

Immersion

Interfaces between gendered spaces and the Yeoville market precinct.
A Reproductive Health Clinic and Womens Complex

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Fig 1: Yeoville Aerial Photograph. Google Earth



Fig 2. Computer generated collage of the occupancy of women in the Yeoville Market. Authors Own

THESIS STATEMENT

The basis of this research was upon the realisation that architectural feminism is discussed almost entirely in the western context. In Africa and particularly South Africa attempts to understand the theory in a pan African context have not taken priority.

Secondly and more importantly through research in my first postgraduate year, I developed an interest in how African women, who are not necessarily architects, articulate spaces in their everyday lives in interesting and what I believe very valuable ways. One of these spaces would be in the informal markets of Johannesburg. Despite factors such as historical colonial hierarchies and being a new entrant in the city, informal markets reveal the vigour in

which women can occupy and 'organise' public spaces in the city.

We are to draw lessons from marginalised urban representatives who appropriate spaces to their own needs. Intentional architectural projects are to be developed that allow for women (as spatial agents) to occupy safely spaces of healthcare, streetscapes, places of living and spaces where skills and empowerment can be transferred amongst themselves.

SCHOOL OF ARCHITECTURE & PLANNING



This document is submitted in partial fulfillment for the degree:
Master of Architecture (Professional) at the University of the
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DECLARATION

UNIVERSITY OF THE WITWATERSRAND

I, Kamogelo Mogale, am a student registered for the course Master of Architecture (Professional) in the year 2019. I hereby declare the following:

I am aware that plagiarism [the use of someone else's work without permission and/or without acknowledging the original sources] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my own work. This document is submitted in partial fulfilment for the degree: Master of Architecture (Professional) at the University of the Witwatersrand. Johannesburg, South Africa, 2019.

Kamogelo Mogale
23/03/2020

DECLARATION

Signature:  Date: 23/03/2020

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Fig 3. Computer generated collage. Authors Own.

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Fig 4. Izilda Nzopene prepares sandwiches for customers in a taxi rank. Photograph by Mark Lewis (2018)

ABSTRACT

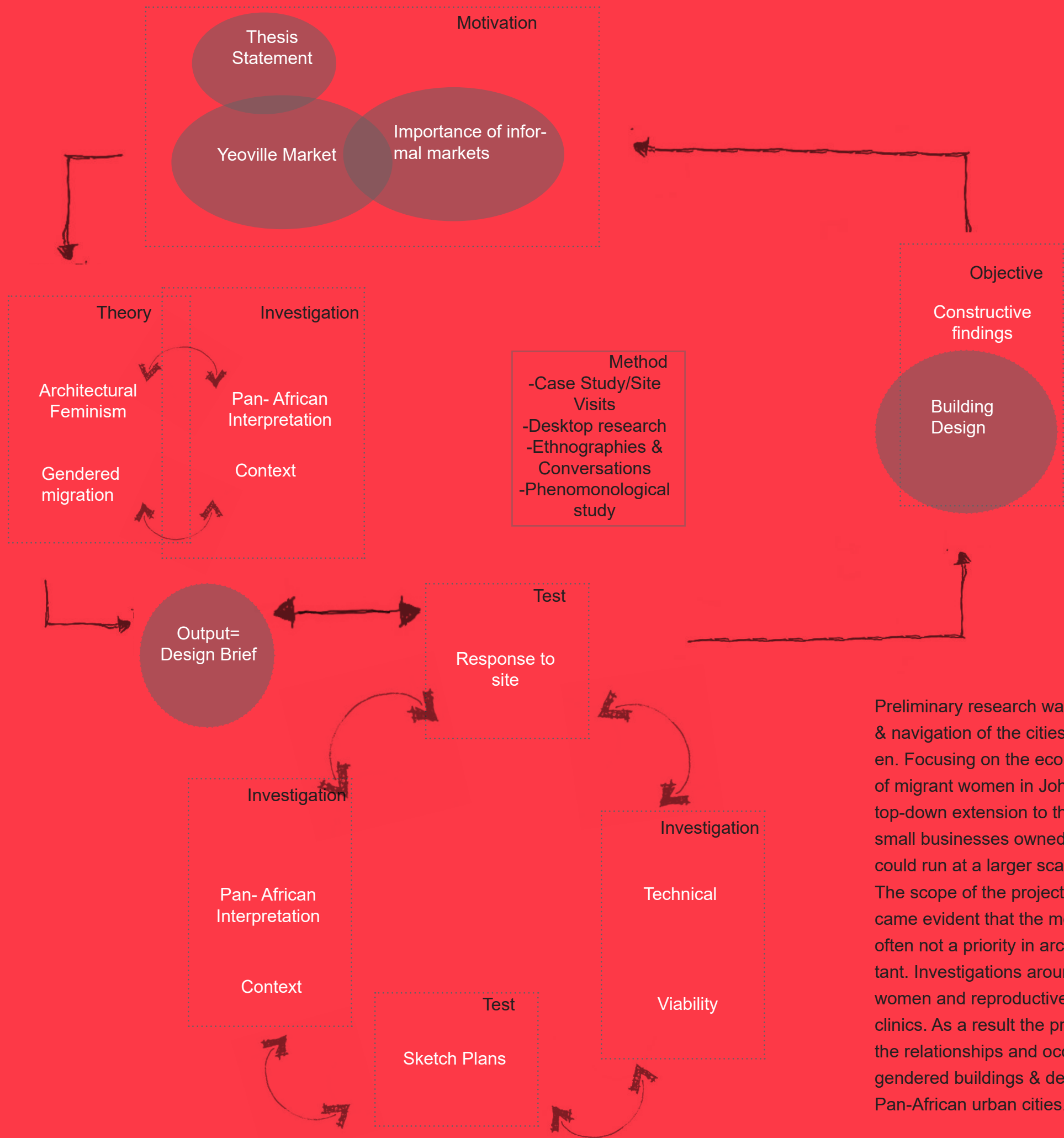
There is minimal research on the importance of a pan-African approach to architectural feminism in African urban cities. To explore the relationships of gendered and contested spaces in African public realms; I began research in the Yeoville Market (a buzz of small-businesses run by a substantial amount of non-native women) and its surroundings.

Johannesburg continues to reveal the historical and multiple codes of power that makes up the city and how these regimes reinforce gender specific power in unpredictable ways. Having started as a mining town, where the number of male migrant labourers exceeded women, suggests the complexities in how African women enter and have a relationship with the city. Since the end of apartheid, the demographic profile has shifted, suggesting that most new entrants to the city are women. Layered with cultural, economic and gender structures present in the CBD, Hillbrow, Berea and Yeoville. Johannesburg's migration hubs. These structures have direct and deep relationships to Architecture, which emerging projects continue to ignore.

The study learns from existing spatial arrangements and networks created by women, using the Yeoville Market as a case study and visiting, observing and interviewing people in Yeoville. Identifying where parallels can or cannot be drawn to principles of architectural feminism.

A pan-African approach to a women's centre and clinic is explored, in multiple scales of architectural design. Concluding on lessons, to be applied in designing for marginalised groups & spaces in Urban African cities. That integral to the African context, architectural feminism is breaking away from colonial structures, the grid and allowing "architecture" to dismantle itself into lived spaces.

RESEARCH STRUCTURE



Preliminary research was around the movement & navigation of the cities public spaces by wom- en. Focusing on the economic marganalisation of migrant women in Johannesburg. I imagined a top-down extension to the Yeoville market, where small businesses owned by Congolese women could run at a larger scale in a vertical factory. The scope of the project quickly evolved. It be- came evident that the moral & political debates, often not a priority in architecture became impor- tant. Investigations around,shelters for abused women and reproductive health and abortion clinics. As a result the project set out to examine the relationships and occupancy of contested gendered buildings & dense public realms of Pan-African urban cities.



CHAPTER 1

INTRODUCTION

1.1

MARKET VALUES

In many African cities, informal public markets are “the only mediating element, the organic space where the needs of the citizen take priority. These spaces are structured, sustainable ecosystems that dominate the economy and serve the communities who build them.” (Serumaga-Musisi, 2018). In West African countries such as Ghana, informal markets are female-dominated spaces. (O’ Neil, 2016) While in other African countries; political, cultural and religious practices are used to dictate public areas including informal markets. Such as parts of Nigeria that have been subject to Islam colonial urban policies, which “explains regional and local differences in women’s market and trading activities” (Friedberg, 1997). Public spaces including markets and street trading in countries under these orders are, on the contrary, male-dominated. These different relationships show how informal markets and trading relate to women of different origins.

For black South African women, historical laws and acts passed by the apartheid government had and still has an influence on how women

enter the labour market. To name an example, the new entry permits, restricting informal work and forcing women as new entrants into the city, to opt for domestic work. (South African History Online, 2011). Apart from the laws there was an “idealised image of domesticity, disrupted by the economic realities faced by many poor black households such that black and colored women were forced by circumstances to engage in back breaking, cheap paid domestic labor as caregivers, washerwomen, nannies and maids. (Matsipa, 2014 p. 31). The gradual removal of these laws and idealisation presented and opportunity for South African women to trade on the streets and in informal markets in the inner city. Historical Apartheid laws & societal norms have limited black women in public spaces for years and cultivating informal markets redresses these limitations. Allowing black women to form systems, claim public space and transfer strategies as empowerment.

Under the current employment climate, women who have recently migrated into Johannesburg



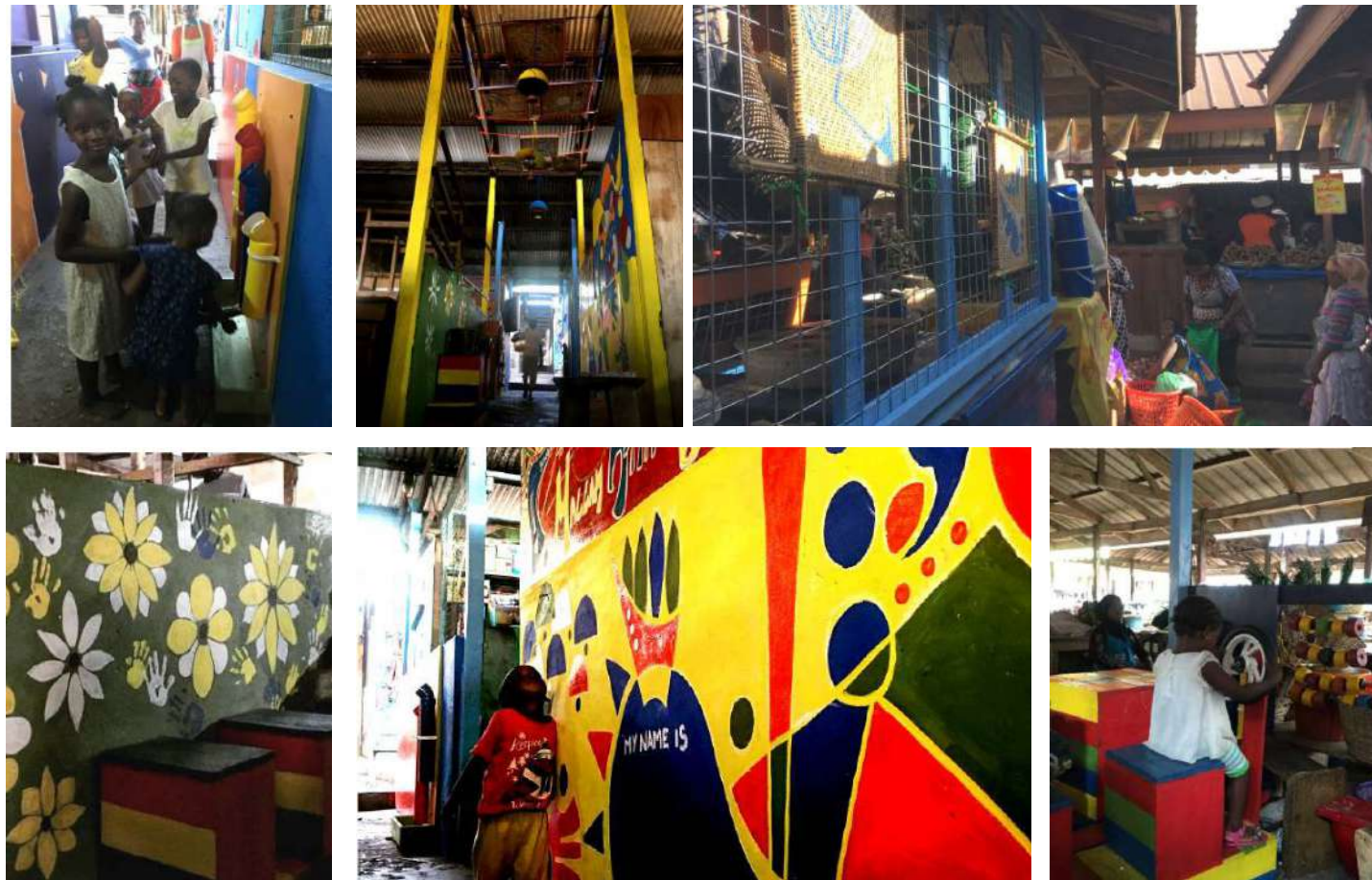
Fig 5. The privilege of scale. Photo Montage by Namata Serumaga Musisi (2018)

have little access to formal work opportunities. Therefore, are more likely to work in the informal sector, like starting an informal trading business in markets or on the sidewalks. To add on to this as Suzanne Friedberg (1997) suggests "In the current era of structural adjustment, economic reforms intended to unleash capitalist development have not freed women from the gender norms that grant them heavy domestic responsibilities. For many, then small-time commerce represents one of the few if not only options for survival."

The continued influx of international migrants into the city continues to grow, informal markets and streets become spaces where a network of systems, coping and survivalist mechanisms are developed and shared amongst internal and international migrant women. While the women running vibrant marketplaces like this do not hold official legal, political and sometimes social power, their collective networks and force drives a significant consumer economy of Johannesburg. Informal markets are also expressive of a few public spaces where women are less concerned about their movement and safety.

"A key question now has become how women working even under this bleak imperative can find even in the marketplace, if not necessarily an escape from poverty, then perhaps the means to challenge oppressive gender norms." (Friedberg, 1997). Such as the responsibility of child care while making a living. Can adequate child care facilities in working spaces be normalised? As often women who work in the markets are caregivers and their children may spend a large amount of their childhood in and around the market. And later on, children may help with trading and taking care of stalls. A good experiment is a recent project by the Mfora foundation along with Namata Serumaga-Musisi. The Ghanaian-based architect designed child plug-in play spaces in the tight pathways of the Malata & Nima markets. (Fig 6-11)

PRECEDENT: PLUG IN PLAY AREAS NIMA AND MALATA MARKETS



150 structures, installations, play-enabled surfaces and loose parts located in tight pathways.

- Vertical surfaces for 3-dimensional play
- Multiple use seating and climbing Units
- Interactive art installations on walls and ceilings for visual stimulation

- Writing and drawing surfaces
- Interactive local games like ludo or oware;
- manipulatives for learning coordination skills;
- Wire mesh demarcation of the play area;
- Multiple use seating & climbing units;

- Micro-library units made from recycled tires;
- Colourful "play boxes".

The project made use of the dense physical layout and organisational culture to facilitate the proximity of mothers or caregivers to their children while promoting learning.

Fig 6-11 Plug in play spaces in Nima and Malata markets.
Author Unknown (2018)

Fig. 12 .Mall

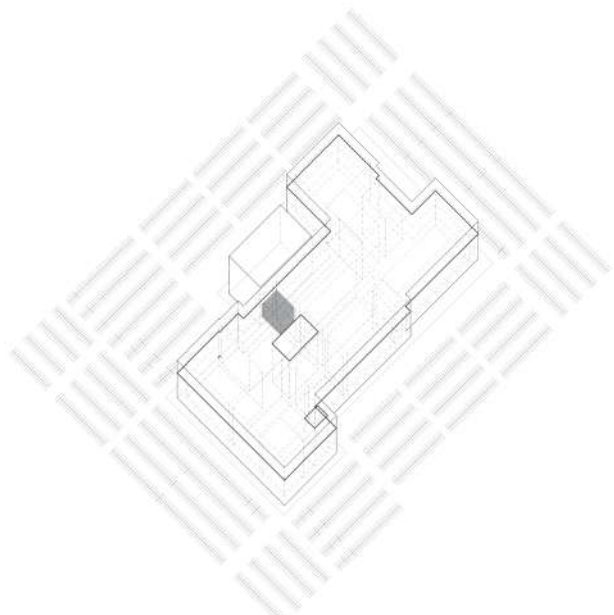


Fig. 13. Police Station

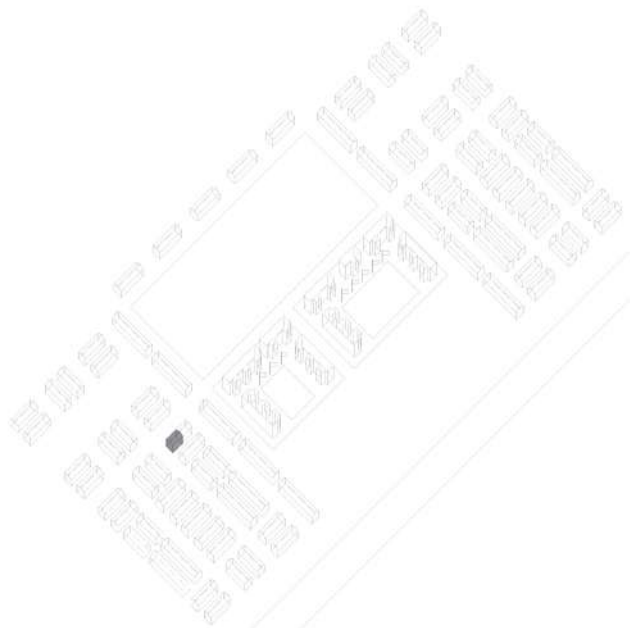


Fig. 14.Office.

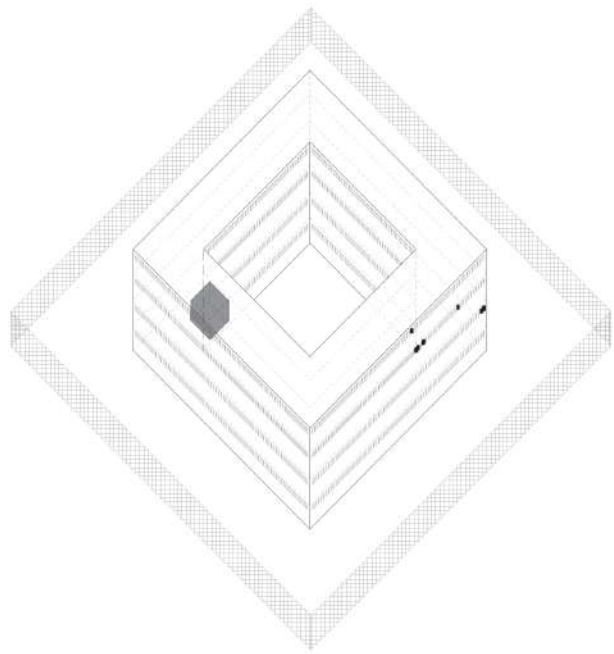


Fig. 15.Church.

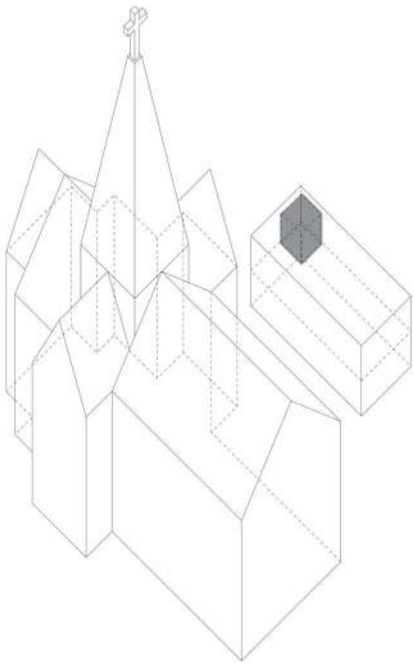


Fig. 12-15. New locations for Clinics. Lori Brown (2013)

Another opportunity or challenge to societal norms is the means for women to access adequate healthcare directly and safely in markets. They are spaces where a large group of women work and can easily and safely access reproductive health services. The Warwick Junction Market in Durban is one example where healthcare services were brought into the market. The project aimed at "testing how health services (including reproductive health) can be positioned in urban spaces to better reach informal workers. Most traders in Warwick, whom most are women find it difficult to leave their stalls during the day as it can mean lost income. Tables for registration and basic tests were set up on either sides of the aisle in the quieter centre of the Early Morning Market. This provided enough space for the testing to take place, and for barrow operators to pass through with the market goods they were transporting. An empty market stall adjacent to the testing tables was converted into a respiratory health testing unit." (Alfers & Xulu,2015)

This also gives the opportunity to interrogate -politically and physically- the planning of contested types of clinics such as those providing abortion

and reproductive services. Lori Brown a feminist and architect and researcher expresses "I advocate for clinics to become more centrally located in our daily spatial lives. Locate them in shopping malls. Already other types of medical practices have established themselves in malls including dermatologists, primary care practitioners, chiropractors, dentists and opticians to name a few. She goes on to question ,"If one is to radicalise and open up reproductive health care services, then where else could these services be located?" (Brown 2013, p. 20).

In an African context informal markets are of importance and can be used to locate clinics. A significant group of black women who otherwise have limited access to specialised clinics can use them. In addition to malls, this proposal also challenges the democracy of other public spaces. It is interesting how these buildings or spaces can be re-imagined and existing systems and networks can be used to infiltrate other issues faced by women. Informal markets present themselves as potentials to further interrogate what a pan African public space is across multiple cultural, political and gender topics.



Fig 16. View of the "day clinic" in operation at the Early Morning Market. Photo: Laura Alfers (2015)



YEOVILLE MARKET
AND TAXI RANK

Fig 17. Image
by Mark Lewis



HILLBROW
MARKET

Fig 18. Image by
Gena D



Fig 19. Image by
Lucky Thusi



PARK CENTRE
MARKET

Fig 20. Author
Unknown



KWA MAI MAI
MARKET

Fig 21. Image by
Jhono Bennet





1.2

YEOVILLE MARKET

There is a difference between women selling their dried fish next to Shoprite on the sidewalk and the women occupying stalls in the market. Traders selling on the street are constantly in a liminal state of their occupation in a public space. The market allows traders, particularly women, to organise their spaces without constraint and concern for their safety and goods.

The robust nature of the Yeoville Market is admirable. Vigorously, the women act as spatial agents of the market. Under the timber, brick and paint structure of the Yeoville market is an organic ecosystem. It flows in its once unoccupied courtyards, through stalls and onto its street edges. While I did not formally document conversations, these interactions provide an important contextual backdrop to understanding the sociology of the site. Observations of informal networks, where for instance, while one trader is travelling to home affairs each week or running errands, her friend selling next door will keep her stall open and continue her sales.

While walking through the market with a local resident, it was intriguing to learn that women selling on the pavement are likely to be Zimbabwean or South African. Those selling in the market are likely to be from Congo or a West African country. Explaining why the Yeoville market is also known as the Congolese Market and revealing the "configurations of culture and political economy that are most conducive to successful women trading, either as an individual or community level." (Friedberg, 1997). The likelihood of West African women to successfully take over the use of markets in Johannesburg is greater compared to Northern and Southern African groups. The political history in South Africa, described earlier, influencing black women into domestic work rather than trade, is a disadvantage in this comparison. Claire Robertson explains this comparative advantage in the book 'African Market Women and Economic Power' which is reviewed by Friedberg.

"Multiple generations of Ga women live and work together in Accra and consider trade a right and

Fig 22. Women in the Yeoville Market. Computer generated collage. Authors own.

“Yeoville has attracted waves of international migrants from seeking a new life in South Africa. Today, seventy percent of the suburbs estimated 40 000 inhabitants are forced migrants: micro communities from Zimbabwe, Nigeria, DRC of Congo, Angola, Burkina Faso, Burundi, Cameroon, Ethiopia, Ivory Coast, Malawi, Mozambique, Rwanda and other parts of Africa. Having adapted the built environment to meet their own social and business needs”- *Alexandra Dodd, Hotel Yeoville*

Fig 23. Yeoville boundary. Google Maps



custom as well as a necessity. This strong commercial tradition Ga women have is compared to the more crisis driven trade amongst women in Kenya, Kikuyu. Neither indigenous household structure nor colonial native policies in Kenya historically, facilitated the development of inter generational women's commercial enterprises. Rather contemporary poverty and marital instability established trading by Kenyan women," (Friedberg, 1997).

In her book *The Invention of Women*, Oyewumi describes the importance of markets in Yoruba culture “Besides, the markets were not just for trading; they were also meeting points for people from all walks of life. Markets were also places for the re-enactment of important historical rituals”. (Oyewumi, 2001, p. 68). Further explaining that for most West African women it is what they identify with, gravitate to and do well. Understanding the advantage this group of women have in a diverse setting such as Yeoville is important to see the potential transfer of skills amongst groups.

The market then is a public space where a woman from Eastern Cape, Zimbabwe, Somalia or Congo meet whether as consumer or trader. Where there is an informal opportunity for transferring skills, learning of new cultures and their structures. Exchanging- at a small scale- the organising of public spaces. We can draw from the market and its surroundings important organisational principles. Draw parallels to architectural feminist principles. Apply further architectural solutions which can apply to other medium to large-scale projects of similar nature in various sub-urban areas across Africa. It also presented an opportunity where existing systems can address other issues faced by women in Yeoville, Johannesburg and urban areas in Africa.



1.3

THESIS QUESTION

Along with debates regarding the number of migrants in South Africa; gender issues around legal and social equality have gained momentum. However, debates around gender-based violence have taken importance. While conferences such as the Gender based Summit held in 2018 are important, these are policy-driven discussions. In the grander scheme policies impact architecture and vice versa. Therefore, architecture, in this project, is both an emotional and physical exploration.

This thesis looks into how architecture can draw lessons from African women as spatial organisers and actors, to develop suitable feminist approaches to architectural projects in Yeoville, Johannesburg.

Questions asked in the thesis include:

1. What constitutes as a feminist architectural design?
2. How are these concepts applied in a pan African Context?
3. How can these architectural methods disrupt existing power structures?

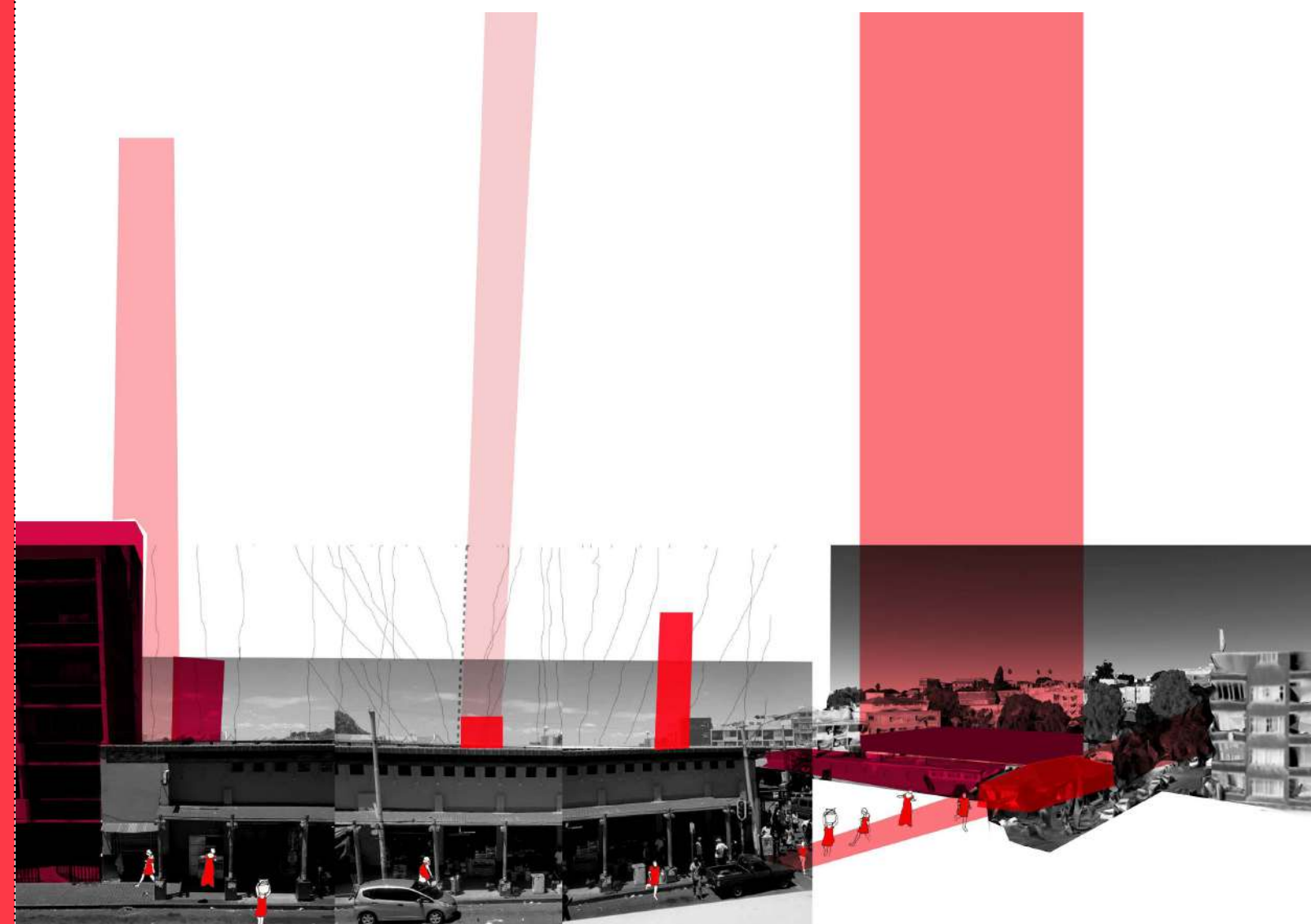


Fig 24.1 Thesis concept montage. Authors Own.



1st Wave

Women's voting and property rights convention.

New Zealand first country to grant women voting rights

1893

1900

1850



2nd Wave

Contraception pill developed

Abortion law legalised in certain USA states

1973

1960



3rd Wave

Intersectionality

Most women granted voting rights, some countries limited to white women

Work and education laws against women challenged

2000

1990

2012



NETFLIX

4th Wave

Internet & digital tools such as social media and tv shows

CHAPTER 2

FEMINISM AND ARCHITECTURAL FEMINISM

Fig 25. Waves of Feminism time line. Computer generated by Author

2.1

WAVES OF FEMINISM

Feminism is a theoretical and political movement starting from the mid-nineteenth century that debated and contested the in-equality of women. We often define it in waves; the first one lasting until the 1960s. "The struggle went as far back as the Seneca Falls Convention in New York in 1848, during which more than 300 men and women assembled for the nation's first women's rights convention."(Korlokke, 2005, p. 3) It is the bureaucratic wave of feminism that spoke to and gave power to issues pertaining to western Euro and American groups of women. It was a long struggle before women won the vote in 1920 In addition to voting rights (Korlokke, 2005, p. 4), there were protests against issues such as married women having no legal identity, not being able to own property, getting an education, divorce rights. While the late 1880s and early 1890s countries began giving women the right to vote, for some they reserved this right for white women. Thus, although women of colour continued to take part and representatives such as Ida B. Wells and Mary Church Terrell also strove to show how the link-

age of sexism and racism functioned as the main means of white male dominance, the first wave of feminism consisted largely of white, middle-class, well-educated women (Korlokke, 2005, p. 4)

The second wave introduced theoretical and practical feminism. Debates around male dominance as a social construct arose and focused on the perception and role of women in society. Including seeking to change gender roles within society that women could break out of traditional, restrictive places. (Flynn & Issitt, 2018) Some argued the nuclear family and the notion of women belonging only in domestic spaces and settings disempowers women (Fig 19 & 20). Activism against workplace discrimination, segregated employment ads, abortion, and sexual health law and gender-based violence. Hence this wave related to a broader group of women as it addressed day to day practical issues. As it evolved to a wider group so did its forms into psychoanalytical, humanist, Marxist, radical and post and ecofeminism. "These movements criticized capitalism and imperialism and



Fig 26. South African woman in domestic setting. Miriam Mazibuko Waters the Garden of her RDP House. Image by David Goldblatt (2008)



Fig 27. Nuclear family in the early 1900s, Parktown Johannesburg. Image by Johannesburg Heritage Foundation (2012)

focused on the notion and interests of "oppressed" groups: the working classes, Blacks, and in principle, also women and homosexuals. (Korlokke, 2005, p. 9)

Equality was still an ongoing process into the third wave. The theoretical debate expanded, introducing the term 'intersectionality'. Describing feminism to overlap with other discriminations that involved class, race, ethnicity, sexuality, language, culture and age. This broadened the debate, criticising the first wave for focusing on issues of white women and that cultural representation should be inclusive in gender equality."A move away from thinking and acting in terms of systems, structures, fixed power relations, and thereby also "suppression"— toward highlighting the complexities, contingencies, and challenges of power and the diverse means and goals of agency" (Korlokke, 2005, p. 21). Amongst other theoretical approaches, emphasis on inter-generational feminism lead to the fourth wave.

As in other industries and theories, technology and digitalisation affects the feminism debate and introduced the fourth wave of feminism. Where activists and information are available to the current generation of feminists. Inclusivity and the power to connect and obtain broader and more accurate perspectives emerged.



Fig 28 & 29. Women and children mobility in the built environment restricted in the 80s. Images by Kate Hepburn (1984)

2.2

FEMINTECTURE

The role of gender analysis grew in multiple industries including architecture. Research traces a feminist approach and debate to architecture back to the 1970s. However, it was only in the 1990s where architectural feminist theory gained strength and momentum. "The early stages of the architectural debate emerged out of the more overtly politicised discourse of feminism (s), where feminists of different persuasions took varying positions: some liberal, arguing for equal representation in architecture." (Rendell, 2012) As these debates evolved in architecture the politically orientated feminist discourse that was more direct and representative in its approach evolved. Rather, the point was "the signifying structure was no longer taken for granted, and subjects, selves and spaces were understood to be performed and constructed rather than natural and self-evident." (Rendell, 2012)

MAKING PLACE & SPACE

The evolving understanding of feminist architecture is a process that allows its users space to create a place, throughout all its processes and outcomes. "Moving from providing a gendered analysis of architecture and its multiple forms of representation to the production of work where subjects, selves, and spaces are understood to be constructed rather than represented. Critiquing architectural value systems as patriarchal, the notion that creating a building is a clean act of control and precision. That women have different priorities in the design of built spaces and the organisation of their production." (Rendell, 2012). The interest is not the only product but in the process itself and space-making. Because of social constructs, women have adopted different value systems emphasising certain qualities such as "connectedness, inclusiveness, an ethics of care, everyday life, subjectivity, feelings, complexity, and flexibility in design," (Rendell, 2012). An architecture critical to its social and contextual settings suggesting that space is socially produced, and that space is a condition of social production.

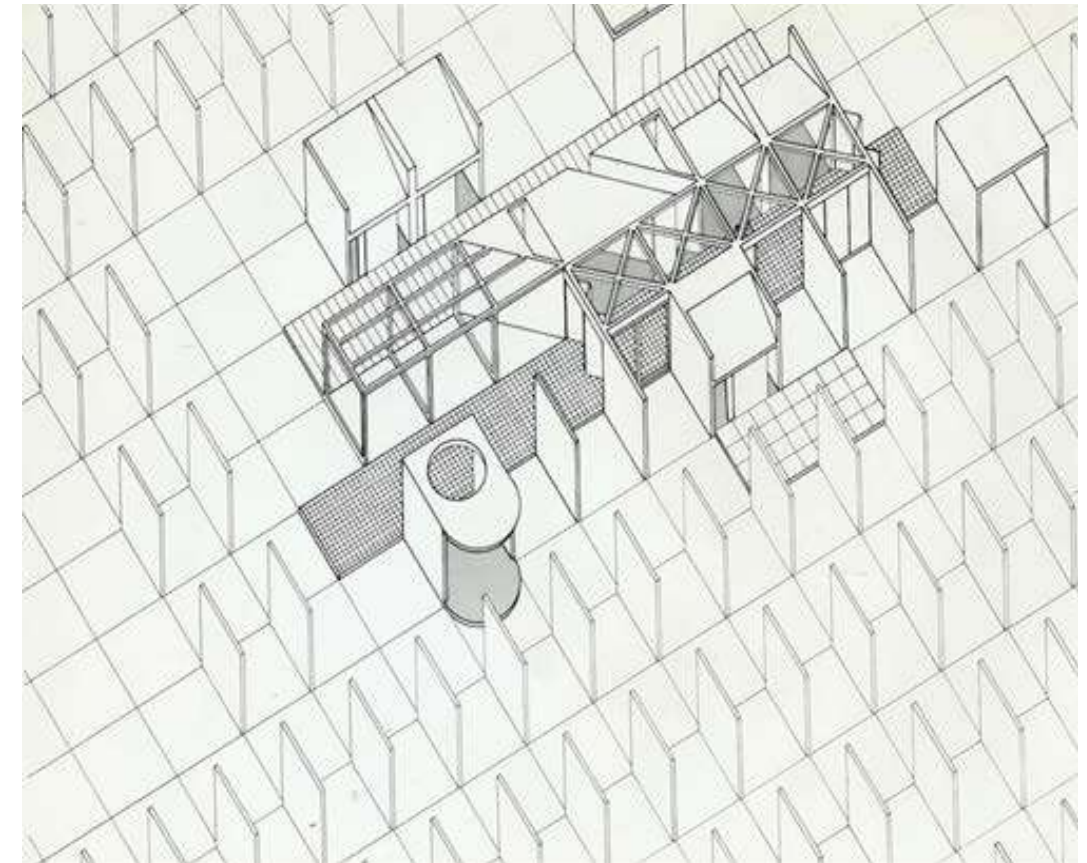


Fig 30&31. Diagrams Showing Space Matrix By Susana Torre (1981)

Therefore encouraging occupants to involve themselves in the design from the beginning and allowing the natural to occur. "Perhaps the 'disorder' of urban life does not so much disturb women. If this is so, it may be because they have not internalised as rigidly as men a need for over-rationalistic control and authoritarian order. The socialisation of women renders them less dependent on duality and opposition; instead of setting nature against the city, they find nature in the city." (Wilson 1991)

"I extend the term 'critical theory' to include the work of feminists and others whose thinking is self-critical and desirous of social change—who seek to transform rather than describe" (Rendell 2003). Rendell highlights the close relationship architectural feminism has with theories of Marxism and Criticality. Theories that refer to autonomy and objectivity. In an essay on Capitalism and the Politics of Autonomy Hartoonian (2014) refers to Tafur, is his interest of then 'current debates' of autonomy that reveal "ideological tricks of the structures and relations that are essential for the production of architecture". The object (architec-

ture) yes attains autonomy when it attempts to change structured values as theorisation occurs. But still a large portion of architectural production depends on these structures. We can say these structures to develop during the Modernity movement, which grew alongside capitalism itself. European modern architecture, even when it operated within the cracks and crannies of the capitalist system (Lahiji, 2011) By mentioning modernity it is crucial to also understand technology's influence on capitalism and architectural production which then results in objectivity.

Objectivity through the production and consuming of a capitalist system has been further discussed by Aldo Loss in his essay "Ornament is a Crime", which rejects this way of practicing architectural design. Another point to raise in this section is how the ideology of autonomy has landed itself over the years to the speed and constant production of architecture that has resulted in most architects handing over their roles to the various agencies of capitalism. Resulting in the objectivity/ "Iconing" of buildings and a less critical or feminist approach to Architecture.

In Ole W. Fischers essay Architecture and Criticality the initial remark refers to Koolhaas' statement that "The problem with the prevailing discourse of architectural criticism is this inability to recognise that there is in the deepest motivations of architecture something that cannot be critical" (Fischer, 2012). If that motivation is production, consumerism and capital investment, then the architecture cannot possibly be critical. Important to my arguments is that contemporary architecture is in fact slow to change/realisation in is a mere nature of practice (consuming capital, material, labour, clear cut commission of the architect etc.). Resulting in hierarchical structures that could sometimes blur critical/functional intentions of the architect in society. Practices and structure that motivate colonial architectural practices in Africa and South Africa. Which has manifested into problematic cultures in architectural practice and design? "Hartoonian summarises this, the central thematic of political criticism of architecture today is as much a cultural issue as it is economic" (Lahiji, 2011)

'Spatial practice' is the overriding ideal in feminist

architectural projects. Spatial practice, has produced an understanding of practice as a process which occurs not only through the design of buildings but also through the activities of using, occupying and experiencing, as well as modes of writing and imaging which describe, analyse and interrogate (Lefebvre, cited in Rendell 2012). This phenomenon is shown in Susana Torre Space Matrix. It demonstrates understanding and care for occupants paired with theoretical explorations. The result was two residential projects responsive to their occupants and the endless possibilities of dwelling.

PRECEDENT: HOUSE OF MEANING 'SPACE MATRIX'

Architects: Susana Torre

Susana Torre argued that both the Victorian spatial arrangement of enclosed rooms and corridors and modernist open plan were inadequate for contemporary life. "The architectural design of an experimental residential centre focused on flexible and complex room arrangements, connections between indoor and outdoor spaces; open kitchens, laundry, and play areas, cooperative cooking and homework." (McGarth, 2018) She did not design The House of meaning as a specific house but to demonstrate the principles of Space Matrix. The basis of the Matrix is the following three principles: Spatial continuity & hierarchy; multifunctional spaces and the architectural object in juxtaposition with the patterns of dwelling.

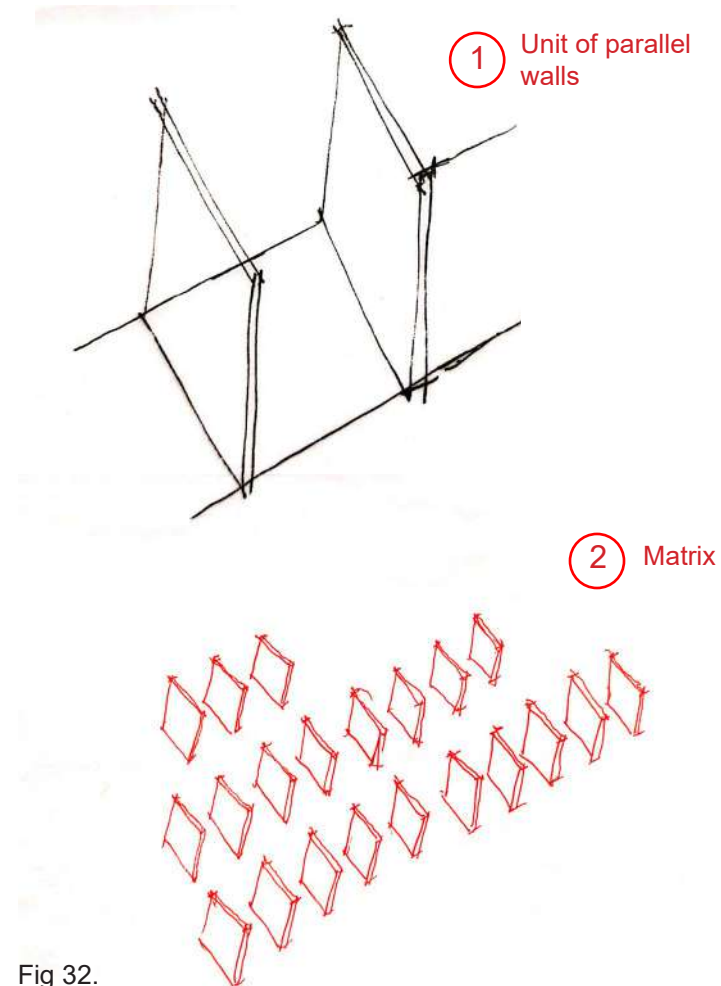


Fig 32.

In Western Architecture the Wall is the primary architectural element. It distinguishes between outside and inside. It creates a boundary and support for shelter. The Matrix combines a series of fixed walls and a series of spatial incidents by placing walls in unusual places and using them to only suggest a potential to occupy space. Rather than using walls as a clear cut demarcations of specific rooms. (Torre 1981)

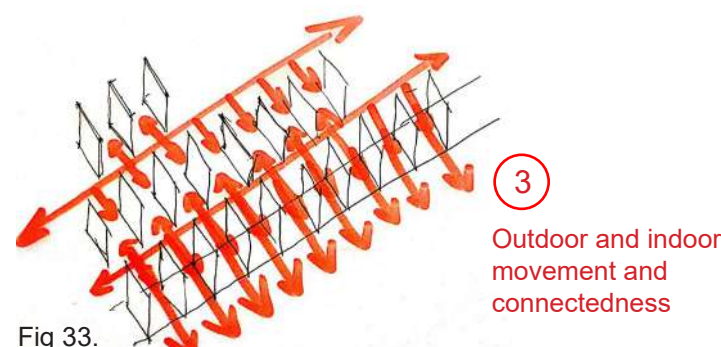


Fig 33.

What happens in between the Matrix of walls is that there is a breakdown of conventional distinction between private and public, individual and shared and highlighting the possibility of opposites existing together and interacting to create a homogenous space. Capable of creating connections in all directions. This spatial continuity then does not reject the hierarchy of spaces which allow for physical distance & formal differentiation. Hierarchy is not explicit in plan and is rather clear in plans of different levels and the division of spaces at different heights. Then these opposites can exist: open/enclosed; isolated/connected; high/low; small; large; intimate/monumental. (Torre 1981)

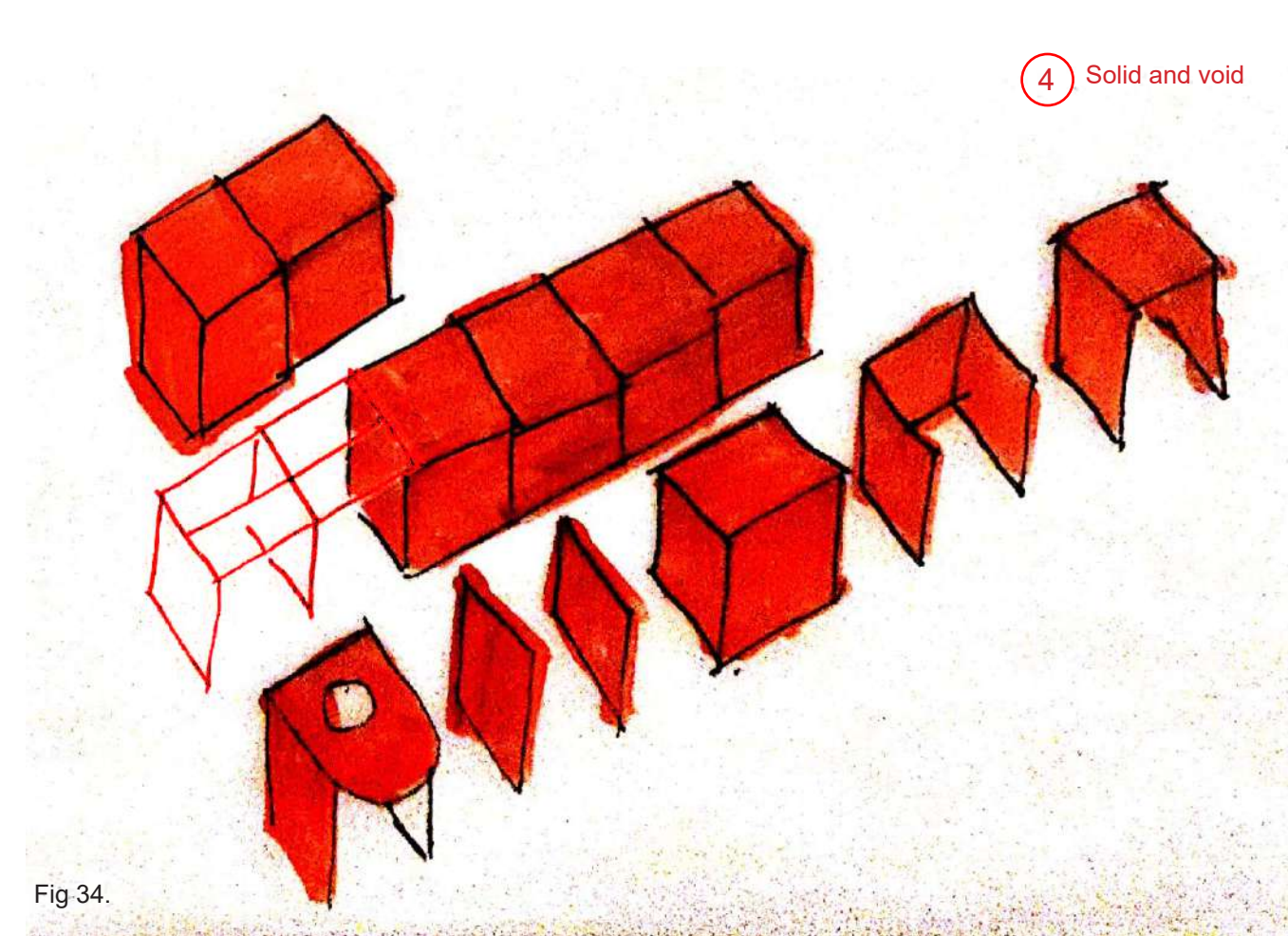


Fig 34.

(5) Multiple space config.

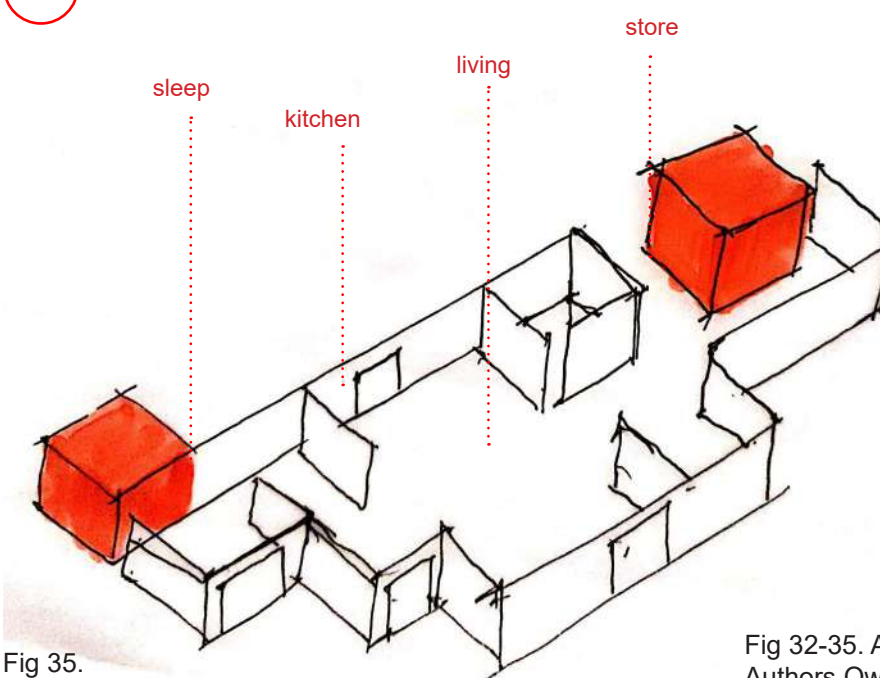
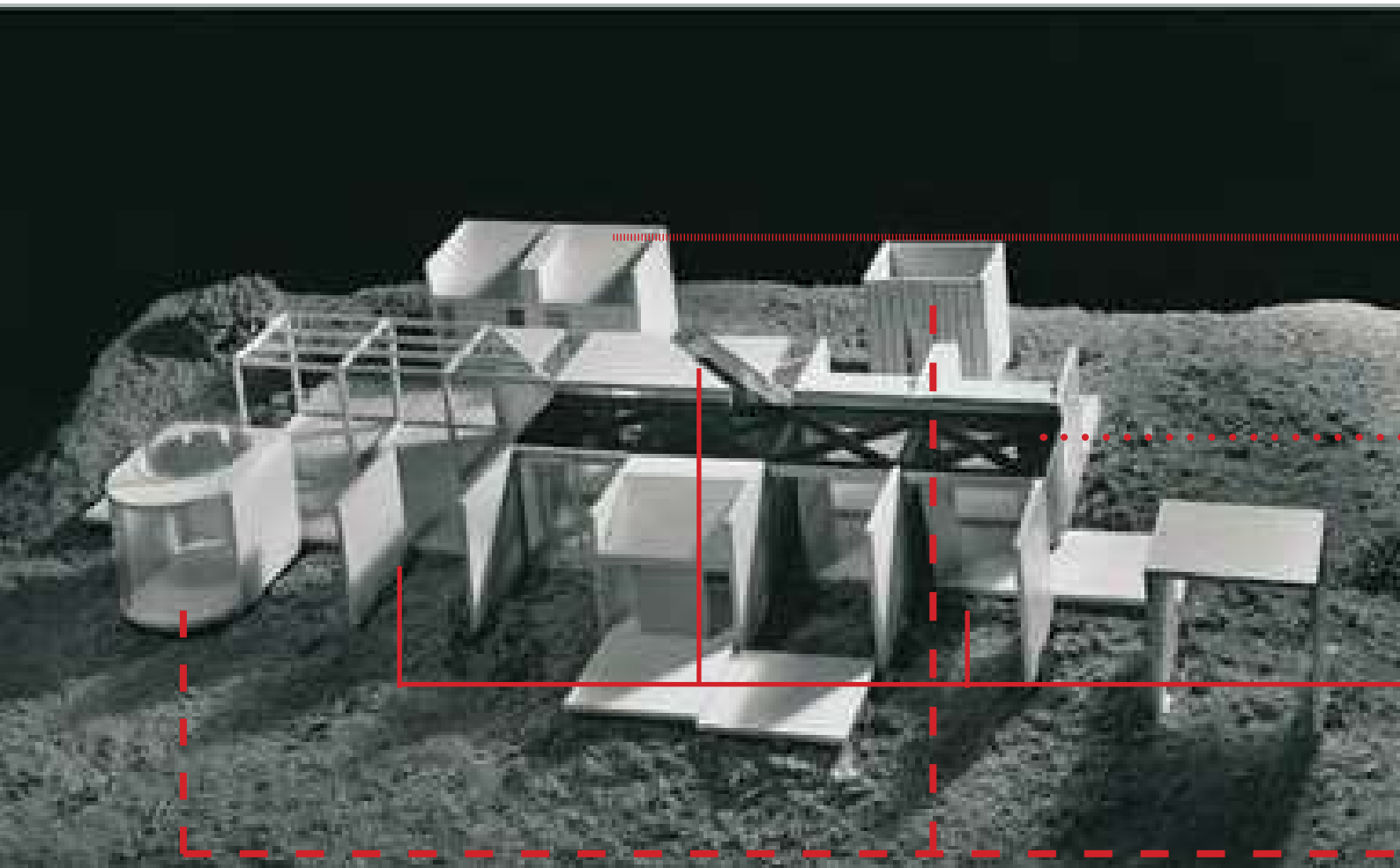


Fig 35.

Segregation of functions and single use provide unwholesome isolation. Between private, shared and public life. Close to the notion of multifunctional is close to the way people actually live. All these three principles working as one can encompass other dwellings within it. The following two houses use the same principles outlined above but fulfil different needs and functions in different ways for different occupants. (Torre 1981)

Fig 32-35. Analytical diagrams for House of Meaning. Authors Own.

Remaking the closed kitchen into a common shared space was central to the interior aspect of the program. Two unbuilt projects for Puerto Rico and Santo Domingo were assumed to exist "in a 'present' state of completion, capable of being altered" by the formal logic of vernacular building." - Extract from Susana Torre web page



Location: North Puerto Rico
Occupant: Writer. Visitation by friends and family for long periods of times.

Joined pavilions=living quarters for frequent guests

Living Arcade/Circulation

Portioned & dimensioned private rooms for multiple & interchangeable use. Partially/ completely open to living arcade.

Closed courtyard and sky lit room separate and disrupt spatial continuity

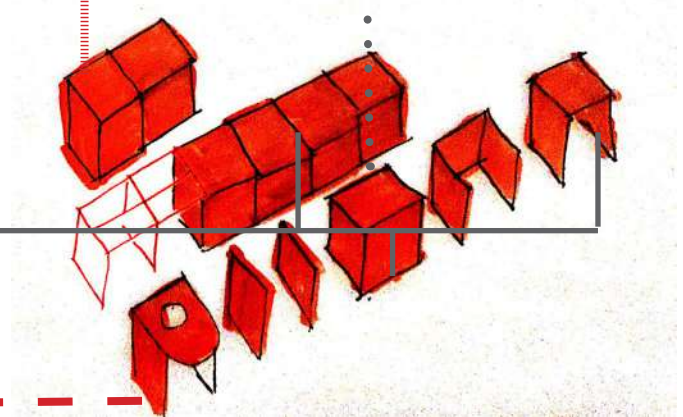
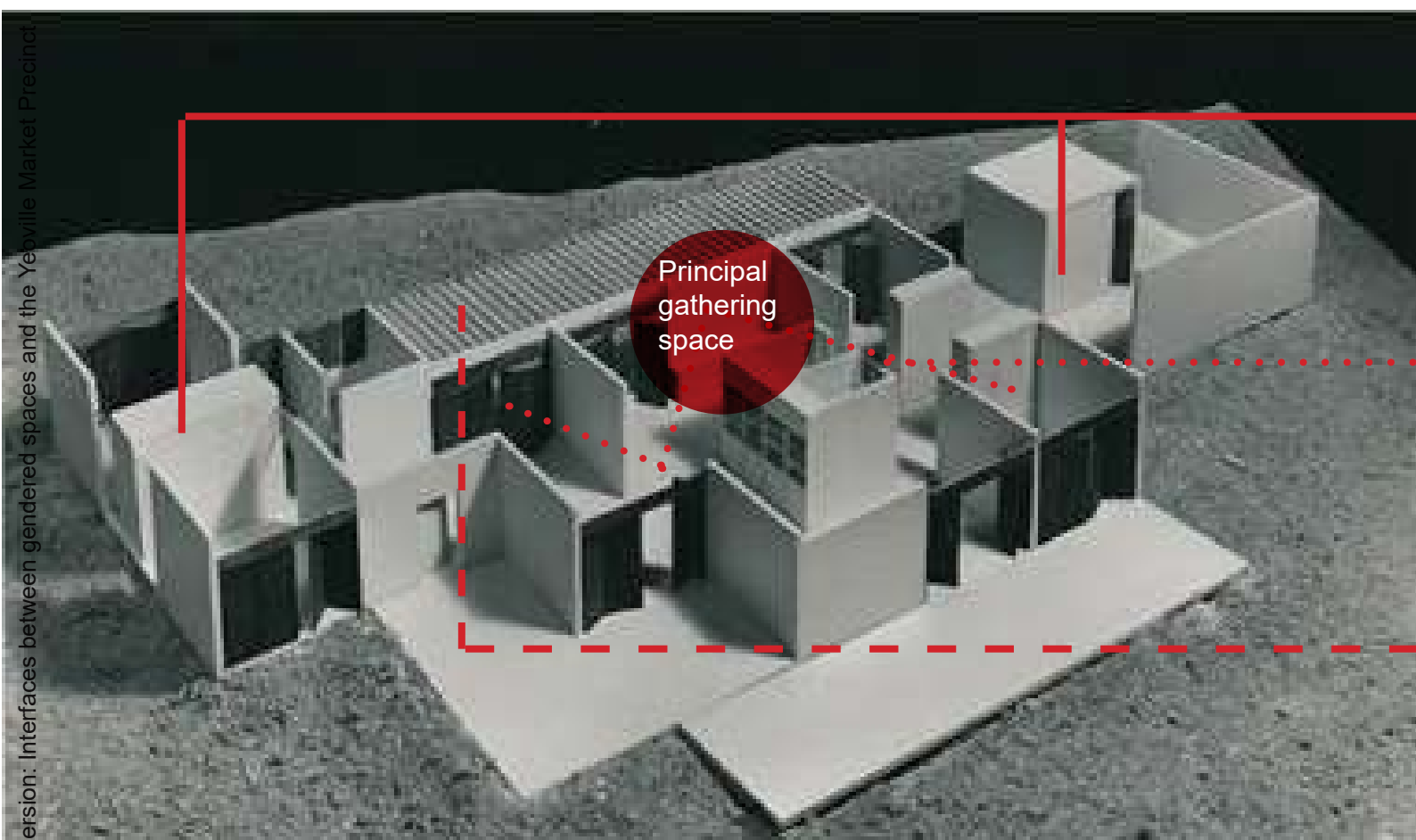


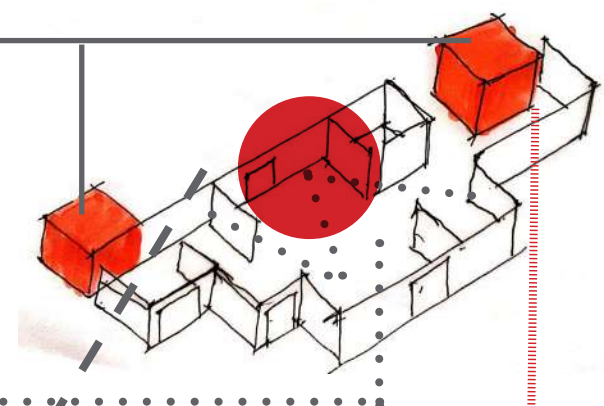
Fig 36.



Private rooms of each household paired at opposite ends of the house

Connecting space= three rooms in zig zag pattern that can be divided by movable walls.

Gallery is secondary gathering space: living room, kitchen and private rooms open to it



Office and workshop for mother=Space for future additions to establish third household.

Location: Santo Domingo
Occupant: Extended family of couple, wives mother and younger sister.

Fig 36 & 37. House of Meaning By Susana Torre (1981)

CHAPTER 3

LOCATING AFRICA

Gender being a western construct is the prominent debate when locating Africa in the feminism debate. For instance Oreyonke Oyewumi writes in her book *The Invention of Women* “As the work and my thinking progressed, I came to realise that the fundamental category ‘woman’ — which is foundational in Western gender discourses — simply did not exist in Yorubaland.” (Oyewumi, 2001, p. ix). The book interrogates the notion of “woman” through the lens of Yoruban cultural history, comparing it against the “cultural logic of Western social categories based on an ideology of biological determinism” (Oyewumi, 2001, p. ix). Suggesting that some African societies should not be dissected and viewed against these constructs.

On the contrary, writers such as Judith A. Byfield in *Taxation, Women and the Colonial State* reveal the marginalisation of women in Nigerian society. “For example, when Alake (King) of Egbaland in Nigeria, wanted to impose taxes on women and weren’t otherwise allowed equal representation in society.” (Msafropolitan, 2012). That led to the women’s tax revolt led by Funmilayo Anikulapo-Kuti and well documented in Nigerian History. It

is also with no doubt that certain South African old traditional practices enforce male dominance, comprising the equality and safety of women in society such as no rights in marriages and domestic violence.

However, what this highlights is that although some African cultures might have not based social hierarchies on gender, however, it may be because of colonial influences that gender constructs exist. Hence decolonisation is a key resistance movement that aligns with feminism through the ‘intersectionality theory’. Dissecting societies in urban African cities through the lens of feminism is of importance. Debating on whether feminism is in African history, does not take away from the fact that African societies rank lowest in the global gender equality index, have some of the highest numbers of violence and marginalisation of women.



Fig 38. What is a African Female Black Body?.Artwork by Billie Zangewa (2015)

3.1

PAN AFRICAN APPROACH TO ARCHITECTURAL FEMINISM

In understanding theories of architectural feminism, one has to understand its cross links to other architectural theory. Theories such as phenomenology, power (politics) and criticality. In Africa, an extra layer and the most important would be that of colonisation and capitalism. Capitalism in Africa (similar to the Americas and Asia) cannot draw separation from Colonialism. Colonialism in this context is the practice by which Europeans reached positions of economic hegemony through capitalism and economic practices from the fifteenth to the nineteenth century. Although hierarchal structures were present in tribes “Systems of class and differing methods of hierarchical ranking have existed amongst human societies for thousands of years” (Lokko, 2000, p. 18) the architecture produced was not of exclusivity as a resultant of capitalism. “Writers travelling in West Africa and, the region historically known as Western Sudan did not record the kind of underprivileged housing we observe today in African cities.” (Elleh, 2013). Transformation of African architectural typologies that result from ‘colonial capitalism’ highlight the ideas of elitism, exclusion

and separation.

Therefore, included in the exclusion and separation is the marginalisation of women. Many urban African spaces hold the legacy of colonialism, reflected at multiple scales of the urban. Colonisation as patriarchy, self-gain, capitalism, one group having power over the other and certain spaces. With this comes the embedded hierarchies of society, which places black women at an unequal planes. And urban lives in an infrastructure constructed and designed by and for a different age and inhabitant. (Musisi, 2017) Expressive of rigidity, separation, control and often obtrude but still existing in polarity with how women move and express space and place. What is problematic is these natural moves and expressions fall under the term ‘informal,’ and cannot be used as templates.



Fig 39.



Fig 40.



Fig 39-41. Artwork by Matri-Archi. An intersectional collective that brings POC African women together for the empowerment and development of African cities and spatial education (2019)

“This is reflected in our use of urban areas, with the hierarchical tension between spaces such as markets and malls, and between modern African hybrids such as Mobile Money kiosks, and banks. Thus the most marginalised [by design] of the populace become a living map of our needs in the hybrid state that is our existence.” (Musisi, 2017)

Therefore architectural feminism in a pan African setting tries to be “more inclusive development dialogue that transcends generation, class, and borders, for a manifested whole.” Prioritising the lived reality and not the ideal.

PRECEDENT: HIKMA: RELIGIOUS AND SECULAR
COMPLEX

Location: Dandaji, Niger.
Architects: Yasaman Esmaili, Mariam Kamara

Although not explicit, the Mosque and library draws on architectural feminist principles by prioritising the lived realities of the community. The value of practicing religion along education and learning. Providing an inclusive scheme that addresses multiple needs including the previous exclusion of women in using the communal building because of Islamic rules.

“By involving women groups in the project, additional spaces for literacy, accounting courses, and workshops were added. As a mosque, women never used the current building, preferring to pray at home. The library and its proximity to the new mosque will engage them and the youth positively with these religious spaces as productive members of the community.”-Atelier-masomi website.



Fig 42. Islamic girls using public Library. Atelier Masomi (2018)



Fig 43. Converted Mosque into library. Atelier Masomi (2018)



Fig 44. Section through library and new mosque. Atelier Masomi (2018)

“Our reconstruction of the street, by way of the gendered tropes of hairdressing salons and the advertising of beauty services and products, articulated something of the dense network of spatial and legal power relations behind the patterning of the streets and its surrounding”
-Mpho Matsipa



Fig 45. Hairstyle advertising boards along Bree Street, Johannesburg. Photograph by Mpho Matsipa (2014)

Rather than looking at projects that are literal in their intentions of being a feminist building, I look at how women occupy certain spaces and reveal their overlooked contribution to principles of feminist architecture in Johannesburg. To highlight that the role of the occupier in creating long-lasting, responsive architecture is important.

In South Africa, the most obvious record of women contributing to architecture would be Ndebele women in traditional domestic architecture. However, it transcends beyond the perception that women create architecture as art in homes. In fact, predominant in creating Indigenous African architecture is the role of the whole community in creating their own spaces. The role of the occupier is further emphasised. Contrary to patriarchal architectural traditions, where the architect designs and produces architecture as a solo artist. “This argument reinforces calls for more creative, engagement with the lived spatiality’s of global connectedness.” (Matsipa 2016).

In her research, *The Order of Appearances* Matsipa (2014) outlines the agency of marginalised urban actors, black women braiding hair on the side of streets and sidewalk traders in Johannesburg and its relationship to architecture and town planning. She follows and details the repurposing of office blocks and apartment buildings by urban actors. Significantly informal trade was not only limited to sidewalk retail, but it also extended to the upper floors of low grade commercial buildings in the inner city (Zack, cited in Matsipa 2014). Such as Nomsa a hairdresser Matsipa follows and interviews. Detailing her choices of sub-letting a space in House X, one of many repurposed apartment and office buildings in the inner city. She rents a cubicle despite charging the same amount for her services compared to her sidewalk counterparts. The preferences of customers, quarrels with ground floor shop owners are her reasons but above everything the possibility of being arrested by the Metro Police “Nomsa’s silences and evasion of questions about interpersonal violence in the inner city, suggests her refusal to being transformed into an embodiment of otherness, but also that the city



Fig 46. Women braiding hair on the sidewalk in Yeoville. Image by Terry Kurgen (2013)

is a highly fragmented social space that is patterned by threats of (unspeakable) interpersonal, gendered violence. Ultimately, these silences also register the precarity of profit margins for her, in this business location. She has very limited space to maneuver, especially in a context where the encroachments of inner city redevelopment, place increasing pressures on available street trading spaces. These encroachments intensify competition for trading space. They also create conditions for pricing wars, amongst different classes of traders i.e.: those who work exclusively on the street and those who rent space in buildings.” (Matsipa, 2014 p.123- 126). This narrative locates how and where gender relations of lower-income occupants is located in inner city urban redevelopment.

Urban Renewal as anti-architectural feminism

Lillian Ngoyi Square, in Pretoria, is a project that (at face value) may represent an architectural feminist building. However, in its design principles and outcome may have missed the theory of the occupier as the spatial agent. The square is suc-

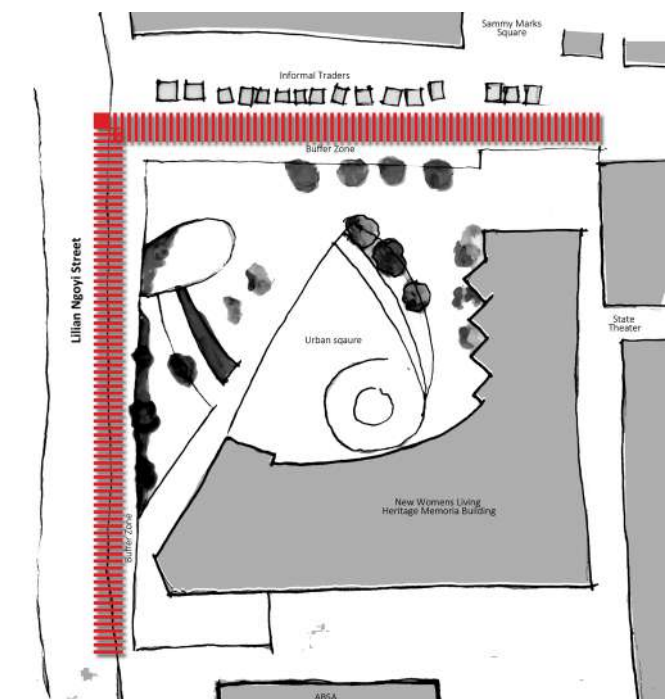
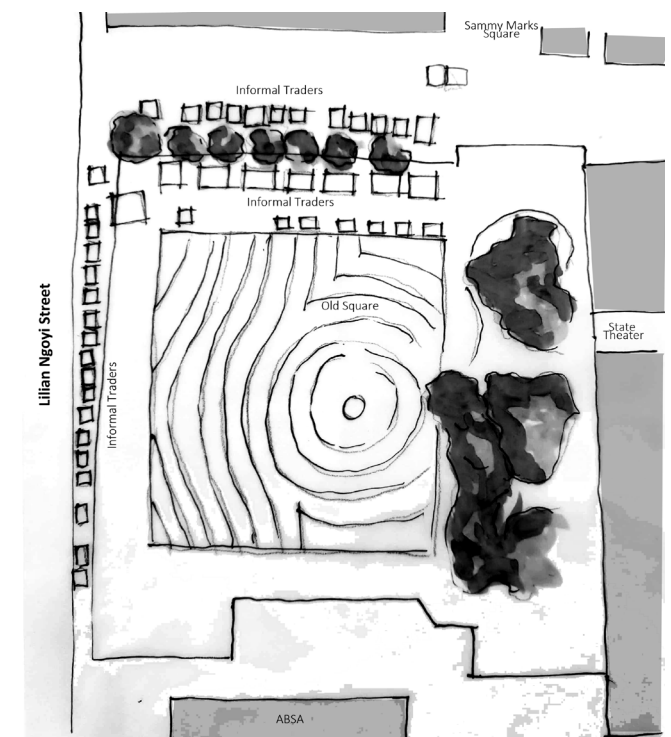
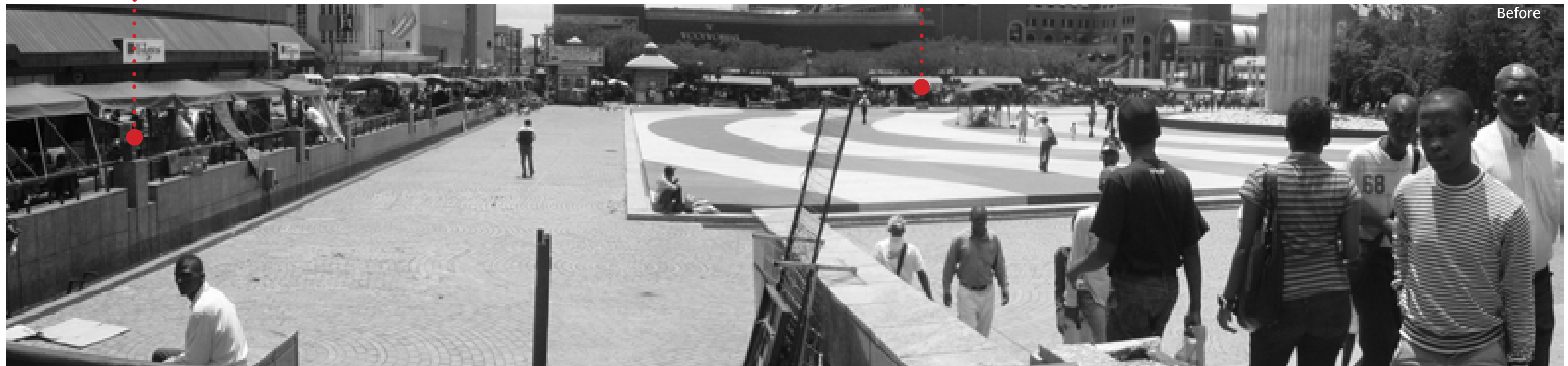


Fig 47.. Analytic Diagrams. Authors Own

cessful in its representation and memorialisation of Lillian Ngoyi and the women responsible for the women's march in 1956. It is also successful in its imagination of a more inviting square: increased greenery, softer textures and materials and seating. The question I pose is; what happened to the informal traders that were once on the periphery? I had passed once while construc-

Informal traders on Van der Walt Street



Limited space and security on now Lillian Ngoyi Street



tion was underway and thought of the removal of informal traders as temporary. Going back after the opening of the square, there was a sense of vastness and openness, and it felt something was missing. The initial choice to analyse the square was to highlight the few (as I thought) feminist architectural projects in South Africa. As the analysis started it was apparent that the untruthful appearances of what we consider a feminist architectural project. Often influenced by political power or capitalism. The periphery of informal traders have not returned and those who have, place themselves closer to the opposite side of the street. The new design seemed to have emulated a buffer between what's 'new' and 'old', 'everyday occupants' and 'visitors'. Regimes of representation make up a new domain of politics in post-apartheid Johannesburg (Matsipa, 2014 pg.6). As with many urban renewal projects in Johannesburg, the design missed an opportunity to allow informal traders and the closest occupiers to filter into the design. Ironical to the purpose of the building, it misses the true princi-

Fig 48 & 49. Before and after Lillian Ngoyi Square. Author Unknown.

Informal traders on Church Street

ples of architectural feminism. Matsipa draws attention to results because of similar redevelopments amongst traders. She interviewed informal traders in Johannesburg during the City Improvement Districts project that sought to 'clean up' the city. Informal traders have also created other spatialities through which public space and notions of private property are continuously contested. The highly contested character of the sidewalk due to the heightened emphasis on surveillance and codification of urban space creates a volatile situation for these traders. The CIDS restrict the access of informal traders to potential customers which often merely displaces those trying to make a living from one prohibited area to another, which also creates conditions for xenophobic violence. (Matsipa 2014 p.115) In Johannesburg where public realms are dense in population and are highly used; inclusive development dialogue that transcends generation, class, and borders is important. This to create spaces and architecture for a manifested whole. Street trading by-laws force traders to navigate a patchwork of zones of relative in-security and

profit that are patterned by shifting territories of private property entitlements and institutionalised violence. (Matsipa 2014 p. 126) While this chapter gives a brief overview of discussions about gender spatiality's in Gauteng's urban cities as part of the architectural feminist discourse. At the end of her study Mastipa suggest directions for future research stating a "meaningful discussion of gendered work and urban informality will require further research, in terms of the broader context of gendered work in Johannesburg, South Africa and globally as well as an engagement with key feminist debates about such processes." (Matsipa, 2014 p. 139) The next chapter focuses on spaces that are gendered in their program and have a history of being contested in public realms. These programs and buildings are rarely discussed in particularly African discussions of architecture and feminism.



Fig. 50. Abortion signs on Bedford Road. Authors Own

3.3

ABORTION & WOMEN'S REPRODUCTIVE CLINICS

Chapter 1 briefly discussed challenging the spatial planning of buildings gendered in program – abortion and reproductive health clinics. In this chapter, I discuss abortion and reproductive health clinics in Johannesburg, a Pan-African urban city. Secondly I discuss their relationship to architectural design and planning; design considerations when placing contested spaces in inclusive public spaces. Particularly the thresholds between these private spaces and the public realm.

“Abortion provides an interesting platform to think through complex relationships of space, a woman’s body, varying degrees of federal and state control, the fluid and ever shifting terrain of reproductive healthcare access, potentials of design thinking in transforming spatial relationships and ways to radically rethink these issues to provoke change.”(Brown, 2013 p. 2). The legalisation of abortion is fairly recent, occurring in 1996 during

South Africa's transition to democracy (Hodes, 2016). Therefore, in Africa and South Africa, the public discussion of abortion clinics remains difficult. Further, the embedded perceptions about the control women have over their reproductive health in African cultures is complex. For instance, in some cultures, in marriage, the gender and amount of children a woman bears is up to the husband or his family’s satisfaction. Or it is believed that if a woman is in an abusive relationship, the only way to stop the abuse is to continue bearing children. Therefore, abortion and reproductive healthcare often come with certain connotations. While discussing abortion remains condemned in African societies so is it rarely discussed as part of the African architectural feminism discourse. These perceptions have direct influence on the politics of space such as where and how reproductive clinics emerge in public spaces.

Cultural and social factors accompanied by financial constraints force women to make use of cheaper, secret and readily available and most of the time illegal medical practitioners and abortion clinics. Legal medical services are limited and still adopt outdated strategies unaccommodating to women from Johannesburg's lower-class areas. In a document by the GCRO Mapping Motherhood in Johannesburg research shows that adequately and successfully caring for themselves and their children's health depends on access to a variety of people, services and amenities. "Mothers need to access medical services. Choices of healthcare were determined by income. Access to these services and amenities is most obviously linked to financial resources but less obviously it is also linked to spatial location, citizenship status, feeling of belonging or dislocation in relation to the community." (Rubin 2017 p. 17) Therefore, in these circumstances it may be easier to resort to illegal means of healthcare. In

a Pan African city such as Johannesburg, many migrants do not access health care for fears of being asked for official documentation and deportation. "Legal status, financial means, and the attitudes of the South African health-care providers all burdened women's access to South African health services. There is also ambiguity about the rights of non-citizens in accessing free primary health-care services." (Munyewende et al, 2011 pg. 8). Architectural discourse then needs to think about "How legitimate clinics are accessible in location and how they intersect with public space. The relationship between the literal building, its siting, and access, what one passes through to enter the building and the security required to ensure safety" (Brown, 2013 p. 14). Clinics are usually on the periphery of neighbourhoods in far access to those who need them the most. Such as other gendered programs -women's shelters, child care facilities- reproductive clinics emerge

as re-purposed residential houses because of security concerns. Traditionally justified through concerns about location and security between abortion clinics and women's shelters. "For decades it has been the practice to keep the location of shelters secret. However, there is movement away from the idea that a shelter or clinic must remain secretive and instead many organisations now focus on making them safer. In some cases programs have reconsidered the 'everything within one building model' and scattering amenities across building types. Their secrecy is in the idea that the building does not advertise their location, meanwhile the women and their children are not hidden away in some undisclosed building." (Brown, 2013 p. 88-89). In Johannesburg illegal clinics are set up in the many offices and apartment blocks re-purposed for retail activity. Although these clinics may be more accessible, these old dilapidated buildings certainly do not meet medical regulations and may be hazard-

ous for abortion and reproductive clinic purposes. Also, the thresholds between very public spaces and private spaces are not carefully considered and designed.



Fig 51. Private Choices Public Spaces design action call. ArchiteXX (2016).



Fig 52. Jackson Women's Health Organization parking entrance view. Lori Brown (2016)

Private Choices and Public spaces curated by and Architect in USA, Lori Brown, explores the thresholds between public realms and contested spaces by conducting a study on the last remaining abortion clinic in Mississippi. The Jackson Women's Health Organisation (JWHO) presented an opportunity to address complex spatial dynamics. They created educational and outreach opportunities through an exhibition where public and private thresholds of the clinic were rethought. The direct engagement with the public produced ideas such as installations that are noise responsive and limit visual access from the outside. These thresholds are important and form part of this research. While we think of new places to locate reproductive health clinics, like in informal markets, it creates complex thresholds. How do we address thresholds in public spaces, and societies where historically abortion has been condemned?

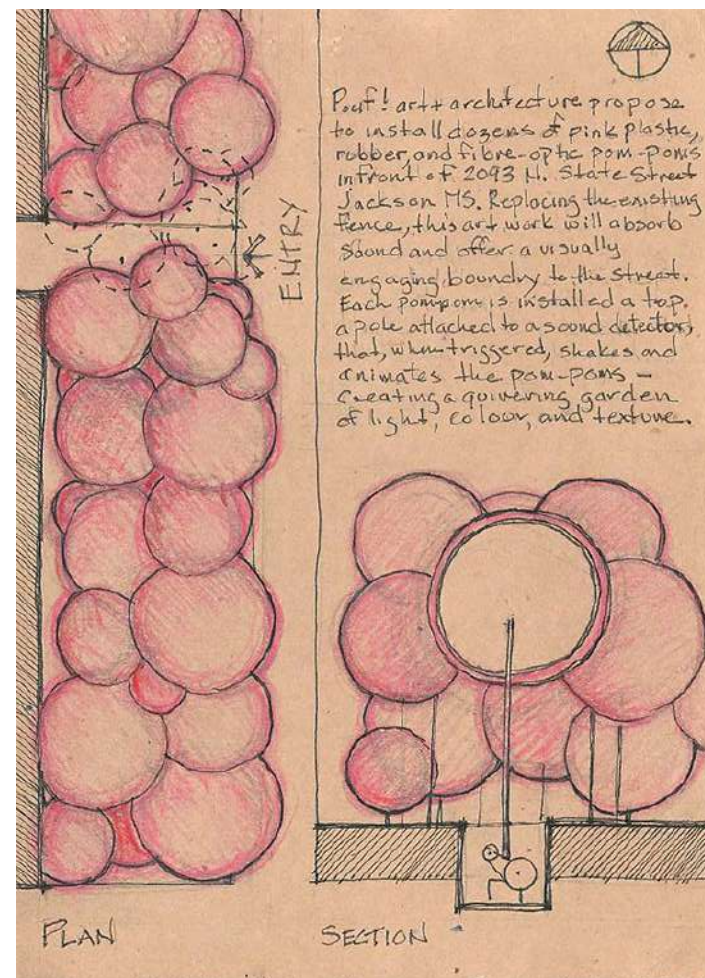


Fig 53. Private Choices Public Spaces design idea. poof! art + architecture.(2016)

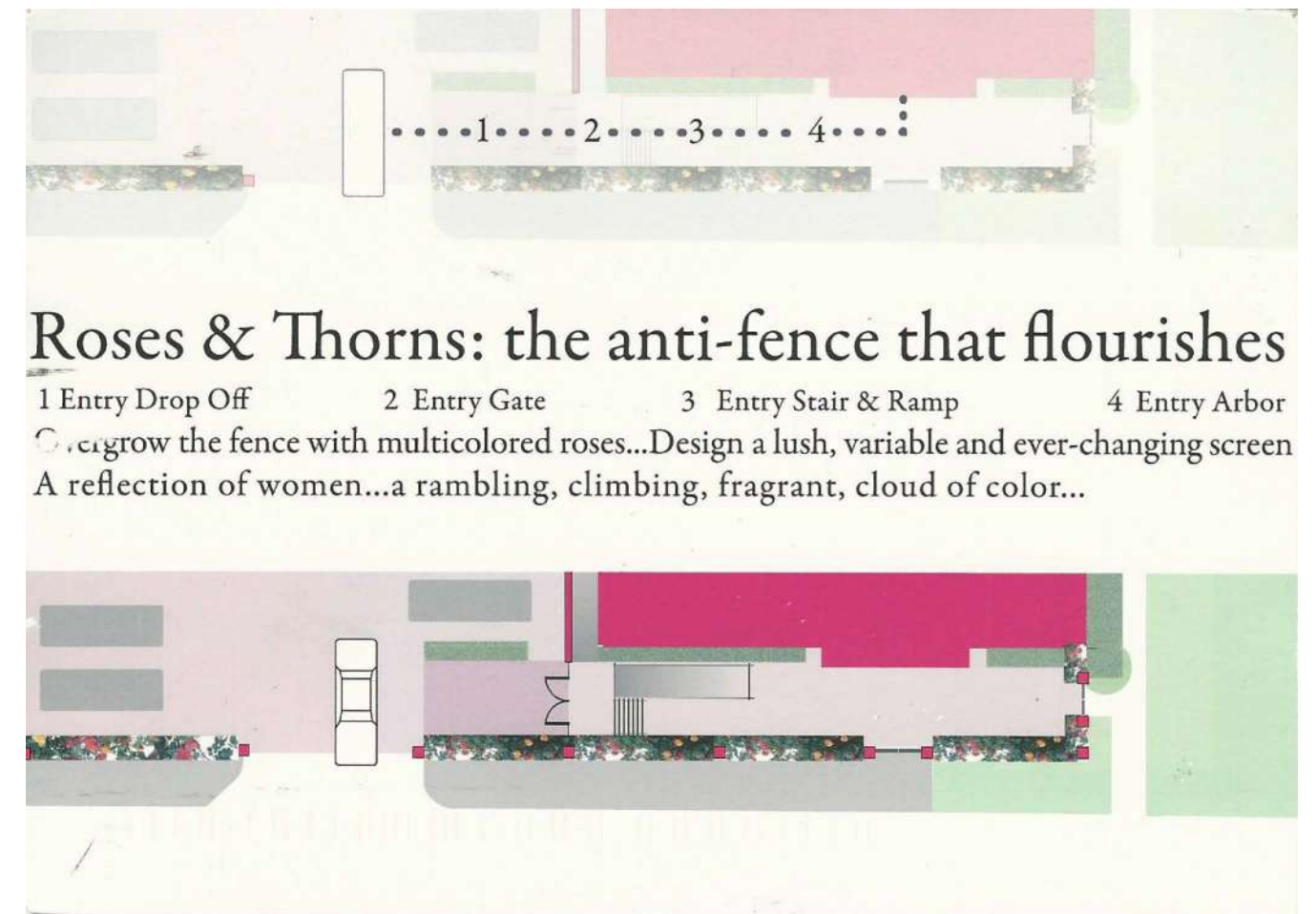


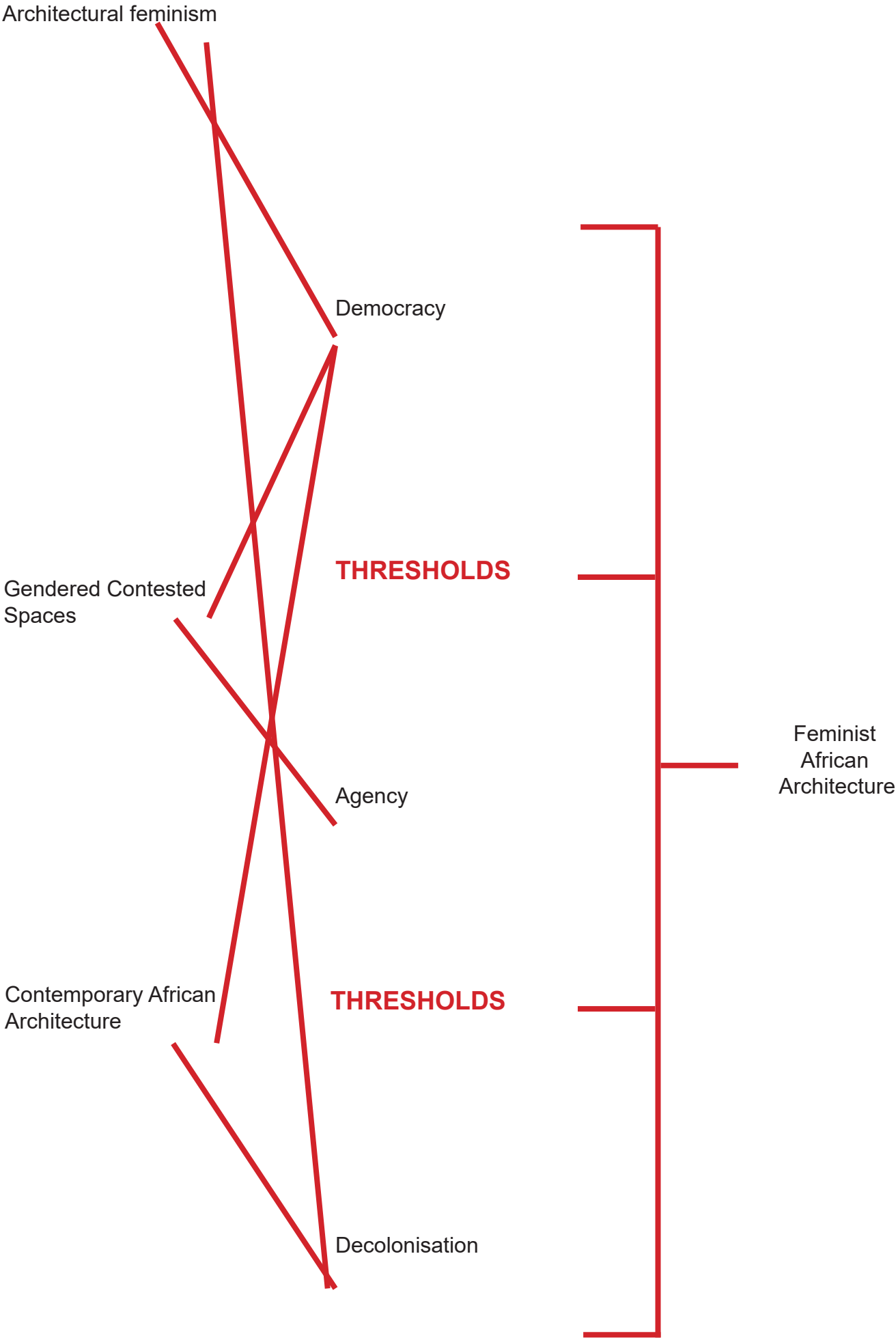
Fig 54. Private Choices Public Spaces design idea. Meta Brunzema (2016)

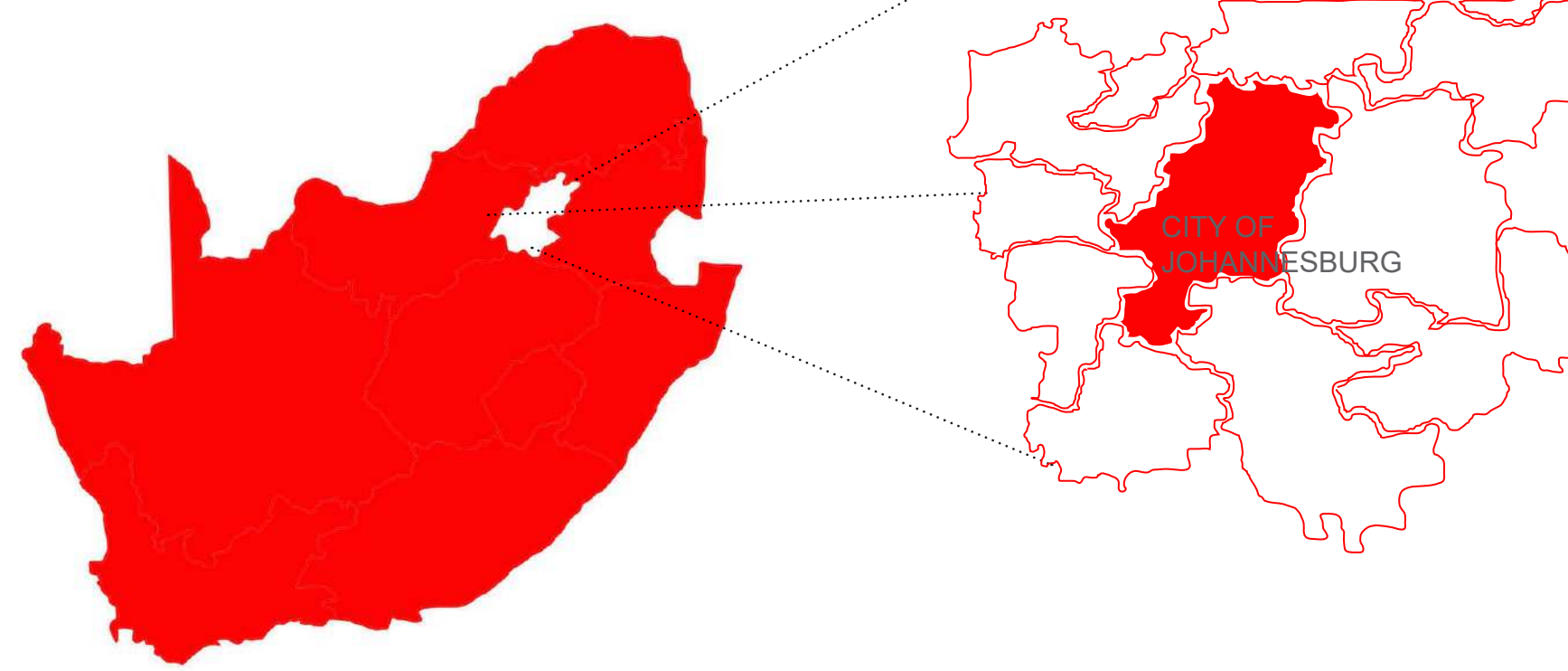
3.4

Resolve

There are cross-links between architectural feminism, gendered contested spaces and contemporary African architecture that have not been adequately explored. After discussing these topics in the leading chapters, the aim of this document is to highlight, investigate and explore the relationships between these topics. This design exploration also aims to highlight common practice by projects relating to architectural feminism, and african architecture, which shy away from ‘bigness’. The architectural scheme demonstrates what every building, street and public space in a pan-African developing African city should provoke as a protest. Rem Koolhaas best describes this phenomenon “Beyond a certain critical mass, a building becomes a Big Building. Such a mass can no longer be controlled by a single architectural gesture, or even by any combination of architectural gestures. This impossibility triggers the autonomy of its parts, but that is not the same as fragmentation: the parts remain committed

to the whole.” It also requires turning to forms of knowledge and practice not generally considered legitimate objects of architectural and urban enquiry or appropriate or adequate sources of history making (Matsipa, 2014 p.37). The objective is to create a feminist African architectural scheme that is big in its gesture and protest.



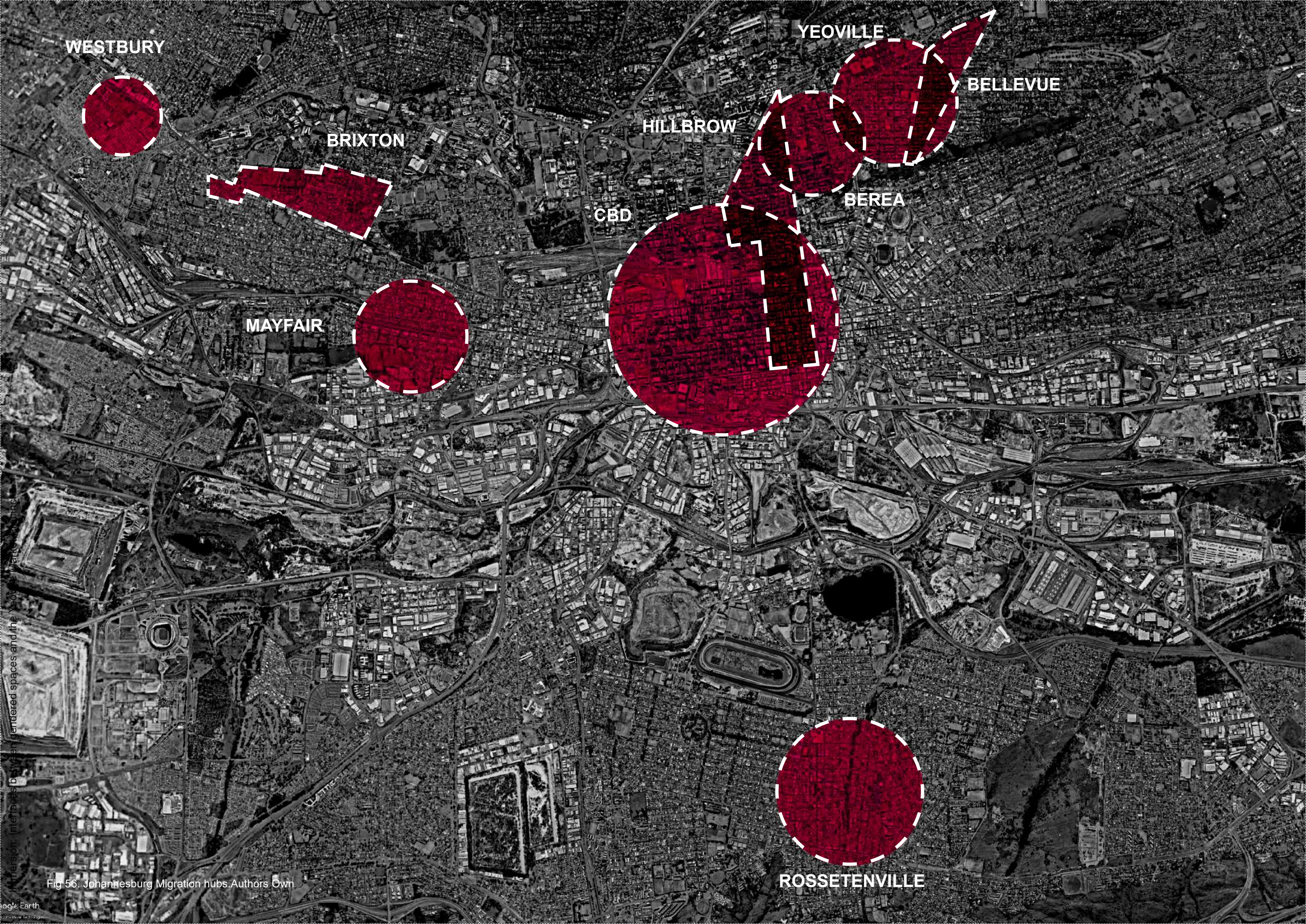


CHAPTER 4

SITE



Fig 55. Johannesburgs greater context & inner city urban fabric. Authors Own



WESTBURY

BRIXTON

HILLBROW

YEOVILLE

BELLEVUE

CBD

BEREA

MAYFAIR

ROSSETENVILLE

Fig 56. Johannesburg Migration hubs. Authors Own



Fig 57. Yeoville built fabric, red represents only pieces of land vacant. Authors own



Fig 58. View from second floor of backyard structure showing attachments to original bungalow and neighbouring bungalow. Authors Own (2018)

BUILT FABRIC

The red shown in the adjacent map shows the only vacant stands left in Yeoville. The area has a dense built fabric and comprises of single dwellings with backyard structures. Four to five-storey apartment buildings lie along Raleigh Street and on the periphery. Although, there is minimal vertical densification in the neighbourhood, because of the continued population growth owners and landlords are building more rental space horizontally. Either adding backyard structures or building attachments to single dwellings. Building regulations are ignored resulting in building footprints that completely cover stands. This has resulted in hazardous living conditions and put a strain on municipal services and infrastructure. Vertical extensions are emerging because of limited space, often building up on backyard structures rather than on the Bungalow.



Fig 59. Housing Typologies. Authors own



Fig 60. Apartment advertising specific to women Yeoville. Authors Own (2019)



HOUSING TYPOLOGIES

Housing typologies have evolved from single dwellings “the bungalow” for single households to housing multiple households. Rooms and passages are rented out and residents share kitchen and toilet facilities. Single flats can accommodate multiple households, sometimes accommodating up to 35 people. Because of this communal living, certain cultural groups prefer to live together. Gender plays a role too, seen in the images besides, of advertisements seen on various walls around Yeoville. Specifying gender, culture group and even marital status. Often where single rooms are shared amongst two or three people and amenities such as toilets and kitchens are shared, women would prefer to live together.

Fig 61. Housing Typologies. Authors own

Single flat-Single household

Apartments with a nuclear family type setting. Allows for a comfortable and private setting where family members afford to sleep in separate bedrooms. Sharing a single bathroom. With space for their own living/dinning room and kitchen. Often setting promotes secrecy (where domestic violence thrives) and no communal interaction.

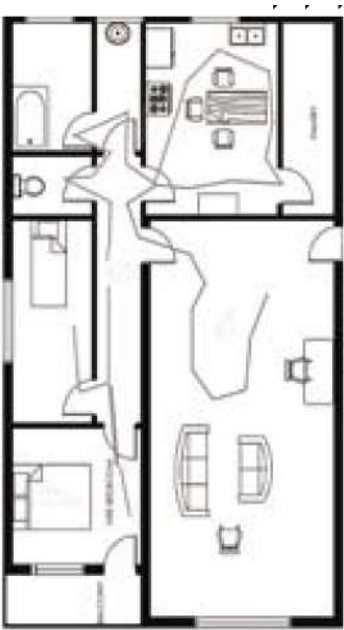


Fig 62. Single flat-single household Yeoville Studio

Single flat-Single person sharing

Flats where either a single person rents out flat with their own bathroom and kitchen. Or often single persons renting a room in a single flat, with a communal kitchen and bathroom. Single females often prefer sharing with other females and sometimes coming from the same country. (Fig. 47)

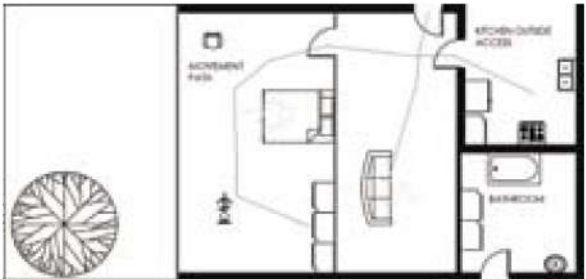
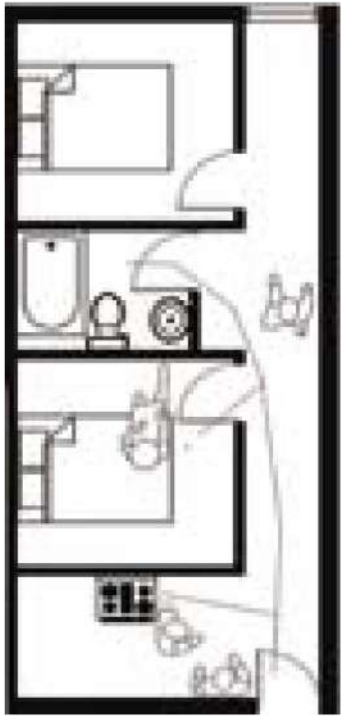


Fig 63. Single flat-single person sharing. Yeoville Studio

Single flat-Multiple household

This typology occurs often in flats in Yeoville and Hillbrow. Flats with multiple households, housing up to 30 people. Where passage ways are rented out and rooms divided by a curtain. Although non-secrecy and communal interaction is clear, it is outweighed by uncomfortable living conditions. Extremely dense living conditions and dependency on limited services.

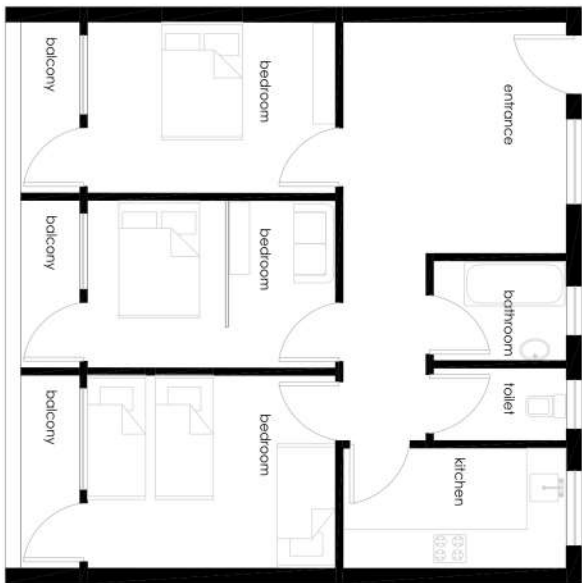
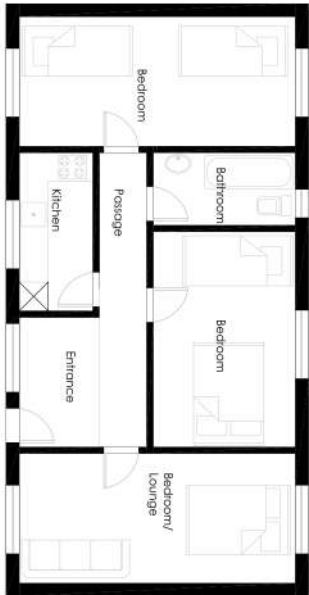


Fig 64. Single flat-single household. Yeoville Studio

Single dwelling & backyard structure-multiple households

This typology offers slightly better conditions, where there are formations of micro communities. Gendered spaces are observed where women congregate around kitchens and backyards. However, capacity is often pushed to the maximum.



Fig 65. Single dwelling and backyard structure-multiple house. Yeoville Studio



Fig 66. Mixed Use Apartment Blocks. Photograph by Kalumbu Kapisa (2014)



Fig 67. Radoma Court Apartment Block. Authors Own (2019)



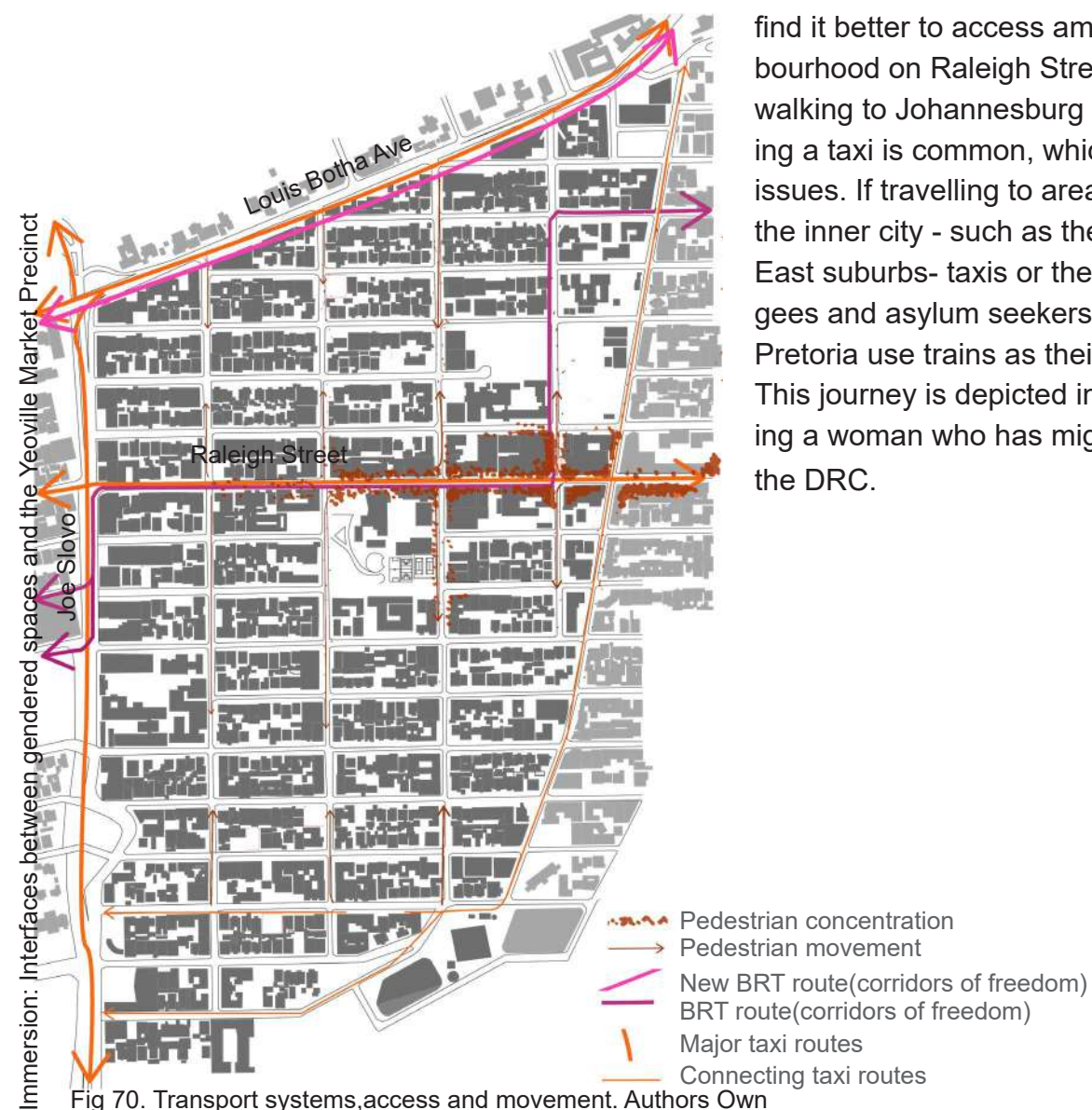
Fig 68. Backyard Structures. Authors Own (2018)



Fig 69. Single Dwellings. Authors Own (2018)

Access to transport and mobility is a huge concern to women in the city. It is where women are most vulnerable, especially those forced to use dangerous methods of movement. First, how does one get to ranking spots and BRT stations, is it close or does one have to walk long distances? Are these along safe and used streets? Second, are ranking spots and stations male dominated, are they well-lit and in the eyes of the public? How do you travel with children as a caregiver? Often women have to be strategic in how they access transport in certain parts of the city.

The predominant modes of mobility in Yeoville is through walking, taxi and bus use. The major route of movement is Raleigh Street. Taxi and bus routes are situated along Raleigh and Cavendish Road. Vehicle use for women does not occur often. Most prefer smaller foot prints because it is safer and cheaper, therefore they find it better to access amenities in the neighbourhood on Raleigh Street. To save on money, walking to Johannesburg CBD rather than catching a taxi is common, which comes with safety issues. If travelling to areas further away from the inner city - such as the North, South and East suburbs- taxis or the BRT is used. Refugees and asylum seekers who travel weekly to Pretoria use trains as their methods of transport. This journey is depicted in the next page following a woman who has migrated to Yeoville from the DRC.



“ Every week I would travel to Home Affairs in Marabastadt, I would wake up very early and walk with my four children to town to catch a train to Pretoria. But we would still find a long line and only to be turned away. For six months I would do this, and turned away every time. So I stopped going”

Fig 72. A play-write by Bobby Rodwell using real life stories of refugees seeking asylum in South Africa. Market Theatre (2019)

Fig 73. Actress playing a story of women who was raped by rebels in the DRC, travelled through five countries, with four children to seek asylum in South Africa. Nkateko MabasA (2019)



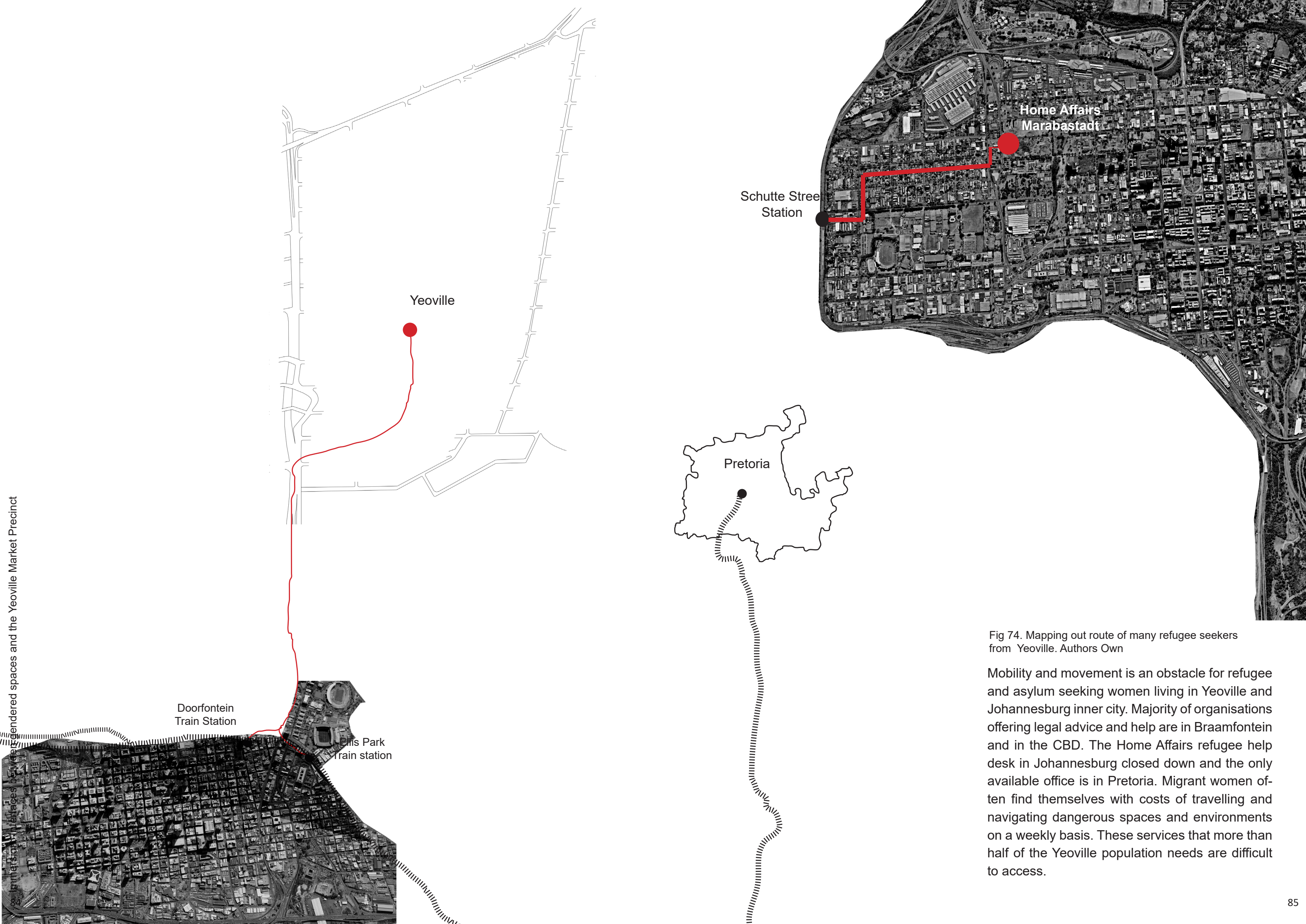


Fig 74. Mapping out route of many refugee seekers from Yeoville. Authors Own

Mobility and movement is an obstacle for refugee and asylum seeking women living in Yeoville and Johannesburg inner city. Majority of organisations offering legal advice and help are in Braamfontein and in the CBD. The Home Affairs refugee help desk in Johannesburg closed down and the only available office is in Pretoria. Migrant women often find themselves with costs of travelling and navigating dangerous spaces and environments on a weekly basis. These services that more than half of the Yeoville population needs are difficult to access.

The limitedness of green landscapes and public space in Yeoville shows the density in built fabric because of the continued need for housing in Yeoville. Therefore, there is great need for a relief from the density. Green spaces such as the Yeoville Park are not maintained because there is no sense of ownership by the community. Homeless persons and drug users take over parks and green spaces rendering them unsafe. The only green spaces left in Yeoville are under used and dead as they are far from the eyes of residents. Perhaps they should be rethought to include supporting programs that promote ownership over these spaces. For children play green areas are required near care givers or in areas where mothers feel that their children are being watched by trusted residents in the community. They can also provide learning spaces beyond the building and school. Not only for children but for their caregivers.



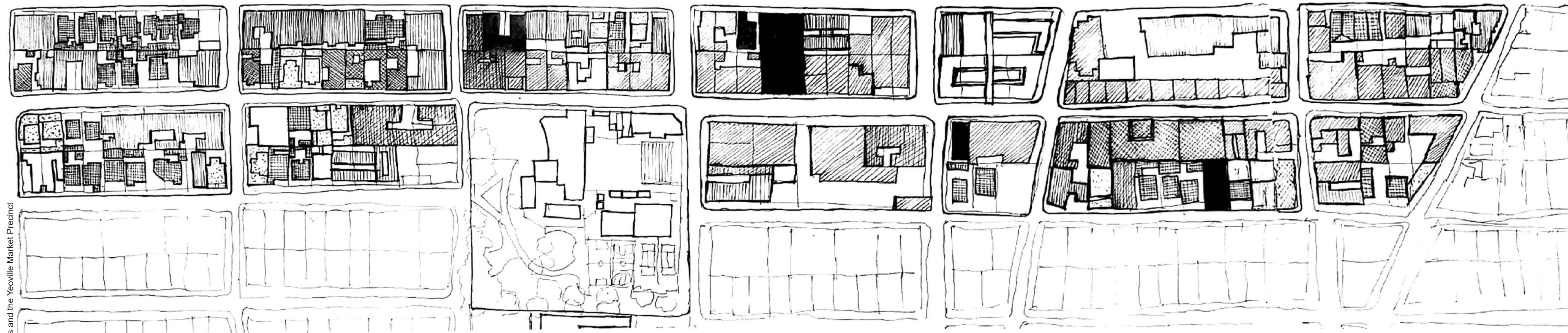
Fig 75. Green Areas and Landscape Yeoville. Authors Own

Yeoville park and recreational centre open to public use.



Yeoville boys school fields. Not open to the public use.

Fig 76. Green Areas and Landscape Yeoville. Authors Own



- Apartment Block
- Single Dwelling & Back Yard Structure
- Leisure & Entertainment
- Dwelling with front Store
- Retail
- Community Amenities & Services
- Vacant Land/Building

Fig 76. Hand drawing street use. Authors Own

RALEIGH STREET USE

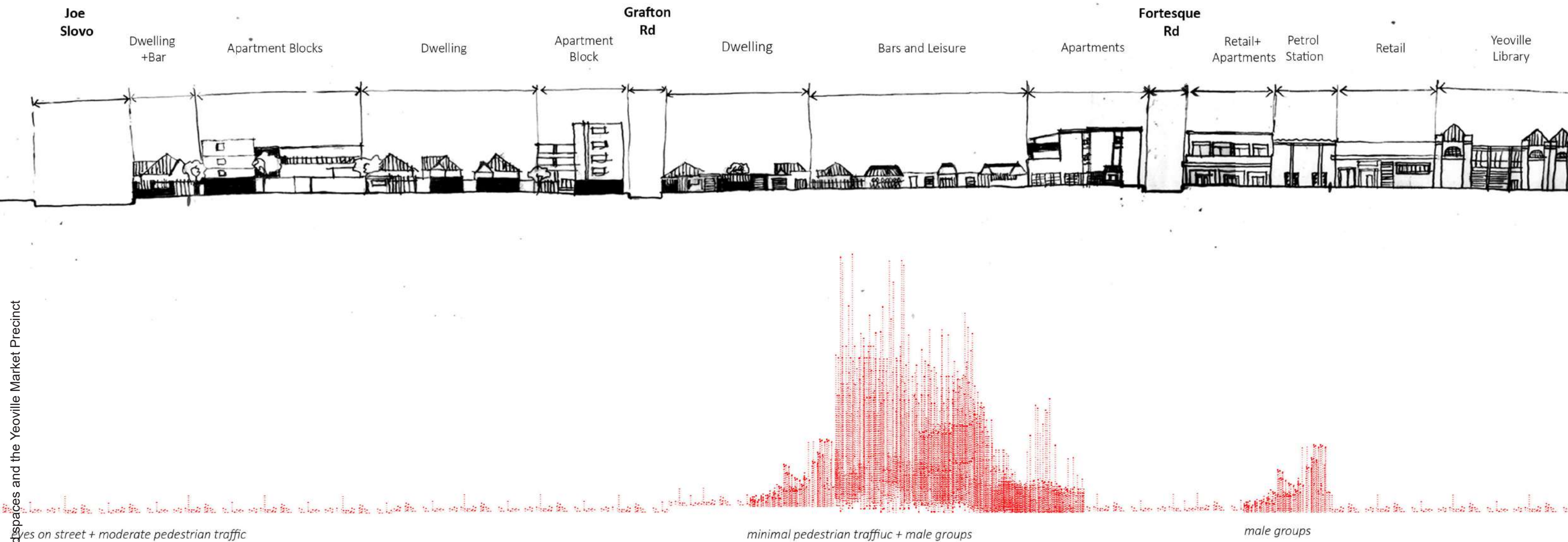
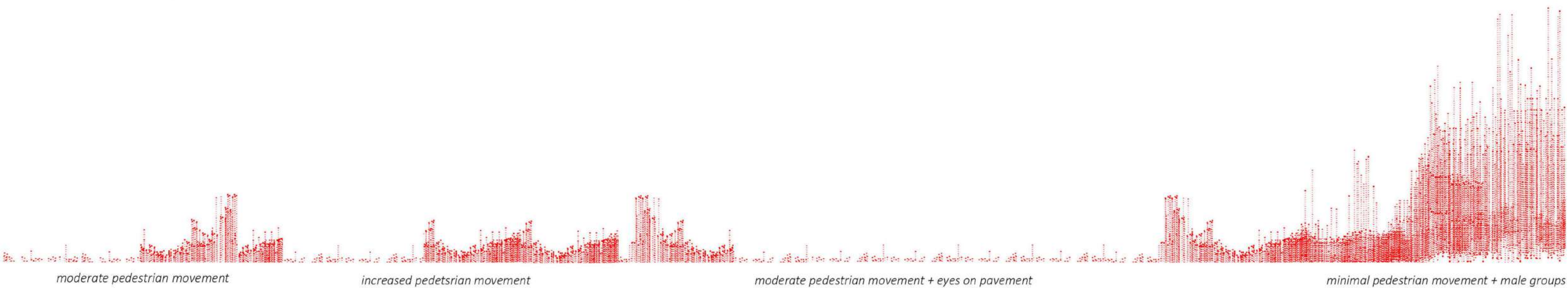
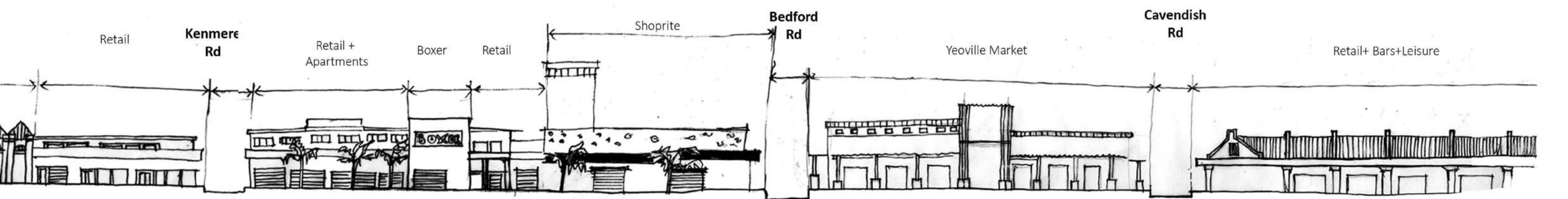


Fig 78. Street Analysis: Personal Experience. Authors Own

RALEIGH STREET: MY EXPERIENCE



SITE SELECTION

The decision to choose this site is based on the following factors:

- Proximity to a large group of women using the Yeoville Market.

- Supporting Yeoville Market and Shoprite street edges. In comparison to challenging street conditions on immediate site.

- Opportunity to redress and reimagine these street conditions together with challenging program.

- Central to community anchors: 1. Yeoville Library 2.Yeoville Community and Recreation Centre 3.Yeoville Police Station 4.Yeoville Clinic 5. Yeoville Boys Primary School.

- Proximity to transport nodes and routes.



Fig 79. Existing buildings on site, Authors Own.

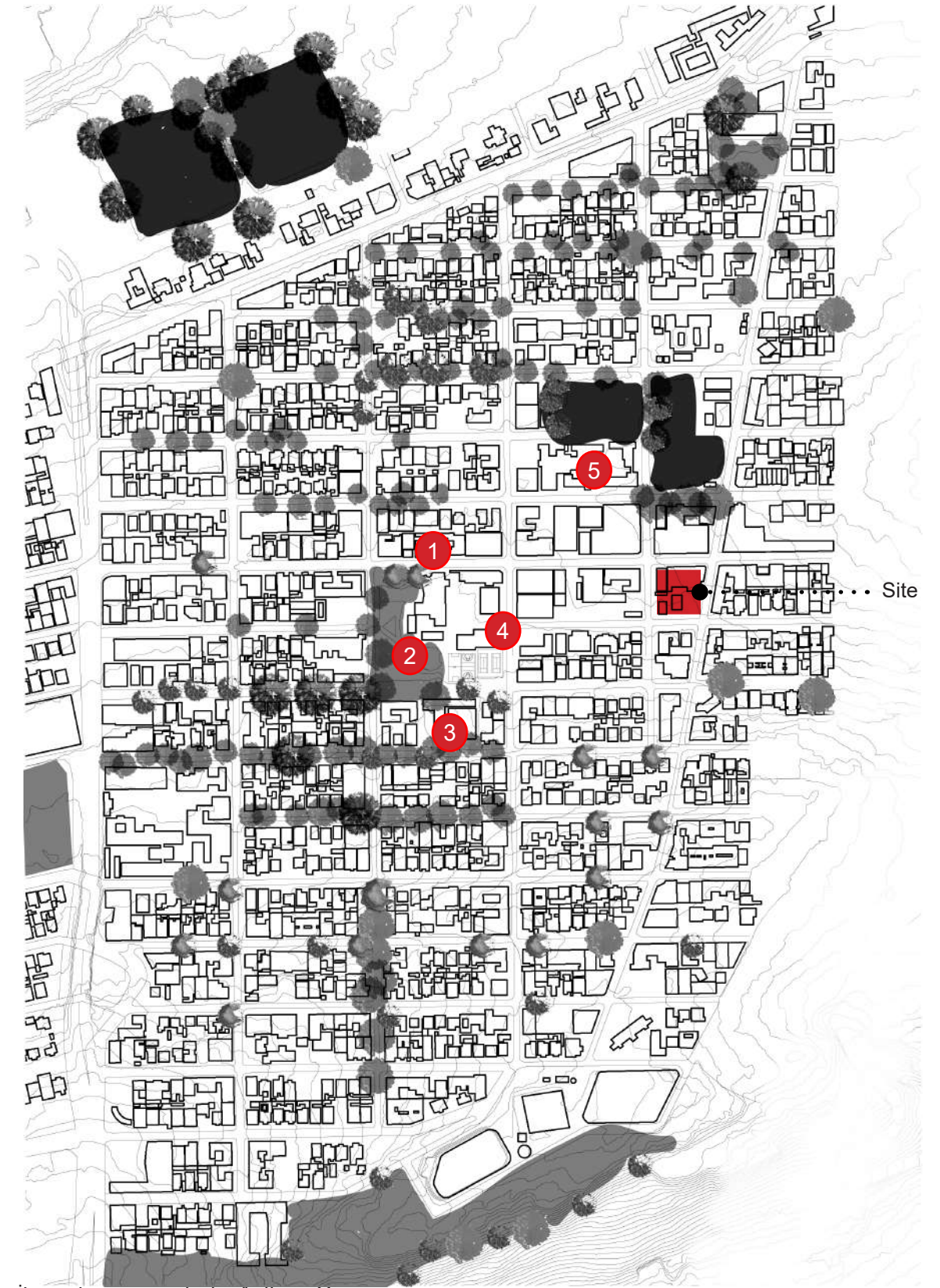
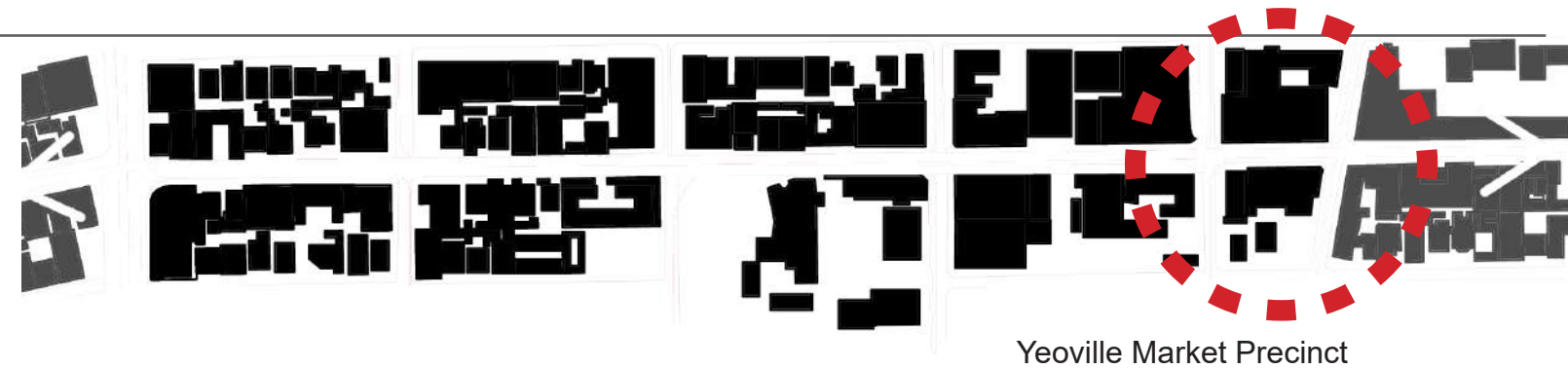


Fig 80. Community anchors around site. Authors Own.



RESIDENTIAL

SUPA SAVER

OLD UNOCCUPIED
PUBLIC LIBRARY

APARTMENT BLOCK +
RETAIL

YEOVILLE LIBRARY

JET STORE

APARTMENT BLOCK &
RETAIL

SHOPRITE

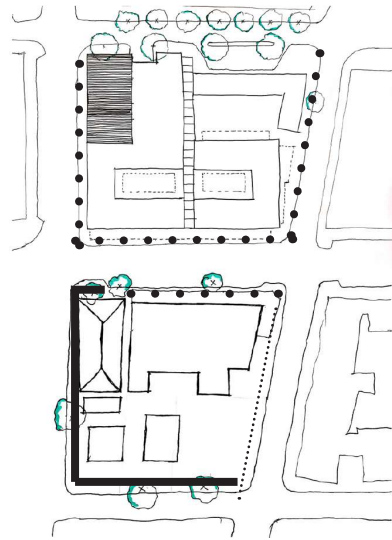
YEOVILLE MARKET

APARTMENT BLOCK

PICCADILLY CENTRE
& CHRIST EMBASSY
CHURCH

YEOVILLE BOYS
PRIMARY SCHOOL

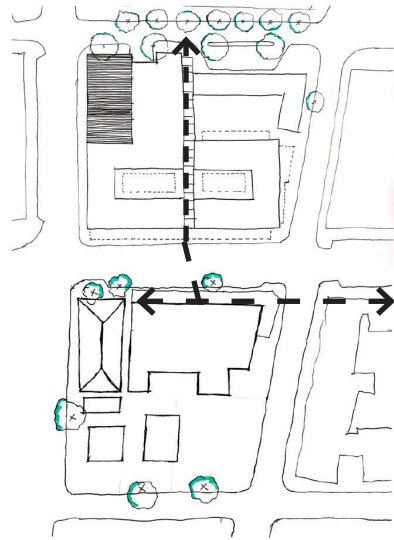
Fig 81. Existing buildings on site and surrounding. Google Earth Image



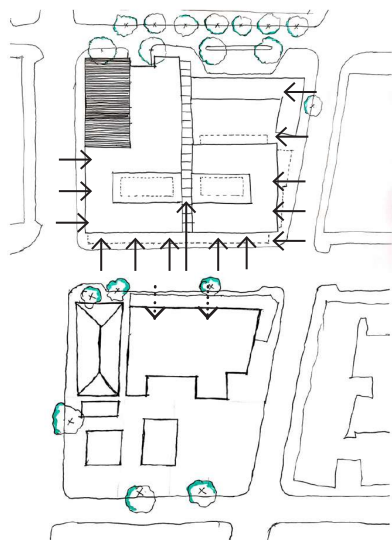
.....
Street edges
to allow traders
near passing
traffic

.....
Walls and gate
but still passen-
ger traffic

—————
Blocked access
High walls and
gates, no seat-
ing go lights

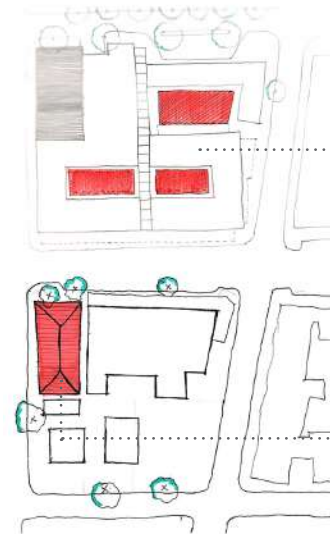


Connection and axis
between taxi rank faci-
ties and Rockey Street.
Axis disrupted across
street



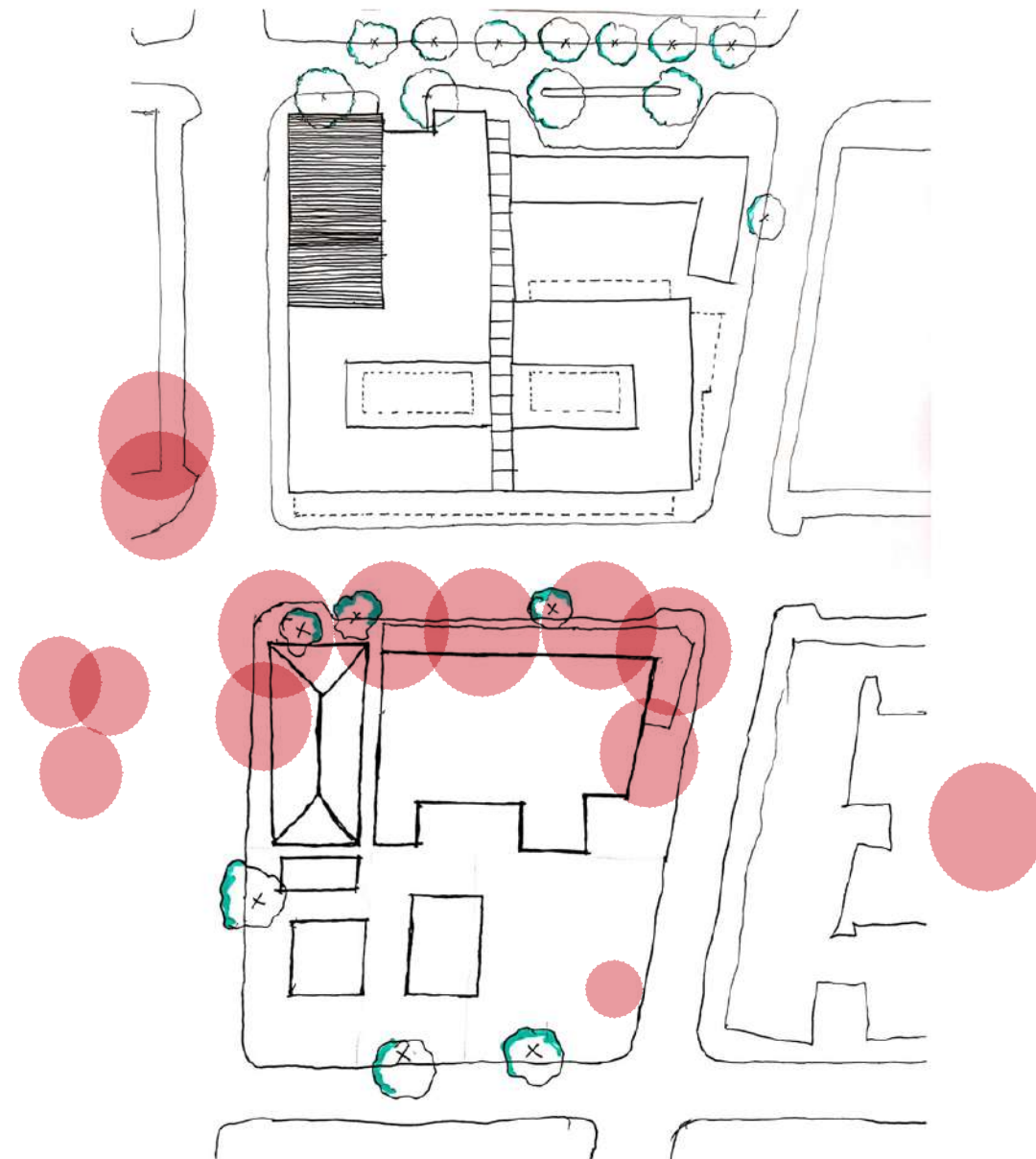
→
Pedestrians
filter through
market at many
points.

↓
Access only at
certain points



Open courtyards intended
as gathering spaces, re-
purposed.
Informal and formal ad-
ditions for more trading
space

Old library hijacked by drug
users and homeless men.



STREET TRADERS



Fig 82. Ralieggh Street. Authors Own (2019)



Fig 83. Raleigh Street view from market. Authors Own

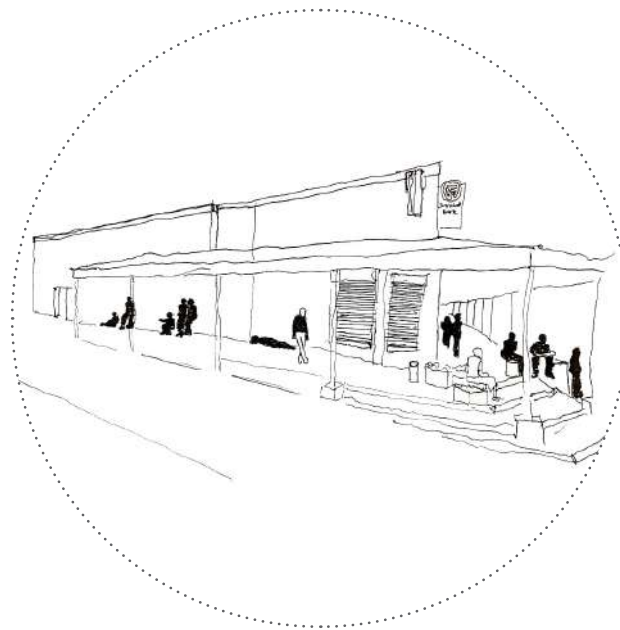
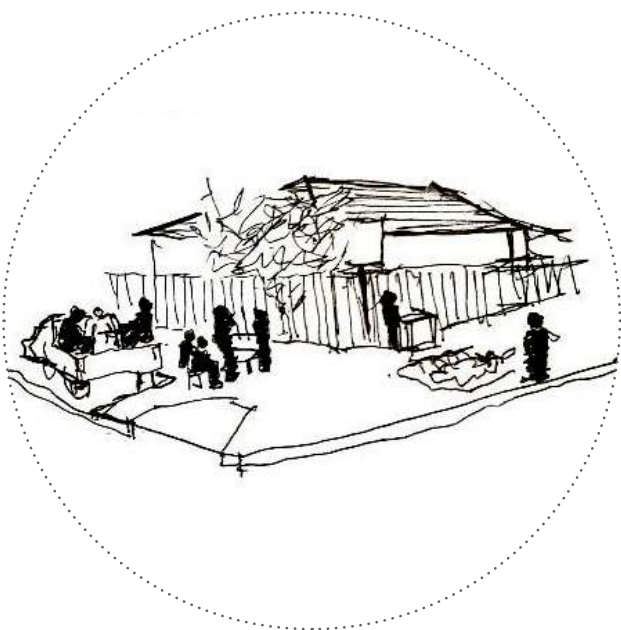


Fig 84.

Fig 86. Corner Cavendish & Raleigh Street. Authors Own Image & Sketch

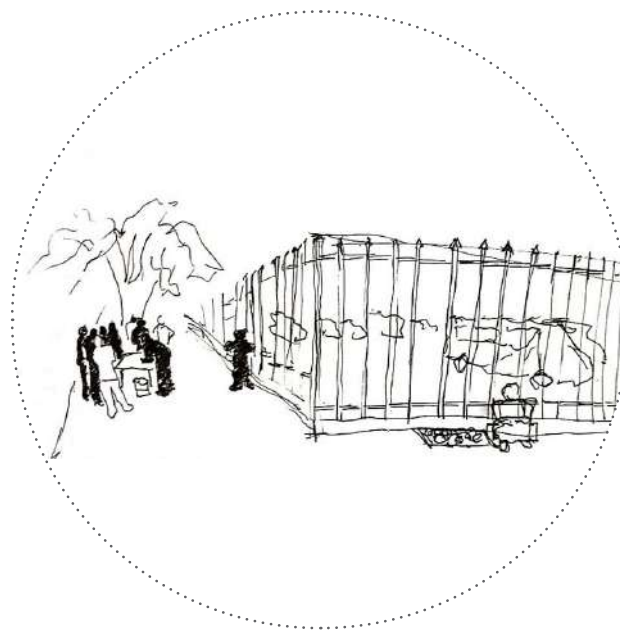


Fig 84-85. Corner Edges on Bedford and Raleigh Street. Authors Own Images & Sketches (2019)

Fig 86-87. Corner Bedford and Hopkins Street. Authors Own (2019)

Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct

CHAPTER 5

WOMEN IN YEOVILLE

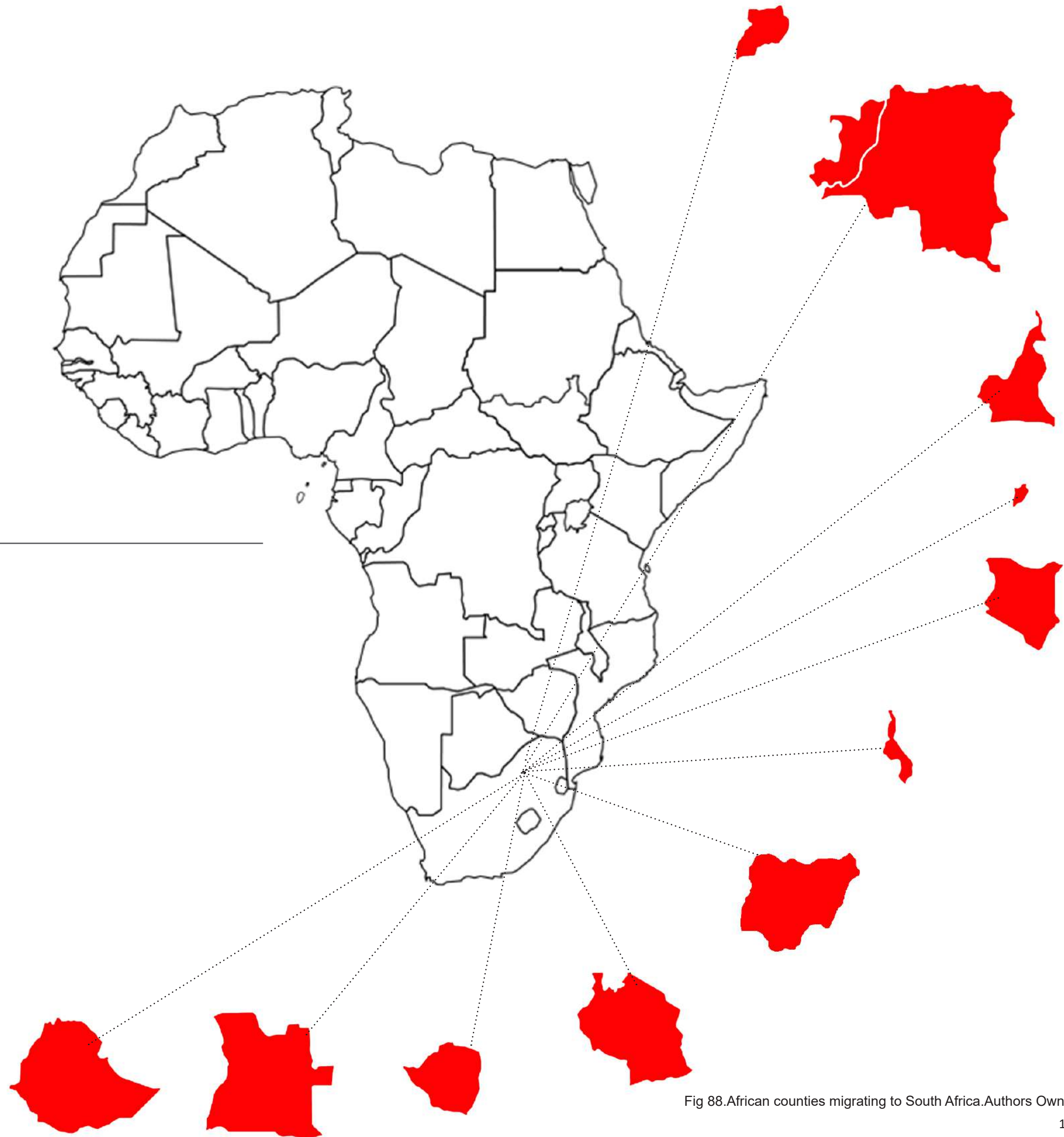


Fig 88.African counties migrating to South Africa.Authors Own

5.1

GENDERED MIGRATION ANALYSIS

Studies have attempted to document different patterns of migration, the factors that cause migration. Theorists have studied the impact of migration at the point of origin and destination across multiple fields and industries. (LINGAM, 1998, p. 715). There is significance in the manner and reasons in which women migrate into urban areas and the city. Whether migrating as a household or as an individual, in border or international, or as an economic migrant versus an asylum seeker. In line with the feminist debate in architecture emerging in the 1970s; so did gender analysis in migration. An emphasis on gender as a systematic construct of relations which was influencing and influenced by migration was adopted. “There is a connection between the decision to migrate and the post-migration experience with gendered systems of inequality in households, labour markets, and cultures.” (Nawyn, 2010, p. 750) Further Nawyn describes “gender relations shift as a consequence of migration and settlement. (power,

production, emotional, and symbolic relations) that interact with one another in social institutions, with each institution having a particular regime of gender relations that shapes how people’s gender performance is constructed.”

Given economic requirements for dual incomes, the breakdown of social and familial relations due to migration and mobility, and the increasing aspirations and professionalisation of many women, now more than ever, women are engaged in multiple spheres of work, home, community, and politics, straddling realms and heading households.

Through migration into urban areas, whether local or international, women subject to extreme gender roles, for instance, Islamic women are introduced to new architectural typologies. From spending most of their time in certain home typologies to apartments in residential blocks, refugee camps, and slums. Often having to make

a living for themselves and the family, typologies such as office blocks, malls, streets, and public areas become a significant part of their lives. And more often typologies relating to sensitive issues; shelter for abused women, clinics, police stations, refugee offices, and departments.

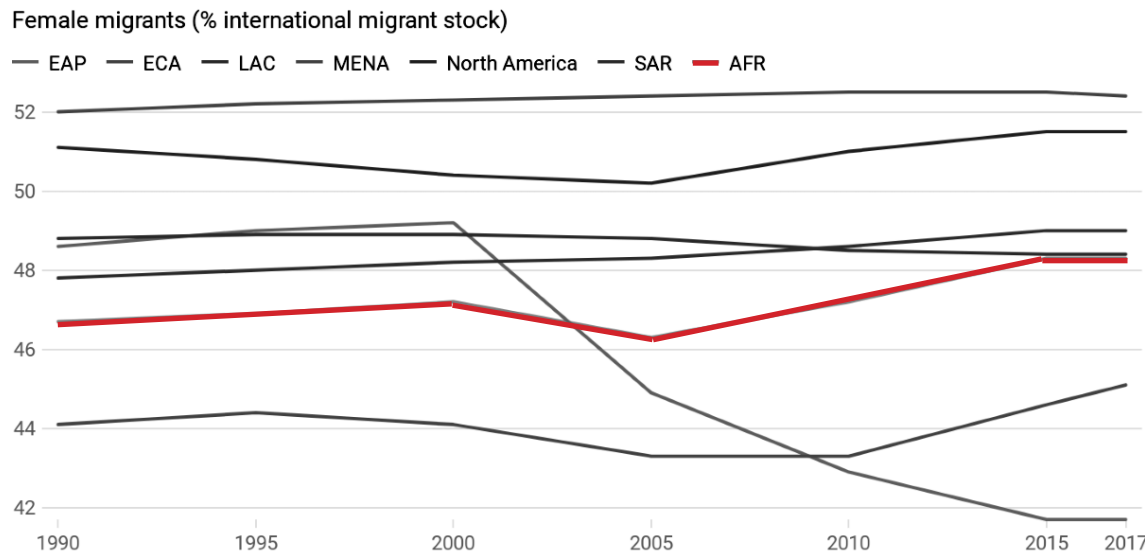


Fig 89. Female composition of international migration. Showing an increase in Africa from 2015. By Gender Statistics database (2018)

5.2 MIGRATION: JOHANNESBURG

Since the end of apartheid, the city has begun to achieve greater gender parity and in 1996 had about 4700 more men than women. Since then the demographic profile has shifted, suggesting that most new entrants to the city were women. (Rubin, 2017 p. 22). The study by the GCRO Motherhood in Johannesburg maps the experiences of females as caregivers and heads of households. The research briefly discusses female migration in South Africa which alters settlement patterns “Fragmented spatial structure, a legacy of apartheid racial planning. But also, over the last twenty-plus years of democracy, the divisions have shifted along lines of class. The unequal geography of the city forces mothers to adopt various strategies to access employment opportunities, child care and quality education for their children” (Rubin, 2017 p.07)

The population of Yeoville comprises 18 884 people, 9110 of the population is women. Of this 50% are cross border migrants with 24% migrating from SADC countries. 46% do not hold official South

African Citizenship (Census 2011). The next section discusses the complexities and tensions of citizenship. Citizenship through ways of belonging, movement and ambition, livelihood and rights in Johannesburg and Yeoville.

	Total women migrants	Women migrants as % of total population	Women migrants as % of total migrants
1990	446 656	2.3	38.4
1995	392 724	1.8	39.1
2000	401 793	1.7	40.1
2005	498 717	2.0	41.2
2010	880 757	3.4	42.0
2015	1 694 596	6.0	44.4
2017	1 792 275	6.2	44.4

Fig 90. Women migrants in South Africa. UNDESA

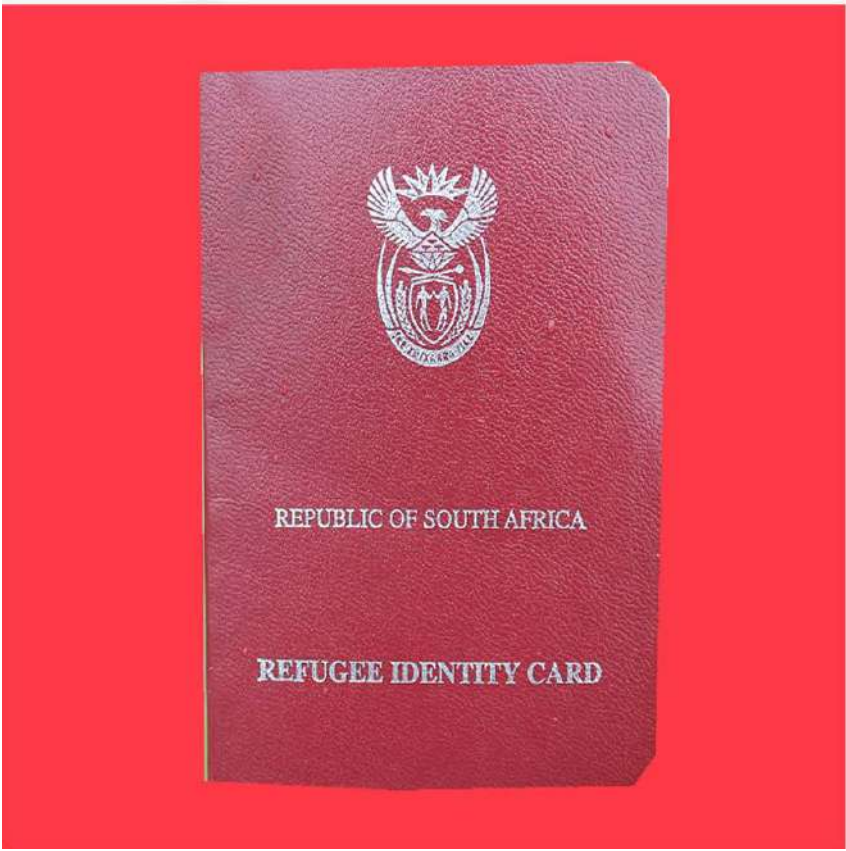


Fig 91. The Red Book. Qiniso Mbili (2010)

CITIZENSHIP

There are implications for citizenship rights and obligations of the growing movement across national borders of migrants and asylum-seekers, the increasingly multi- ethnic nature of many societies and the claims of indigenous peoples. (Lister, 2003 p.2) Citizenship is expressed in ‘spaces and places’. Despite the relationship between individual and state and the practicality/ expenses of getting legal status, what about the relationship of individual citizens within a community? As a migrant woman in Johannesburg, whether from rural South Africa or across the border. In her feminist approach to citizenship Lister (2003) explains: These perspectives are mirrored at the level of the individual in the idea of ‘lived citizenship’, that is the meaning that citizenship actually has in people’s lives and the ways in which people’s social and cultural backgrounds and material circumstances affect their lives

as citizens. Citizenship struggles are thus also shaped by cultural, political and historical context. This struggle in ‘lived citizenship,’ is prevalent in South Africa. For example, the South African Constitution guarantees the right of access to health care for everyone including migrants with official documents. However, because of xenophobic violence, insensitive health workers, and social exclusion prevent migrant women and young women from seeking medical attention. (Munyewende et al., 2011 pg.3) “Although asylum seeker permits allow the holder to work and study in South Africa, few service providers, such as banks and state hospitals, as well as landlords, recognise these documents as invalid forms of identity. As such, at an everyday level, asylum seekers are unable to open bank accounts, sign a lease, get free health care or walk the streets without the fear that they will be detained by police, have to

DEPARTMENT OF HOME AFFAIRS
REFUGEE RECEPTION OFFICE
JOHANNESBURG
2007-12-21

Ben/010924/98
Room 26

REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF HOME AFFAIRS
ASYLUM SEEKER TEMPORARY PERMIT
Section 22 of the Refugees Act No. 130 of 1998

REFERENCE NO: JWS086
JWS1966

Permission is hereby given to the following person as holder of this permit to remain in the RSA or part thereof as indicated in Part B hereof.

A. PERSONAL PARTICULARS OF HOLDER

SURNAME: [REDACTED] FIRST NAME: ROSETTE
RESIDENTIAL ADDRESS: 14 FORLENGHE YOOVILLE JOHANNESBURG
DATE OF BIRTH: 18/08/81 AGE: 22 GENDER: Female
NATIONALITY: RWANDA COUNTRY OF ORIGIN: RWANDA
PASSPORT OR TRAVEL DOCUMENT NUMBER: NONE PLACE OF ISSUE: NONE EXPIRY DATE:

B. CONDITIONS

1. The holder of this permit may remain temporarily in the Republic of South Africa for the purpose of applying for asylum in terms of the Refugees Act No. 130 of 1998.
2. The permit holder shall, without prejudice to the above, have the right to work or study as duly authorised by a Refugee Status Determination Officer if his/her application for asylum has been accepted.
3. The holder shall report only to the office where application initially submitted as indicated on back and shall ensure that the office is duly advised of his/her place of residence.
4. The permit entitles the holder to: EMPLOYMENT AND STUDY
5. Failure to comply with the conditions of this permit will be dealt with in terms of Section 37 (b) and Section 38 (b) of the Refugees Act 1998.
6. All permit holders are obliged to respect the laws of South Africa.
7. This permit will lapse if the permit holder does not appear in person at the designated Refugee Reception Office or if he/she departs from the Republic without prior authorisation from the Director-General.
8. All other permits issued prior to the issuance of this permit are hereby nullified.
9. Other comments: Submit the decision Room 26
10. I, the holder, ROSETTE, and agree to the above conditions and understand that a breach thereof will result in an offence in terms of Section 37 (b) of the Refugees Act 1998.

PLACE: Crown Mines DATE: 18/08/07
CAPTURED BY: [REDACTED] PRINTED BY: [REDACTED]
REFUGEE RECEPTION OFFICE: [REDACTED] PERMIT NO: [REDACTED]
APPOINTMENT REFERENCE NO.: [REDACTED] DATE: 18/08/07
PLACE: Crown Mines

ORIGINALLY ISSUED ON: [REDACTED] NUMBER OF EXTENSIONS: [REDACTED] PERMIT EXPIRY DATE: 28/12/08

PERMIT HOLDER SIGNATURE: [REDACTED] REFUGEE OFFICER SIGNATURE: [REDACTED]

103123595 103123605

Fig 92. Section 22 Asylum Seeker Temporary Permit. Kihato (2009)

pay a bribe or be denied access to essential services.” (CORMSA, cited in Kihato 2009 p. 124).

For many migrants in South Africa, obtaining legal rights continues to be an obstacle to go around, there are few red ID books that go around. Attending a lecture on working with migrants in Johannesburg, Roshan Dadoo, expressed how issues such as the closing down of the refugee reception desk by the Johannesburg Home Affairs, the backlog in government assessing if one is a refugee or not; results in waiting periods of up to 5-10 or more years to get legal documents. What happens in this period? What Kihato (2009) would call a “liminal state”; taking countless trips to Pretoria (at an expense) to renew documents, while acting is a caregiver, making a livelihood often in informal ways and trying to settle in a new space.

While conducting research interviews for *Bungalow Urban Compounds: Transforming the Bungalow in Joburg*, more than half of the participants were female migrants. Simply of the reason, that majority of interviewees who were available are married women or in relationships where the man goes to work during the day while they stay at home.(Mogale &Tsefu et al.,2018 pp.86-98) This to me presented two extremes, women who are subject to very traditional gender roles and those in forced areas of work if they had the option wouldn't be their first choice.

However amongst all the women stood out common concerns; one safety and health for their children and themselves, two the need to make money, three the need to create a home in dense living situations and last although not explicit to stop walking on eggshells because of being characterised as ‘illegal’.



Fig 93. Common shared spaces for women in dense living conditions, Yeoville.
Authors Own. (2018)



Fig 94.

I visited the stall on a Sunday. I found a woman with a small frame, vigorously sweeping the floor. This was Isabels (not her real name) sister. I told her I was looking for Isabel, who would make my garment. She was not there, but her sister expressed she will be there in the afternoon and insisted she takes my number to make sure I come back. I agreed and came back the same afternoon. This time the stall was slightly busier. On the one end was Isabel's sister grinding cassava into a fine powder and chatting with a few ladies waiting for her to finish. In the one corner was Isabel quietly sewing away on her machine. Isabel sister quickly noticed me and with a friendly smile, loudly shouted across the stall "My sister, I told you she will be here! Isabel!" We discussed what I wanted and agreed on collecting my garment on Monday. On Monday the stall was full and a lot busier. Isabel too preoccupied to even notice me. I noticed an older woman, who I later learned was Isabel's mother. She was friendly but had a certain asser-



Fig 95.



Fig 96.

tive aura to her. That is probably why Isabel and her sister were so preoccupied, unlike when she was not around. She came in and out the stall; she seemed to work from the cooked food section of the market. Isabel was more reserved, but I could have short conversations with her. From these conversations, I learnt that her mother was the first to arrive here from Congo. She opened up the stall by herself, selling beans, palm oil, dried fish, rocks/soil to eat or have you cassava ground into a powder. Later Isabel and her sister joined their mother in South Africa. They now take care of this stall, Isabel runs her seamstress business from the same stall and their mother runs another cooked food stall on the other side of the market. After about my fourth visit, her mother noticed the short conversations we had. She seemed concerned and muttered with concern something to Isabel. Feeling uncomfortable, I let Isabel know I will no longer wait for the deok she was quickly making for me, and I will rather fetch it on

another day. The next time I came, I sensed a reservation from both Isabel and her sister. I was reminded of the same reservation I was met with in the previous years while conducting interviews for another research project with women who also lived in Yeoville. I realised that this is the result of the constant uncertainty and fear they have to deal with every day. I was also reminded of a quote by Matsipa (2014) who also engaged with black women working in Johannesburg inner city:

"Her silences and evasion of certain prying questions about the legality of her building & salon and her neighbours spoke to her precarious position in the city."

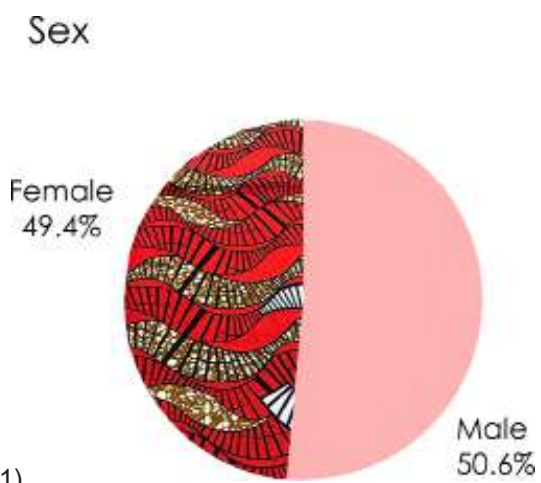
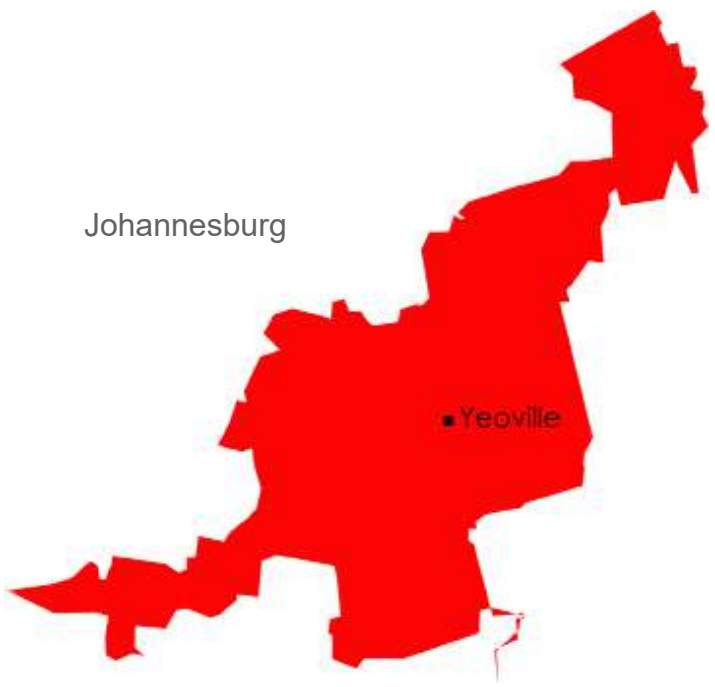
Fig 94 -96. Isabel, Sister and Mother working from the stall. Authors Own (2019)



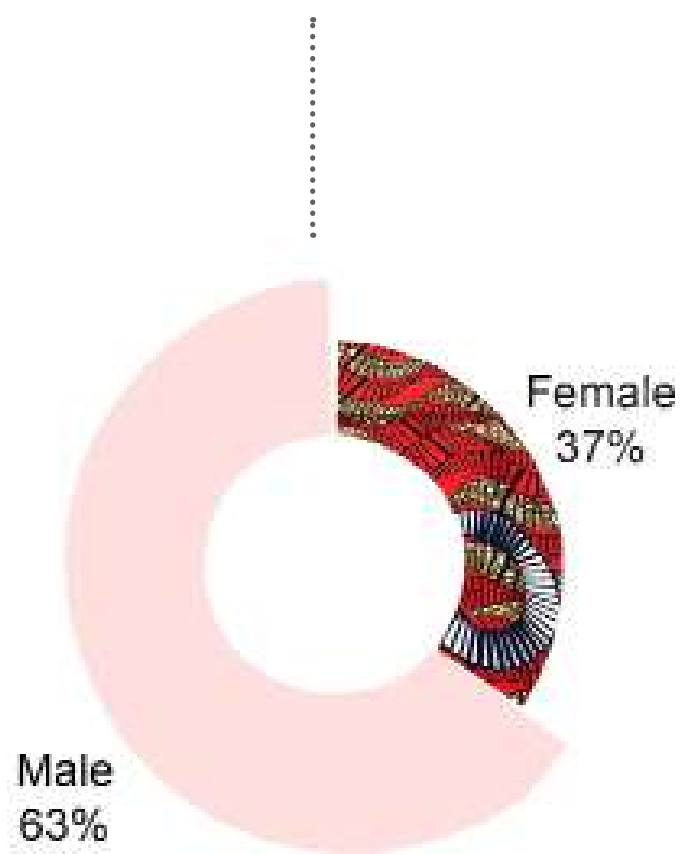
Fig 97-106. Products sold in Isabels stall. Authors Own (2019)



5.4
DEMOGRAPHICS



HOUSEHOLD HEAD
Being the head of a household emphasises the necessity of earning an income and assisting to support the household financially. This highlights notions of identity and ideology, which prioritise either child care or financial support.



AGE
Majority of the female populace ranges between 25-35. Often single parents or just starting off their families, so financial well-being is a great concern.

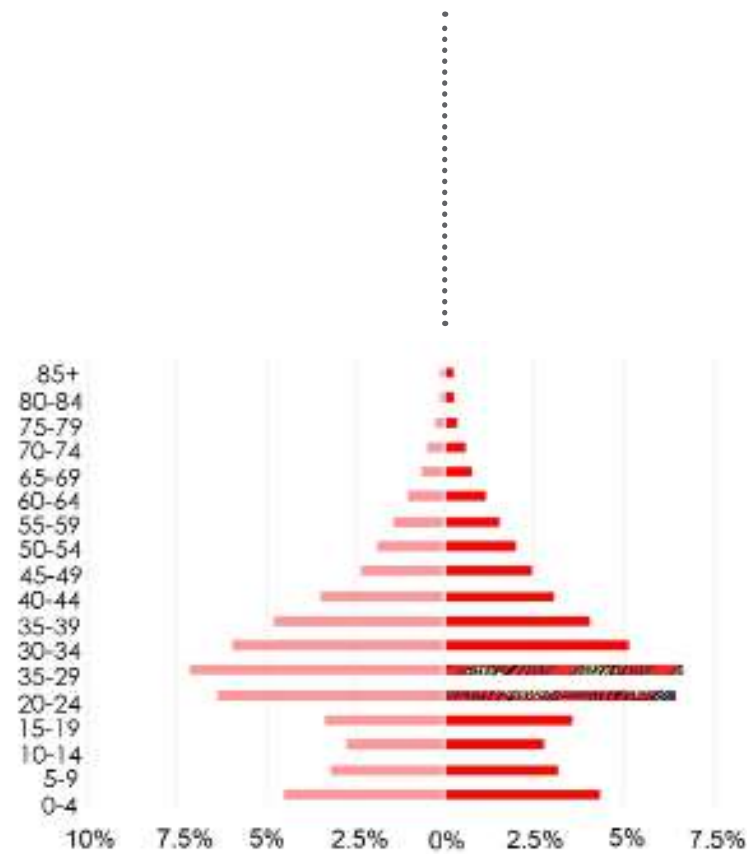


Fig 107-110. Authours Own. Stats sourced from Stats SA (Census 2011)

EMPLOYMENT SECTOR

Due to factors that make it difficult for women to enter formal professions, often women begin their working careers in the informal sector.

HOUSEHOLD SIZE

Household sizes are often small, however sometimes women are not only supporting family in Johannesburg but also send money back home.

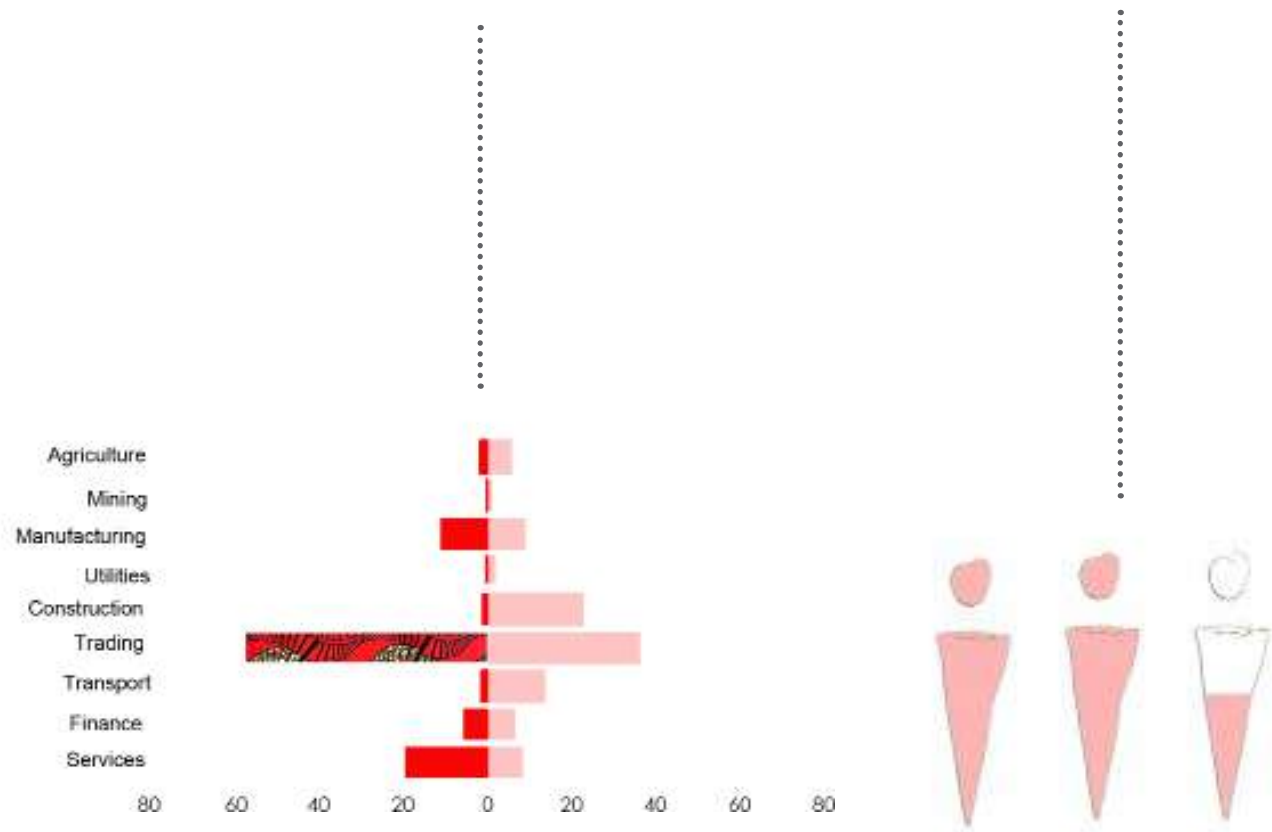


Fig. 113

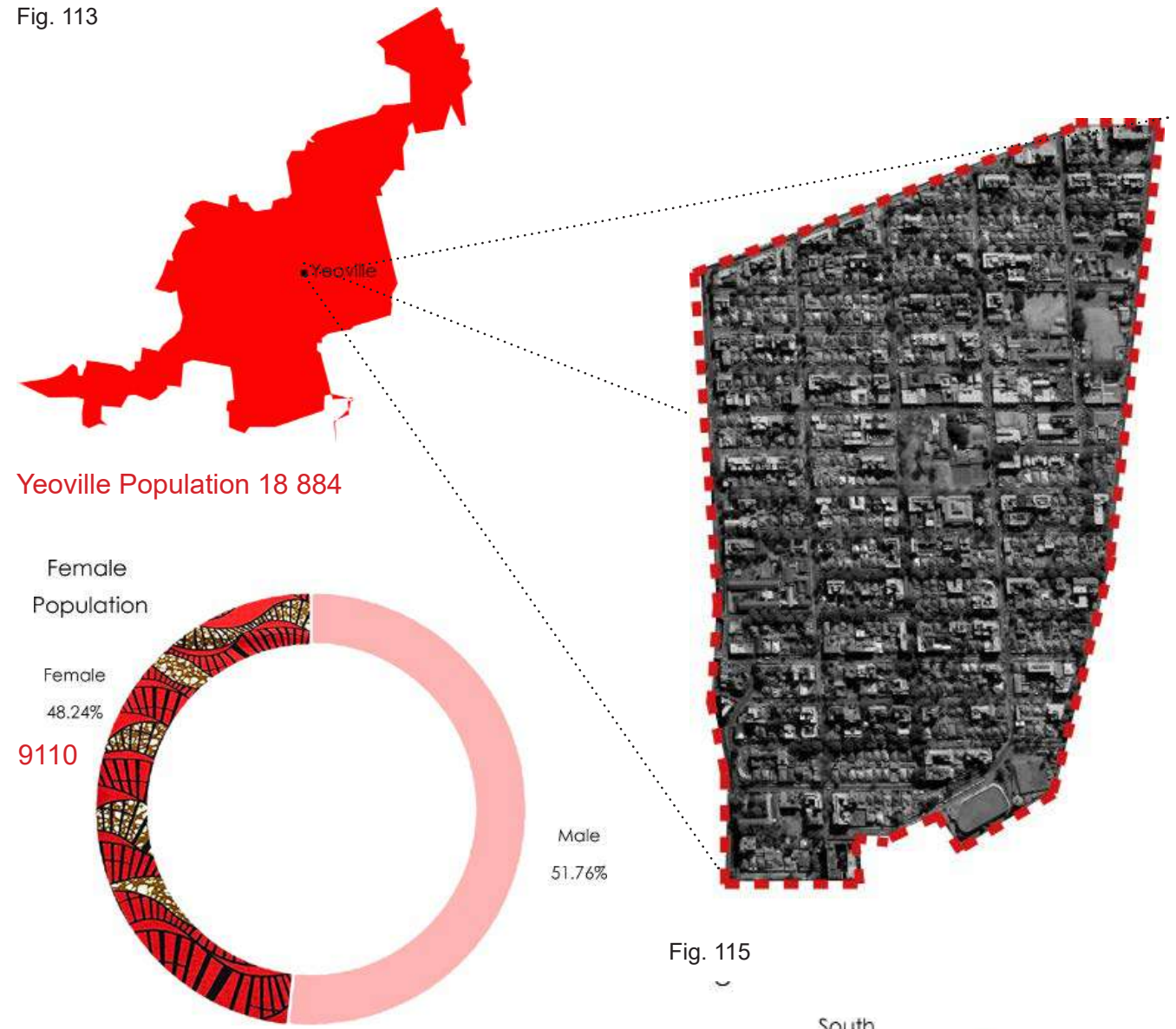
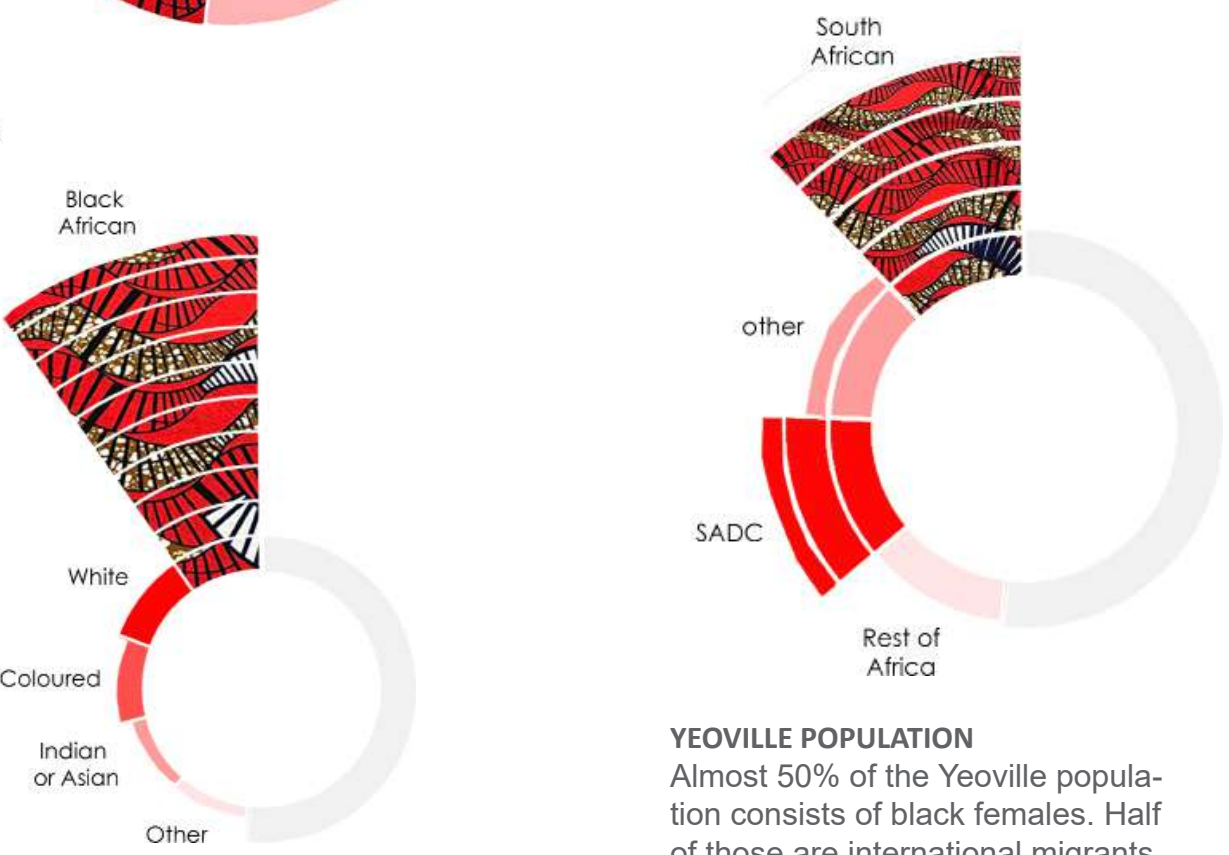


Fig. 114
Race



YEOVILLE POPULATION
Almost 50% of the Yeoville population consists of black females. Half of those are international migrants the other half are in border migrants.

Fig.111-115.Computer generated illustrations by Author.Stats sourced from Stats SA (Census 2011)

5.5

PROGRAM

The chapters leading to now have discussed and detailed the context in which women migrating into Yeoville live in. Detailed and discussed under the following categories:
-Observation/Mapping/Interactions
-Statistical Demographics
-Theoretically
To develop a program responsive to the women living in Yeoville,I broke down the findings & needs under each category. Programs are designated as a response to findings and needs.

Observation/Mapping/Interactions

Findings	Needs	Program
Limited access to adequate legal abortion and reproductive clinics	Safe and inclusive access to reproductive healthcare.	Reproductive health clinic.
Small scale entrepreneurship.	Grow business and make more money.	Small business incubator.
Difference in entrepreneurial and coping skills across different cultural groups.	Transferring and sharing of skills across groups.	Seminar and meeting rooms.
Limited safe outdoor and green play spaces for children.	More safe outdoor play spaces and public child care facilities.	Child play and care facilities.
Substantial amount of female traders on sidewalk.	Make money safely and securely	Additional trading/retail space.

STATISTICAL

Findings	Needs	Program
37% Households are female headed.	Financial security, business and entrepreneur opportunities.	Small business incubator. Additional trading/retail space. Information Centre
Majority of the female populace ranges between 25-35.	Reproductive health education & care Education advancement. Job Opportunities.	Reproductive Health Clinic. Digital Labs & Seminar Rooms. Information Centre.
60% females work in informal trading.	Make money safely and securely. Business advancement.	Additional trading/retail space. Small business incubator.
50% are cross border migrants with 24% migrating from SADC countries. 46% do not hold official South African Citizenship	Access to health care for women. Citizenship & Legal assistance.	Reproductive Health Clinic. Legal assistance offices.

THEORETICAL

Findings	Needs	Program
Marginalisation of gendered spaces in public	Democracy of gendered and contested spaces.	Reproductive clinic.
Unresponsive and non-critical architecture	Critical and responsive architecture to demographic change	Women friendly street edges.
Historical marginalisation of women	Re-adress the inequalities	Women's complex
Gendered migrant analysis	Assistance integrating into a new society	Women's complex

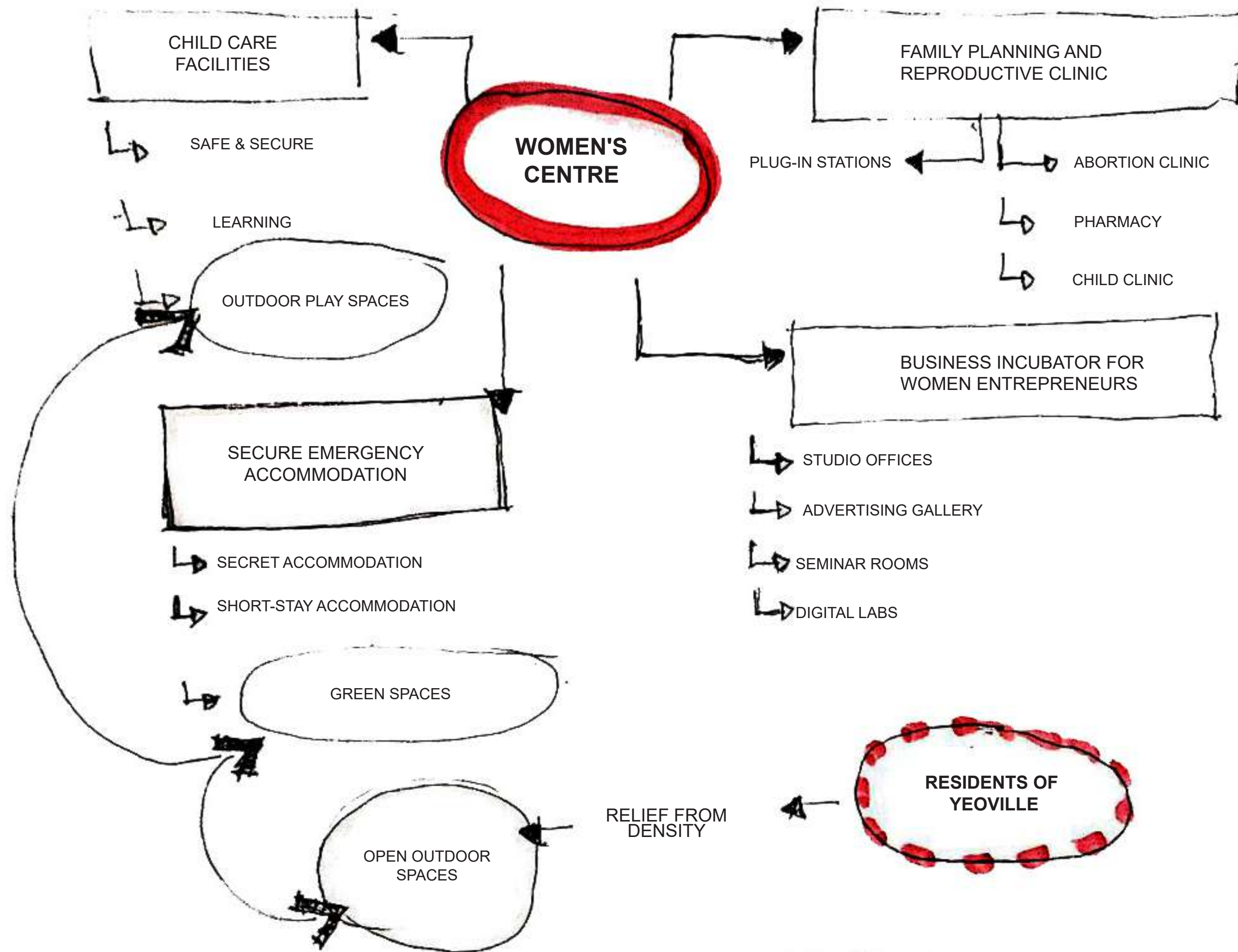


Fig. 116. Program Exploration. Authors Own

REGIONAL NETWORKS
JOHANNESBURG INNER CITY

Regional Networks

Informal Markets

1. Metro Mall Taxi Rank

2. Faraday Market & Taxi Rank

3. Kwa Mai Mai Market

4. Park Center Market

5. Hillbrow Market

6. Yeoville Market & Taxi Rank

Childcare organisations and facilities

1. Johannesburg child welfare

2. Registered & unregistered creches

Refugee Organisations

1. JRS

2. Sonke Gender Justice (refugee health and rights)

3. AFRICAN DIASPORA FORUM (ADF) WOMEN'S LEAGUE

4. Consortium for Refugees and Migrants in South Africa

5. Group of Refugees without Voice

6. Refugee Children's Project

7. Lawyers for Human Rights

8. Black Sash

Clinics & Research Institutions

1. Hillcare Women's Clinic

2. Marie Stopes Clinic for Reproductive Health

3. Charlotte Maxeke Johannesburg Academic Hospital

4. Ibis reproductive health South Africa

5. WRHI Hillbrow

6. Wits WRHI clinic

Womens Shelters

1. Frida Hartley

2. Bienvenu Shelter

3. Usindiso Ministries- Shelter for abused and homeless women and their children

4. Ikhaya Lethemba – Centre for abused women

5. Bethany Shelter

6. Methodist Church

Womens organistaions

1. POWA

2. Women's Legal Centre

3. National Movement of Rural Women

4. BUSINESS WOMEN ASSOCIATION SOUTH AFRICA

5. International Womens forum

Due to the small scale of the actual building design, it was important to map out the regional networks. Putting into context the systems and networks the building will operate in and support.

The significance of the market is detailed in a later chapter. Many women use ‘informal trading as a source of income, and expressions of the few public areas where women are spatial agents.

Child care facilities is a complex network of registered and unregistered networks. Revealing itself as to be directly affected by the continued densification of Johannesburg Inner City. From the conversion of office spaces to residential houses.

As the destination of international migrants there is a substantial amount of refugee support offices. Mostly in CBD displaying modes and intricacies of access and for residents of migrant suburbs of Hillbrow, Yeoville and Berea.



Fig 117. Regional Networks. Authors Own

SUPPORTING NETWORKS: WAVES IN YEOVILLE

As part of a design charette , I decided to express these waves visually in relation to the Yeoville context. This was done to firstly outline which issues each wave dealt with, determine issues in Yeoville that fall under each wave. To further develop a program for the women's complex that was responsive to the needs of the women living in Yeoville. I began to map out buildings, organisations and spaces that would fall under each wave. To determine the gaps but also identify the supporting networks to the proposed Yeoville women's clinic and complex.



Fig 118. Above is a determination of citizenship form by the Department of Home Affairs. The map shows organisations and buildings in Yeoville that assist refugees and asylum seekers with obtaining legal papers and with issues pertaining to citizenship and issues refugees face. Authors Own



Fig 119. The visuals above are water colour paintings that play-on the works by feminist artist Louise Bourgeois. They represent the right to reproductive autonomy, sexuality and domestic violence in that was fought for during the 2nd Wave. The map shows organisations that fight for women's reproductive rights and against domestic violence in the Yeoville area. Authors Own

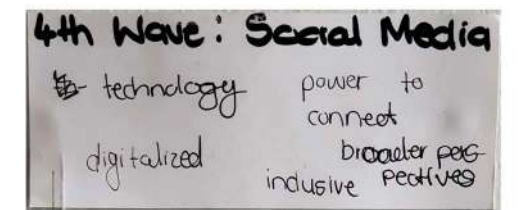


Fig 120. The 3rd wave recognised the diverse representation in the feminist discourse. Above is the representation of an African black woman. The Yeoville maps out spaces and organisations of black women representation Yeoville. Authors Own

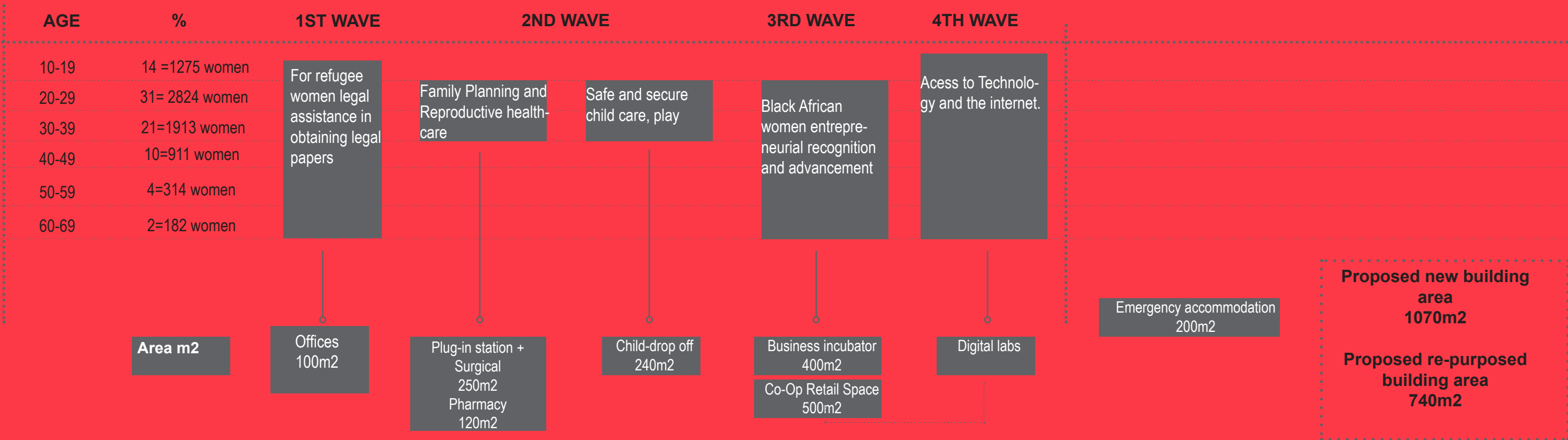
Fig 121. The 4th wave focuses on cross generation feminism through technology and sharing of information. The map shows places in the neighbourhood where young girls and women are able to empower themselves and share information . Authors Own

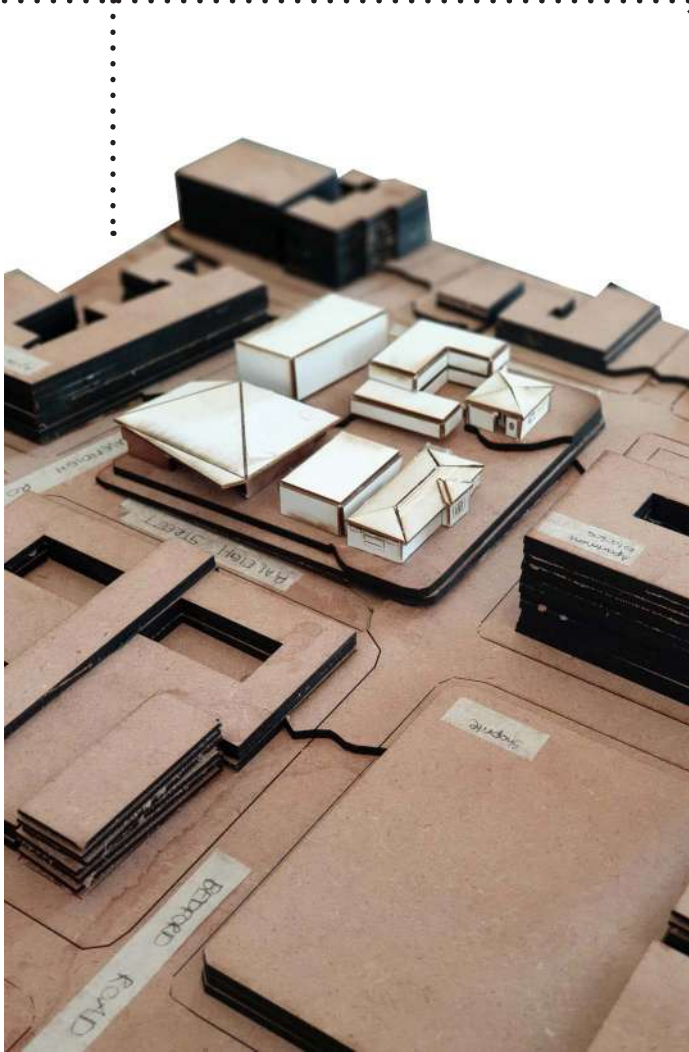
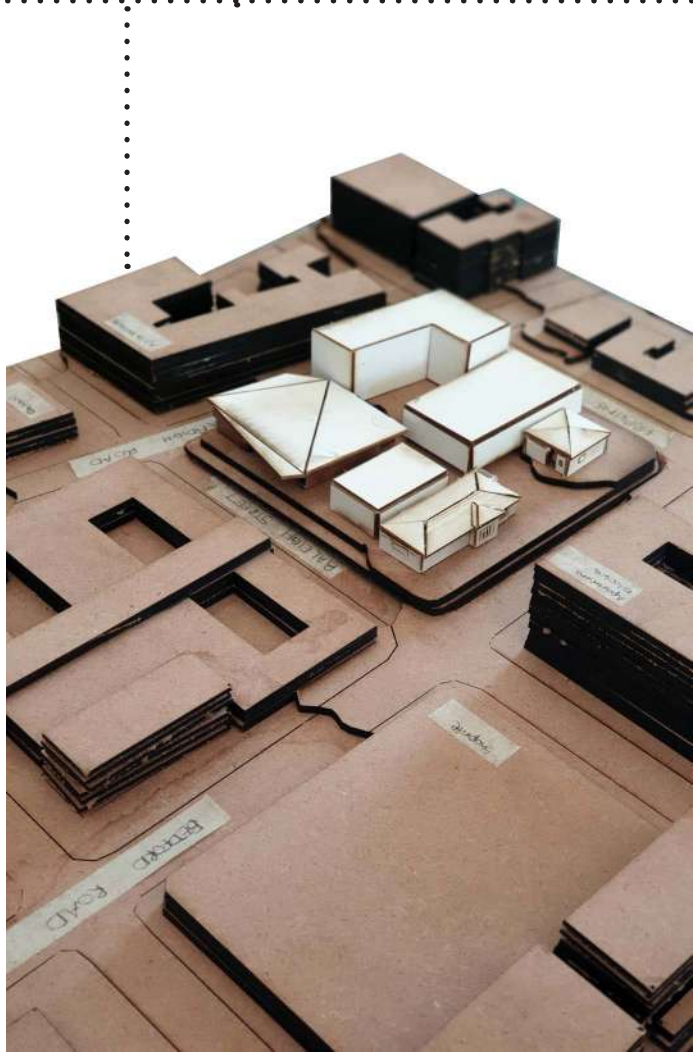
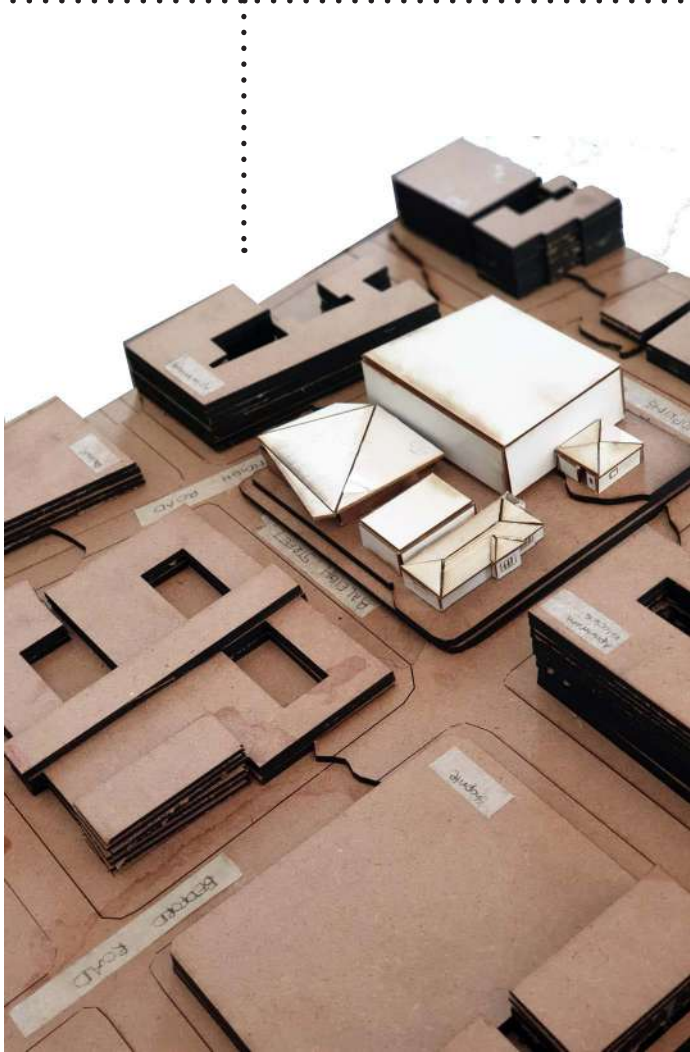
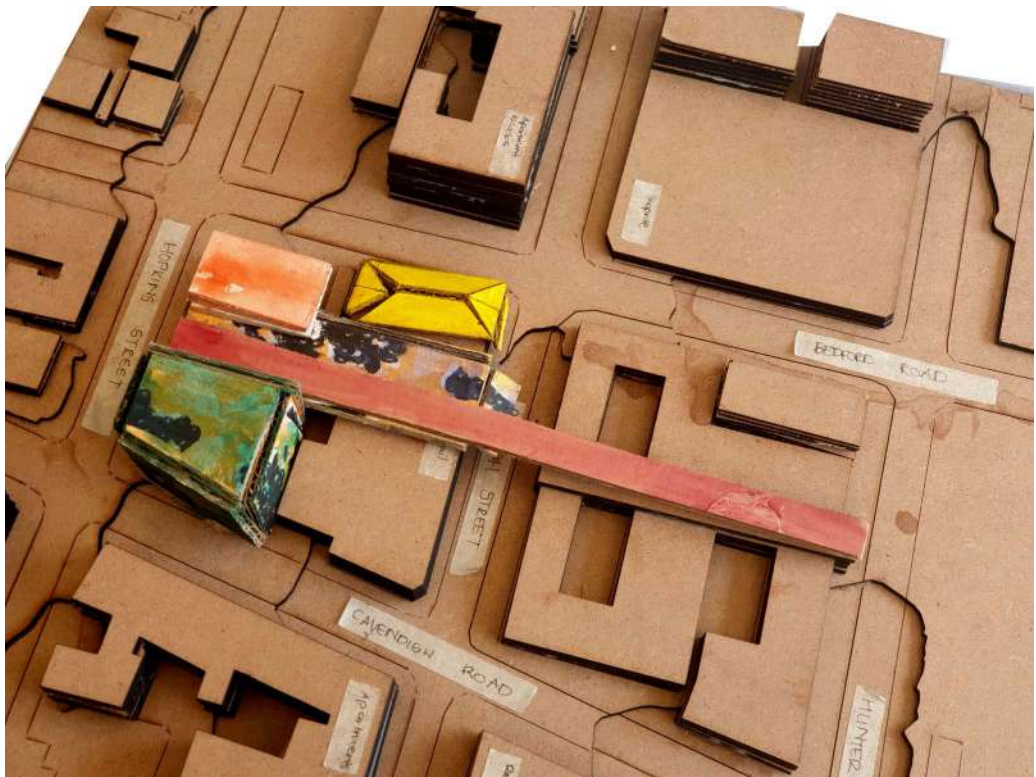
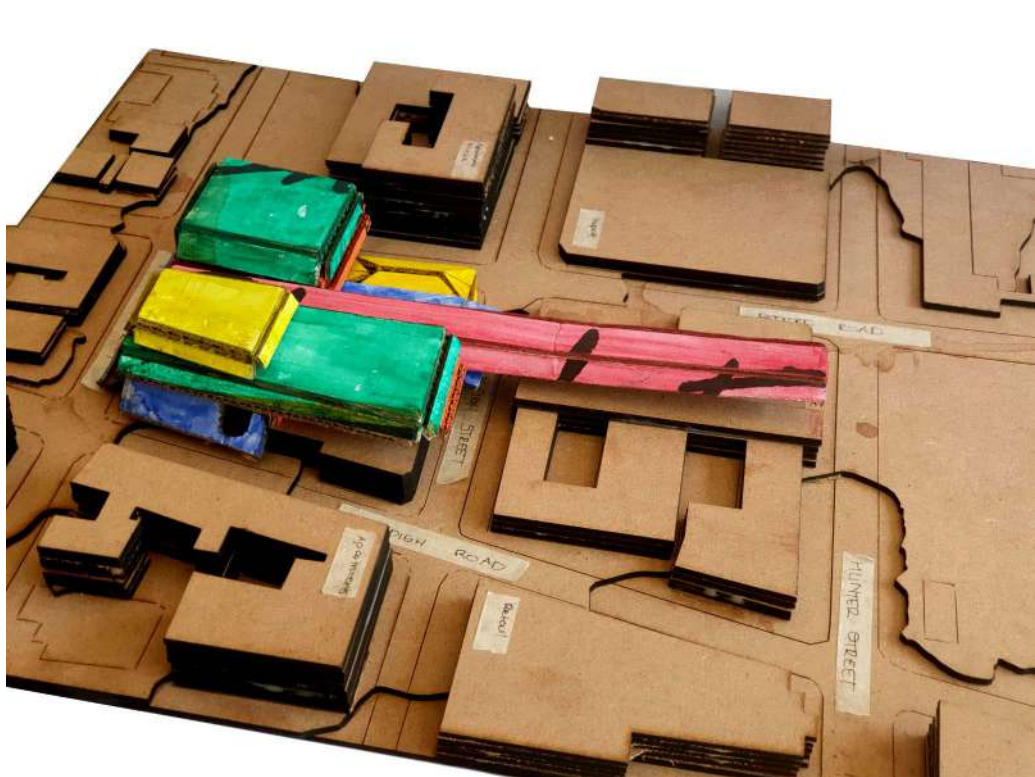


Fig 122. Consolidated Map of Waves of Feminism in Yeoville, Authors Own

What is derived is a wide range of programs that function in different ways. It requires grouping the programs strategically so that they are able to coexist and function efficiently on a tight site. The 4 waves of feminism discussed earlier is used to appropriately group the programs. Particular programs could be grouped together or close together to efficiently share services. However programs could also support each other. The program is sorted according to the amount of women in specific age groups in Yeoville to determine the size of each program. A new scheme of approximately 1070m2 in building area is proposed.

9110 Total Women





Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct

Fig. 123. Program Exploration Models. Authors Own

CHAPTER 6

SUPPORTING SPACES

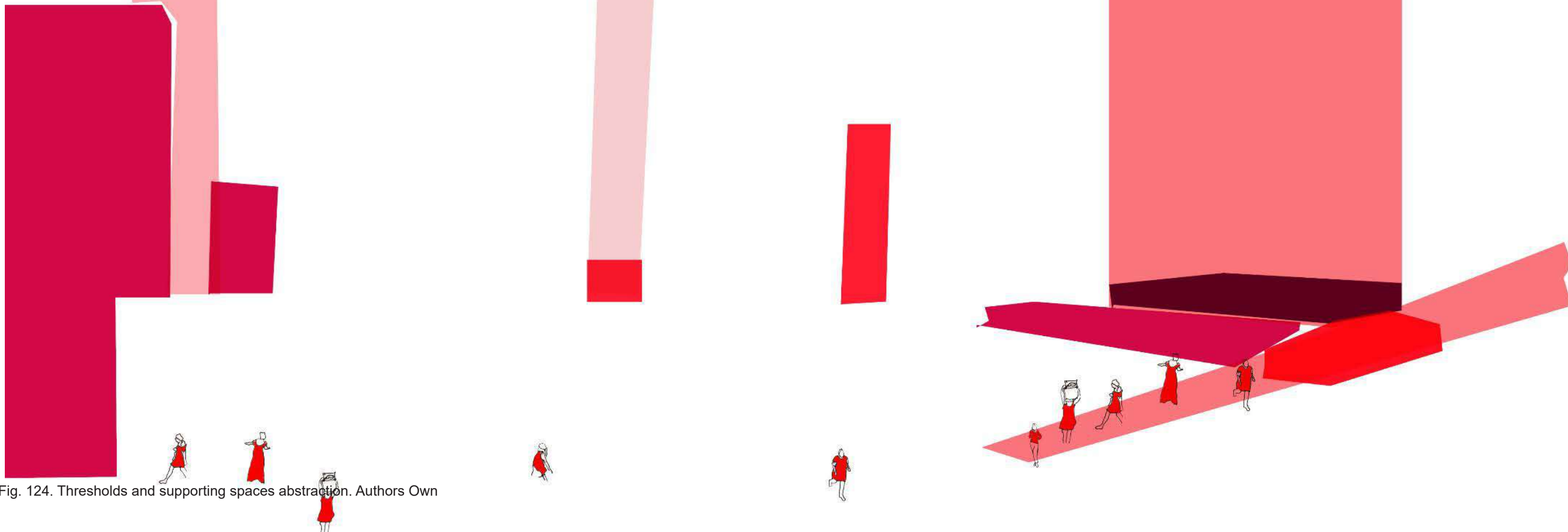
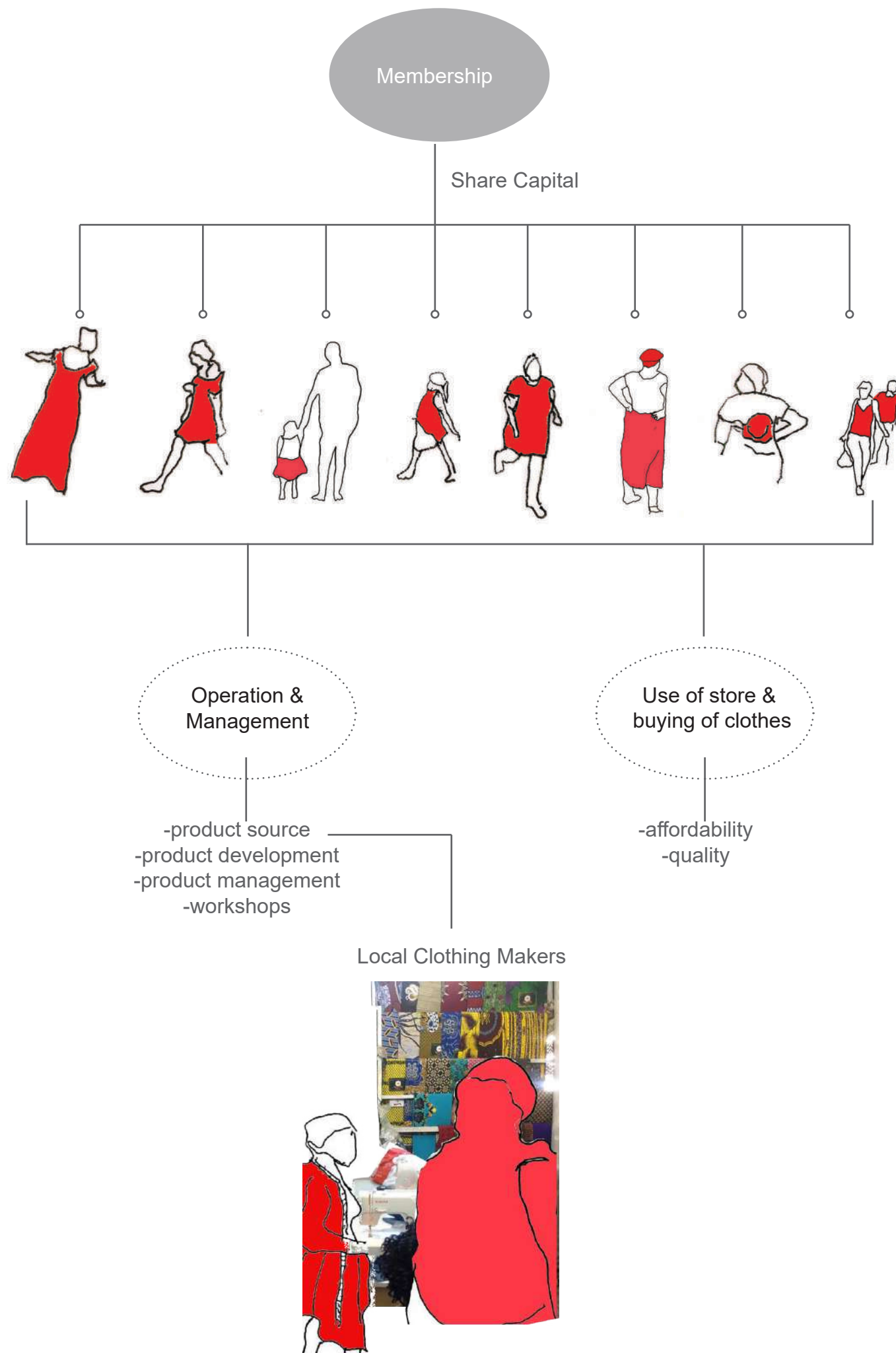


Fig. 124. Thresholds and supporting spaces abstraction. Authors Own



6.1

CO-OP RETAIL STORE

Consumers Co-operative is a company or enterprise owned by consumers and managed democratically which aims at fulfilling the needs and aspirations of their members. Each member contributes equity capital and earns shares. Control of the cooperative is then on a one-member, one-vote principle." Co-operatives are people-based and value based economic enterprises, founded upon well-defined ethics and principles, which include concern for the community". (Mohammed quoted by Dichabe pg. 3). It is also noted that cooperatives can maintain and create employment, especially in low-income areas such as Yeoville. Such as in the case of Kenya, where 63% of the population obtain thier livelihood through co-operatives. Co-ops in the UK are popular in the form of grocery stores. In South Africa, these are not popular, however the Government have used the cooperative model as part of poverty alleviation programmes. Often in the form of farming and agriculture groups. Dichabe describes a case study in Erasmus Tshwane where women who produce clothing and textiles are potential co-operatives, "There are other participants who knit and sew goods such as mats, hats, boots, aprons, and pillowcases." (Dichabe pg. 48) However, projects in South Africa independent from the state or government are not popular amongst communities as a form of mutual aid. In Yeoville, where government support would not be given. There is strong communal participation and the urge to make mon-

ey, consumer cooperatives could be successful and sustainable. Where groups such as women and care givers come together to form a food or clothing store co-op. Products such as clothes and textiles can be locally sourced from women who sew and make clothing in the community. As the co-op becomes fully operational, a portion of the proceeds will be invested in other parts of the scheme such as the women's entrepreneurial business incubator. For further information of complete funding model for the entire scheme refer to **Appendix A**

Fig 125. Co-Op Structure

6.2

MOTHERHOOD, THE BUNGALOW AND CHILDCARE

“For black African mothers engaging in paid work is as important a contribution to children’s welfare as caring for them in the home. This is not out of choice but out of economic necessity and does not necessarily result in more equal gender dynamics within the home environment” (Rubin, 2017, pg. 15). Mothering is constituted by the sole care and responsibility for the lives and development of children. In the early years, 0-3 years. From the ages, 4-6 children experience learning independently from their parents and experiences outside of domestic setting become important. Due to densities and safety in Yeoville concerns, often mothers are concerned about where their children can learn and play. It is preferred or more beneficial to for mothers to have as much contact with the child as possible. Often for women in Yeoville it would be necessary to engage in paid work as early as possible, leaving mothers with no choice to either leave children with family members, neighbours, or enrol them in child care facilities. Explaining the upsurge of child care facilities in Yeoville. Often seen through the conversion of the traditional bungalow into creches.

Casita de Chocolate is one of many Bungalows converted into a creche. The kitchen and main toilet remained unchanged. They converted one bedroom into a baby change room and children's toilet. The other two bedrooms are play and sleep areas for children between 0-3 years. The living and dining room was converted into learning and play spaces for children between 3-4 years. A cottage was set up outside to accommodate a Grade R class, and toilets were set up as an attachment to the existing house. The backyard structures were converted into an office and storage space. The rest of the backyard is now a controlled and secure play space. To support the clinic, business incubator and market, the existing residential building will be refurbished into a child care facility. Outdoor play spaces will be designed for public use.



Fig 126. Casita de Chocolate Yeoville. Sketch Plan. Authors Own



145 Fig 127. -127. 30 Casita de Chocolate Yeoville. Photographs Authors Own

Yeoville Streets are densely populated areas. Raleigh Street as the high street of Yeoville has the most amount of commuters, traders, children playing, bystanders, corner occupiers, cars and delivery trucks to retailers. Walking along portions of the street is met with many obstacles. For women portions of the streets may be uncomfortable and unsafe because of dangerous nudges away from public eyes, frequent male groups and lack of lighting. For Mothers who are using prams, these dense strategies make it impossible to use. Witnessing a mother pushing her pram on the street towards oncoming vehicle traffic.(Fig 108)

More quiet streets are often met with high walls, with no eyes on the street, no lighting and seating.(Fig. 107)

The Yeoville Market colonnade street edge allows traders direct access to commuters, allowing for eyes on the street and security. These pathways are kept clean and well lit.(Fig 106)

As Raliegh Street turns into Rockey Street, male presence increases around bars, and betting shops. The street still allows for high male dominance.

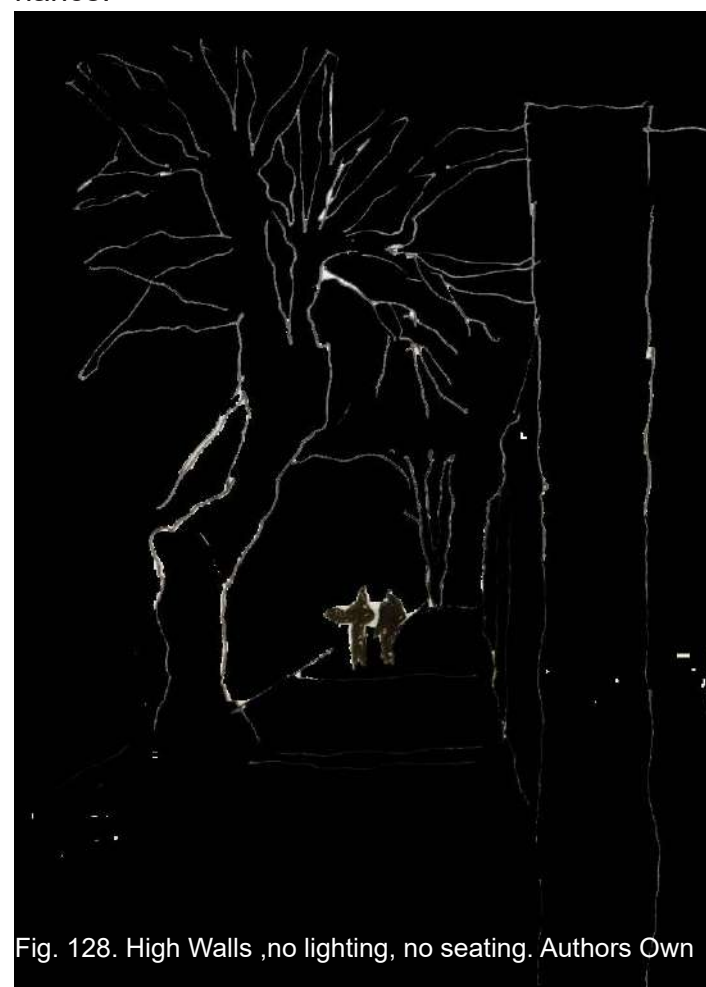


Fig. 128. High Walls ,no lighting, no seating. Authors Own



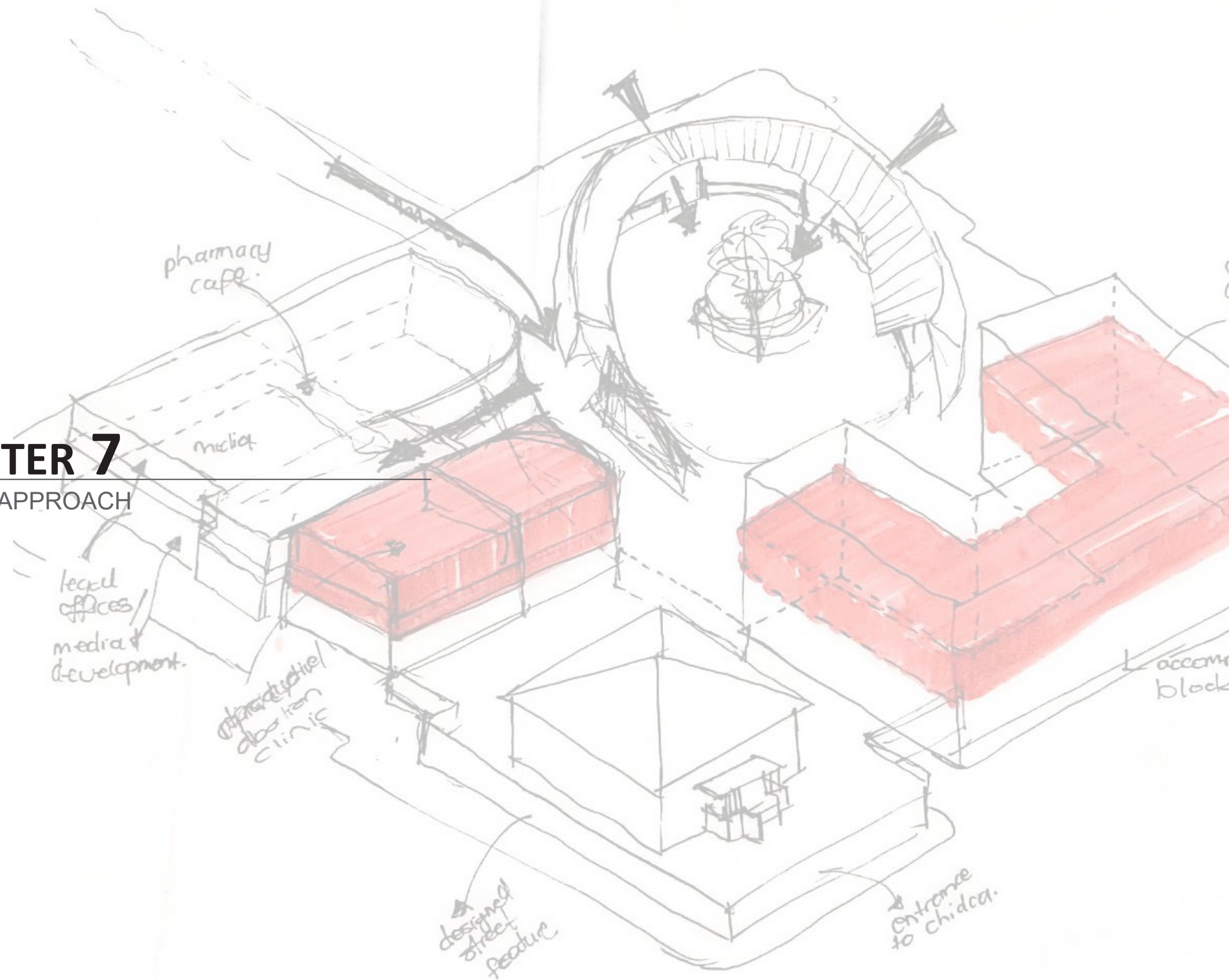
Fig. 129. Yeoville Market street edge quality. Authors Own

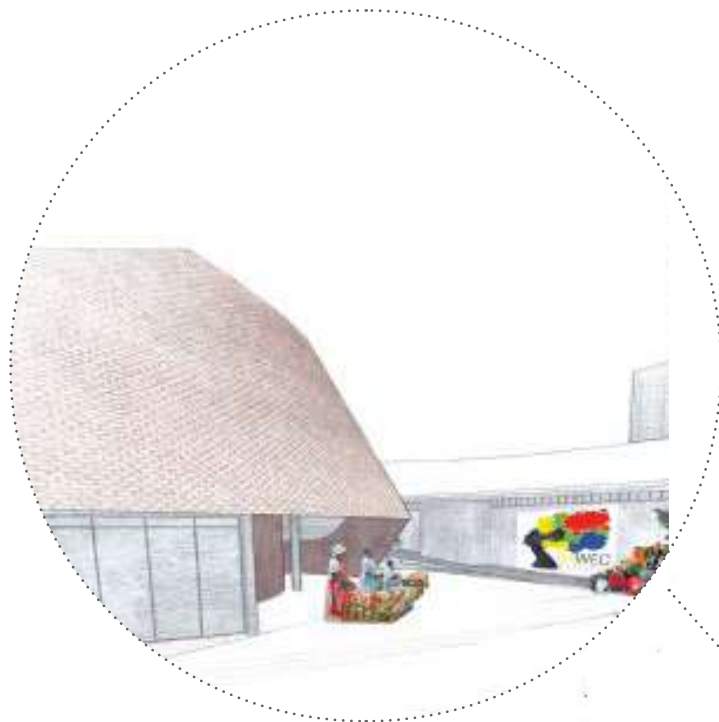


Fig. 130. Mothers on the street. Authors Own

CHAPTER 7

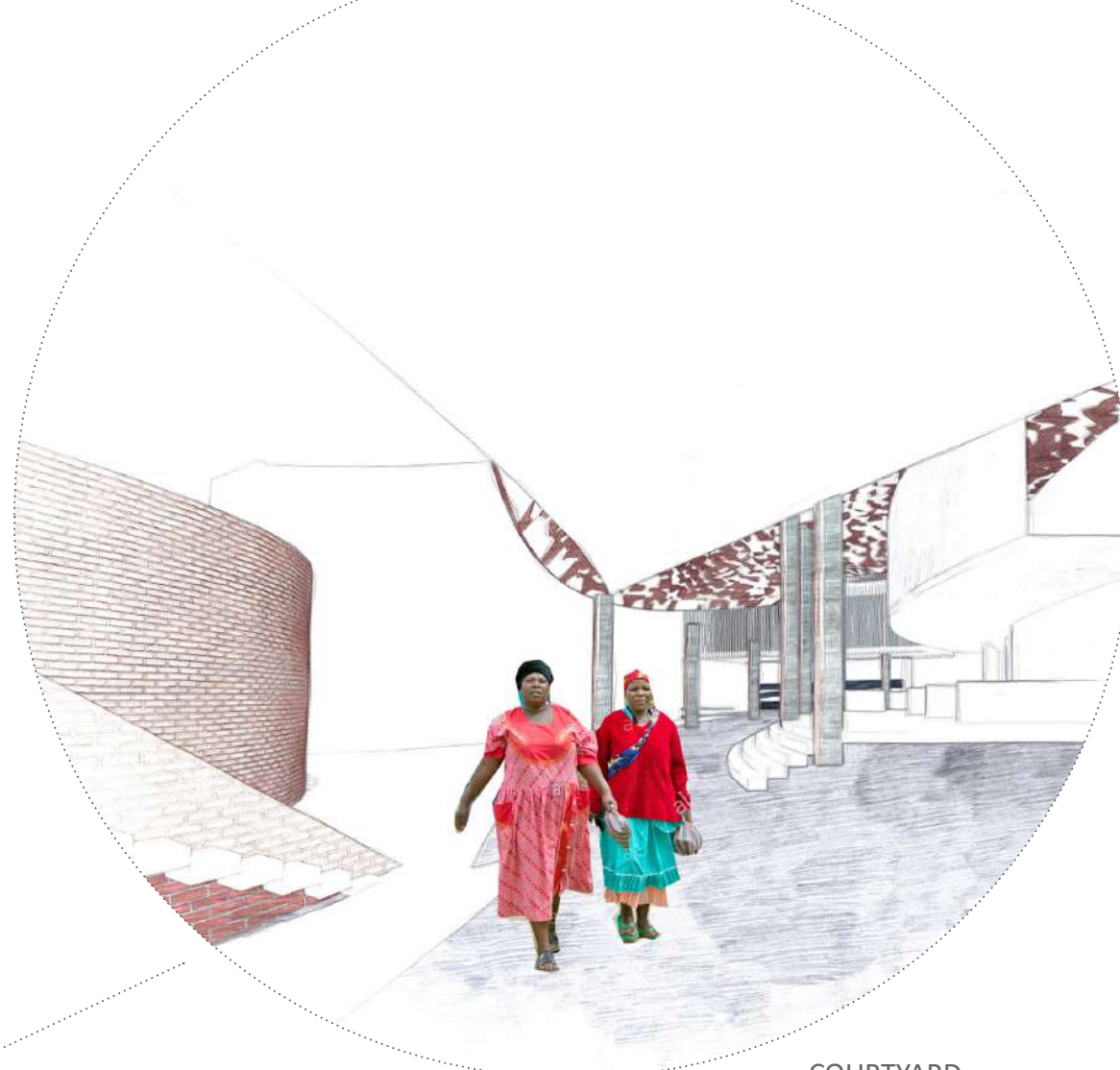
DESIGN APPROACH





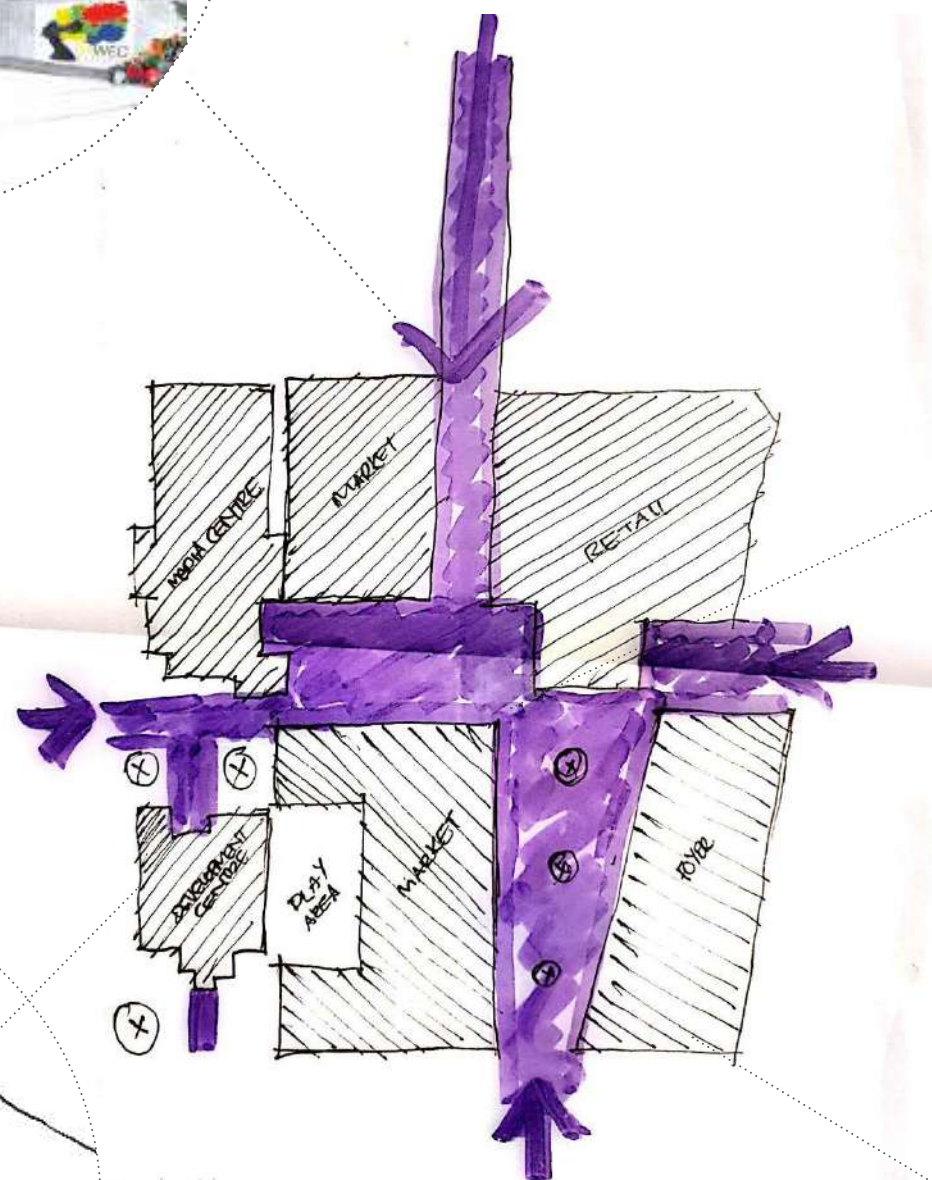
ENTRANCE TO COURTYARD FROM RALEIGH STREET

- Security Lines
- Trader friendly
- Commuter friendly
- Threshold change



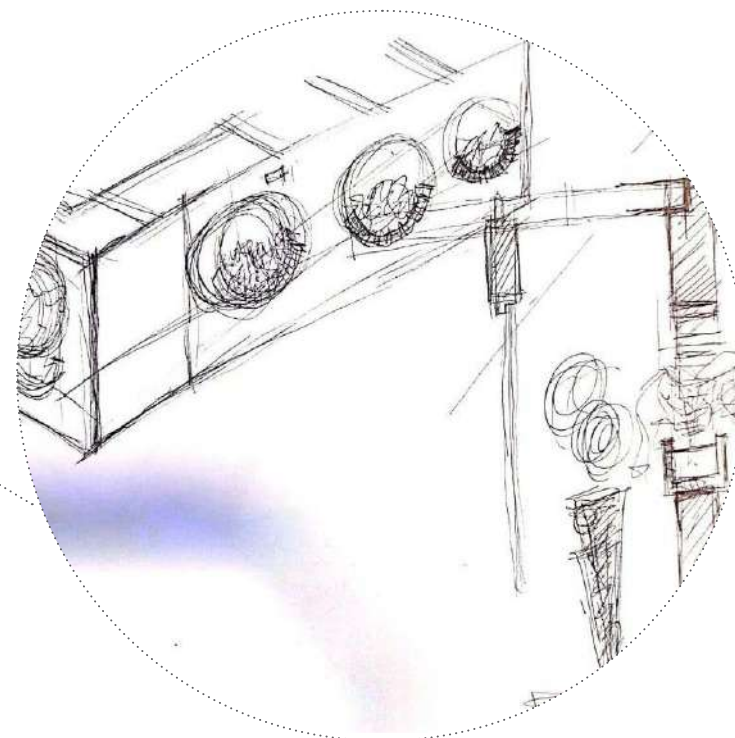
COURTYARD

- Semi Private
- Safe space
- security thresholds into clinic
- security thresholds into child care facility
- green space
- planting
- play



BEDFORD STREET EDGE

- Commuter friendly
- lighting
- removal of high walls
- seating

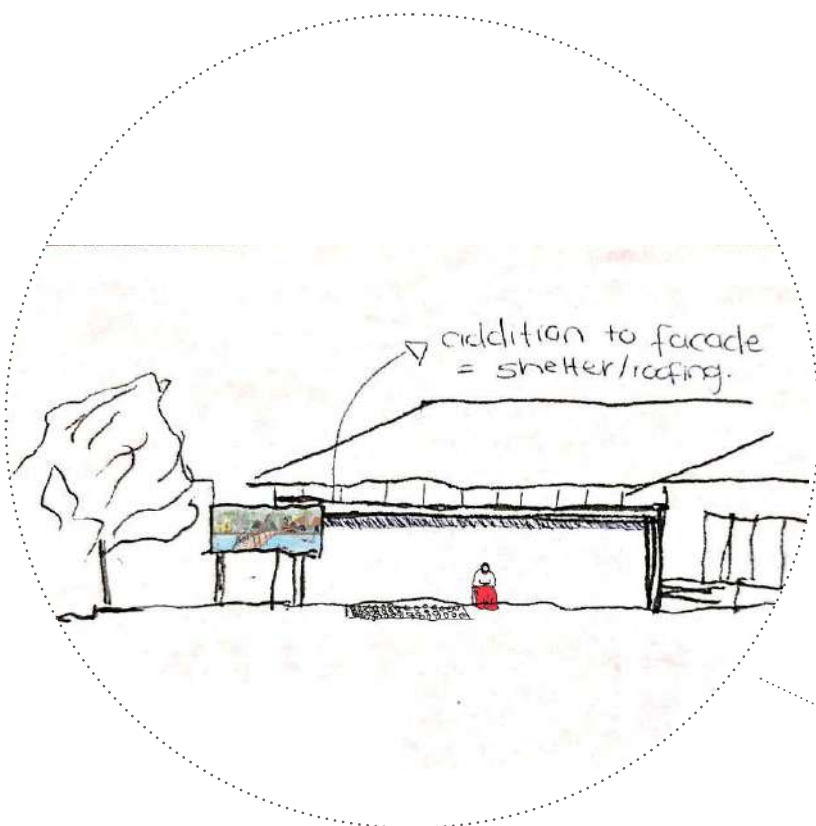


HOPKINS ENTRANCE

- Visual access from clinic
- planters as screens from outside
- perforated walls
- Architectural Elements as security
- Lighting into clinic
- Entrance allows activity on quiet street

OLD LIBRARY STREET EDGE

- shading for traders
- Advertisement
- Entrance to incubator and infor center
- Visual access to gallery
- Removal of fence
- Interactive corner



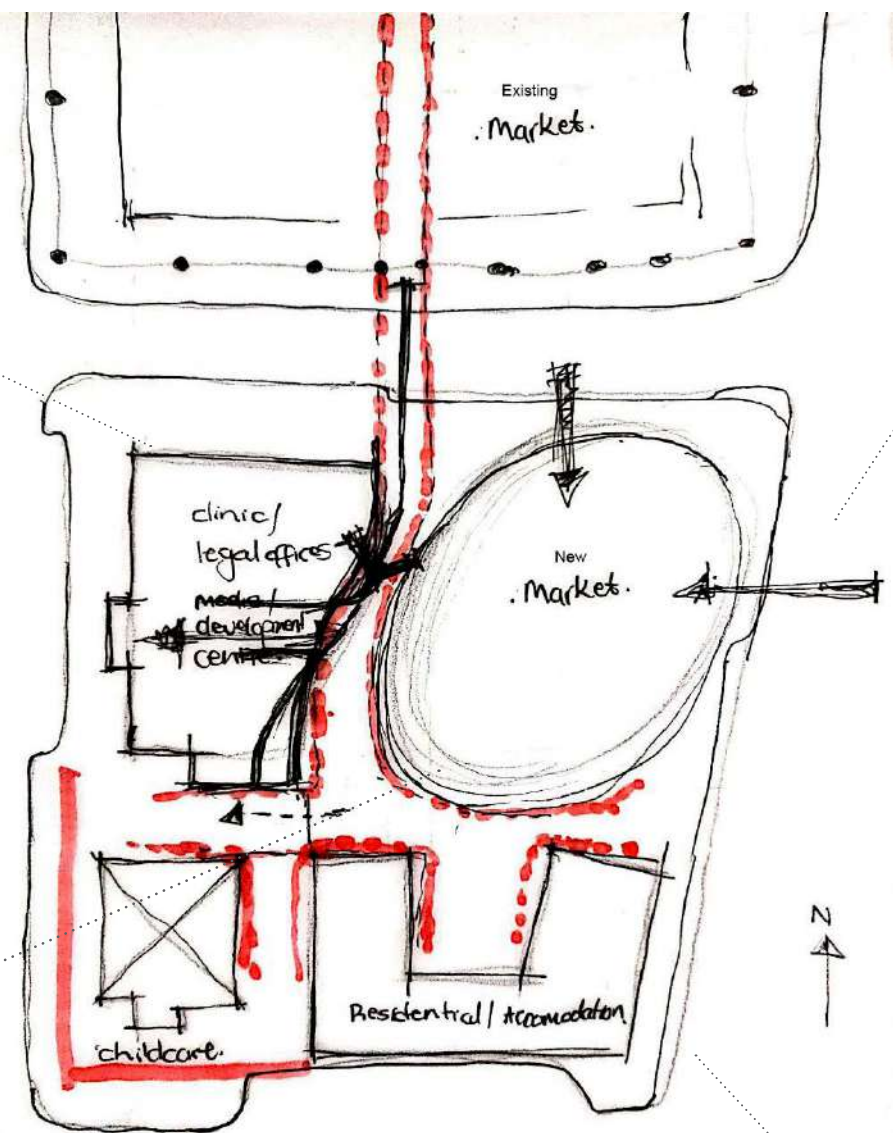
COURTYARD

- Architectural element to indicate different spaces
- circulation changes
- green space
- planting
- play



CNR CAVENDISH AND RALEIGH STREET EDGE

- Entrance into market
- Porous edge
- Advertising
- Shading
- Planting



CNR CAVENDISH AND HOPKINS STREET EDGE

- Eyes on the street
- Colonnade
- Secured entrance to clinic
- Discrete

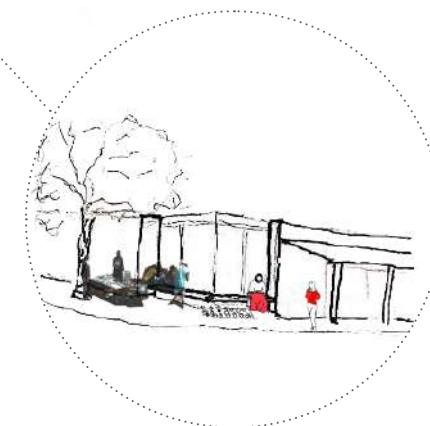


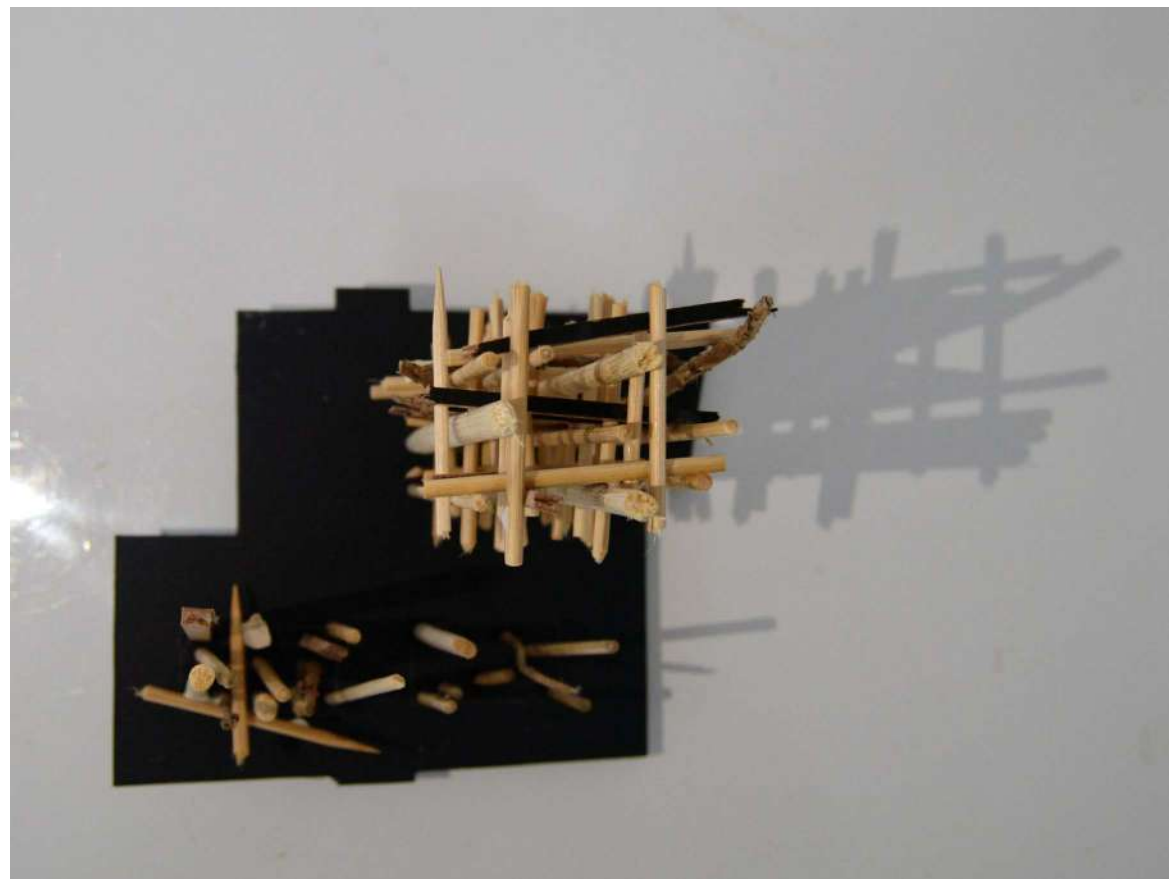


Fig 131. Breaking from the grid conceptual model. Authors Own

7.2

CONCEPT: BREAKING FROM THE GRID

Integral to the project is the dismantling of dominating structures, orders and grids that do not work well with African urban societies. The grid, the order for Classical design, that transgressed into non-functional decoration of Modernism. Concepts of this project questions what is considered as 'rational' contemporary design across multiple scales: from social orders influencing urban and public space planning down to modes of building design and technicality. The model alongside explores the linear against the free form. To immerse the unexpected in spaces that seem ordinary. This concept is firstly explored poetically, through circulation and spatial planning, form finding and lastly through materiality.



THE RIGID

Early models made during design charrette to express traditional linear modernist forms. The models shows the dismantling of a precise linear structural form into more chaotic expressions of form. When viewed from angles different expressions of structure are seen. One more controlled than the other.



THE EXPRESSIVE FREE FORM

A more poetic expression of occupying space. These models use the analogy of a plant emerging out of a controlled space. The first three forms are representative of seeds that are contained. The following form gradually grown out of its container. The end form grows from a structure that is not visible but allows for these expressive forms to stand.

Fig 132-139. Design Charrete models created using materials sourced from the Yeoville market. The rigid against the free form. Authors Own

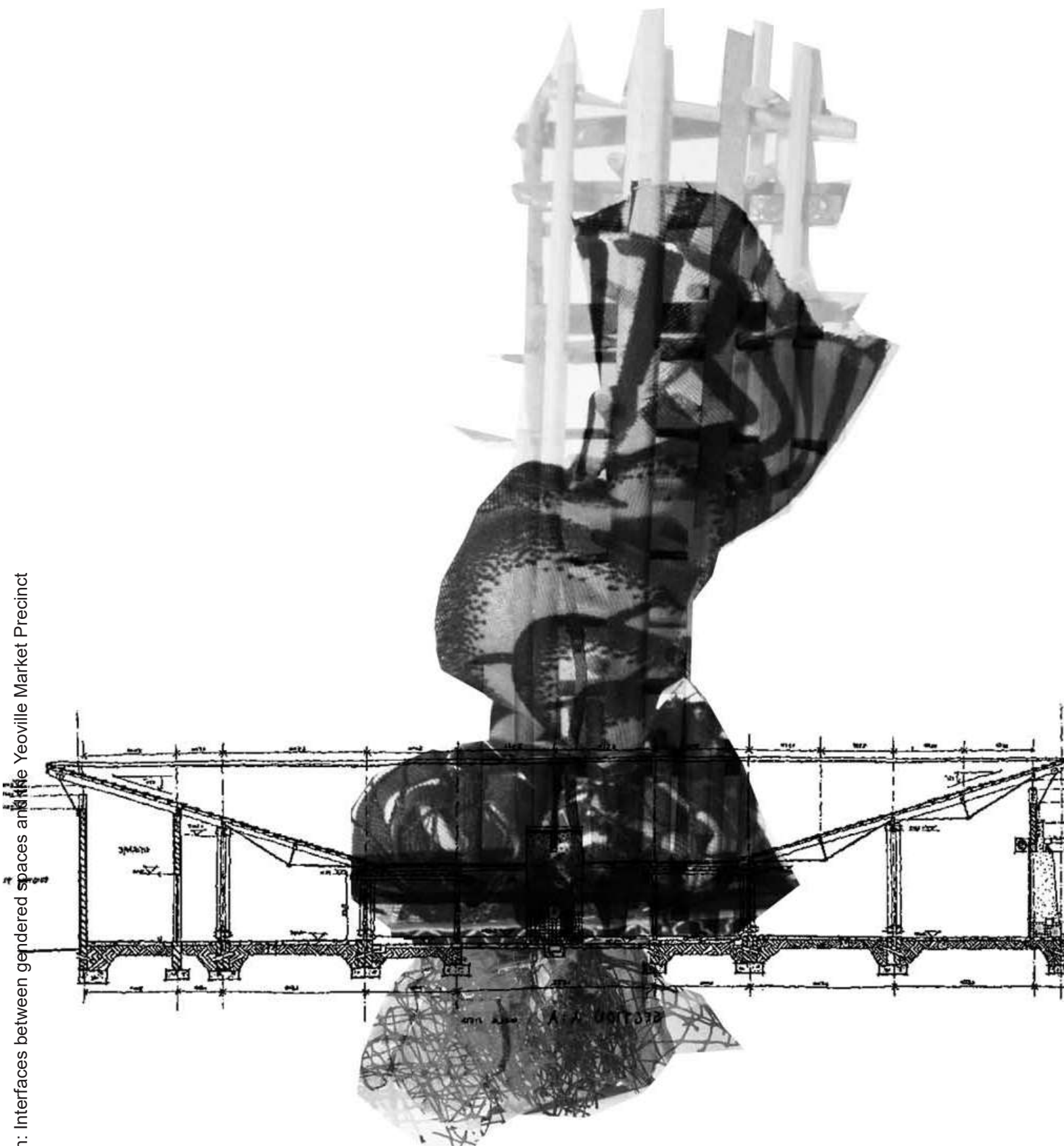


Fig 140. Conceptual Montage of exploration models emerging out of the Yeoville Market . Authors Own

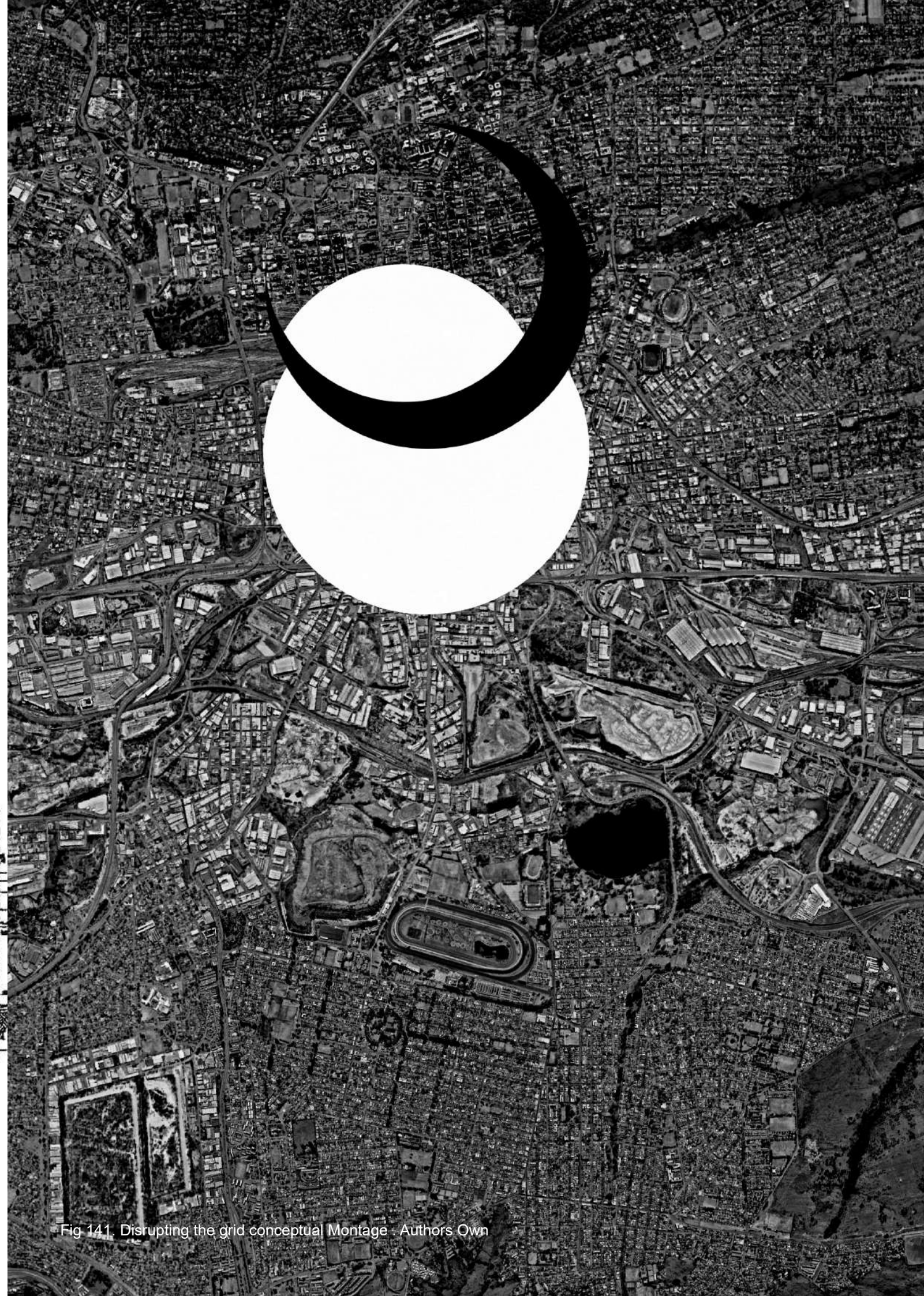
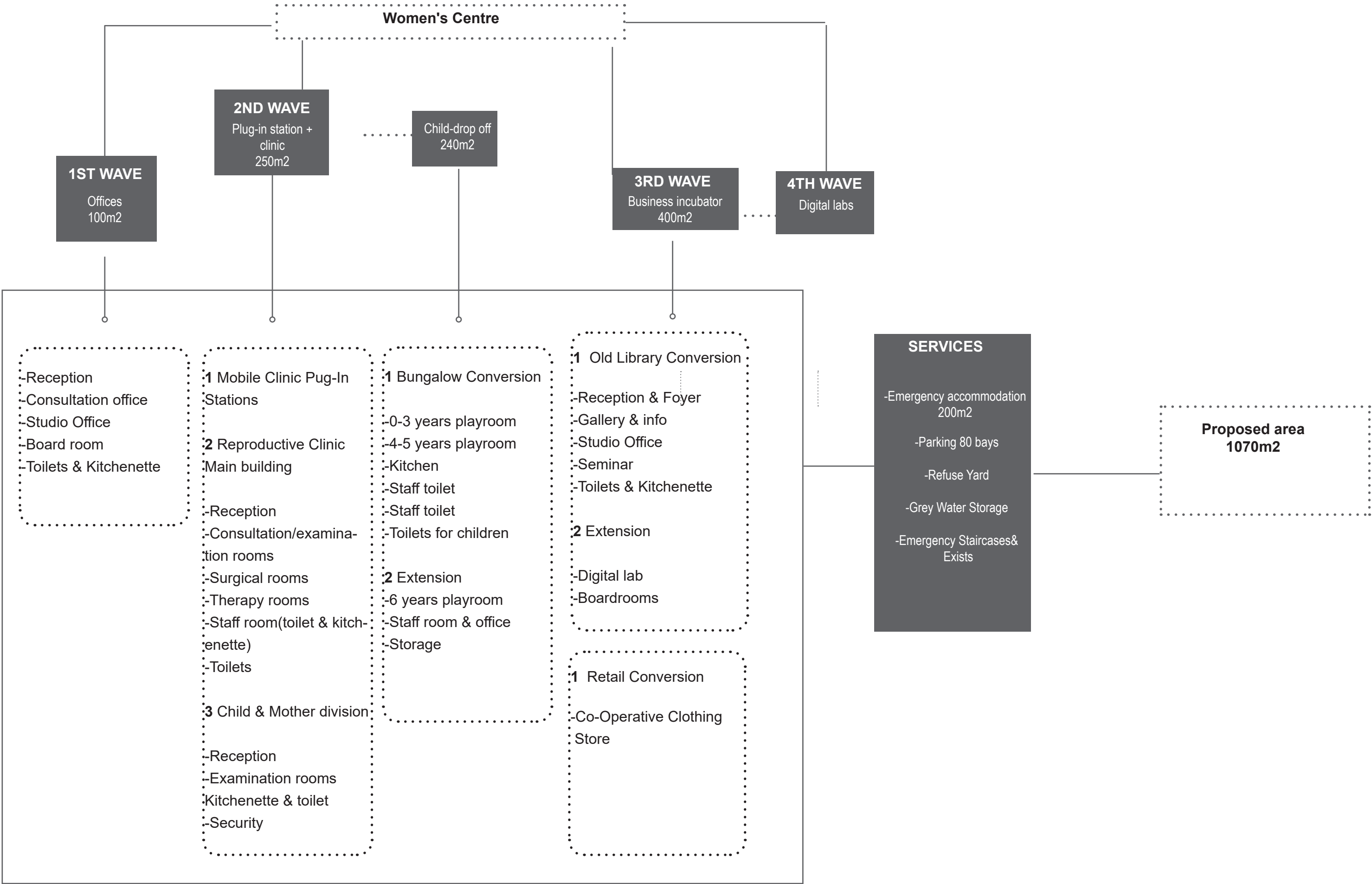


Fig 141. Disrupting the grid conceptual Montage . Authors Own



PROGRAM MASSING DEVELOPMENT

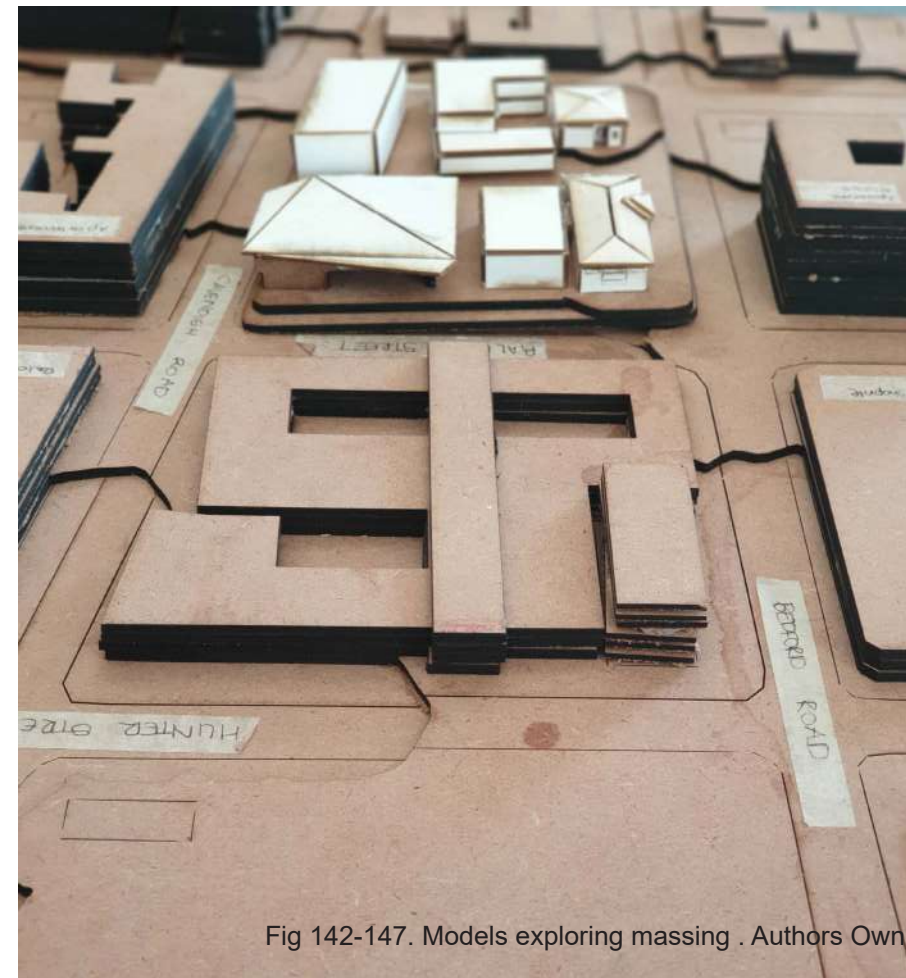
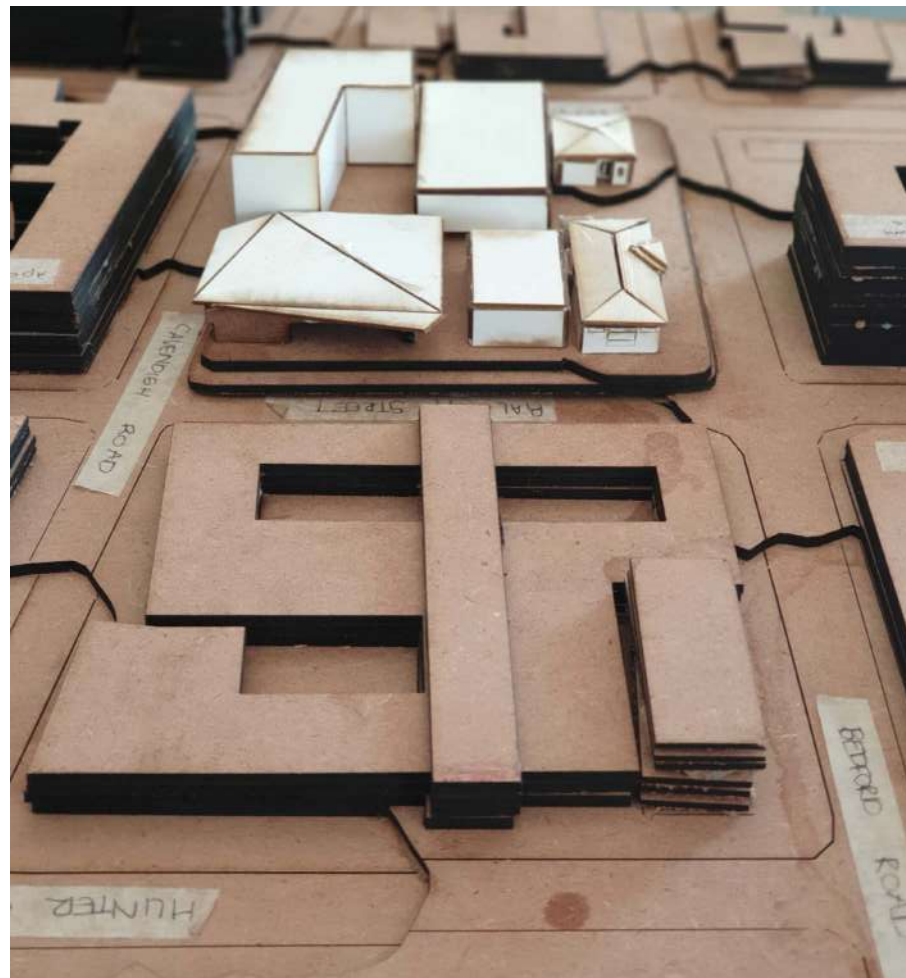
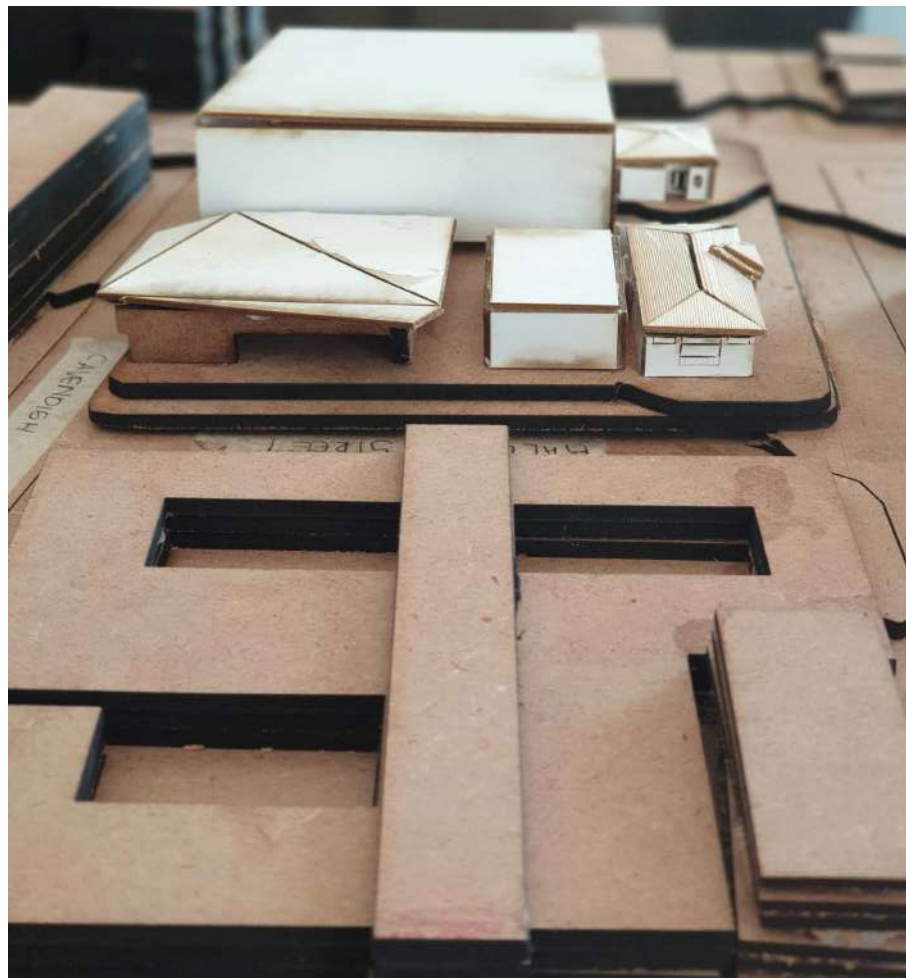
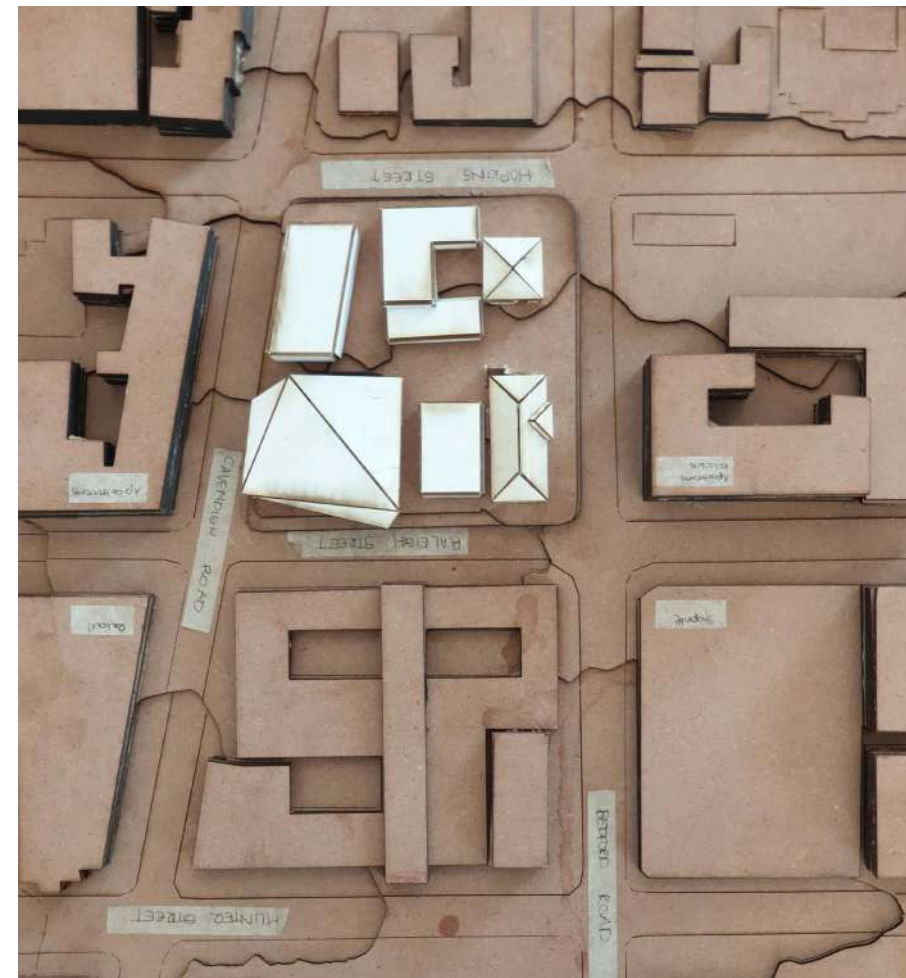
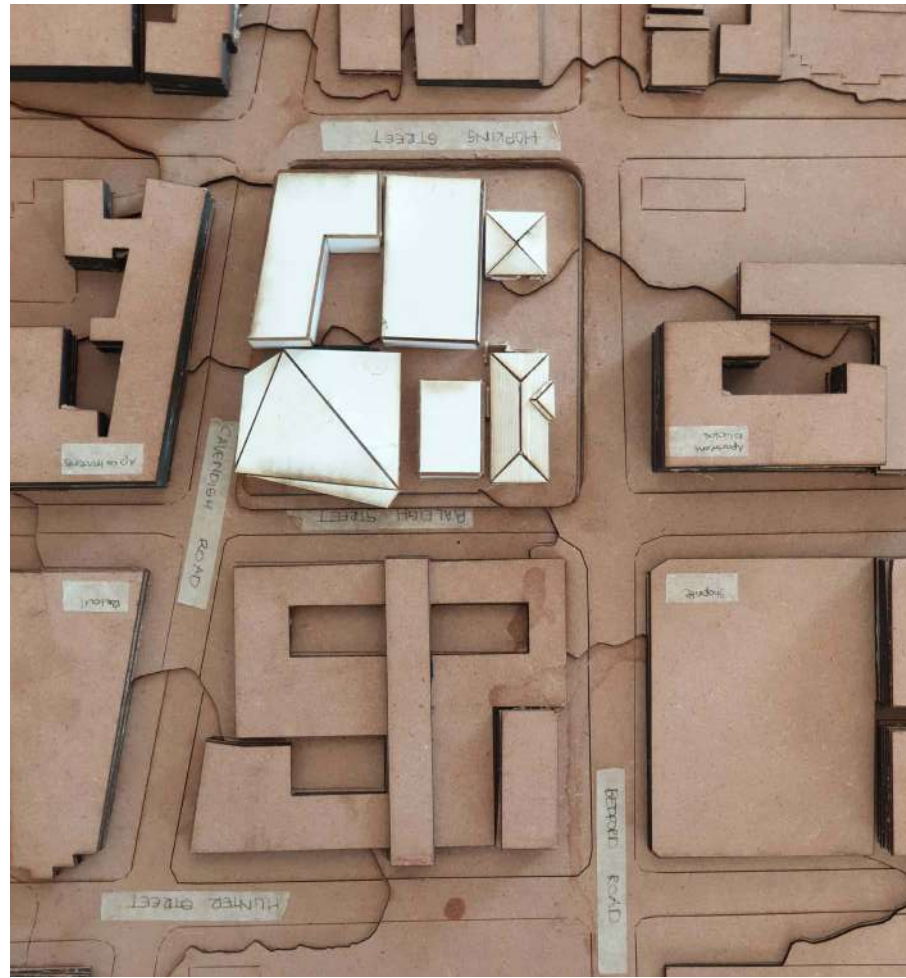
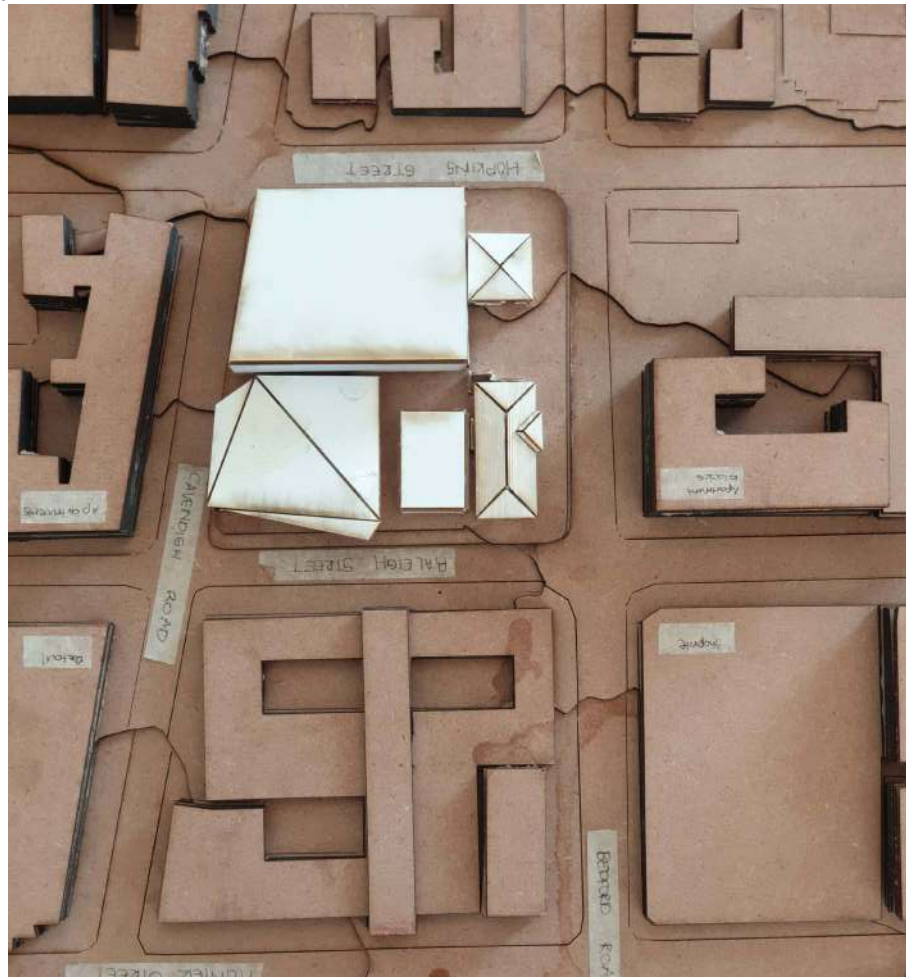
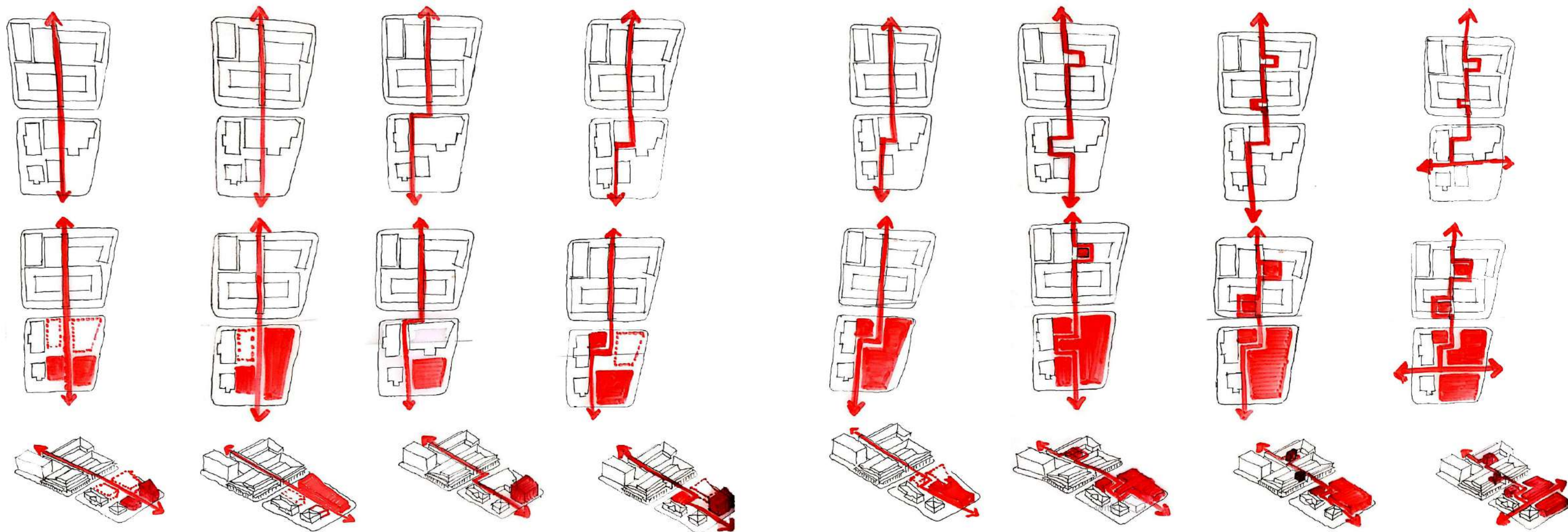


Fig 142-147. Models exploring massing . Authors Own

THE AXIS
 The north/south axis of the existing Yeoville Market is used to carry through circulation into the new site. This axis forms one of the driving elements for the spatial planning of the new complex. The diagrams below show the adaptation of the axis based on the grouping of the program, disrupting the rigid clear cut planning as a concept, circulation in and around complex, carving into exiting forms and stacking onto existing structures.

Fig 148-155. Axis Exploration. Authors Own



Four buildings on new site cut by axis. Axis cuts across existing retail building. Two new buildings on south end of site.

Singular new building on the east. New attachments to existing buildings. Separated by axis.

Axis stepped around existing buildings. New building on South-East end of site

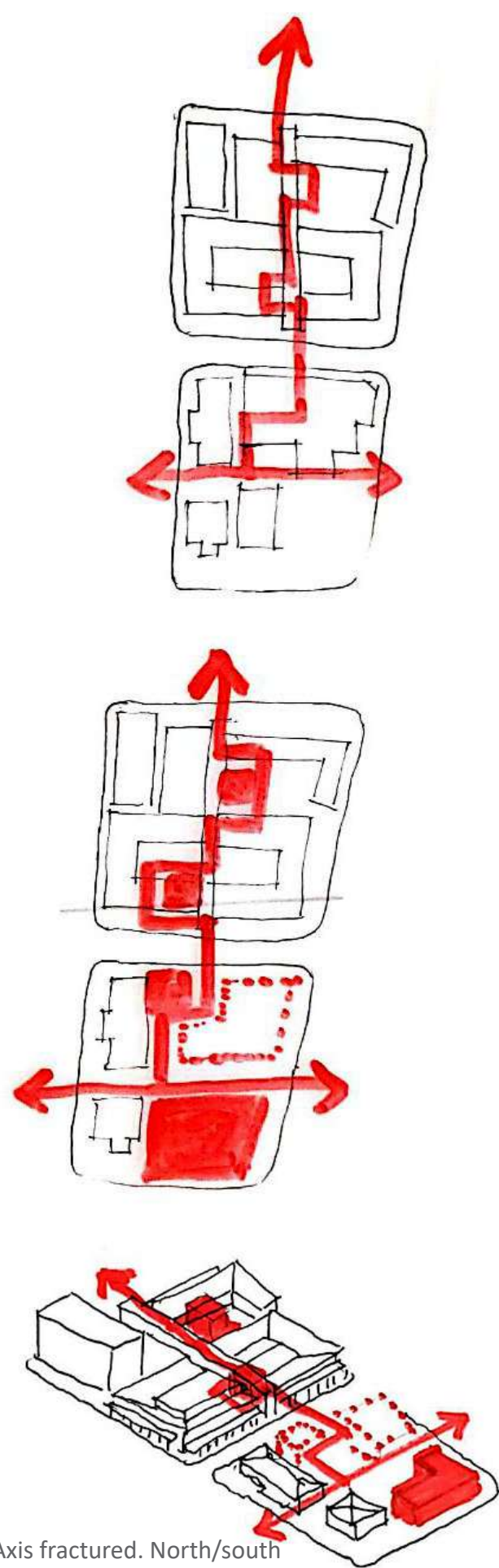
Axis stepped within new site. New building on South-East end of site. Portion of retail building remains. New addition to library.

Axis stepped within site New building on east end of site. New addition to library.

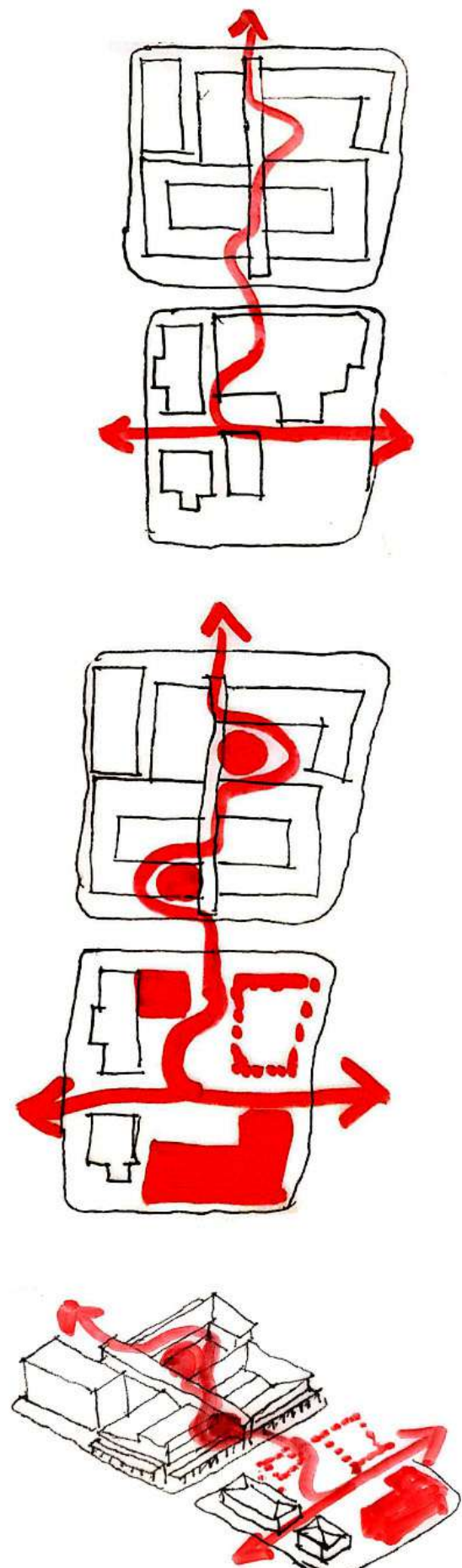
Carving and infill into existing market. Additions to existing library and bungalow. New building on east. Fractured axis.

More carvings and infill in existing market. Addition to library. Axis stepped to run along bungalow and new building on east.

Axis fractured. North/south axis changes direction on new site to east/west. Additional entrances on east and west street.



Axis fractured. North/south axis changes direction on new site to east/west. Additional entrances on east and west street. Portion of existing retail building kept.



Axis fractured. North/south axis changes direction on new site to east/west. Additional entrances on east and west street. Portion of existing retail building kept. New building L shaped to allow for courtyard on site.

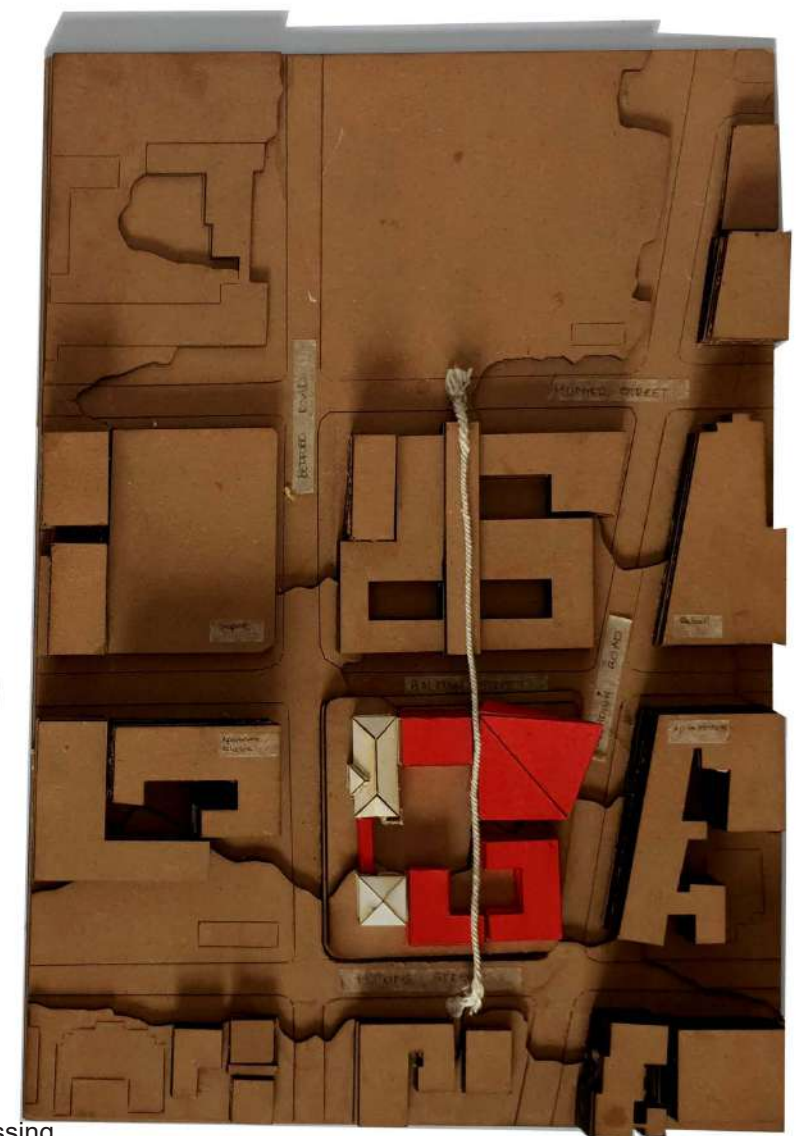
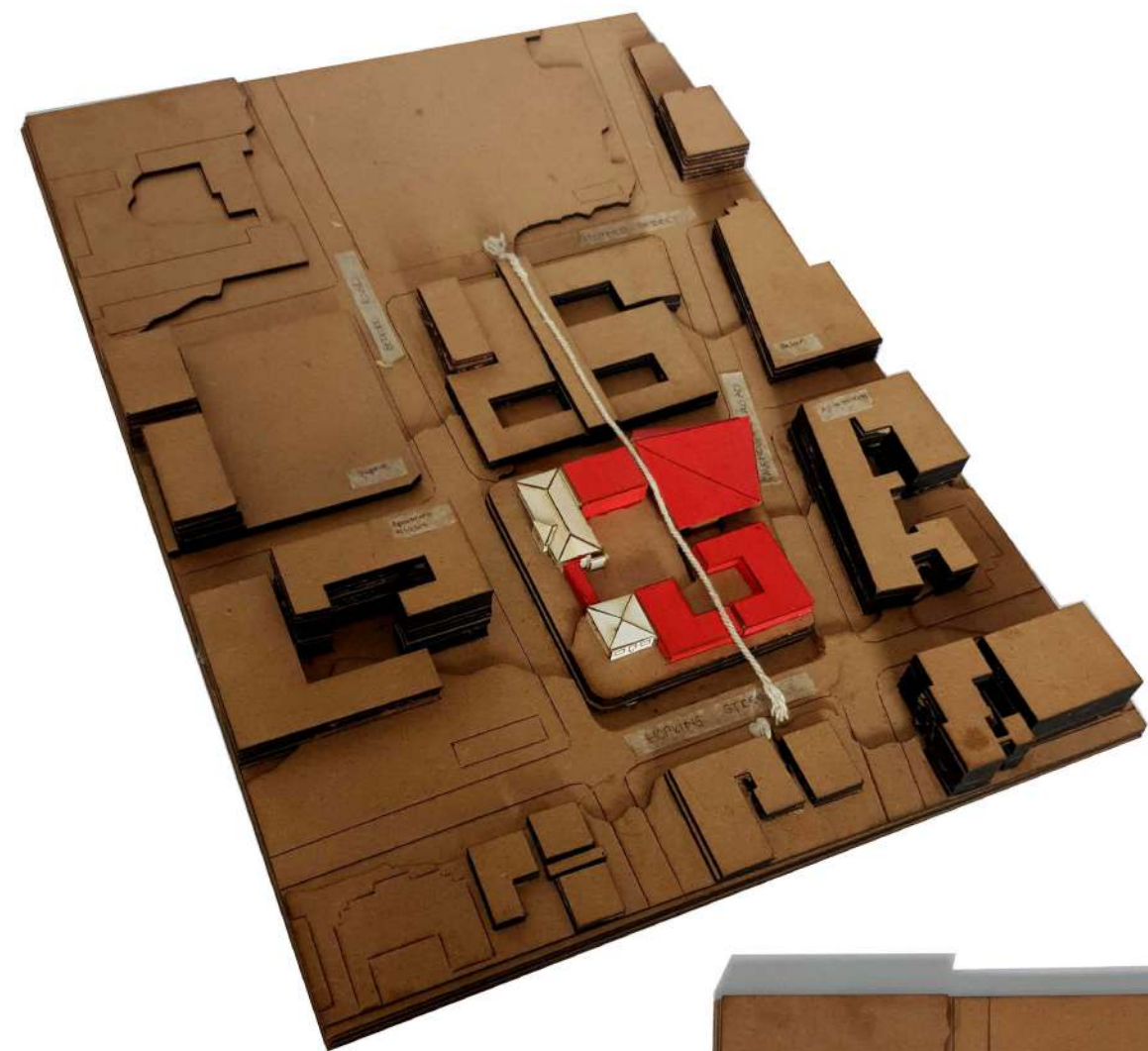
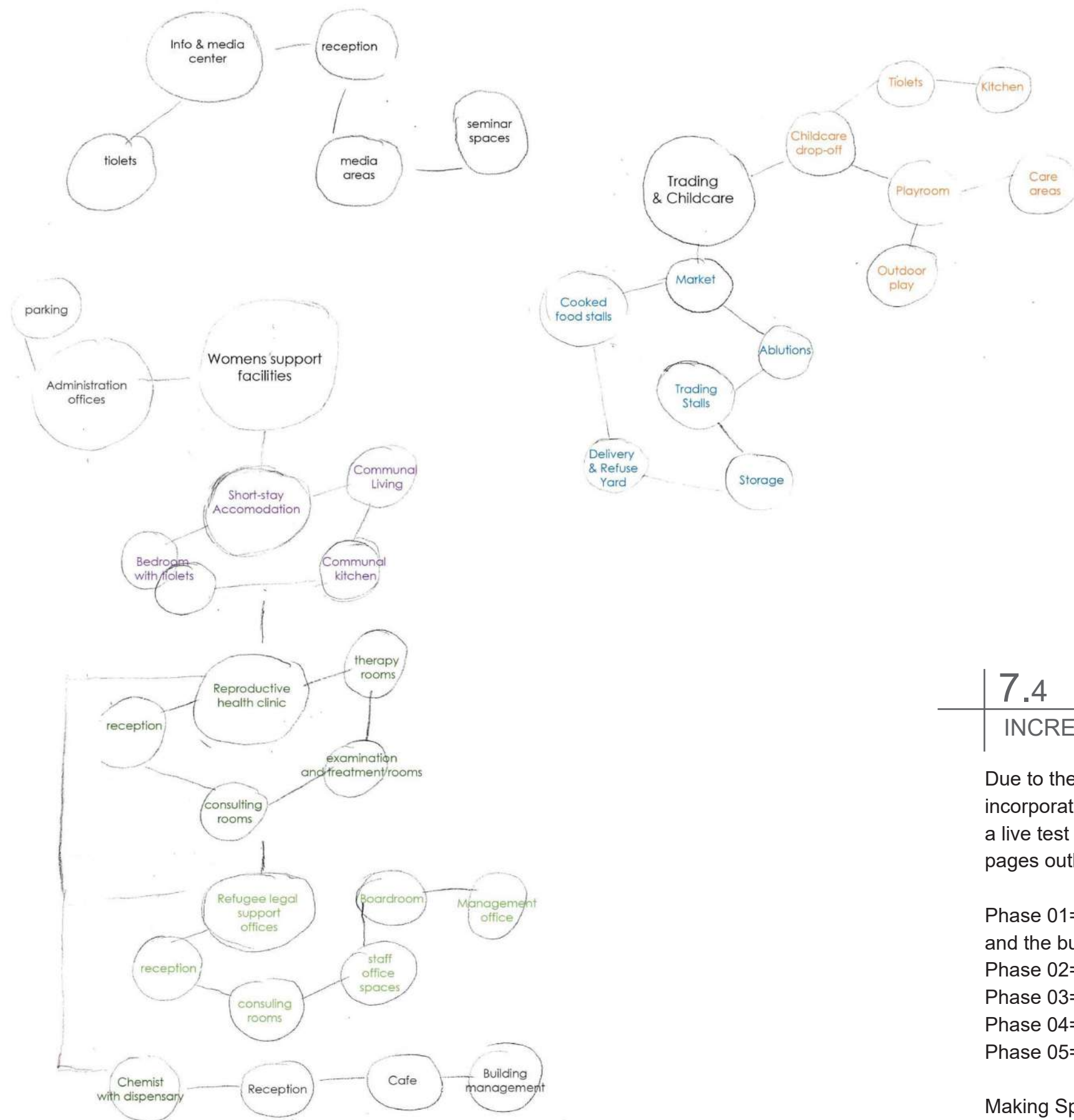


Fig 156. Diagrams explored through models. Final massing



7.4

INCREMENTALISM

Due to the nature of this project(its existing context and funding structure); realising its viability is incorporating incrementalism in its design and execution. Each component should be viewed as a live test of a greater master plan involving Johannesburg migration hubs. The order of the next pages outlines the execution of the project through phases:

Phase 01= The mobile clinic plug-in stations,conversion of the library into a business incubator and the bungalow into a child care facility

Phase 02= Refurbishment of existing retail building into a Co-Op Clothing Store.

Phase 03= Extension of the business incubator and child care facility.

Phase 04= The clinic main building

Phase 05=The child and mother division.

Making Space in Dalston by Muf Architects and their other projects in the public realm act as relevant examples of incrementalism. They base the project on three principles, valuing existing spaces, identifying and nurturing possibilities in what is existing and realising the project through incremental regeneration.

Fig 157. Spatial Relationships. Authors Own

PRECEDENT: MAKING SPACE IN DALSTON

Location: Dalston, London.
Architects: Muf Architects.

The outcome of the project depended on the process in both engagement and the delivery of the output. The project further highlights the role of temporary projects as action research. Then taking those aspirations and articulating them in ways the community can understand and experience.

“It begins with the identification and celebration of existing assets: social, cultural and physical. It then generates strategies, design moves and a program of cultural activity to inform and enhance the public realm as shared spaces”-Book Insert.

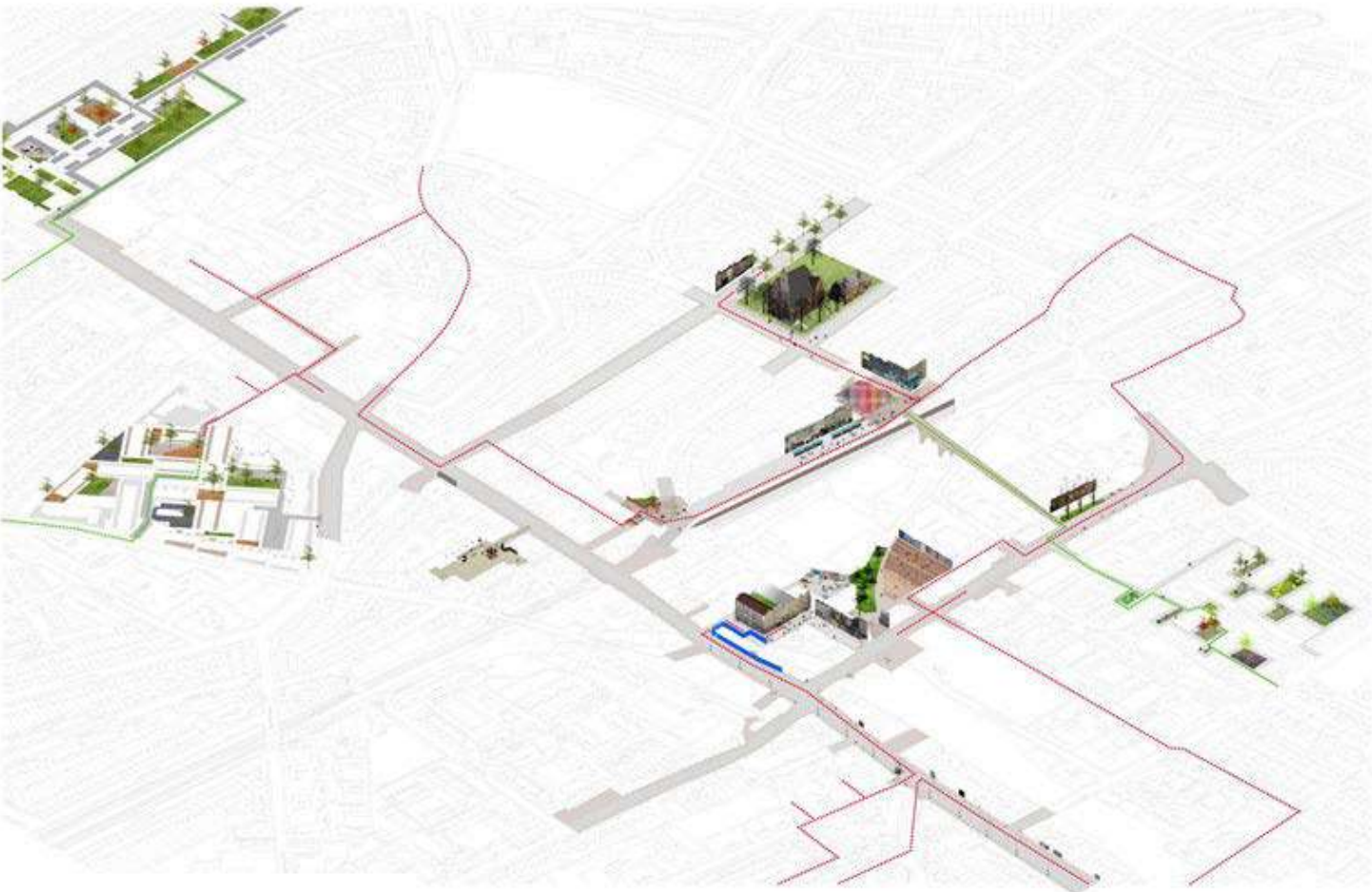


Fig 158. Example of small incremental public interventions. Muf Architects (2009)

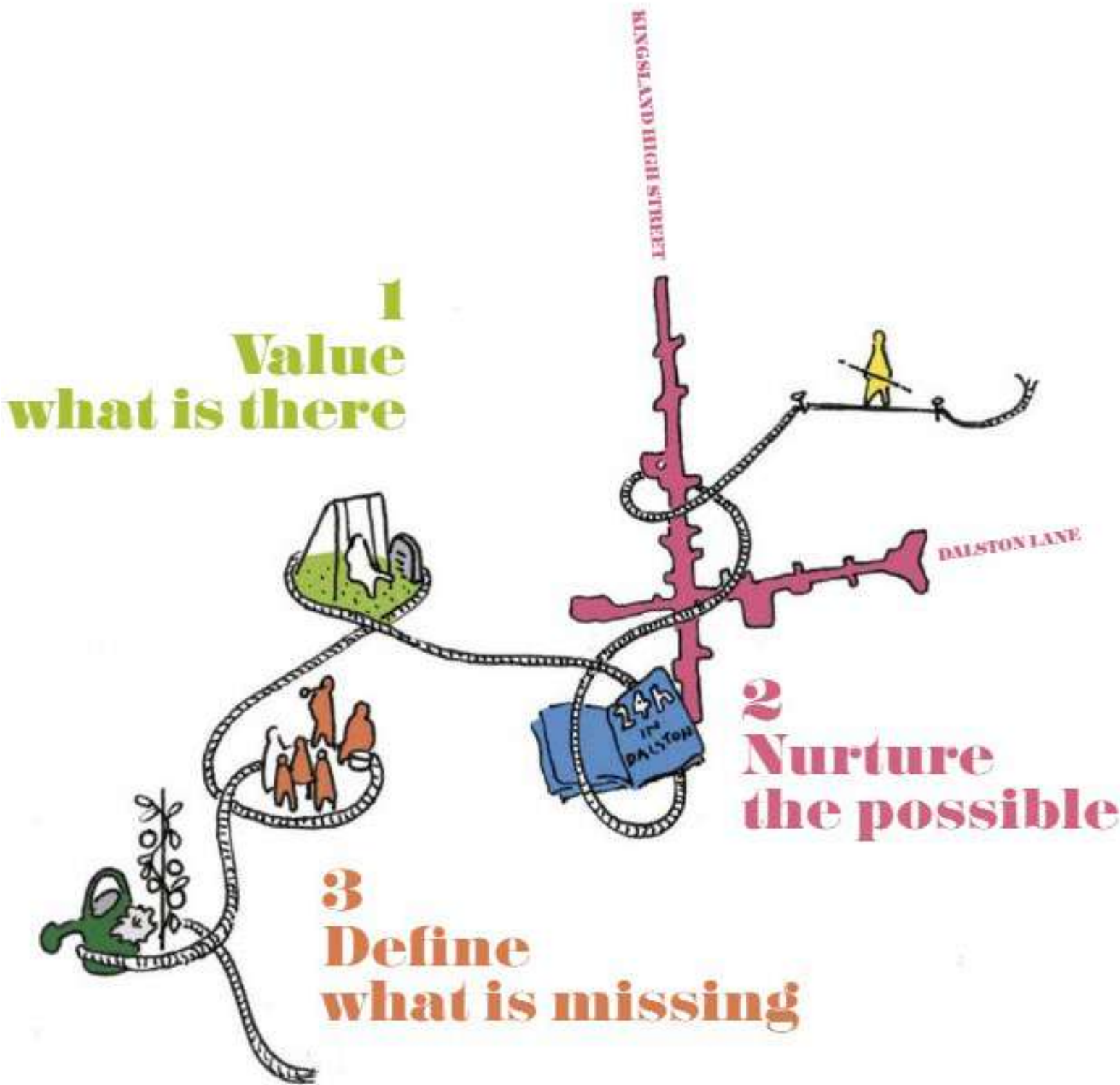


Fig 159. Project Principles. Muf Architects (2009)

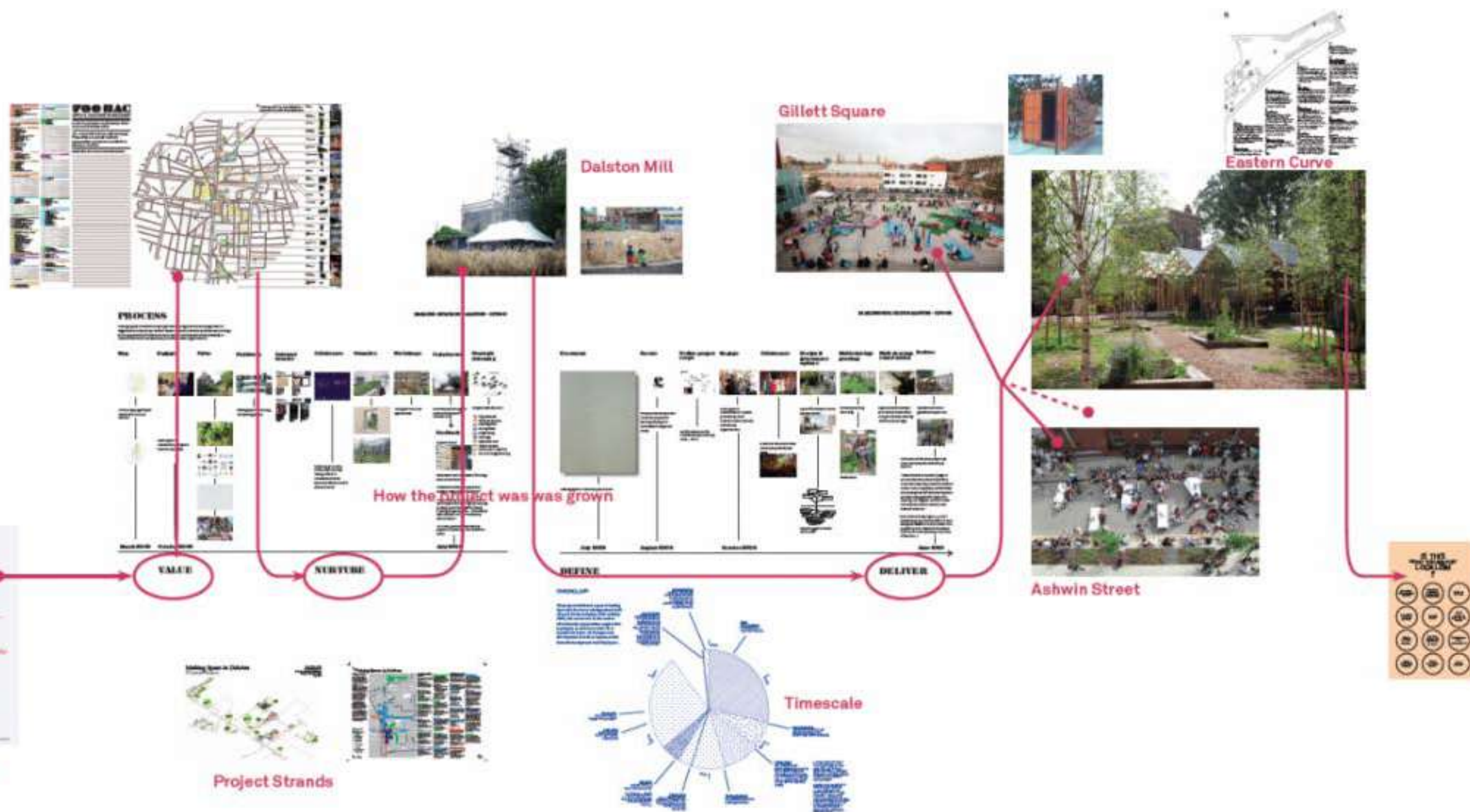


Fig 160. Incremental Timeline. Muf Architects (2009)

PHASE
01

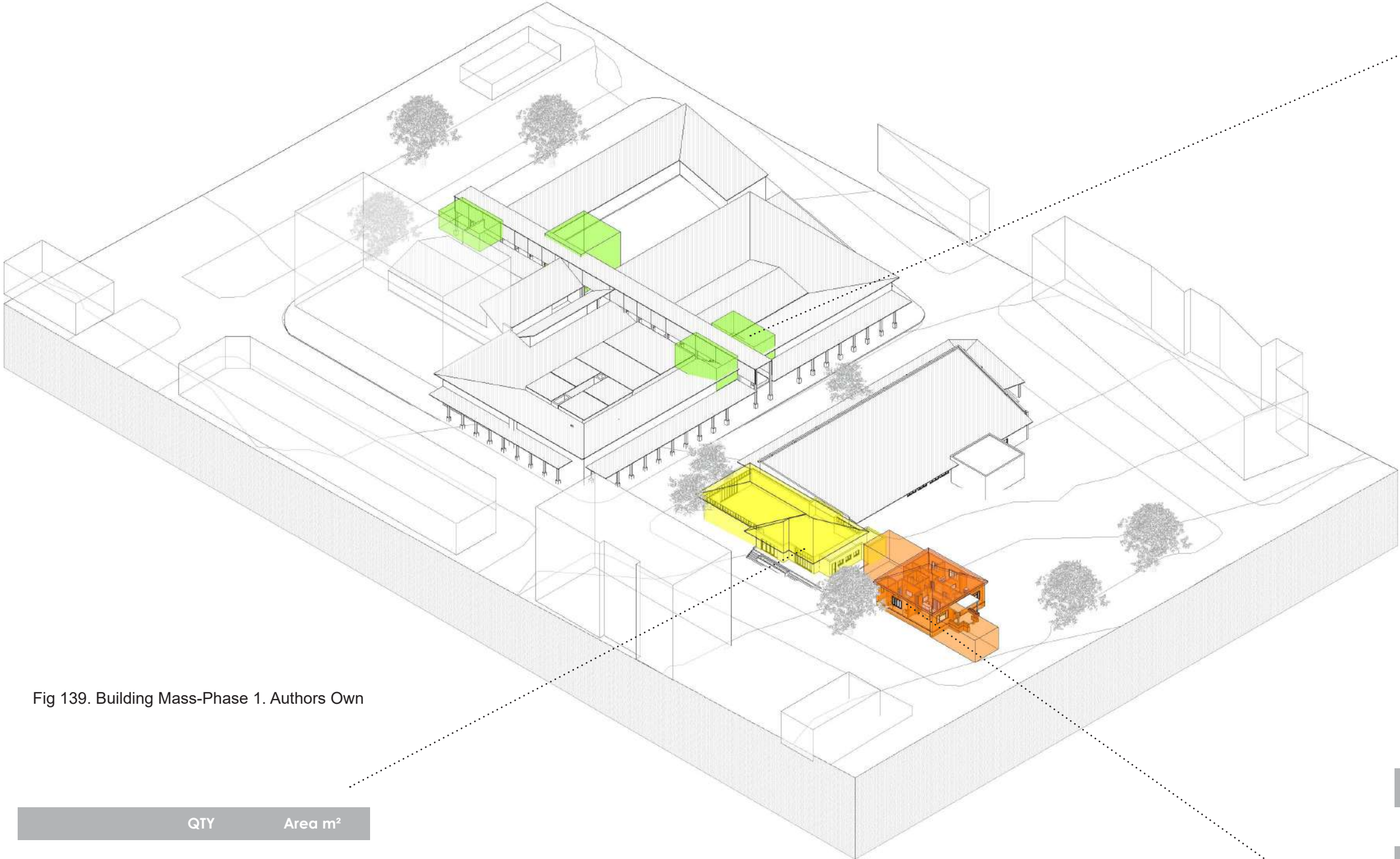


Fig 139. Building Mass-Phase 1. Authors Own

	QTY	Area m²
--	-----	---------

Business incubator for women entrepreneurs

Phase 1:Old public library conversion		284
---------------------------------------	--	-----

Reception & foyer	1	60
Gallery & Info	1	40
Studio Office	1	52
Seminar room	1(20 people)	50
Tiolets		

	QTY	Area m²
Womens Clinic		
Family Planning & reproductive health station(plug-ins)	6	(3m*4.5m)
Pregnancy,HIV,STI Tests Gynecological Exams Health Education Counselling Family Planning		
Total		108

	QTY	Area m²
--	-----	---------

Childcare Facilities

Bungalow conversion and additions		238
-----------------------------------	--	-----

0-3 area	1	
4-5 years area	1	
kitchen	1	
staff tiolet	1	
tiolets for children	1	
Staff room & Office	1	



QTY		Area m²
Womens Clinic		
Family Planning & reproductive health station(plug-ins)		
6		(3m*4.5m)
Pregnancy,HIV,STI Tests		
Gynecological Exams		
Health Education		
Counselling		
Family Planning		
Total		108

Functionality
Privacy
Security
Noise reduction
Art Installation
Lighting

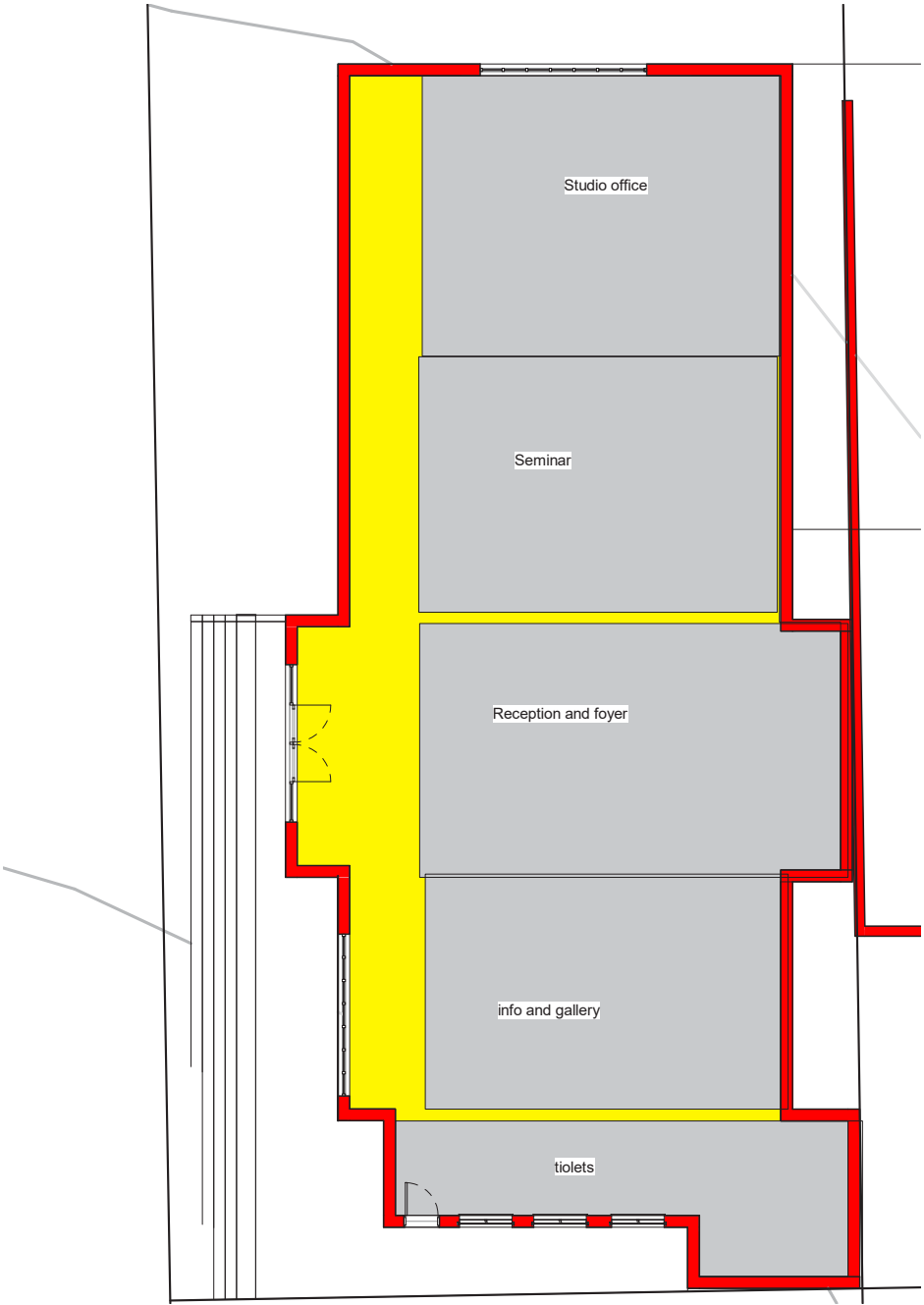
QTY	Area m²
-----	---------

Business incubator for women entrepreneurs	
--	--

Phase 1:Old public library conversion		284
---------------------------------------	--	-----

Reception & foyer	1	60
Gallery & Info	1	40
Studio Office	1	52
Seminar room	1(20 people)	50
Tiolets		

Functionality
Visibility From street
Advertising
Flexible internal spaces



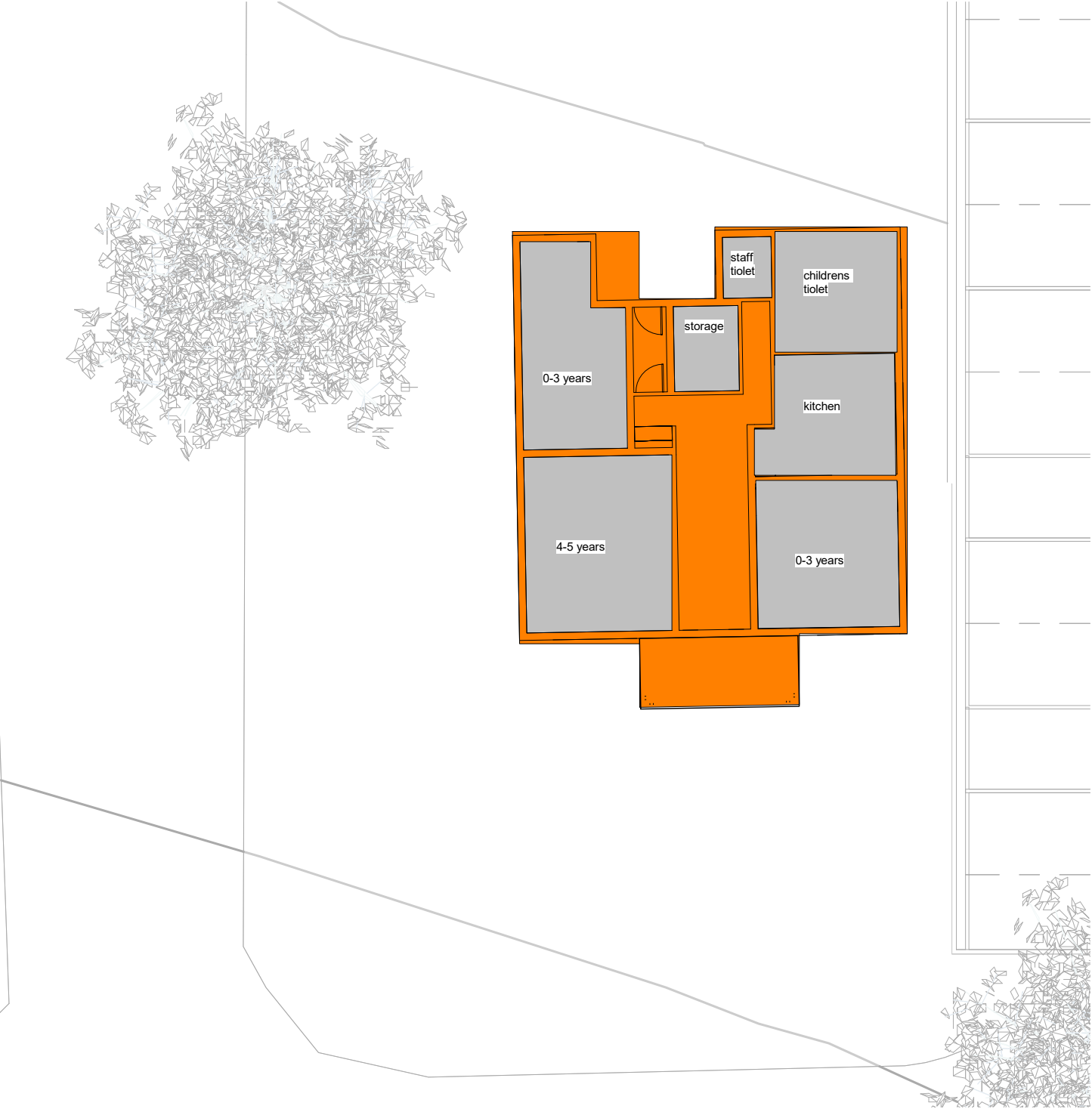
QTY	Area m²
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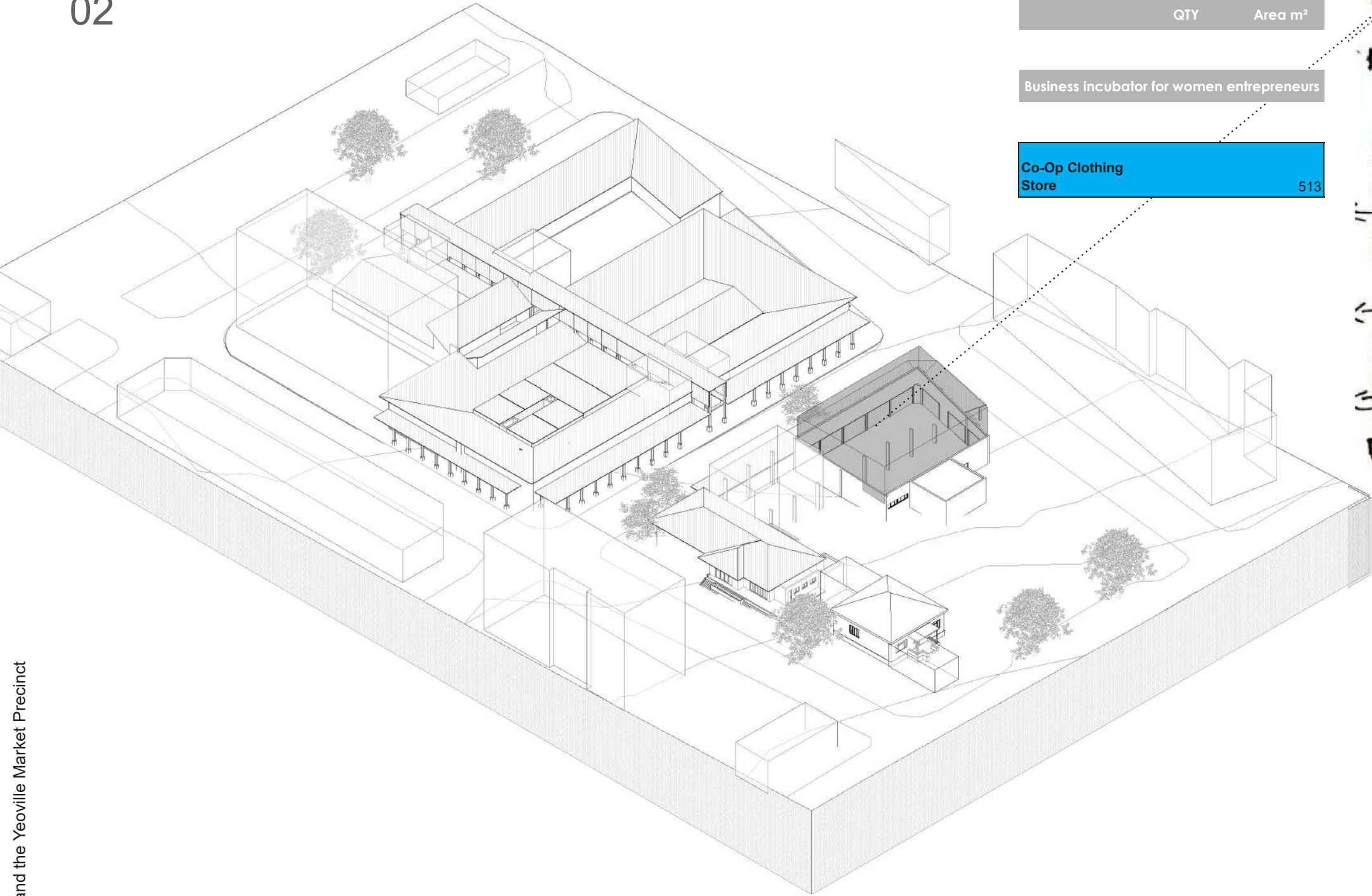
Childcare Facilities

Bungalow conversion and additions	238
-----------------------------------	-----

0-3 area	1
4-5 years area	1
kitchen	1
staff tiolet	1
tiolets for children	1
Staff room & Office	1

Functionality
Safety
Stimulate learning
24 hour function?

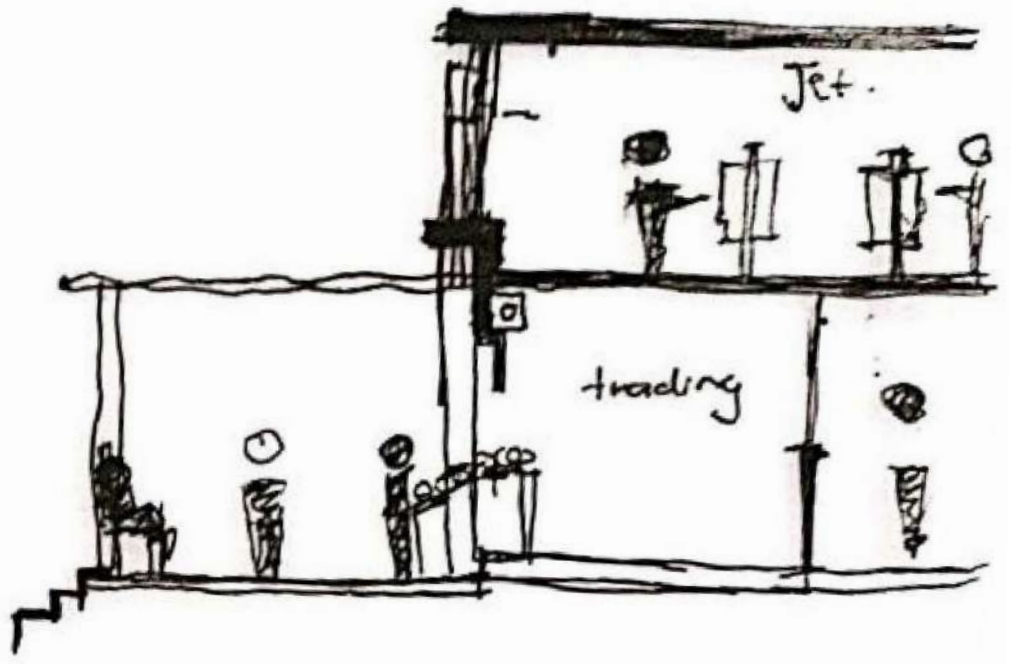
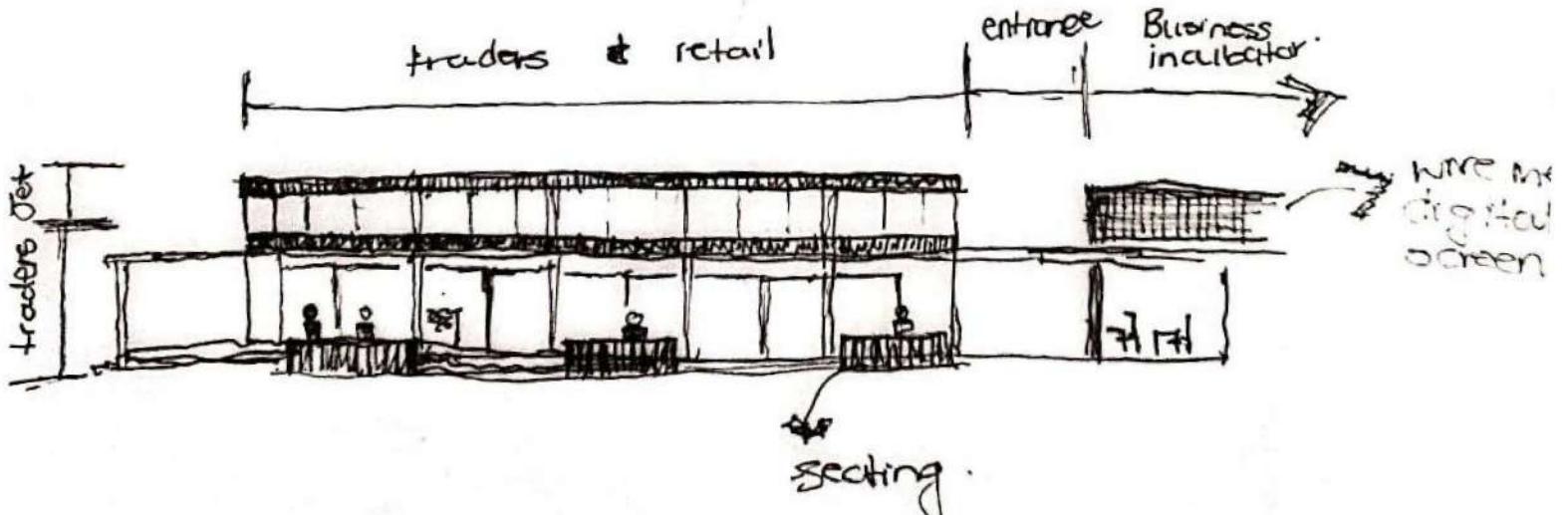
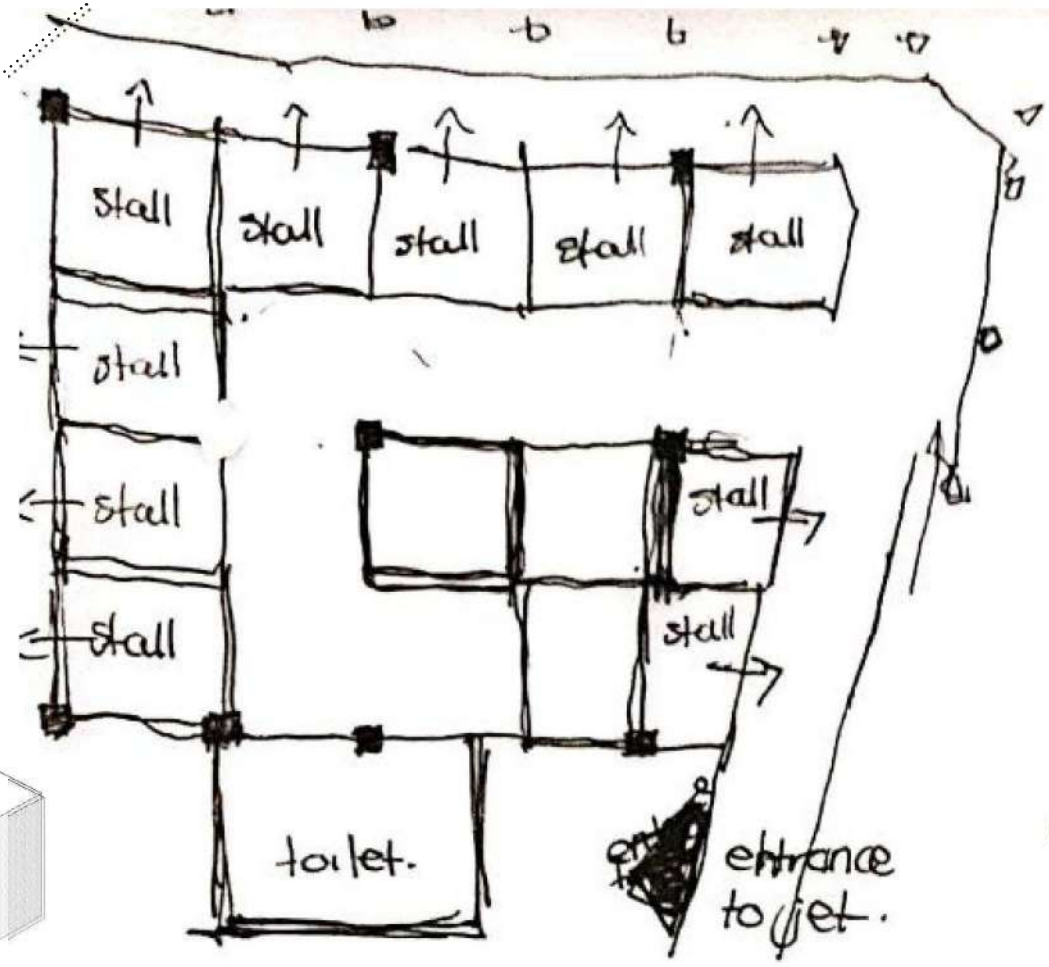


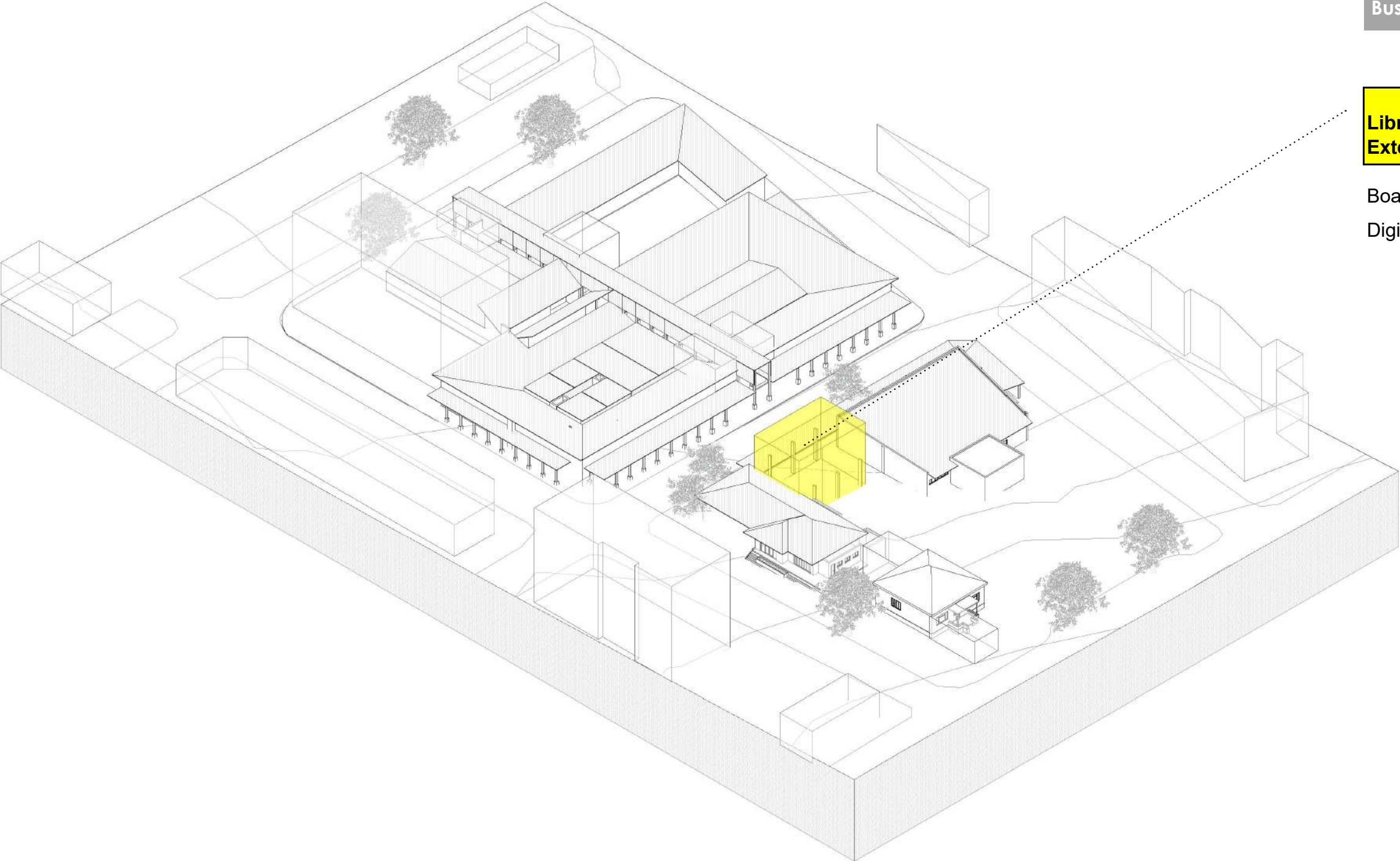


QTY	Area m ²
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Business incubator for women entrepreneurs	
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Co-Op Clothing Store	513
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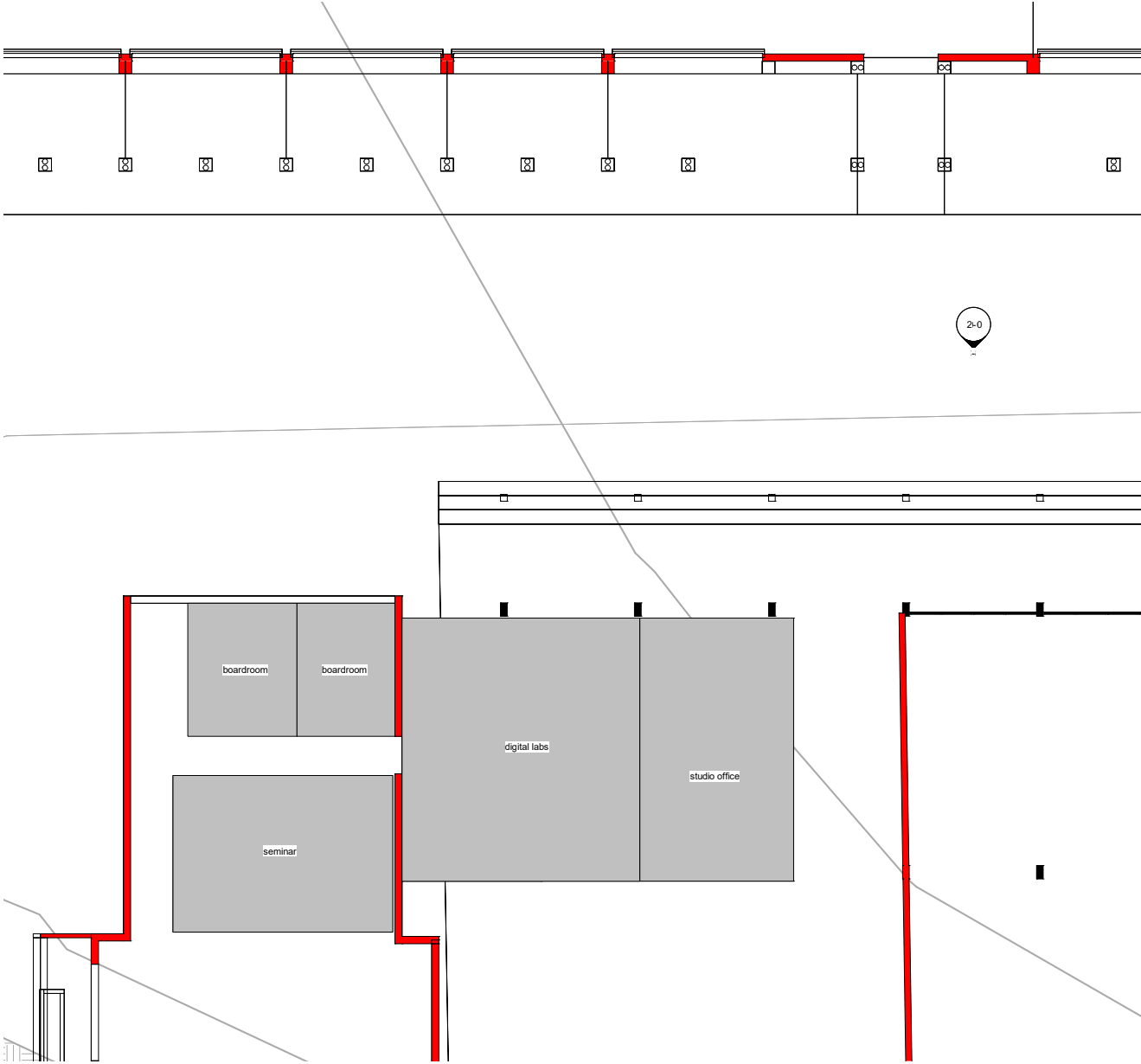


	QTY	Area m²
--	-----	---------

Business incubator for women entrepreneurs

Library Extension		130
-------------------	--	-----

Board Rooms	2	30
Digital Lab	1	70



QTY	Area m ²
-----	---------------------

Business incubator for women entrepreneurs

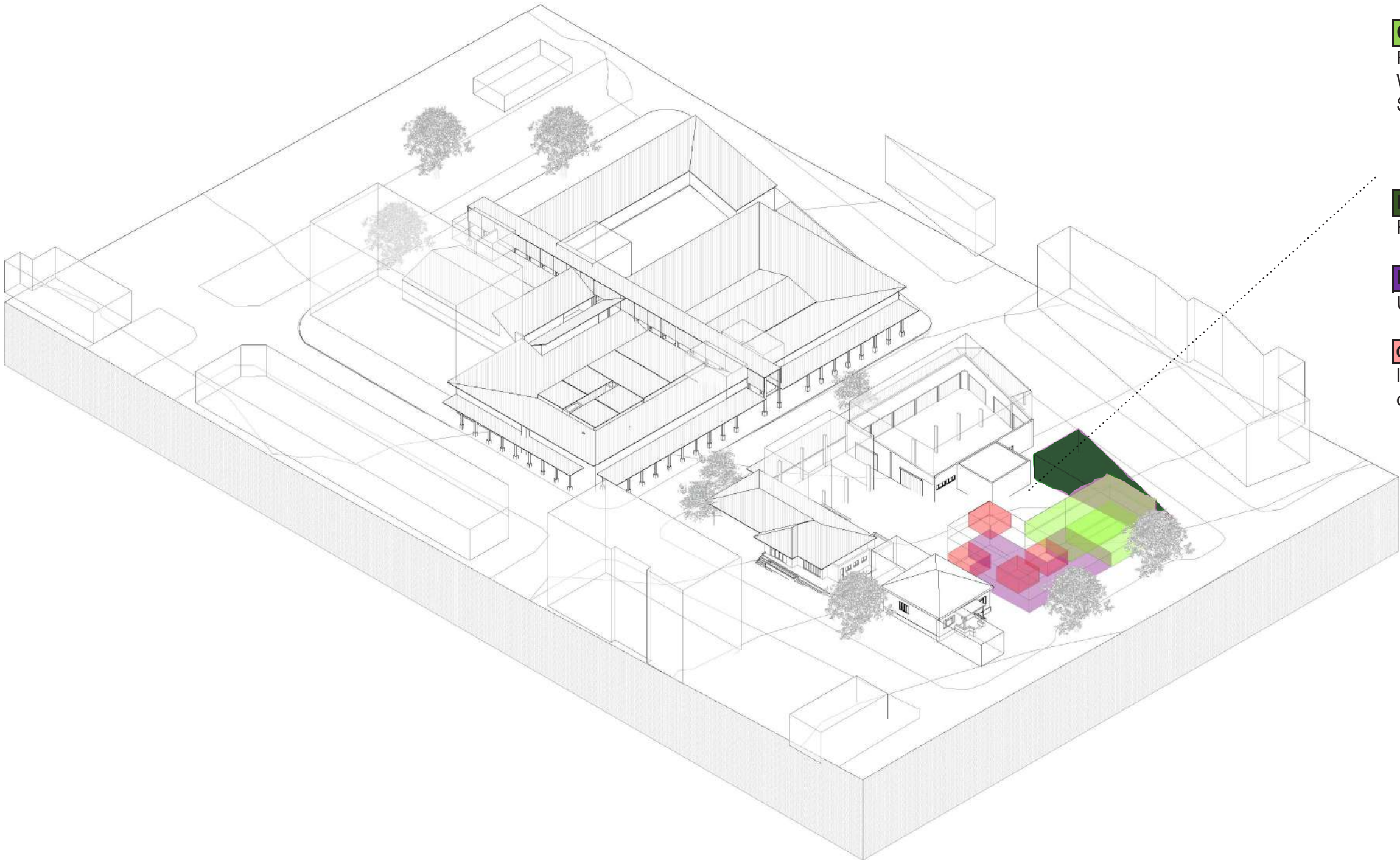
Library Extension	130
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Board Rooms	2	30
Digital Lab	1	70

- Functionality
- Visibility From street
- Advertising
- Flexible internal spaces



Fig 161. Sign Outside Library re-imagined. Authors Own



QTY		Area m²
Clinic complex		
Clinic		300
Reception & Waiting	1	50
Surgical clinic	1	250
Retail		120
Pharmacy	1	
Emergency Units		200
Units	4	50
Offices		
legal assistance offices	1	100



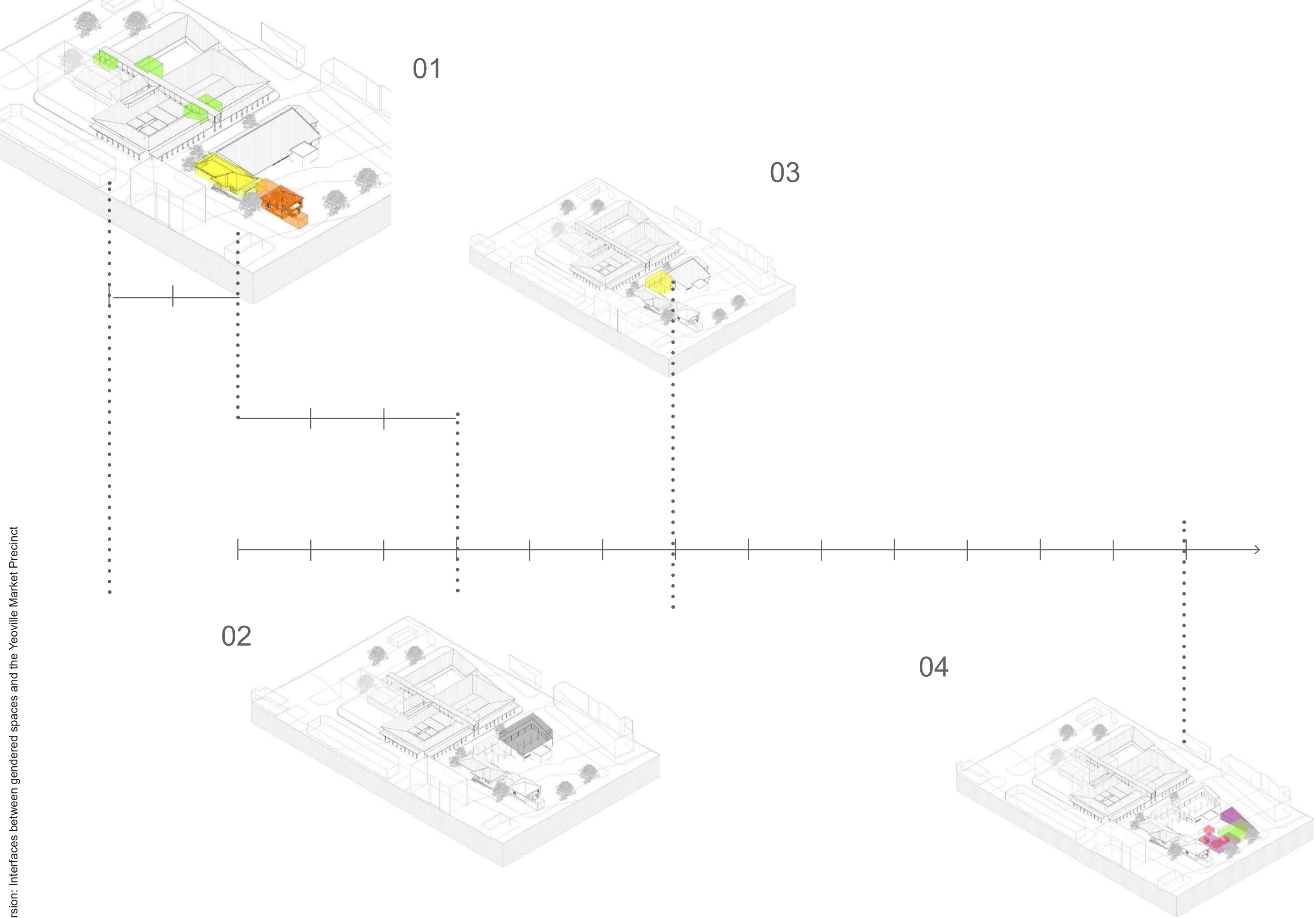


Fig 162 . Incremental Process. Computer generated by Author

"A number of feminist designers have also drawn architectural inspiration from the female body, designing womb-like and curvaceous forms rather than phallic towers, spaces which focus on aspects of the enclosure, exploring the relationship between inside and outside through openings, hollows, and gaps" (Rendell, 2012 p. 87)

Integral to the project is the dismantling of dominating structures, orders and grids that do not work well with African urban societies.. Questioning what is rational contemporary design across multiple scales: from social orders influencing urban and public space planning down to modes of building design and technicality. The grid, the order for Classical design, that transgressed into "non-functional decoration of Modernism." (Farhady 2009 pg. 18)

I developed interest in the ideas developed by Van Eyck. Theories that acknowledge and embrace the existence of polarities at the same time. Prevalent in his built work is polarities that occur at two levels, that of structure and that of form. At structural level through linking two different interior spaces or the total fusion of two different patterns to form a new and complex structure. "Van Eyck shows that it is not a matter of choosing between two elements, but of employing both in conjunction in such a way that the right reciprocal effect is obtained." (Farhady, 2009 pg. 19)

This idea of in the 'in between' is prevalent on another level in the landscapes of African cities; in the occupation of space. The symbiosis of beings accustomed to opposite modes of space, forced into tight-knit structures, forms and spaces. "Herman Hertzberger argues about the transition of space, using the term 'threshold'. He says that "The threshold provides the key to the transition and connection between areas with divergent territorial claims and, as a place in its own right, it constitutes, essentially, the special condition for the meeting and dialogue between

areas of different orders." (Farhady 2009 pg. 17)
This project explores polarities at three levels:

1. Polarities in contested spaces and (clinics and shelters) and dense public areas
2. Gendered occupancy of spaces
3. Structure and in form

It is important to highlight the importance of the circular form in many indigenous modes of space and architecture (Fig 163). Which Van Eyck describes as an expression of the human identity, which while manifesting itself in different forms in various ages and cultures, has remained constant. He studied the circular in indigenous African cultures and wanted to understand architectural heritage to enable himself to reconstruct it in a twin phenomenon with classical and modernism principles.

BY .US*

FOR US

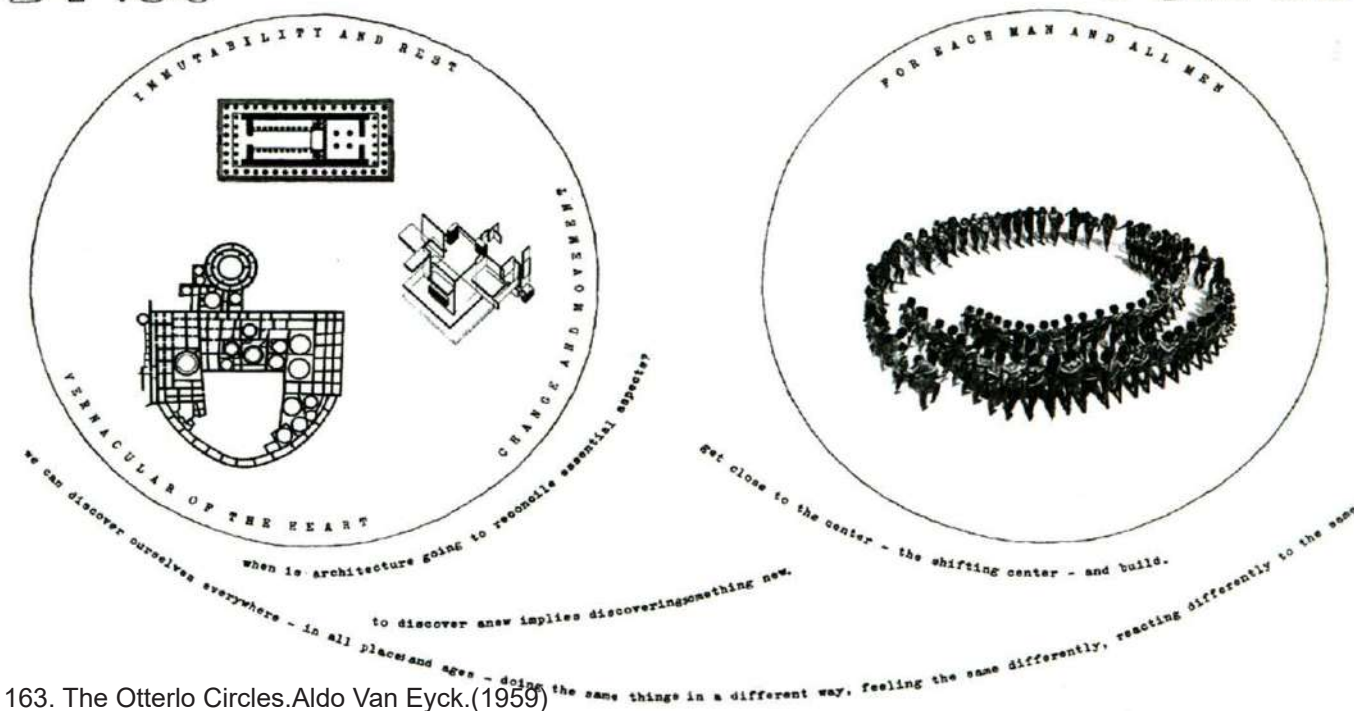


Fig 163. The Otterlo Circles. Aldo Van Eyck. (1959)

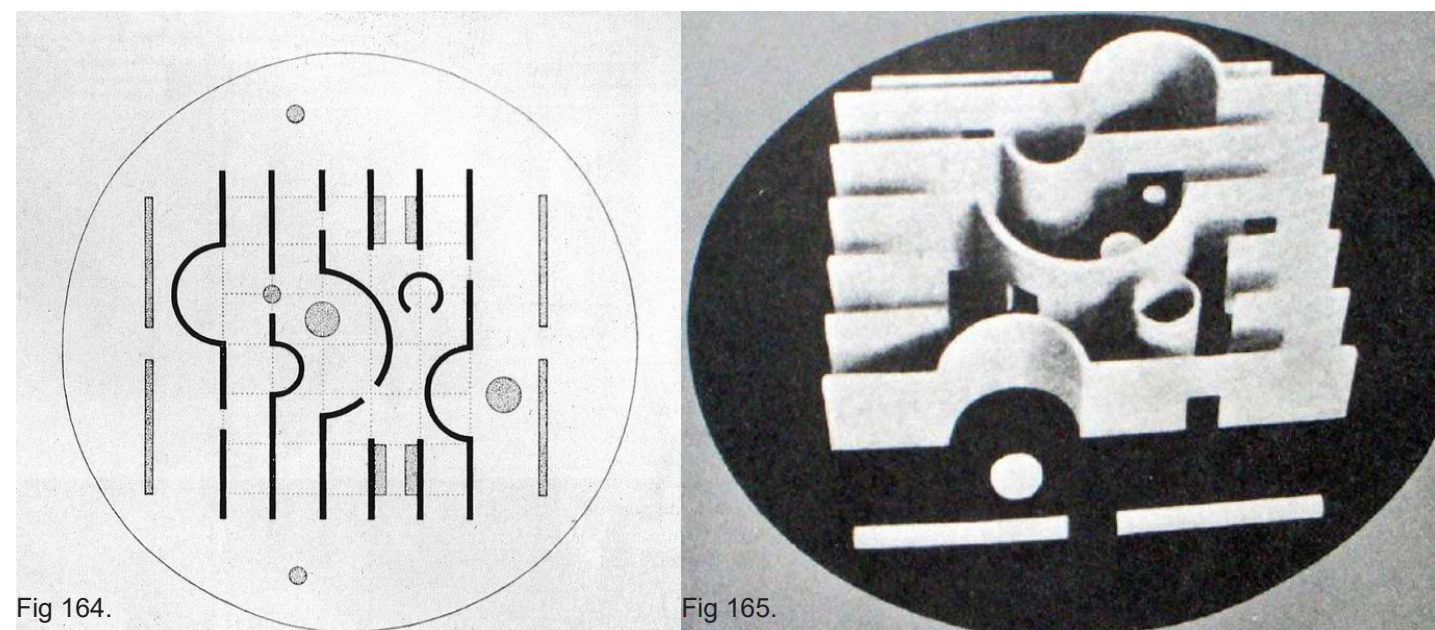


Fig 164-165. Sonsbeek Pavilion Plan and Model. Aldo Van Eyck (1966)

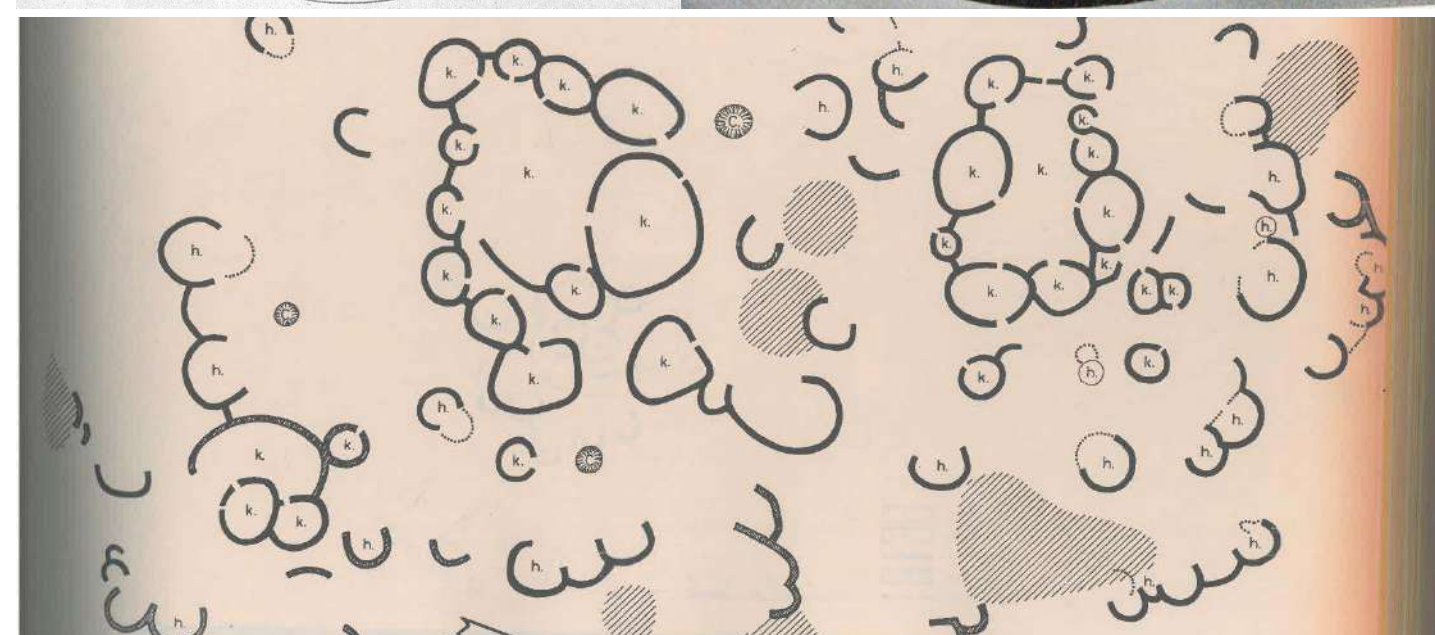


Fig 166. Settlement Patterns. Buf-felhoek. Franco Frescura (1980)

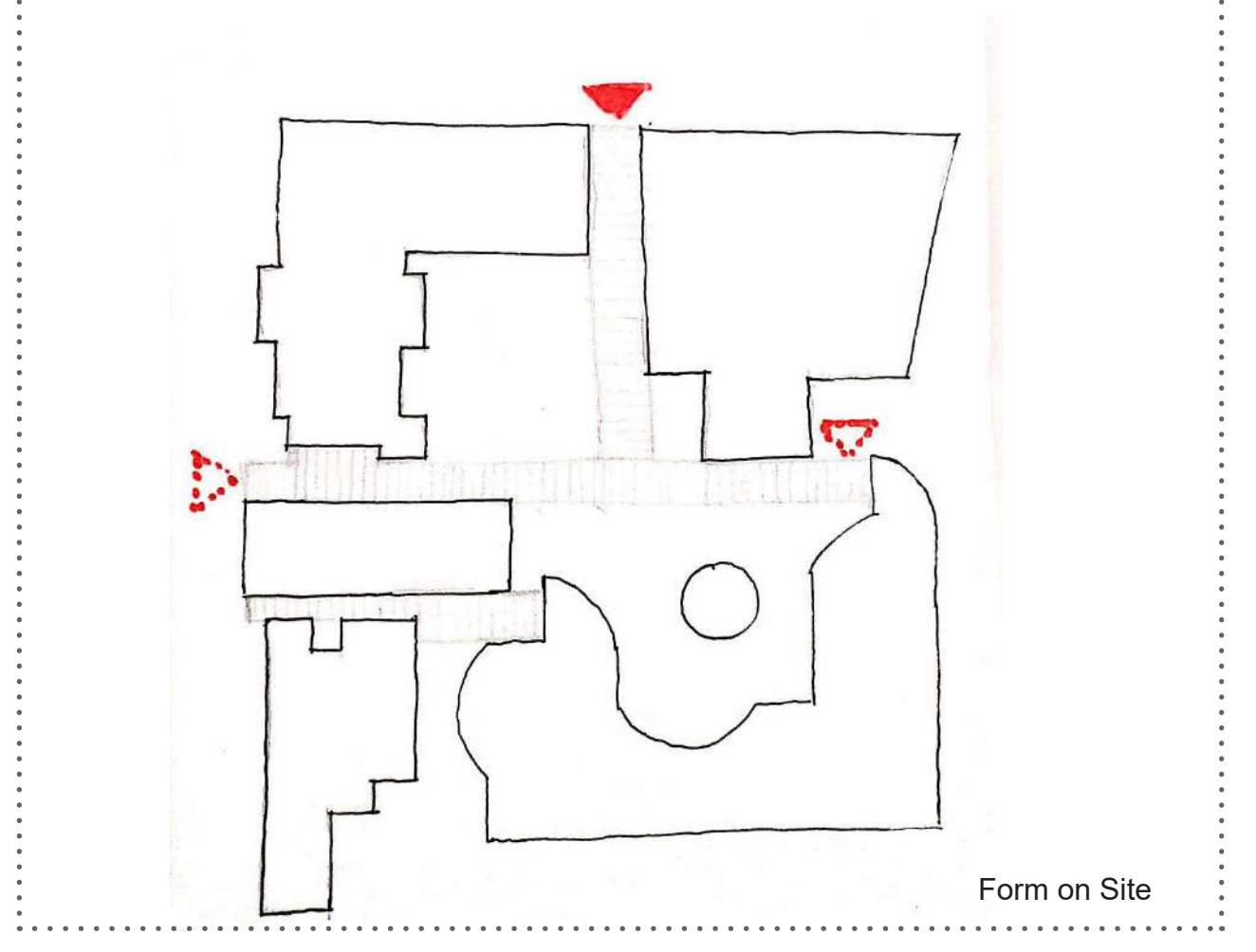
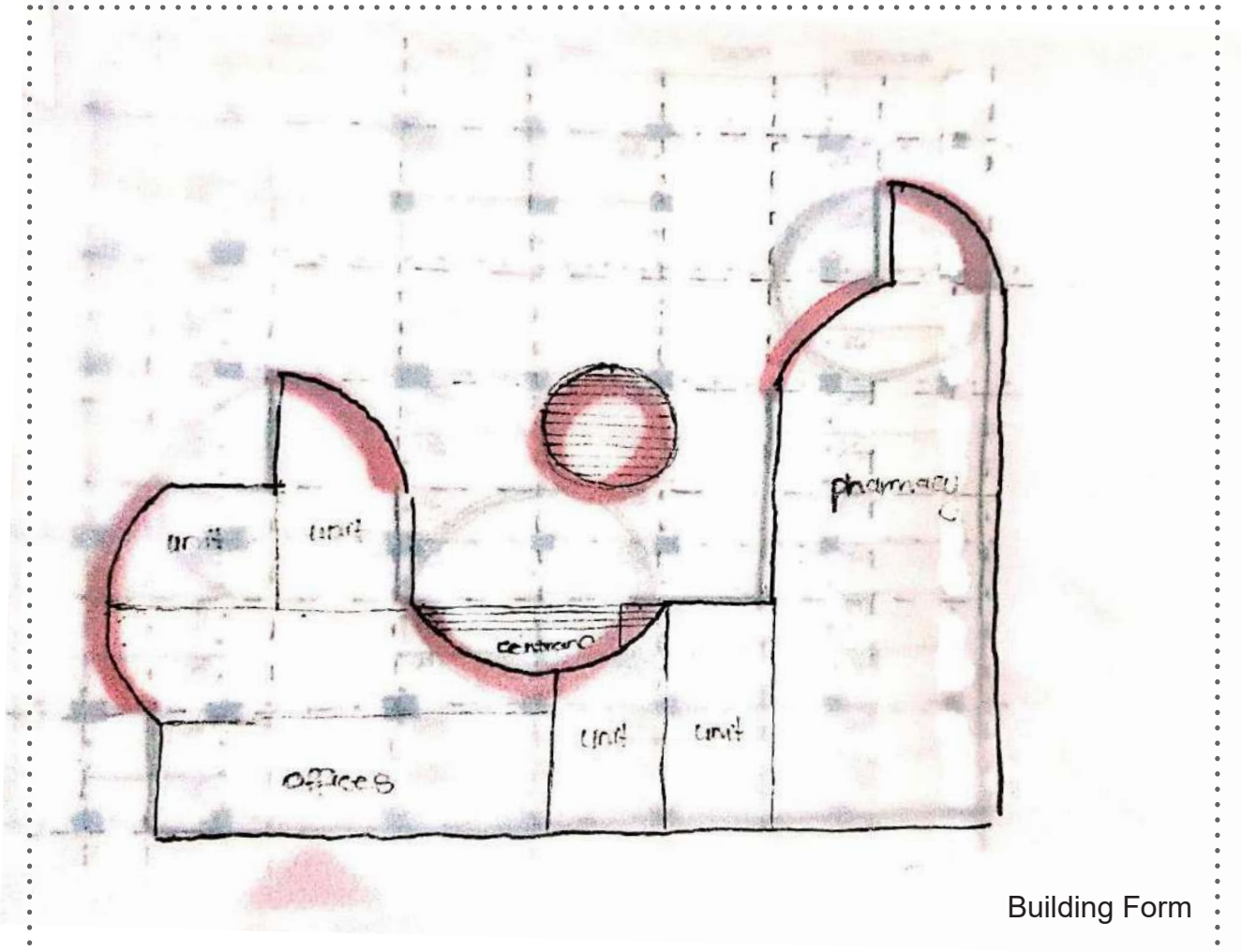
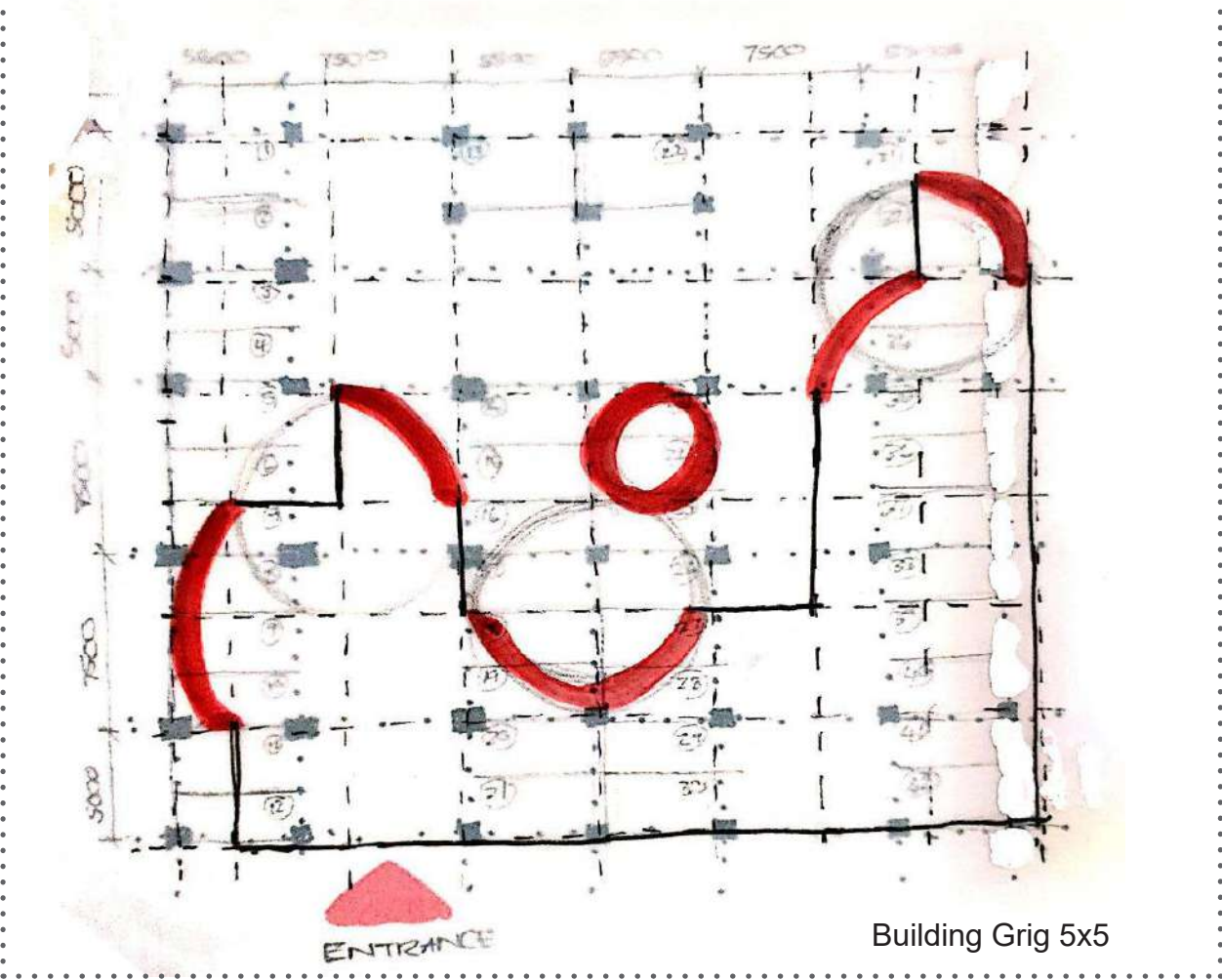
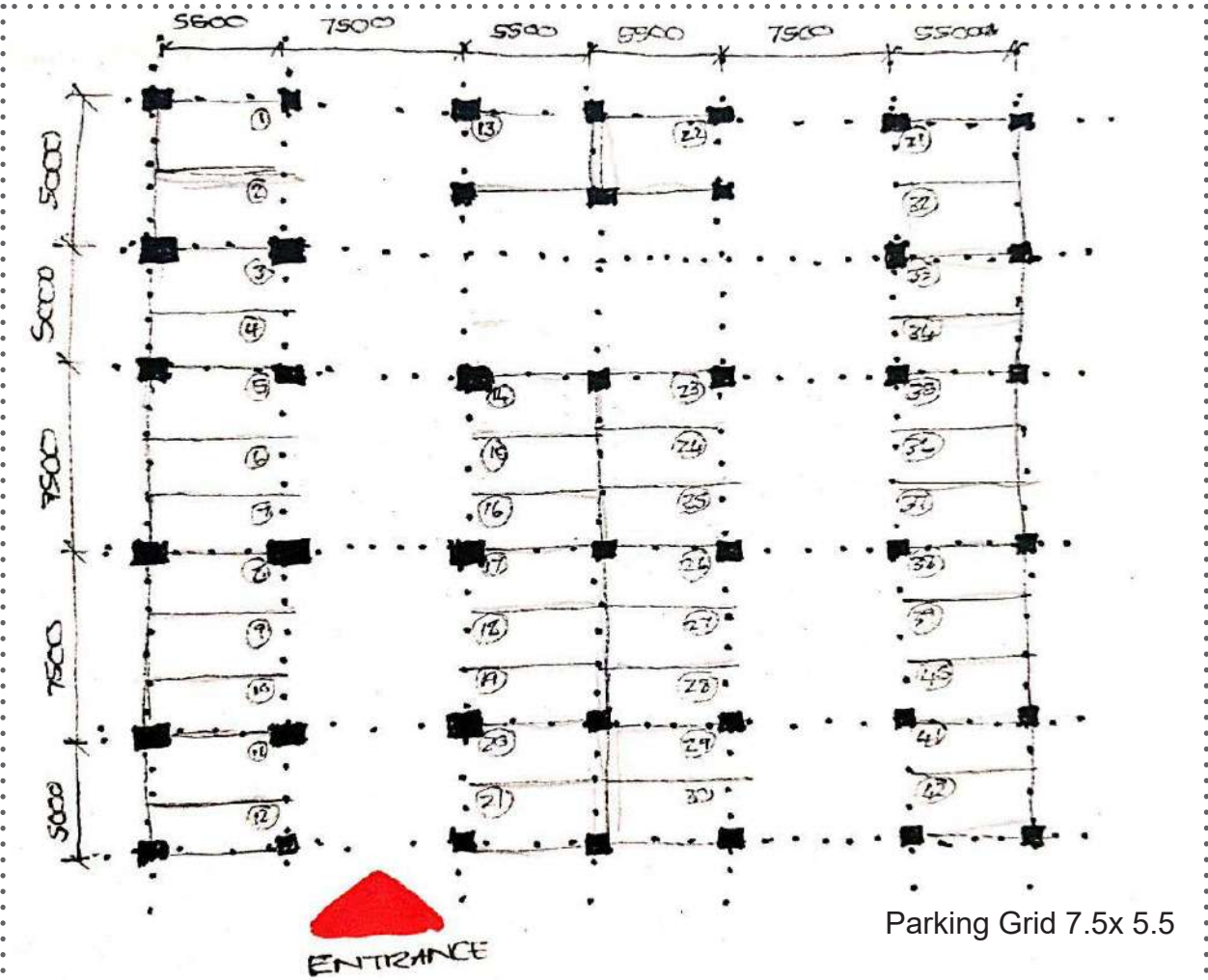


Fig 167-170. Structural and Form Polarities Clinic Building. Authors Own

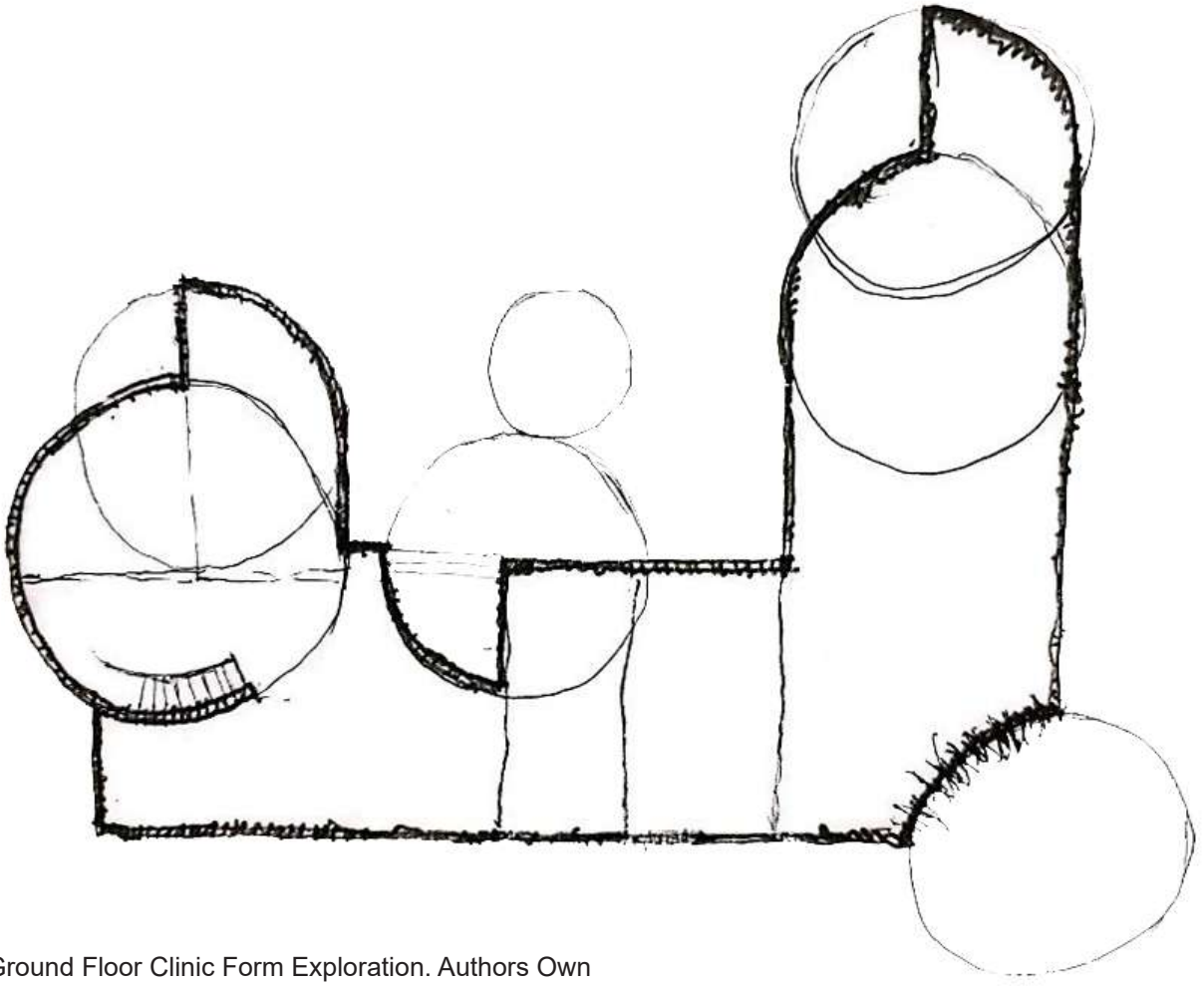


Fig 171. Ground Floor Clinic Form Exploration. Authors Own

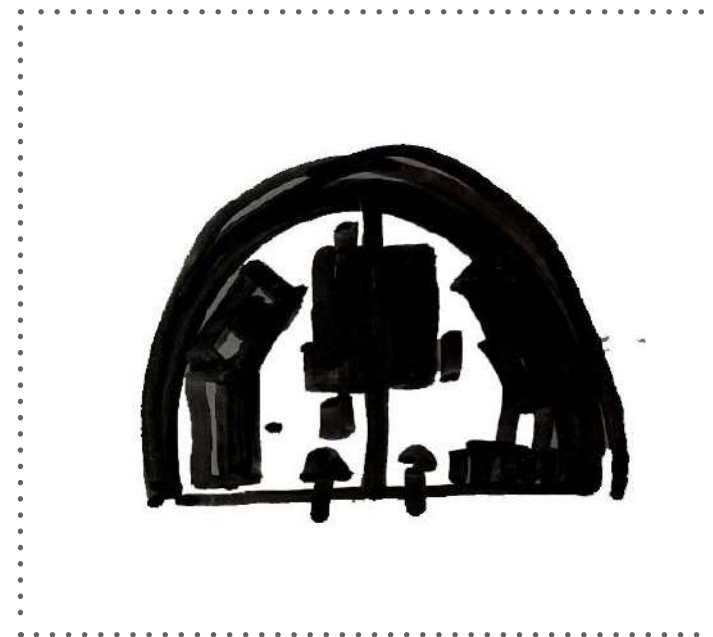
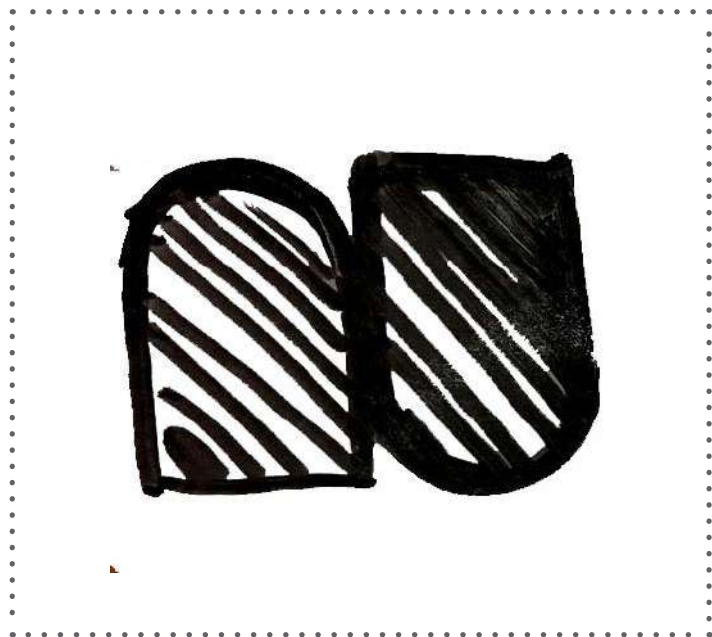
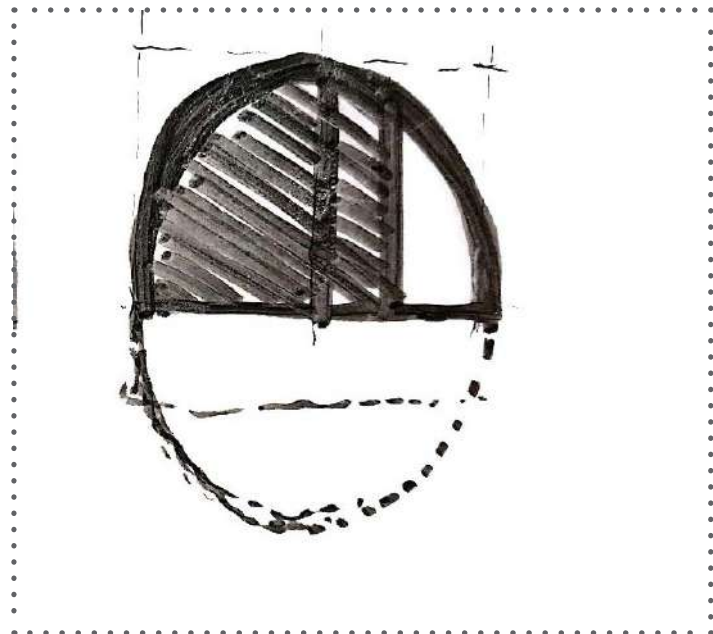
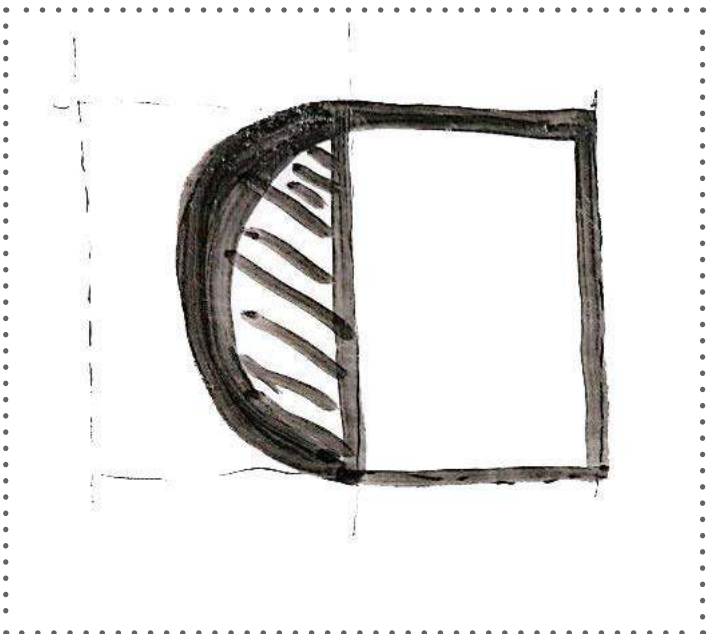
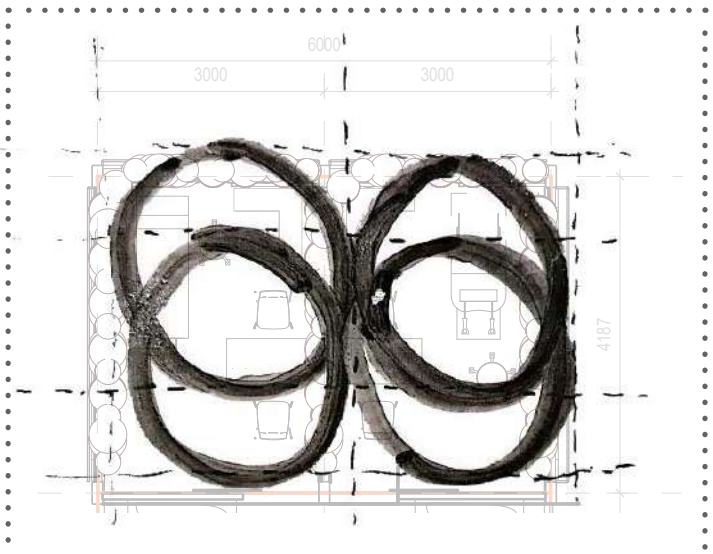
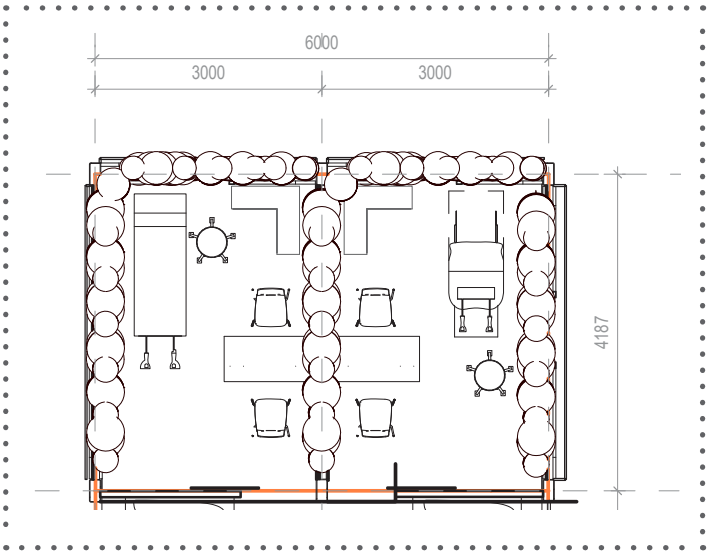


Fig 172- 176. Form Plarities Plug-In Stations. Authors Own

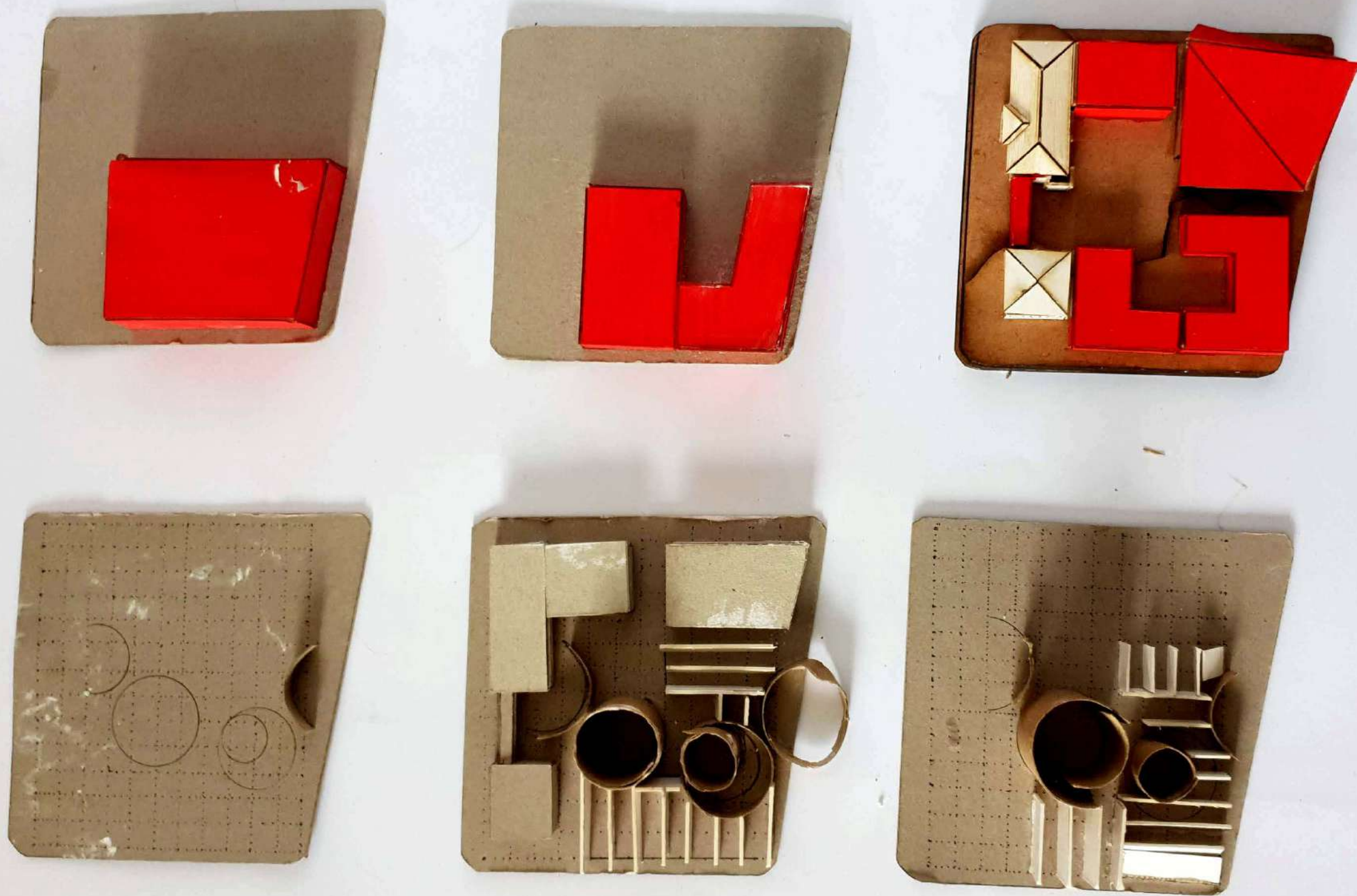


Fig 177. Mass and form finding models. Authors Own

Fig 178. Schematic Plan. Authors Own

First Floor

- 1. Clinic Reception & Waiting Area
- 2. Therapy Rooms
- 3. Recovery
- 4. Consulting, Treatment & Procedure Rooms
- 5. Roof
- 6. Mobile Clinic Plug-in Stations

Upper Ground

- 1. Boardrooms
- 2. Seminar Room
- 3. Reception and Gallery
- 4. Paediatric and Neonatal Consulting
- 5. Reception
- 6. Staff and Store
- 7. 4-5 years playroom
- 8. 6-7 years playroom
- 9. 0-3 years playroom
- 10. Kitchen
- 11. Toddlers toilet
- 12. Emergency Units
- 13. Legal Offices
- 14. Pharmacy

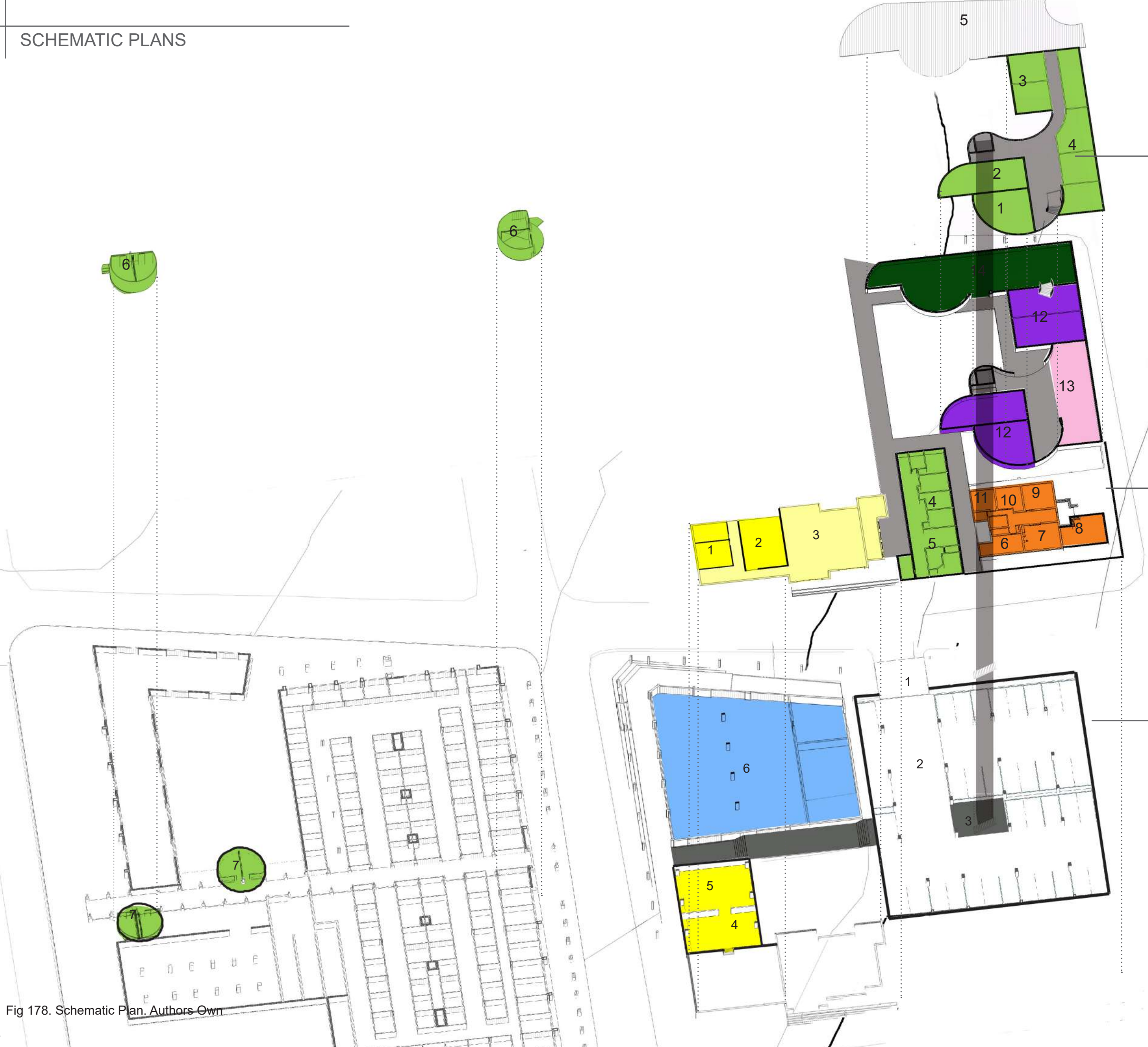
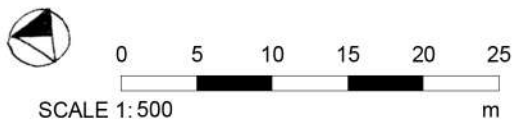
Basement Level

- 1. Basement Entrance
- 2. Parking
- 3. Entrance: Lifts & Staircase

Lower Ground

- 4. Studio Office
- 5. Digital Lab
- 6. Co-Op Clothing Store
- 7. Mobile Clinic Plug-in Stations

- Reproductive Health Clinic
- Legal Offices
- Child-drop off
- Emergency Accommodation
- Business Incubator
- Co-Op Clothing Store
- Circulation



THRESHOLDS, FACADES, SHELL

Materiality will be explored through interfaces between the sensitive program of the building (the abortion clinic and shelter) and the high density of the area. Thresholds between public, semi-public and private are important both in spatial planning and the materiality of the building. The facade or the shell becomes an architectural device significant to the design. One that will be explored technically. For areas such as therapy rooms or the whole abortion clinic (due to its contested nature), if for instance protests occur on the perimeter of the building sound treatment is important.

The treatment of the facade is dependent on two factors:

1. The placement of space components on site; in the bustling market versus the quiet end of the site along Hopkins Street. This determines whether sound should be reflected or absorbed or diffused.

2. The functionality of each space component; is it provision of security, privacy, awareness, visibility protection from sound? from weather? from public eyes?

This determines whether sound should be reflected or absorbed or diffused. From that a choice of material can be made

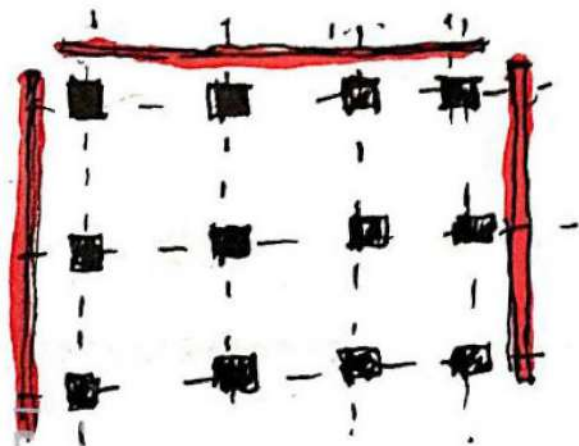
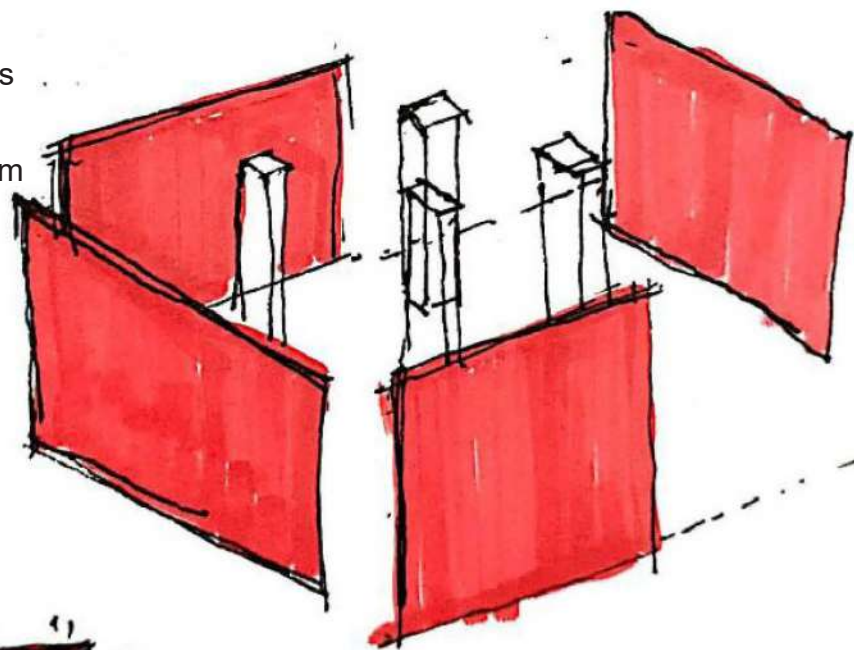
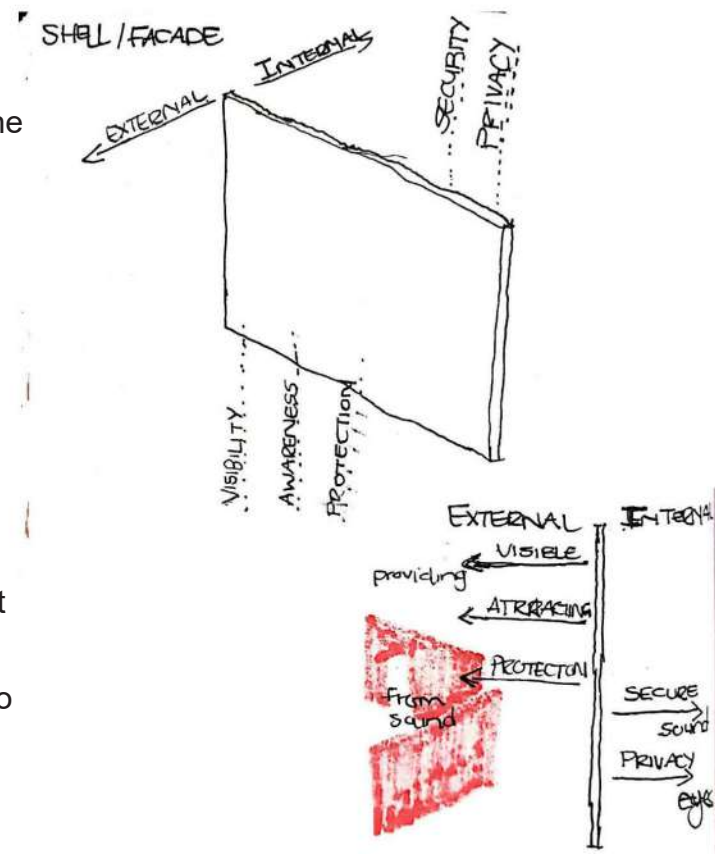


Fig 179. Envelope Sketch. Authors Own

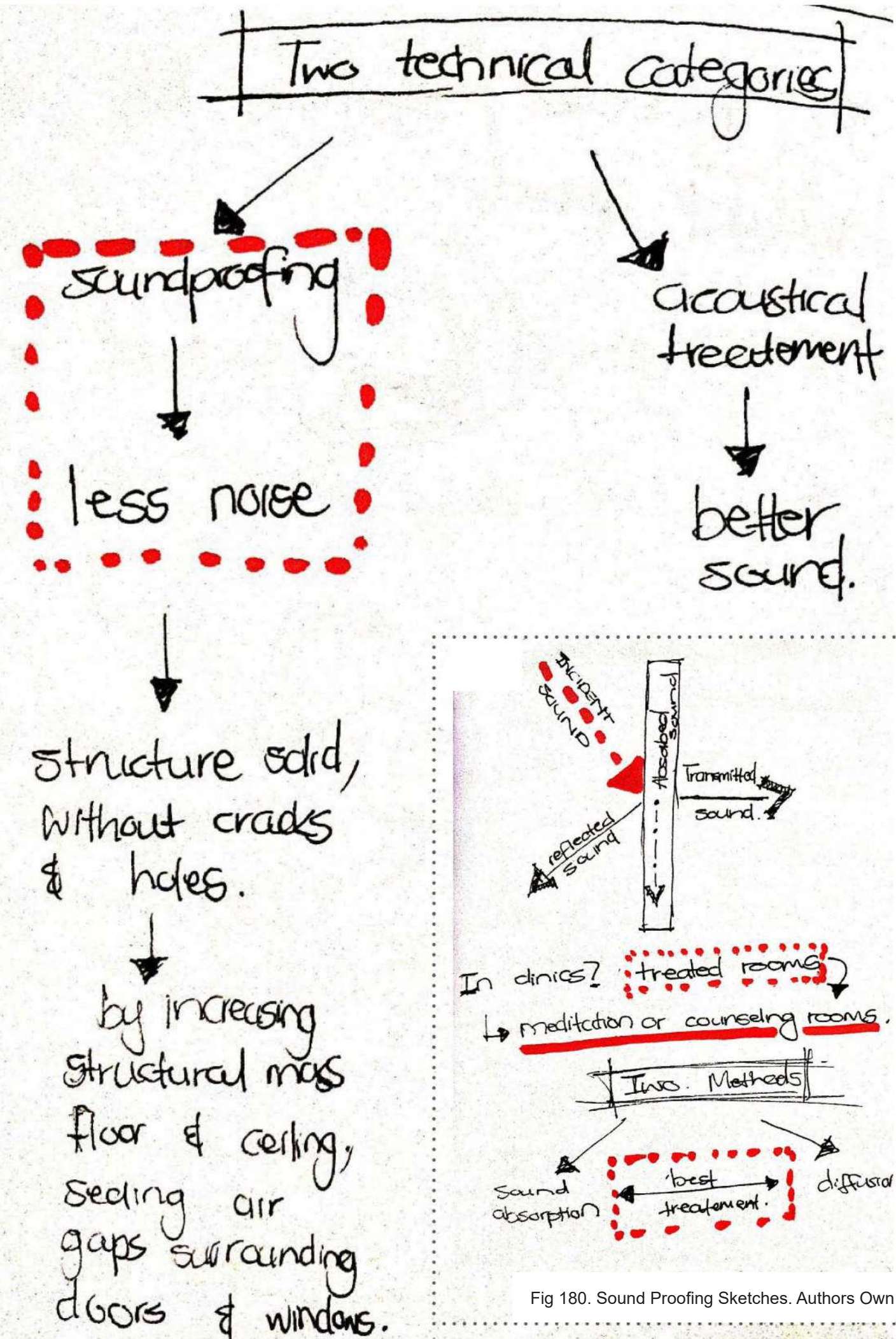
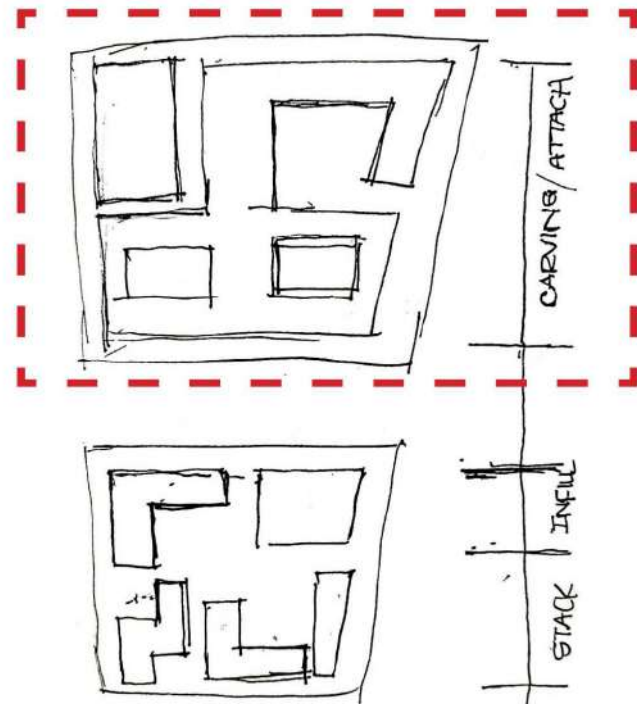


Fig 180. Sound Proofing Sketches. Authors Own



REFLECT

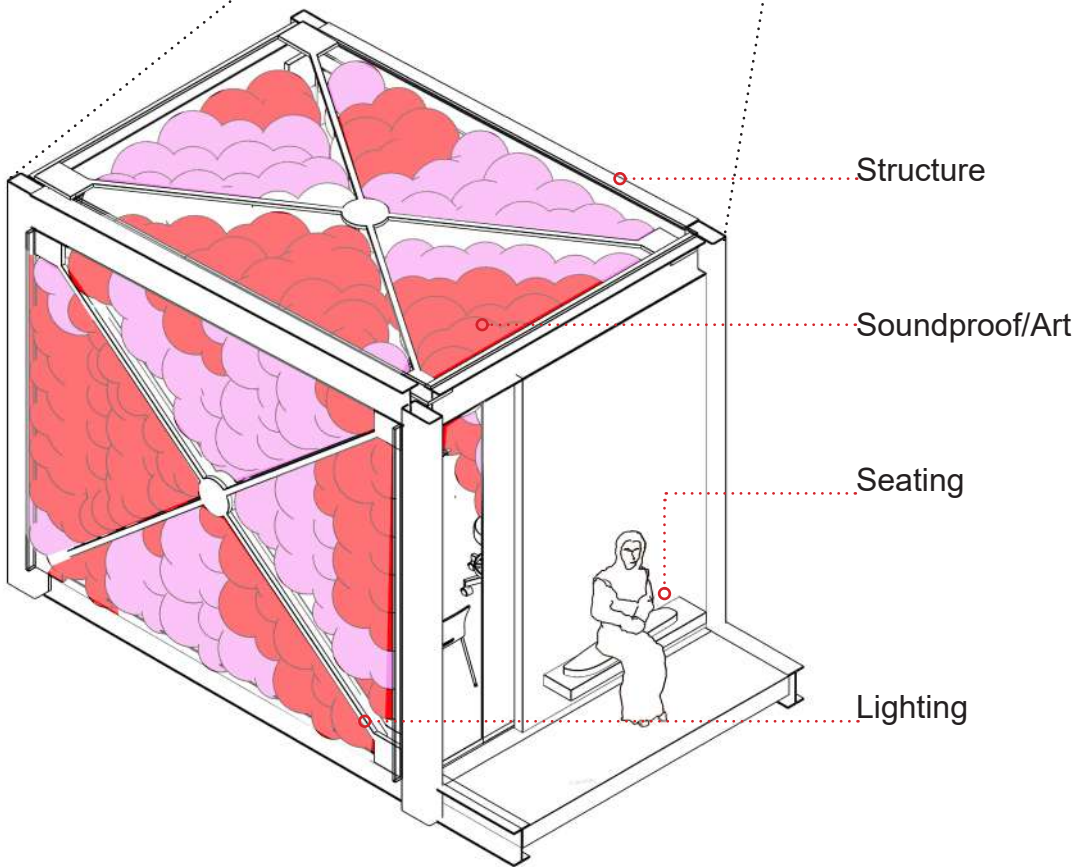
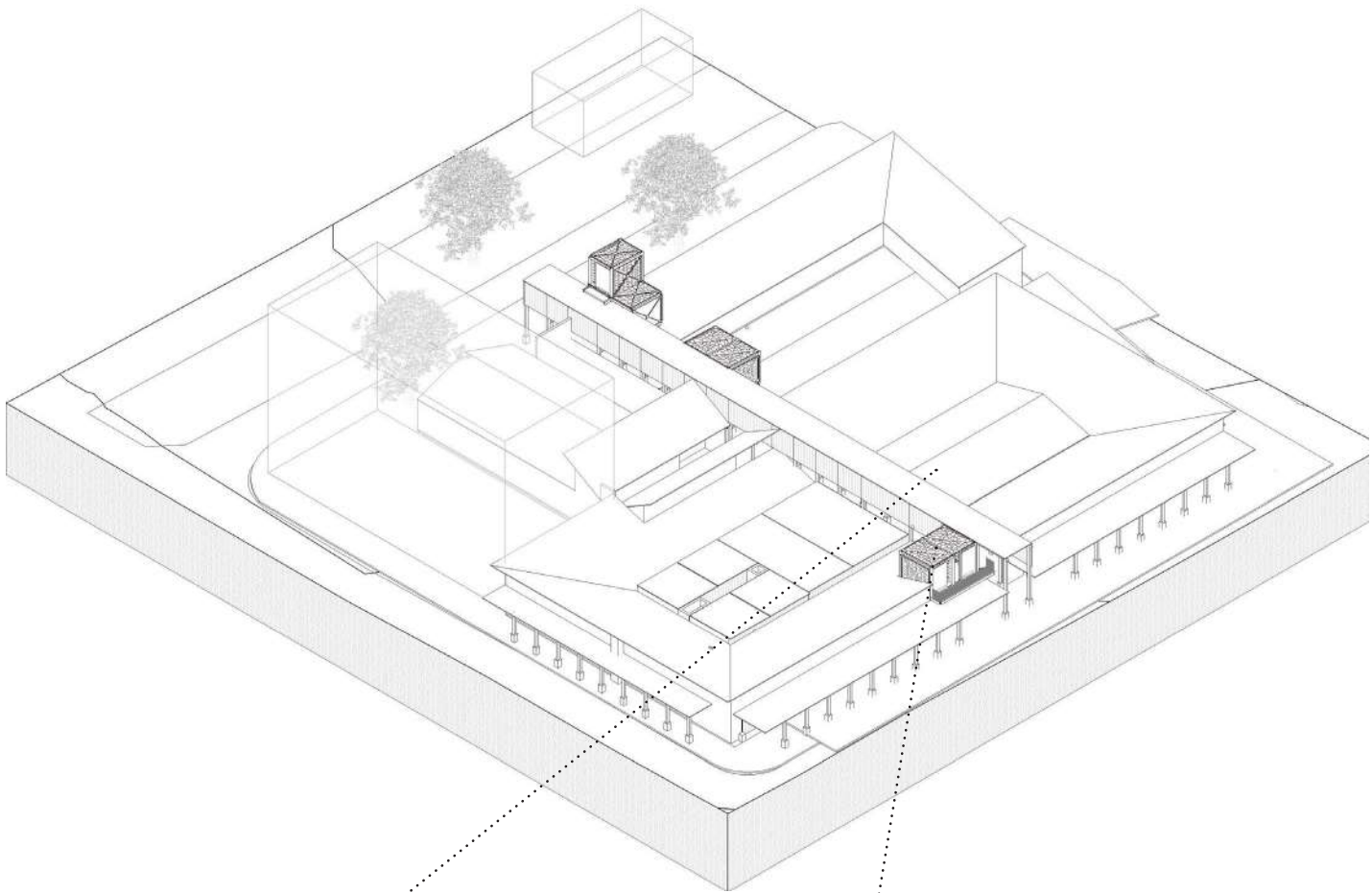
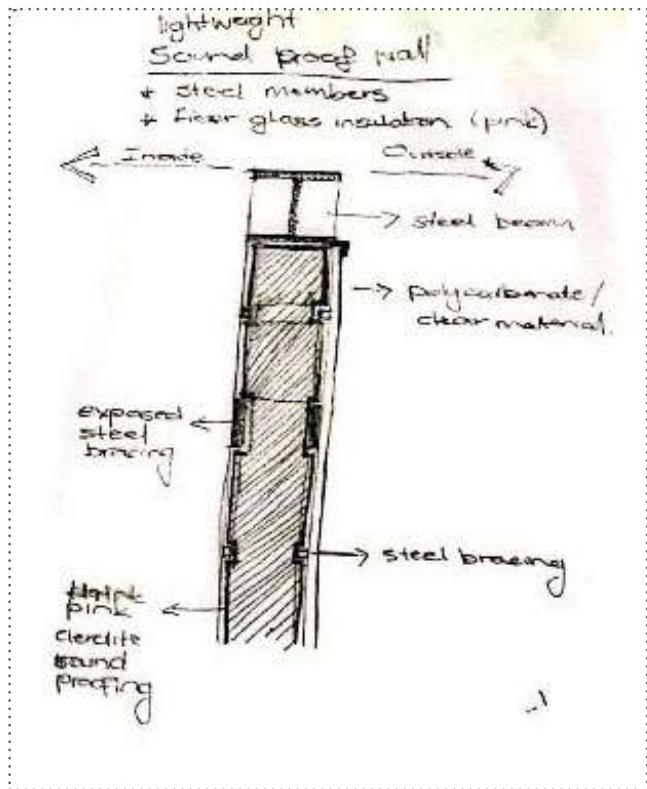
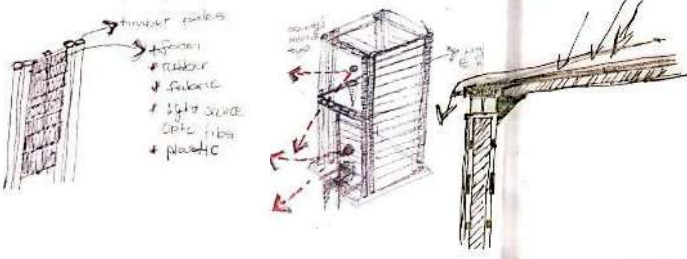
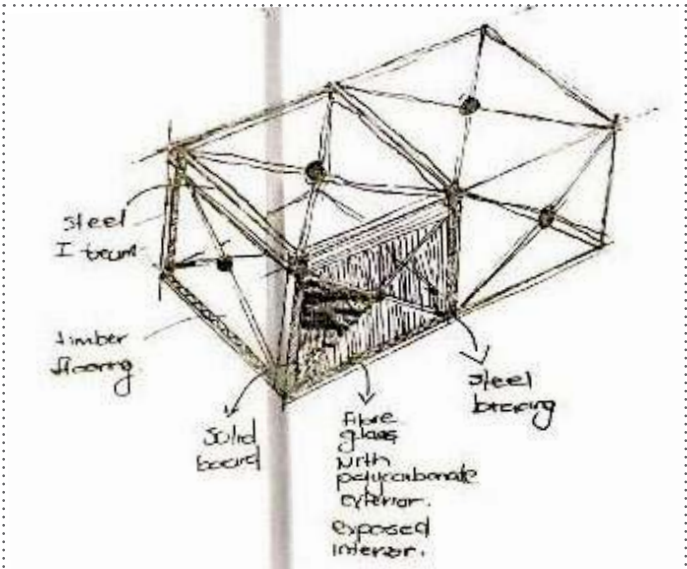
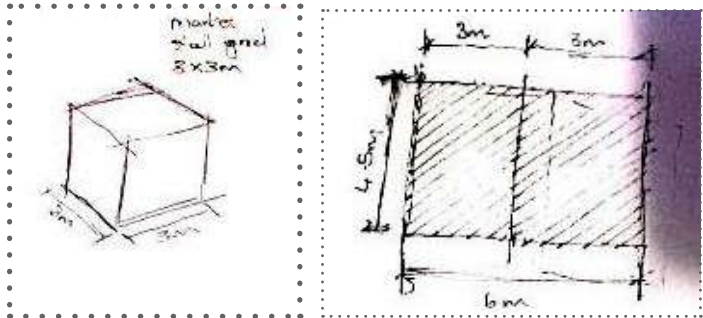
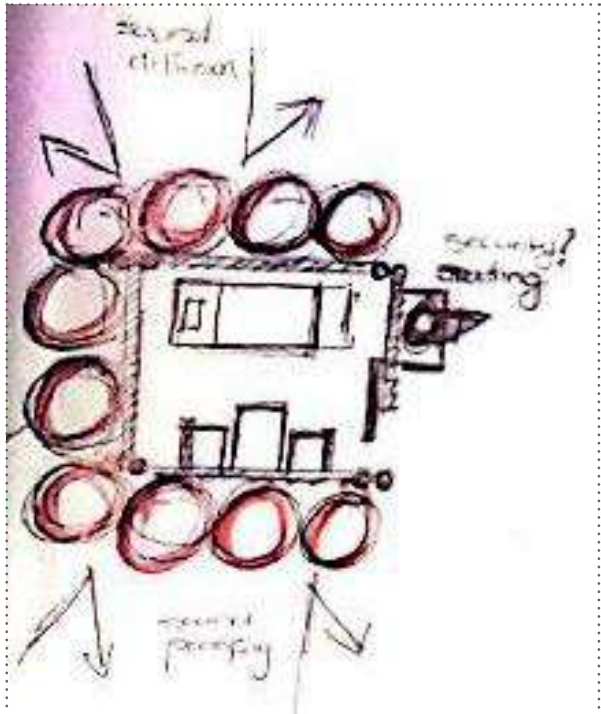


Fig 181-190. Plug-In Installations Materiality Exploration. Authors Own

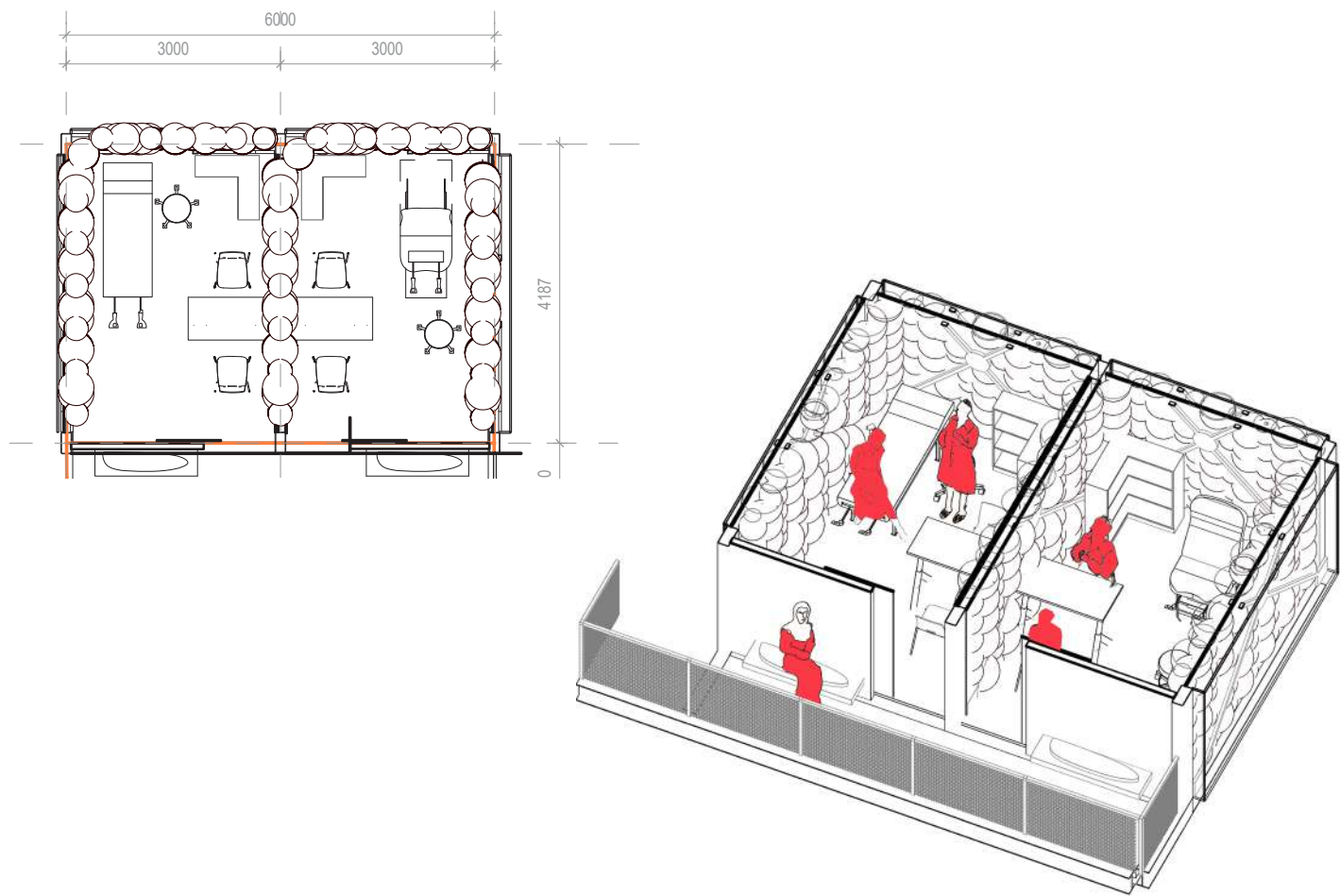


Fig 191. Use Of Plug-Ins

Because the market has high human traffic, the choice of material for the plug-ins should reflect sound. Due to the nature of the program, the material would not only perform acoustically, but hygienically and aesthetically. Autoclaved Aerated Concrete has properties of sound insulation. ACC panels also allows for modulations of patterns into workable portions. Panels are 600mm wide. They are either 100 or 150mm thick. Lengths are in increments of 300mm ranging from 2,4 m 2,7m or 3,0m. These panels are a quarter of the weight of conventional concrete panels. This reduces the amount of material used and allows for pre-fabrication and ease in dismantling of the temporary structure. These panels can be custom moulded into circular patterns on the outer face to achieve the aesthetic alongside. Therefore aerated concrete is the primary material of choice as it allows for the functionality of the installation.

Module Size Grid

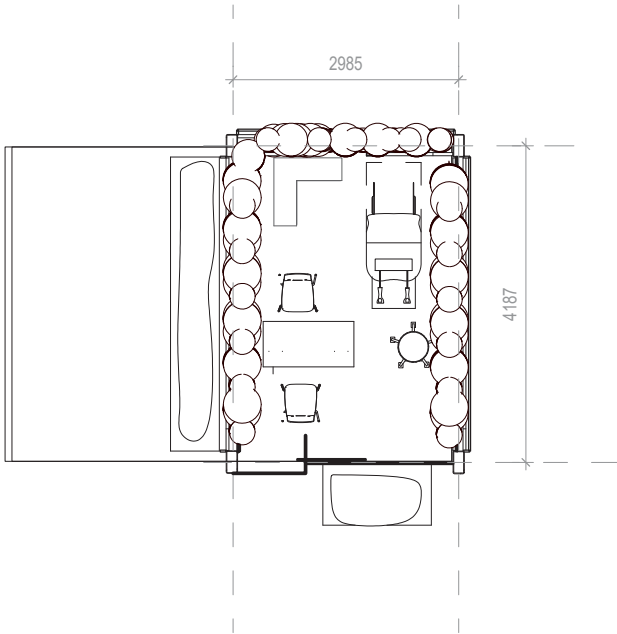
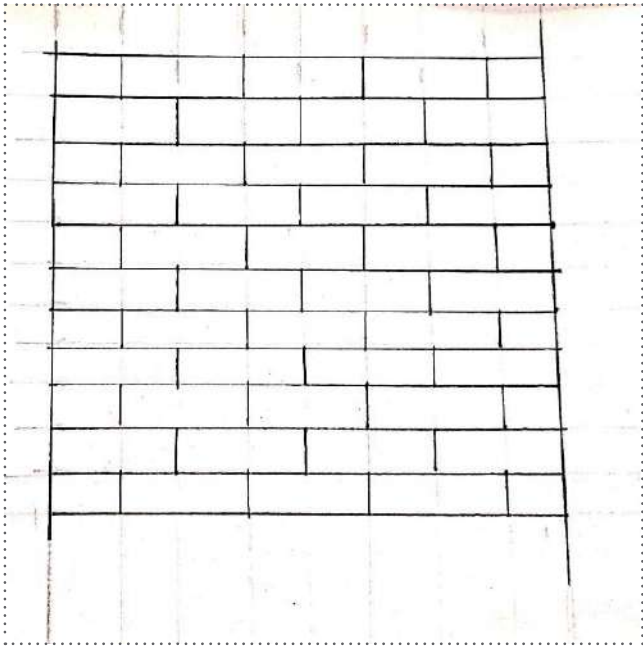
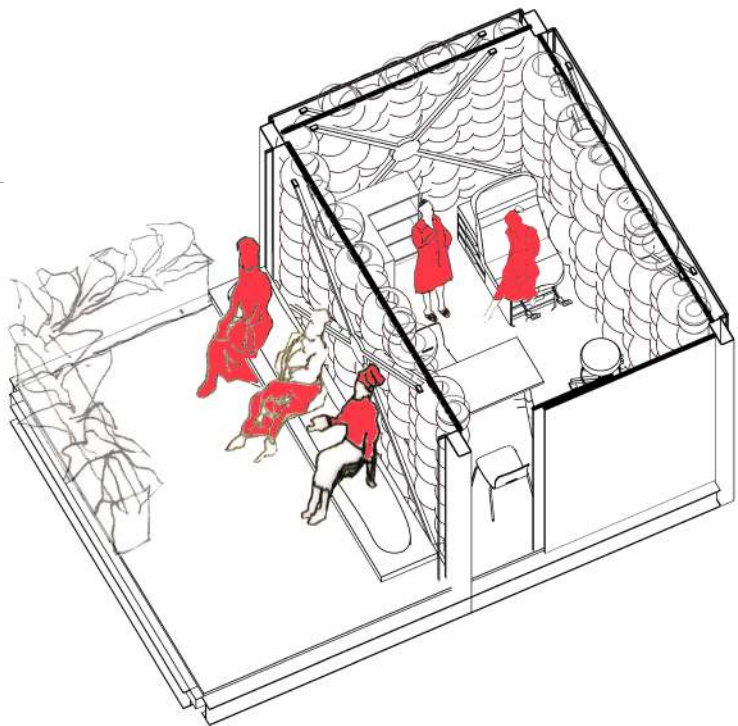
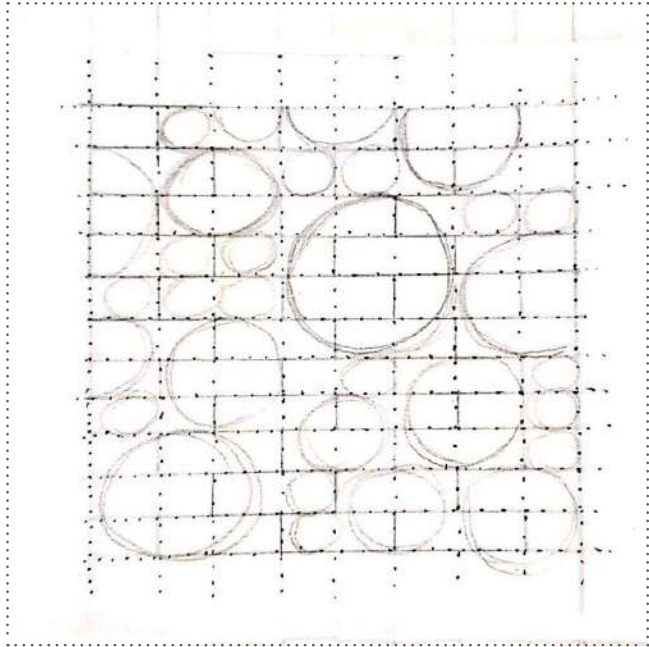


Fig 191-192. Use Of Plug-Ins. Authors Own



Overlaid Circular Pattern Grid



3D

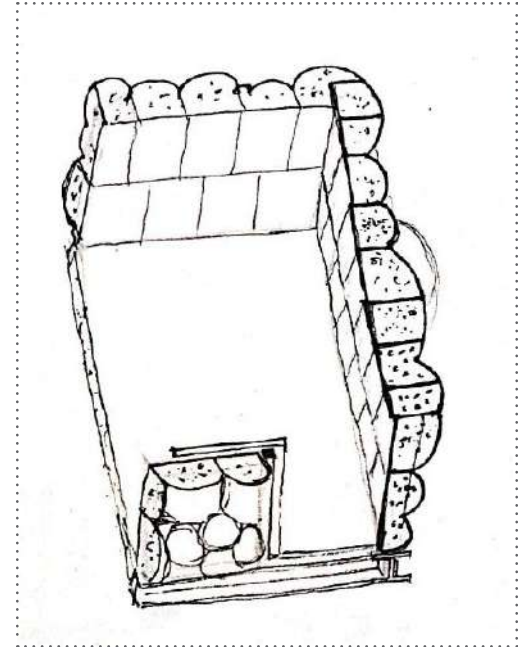


Fig 193-194. Aerated Concrete Facade Design Exploration. Authors Own

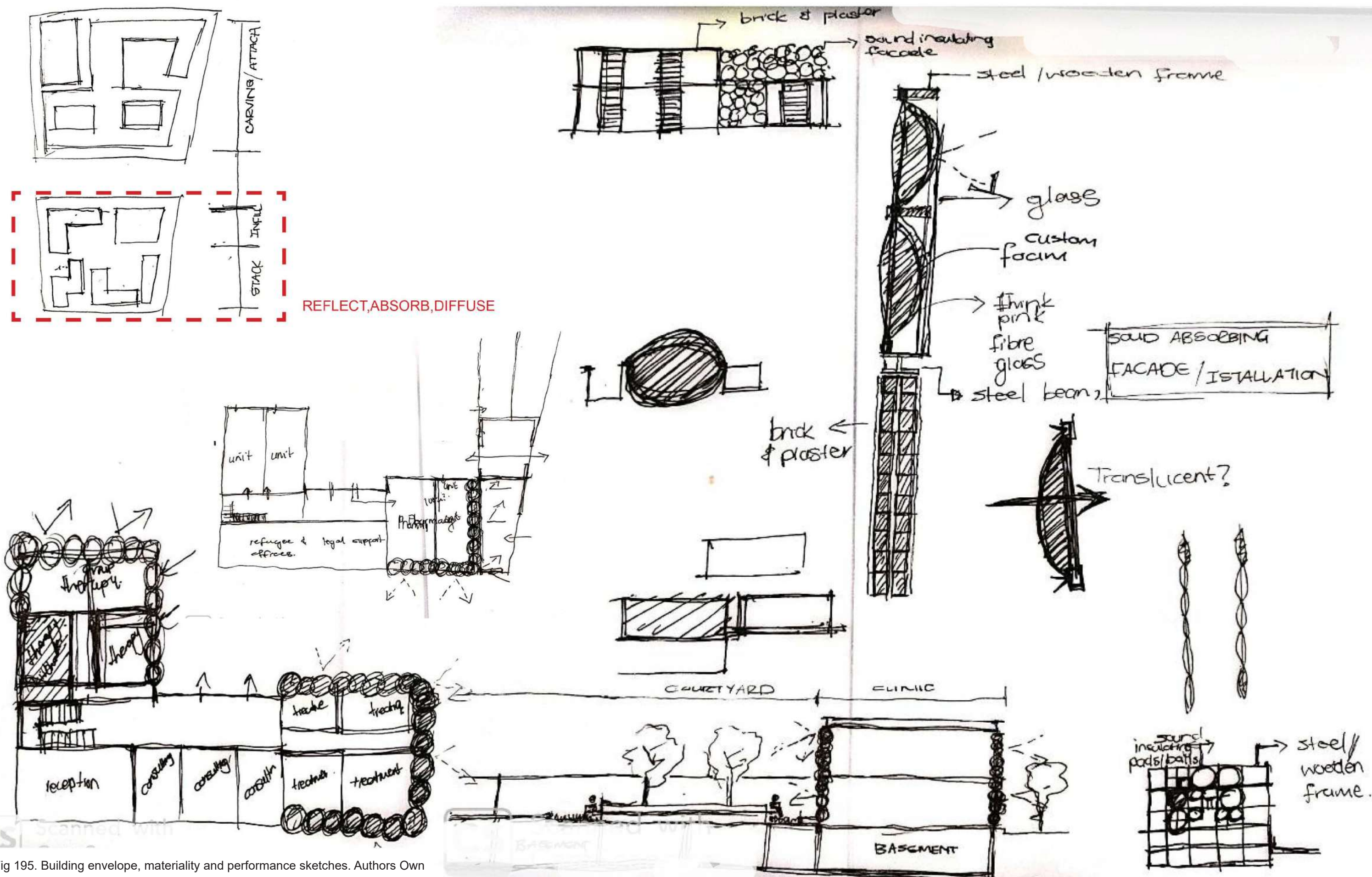


Fig 195. Building envelope, materiality and performance sketches. Authors Own

FACADE DETAIL EXPLORATION

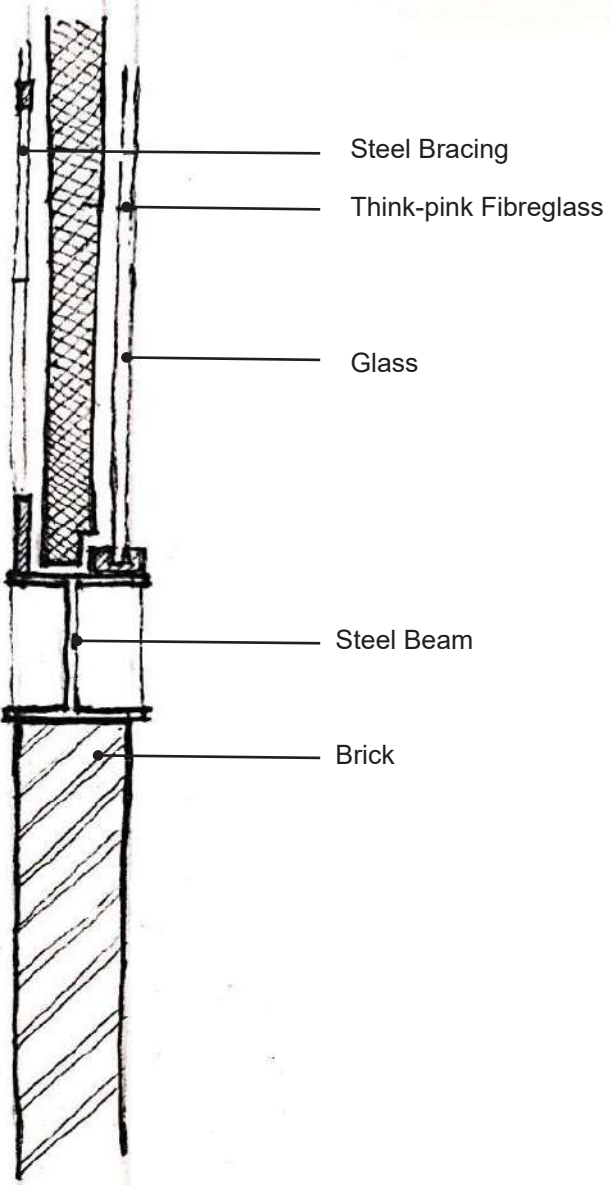


Fig 196. Detail 1. Authors Own

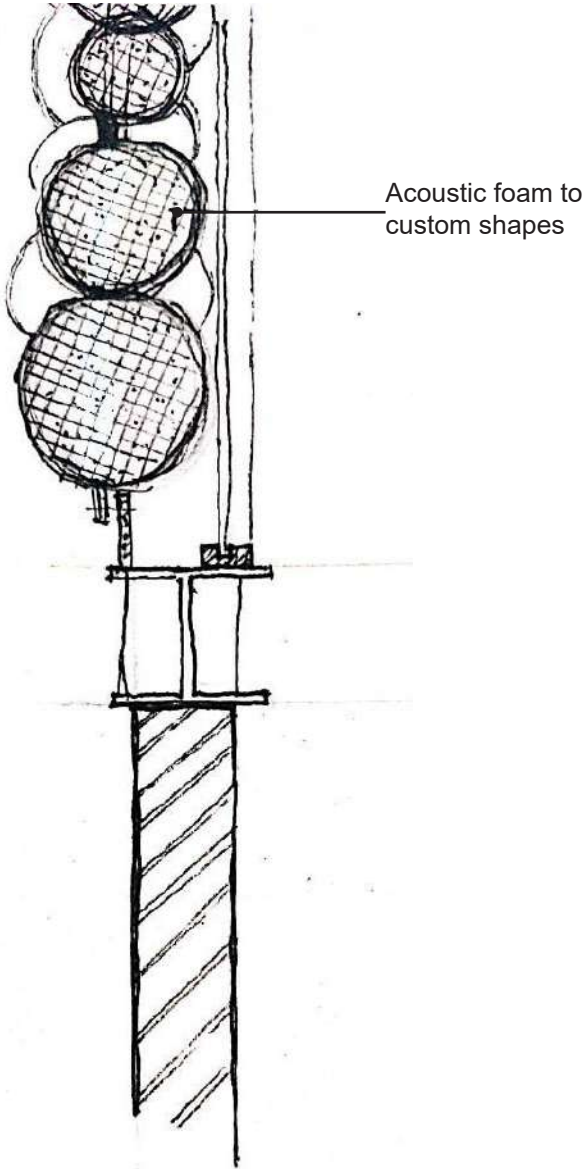


Fig 197. Detail 2. Authors Own

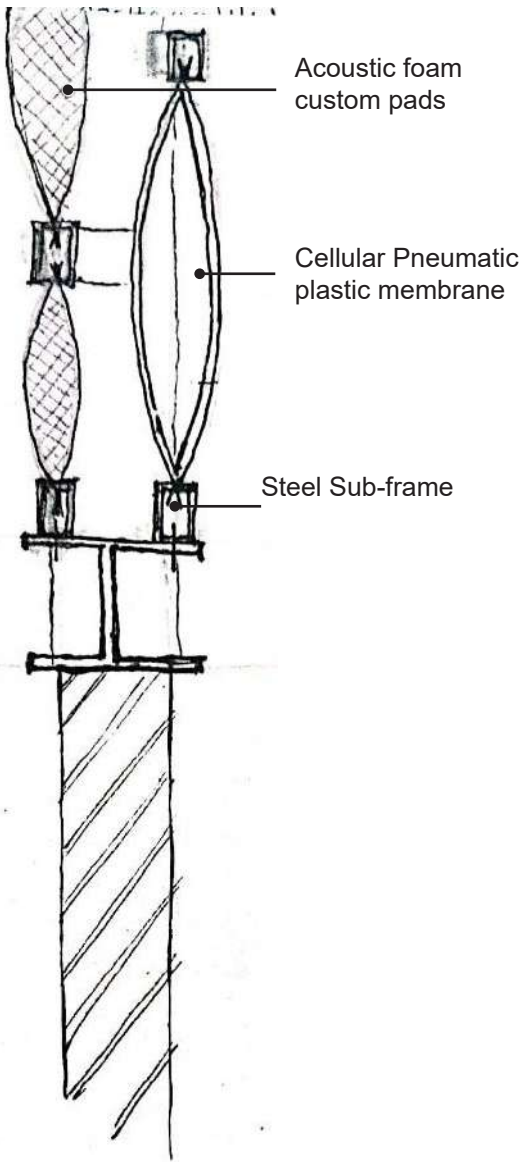


Fig 198. Detail 3. Authors Own

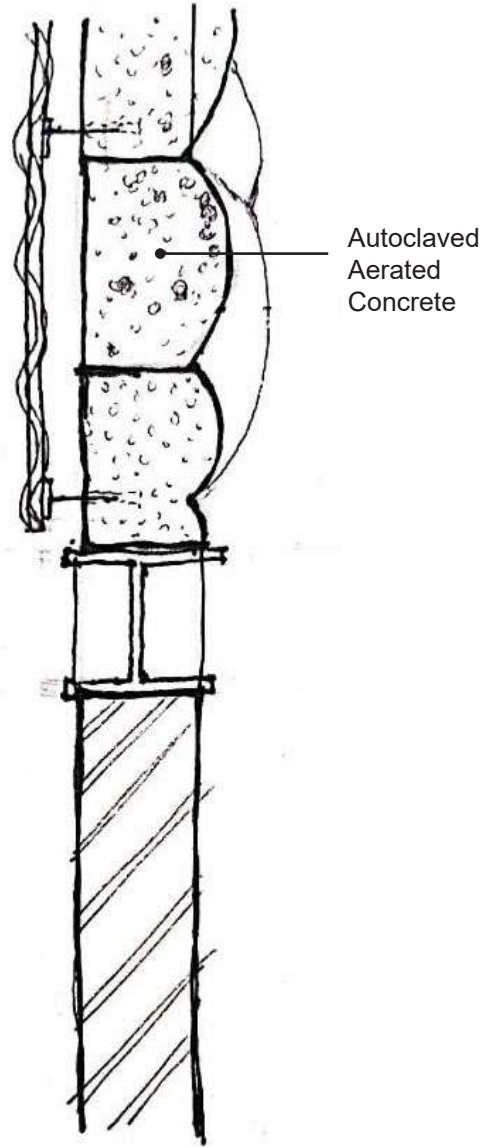


Fig 199. Detail 4. Authors Own

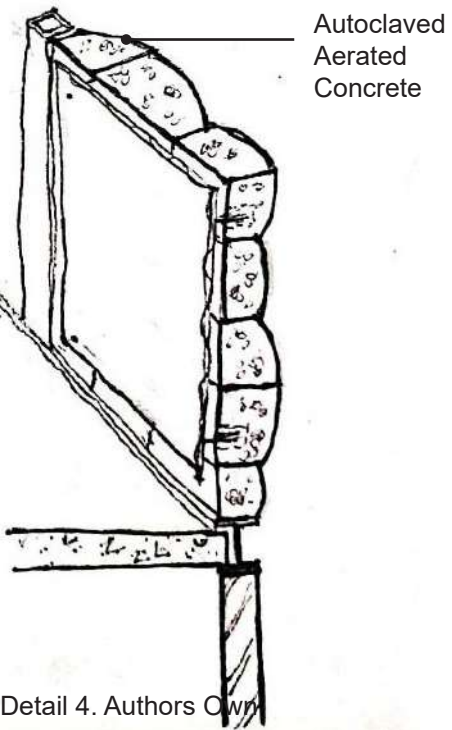
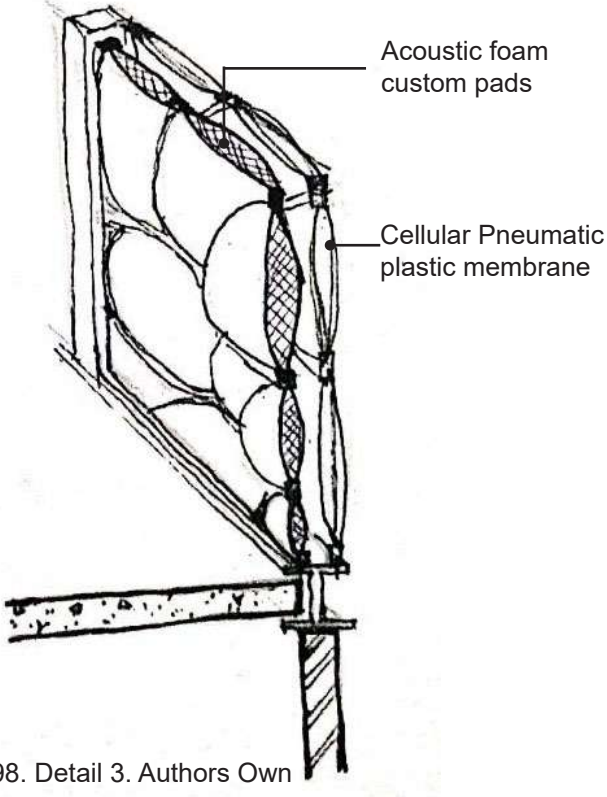
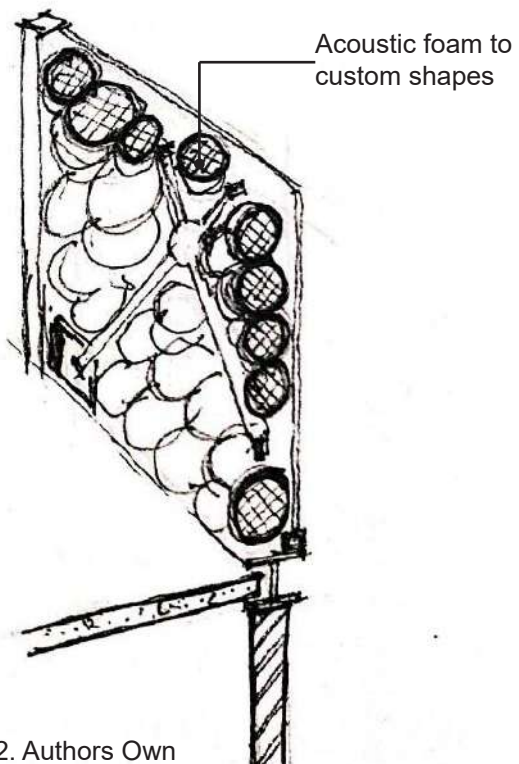
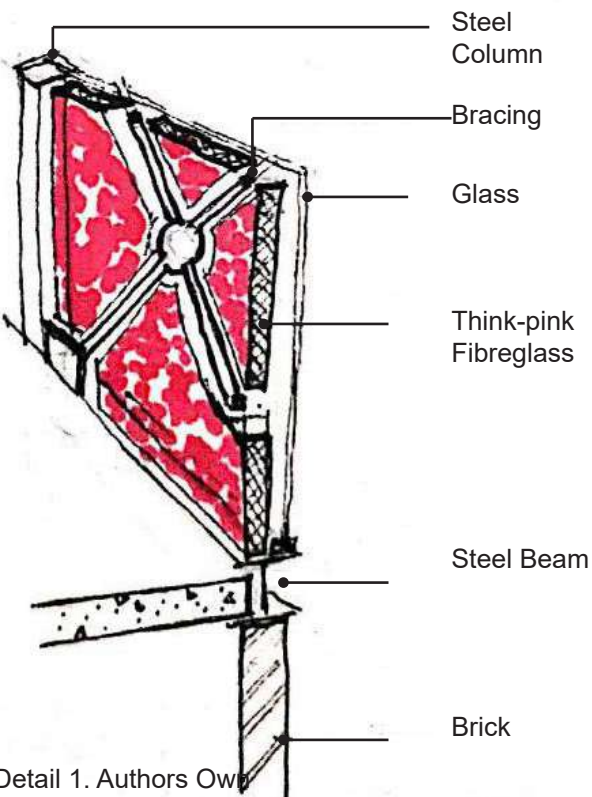




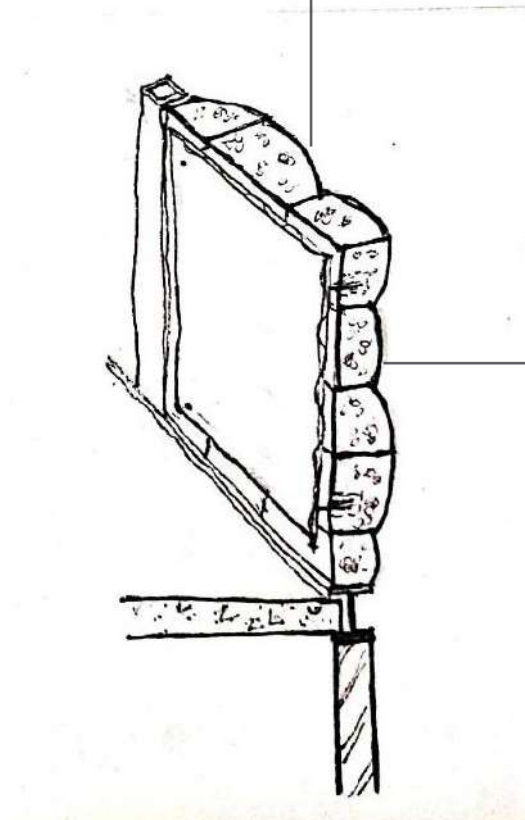
Fig 200. Textured Brick Facade. Miralles Tagliabue (2019)

Technique



Fig 201. Brickwork. Designtrends(2019)

Brickwork



Chosen Detail Development

Autoclaved Aerated Concrete



Fig 202. Designed and fabricated a prototype section of a screen wall system made from autoclaved aerated concrete. Pratt Students (2014)

Technique

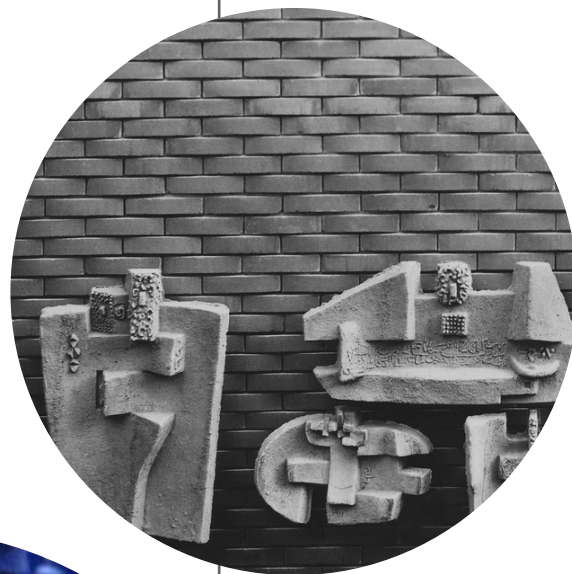


Fig 203. Constantino Nivalo pefabricated.Custom Panels

Performance

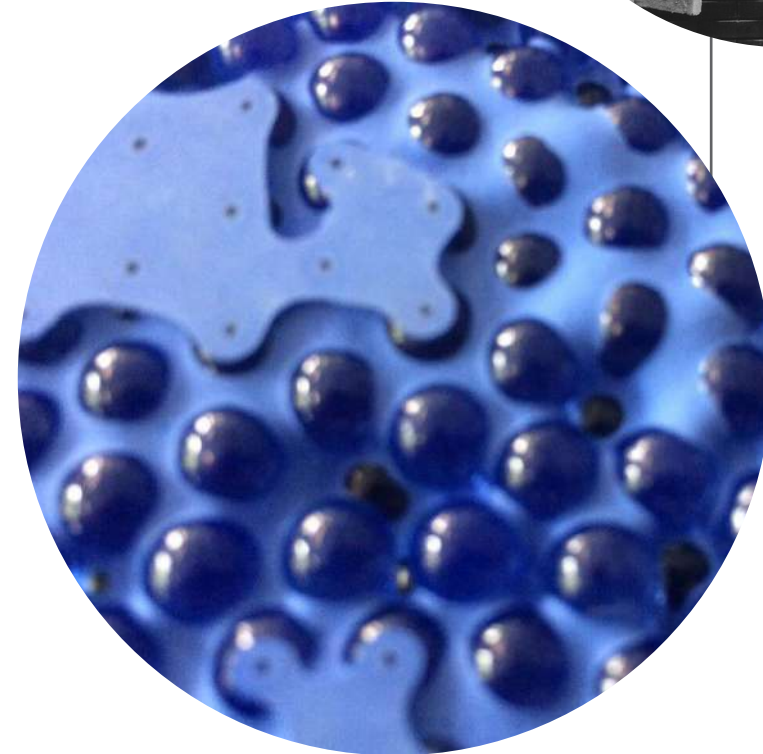


Fig 204. DysCrete developed by Kennwert. Refer to Chapter 7-Sustainability.



Fig 205-209. Plaster of Paris Models to explore custom mold techniques. Authors Own

SUSTAINABILITY

Yeoville is a highly densely populated area, whereas much as 4 households of at least 3 persons live in a single flat. Flats are originally designed for a single household. These types of living conditions results in pressures on municipal electrical and water services. Strain on these services continue to increase as the density of population in the Yeoville increases. It is essential that emerging architectural projects in the area incorporate both sustainable and ecological design. Where sustainable building design focuses on reducing negative impact to the environment and an ecological building increases positive interactions with the environment. For instance, a building that reintroduces endangered species of insects and flora back into the environment.

This scheme and building design focuses particularly on sustainability & energy saving based on the following two principles:

1. Passive cooling and heating due to building orientation and architectural design.

2. Energy creation through the building envelope

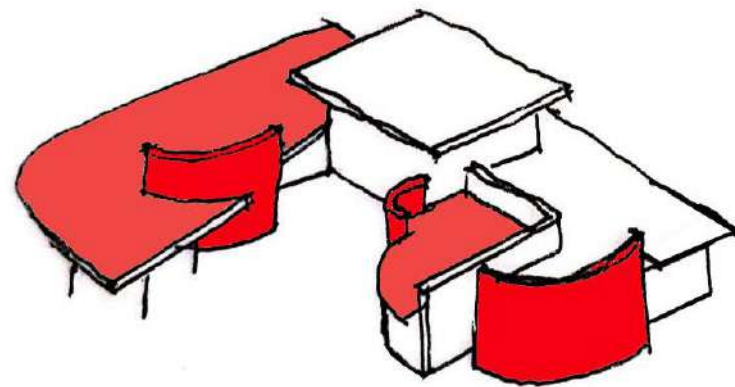
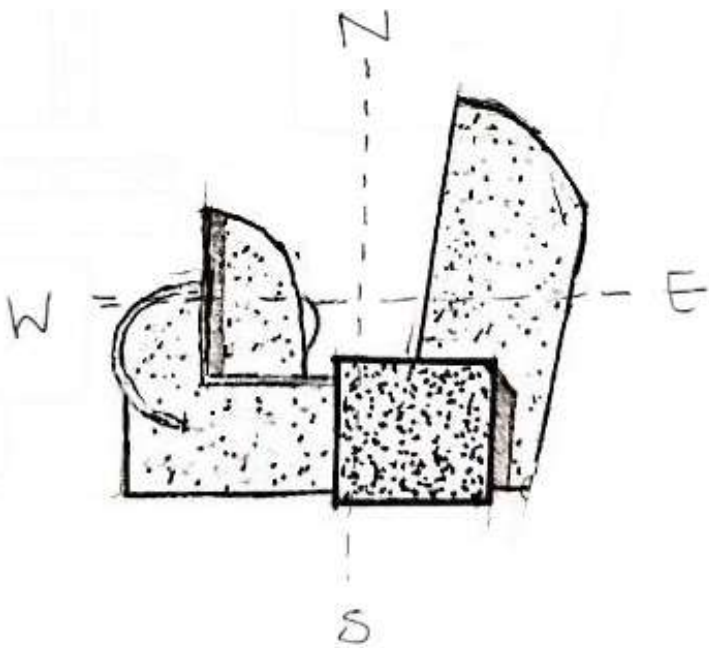


Fig 210-211. Sustainability Diagrams. Authors Own

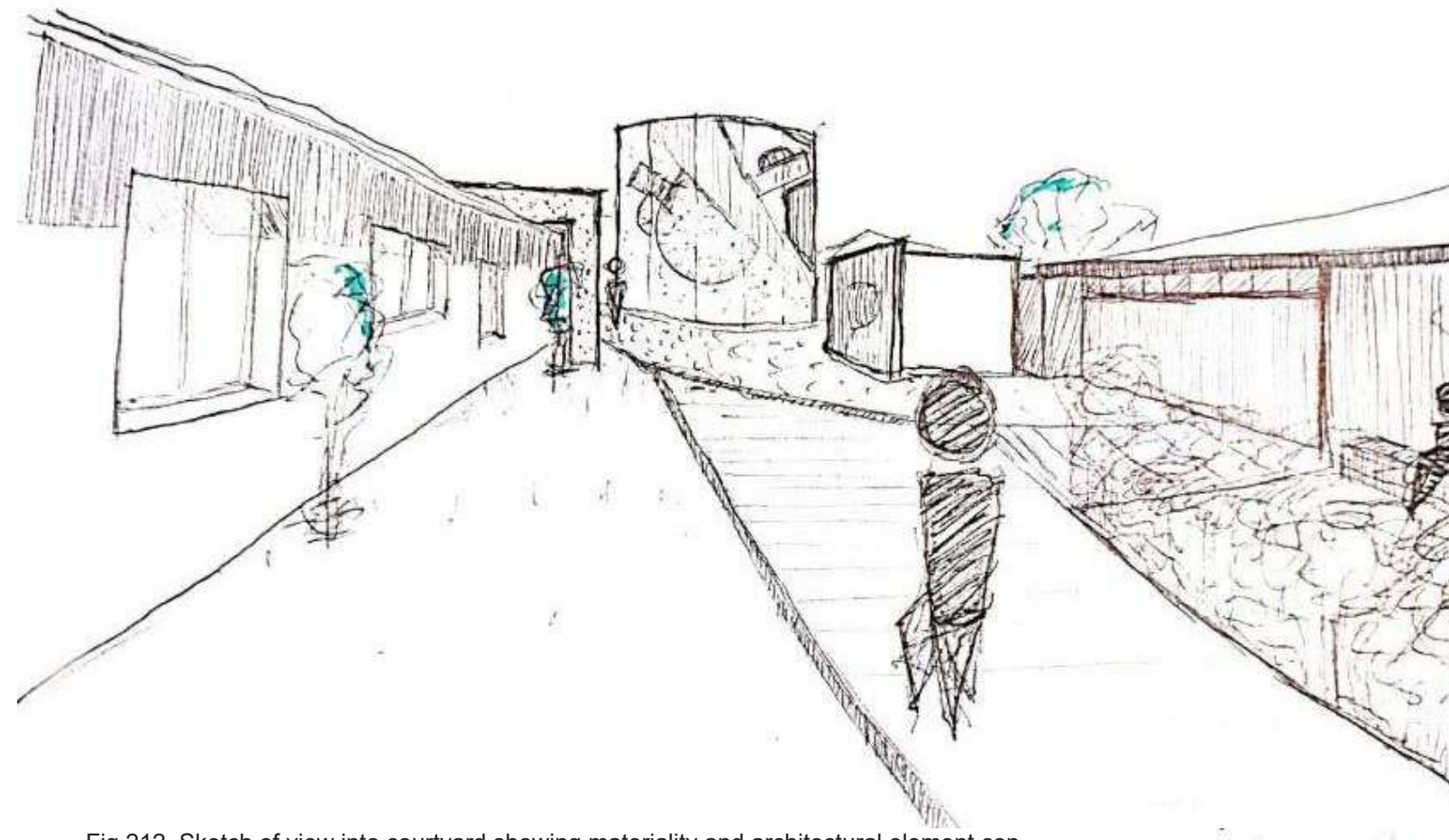


Fig 212. Sketch of view into courtyard showing materiality and architectural element contributing to sustainability. Authors Own

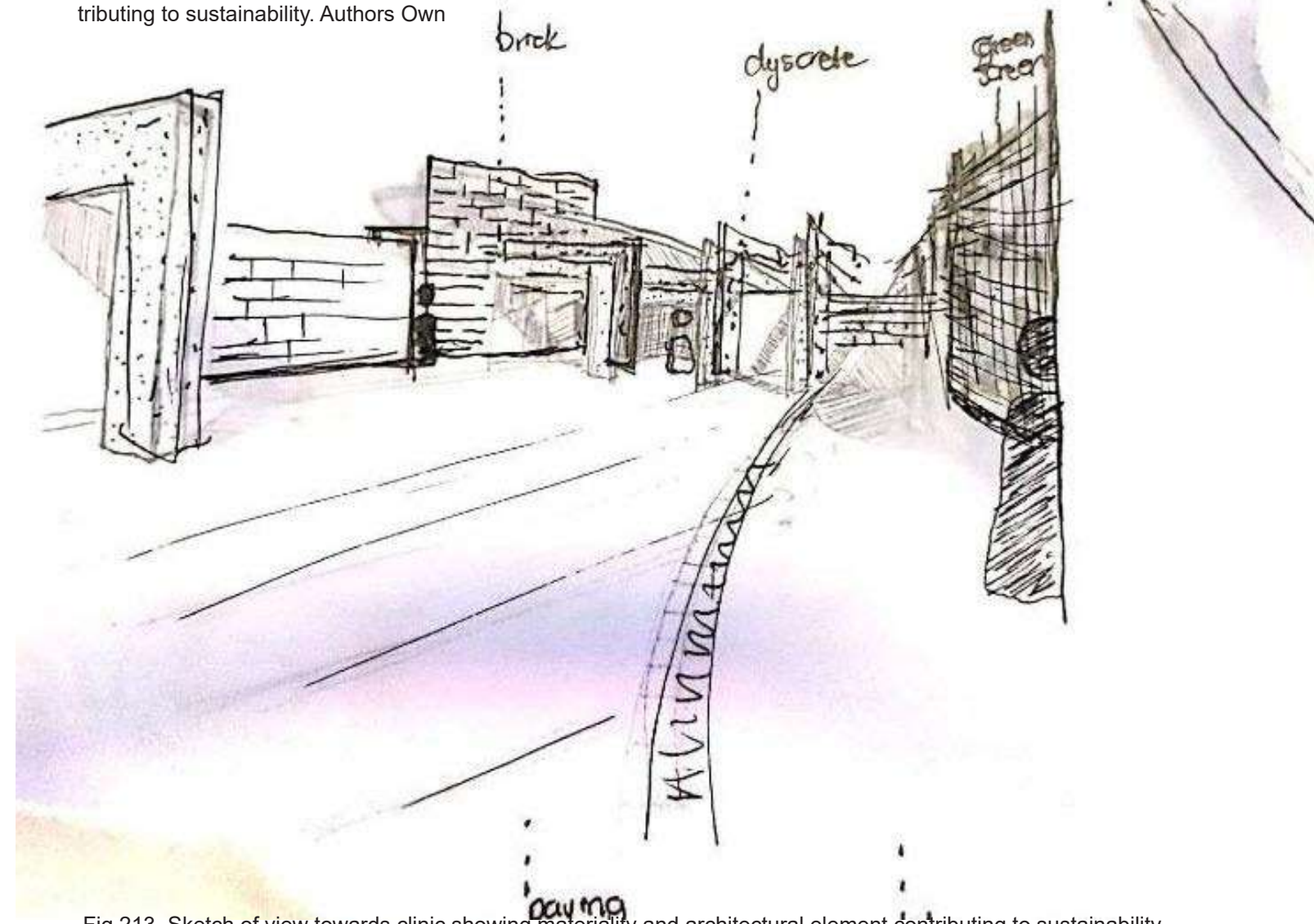


Fig 213. Sketch of view towards clinic showing materiality and architectural element contributing to sustainability. Authors Own

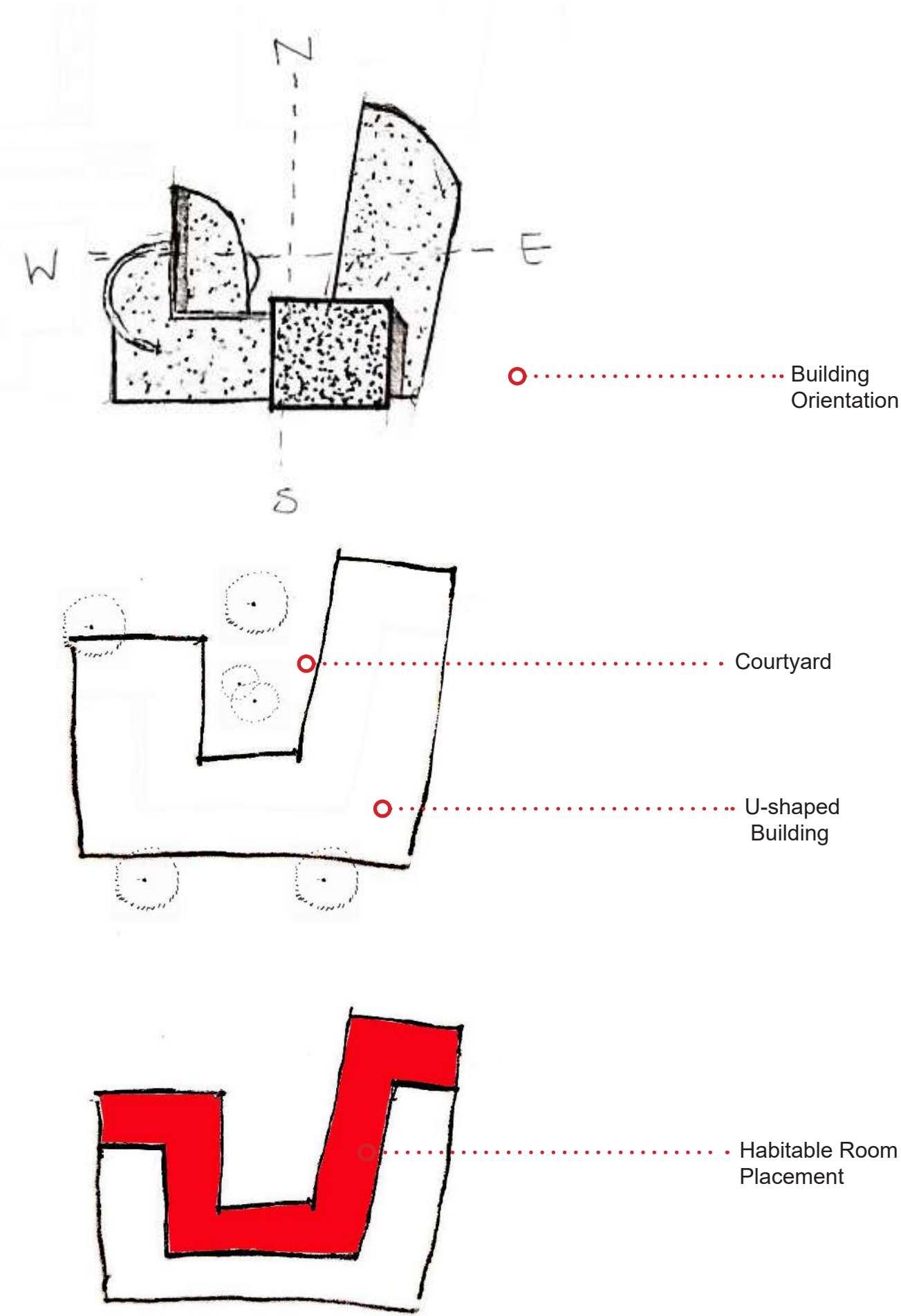


Fig 214-216. Sustainability Diagrams. Authors Own

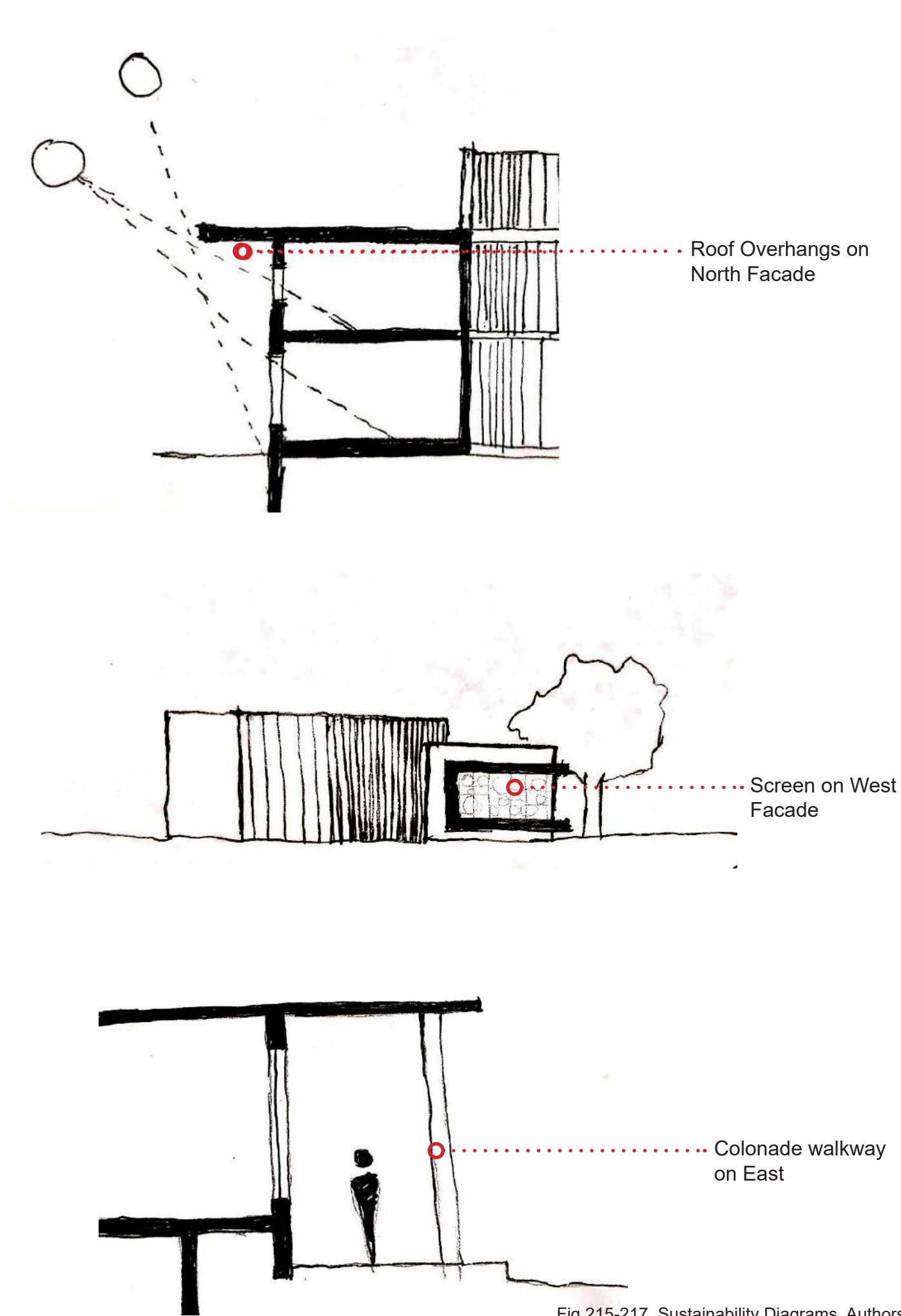


Fig 215-217. Sustainability Diagrams. Authors Own

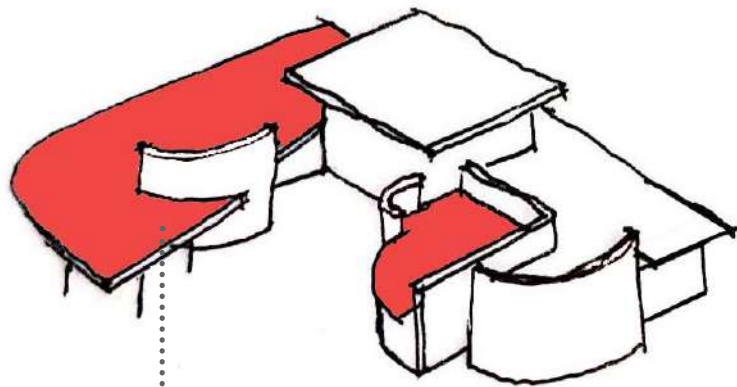


Fig 217.



Fig 218.

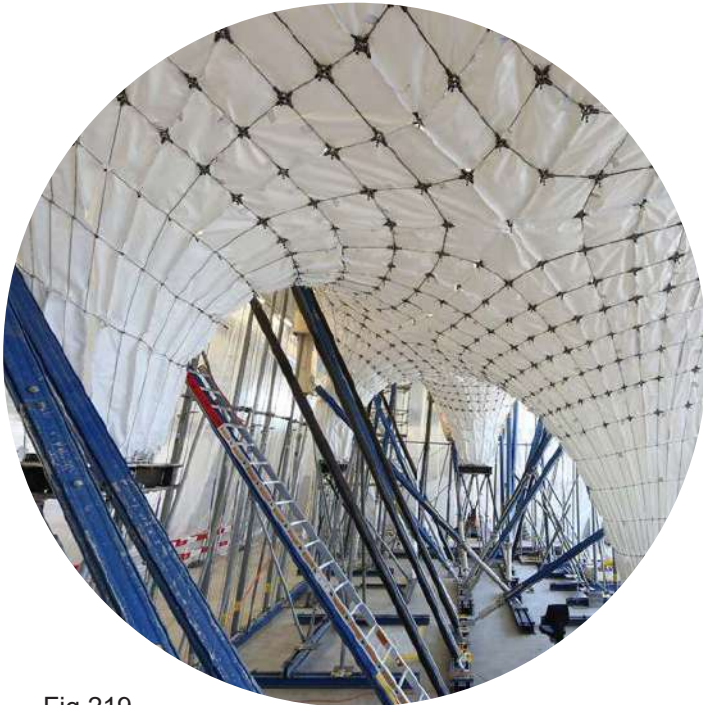


Fig 219.



Fig 220.

"Self-supporting, double-curved shell is comprised of several layers, including heating and cooling coils, and insulation that are sandwiched between two concrete layers. The exterior layer is covered with thin-film photovoltaic cells that generate energy."

"A net of steel cables, stretched into a reusable scaffolding structure."

"This cable net supported a polymer textile that together functioned as the form work for the concrete."

"Building system with sensors that uses heat at low temperatures to create a pleasant interior climate. For this purpose, he uses components of the structure, including the roof, that are thermally activated."

Fig 217-220. Ultra Thin Solar Concrete Roof Construction. ETH Zürich / Michael Lyrenmann / Naida Iljazovic (2018).

Summer

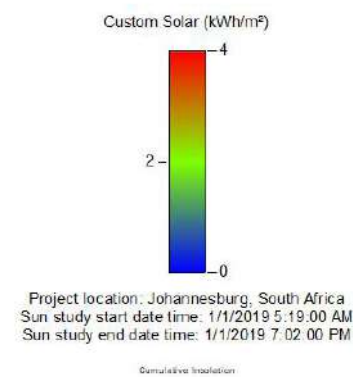
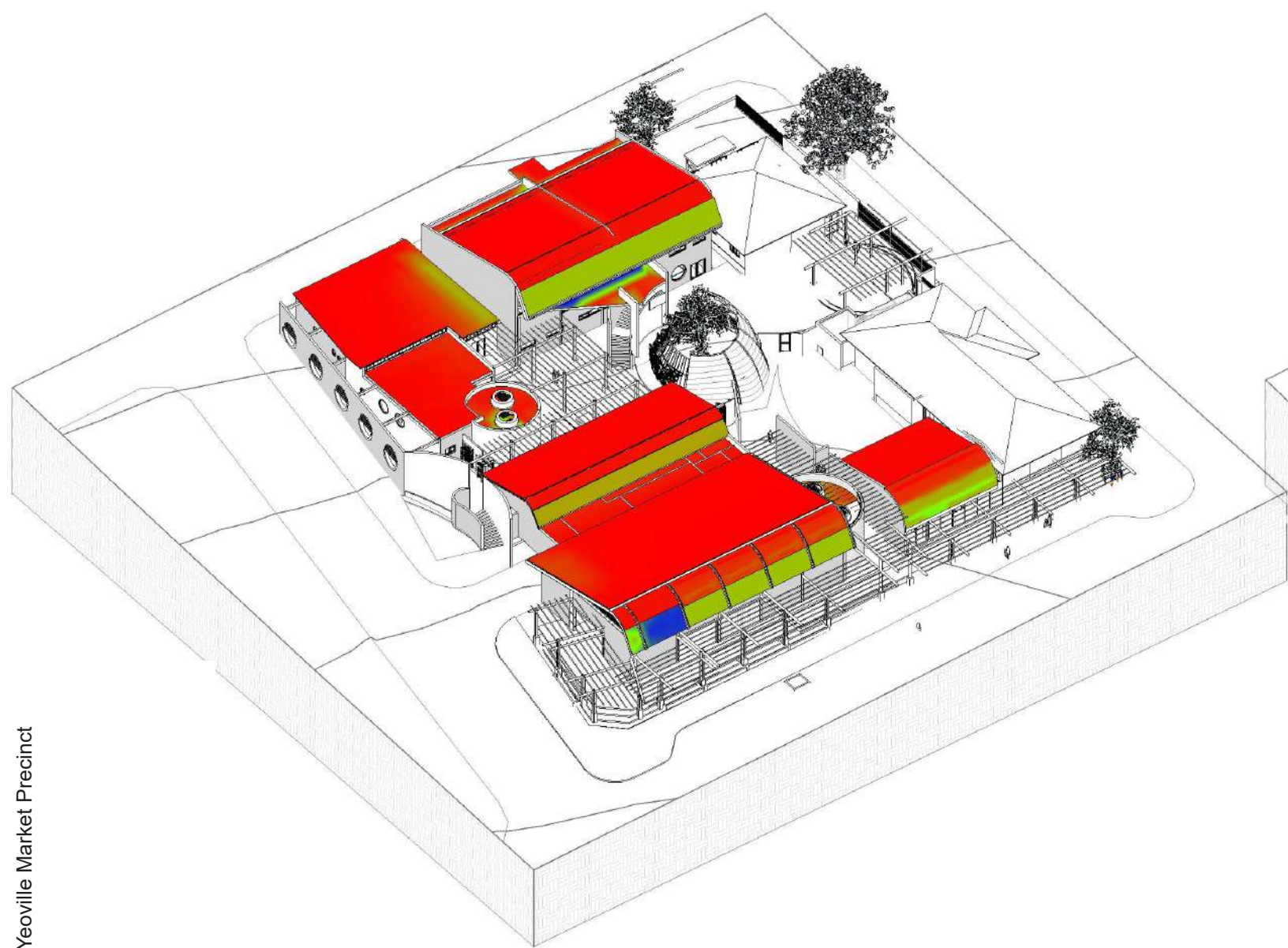


Fig 221. Roof Cumulative Isolation Analysis-Summer. Authors Own

Winter

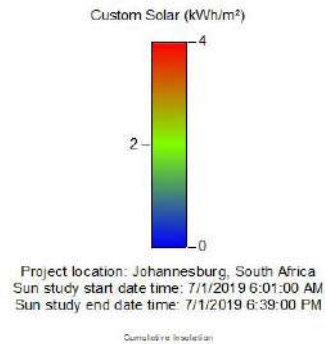
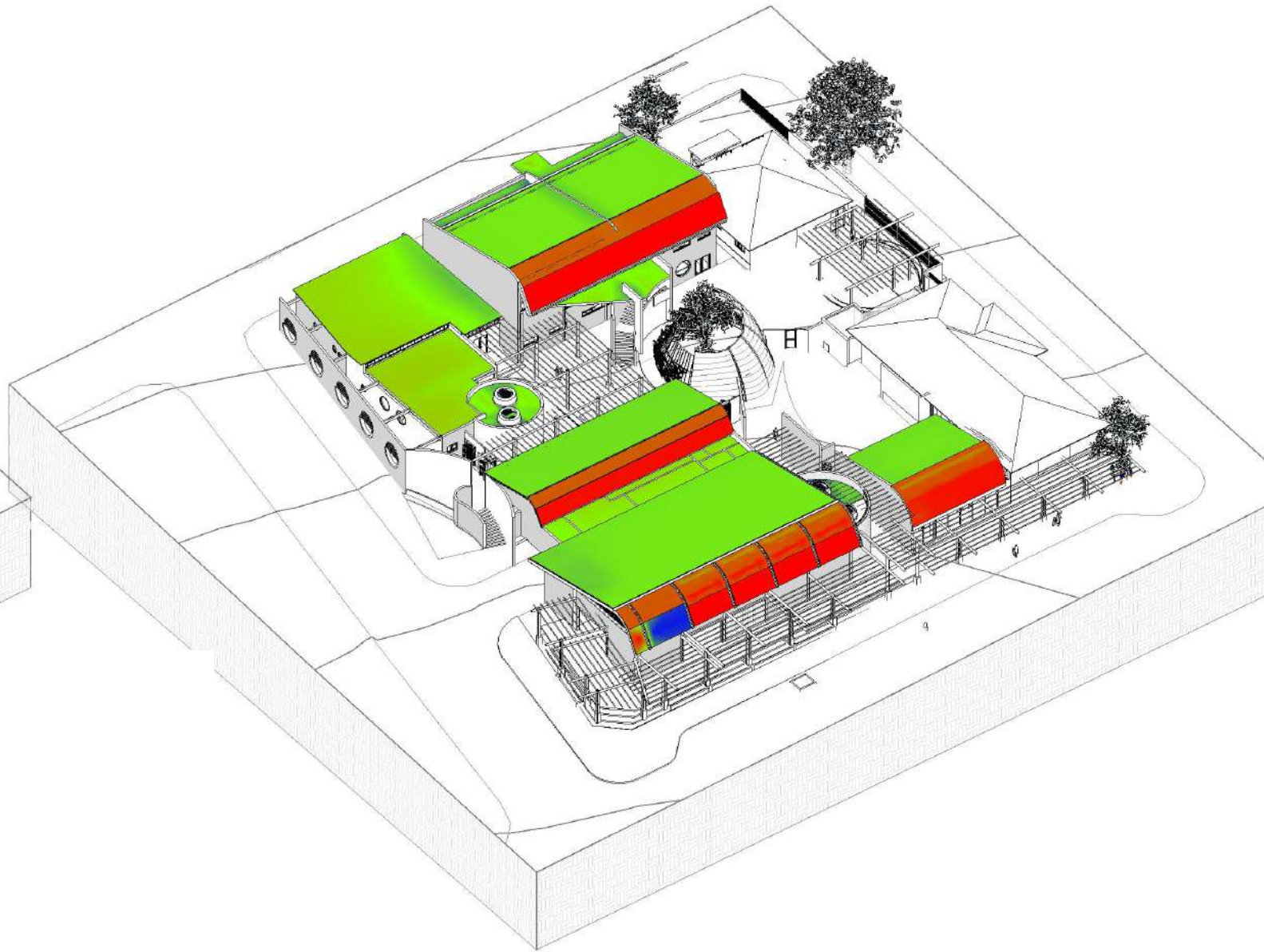


Fig 222. Roof Cumulative Isolation Analysis-Winter. Authors Own

The figures above depict the solar cumulative isolation during a day in summer and in winter. Showing only a small portion in winter receives maximum sun contact versus in summer, where a larger portion of the roof gets maximum sunlight. Therefore, in summer, a larger portion of the building could function using the energy generated in the roof. In winter the roof will generate less energy, this energy can be limited to certain portions of the building.

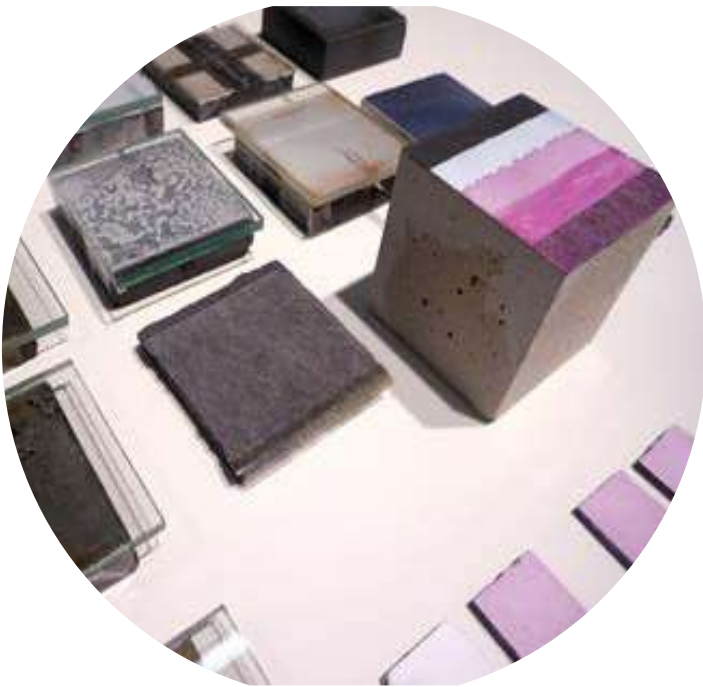
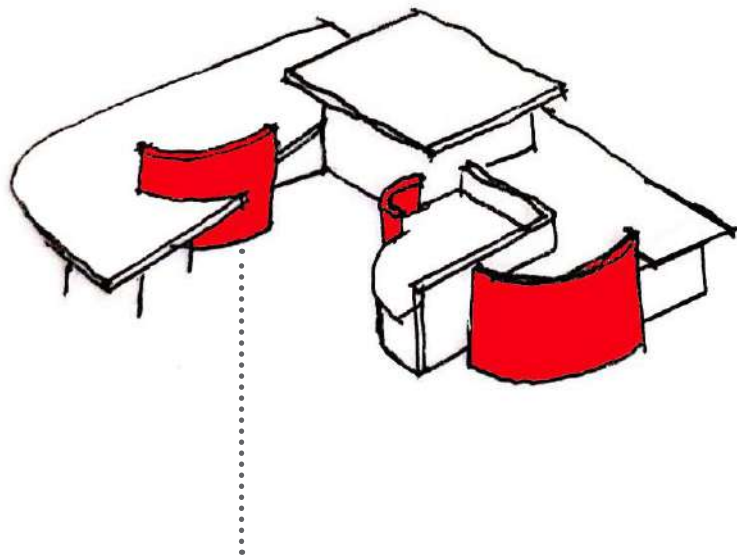


Fig 223.

"DysCrete is a dye-sensitized energy-generating concrete made by coating prefabricated concrete components with layers of organic dyes held in suspension. DysCrete uses organic dyes to absorb light and produce electricity through electrochemical reactions."

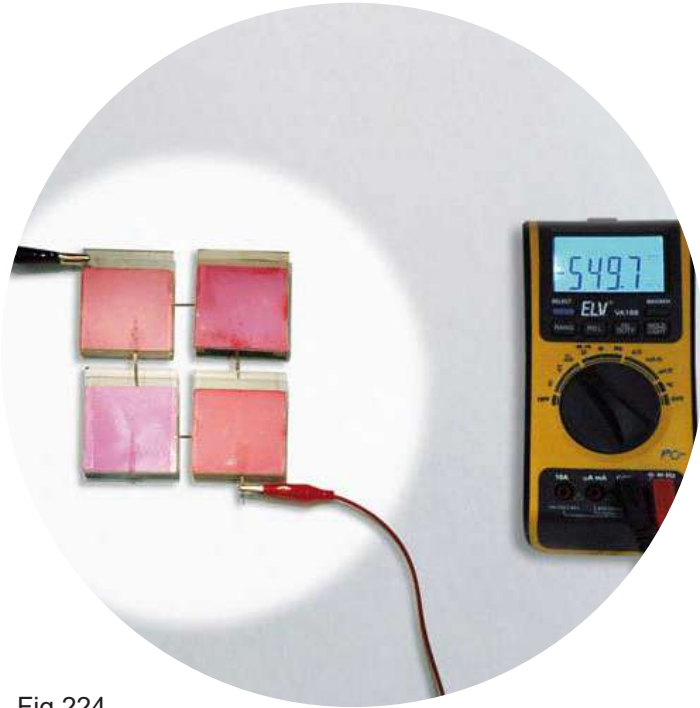


Fig 224.

"Like the chlorophyll in plants, these dyes generate electricity via electrochemical reactions that occur when illuminated. Based on a simple structure of functional layers. These combine to form a redox reaction coating that generates energy through an electrochemical process when exposed to light."



Fig 225.

Since the concrete is to be used over a large area and is inexpensive to manufacture, the efficiency could play a minor role. relatively low production cost, giving the system great potential as a low-cost energy source. materials is renewable, largely recyclable and environmentally friendly."

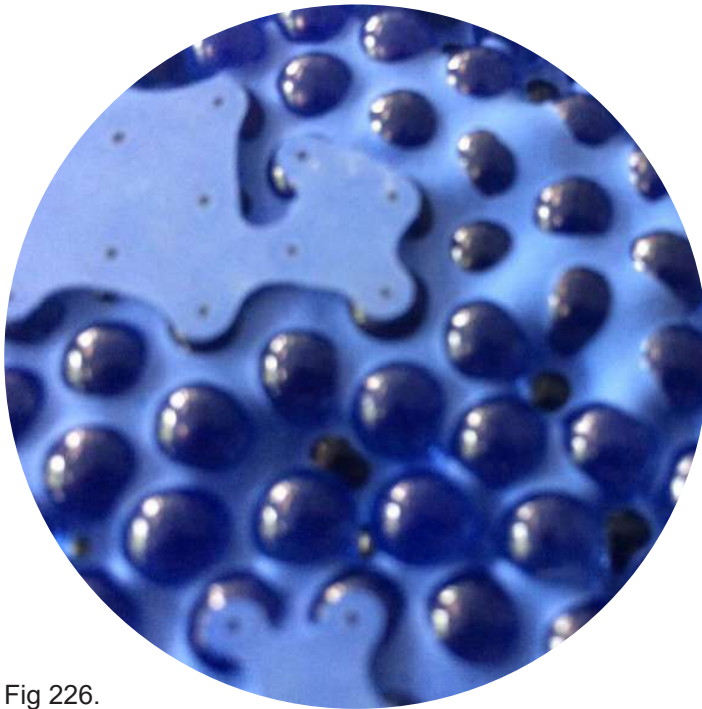


Fig 226.

"Uses a spray-coating method that can be performed in situ. The conventional encapsulation process, in which the failure of a single component renders the entire cell useless, is replaced by a layer grouping system with a renewable sandwich structure that offers exceptional versatility in cell construction."

Summer

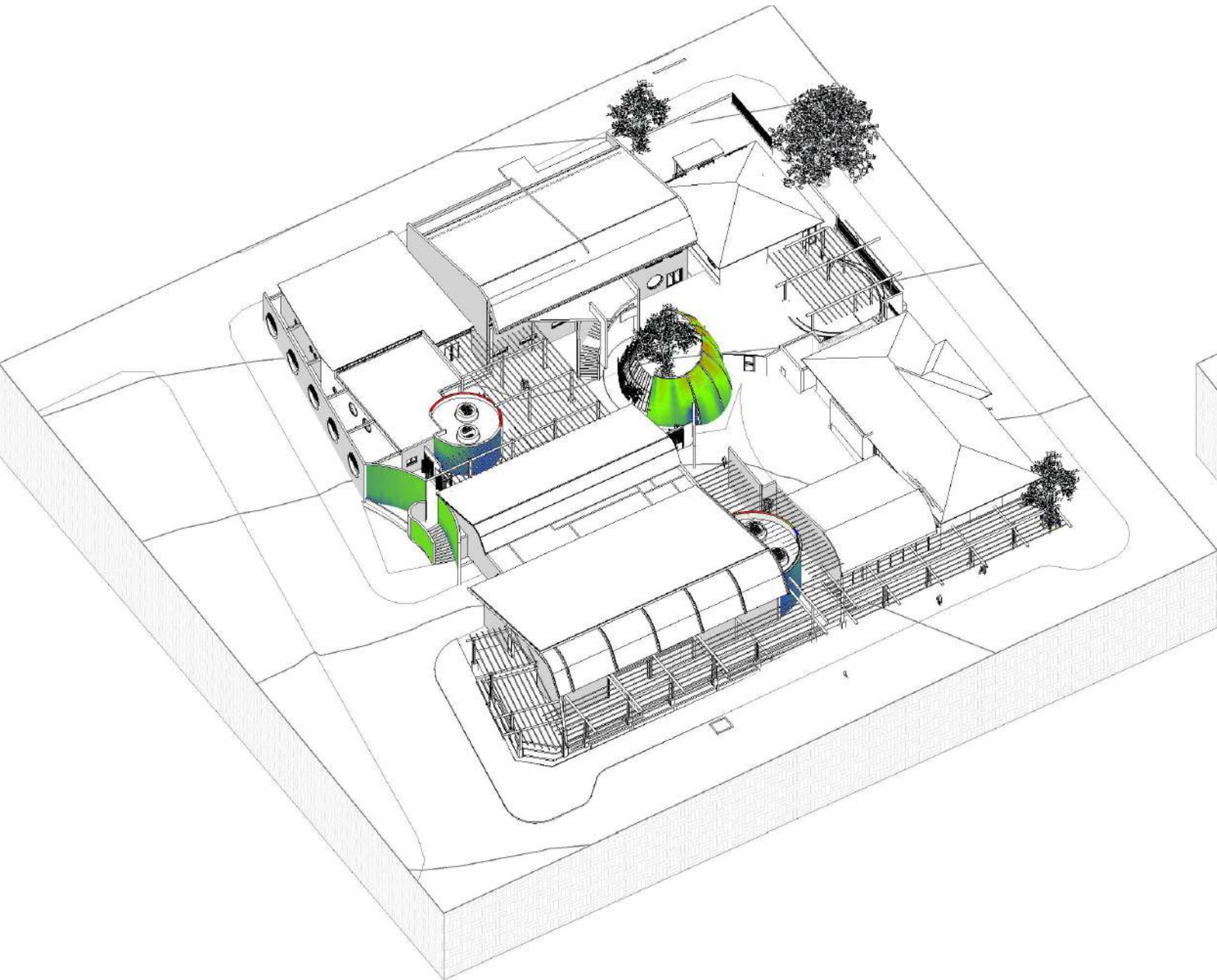


Fig 227. Roof Cumulative Isolation Analysis-Summer. Authors Own

Winter

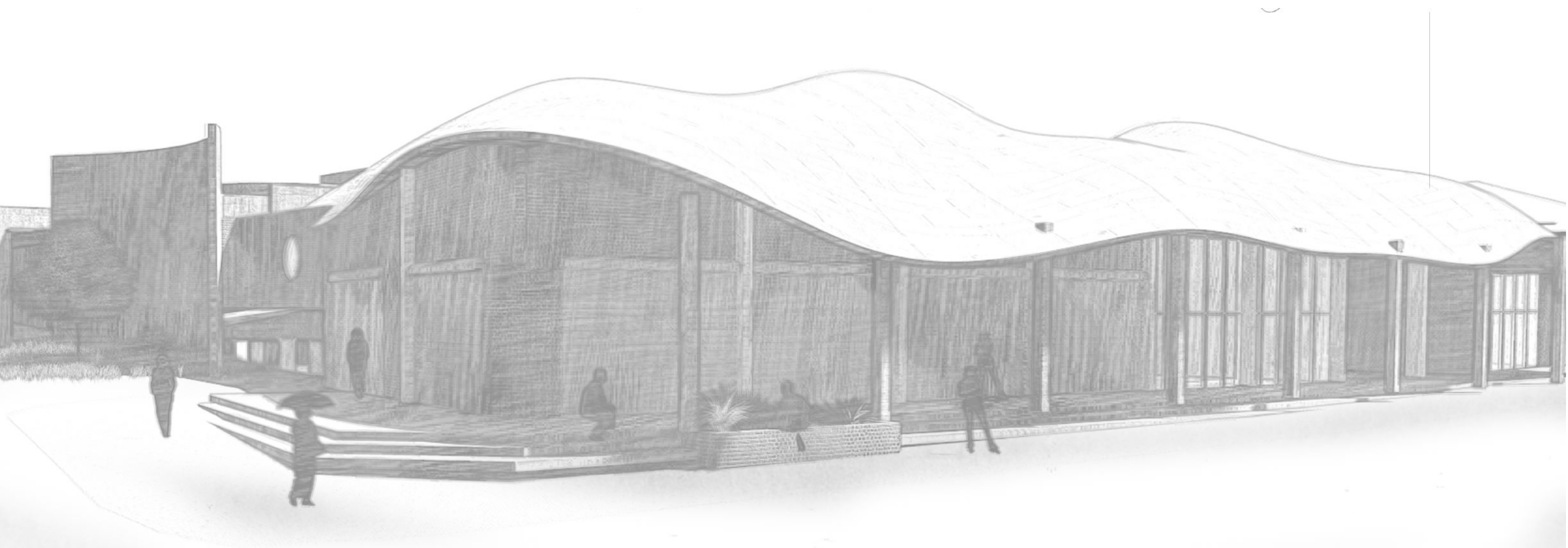


Fig 228. Roof Cumulative Isolation Analysis-Winter. Authors Own

The figures above show how selected vertical elements in the building would perform using DysCrete. On average, they would receive medium solar gain with a slight increase to maximum in winter for the wall in the courtyard. Therefore, the bulk of generated energy will be from the roof as depicted earlier. The use of Dyscrete could be used as an architectural exploration and experimentation that would be developed and adapted during construction and the course of the building life. This will be done on a small portion of the building to minimise costs and will be integrated to other parts of the building as its application is developed and can produce more energy for the building.

CHAPTER 8

DESIGN DEVELOPMENT



CLINIC SPATIAL REQUIREMENTS

Patient focused care entails that the design of the healthcare facility and the functioning of the health service need to respond primarily to the needs of the patient. Physical comfort, emotional support, respect, information and communication, continuity and transition, care co-ordination and access to further/specialised care. Main categories in determining spatial guidelines for designing healthcare spaces are:

- 1. Determining specific population and type of healthcare provision
- 2. Ergonomics
- 3. Servicing and Circulation
- 4. Hygiene
- 5. Lighting, Ventilation and Noise Control

1. Determining specific population and type of healthcare provision

Women's Reproductive Clinic & Pharmacy

- Gynaecological
- Surgical Abortion
- Victims of Sexual Violence Unit

Baby Clinic

- Paediatric
- Pre & Neonatal

Women's Reproductive Clinic & Pharmacy

Public

- Separate Entrance
- Reception and waiting area
- Public ablutions

Patient

- Private counselling room
- Private consulting/examination room
- 35m2 min procedure room
- Recovery room

Staff

- Toilet
- Rest,change and shower
- Kitchenette

Support Service

- Sluice room with a freezer
- Dirty utility
- Storage for medicines
linen
consumables
sterile packs
- clean utility
- cleaners room.

2. Ergonomics

Consulting/examination rooms

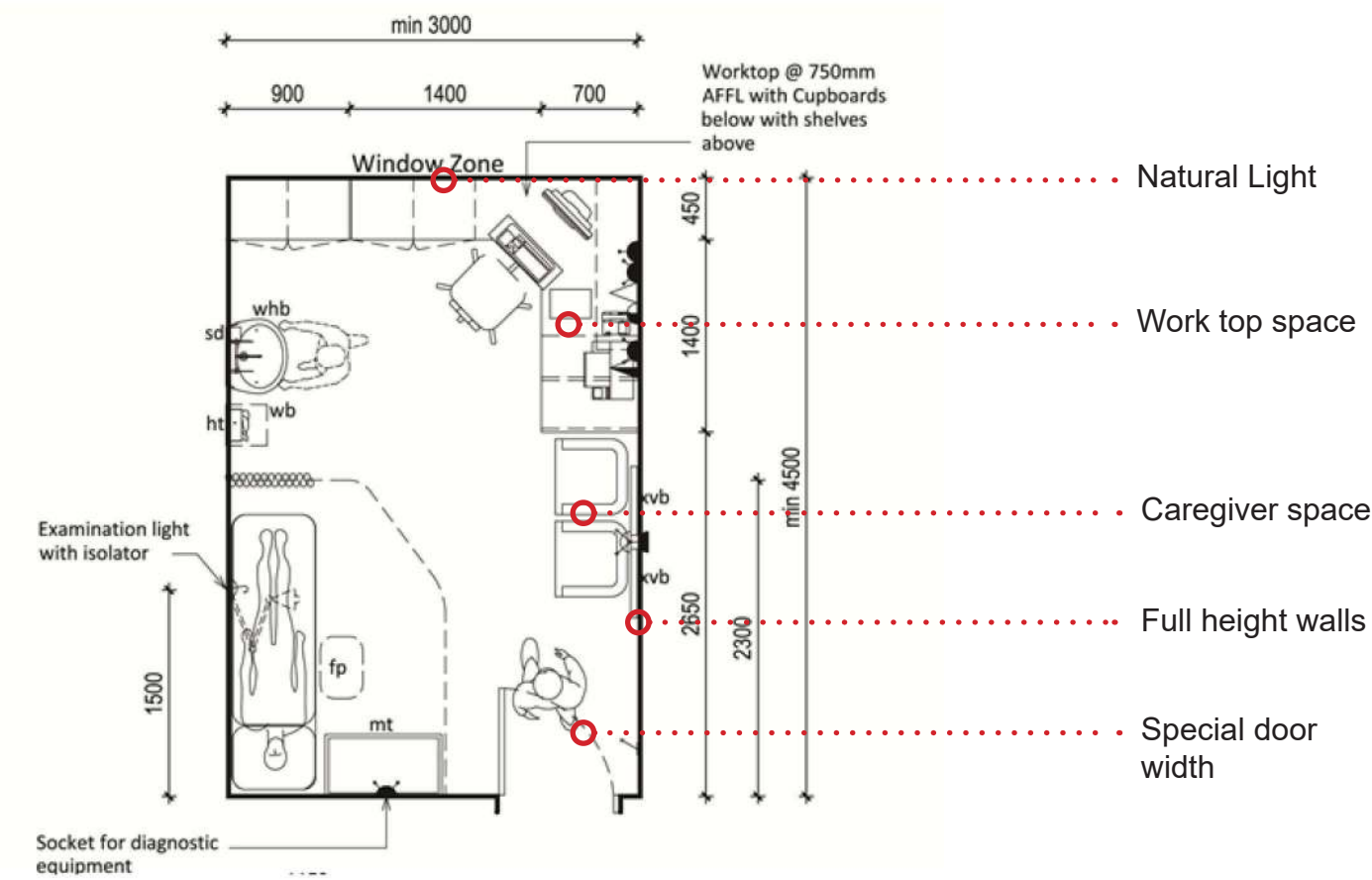


Fig. 229. General Consulting Room Spatial Requirement. GAZETTING OF HEALTH INFRASTRUCTURE NORMS, STANDARDS AND GUIDELINES (2015)

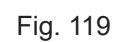
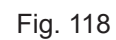
233
Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct

Fig 233. Example of day recovery rooms. Neufert (2000)

The floor plan shows a central area labeled "nurses' workstation" with a circular desk and two chairs. To the left is a "medicine room" with a sink and a counter. To the right is a "linen" closet. Further right is a "staff rest room" with a sink and a chair. A "counter" is located at the bottom left of the workstation area.

Fig 234 Example Reception and Staff Spaces. Neufert (2000)

The diagram illustrates the proposed layout for the Main OPD Entrance, showing the flow of people from the entrance through the waiting area to the various service areas. The layout is organized into three main sections: PUBLIC, PATIENT, and STAFF & SERVICES.

- PUBLIC SECTION:** Includes the MAIN OPD ENTRANCE and the MAIN WAITING AREA.
- PATIENT SECTION:** Includes Ablutions, CONSULTING, TREATMENT, COUNSELLING, and EMERGENCY.
- STAFF & SERVICES SECTION:** Includes STAFF AREAS and Storage & Utilities.

The diagram shows the flow of people from the entrance through the waiting area to the various service areas, with specific pathways for different types of patients and staff.

Fig 235. Spatial Relationships of Outpatient Facilities. GAZETTING OF HEALTH INFRASTRUCTURE NORMS, STANDARDS AND GUIDELINES (2015)

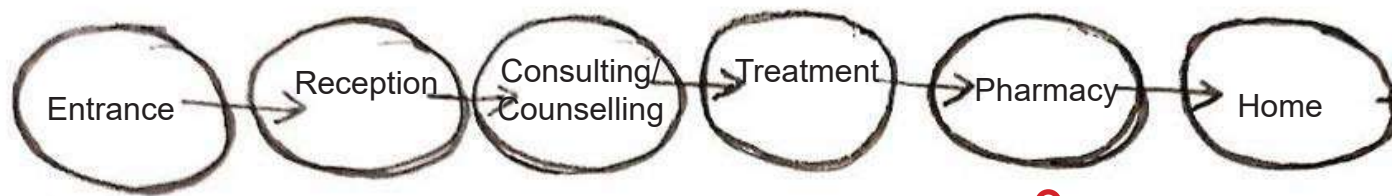


Fig. 123 Patient Route. Authors Own

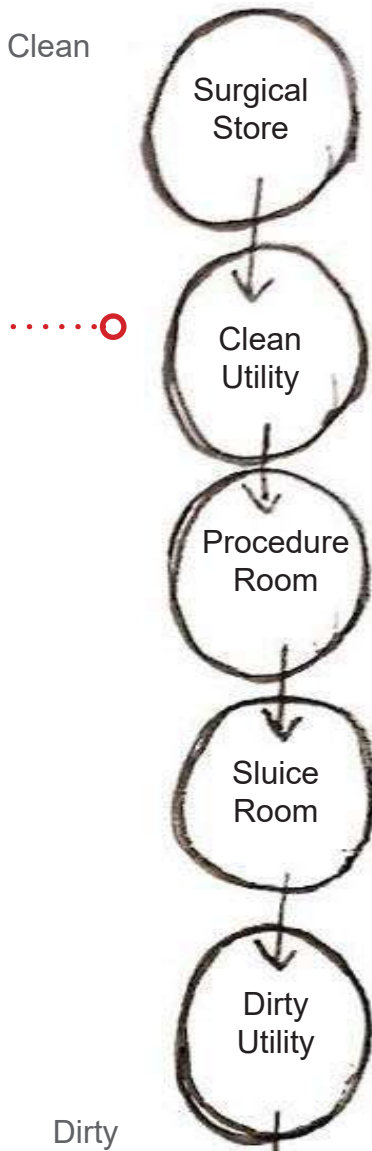
The In the Health Facility Guildlines of South Africa Health Infrastructure Norms Advisory Committee emphasises The requirement of high level security on pharmacies delivery routes. Pharmaceutical supplies need to be delivered directly to the pharmacy and off loaded into a security cage.

3. Hygiene

It is important that the following key room relationships are maintained to ensure a one directional flow:

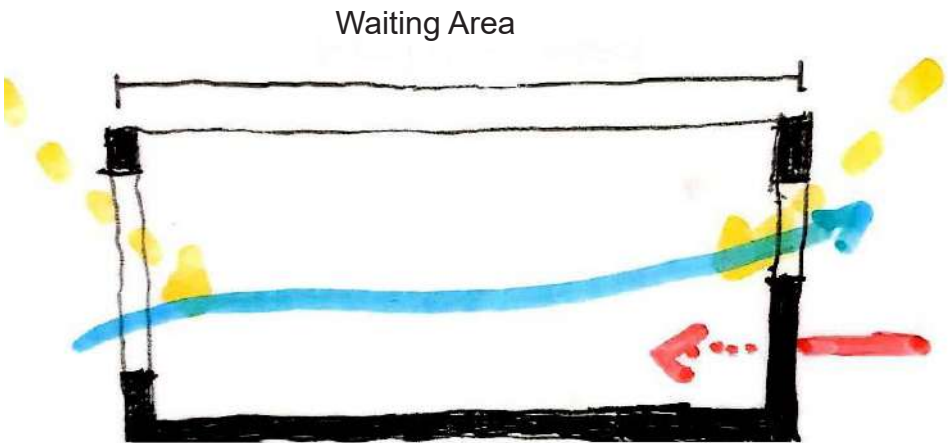
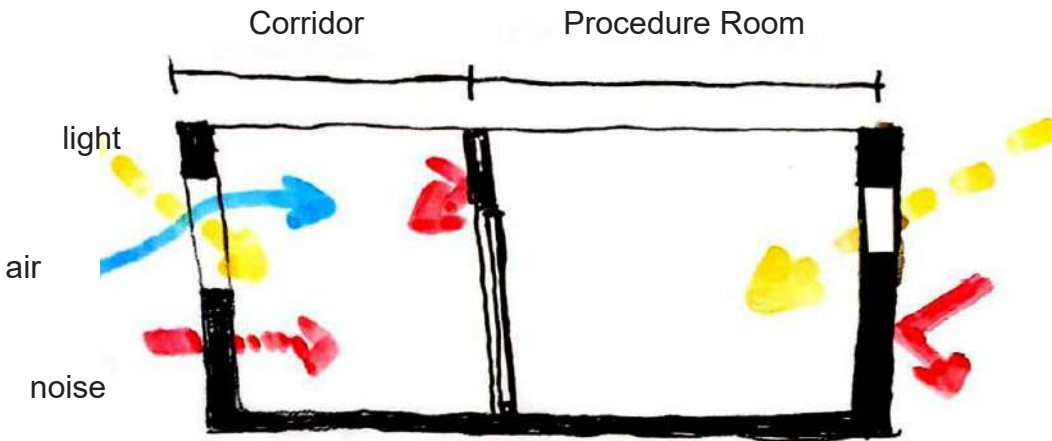
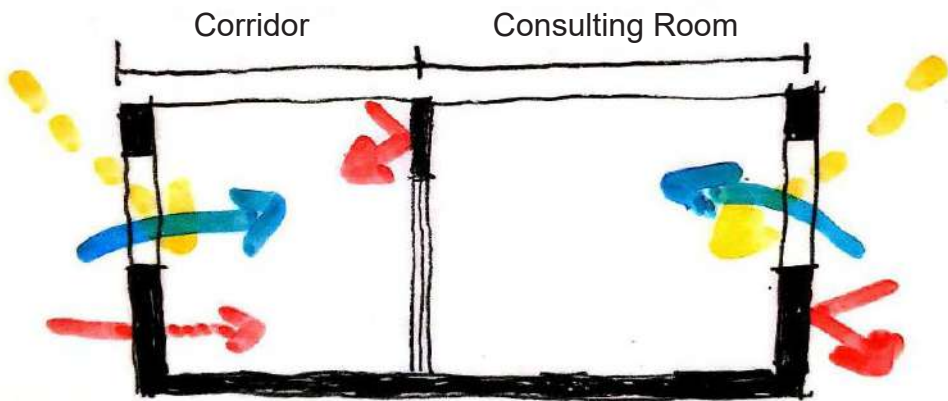
- Sluice Room
- Clean Utility
- Dirty Utility

A waste system is important."Provision must be made for the safe collection and holding of waste at a point of generation, waste collection and removal to a central holding point, and disposal from the site. Waste Disposal pathways should be seperatand as far away as possible from patient pathways.(IUSS, 2015)



4. Light, Ventilation and Noise Control

Air management in waiting areas should be designed to reduce airborne. Where natural ventilation is used the flow of air needs to be carefully considered to avoid potential contaminated air. getting into functional rooms. Ultrasounds are to be done in isolated rooms such as procedure rooms and mechanical ventilation has to be used. Therefore hybrid systems that use both natural and artificial systems of ventilation should be investigated. (IUSS, 2015)



PRECEDENT: WOMEN'S HEALTHCARE CENTRE

Location: Ouagadougou, Burkina Faso
Architects: FARE



Fig. 126

The project draws feminist approach in the political stance it takes, in its representation and programme. The project responds to the Genetial Female Mutilation through offering medical, psychological and legal services. But at the same time educational services, information and awareness about women's sexual and reproductive rights.

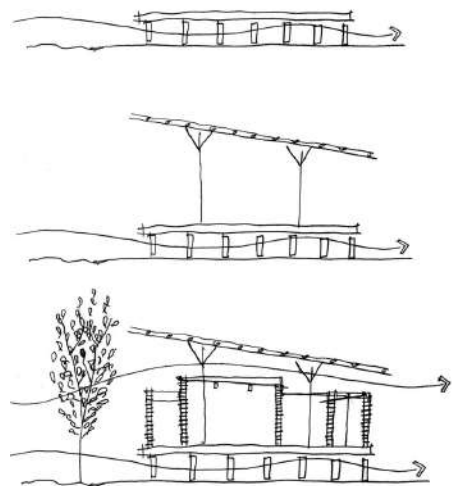
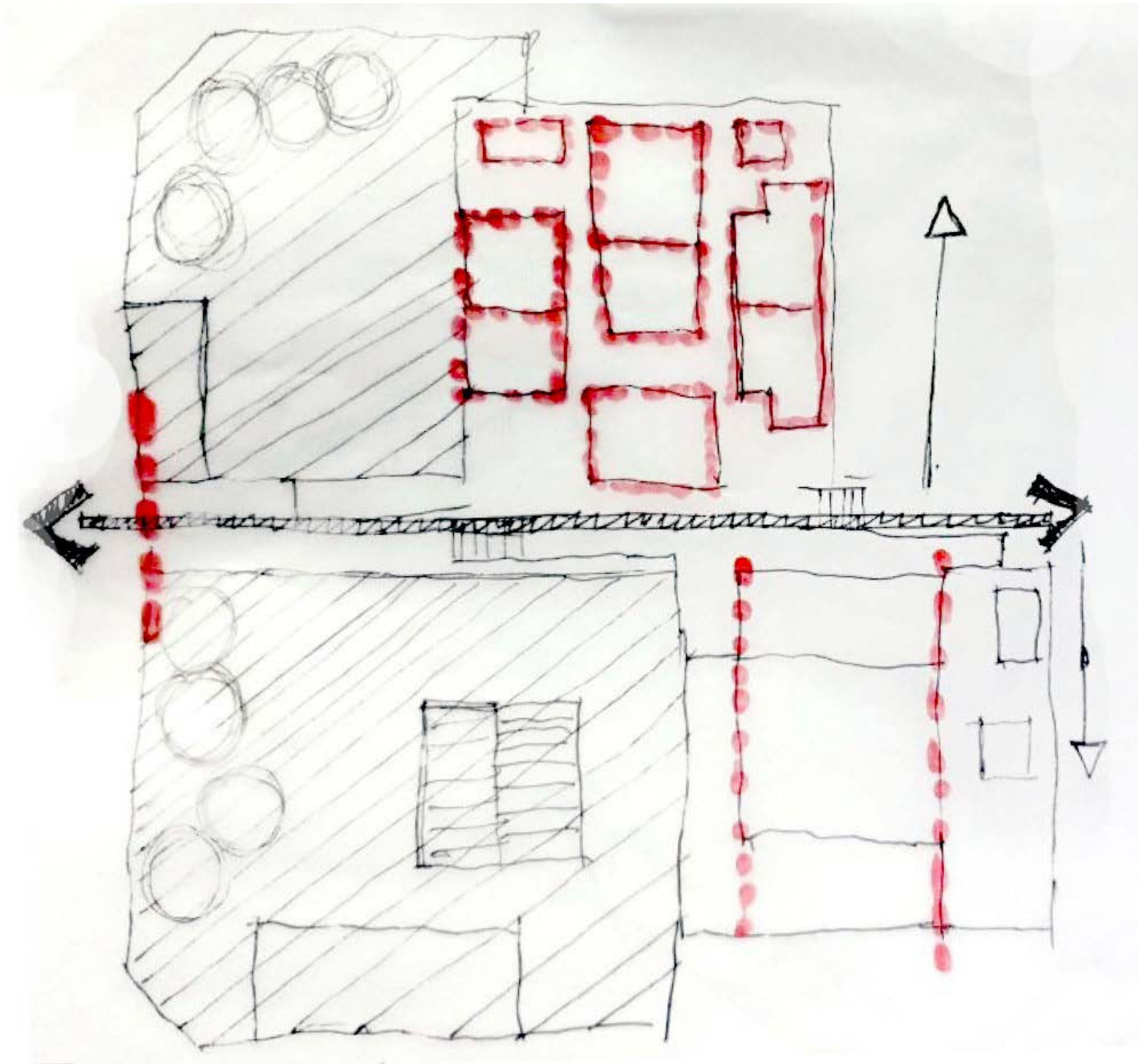


Fig. 127

In the building technology, and African technique developed by Francis Kere is adopted that responds to the climate conditions of the area. An independent roof structure supported by steel structural trees.



Fig . 128 Design Principles for Women's healthcare centre by FARE architects, Archdaily.



Its organisational structure adopts African/neo-colonial theories. Transitional spaces such as courtyards, verandas and patios. Maintaining a connection between outdoor and indoor. Security lines and organisations of rooms that support the different programs and sensitivity of the two buildings. Offering ventilated but private patios.

Fig 129. Analytical sketch. Authors Own

SCHEMATIC PLAN DEVELOPMENT



The spatial development was developed around the spaces of thresholds marked with the red circles. These spaces hold the following functions:

- Gathering-Play pergola and amphitheatre
- Sanctuary-courtyard private garden
- Therapy- Group therapy rooms
- Meeting- Co-op retail store meeting rooms/community meeting rooms
- Consultation- Clinic plug in stations

Around these is the orthogonal planning of the clinic and pharmacy that requires a substantial amount of services. Both the clinic and pharmacy are services from the basement. Medical waste is stored and collected from the rear of the building on Hopkins street. The paediatric section is separated from the reproductive section of the clinic with separate entrances. They share service spaces such as toilets, storage, dirty utility rooms and staff rooms. Security lines are marked with red lines.

The planning of the clinic is orthogonal to ensure the functionality of the clinic. The special spaces are hugged by circular architectural elements such as walls, screens, columns and roofs.

Earlier I discussed the roof as and energy saving and generation device. In this section the roof as an architectural expression is explored. The following sketches show how the re roofing of the retail building on Raliegh street could be imagined using Ultra Thin Concrete technologies. The roof can then be expressive and experienced in the interior of the building. The exterior of the roof can be used for advertising using energy generating concrete dyes discussed earlier.

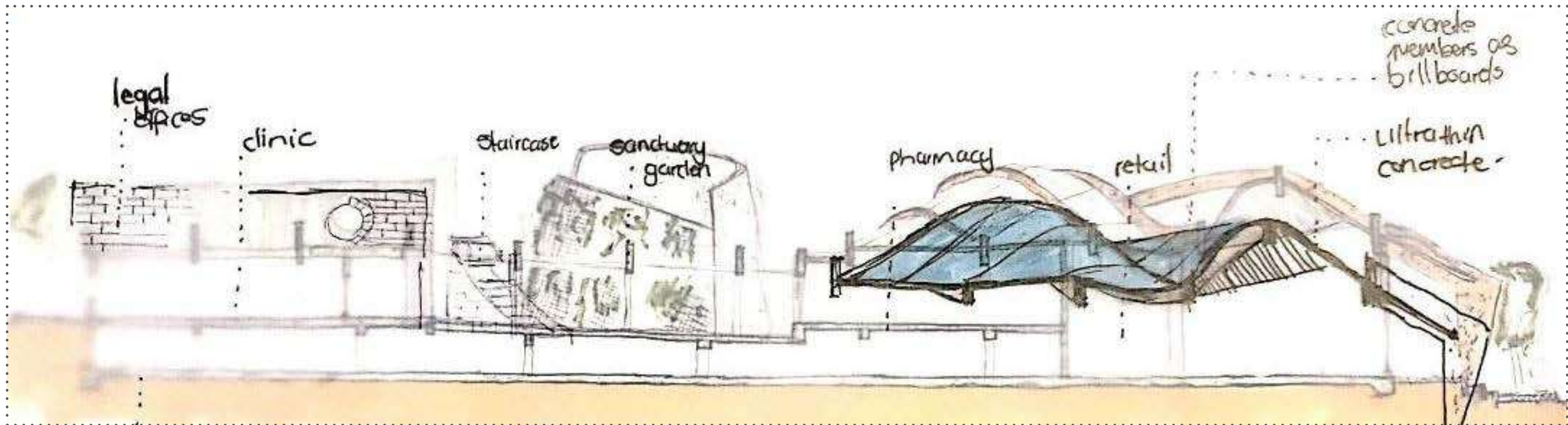
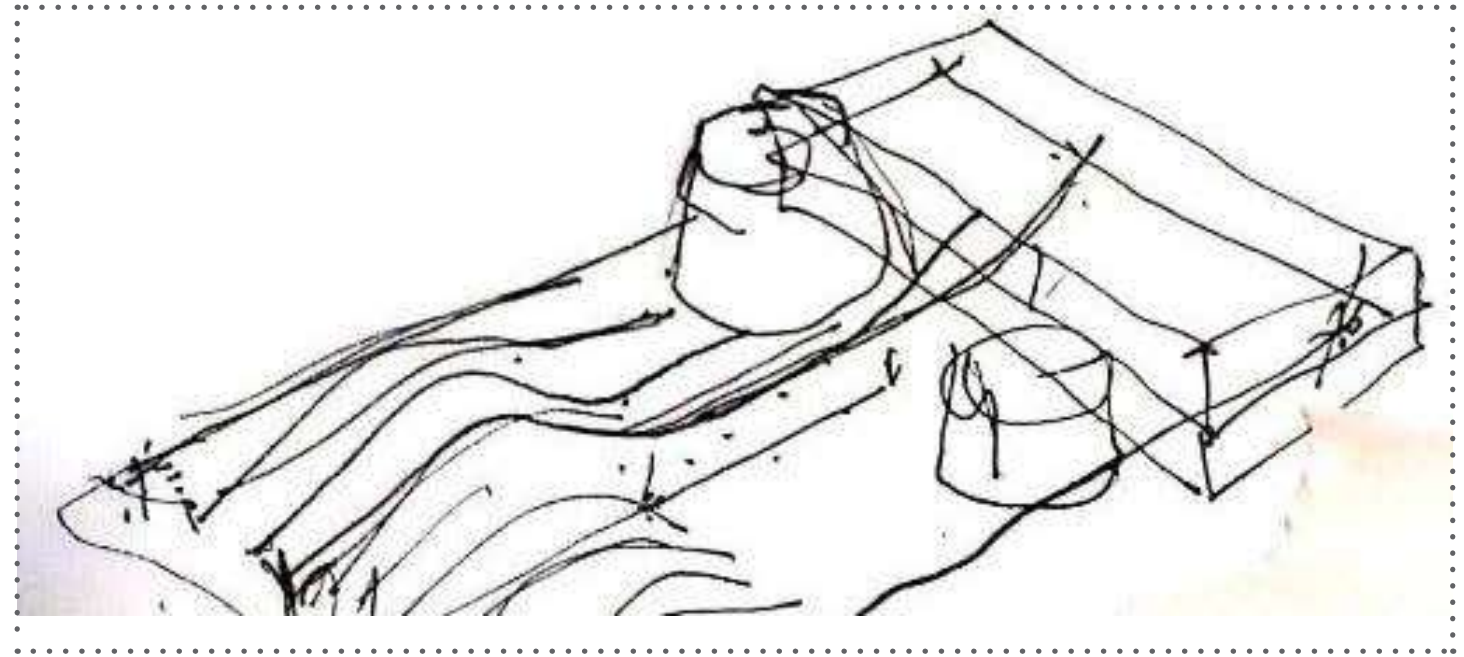
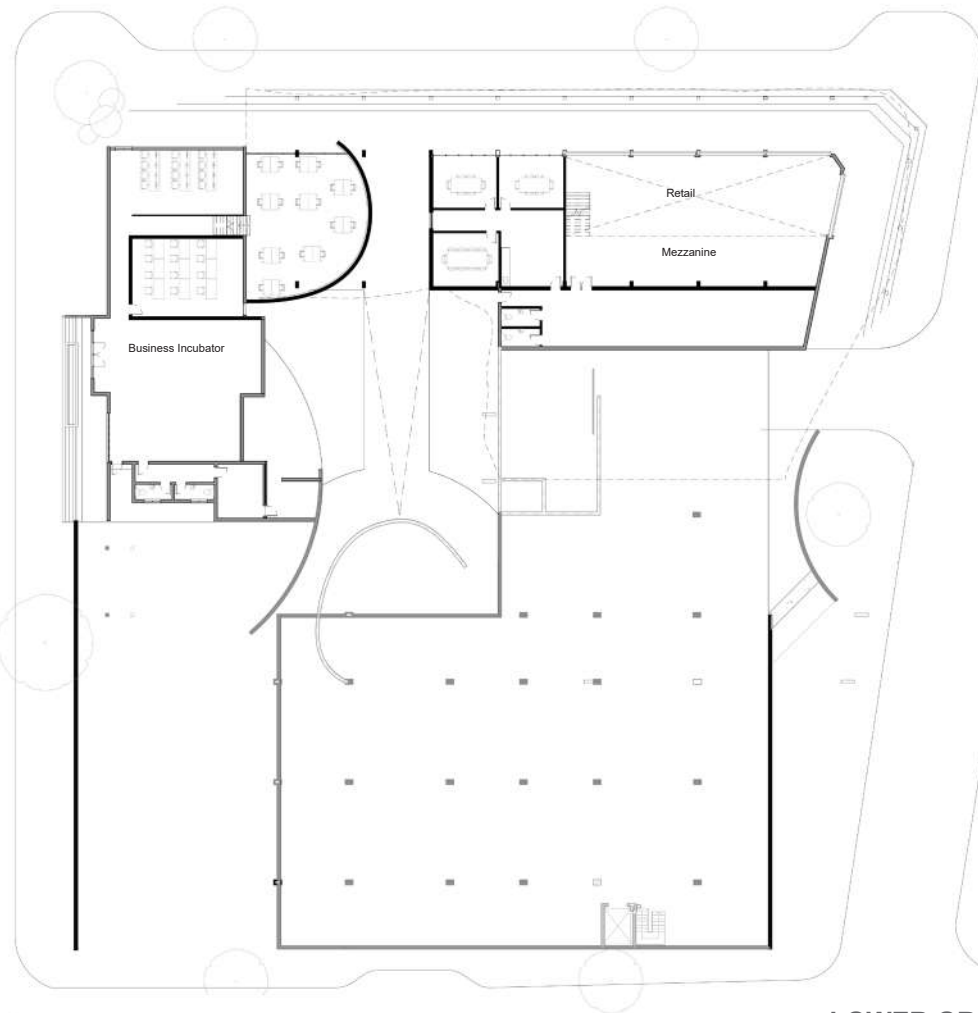
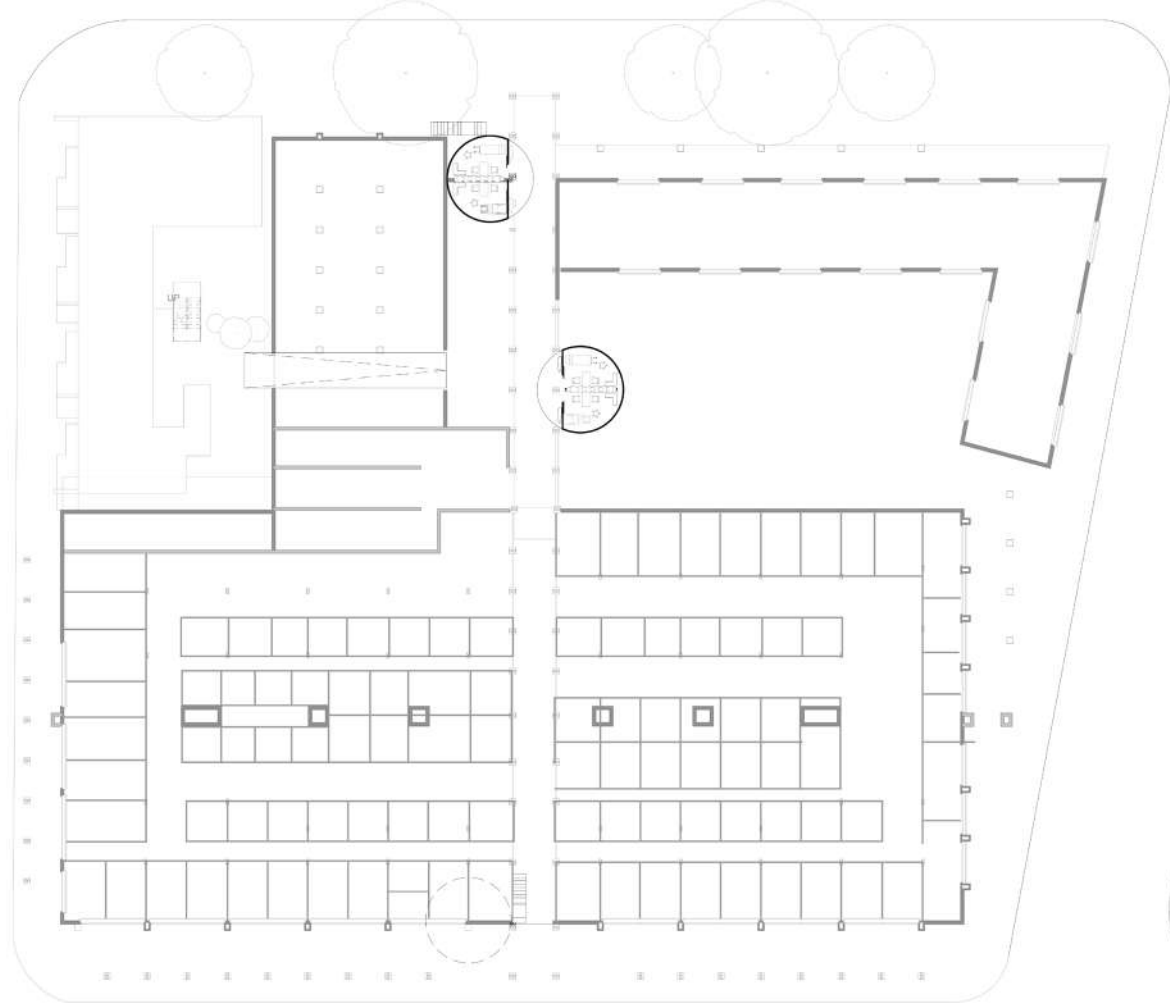
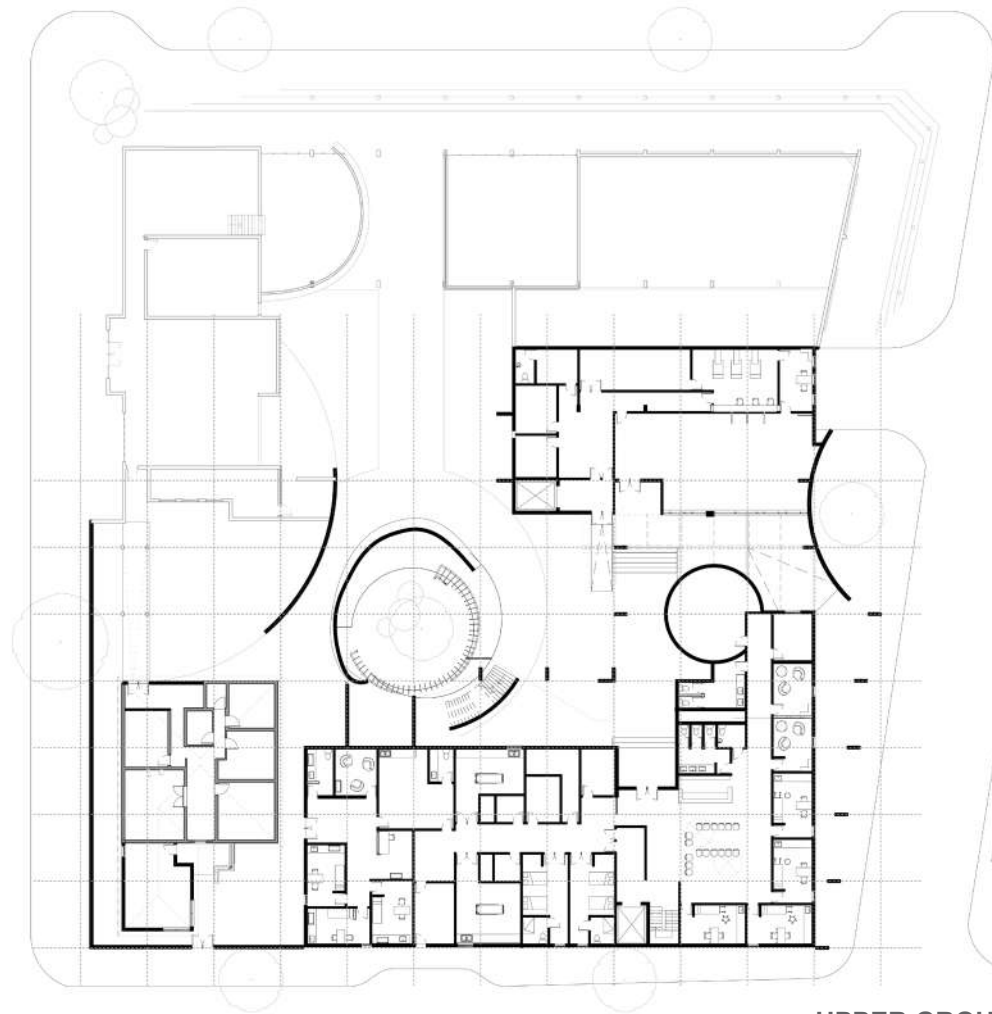
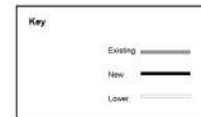


Fig 229. Roof form exploration, sketches. Authors Own

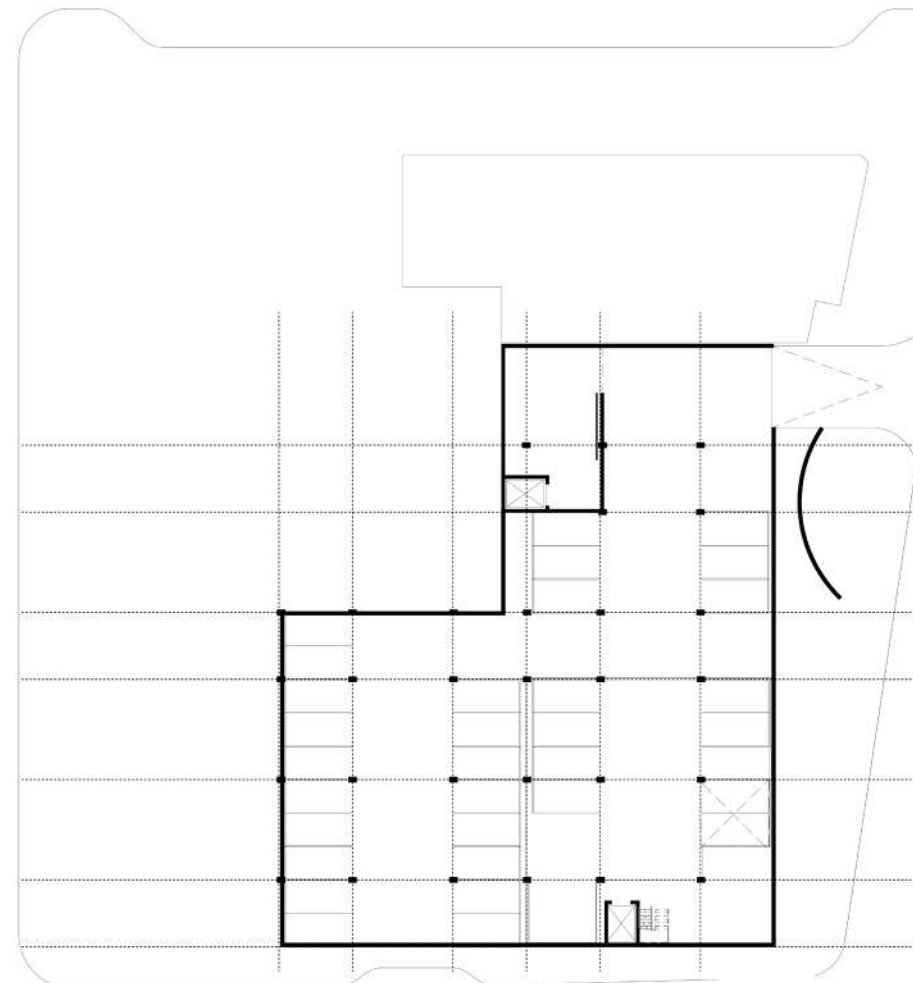




LOWER GROUND NTS

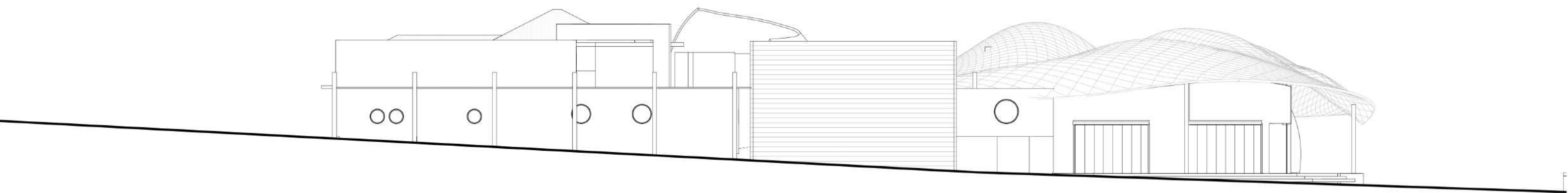


UPPER GROUND NTS

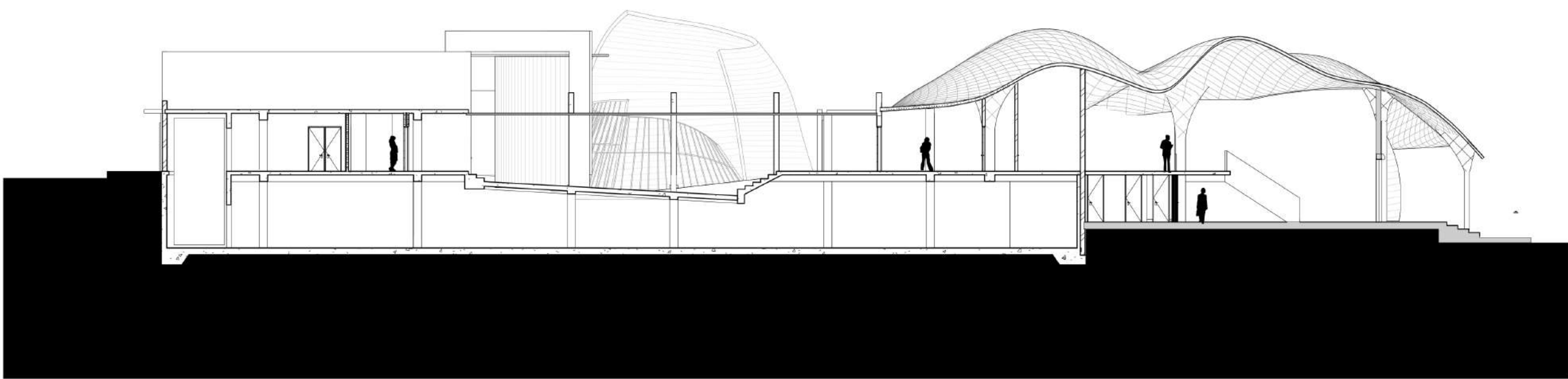


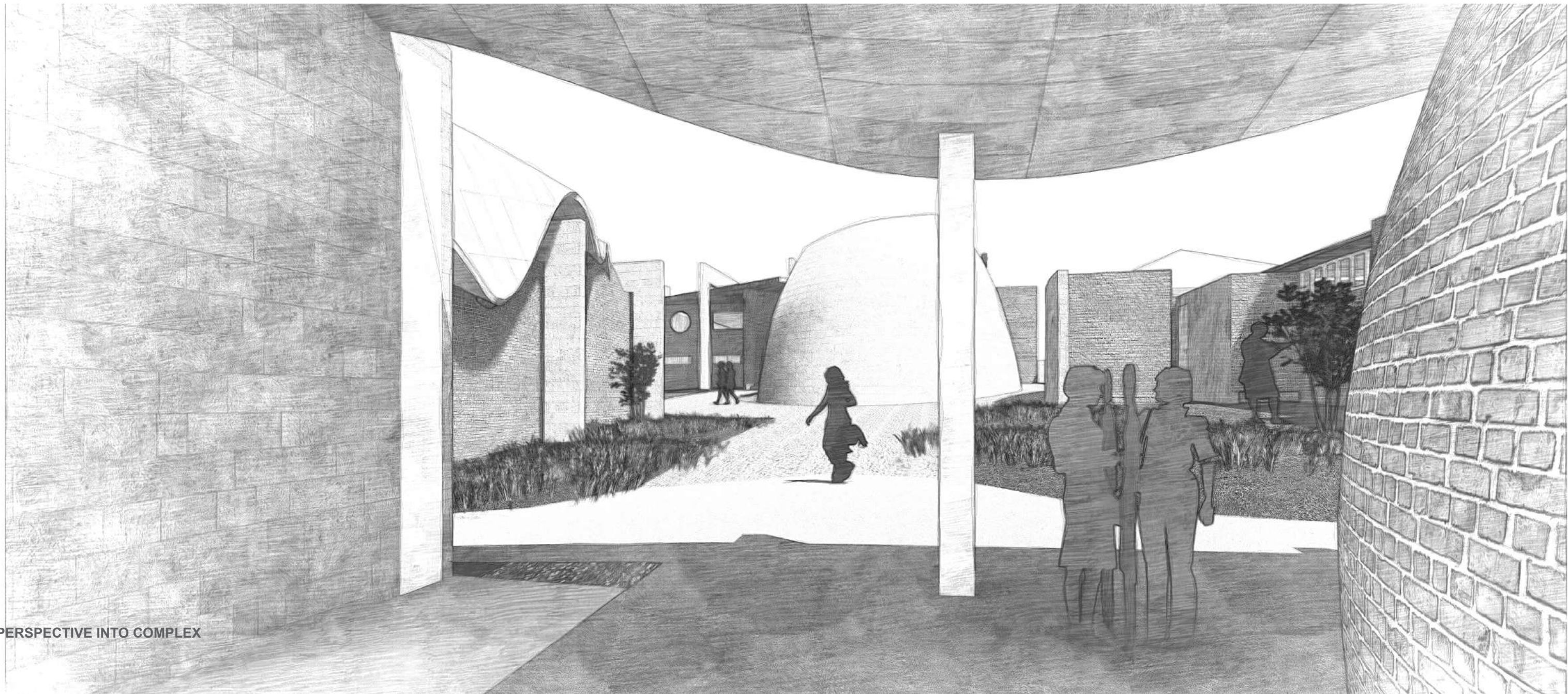
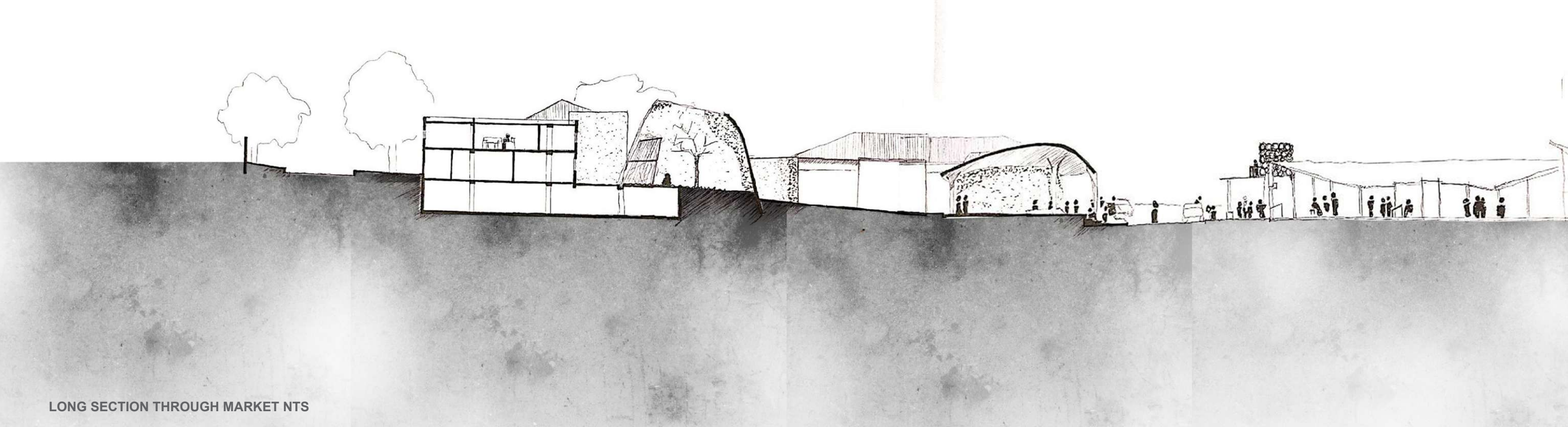
BASEMENT NTS

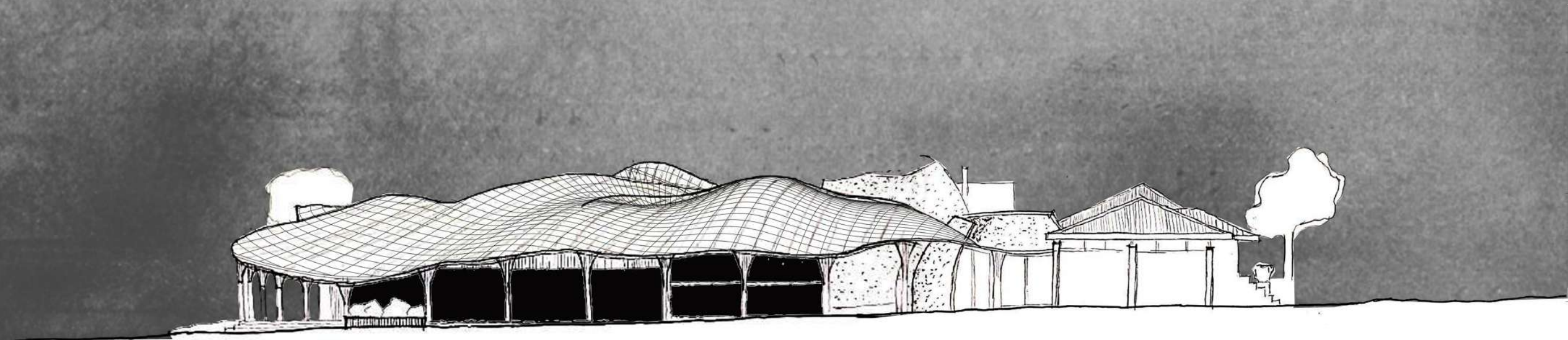
EAST ELEVATION NTS



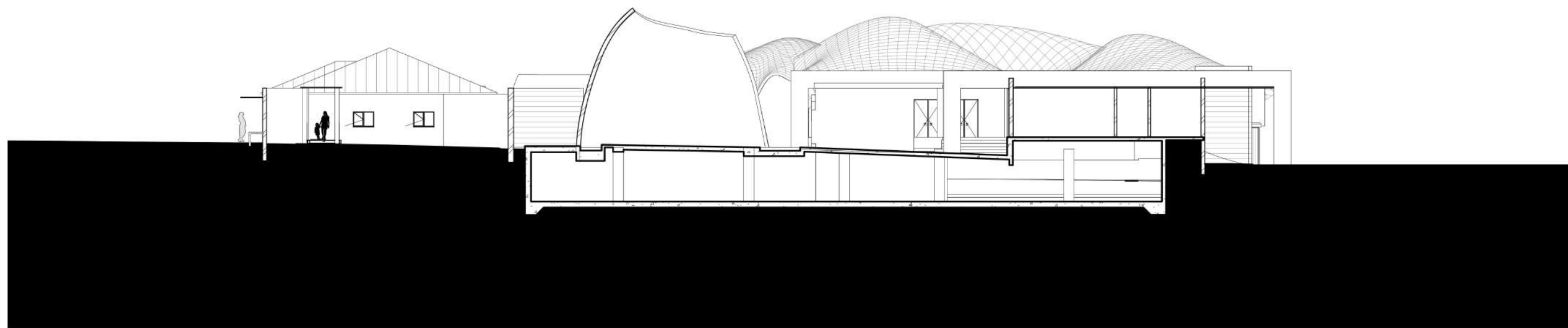
SECTION A-A



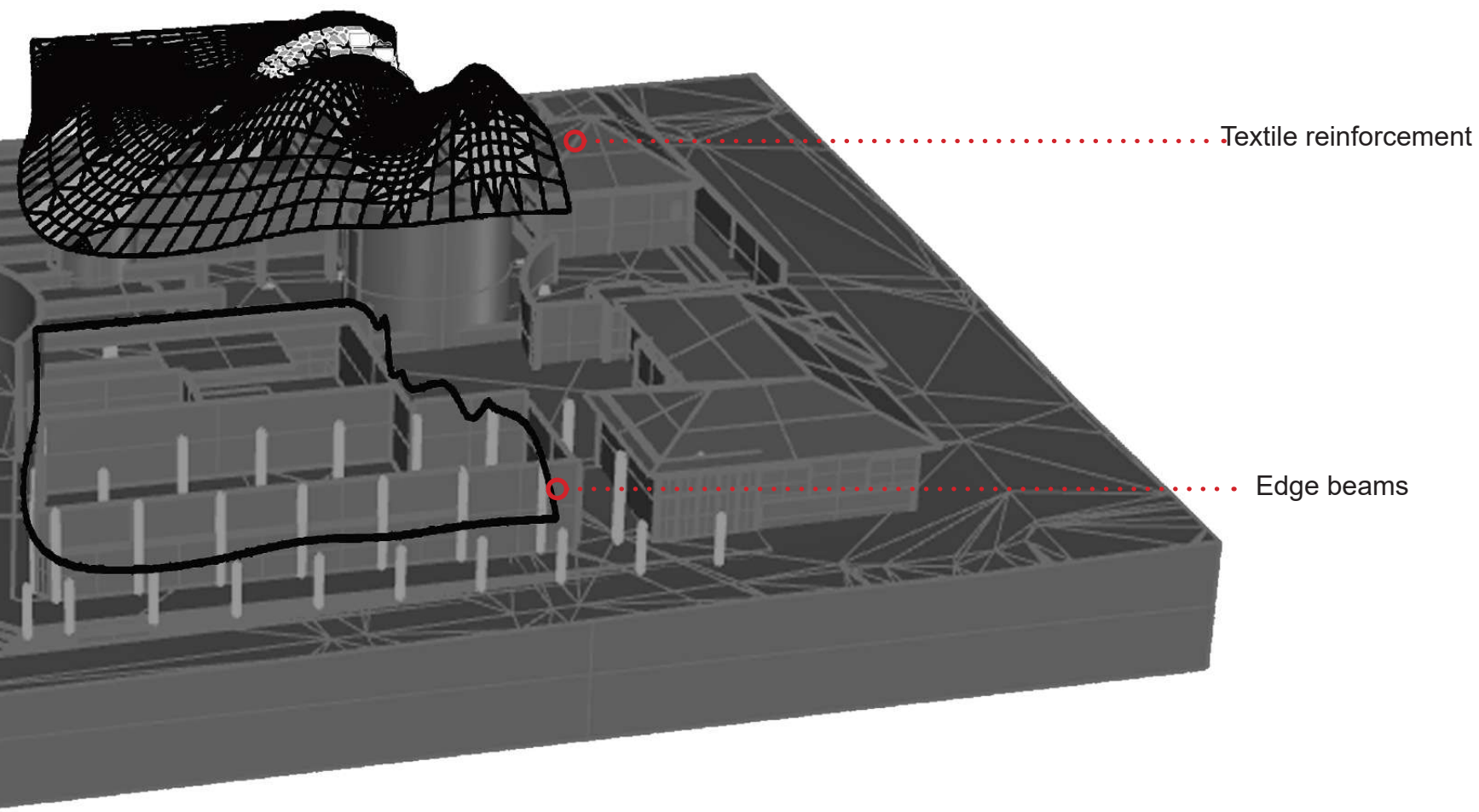
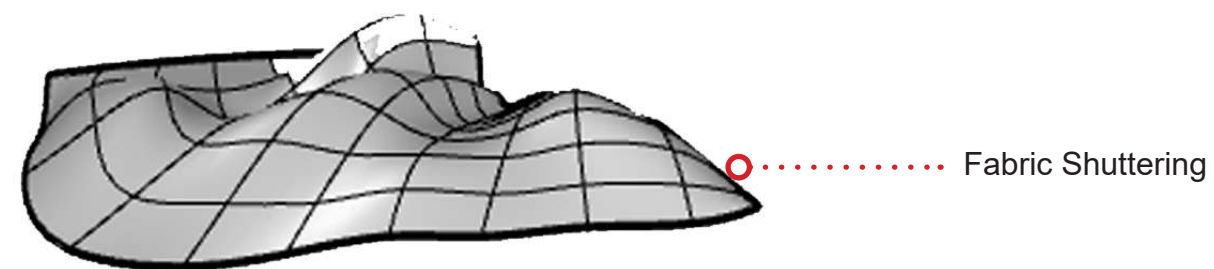
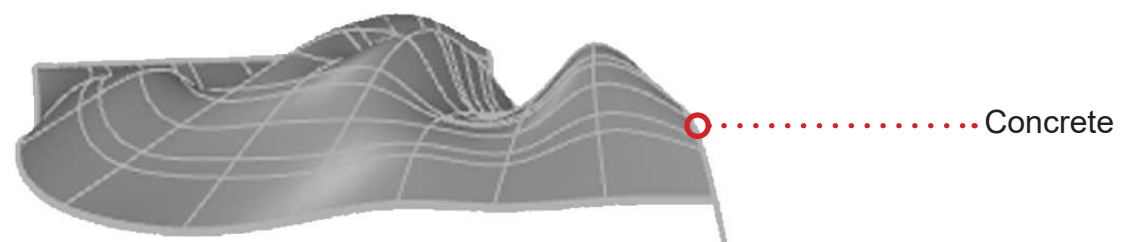




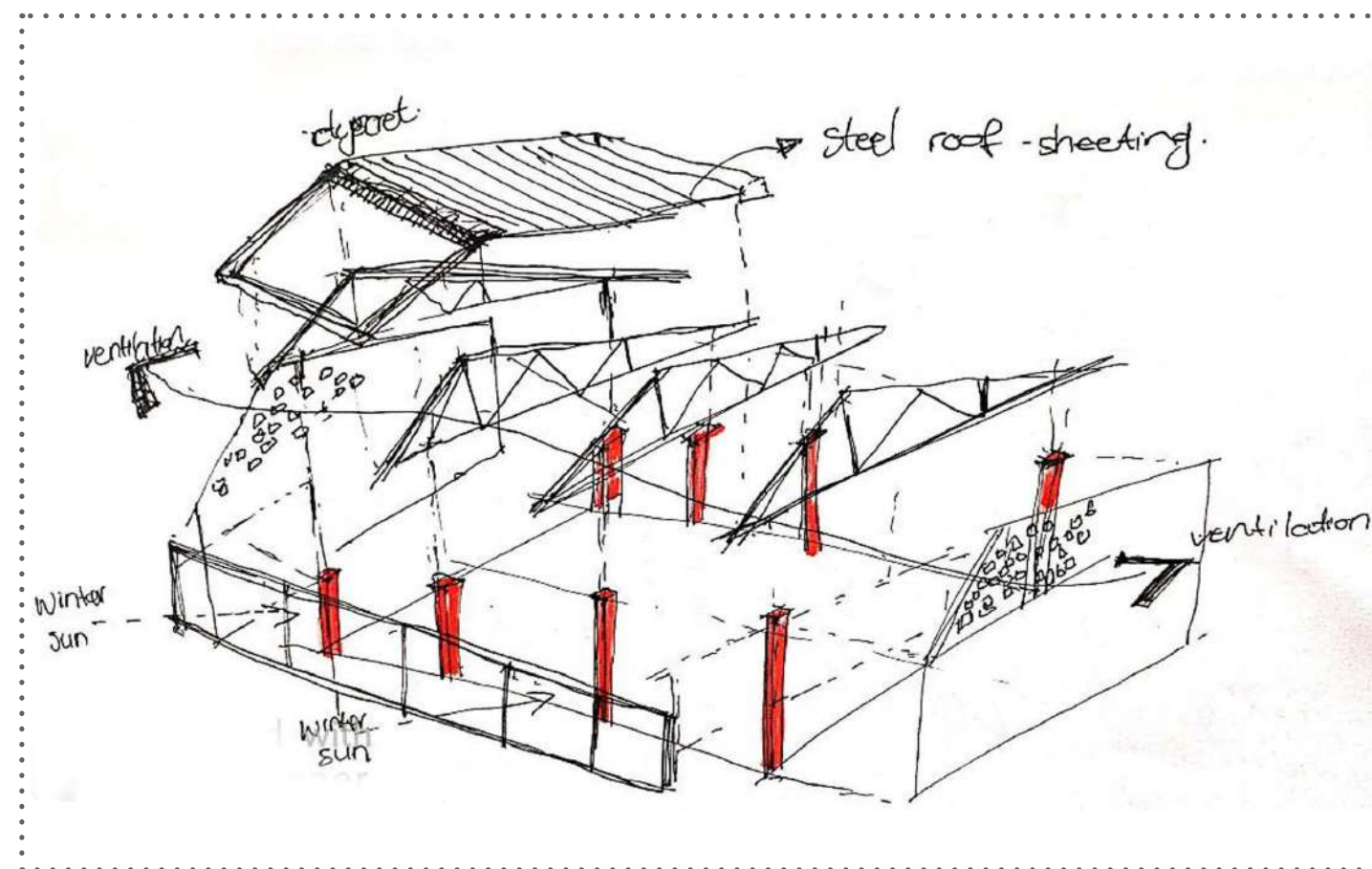
NORTH ELEVATION NTS



SECTION B-B



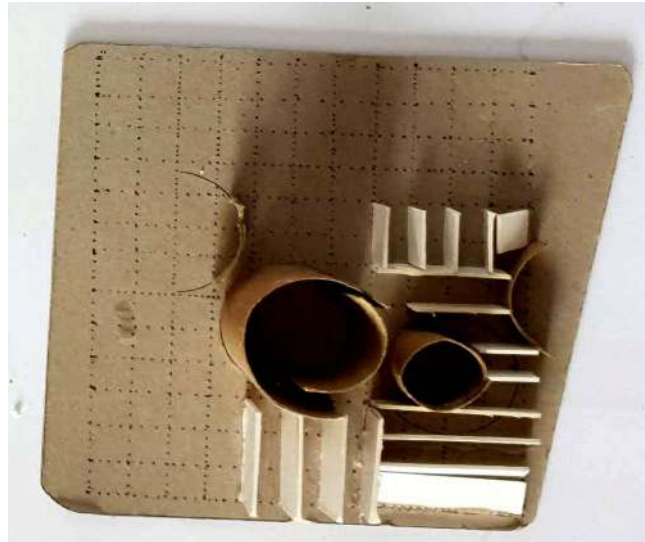
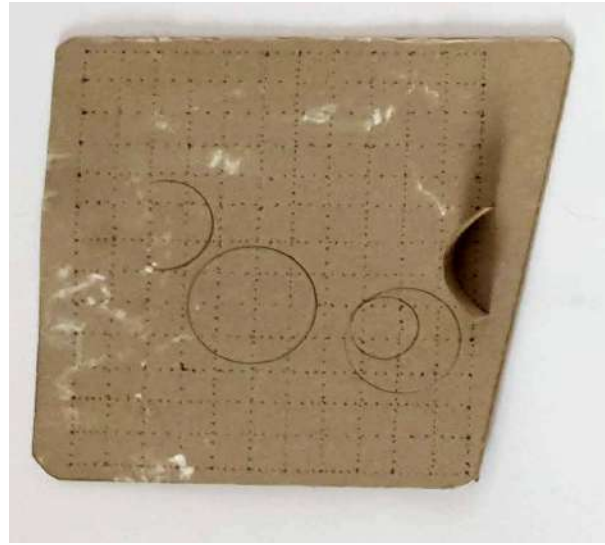
ROOF TECHNOLOGY



ALTERNATIVE BUILDING TECHNOLOGY

The form of the roof is explored through a Rhino and Grasshopper simulation. The positions of existing columns were used as anchor points. Multiple iterations of form are explored using gravitational force formulas and the chosen anchor points. The roof spans in different directions, which may be difficult in construction. This building form is achievable through the ultra thin concrete building technology (discussed earlier) derived by ETH Zürich. For this type of project exploring this method would be costly. Therefore the roof should rather span in one direction.

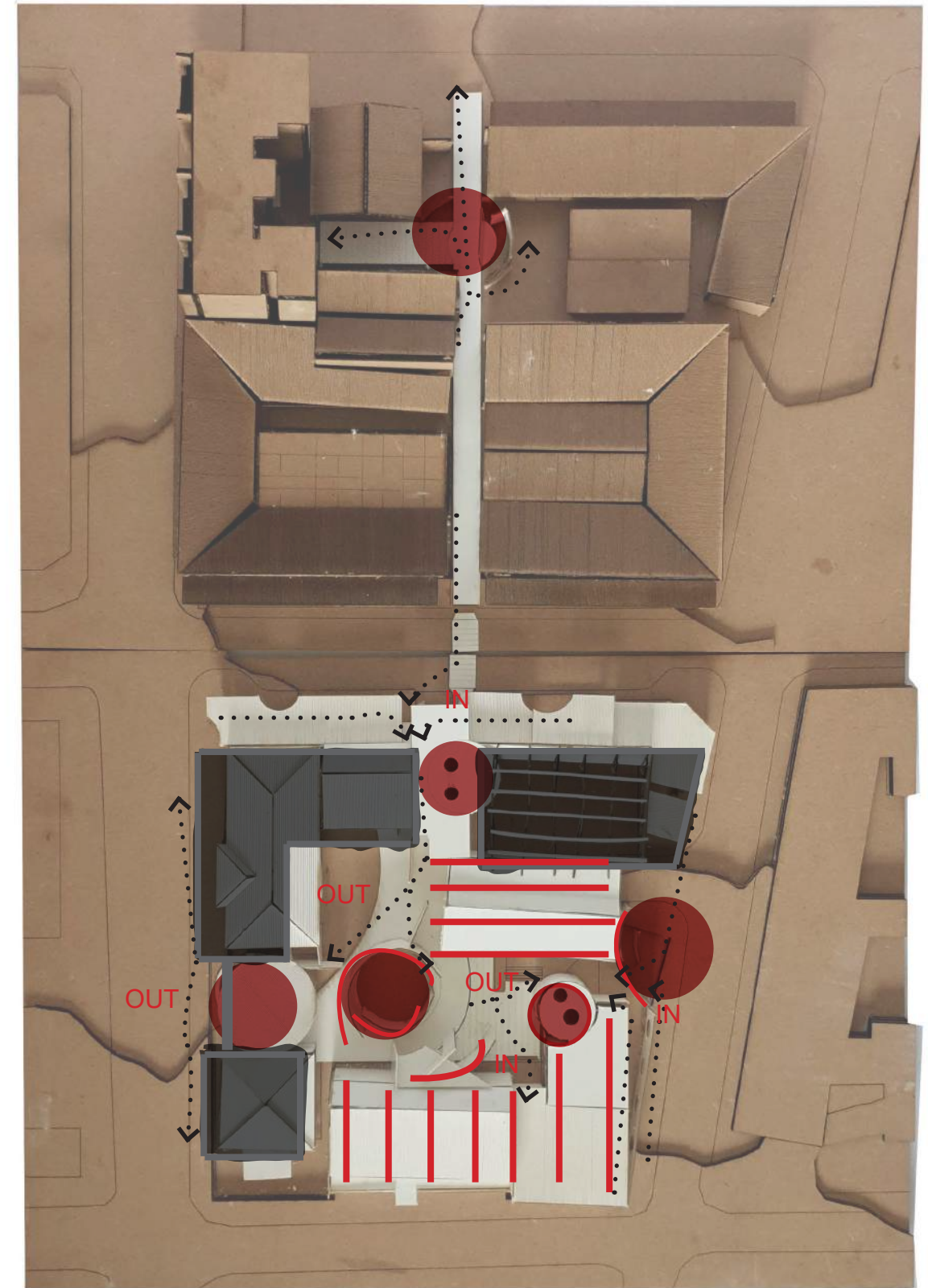
An alternative construction can be used. The same ultra thin concrete is used as panels spanning over an independent roof structure supported by steel structural trusses. The existing structure remains. The side walls are perforated to allow for ventilation through the building. Direct sunlight is blocked during summer and enters in winter.

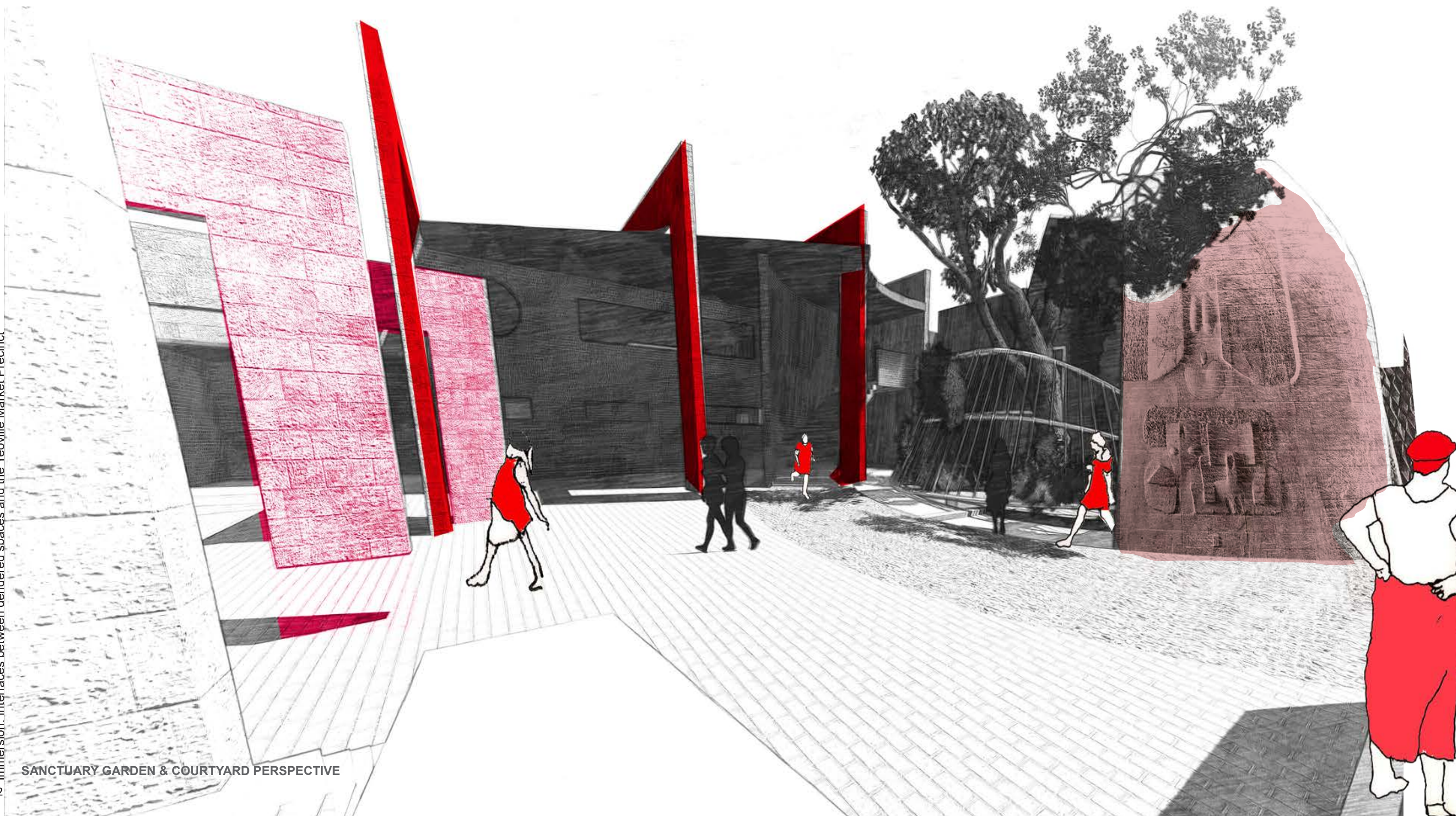


The schemes design language is overt in the juxtaposition between the linear and the curvilinear. It is a direct response to the limitations of Modernist design techniques that result in linear urban grids and forms. This language lacks in the spatial & functional integration of certain social spaces. To integrate these spaces of gathering and social interaction: experimental forms of architecture are introduced. Curvilinear forms accommodate the organic spatiality and functionality of these social spaces. Similar to the "twin phenomena" developed by Aldo Van Eyck: the scheme presents itself as two architectural languages that coexist in one design. This architectural language alludes to the symbiosis of Africans and African women being accustomed to opposite modes of space. Their organic responses and organisation of space while being forced into tight-knit structures, forms and spaces.

The linear tight knit plan is derived using a 5x5m and 5x7.5m structure grid. This grid is used in the clinic's planning where there is rooms of a standard size required. This results in an orthogonal placement of walls, floors and columns. As a counterbalance, negative spaces are carved in to the linear grid by curvilinear walls, floors and roofs. In these negative spaces are the 'social circles' such as a gathering amphitheatre, play pergola, private sanctuary garden in the courtyard, group therapy rooms, community meeting rooms & mobile clinic booths. The use of curvilinear elements -supplemented by the use of colour and lighting- form, hug and protect a designated space and from another point of view directs one away from this space.

The placement of these social circles are strategic in that they do not only relate to the surrounding program but to circulation within the design. They introduce a threshold and encourage movement in at a certain point or out at another point. In other instances encourages movement into and across the site or along street edges.





SANCTUARY GARDEN & COURTYARD PERSPECTIVE

Immersion

Interfaces between gendered spaces and the Yeoville market precinct.

A Reproductive Health Clinic and Womens Complex

Kamogelo Mogale.

CHAPTER 9

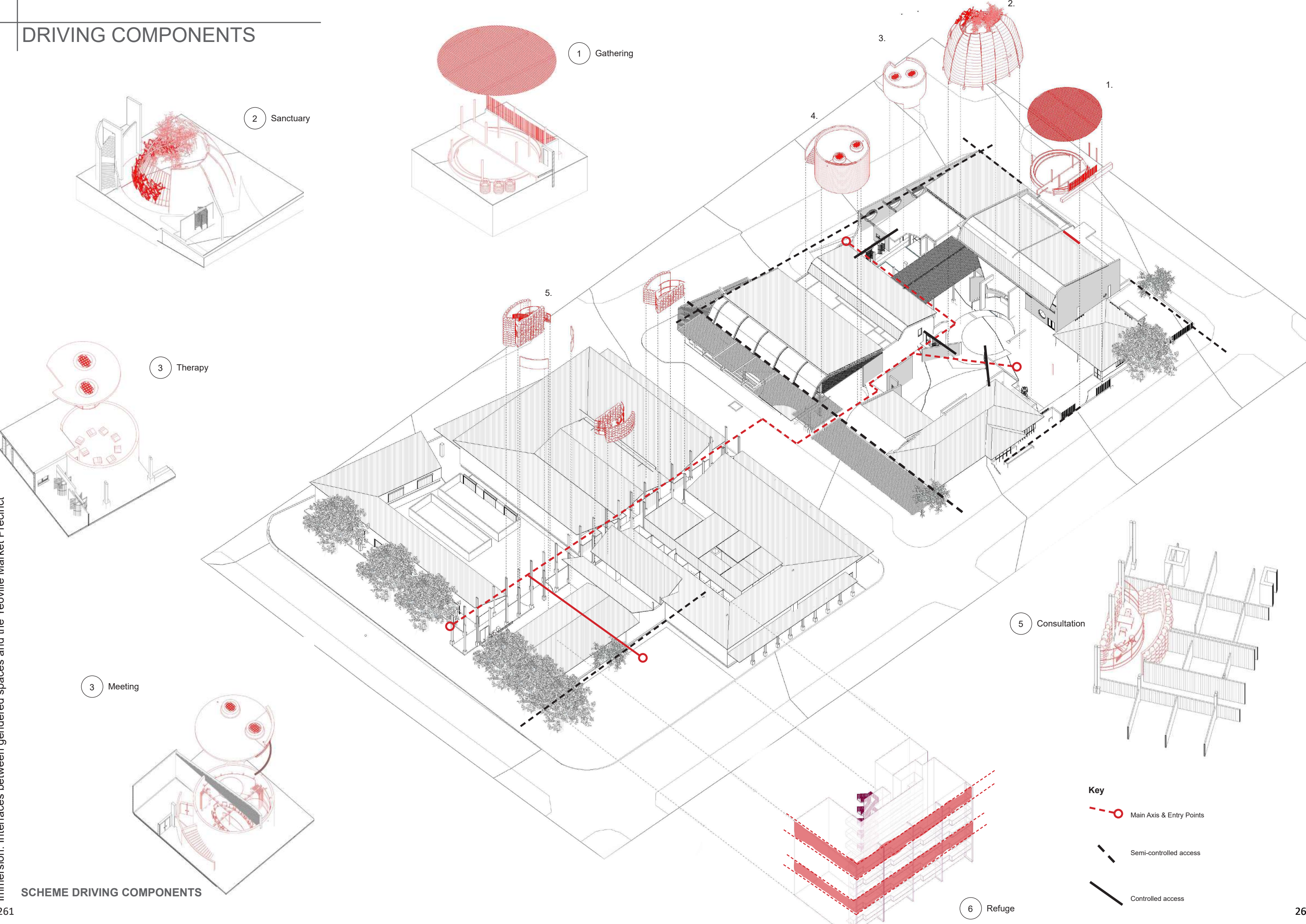
BUILDING DOCUMENTATION

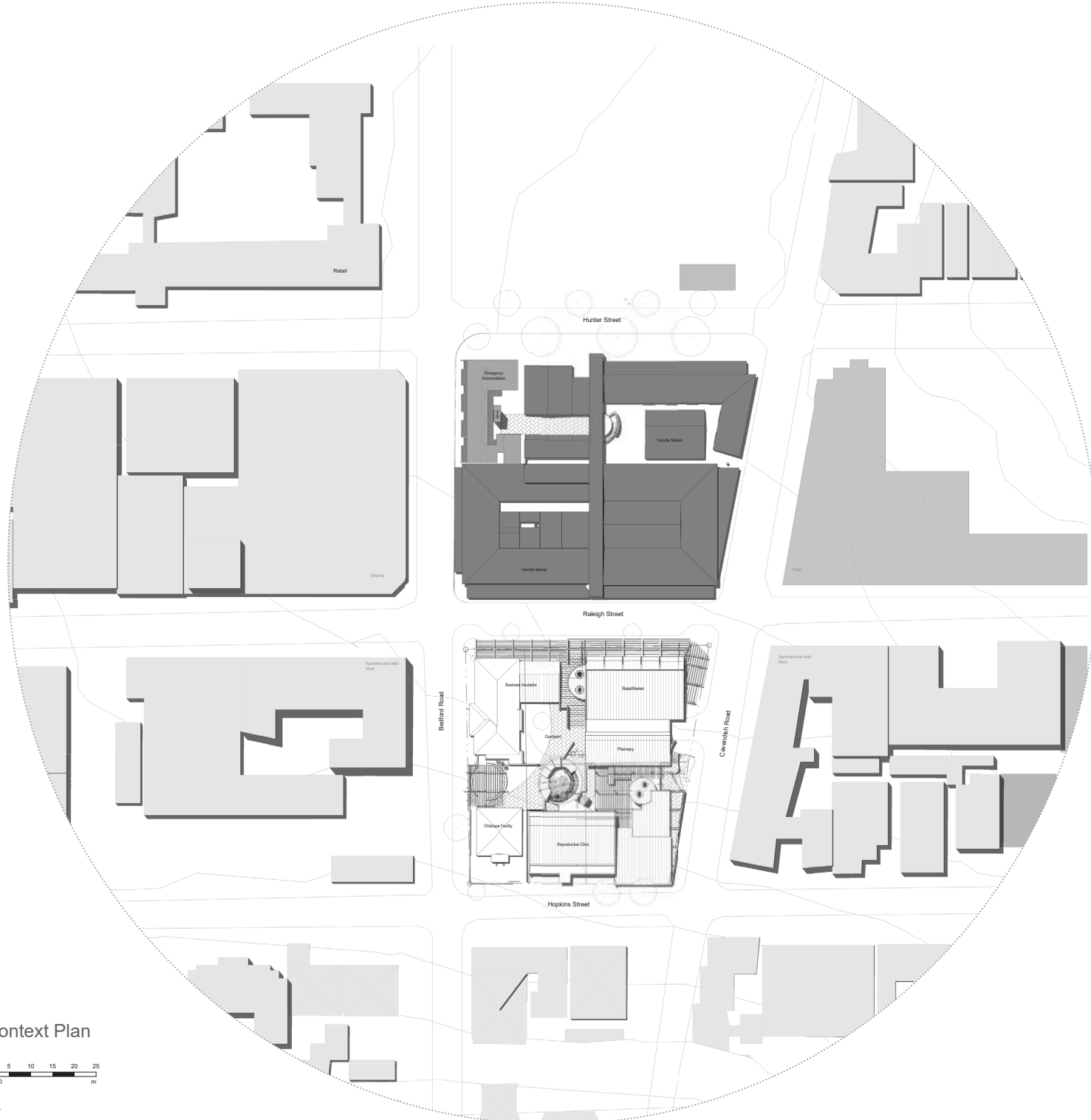


DRIVING COMPONENTS

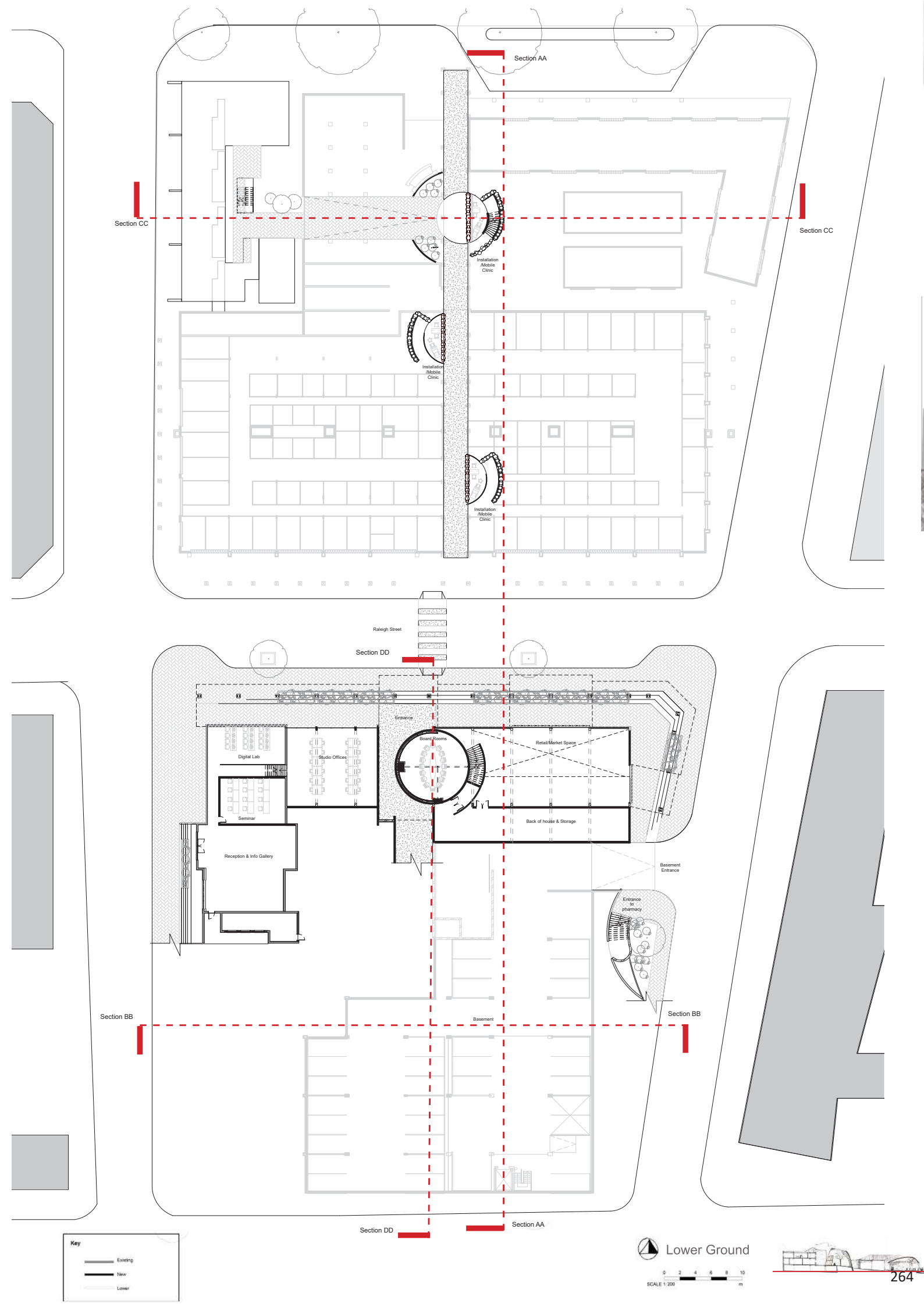
Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct

SCHEME DRIVING COMPONENTS





Context Plan



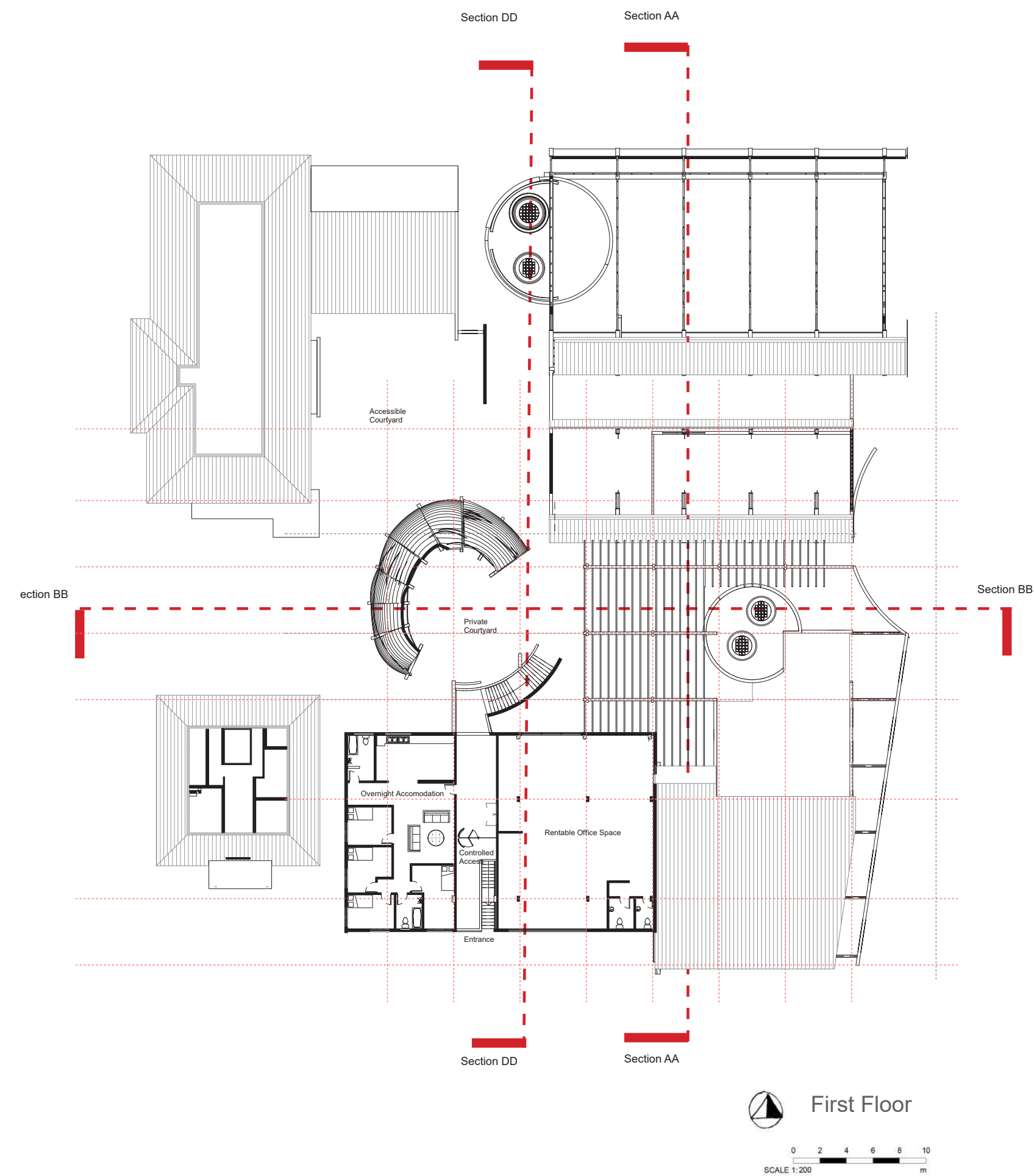
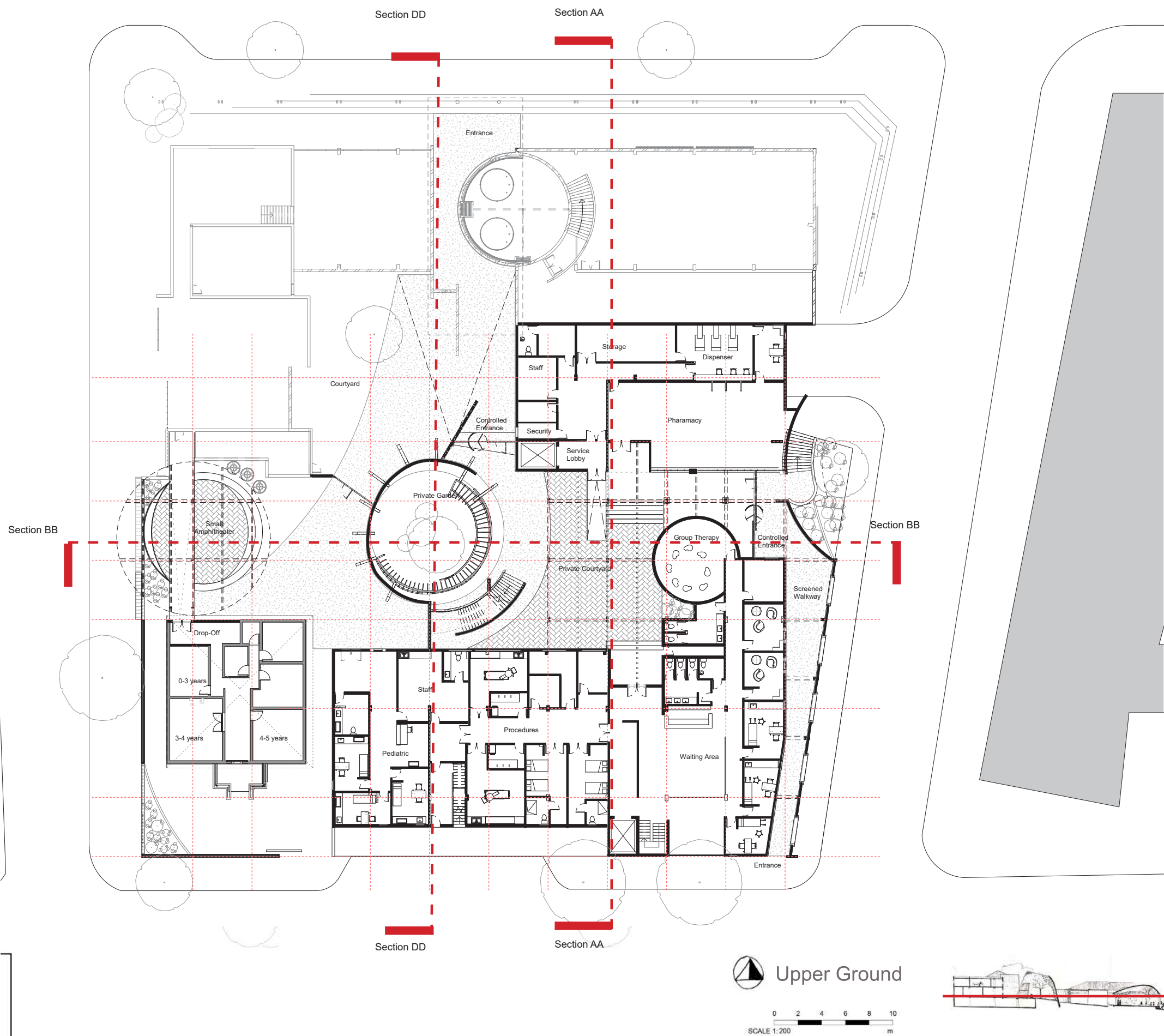
Key

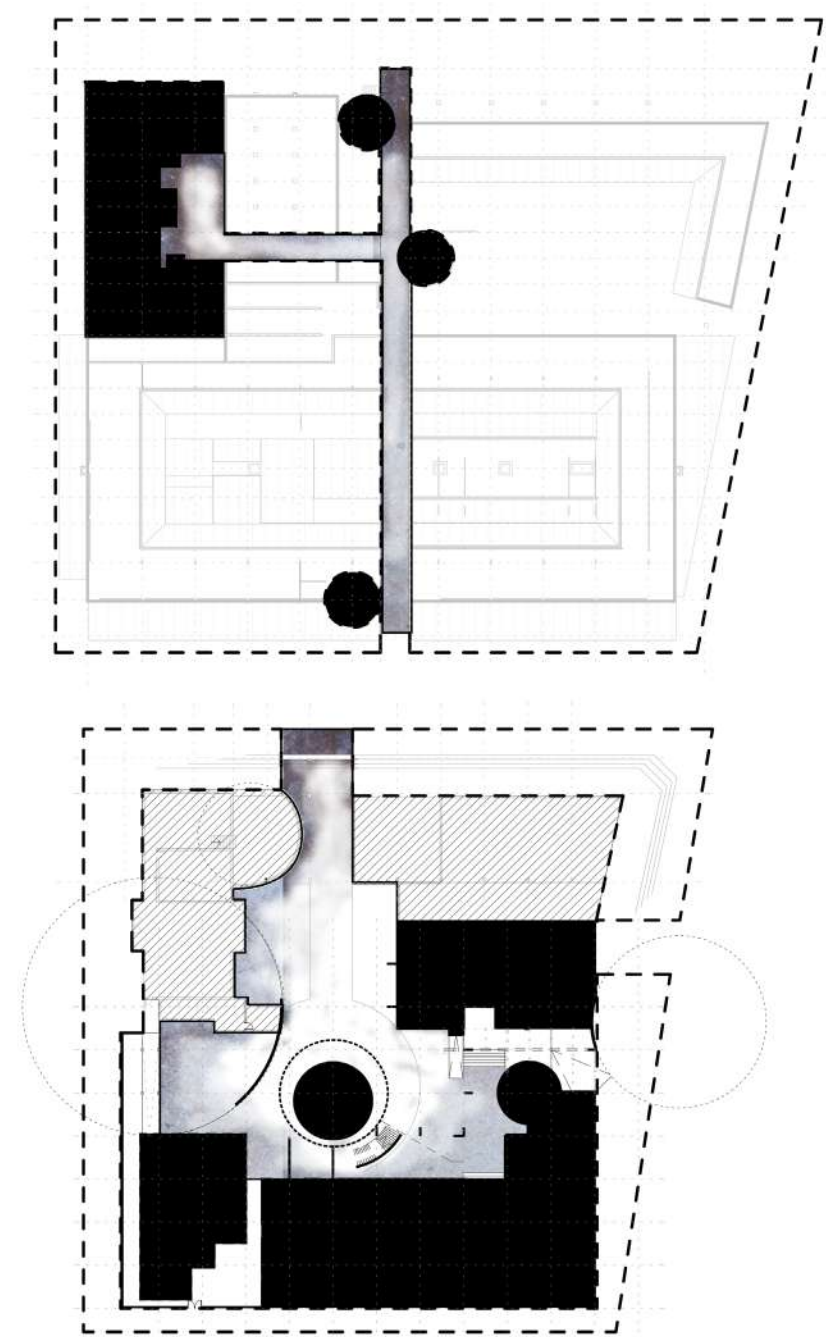
- Existing
- New
- Lower

Lower Ground

SCALE 1:200

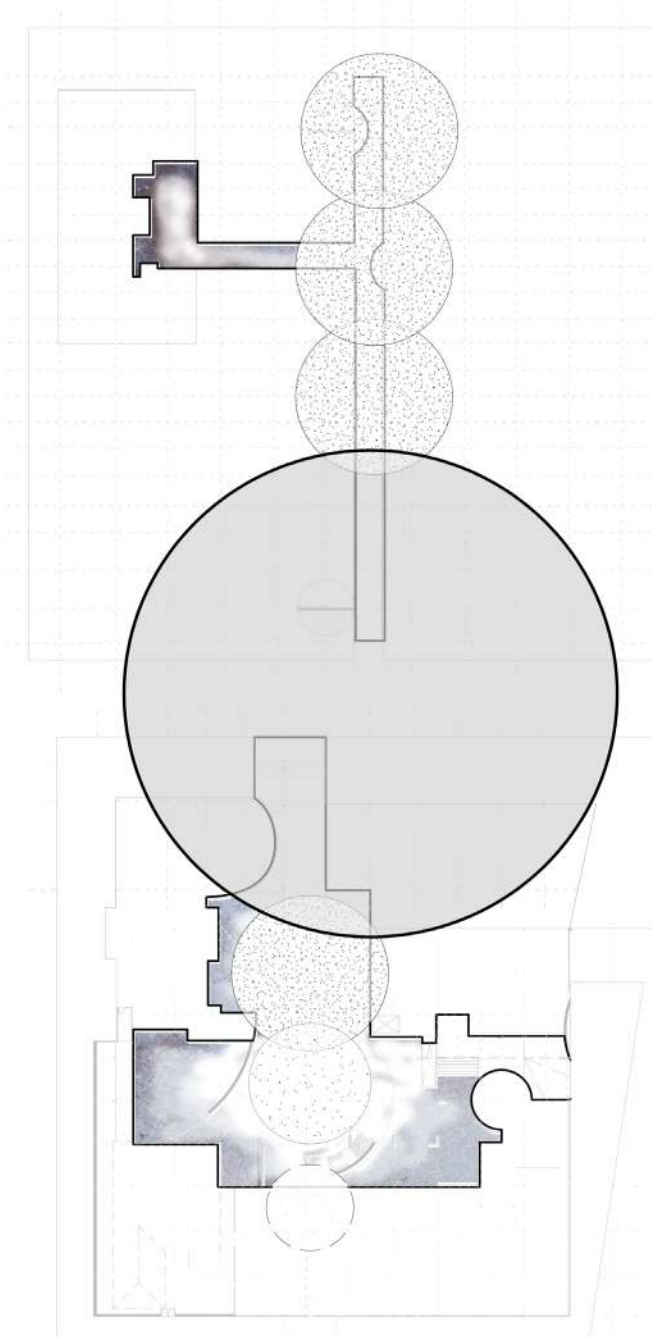
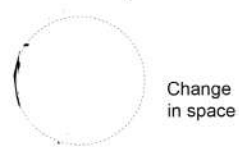






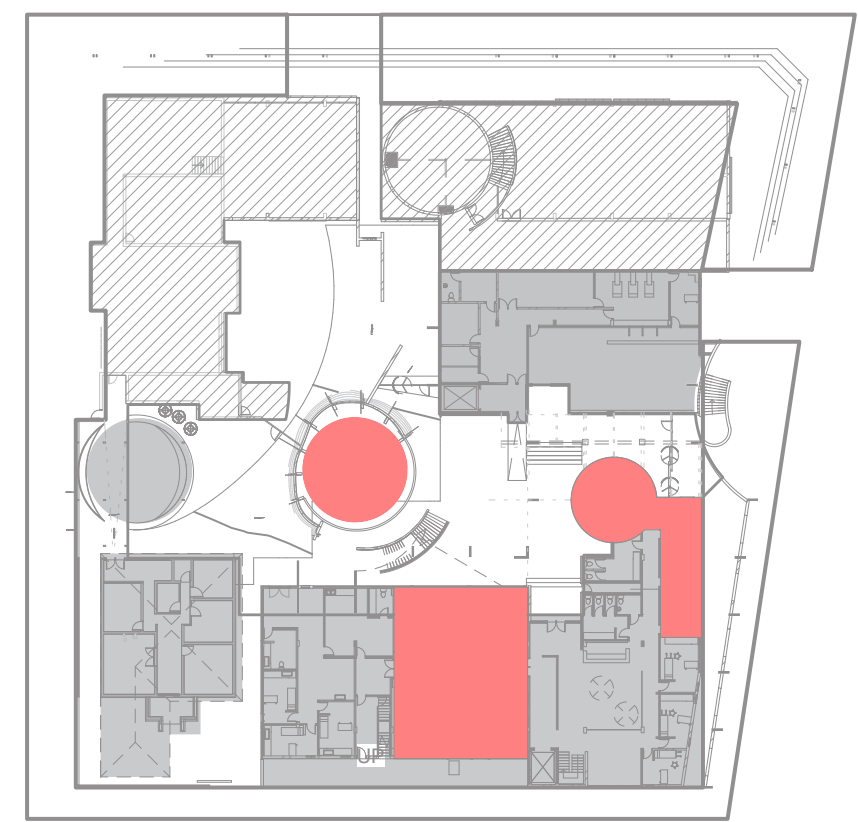
Thresholds-Access

- Private
- Semi-public
- Public



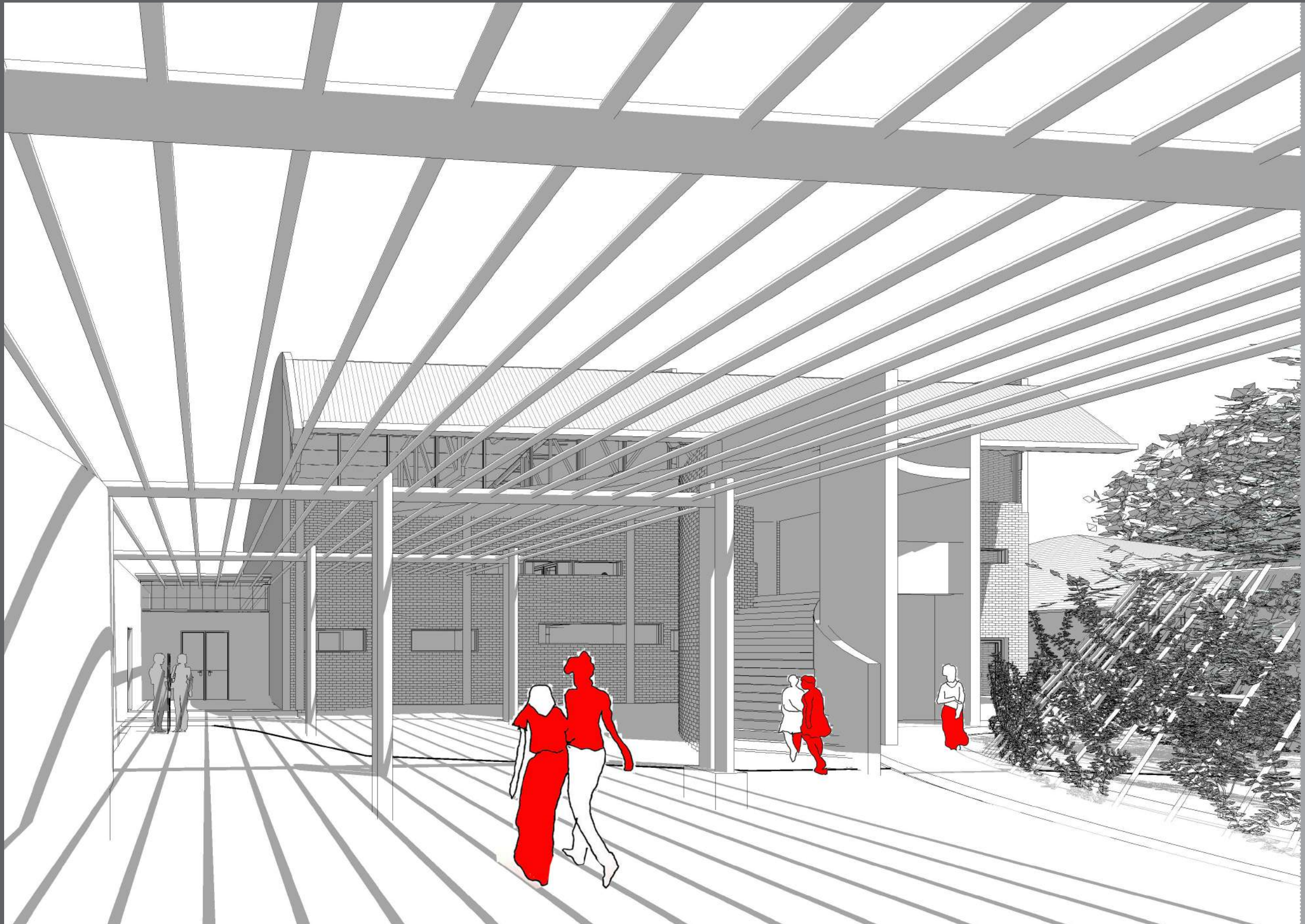
Thresholds-Access

- High Density
- Medium density
- low density

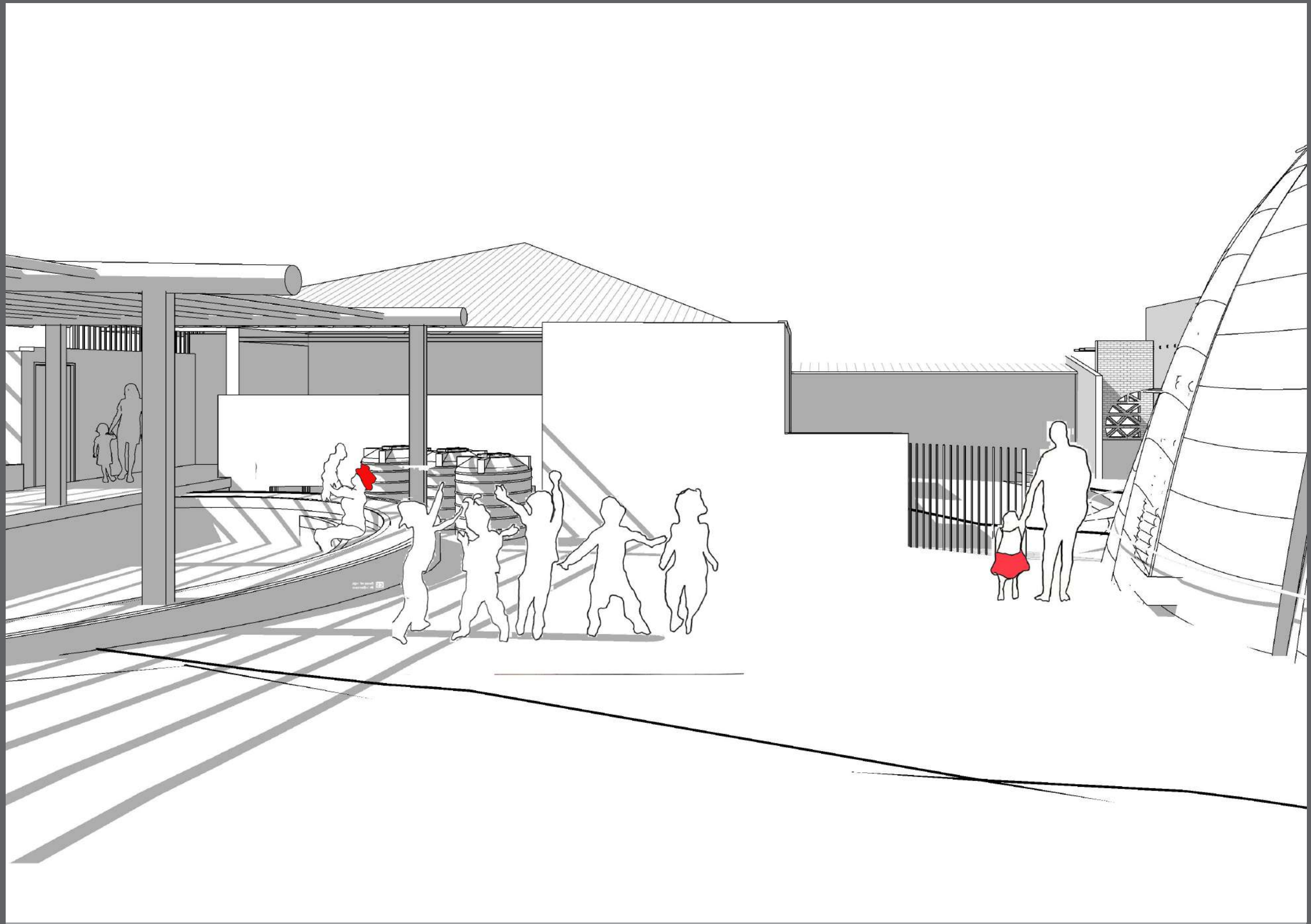


Thresholds-Restrictions

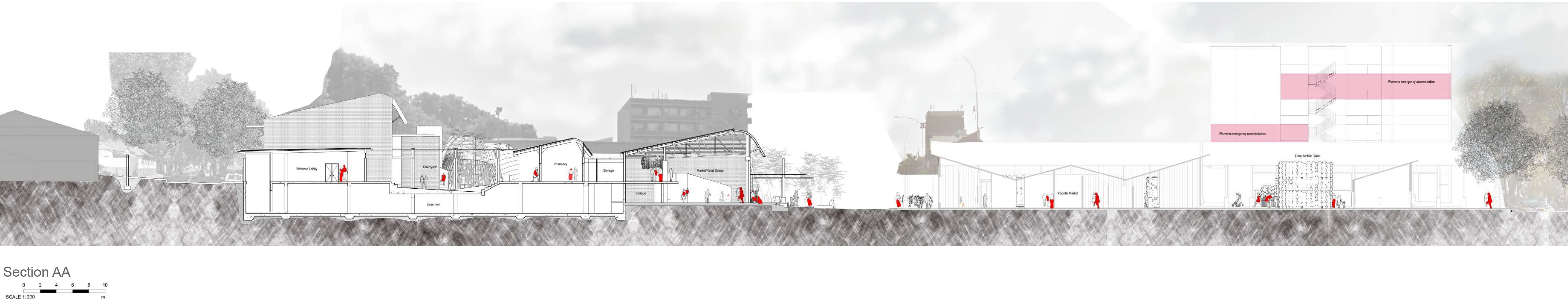
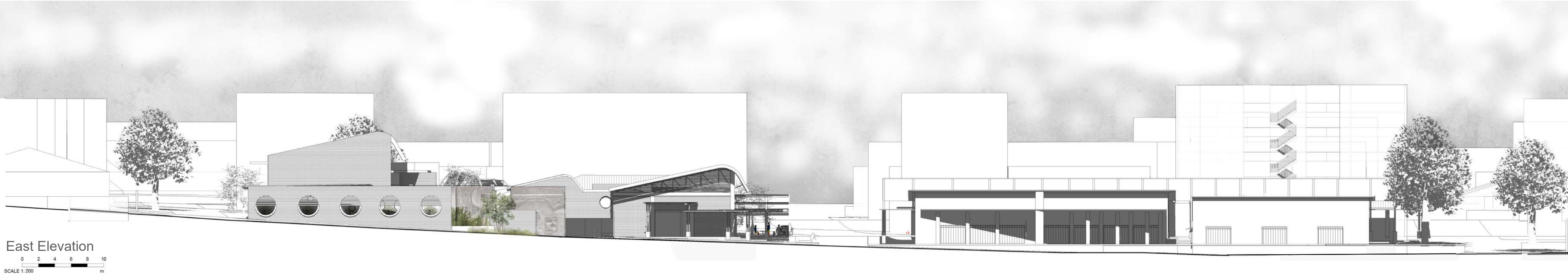
- Female only access
- All access-controlled
- All access-free

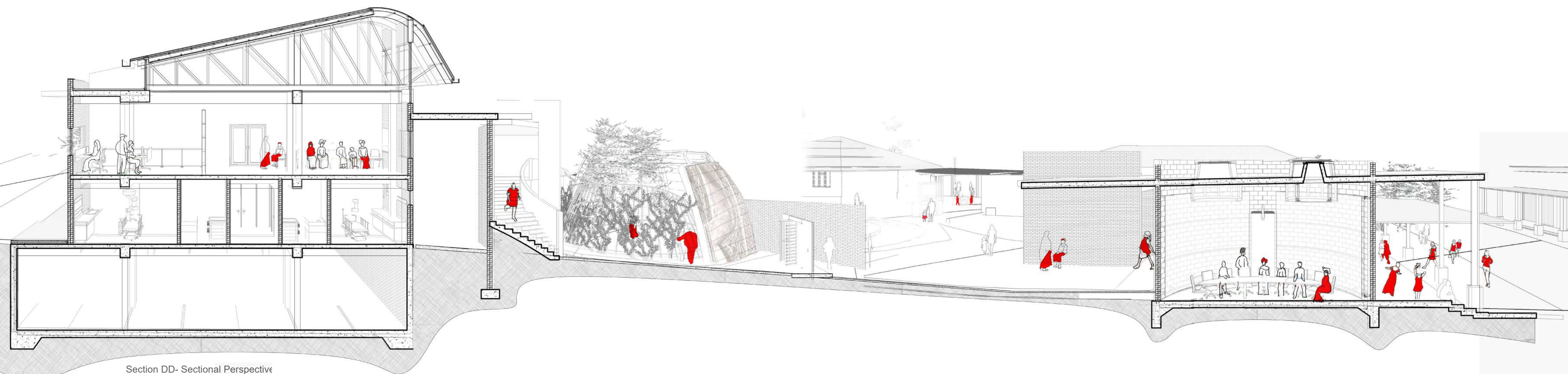


COURTYARD PERSPECTIVE



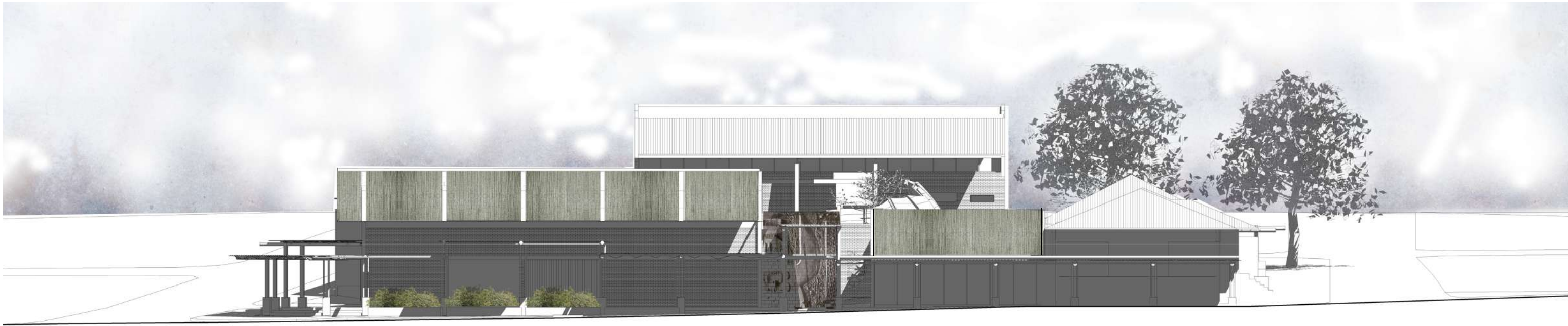
COURTYARD PERSPECTIVE





Section DD- Sectional Perspective

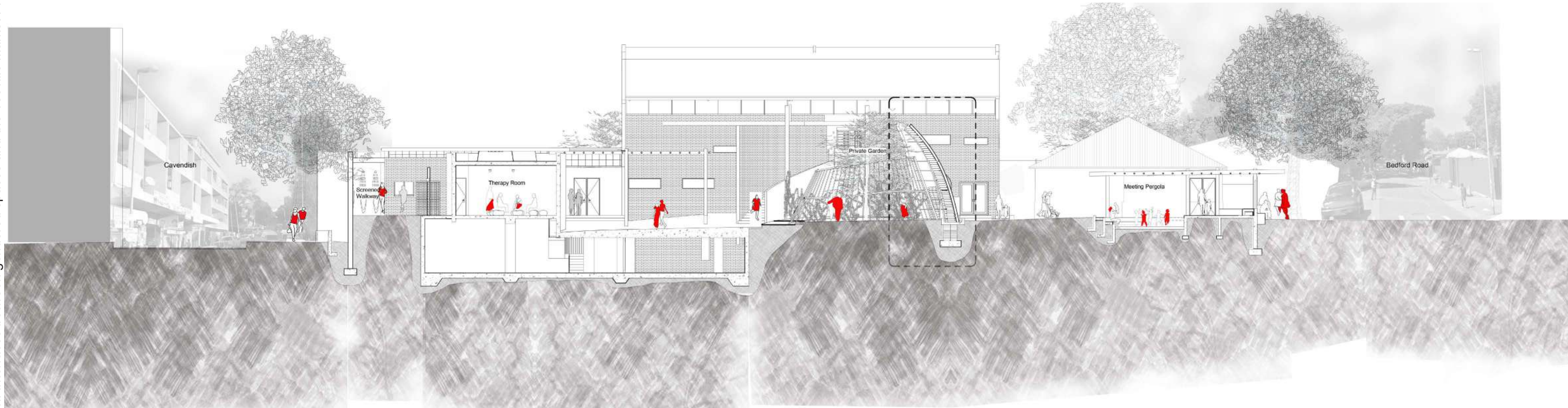
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m
SCALE 1:50



North Elevation

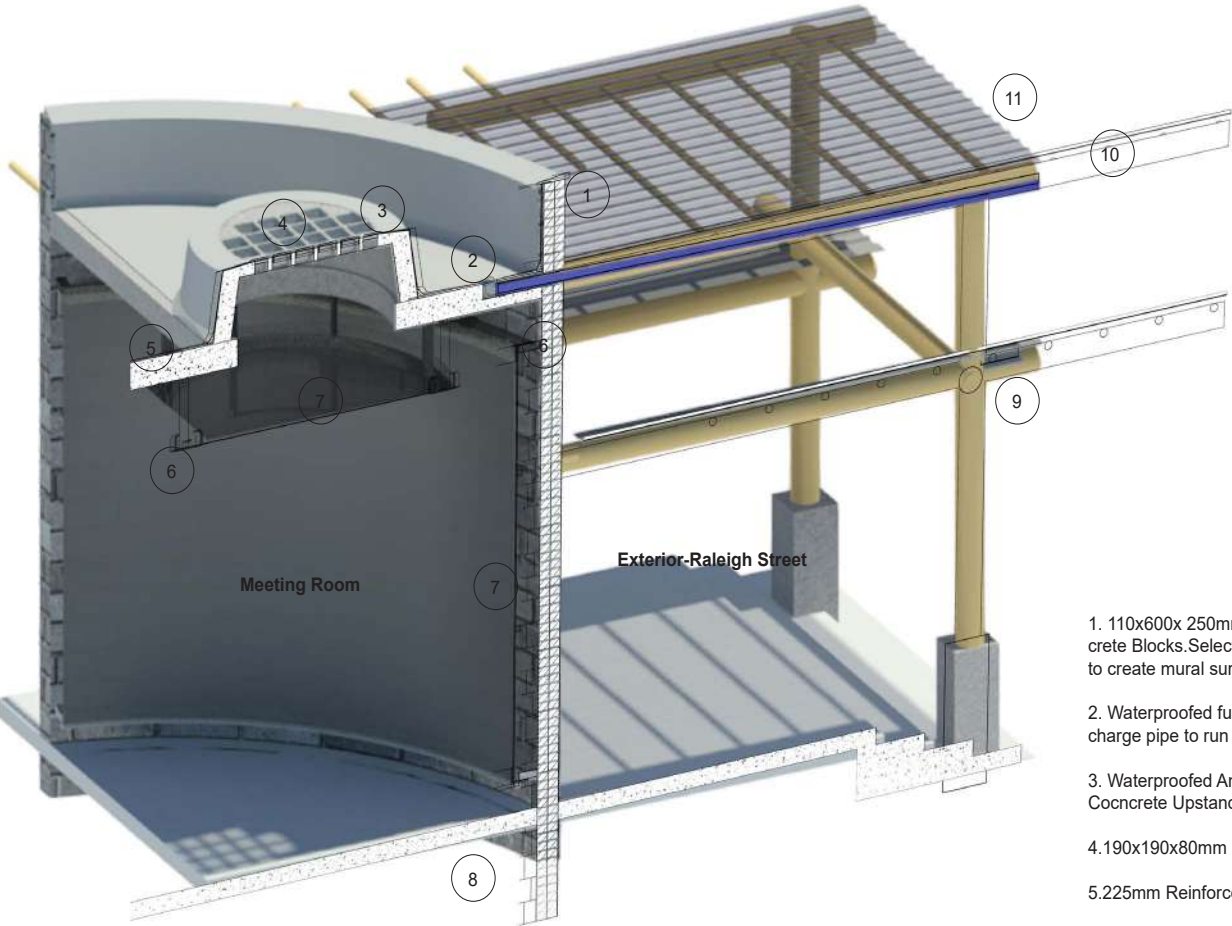


Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct



Section BB



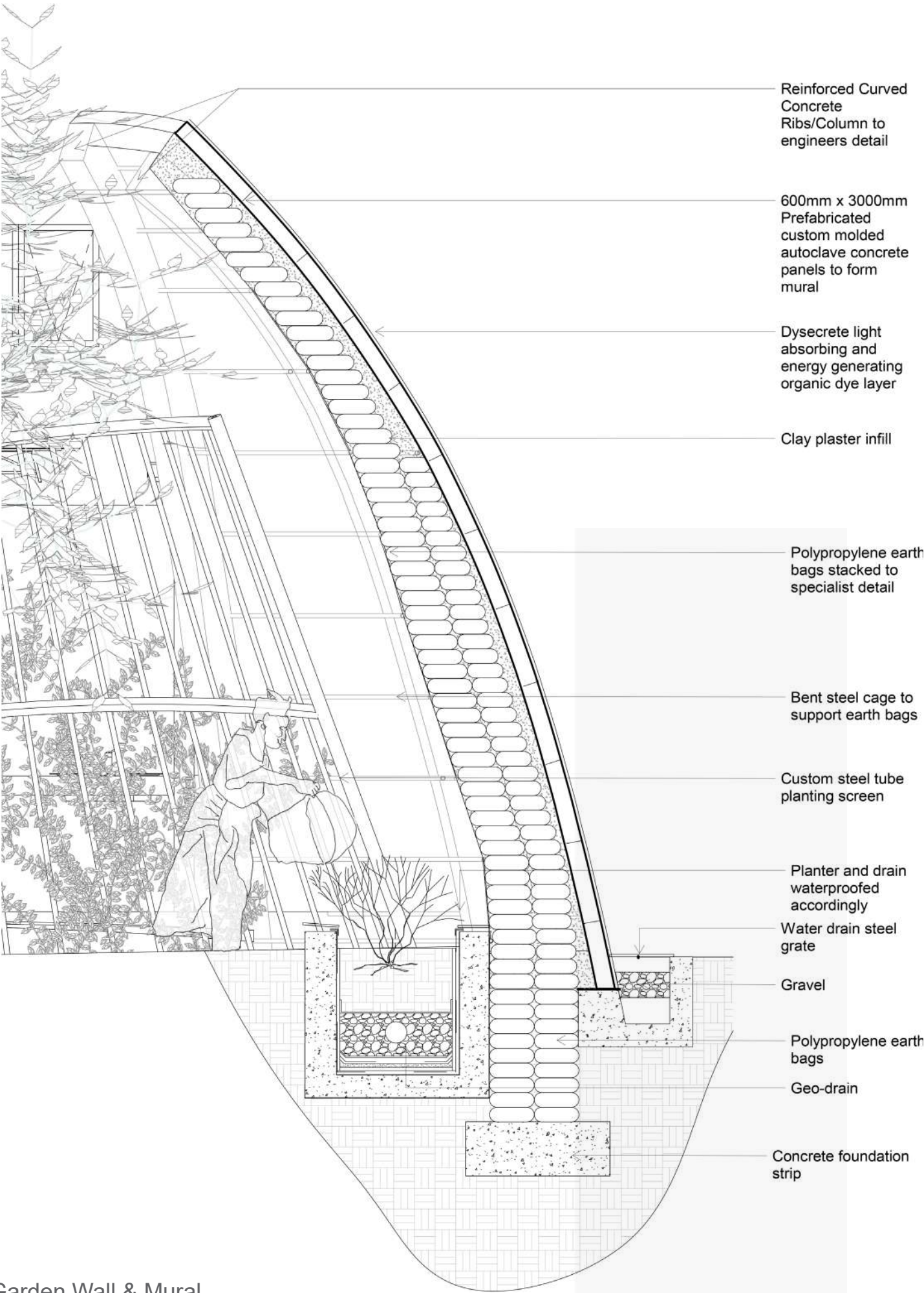


ction-Noise SoundProofing

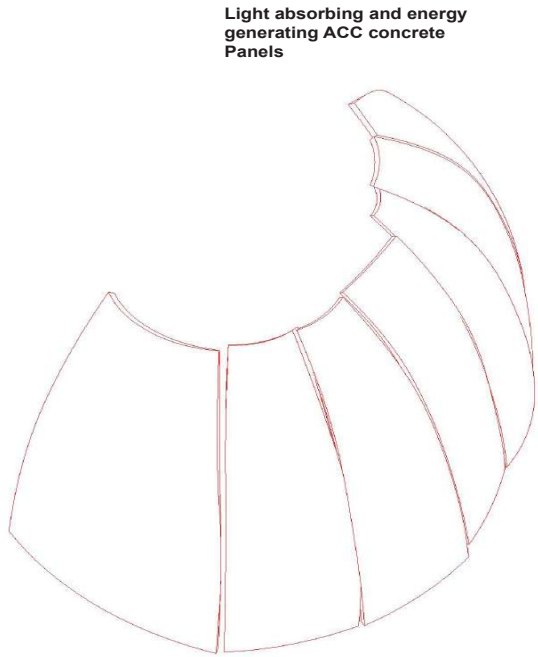
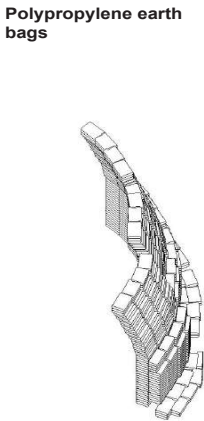
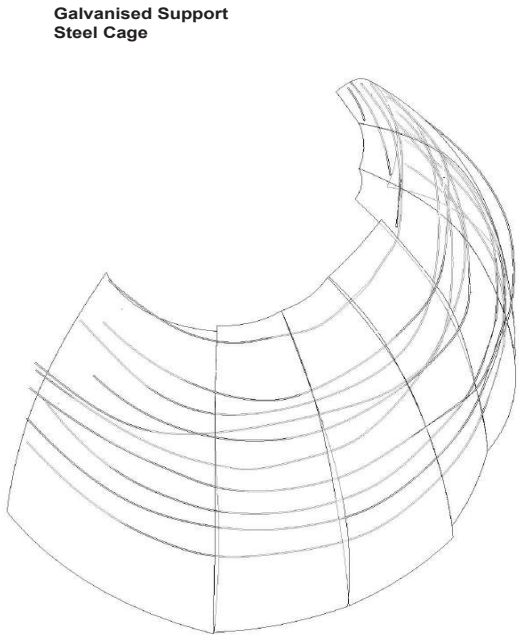
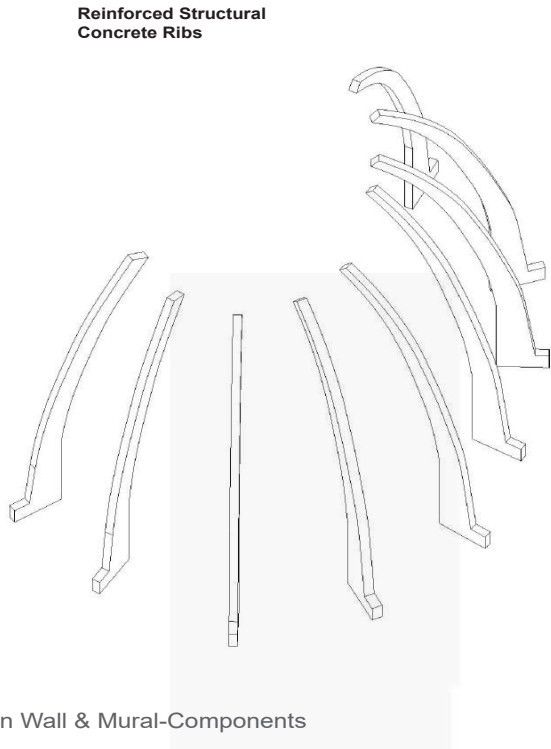
- 1. 110x600x 250mm Everite ACC Concrete Blocks. Selected custom molded to create mural surface
- 2. Waterproofed fullbore outlet and discharge pipe to run along timber pole
- 3. Waterproofed Angled Reinforced Concrete Upstand for skylight.
- 4. 190x190x80mm Glass Blocks
- 5. 225mm Reinforced Concrete Slab
- 6. Steel sub-frame connected to concrete slab or ACC concrete blocks.
- 7. Guilford of Main acoustically transparent fabric stretched over steel sub-frame.
- 8. 170mm Reinforced Concrete Surface Bed
- 9. Timber Post and Beam Pergola structure
- 10. Polycarbonate Corrugated Roof Sheet

Detail Section-Concrete Garden Wall & Mural

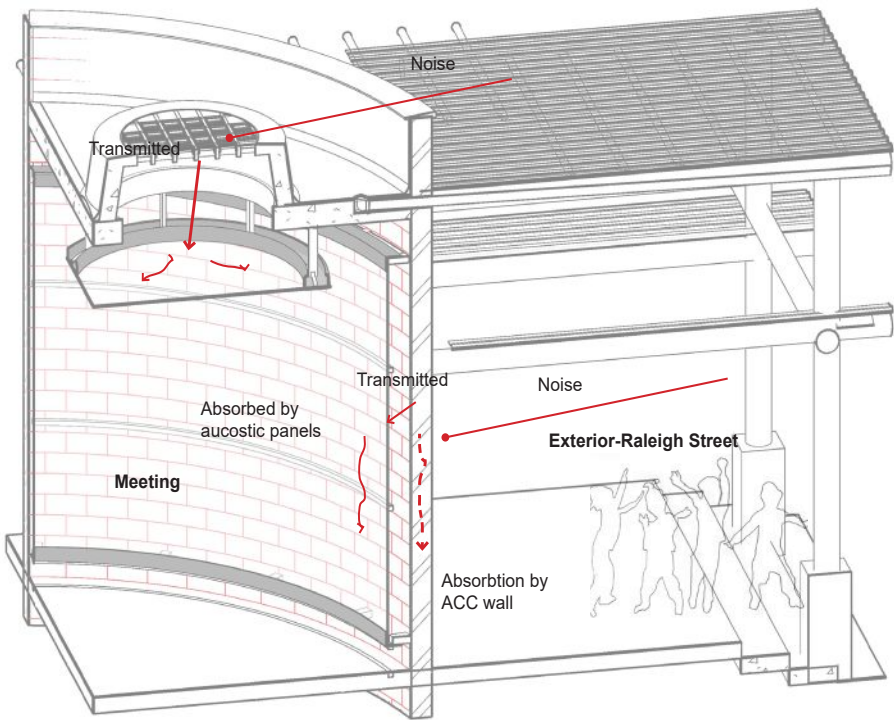
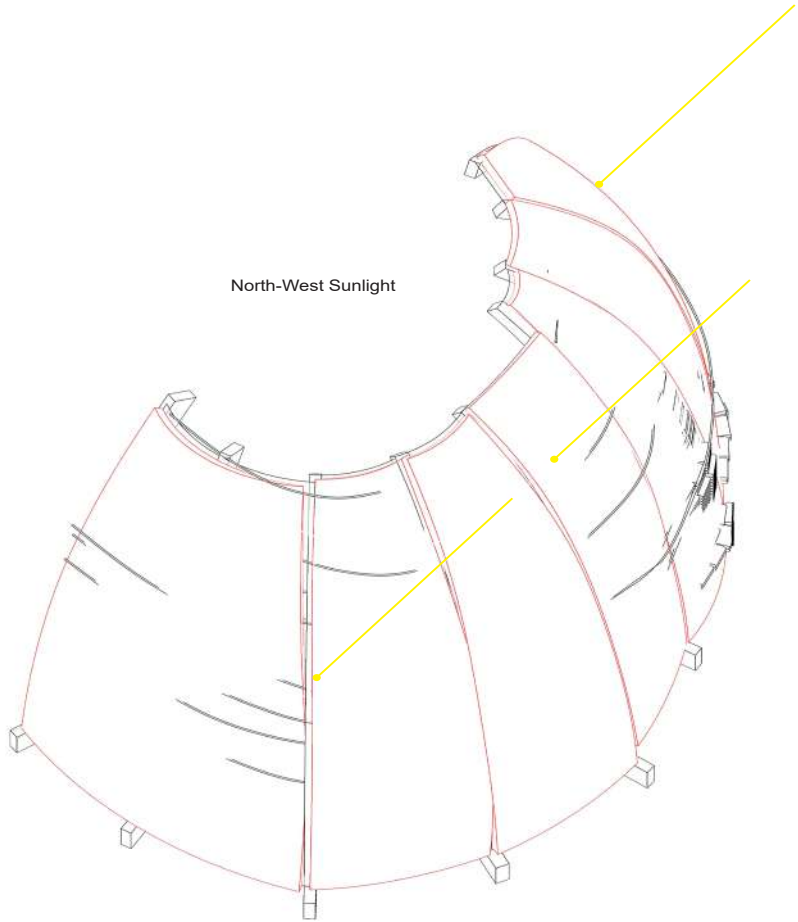
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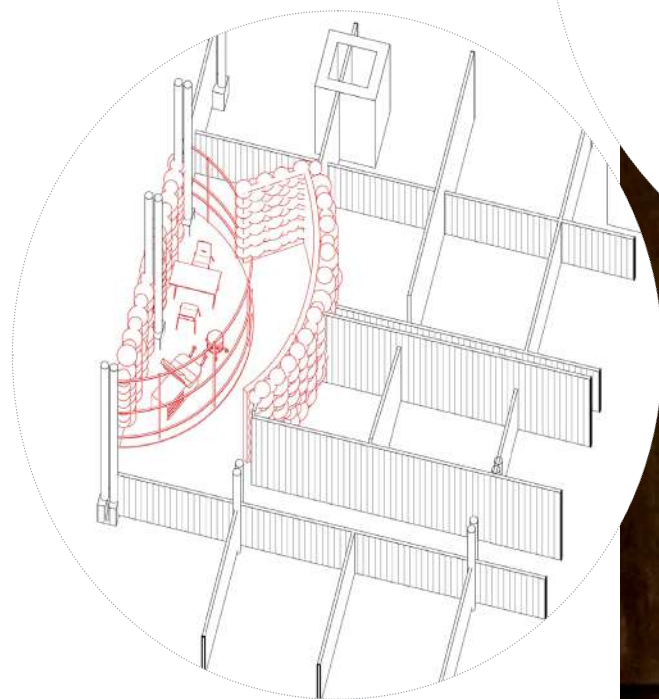
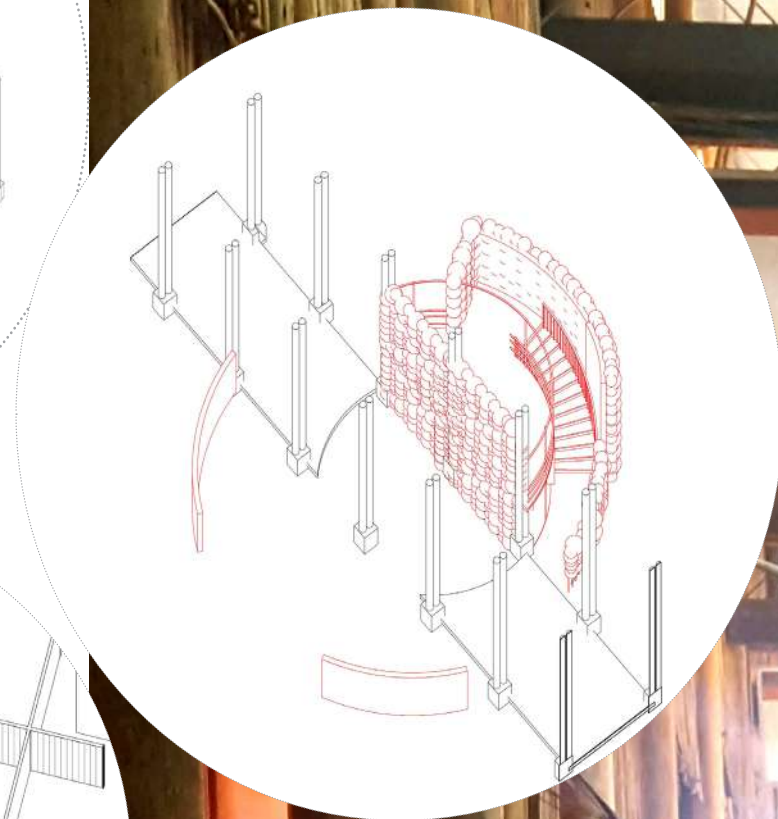
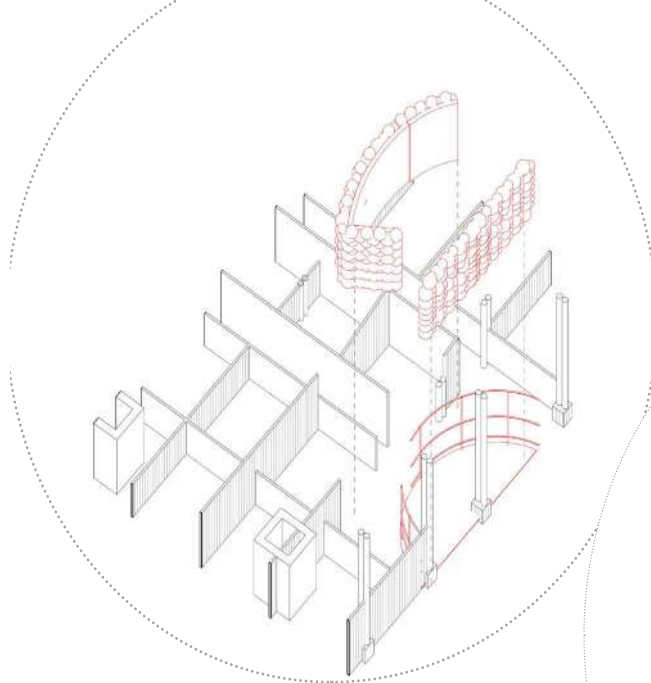
- Reinforced Curved Concrete Ribs/Column to engineers detail
- 600mm x 3000mm Prefabricated custom molded autoclave concrete panels to form mural
- Dysecrete light absorbing and energy generating organic dye layer
- Clay plaster infill
- Polypropylene earth bags stacked to specialist detail
- Bent steel cage to support earth bags
- Custom steel tube planting screen
- Planter and drain waterproofed accordingly
- Water drain steel grate
- Gravel
- Polypropylene earth bags
- Geo-drain
- Concrete foundation strip



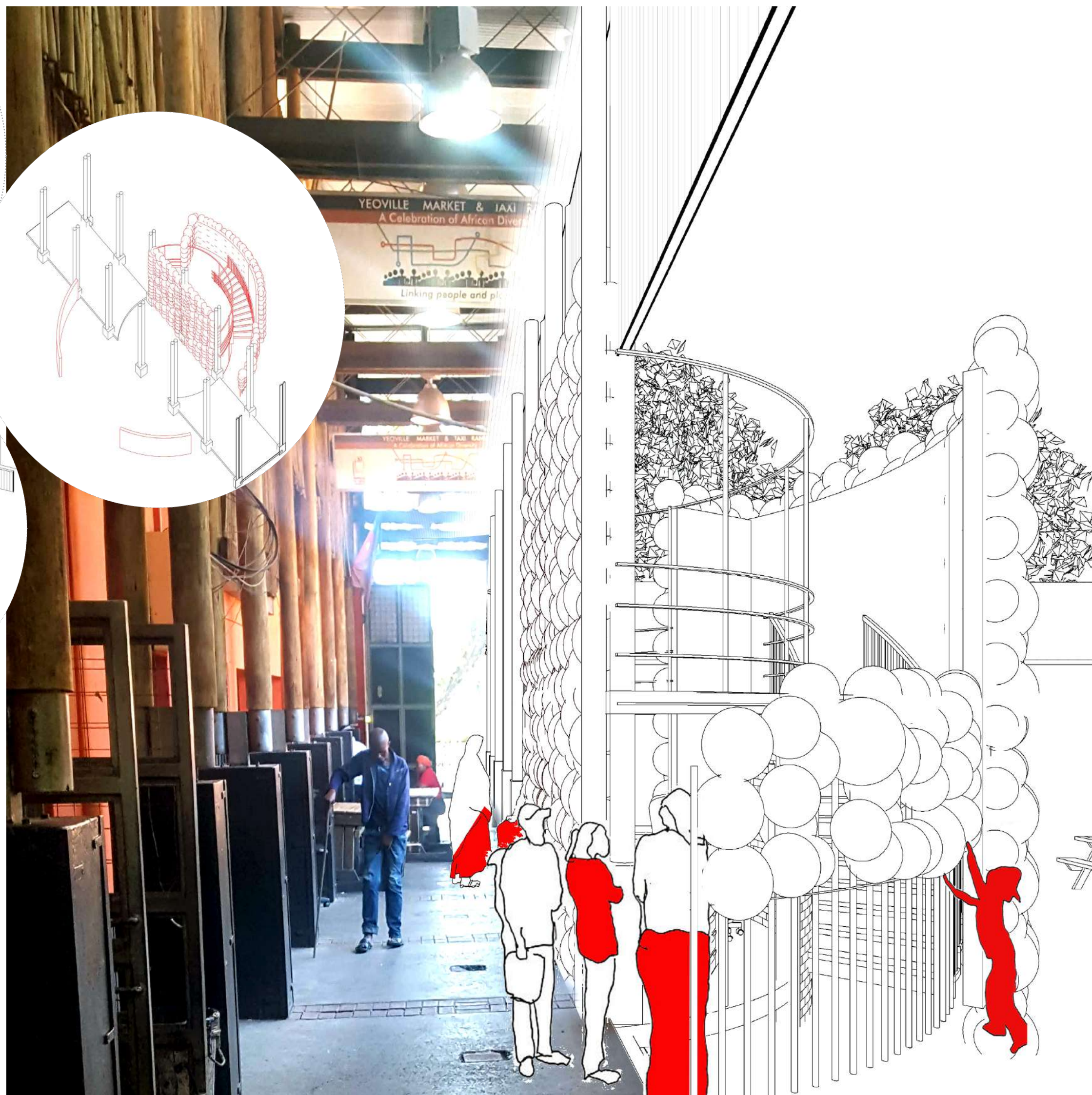
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3D Daigram-Noise SoundProofing



Temporary Installation and mobile clinic

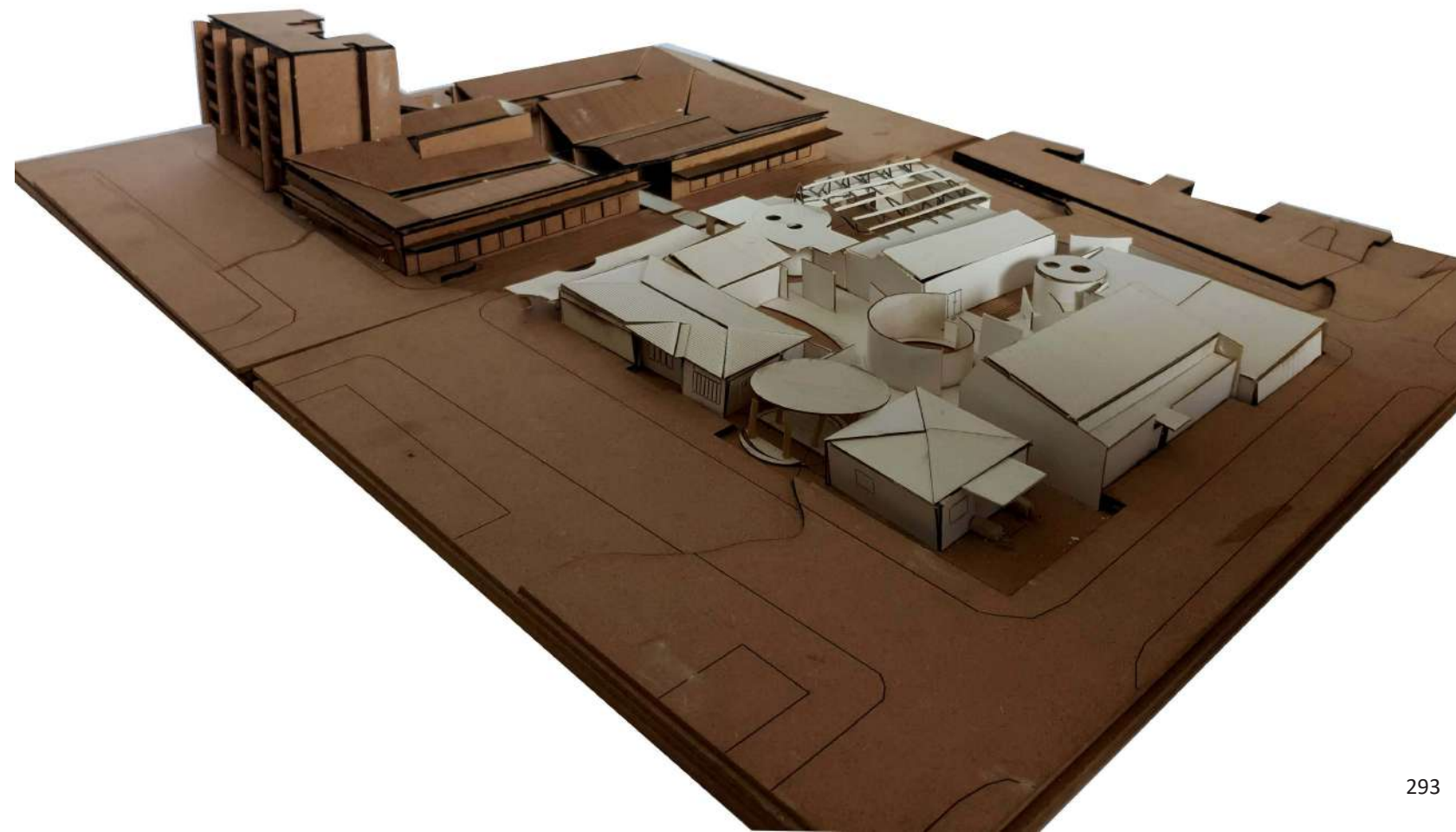
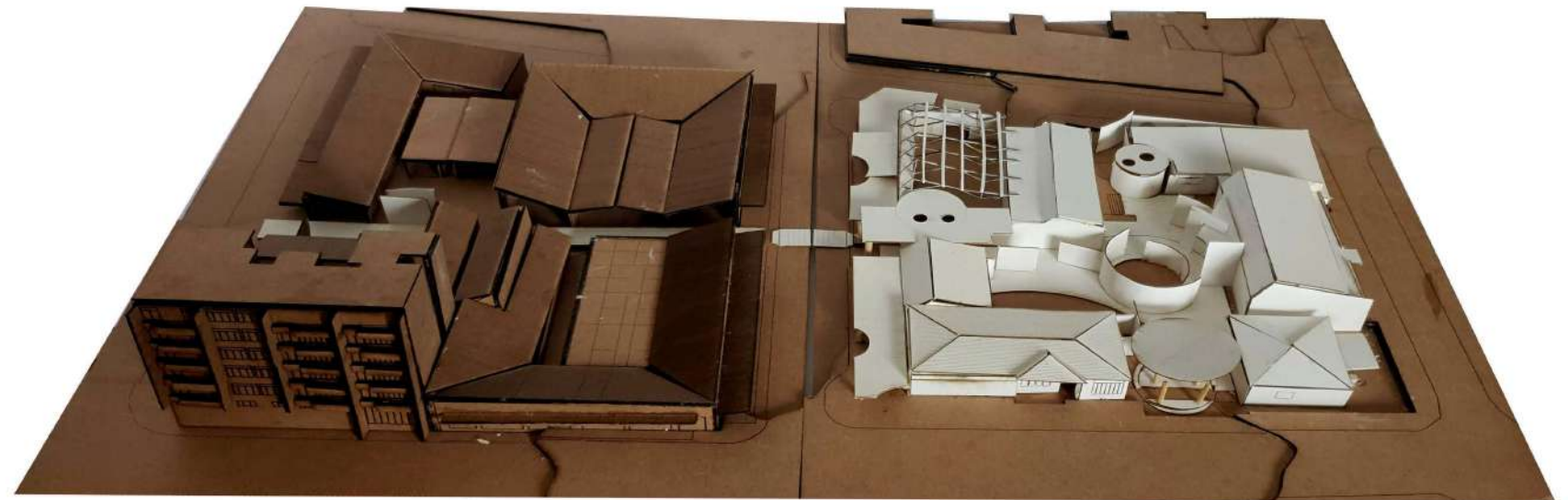
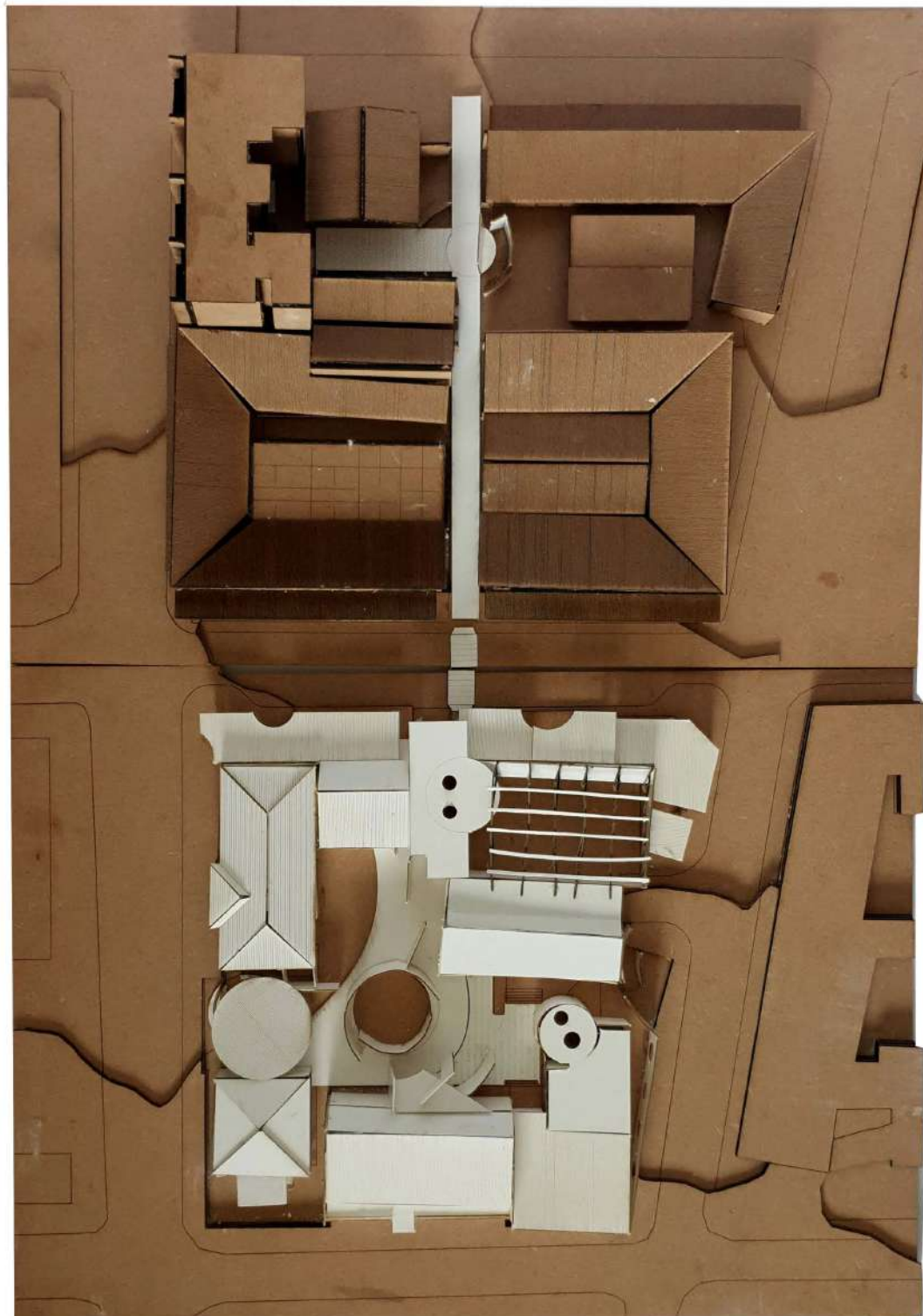






w Clothing Retail Market-Internal





CONCLUSION

The three themes of Architectural feminism, Contemporary African Architecture and Gendered contested spaces are intended to form an architecture responsive to socio-political issues in growing African urban cities. The thresholds between agency, democracy and decolonization inform the architecture that becomes a reimagined character of the Yeoville Market Precinct. This type of research in South African and African architectural discourse is limited and as it is very difficult subject to tackle and respond to in the form of a single building. This dissertation does not qualify the building as the only conclusion to responsive architectural projects. What is of more significance is the constant engagement any architectural design should embody. Through continued research the engagement of: city, socio-political, spatial agency, thresholds and built form.

Fig 24.1 Thesis concept montage. Authors Own.

APPENDIX A
LIST OF FIGURES

Fig 1. Yeoville Arial Photograph. Google Earth

Fig 2. Computer generated collage of the occupancy of women in the Yeoville Market. Authors Own.

Fig 3. Computer generated collage. Authors Own.

Fig 4. Izilda Nzopene prepares sandwiches for her customers in a taxi rank. Photograph by Mark Lewis. Ho, U. 2018. *Undercity: An alternative story of Joburg that's more about what's out of sight than what's hidden*. Avialable: <https://www.dailymaverick.co.za/article/2018-11-04-undercity-an-alternative-story-of-joburg-thats-more-about-whats-out-of-sight-than-whats-hidden/> [June 21 2019]

CHAPTER 1- INTRODUCTION

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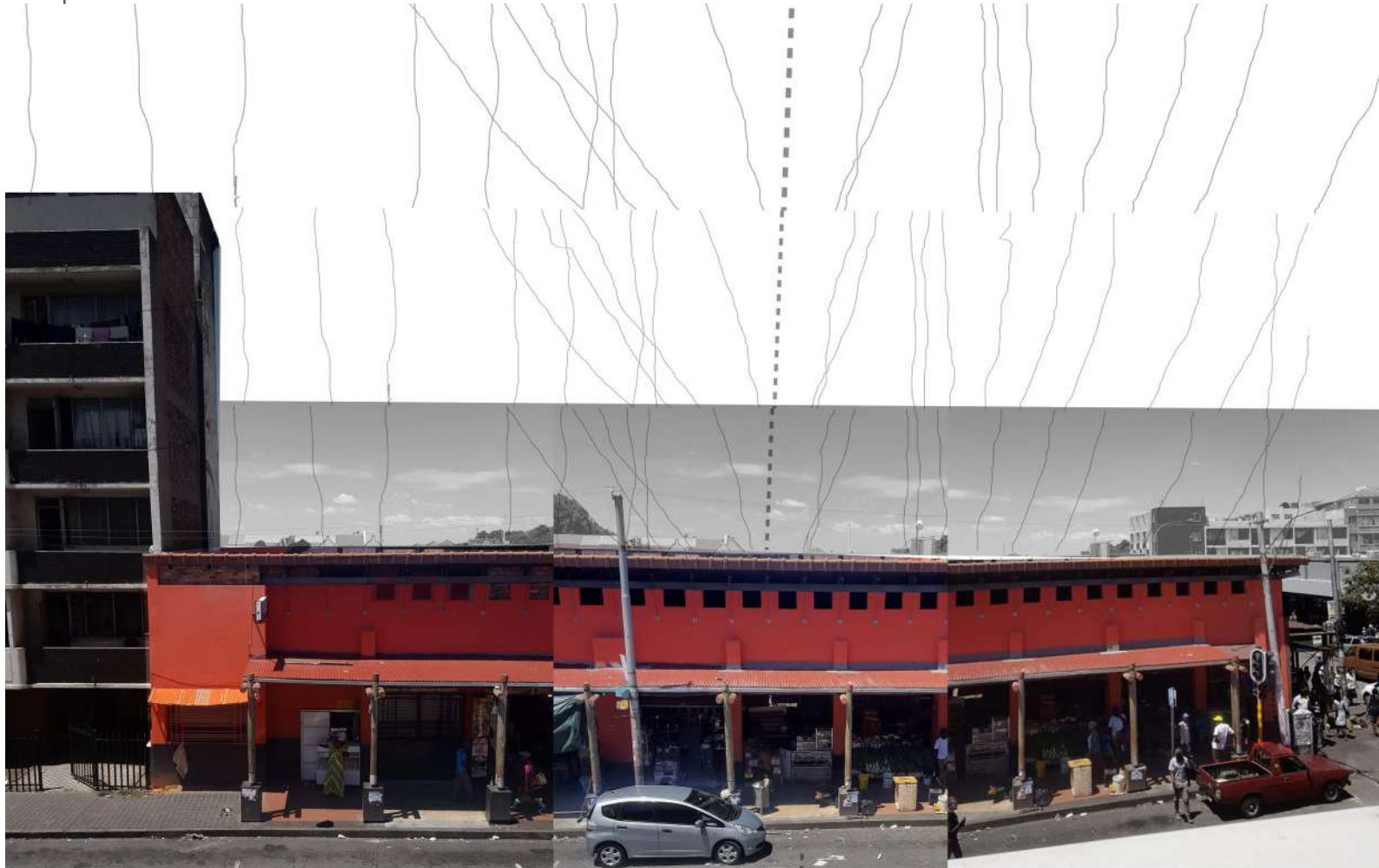
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Business Plan for a Yeoville Womens Clinic and Support Center

PRECARIOUS EXISTENCE
Reimagining gendered spaces in the Yeoville Market Precinct

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INTRODUCTION

“Precarious Existence:*Reimagining gendered spaces in the Yeoville Market Precint”* is a research project focused on architectural approaches to the influx of women into urban and city spaces, in particular Johannesburg. Since the end of apartheid the demographic profile has shifted, suggesting that most new entrants to the city are women. These shifts in patterns constitute complex and layered gender, cultural and economic structures that are present in Johannesburg’s migration hubs (the CBD and its north eastern suburbs of Hillbrow, Berea and Yeoville).Yeoville has attracted waves of women migrants both national and international seeking a new life in the city, however are still faced with difficult issues in how they intergrate into the city and its spaces. Amongst others, issues faced by women who migrate into the city include:

- Inadequate safe reproductive healthcare facilities
- Limited access to legal support for refugee women
- lack of childcare services in close proximity to workplaces and public spaces.

The proposed building is a **mix use Yeovilles Womens Clinic and Support Center** for women who have migrated in the inner city offering services that address issues mentioned above with auxiliary programs that are detailed within the document. The building offers , trading, office, and healthcare space.

Site Information

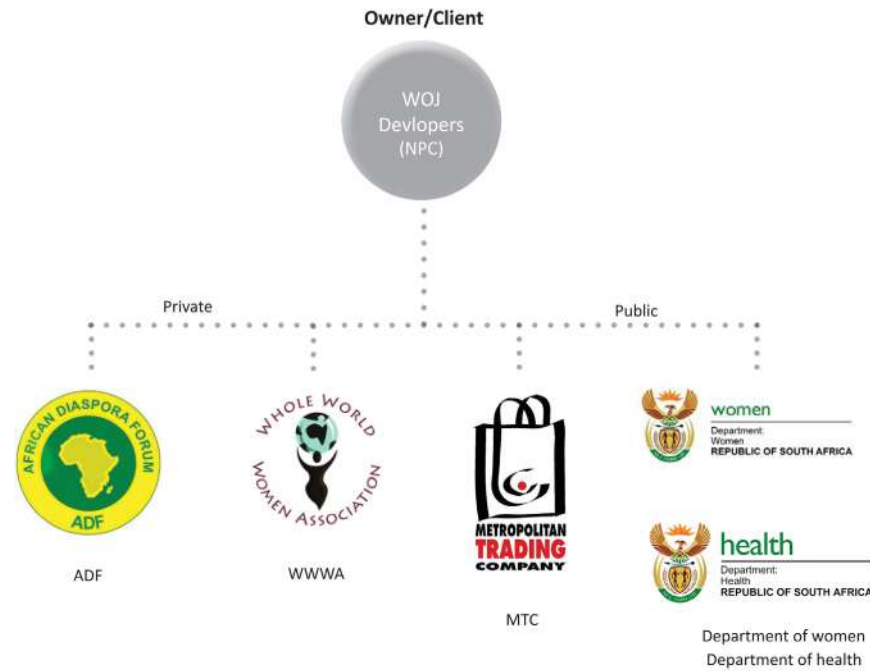
Suburb:	Yeoville
Property Street Address:	Raliegh & Hopkins street ,Bedford and Cavendish Road
ERF No.:	1300, 685, 625, 653, 654
ERF Area:	3900 m²
Local Authority:	City of Johannesburg
Existing Buildings:	Old public library-to be repurposed Retail building (Jet)-to be partially repurposed Residential and outbuildings- to be demolished
Proposed Building:	Yeovilles Women's clinic and Support Centre (Gross Area=23 400 m²)
Program:	Women's reproductive health clinic Women's traders only market (as extension to existing Yeoville Market) Crèche Refugee women legal support offices Entrepreneurial Skill development media centre Conference rooms Management and staff offices Parking



CLIENT

Owner

The project has a priority of assisting international and in border migrant women in the Yeoville area. It is to empower the female community rather than creating profit for a privatised entity. However will still require a commercial component to the functioning of the building to ensure the self-sustainability of the building and development. Therefore the owner/client would be a newly-formed **Non Profit Company: Women of Johannesburg Developers (WoJD)**. The WoJD is a partnership between the **African Diaspora Forum Womens League, The Whole World Womens Association, The Metropolitan Trading Company, The Department of Women** and **The Department of Health**. WoJD will manage/fund the development and the construction of the proposed building. Once in operation WoJD will manage the functioning of the building and all its operational components. The NGOs are interested in setting up this NPC as a strategy for the empowerment of marginalized women in urban areas. The government departments are interested in decreasing the use of backstreet abortions, increasing clinics that focus on womens (including refugees) reproductive health and the general social development benefits the project will bring to the Yeoville Market and Taxi Rank Precinct.



African Diaspora Forum Womens Leauge

“The African Diaspora Forum (ADF)Women League’s vision is to be the voice of women empowerment, and integration of migrants and South African Citizens.” The private organisation will form part of the main stakeholders of the project. The ADF is committed to advocating for migrant and South African womens emancipation, and fostering women participation in development initiatives.The organisation is already involved in programs involving:

- Educational workshops on women and children's rights
- Collaborative workshops between migrant and local women in business and in leadership,
- Participating and contributing in charity activities
- Participating in dialogues with government institutes
- Participating in policy related debates.

Currently the organisation operates through workshops often held at the Yeoville Recreation Centre.The ADF wants to set up permanent service provision a propses the new building.The **overall development of the project, legal advice offices, childcare facilities, entrepreneurial skill development center and secondary funders/donors** will be managed by the ADF.

The Whole World Womens Association

The WWW Association which is currently based in Cape Town are looking to set up a division in Johannesburg. *“The Whole World Women Association is a multicultural organization. It was founded by a remarkable group of refugee women, supported by South African women, who had experienced first hand the need for more comprehensive refugee services”*. Heading programmms such as:

Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct

- support of abused women
- advocacy for womens rights
- skill development
- womens health and social cohesion.

Along with the ADF the association will manage and contribute to the overall development of the project, legal advice offices, childcare facilities ,entreprenural skill development centre and secondary funders/donors.

The Metropolitan Trading Company

“The Metropolitan Trading Company (MTC) takes care of informal traders and taxis, giving developmental support to the sector and managing the facilities the City has set aside for micro retailers and taxi operators”. The municipal entity manages informal markets located in Johannesburg including the Yeoville Market across from the proposed site. MTC will manage and fund the extension of the market as a women traders only division to the market.

The Department of Women and The Department of Health

The department of Health aims to “consistently improve the healthcare delivery system by focusing on access, equity, efficiency, quality and sustainability.” Along with the department of women they are interested in eradicating the increased use of illegal and unsafe abortions in Johannesburg. Therefore the department is interested in developing a reproductive healthcare clinic in the Hillbrow, Yeoville, Berea area, with particular focus on providing services to refugee women and girls. Along with the overall building, they will manage and fund the womens reproductive healthcare clinic.

Management and Leadership Structures

As a newly formed NPC a new leadership structure that manages the overall functioning, program, finances and staff of the building is to be formed. Each organization will be represented in the board of directs. Then each function/division of the building will be led by the suitable organisations as demonstrated below:

Occupants

NGOs operating from the building will contribute greatly to the financial viability of the project. The office spaces on the 5th and 6th floors will be leased out to NGOs providing support to women and refugee women. Support services such as legal assistance, counselling for abused women, Women shelters information, general guidance .Organisations will include:

- African Diaspora Forum Womens Leauge (Owner)
- The Whole World Womens Association (Owner)
- Laweys for Human Rights
- Wits Law Clinic
- POWA
- Christians for Peace in Africa
-

Overtime the income recieved from rental to NGOs will be able to subsidies other divisions of the building like the childcare facility and the skill development media center.

Secondlly viability will be obtained through the traders in the market on the ground floor. The rental of individual stalls will cover a substantial portion of the operational costs of the market. In the broader context the increased trading space will contribute inceasing economic activity in the existing market which contributes to the informal economic activity in Yeoville and Johannesburg .

However the true viability will be measured by the social contribution to the femal community. The building provides a substantial variaty in services for its occupants all focused on providing a social cotribution to the community.

THE PROJECT

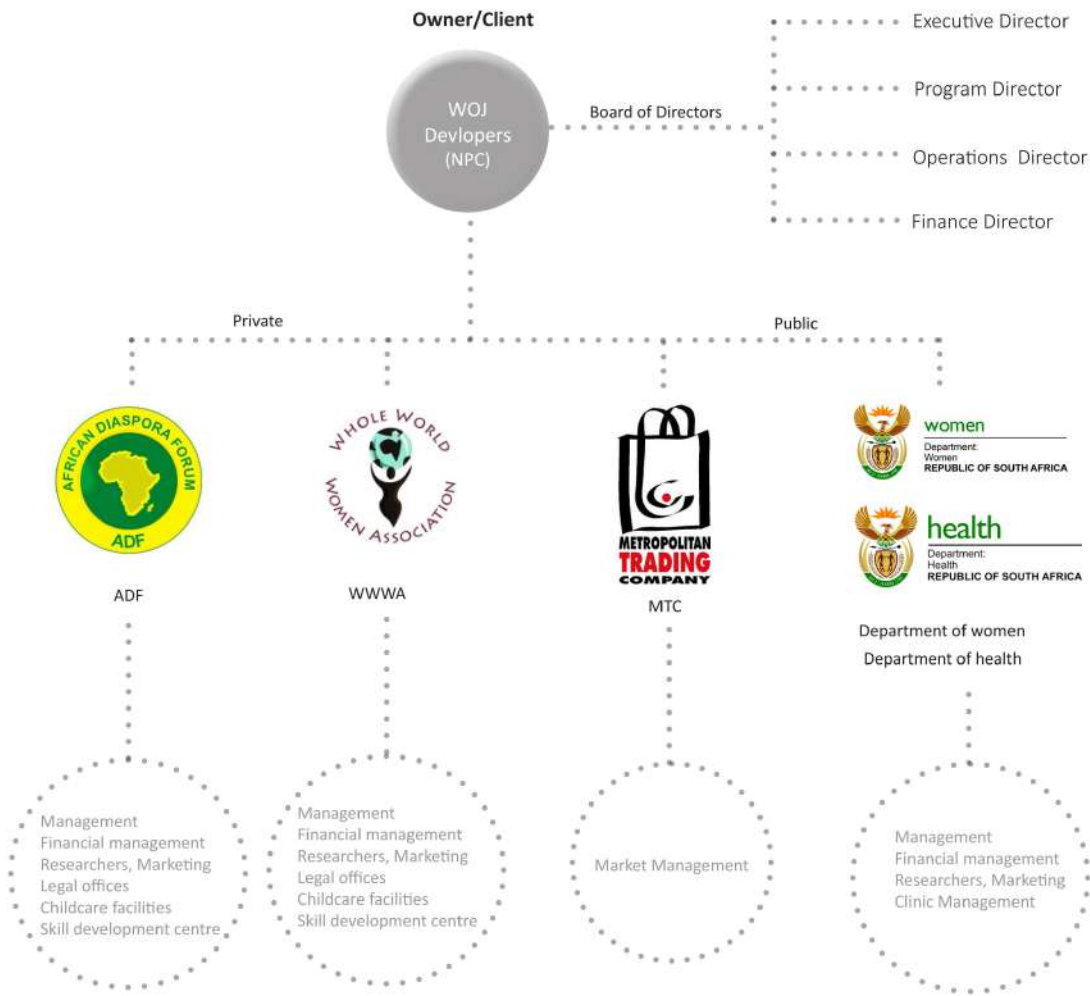
Site Selection

The selection of the site is important as the target market for the project is a pan African community of women who have recently migrated into the city. Yeoville is a sub-urban neighborhood that accommodates a pan African community where almost half of the population is women. Neighboring suburbs such as Berea and Hillbrow are of similar demographics and could benefit from the development. Yeoville in the close proximity to the inner city accommodating a large amount of the target market, is the selected site. The Women’s clinic and support center would be suitable in this area and easily accessible to the women of Yeoville, Berea and Hillbrow.

The location within Yeoville is important too as a large portion of the typology is low rise residential dwellings. Raliegh Street is the only highly densified street with high retail activity. A large group of women make use of public amenities along the street. It was important to locate the building, firstly in close proximity to where women occupy and make a living. Secondly the conventional location of gender specific buildings such as womens shelters and clinics are usually in domestic settings on the periphery of the city away from public areas making accessibility very difficult. Therefore as one of the issues the project addresses, the building will be located in close proximity to public transport stops and streets used the most by women. However the site should still offer some level of privacy and safety.

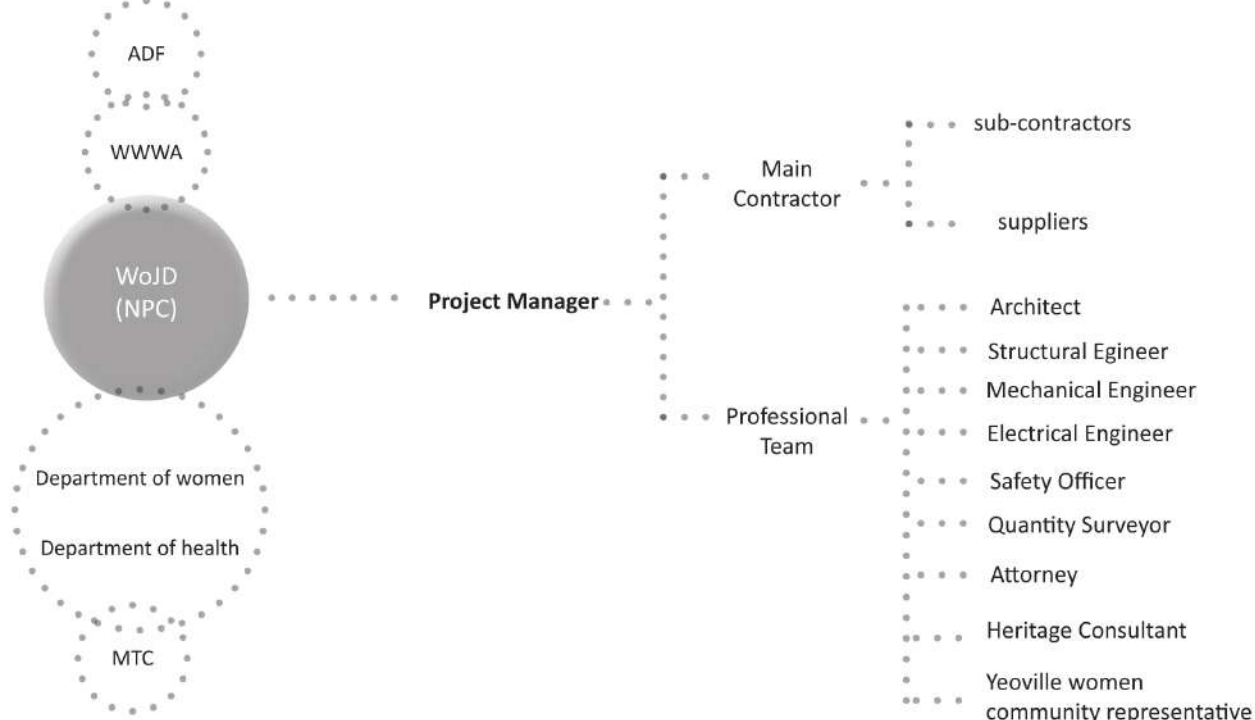
The block enclosed by Raliegh and Hopkins street, Bedford and Cavendish Road is the selected site. It meets majority of the criteria. It is opposite the Yeoville market where many women make their living in and around the market in the form of informal trading. It is also in close proximity to the reatil stores such as shoprite, boxer stores and banks that attracts most of the Yeoville population. Jet that is located on the Raligh Street side of the site also attaracts a sustantial amount of the female population. Hopkins street is less dense and quite part of the block that s suitable for the access to the childcare, clinic facilities and

Immersion: Interfaces between gendered spaces and the Yeoville Market Precinct



IMPLEMENTATION

Professional Team



The Project manager will be appointed by the NPC and manage the Professional Team, the Main Contractor and the overall project. The design and coordination shall be lead by the project architect which will be responsible for the inception of the design, and the design implementation of the project brief.

Procurement & Construction Methodology

As this is a low-risw building with limited funds ; construction of non-complex technological,structural systems and construction methods are to be implemented as far as possible for efficient and safe construction. However creative construction methods are to be implemented where the new building will connect to the market through a pedestrian bridge. The lightweight structure of the Yeoville Market will have to be considered along with the composite between concrete and steel skeleton of the new building. Therefor a collaboration between local professionals in the building industry with local technologies that can produce appropraite aesthetic opportunities. The first phase of the construction phase would be renovations and demolitions of existing buildings and would require professional such as Heritage consultants and a community representative that otherwise would not be required in other phases of the project such as when construction of the new building is constructed. Other procurements of the professional team such as the project manager,architect,QS will happen in the beginning of the project and will run through until the end of the project.Contrators and engineers will be selected through tender process selected by the client and the architect early in the project to submit quotations for development costs.

Due to the limited fund for the project, the need for experienced personnel is critical for efficiency and vigorous construction of the project. The early tender process, professionals will be involved in a collaborative design and construction process, to ensure no time and money is wasted.

FINANCIAL MODELING (forms part of implementation process)

Construction Costs

The building is a low rise, medium density development with 6 storeys. The development involves two processes to the construction.One is the demolition and Renovations of existing buildings on the site totaling to a cost of R8,304,816 **see Apendix A**.This involves renovating and repurposing the old pub

lic library into the entrepreneurial skills development center.The retail building on Raliegh Street will be renovated and partially repurposed into the womens market and the remaing area will be occupied by the existing Jet Store. The residential dwelling and outbuildings will be demolished where the proposed building will go up.

Secondly a new constructions will be located on erfs 652,653 and 654 and the retail building will be vertically extended by 5 storeys.Resulting in an estimated construction cost of R208, 003,296.00 for a total area of 23 400m² of new constructions(estimate includes building services,finishes and fitouts) . Calculations are detailed in **Appendix B**.

Development Costs

Development costs include the the total construction costs, professional fees, land cost, and utilities. The Erfs 1300, 652,653 and 654 are owned by ANA Brother Properties CC and therefore will have to be purchased. 658 is owned by the city of Johannesburg and because part of the NPC is public departments will not be included in the land costs.The servicing of the land such as rates and taxes will form part of the development costs.The NPC will be responsible for the land and servicing costs.The NPC will also be responsible for the professional fees.Estimated development costs are illustrated below:

Development Cost	
Land Costs	R5,560,000.00
Professional Fees	R28,336,362.67
Building Costs	R216,308,112.00
Total	R 250,204,474.67

Funding

Primary funding

The project will mostly receive its primary funding from the NPC where private organisations will recieve funding in the form of in place capital,loans and donations.The goverment departments will provide subsidies and recieve donations. NGOs who are not part of the clients will also provide parts of the funds to keep the operation of the building sustainable. Certain aspects of the project will have certain funders, and is broken down as follows:

MTC- As an extension to the already existing market, the MTC along with the African Womens development fund will fund the womens only market that happens on the ground floor of the building and the childcare facilities that supports women who work in the market

Government departments- The clinic will be funded by the department of health and women.
WWW&ADF-The womens support section of the building will be funded mostly by the private side of the NPC.The African diaspora forum womens league, The Whole world womens association will fund the refugee legal support offices and the general management of the building.

Secondary Funding

Corporate Social Responsibility- As Jet is currently occupying space in one of the buildings on-site, the Edgars company will fund the entrepreneul skill development centre in the form of a sponsoship. This forms part of their CSI for the area.

African Women's Development Fund will also provide financial support to the development.
“Our mission is to mobilise financial, human and material resources to support initiatives for transformation led by African women, women's rights organisations and African women's movements.”

Financial Viability

Operational Costs **see Appendix C**

The bulk of the operational costs of the building will be produced by the Clinic, followed by the market the creche, the offices and the skill development centre. Each division has their own operating cost.The detailing of the operational costs are Detailed in **Appendix C**.

- Clinic

Services provided will be abortion prodecudures ,HIV counselling and testing, trauma counselling, syn-dromic management of sexually transmitted infections (STIs), cervical cancer screening, breast exams, and general health education. The biggest contribution to costs in public clinics is the staff.An average of 500 patients per month will produce an operation cost on average R1,070,364.75 per month.

- Market

According to the COJs Informal trading Development plan the repurposing and of a portion of the ground floor and extension of of the retail building is considered a Grade A Market. Operation of this kind of market requires security, cleaning services, storage, electricity and water and regular waste removal. Therefore rentals of stalls are higher. On average the operational cost of this Grade of market is estimated to be R100 000 per month.

- Childcare centre - estimated to be R50000pm
- Legal Offices-estimated to be R30000pm

Resulting in a total operational expenditure for the whole building of R15,004,377.00 per Annum.

Income

There are two divisions of the building that will be generating bulk of the building income. 1 rental from traders, 2 Rental of office space to other organisations providing legal support to refugee women on the 5th and 6th. As the new owners of the retail building Jet will still be operating in the building and in turn for using the rtail space will provide sponsership for the skill development media centre and to a portion of the project. A detailed breakdown of income is outlined in **Appendix D**.The total income from the building will be **R15,082,377.00** per annum.

Income for the clinic will come in the from government subsidies and donations.Where the clinic will be part of **research projects and developments** undertaken byt the Health development and the **Wits Reproductive Health and HIV Institute**.The small portion of income will be received from the operations of the clinic

The building will recieve a total income of R **R15,082,377.00** per annum.

Cashflow

An estimated cashflow is detailed in Appendix E. The building will reach a positive cashflow over 19 years acording to income and expenditure estimates and therefore will be self-sustainable and will be able to pay for operational costs for certain divisions of the building.The mix use of the building allows for the eventual positive cashflow.

Professional fees

The professional fees will be of the respocibility of the WOJ Developers (NPC).The professional fee break down will make up a total of 13% of the building construction cost.The breakdown between profession-als in outlined in Appendix D. The professional fees form part of the development costs, therefore only relevant professionals(professional team outlined in previous chapter) are to be utilized as to not un-ecissarily drive up development costs.

(Participation information sheet, Consent form, Interview questions)



Dear Sir / Madam

My name is Kamogelo Mogale and I am a Masters student in Architecture at the University of the Witwatersrand in Johannesburg. As part of my studies, I have to undertake a research project, and I am investigating women and children spaces in Johannesburg particularly Yeoville. The aim of this research project is to find out gender and cultural structures/practices that affect women in urban areas and cities.

As part of this project, I would like to invite you to take part in an answering a questions and if possible a tour of the day care. If an interview is agreed to it will involve answering questions relating to your experiences and knowledge around childcare facilities in Johannesburg and will take around 40 minutes. With your permission, I would also like to record the interview using a digital device and take photographs around the daycare.

You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. The subject at hand will not include sensitive information however, should you feel overwhelmed during the interview you are permitted to stop at any time. With your permission you will be identifiable based on your official role at the Frida Hartley Shelter. Otherwise the interview can be completely confidential and anonymous if wish to keep it so and I will not ask for your name or any identifying information, and the information you give to me will be held securely and will only be available to my supervisor. It will not be disclosed to anyone else.

If you have any questions during or afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you wish to receive a summary of this report, I will be happy to send it to you. If you have any concerns or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrec-medical.researchoffice@wits.ac.za

Yours sincerely,
Kamogelo Mogale

Researcher:
Kamogelo Mogale, 800199@students.wits.ac.za, 0727484410

Supervisor:
Hannah Le Roux, Hannah.LeRoux@wits.ac.za, 082442799

Precarious Existence: Reimagining gendered spaces in the Yeoville Market

Kamogelo Mogale

I, Elizabeth Lekwe, agree to participate in this research project. The research has been explained to me and I understand what my participation will involve. I agree to the following:

(Please circle the relevant options below).

I agree to be identified when quoted in the research report. ☒ YES ☐ NO

If NO. The researcher may use my anonymous quotes in the research report. ☐ YES ☐ NO

I agree that the information I provide may be used anonymously after this project has ended, for academic purposes ☒ YES ☐ NO

I agree that photographs may be taken in and around the shelter. ☒ YES ☐ NO

[Signature] (signature)

Elizabeth Lekwe (name of participant)

10/07/19 (date)

[Signature] (signature)

KAMOGELO (name of person seeking consent)

10/07/19 (date)

SCHOOL OF ARCHITECTURE AND PLANNING
HUMAN RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE
PROTOCOL NUMBER: SOAP022/03/2019

PROJECT TITLE: Precarious Existence: Reimagining gendered spaces in the Yeoville market

INVESTIGATOR/S: Kamogelo Mogale (Student No: 800199)

SCHOOL: Architecture and Planning

DEGREE PROGRAMME: Masters of Architecture Professional (MArch Prof)

DATE CONSIDERED 11 August 2019

EXPIRY DATE: 11 August 2020

DECISION OF THE COMMITTEE: Approved

CHAIRPERSON *BC Boshoff*
(Dr Brian Boshoff)

DATE: *21/8/19*

cc: Supervisor/s:

Hannah Le Roux

DECLARATION OF INVESTIGATORS

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to endure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

Signature *Mogale*

Date *28/08/19*

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