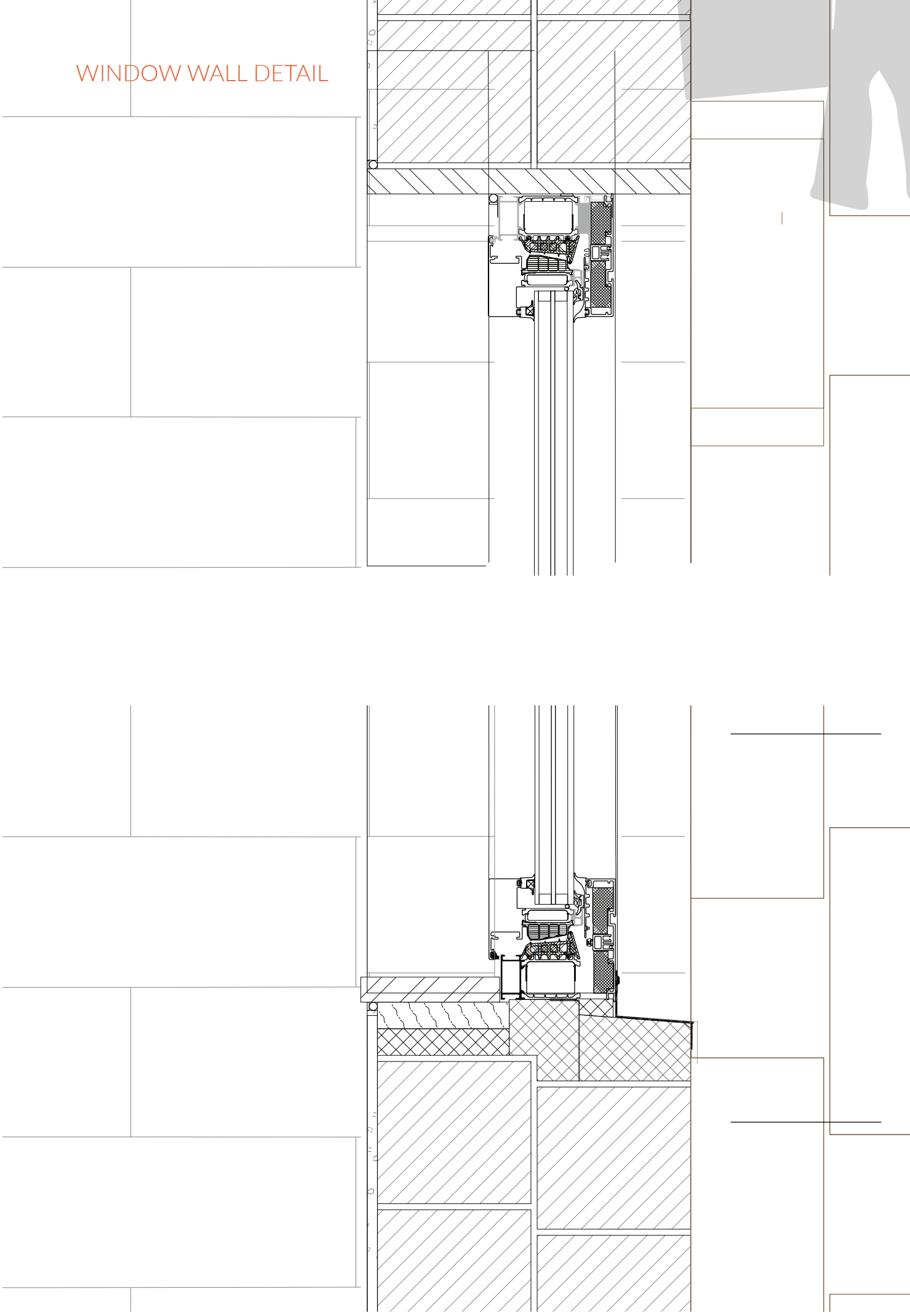
2 . Roof structure

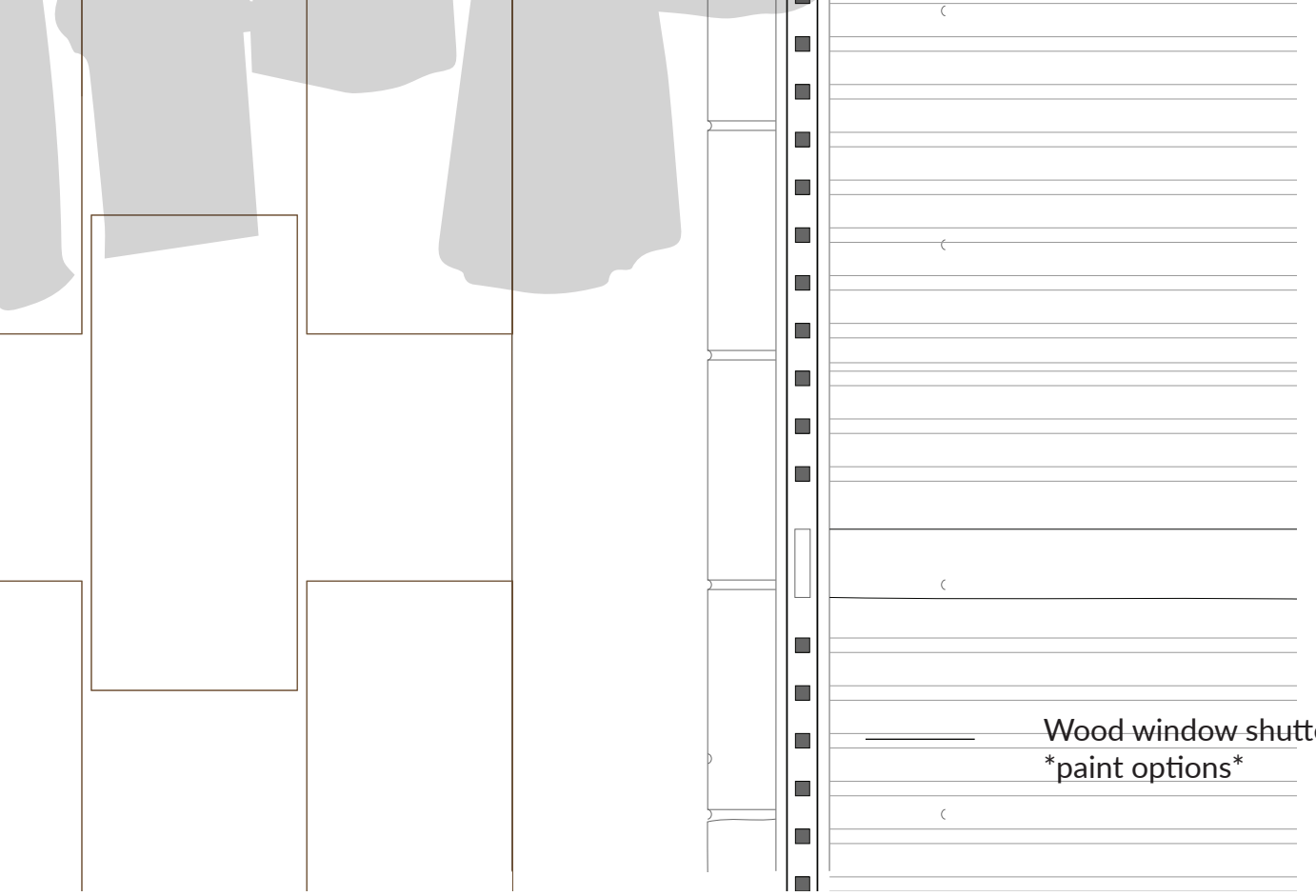
Reinforced concrete ceiling 0.3 m
Vapor barrier 4 mm
Thermal insulation with a gradient of 2%
Sealing 4 mm
Separation layer 4 mm
Gravel bed with a gradient of 2%



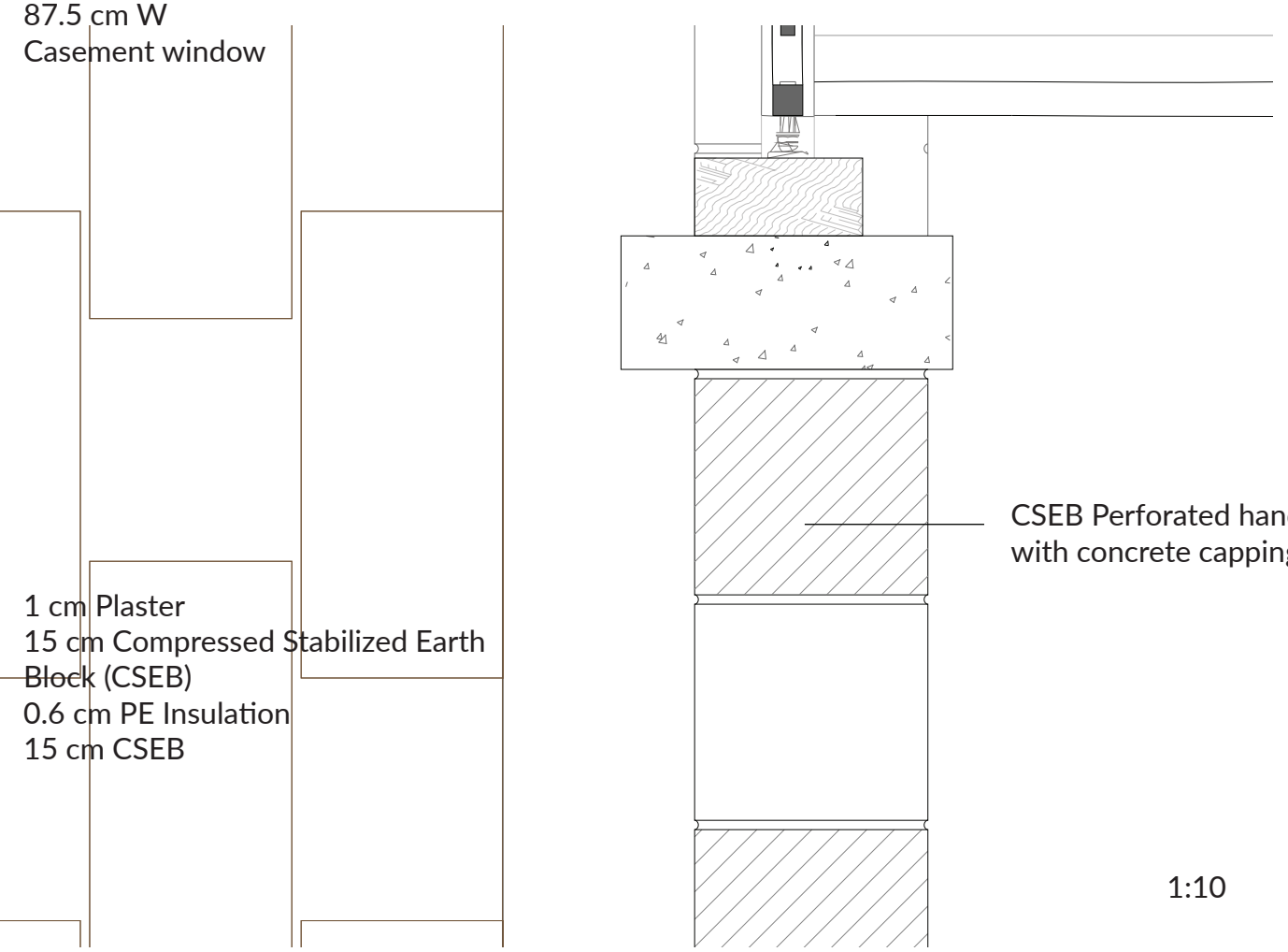
1:5

WINDOW WALL DETAIL





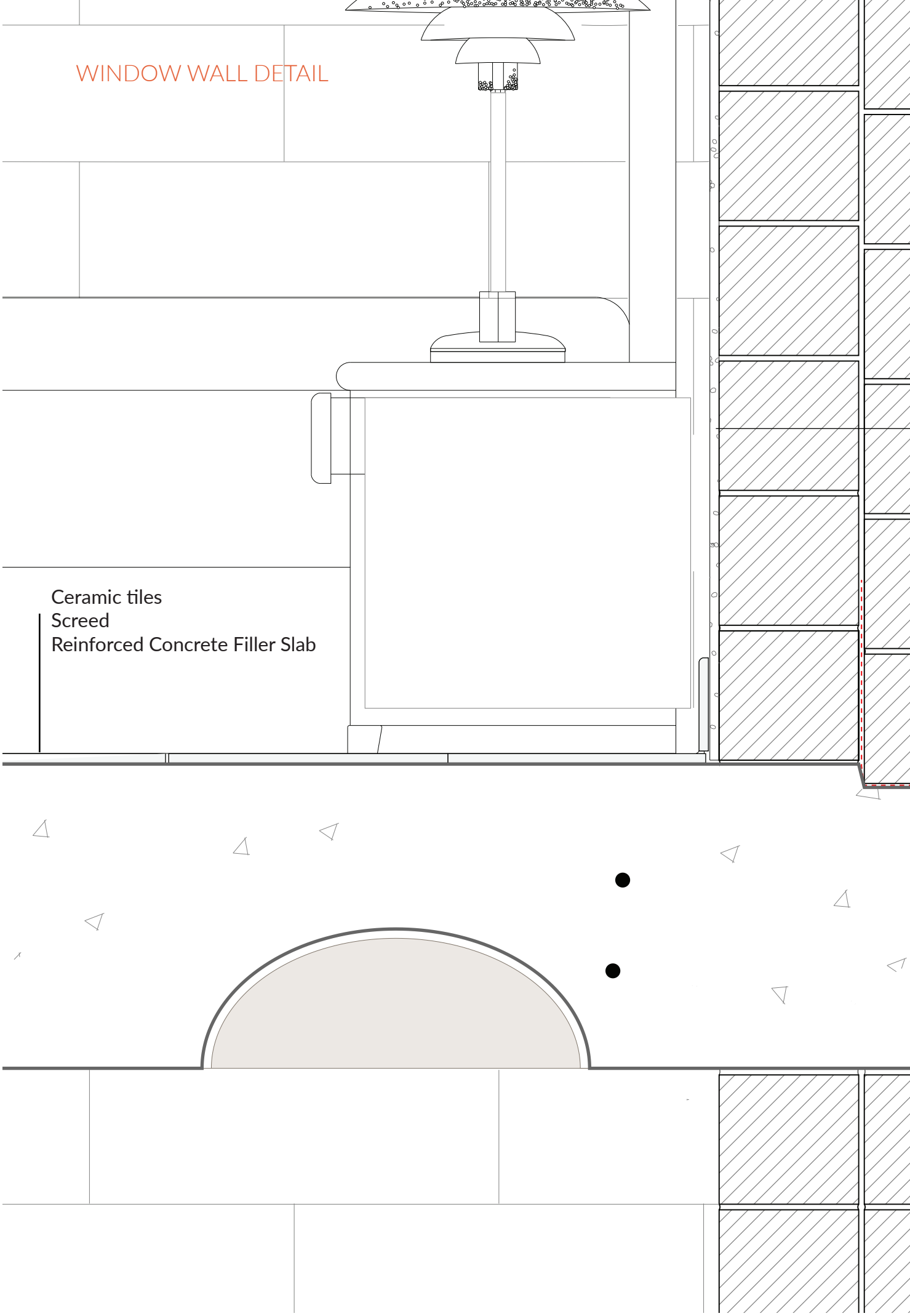
87.5 cm W
Casement window

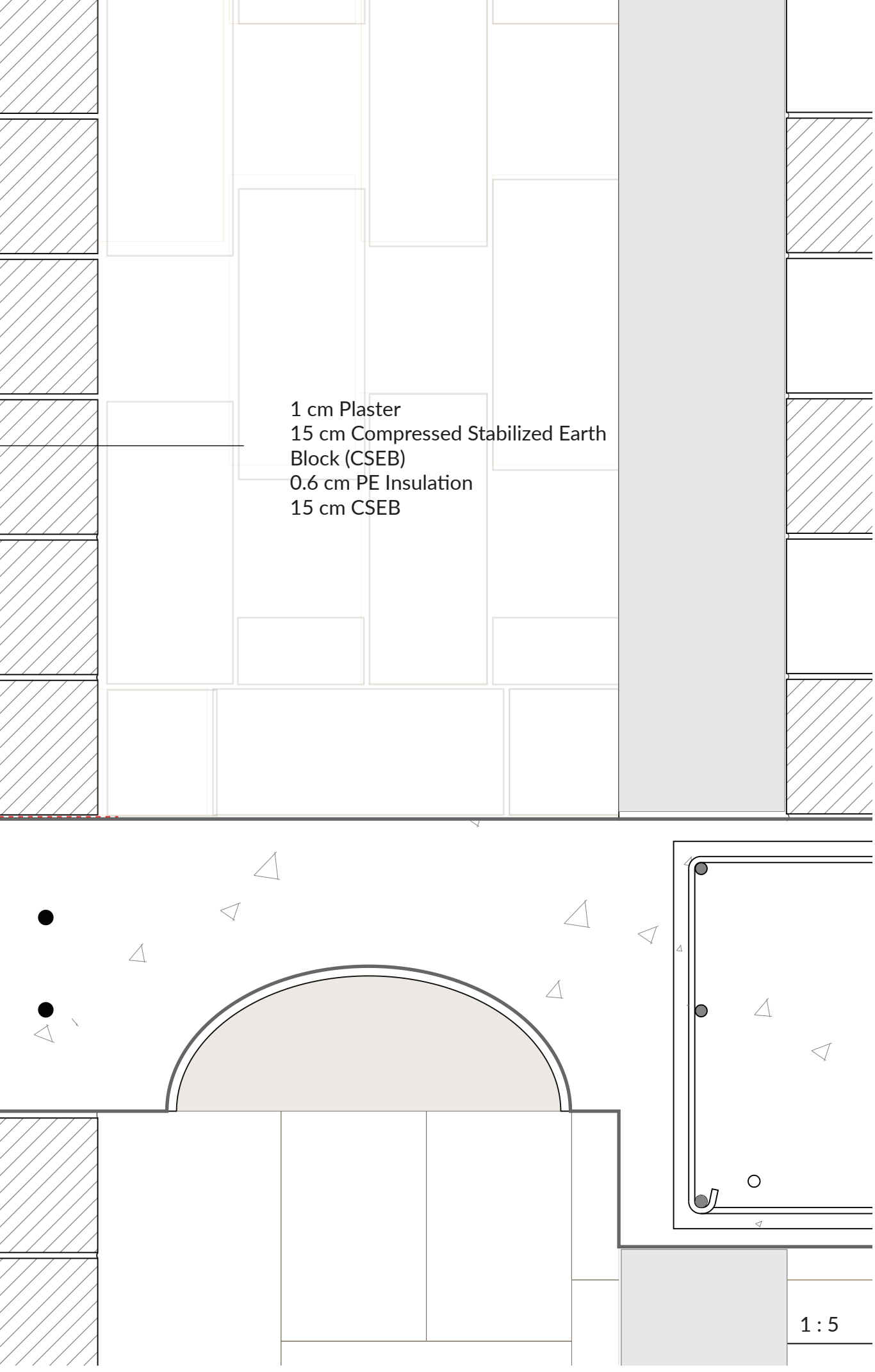


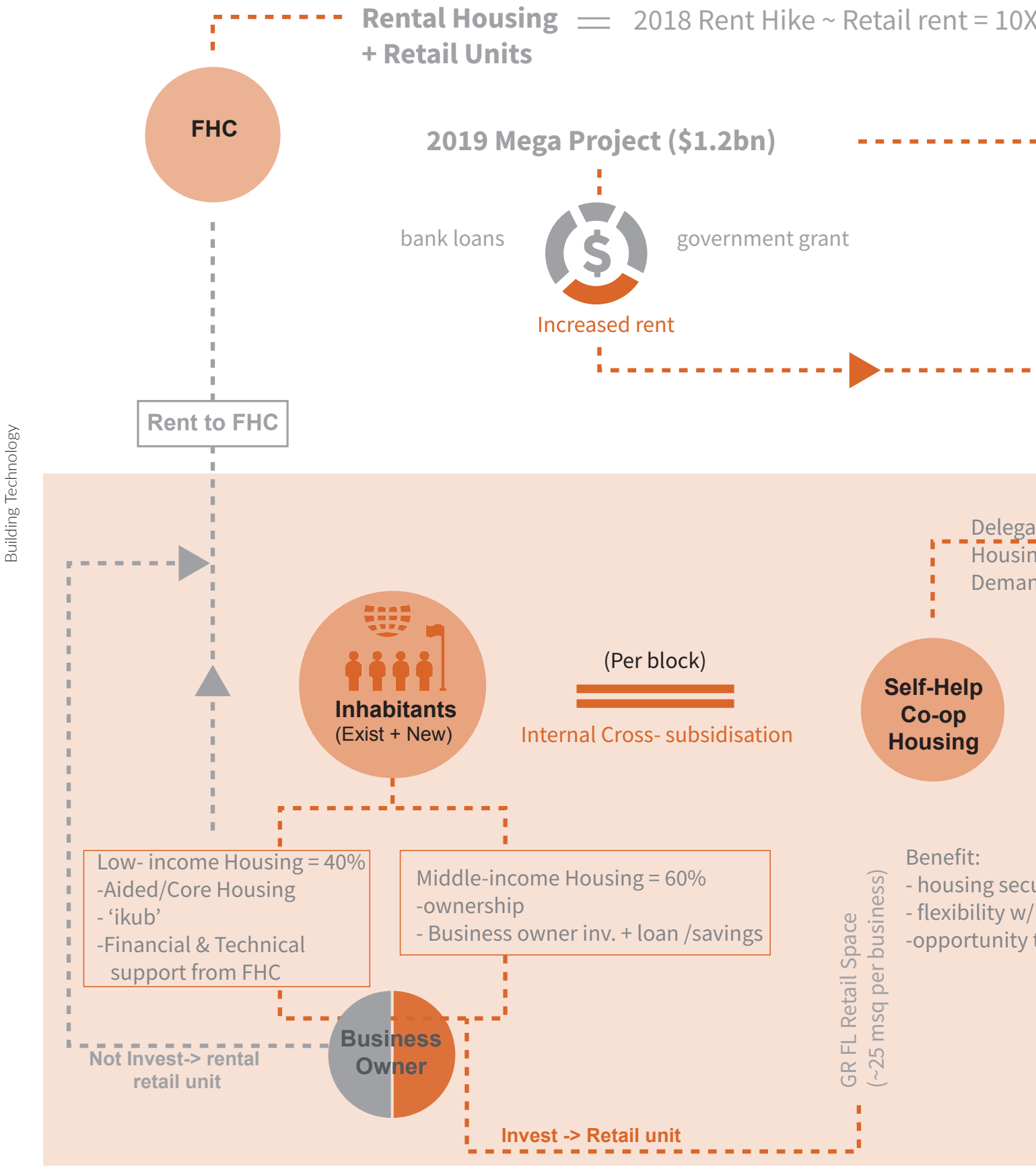
1 cm Plaster
15 cm Compressed Stabilized Earth Block (CSEB)
0.6 cm PE Insulation
15 cm CSEB

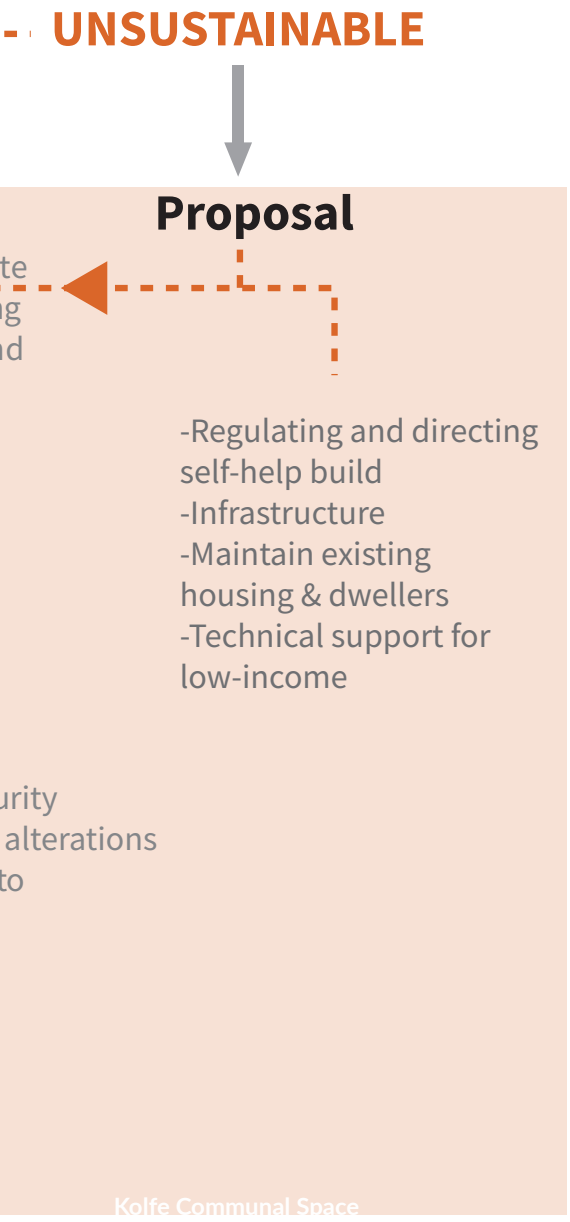
1:10

WINDOW WALL DETAIL




1 cm Plaster
15 cm Compressed Stabilized Earth Block (CSEB)
0.6 cm PE Insulation
15 cm CSEB
1 : 5


Rental Housing
+ Retail Units
2018 Rent Hike ~ Retail rent = 10X
FHC
2019 Mega Project ($1.2bn)
bank loans
government grant
Increased rent
Rent to FHC
Delega
Housin
Deman
Inhabitants
(Exist + New)
(Per block)
Internal Cross- subsidisation
Self-Help
Co-op
Housing
Low- income Housing = 40%
-Aided/Core Housing
- 'ikub'
-Financial & Technical
support from FHC
Middle-income Housing = 60%
-ownership
- Business owner inv. + loan /savings
Benefit:
- housing secu
- flexibility w/
-opportunity
GR FL Retail Space
(~25 msq per business)
Business
Owner
Not Invest-> rental
retail unit
Invest -> Retail unit

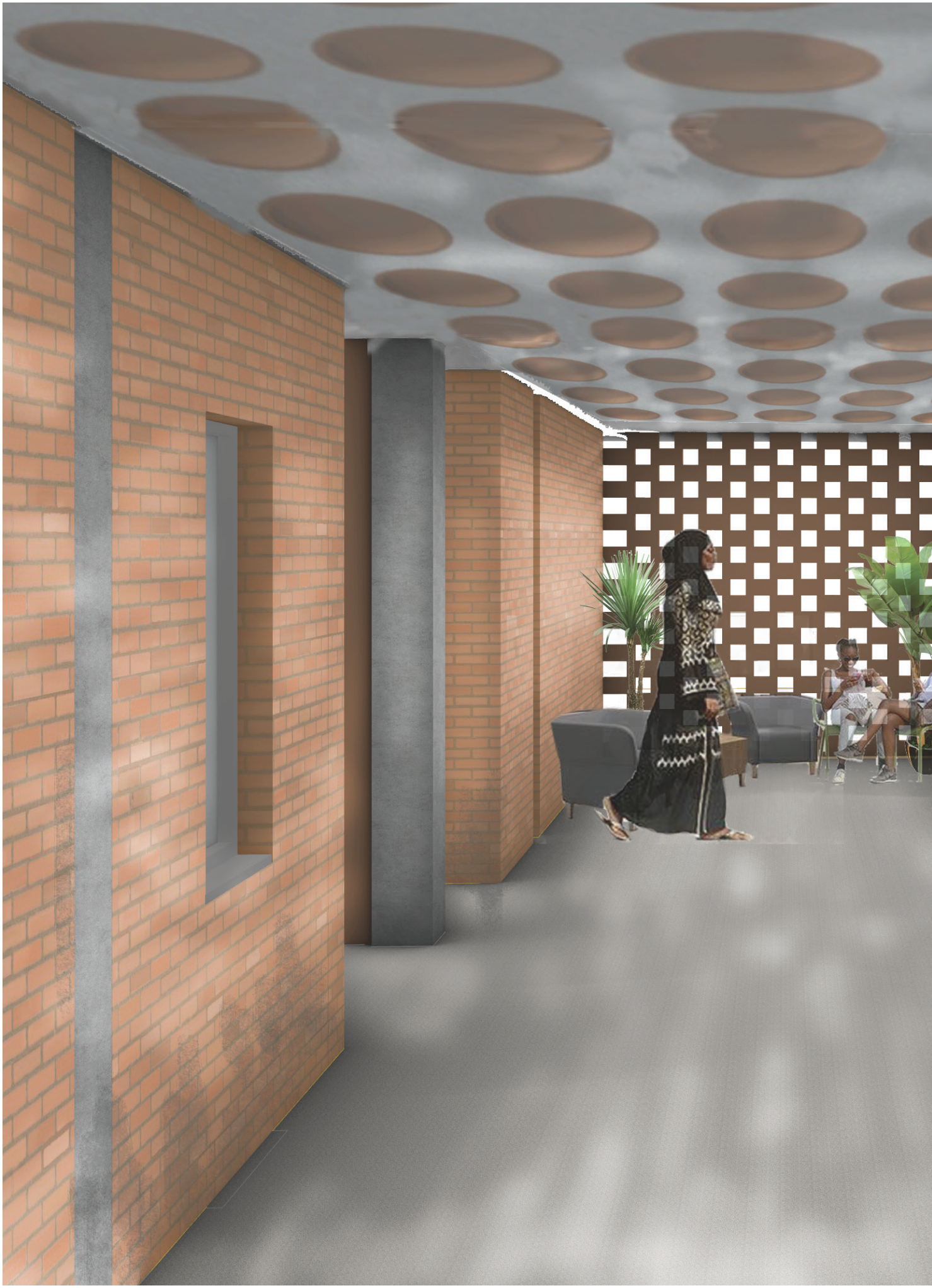


The major stakeholders of this project are the inhabitants (mainly the existing inhabitants) and the FHC. The architect mainly acts as a mediator and designer of the project. It is clear from recent changes implemented by the FHC that the methods being used are unsustainable for the future of FHC and require change in their approach.

This scheme suggests that FHC continues as, aside from maintaining its existing housing stock, a body that enforces the regulations, maintain and provide infrastructure, and provide technical support for the low-income inhabitants.

The co-operative can alleviate a great deal of the housing provision by organizing the inhabitants into a cooperative and obtaining retail investors to fund the project which will also allow it to provide core-housing for the low-income households.

BLOCK COMMUNAL SPACE - FIRST FLOOR









COMMUNAL TRADITIONAL 'MESKEL' BONFIRE IN CLUSTER





RIVERFRONT WALKWAY





URBAN CONNECTION - MARKET STREET











REFLECTION



RELATIONSHIP BETWEEN PROJECT TOPIC, THE STUDIO TOPIC, MASTER TRACK (ARCHITECTURE), AND THE MASTER PROGRAM (MSC AUBS)

The studio topic for this graduation project of Global Housing: Addis Ababa Living Lab focuses on "Creating Resilient Dwelling Clusters for Urban Resettlement". The topic aims to address the housing shortage in Addis Ababa and explore human-friendly solutions which take into account existing social ties.

The current housing provision in Addis Ababa has mainly focused on fast and cheap solutions which, in some instances, precipitated tight and low-quality living conditions far away from major amenities. Through the quest for cheaper land to house the masses, the city resorted to employing eminent domain and acquiring farmland on the outskirts of the city. This intensified underlying ethnic and income inequality tensions and housing instability which combined to create the existing acrimony very present in the city. It is no surprise that this issue has mainly affected the poverty-stricken individuals of the city who continue to receive the short end of the stick when it comes to housing security. The Global Housing studio, and in particular the Affordable Housing projects, address these issues and explore sustainable ways of addressing the needs of the low-income community of our society.

The built environment influences social relations. With that in mind, we can say that the built environment can be used to introduce inclusion and stability in a society. My topic focuses on using open and communal spaces as social (and environmental) buffer zones which elicit spontaneous and peaceful interactions between neighbours while reintroducing traditional domestic practices in visual and verbal contact with neighbors. The project will use these spaces as both social and environmental buffer zones by introducing central courtyards in the blocks and a communal courtyard in each cluster.

RELATIONSHIP BETWEEN RESEARCH AND DESIGN

During the research, hypothesis and design process, there were a few moments which influenced my design and managerial approach. First was the general research followed by readings I did in class regarding the state of housing and land ownership issues in Addis Ababa. This research helped me understand the shortfalls of the most recent mass housing schemes implemented by the city when it comes to the urban poor and how they have affected the social, economical, and housing security of the people. In almost all cases, the top-down approach in the condominium setup does not account for the well-connected community life and spaces which exist in the inner city of Addis Ababa amongst the urban poor that are often created by bottom-up initiatives in the neighbourhoods. This underlines the importance of a balance between the top-down and bottom-up approaches in the community when designing communal and open spaces which can accommodate social activities.

The second stage of my research which greatly influenced my design hypothesis was the field trip, site surveys, and some ethnographic research I conducted in Addis Ababa. In addition to conducting interviews in two sites in Addis Ababa and participatory design – although very minimal due to time constraints – I opted to stay in one of the condominium buildings built during the early phases of the Integrated Housing and Development Plan (IHDP) mass housing scheme by the government. This experience added another level to my ethnographic research in Addis Ababa and the daily life of the inhabitants by gaining a firshand, 2-3 weeks experience in the dwelling units. From this immersion, I learned that the layouts of the dwellings – both in rental homes in Kolfe and condominium units – are restrictive (which necessitated alterations) and I was faced with some unpleasant realities that city dwellers face on a daily basis. For instance, due to the political and ethnic tension which has permeated into the housing security issues of the city, the priority of daily life activities has shifted from the communal life and close-knit social activities – a practice deeply rooted in Ethiopian culture – to privacy and housing secu-

rity, This has caused the sense of community and social life to dissolve in the neighbourhoods and has forced communal spaces which can accommodate social activities to take a backseat. During this time I also did some research for a volunteer TU Delft research project – Home Life Diaries – on the traditional 'tukul' housing of Western Ethiopia where my father grew up. This work shed some light on traditional domestic practices. Additionally, through the graphic novel group work for the Research Seminar course I was able to contrast the living situation in the predominantly low-income communities such as Kolfe and the middle to high-income households such as Summit in Addis Ababa. My design proposal attempts to reintroduce social life and spontaneous interactions into daily activities and create open spaces which respond to different site conditions and accommodate different user groups at different scales – unit, building, and community – while keeping flexibility and private domestic life in mind.

The last part of my research that is taken into account for my design proposal are the case studies of three housing projects: a 1992 cooperative housing in Addis Ababa, Humanscapes Habitat in Auroville, and Belapur Housing in Mumbai by Charles Correa. The model cooperative housing in Addis Ababa built in 1992 was one of the first and most successful cooperative schemes. Although the scheme was mainly suitable for the middle-income households and failed to serve the low-income households it was meant to support, it was successful in providing an alternative and affordable home ownership opportunity with a mixed-use housing building for middle income households. My design bridges the gap between the different income groups by allocating 40% of the units to low-income households with core housing.

The other two projects are socially-conscious housing projects in India which also take different private and communal activities into account. Humanscapes Habitat is an investigative project which explores environmentally friendly

housing with in-situ construction methods and introduces a human ecology by using the “principles of cohousing concept of living, facilitating interaction among neighbors for inclusive social development, economic and environmental benefits.” Lastly, Belapur low-income housing development takes the traditional Indian settlement patterns and applies it the spatial hierarchical configurations at the private dwellings scale “through the ‘doorstep’”, the communal courtyard, and the larger public space. Correa emphasises the focus on the dwelling unit and the open space and expands it to the larger public space using its geometric grammar, which allows for flexibility and future alterations. This idea of spatial hierarchy which starts from the dwelling and expands into the public promenade is an approach that can work well in the Ethiopian context and its common domestic patterns. The dwelling units which make up a block can be thoughtfully connected to other blocks based on the site condition thereby creating alternating open spaces.

RESEARCH METHOD AND APPROACH CHOSEN IN RELATION TO THE GRADUATION STUDIO METHODICAL LINE OF INQUIRY

The sudio's approach for the graduation project was divided into phases throughout the year. Naturally, my approach was somewhat guided by this approach. These phases were:

Phase 1 _ Design Research / Projective Mapping

During this process, the studio class was divided into groups to study the Ethiopian – particularly the Addis Ababa – context and build an intellectual base before conducting site surveys. The research results from this process were synthesized into research booklets with four main topics: hard data, soft data, spatial mapping, and housing.

My role during this phase was within the soft data group researching on and analyzing the widely varied cultural backgrounds (including arts and craftsmanship) of Ethiopia. During this research we mapped out the commonly known history of Ethiopian kingdom, politics, religious background, and the different cultures. For my role, I studied the arts and local cultures based on the region and geographical location which not only greatly influence the common practices of the different groups but also shapes their way of life. The Ethiopian culture including clothing, food, rituals, ceremonies, and religious practices are mostly influenced by environmental influences and the neighbouring regions. Addis Ababa is a melting pot (or perhaps a salad bowl) of different cultures and ethnic groups. It is seen as a safe haven by people who travel to the city for myriad reasons. These individuals maintain their cultural expressions and customs which very much shapes their interactions in the city. For this reason, having a good understanding of the different cultural, historial, and political background is (and has been) very beneficial when conducting ethnographic research in a specific context.

Phase 2 _ Field Trip / Site Survey

The main goal of the field trip to Addis Ababa in November 2019, also broadly discussed in the previous section, was to conduct site surveys, research, and workshops for the graduation project and Research Seminar course. During the site survey and ethnographic research, we went to the site of Kolfe to conduct interviews and identify the core problems and positive attributes of the site. By talking to the inhabitants, I was able to gather information on their daily lives in the household, their communal life, aspirations, and changes they desired to include into the redevelopment process of Kolfe. In most cases, their aspirations and the shortfalls of the original core housing provided by the government or Federal Housing Corporation (FHC) can be seen through the multiple self-aided transformations made by the homeowner over the years. (Fig. 10)

Phase 3 _ Design Hypothesis

As mentioned previously, the site surveys and research conducted in Addis Ababa during the field trip greatly influenced the problem statement and design hypothesis process. I was then able to synthesize the information I gathered and used it for the problem statement and research questions to formulate my design hypothesis. With this phase, I started to explore the urban strategy for the site and think about design strategies and phasing schemes. Although my approach has focused on maintaining the existing infrastructure and neighbourhood structure which would allow the existing social ties to transition into the new blocks, the triangular shape of the site and the existing river on the east side of the site has been a challenging factor. It has been clear that maintaining most of the existing infrastructure would be a positive approach since it is also a cost-effective and efficient way of redeveloping the site. As I delved deeper into the process, I experimented more with different ways of orienting or clustering the blocks, creating more porosity and creating a more organic connection to the river.

Phase 4 _ Preliminary Project

The current version of the design proposal is a compilation of the different research, analysis and case studies conducted throughout this process to cre-

ate a human-scale community for the existing and new inhabitants of Kolfe. The design reintroduces traditional domestic practices into the central/ social spaces which were inspired by the case studies and ethnographic studies. The unit designs also take into account vernacular domestic rituals such as intimate spaces and open versus closed areas of the home. The phasing scheme used responds to existing community ties where the current households from the same 'sefer' can organize a cooperative for the housing. These cooperatives can transition into the same block which are characterized by the courtyard typologies. The proposed scheme introduces cooperative housing which was successful in Addis Ababa's housing history and makes the necessary adjustments to include low-income households.

The central courtyards in the blocks, each featuring a water collection tank and vegetation, create intimate spaces where people can enjoy their social interactions in the beautiful weather. The central courtyards also connect to a common social space for each cluster which can accomodate the social activities currently present in the neighbourhood of Kolfe.

RELATIONSHIP BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL AND SCIENTIFIC FRAMEWORK

The built environment greatly influences social relations, and how people experience their environment. This project explores how different spatial hierarchical configurations and social spaces can be used to include – and introduce – different income groups on the site of Kolfe while providing equitable quality of life to the different strata of the society. A sustainable, human-scale design approach which takes the community and social life into account while also respecting the private lives of the home has the ability to influence an individual's sense of security and peace of mind. Finding ways of achieving this goal in affordable housing can have great impact in the low-income community which can potentially also be realised in different contexts.



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LIST OF IMAGES (NOT BY AUTHOR):

Img. 1 -Aerial View of Addia Ababa, 1934

https://www.wikizeroo.org/index.php?q=aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnL3dpa2kvRmlsZTpFVEgtQklCLUthaXNlcnBhbGFzdCxfJTIyZGVyX2dyb3NzZV9HaWJpJTIyX2F1c19kZXJfTHVmdC1BYmVzc2luaWVuZmx1Z18xOTM0LUxCU19NSDAyLTIyLTAyMjI-udGlm

Img. 2 Woman walking in 'Bete Giyorgis', one of the rock-hewn churches in Lalibela, Ethiopia"

https://www.linkethiopia.org/ethiopia/learn-about-ethiopia/history/

Img. 3 Konso village

https://commons.wikimedia.org/wiki/File:Konso_village_01.jpg

Img. 5 Picture of Menelik II

https://origins.osu.edu/review/when-ethiopia-stunned-world

Img. 4 Fasilides' Castle from the Solomonic Dynasty in Gondar

https://www.linkethiopia.org/ethiopia/learn-about-ethiopia/

Img. 6 First palace of Menelik, Entoto, Shewa II

https://commons.wikimedia.org/wiki/File:First_palace_of_Menelik_II_1.`

Img. 7 Empress Taitu

https://i.pinimg.com/originals/dc/91/cb/dc91cb139297f224ba699fc78c316e3a.jpg

Img. 8 Haille Salassie Enters Addis Addis

https://ww.wikiwand.com/en/History_of_Addis_Ababadis_Ababa.jpg

Img. 9 Addis Ababa Inner City

https://scroll.in/article/930055/a-gentrified-addis-ababa-has-no-place-for-street-hustlers-the-same-people-who-helped-build-it

Img. 10 Addis Ababa Condominium Construction Site

https://www.theguardian.com/cities/2017/dec/04/addis-ababa-ethiopia-redesign-housing-project#:~:text=%E2%80%9CAddis%20Ababa%20has%20run%20out,like%20Haile%20can%20cause%20problems.

Img. 11 Tilu Dimtu Housing Complex

https://www.theguardian.com/cities/2017/dec/04/addis-ababa-ethiopia-redesign-housing-project

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https://www.afro105fm.com/afrofm.com/2018/06/12/ethiopias-economy-record-2-percent-dip-wb-report/

Img. 13 A slum in the old Piassa neighbourhood of Addis Ababa, slated for demolition

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Global Housing - Addis Ababa Living Lab

Yadie Meko

2020