



REST IN PEACE

Encouraging empathy, compassion and interconnectedness through the design of a rehabilitation centre within Braamfontein Cemetery.



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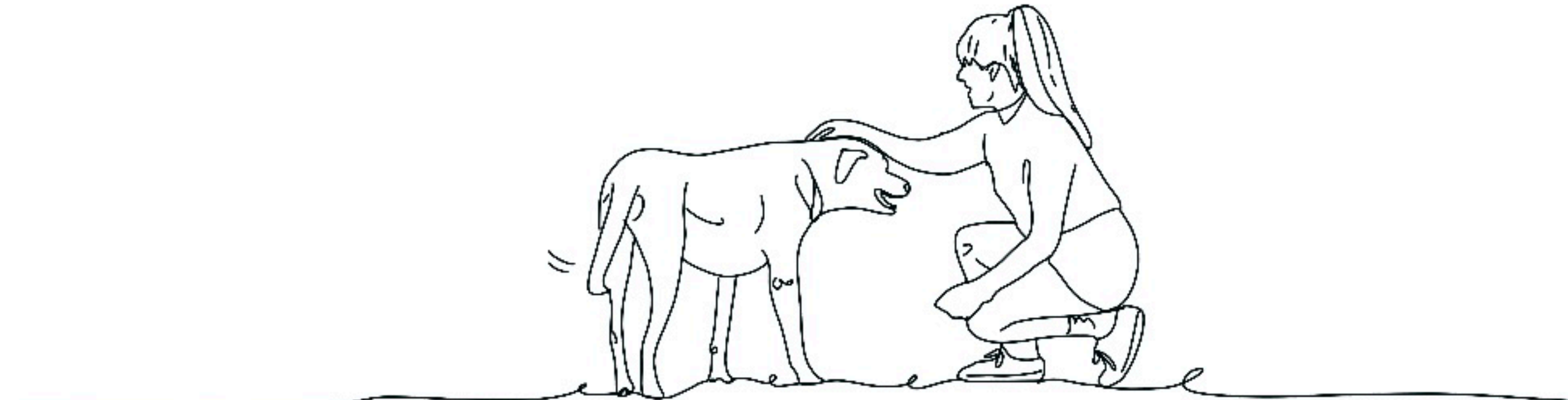
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Ana Damjanovic

21 February 2025



This document is submitted in partial fulfilment for the degree: Master of Architecture (Professional) at the University of the Witwatersrand, Johannesburg, South Africa, 2024.

Fig i
Cover Page
Rest in Peace
(Author, 2024)

Fig ii
Previous
Johannesburg Map
(Author, 2024, after
Google Earth, 2024)

Fig iii
Opposite
Human-Dog Interaction
(Author, 2024)

Acknowledgements

The field of architecture is not an easy path. It is filled with frustration, sleep deprivation, anxiety, and more stress than I have experienced ever in my life before. I truly believe that no one could go through it alone. I am incredibly lucky to be surrounded by people that believe in me and love me, and so I cannot express my gratitude enough for their help in getting me through this chapter of my life.

To my parents, thank you for believing in me and pushing me to study hard. Mama, thank you for always making sure I don't have to worry about anything but fulfilling my studies and providing for me all these years. Tata, thank you for always telling me that everything will be alright no matter what happens when I was in times of stress. Without you, I would not be who I am today.

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To my supervisor, Dirk, whose knowledge and insight made this thesis possible. Thank you for your patience with me, your kindness, and for all of your help throughout this year.

And lastly, to my little Pepe, to Bela, Iva and to sweet Oli who have been gone for too long. Without them, I would not know what is to have a friendship with an animal, which is truly a beautiful and rewarding experience. I miss you all with my whole heart.



Fig iv
Opposite
Pet Collage
(Author, 2024)

Glossary

Anthropocentric

A view that puts the human above all other species and believes that humans are the centre of ecological and economic concerns.

Ash Walls

Walls that hold the urns of the ashes of people cremated in a cemetery. Usually the wall will have granite/stone plaques that display the name of the person deceased.

Columbarium

Similar to an ash wall. A group of short walls that hold the ashes of people cremated in a cemetery. Loved ones are able to come pay their respects here and leave flowers.

Existentialism

The theory of believing that humans form their own meaning in life and that death is an important part of life.

Flaneur

A person that wanders the city using their senses and whims rather than following a path to a destination.

Necropolis

The land, or city, of the dead. In this context, that is Braamfontein Cemetery.

Post-anthropocentrism

Post-anthropocentric theory rejects the idea that humans are more important than other species and encourages the making of meaningful interrelationships between humans and non-human species.

Posthumanism

Posthumanism is the theory that humans are not the centre of all concerns to do with the world, and dismantles the idea that humans should have control over other species.

Rehabilitation

The act of carefully restoring a being back to their usual life, or health.

Relational Ecology

The theory that animals and humans benefit greatly from relationships with each other, and that the world is a complex web of interrelationships between many species.

Sanctuary

A place where humans and non-humans alike can go to seek safety and solace.

Vista

A line of vision or view created between trees.



Fig v
Opposite
Crow and Skull
(Author, 2017)

Abstract

Within Johannesburg lies a dormant space, once a cemetery now forgotten – a relic of the past amidst the hustle and bustle of the city – the Braamfontein Cemetery. This thesis proposes a transformation, seeking to breathe life into this neglected space by integrating an animal rehabilitation centre and archive facility within its grounds, and tying it all together with public spaces and a large walkway. By merging the ideas of animal and ecological rehabilitation, urban revitalisation, and the fostering of connections between humans, nature and animals, this project aims to transform the Braamfontein Cemetery into a place of solace within the busy city.

This centre would not only serve as a sanctuary for injured, abandoned and unwanted animals but also as a refuge for city dwellers seeking rest from the stressful and fast-paced living that comes with being in the city.

The cemetery has a rich history that is seemingly forgotten by the people that reside so close to it. This thesis aims to use architectural solutions to resurface this history in order to foster a connection between the present lives of people using the space and the past lives of the people buried in it.

Drawing inspiration from the ideologies of posthumanism, post-anthropocentrism, existentialism and memory, human-animal relationships and ecological restoration, this thesis explores the potential of reimagining forgotten, green urban spaces as vibrant ecosystems through the use of architecture.

Ultimately, this thesis strives to not only revitalise a neglected space but to also cultivate a sense of interconnectedness among all living and non-living beings, fostering empathy, understanding, and reverence for the natural world and for the necropolis .

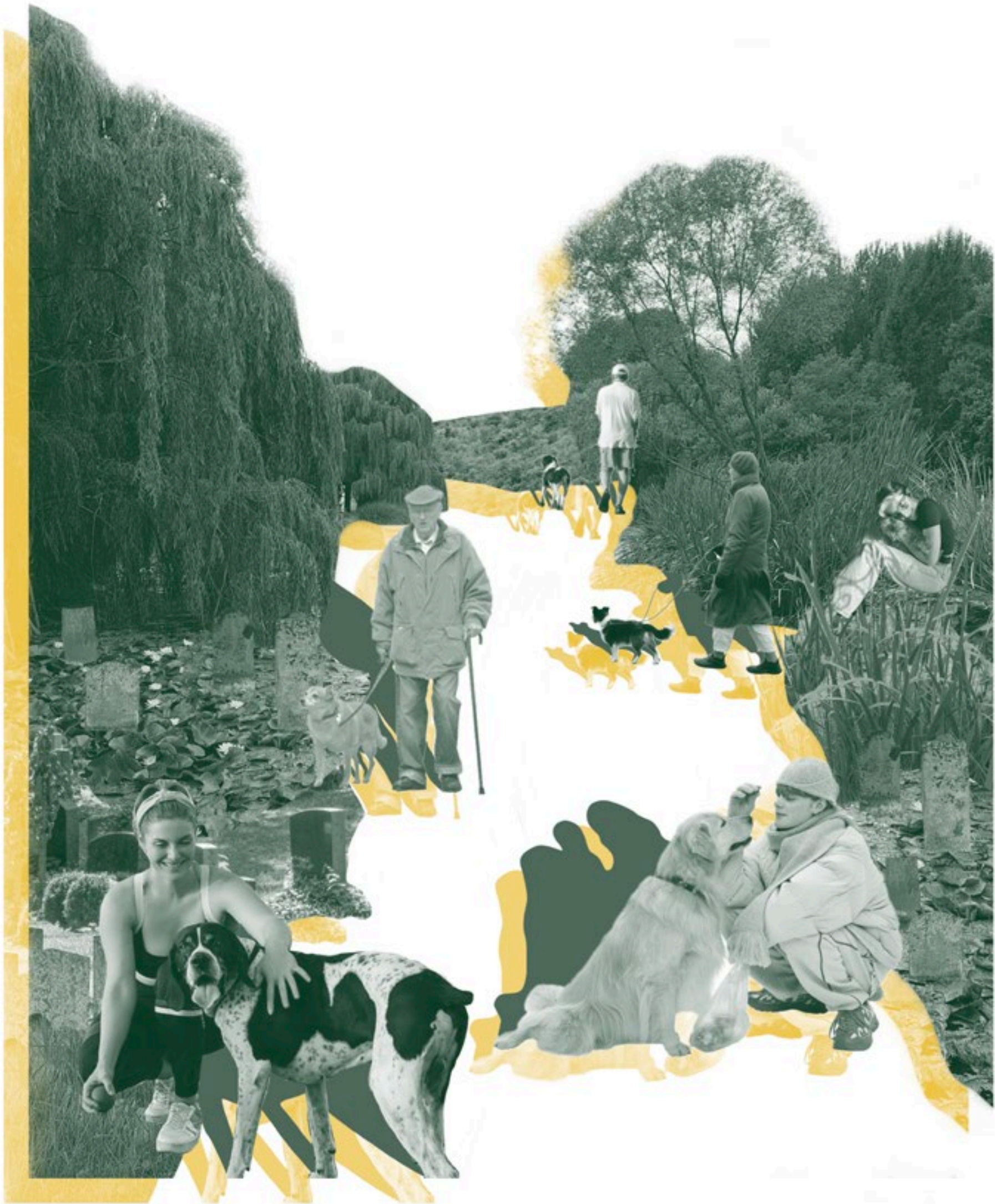
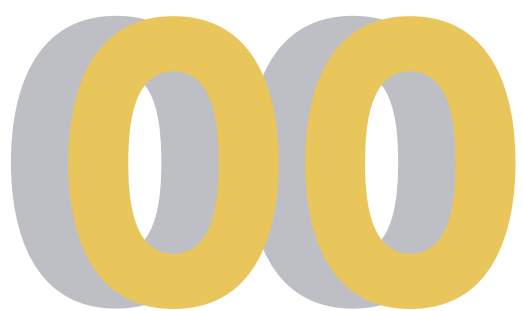


Fig vi
Opposite
Cemetery Walk
(Author, 2024, adapted
with multiple sources)

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Preface

The preface takes the form of the very beginning of my thesis. It shows the beginnings of my concept and sets the tone for the thesis to come. It is a personal account of experiences that have made me who I am today.

Why Animals? [0.1]



Why Animals?

“These are lessons that I learned in part walking with my dogs and wondering how the world looks without a fovea [a part of the human eye] and very few retinal cells for color vision but with a huge neural processing and sensory area for smells.” (Haraway, 1988:583)

My thesis idea came about while having a conversation with my partner. At the start of the year, we were out for dinner for the half-off sushi special at Simply Asia, and I was complaining about how I had no idea what to do my Master’s thesis about. After talking through and listing some unenthusiastic ideas to my partner between bites of delicious salty-sweet sushi, he said, “What about animals? You love animals.” And this was the spark.

Animals... I thought to myself. I do love animals. And so, I embarked on my journey to create an architectural thesis about caring for stray cats and dogs within Johannesburg.

My passion for animals – especially that of dogs and cats – comes from growing up with them. Ever since I was little, I had three dogs running around the house and garden. It was always part of my daily routine to interact with the animals in my house. When I look back, I could almost describe my home as a menagerie: my sister had a lizard, I had a bird, and then a hamster, and then a hedgehog. But all the while there were dogs. They always remained a constant in the house, and so I grew very fond of them.

From when I can remember, my family had two big dogs – always Rhodesian Ridgebacks – and one small dog. When I was a little girl, we had Flok – a small, fluffy pavement special from the SPCA that contracted the deadly Parvo virus shortly after we adopted him, but survived against all odds. Flok was my first best friend. He was an incredibly patient dog, especially with kids. There are pictures in the family albums of 4-year-old me and Flok sitting together in his bed, just enjoying each other’s presence. He would let me and my sister do whatever we wanted and would never bite, bark or lose his temper. He was our little guardian.



Fig 0.1
Previous
Braam Cemetery
(Author, 2024)

Fig 0.2
Opposite
Me and my first Dog
(Damjanovic, 2002)

Why Animals?

Sadly, Flok left us when I was still a child, and that’s when we adopted a small Yorkshire Terrier that we named Pepe. I spent 15 years of my life with him and that feels much too short. He had a completely different temperament to Flok. He was cheeky, and he was not afraid of letting his thoughts be known, particularly when he was hungry and it was nearing dinner time. He kept me company during my late nights working on my computer where he would sleep on a pillow next to my chair. He would always greet me with such enthusiasm after I’d come home from school, university or even a grocery run. So, naturally, when it was his time to go, I was heartbroken.

I had always had a profound love for dogs, but cats were a different story. Having a bad experience being scratched across the face by a family friend’s cat instilled a fear of them in me when I was very young. Only until my sister insisted that she adopt a cat after her lizard passed away (poor Houdini was well into his elderly years), did my relationship towards cats start to change for the better. When my sister and I brought Olympia – Oli for short – home for the first time, my entire family fell head-over-heals in love with her. She was a strange-looking, skinny, tortoiseshell-coloured kitten with huge ears, but we just thought she was absolutely beautiful.

She would often talk to us and answer with her characteristically deep ‘meow’ when we would talk back. My sister taught her to sit and play fetch, which one would think impossible with a cat, but Oli was special. She would cry when she lost her favourite multi-coloured butterfly toy and would not accept any replacements. She was picky about her food, but would shout for ham whenever anyone was making sandwiches in the kitchen. She was almost like another person in the house. She would look at you with eyes seemingly full of knowledge, like she knew the meaning of the world and existence, she would lick us as if to comfort us when we were sad, and she would gain energy from our happiness. She was truly a turning point in my life. I never thought I could have loved a cat like this until I met Oli.



Fig 0.3
Opposite
Oli Triptych
(Author, 2024)

0.1 Why Animals?

One of the saddest nights that I can remember was the night we lost her. She had gotten cancer and was responding very poorly to her chemo treatment. She had given up eating, playing, talking and moving so we knew it was time. After less than three years shared with her, she passed away. What, to me, makes Oli so special, is that even in the short time she was part of the family, she had changed not only me, but also my sister, my mom and my dad. We all came out of those three years a different person. I got over my fear of cats completely, my sister experienced her first ‘animal soulmate’, my mom realised how much she liked cats, and my dad acquired a sweet gentleness towards cats (which he hadn’t cared for much before). We all went through some sort of transformation, and it was all because of a small cat with large ears, but an even bigger heart.

I could go on about all the animals I’ve had be part of my family, but then this thesis would be never-ending because they were all so special in their own ways, much like people are. Thinking about my animals and my experiences with them inspired me to create a thesis where I could design a place for animals that have been abandoned, or have never had a home to begin with, a place to be cared for. I believe all animals deserve to be cared for and that is what I’m bringing into my thesis.

The reason I’m including my personal experiences with animals in my thesis is because I feel that it shows how influential and positive a connection with an animal can be for one’s – a human’s – emotional growth and mental well-being. I am very sentimental about the last few animals that have been a part of my life because currently, for the first time in my life, I have no animals at home. It has been a strange year not having the quiet emotional support between human and animal, and I think humans could greatly benefit from a connection to animals and other species.



Fig 0.4
Opposite
Oli
(Author, 2020)

01

Introduction

This chapter will introduce the main ideas and concepts of the thesis, breaking down the groundwork of the project into context, the site – Braamfontein Cemetery – and its geographical location, as well as the area of investigation of the thesis to follow.

- Why Johannesburg? [1.1]
- Positionality [1.2]
- Why a Cemetery? [1.3]
- Why Braamfontein Cemetery? [1.4]
- Area of Investigation [1.5]



1.1 Why Johannesburg?

“Cities balanced on the edge of sustainability, always one step from starvation. When you pressed so many people together, their cultures, ideas, and stench rubbed off on one another. The result wasn’t civilization. It was contained chaos, pressurized, bottled up so it couldn’t escape. There was a tension to cities. You could breathe it, feel it in every step”

- Brandon Sanderson, *Excerpt from Oathbringer, Stormlight Archive.*

After confirming that I would bring the theme of animals and animal wellbeing into my thesis, I had to choose a site to hold my future design intervention. I knew I wanted to stay in the context of Johannesburg, because I grew up not far, in Randburg and so, the city is accessible to me.

It is important to note that although I was born in South Africa, my parents are immigrants from Montenegro (which was part of Yugoslavia before the Yugoslav Wars), and so my view of Johannesburg and my experience within it differs from that of someone who’s family’s roots originate in Johannesburg and South Africa.

Growing up was an interesting mix of learning South African culture at school, while embracing my Montenegrin culture at home. There are still many nuances within South African culture I have yet to learn, and I often learn something new every day through friends, classmates, lecturers and even strangers.

So, while I believe my experiences and knowledge of Johannesburg, supplemented with additional research, is adequate enough to be able to analyse the city and what intervention might benefit it, I do not claim to know the complex interrelationships that different people have with the city. I merely look at my own experiences and those of the people I have gotten to know throughout my life to help me navigate the city and its complexities throughout this thesis . This becomes my position and “positionality” in this thesis.

Fig 1.1
Previous
*Memorial in Braam
Cemetery*
(Author, 2024)

Fig 1.2
Opposite
*Large Scale Map of
Johannesburg*
(Author, 2024, after
Google Earth, 2024)



1.2 Positionality

Positionality refers to the social and political context that shapes an individual's identity, perspective, and power dynamics in relation to others. It recognizes that factors such as race, gender, class, sexual orientation, ability, and nationality significantly influence how individuals perceive and experience the world. It recognises that we have "a finite point of view, and so an inevitably disqualifying and polluting bias in any discussion of consequence outside our own little circle" (Haraway, 1988:575). In research and academic contexts, positionality involves a critical understanding of how these factors affect the research process, including the relationship between the researcher, the subject and the interpretation of data. The question of objectivity comes to the fore – how can one be truly objective? In Donna Haraway's seminal essay "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.", Haraway argues that all knowledge is "situated," (1988), she explains that one cannot be objective, one can only try to work with others to expand their perspective. But "The moral is simple: only partial perspective promises objective vision" (Haraway, 1988: 583), and so a broader, detailed perspective cannot be objective.

Understanding positionality is crucial in acknowledging the inherent biases and limitations that shape any research endeavour, including my own. By recognizing that knowledge is always "situated," (Haraway, 1988) we accept that objectivity is elusive, and our perspectives are inevitably influenced by our social and political contexts. However, this awareness does not diminish the value of research; instead, it enriches it by encouraging reflexivity and a deeper engagement with diverse viewpoints. So, by addressing positionality, as I have done above, I aim to embrace the complexities of partial perspectives, recognizing that they contribute to a more nuanced and meaningful understanding of the world.

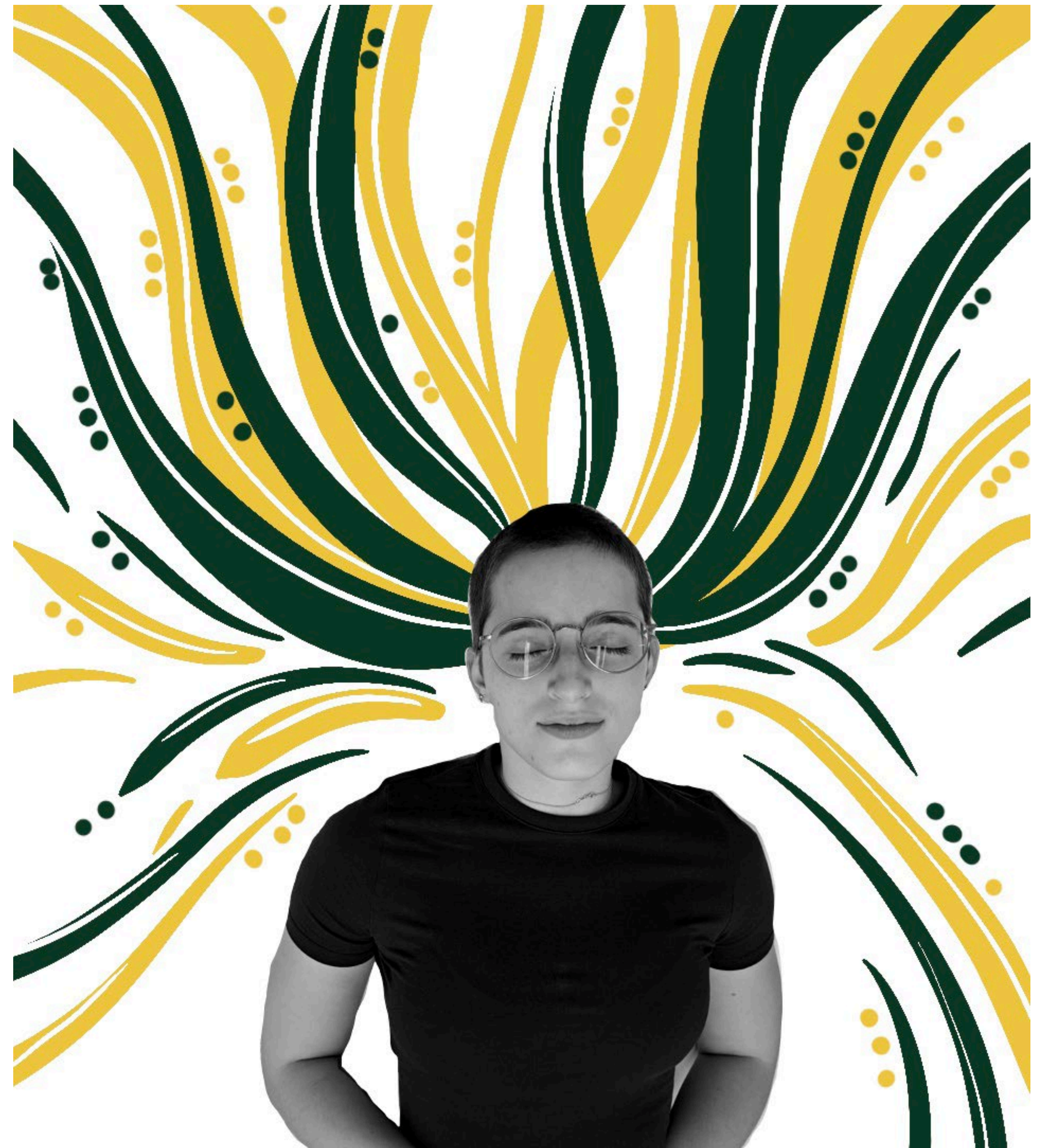


Fig 1.3
Opposite
Positionality
(Author, 2024)

1.2 Why a Cemetery?

Johannesburg, “as represented by its millions of multinational inhabitants, is in constant movement; it is restless” (Stiebel, 2008). This is something I noticed during my life travelling from the suburb of Randburg to the city of Johannesburg – how fast paced the city is. Joburg seems to be in a constant state of rush: rushing to get to work in the morning in bumper-to-bumper traffic, rushing to do your work in order to get paid a salary that keeps your family afloat, rushing across the street when walking through the city in fear of getting run-over, and just a sense of hurry in the air. It seems impossible to take a moment to breathe when navigating the city.

In other academic publications “Johannesburg has been described variously as an elusive, genre-less, blank, even self-cannibalizing city.” (Charlton, 2017:14 .). In fact, several authors have written about Johannesburg’s unique urban landscape, describing it as a city with “ceaseless metamorphosis” (Nuttall and Mbembe, 2008:18), uncertainty, and tension. For instance, Achille Mbembe and Sarah Nuttall in their influential work, “Johannesburg: The Elusive Metropolis,” (2008) explore how Johannesburg’s history of apartheid, migration, and economic shifts have created a city that is perpetually in a state of becoming – it is never quite stable or settled, hence the use of the phrase ‘ceaseless metamorphosis’. They argue that the city’s identity is shaped by a continuous negotiation between fear and hope, visibility and invisibility, and construction and destruction.

In the second section of the Nuttall and Mbembe’s book is a collection of several styles of writing from different perspectives that write the city of Johannesburg into being. Some of the authors of these “Voice Lines”-the name of this section in the book-describe the city as “‘this ugly city” (Matshikiza, 2008:237), “restless” (Stiebel, 2008:122), an “always moving space” (Stiebel, 2008:122; cited Nuttall, 2008), a space where music circulates by “automobility” (Liverman, 2008:274), a place where “all are on the move, both observers and observed” (Stiebel, 2008:122 cited Hornberger, 2008), and more.



Fig 1.4
Opposite
Gravestones at the
Braam Cemetery
(Author, 2024)

1.2 Why a Cemetery?

Mark Hunter's (2010) work on urban fear and the social geography of Johannesburg further supports this narrative. Hunter (2010) shows how the city's spatial planning that consists of gated and fenced off communities, stringent security measures like electric fences, and spatial segregation reflects and reinforces social anxieties. It is deeply embedded in the city's spatial practices and cultural perceptions that just feeds the fear and concerns of the people living in the city.

William Kentridge – a Johannesburg resident himself – has various charcoal drawings of Johannesburg that “capture the grit, the modernity, [and] the ‘smudginess’ of life lived” (Stiebel, 2008:122) in Johannesburg. His expressive style through the use of a messy medium like charcoal, allows him to bring forth the harshness of the city's atmosphere and the rush of those residing in it.

The research mentioned above aligns with my experience of Johannesburg, and shows that it is not isolated and is shared by many. The city is jittery, unpleasant, unrooted and sometimes hostile. These are the kinds of thoughts that led me to seek out the green spaces within Johannesburg. Green spaces are something that offer solace from the harshness of the city, and greatly improve the mental well-being of the city's inhabitants (Kakkar, 2022). Green spaces are few and far between in the city and after sleuthing around on Google Maps, I noted that the majority of the large green spaces I saw were cemeteries. This made me wonder why cemeteries, with their spacious and verdant qualities, aren't used as places for public relaxation and social interaction.



Fig 1.5
Opposite
Drawing for the film
Stereoscope
(Kentridge, 1998-1999)

1.2 Why a Cemetery?

At this point, I knew I wanted my site to be a cemetery, so I listed the cemeteries within Johannesburg and started to rake through the positive and negative qualities of each cemetery in terms of my thesis and my aims. The Braamfontein Cemetery stood out because of its closeness to WITS University, the University of Johannesburg, student accommodations that supplement the two, residential lofts and the rest of Braamfontein.

Braamfontein is densely populated urban area defined by high-rise buildings and limited green spaces as mentioned before. This lack of green space becomes a problem in the terms of Braamfontein being a largely student-populated city. This fact is only exacerbated by the increasing densification in the area due to a higher demand for student housing each year. Without access to green, open space, students remained cramped in their accommodations. This is concerning due to the fact that mental well-being in students has been on a rapid decline during the past few years including increased rates in depression, anxiety and suicide (Bantjes et al., 2023; Meintjes, 2024). The pressures of academic life, coupled with the challenges of adjusting to independence and adulthood, contribute to these issues.

These points directly tie into the site selection. Through choosing a site that addresses these challenges, my project aims to provide a necessary respite for students—a place where they can escape the overwhelming urban environment, find solace, and engage in activities that promote mental, emotional, and existential well-being. The peaceful and wooded nature of the Braamfontein cemetery allows for my project to begin to do this.



Fig 1.6
Opposite
*View of Gravestones from
main cemetery road*
(Author, 2024)

1.3 Why Braamfontein Cemetery?

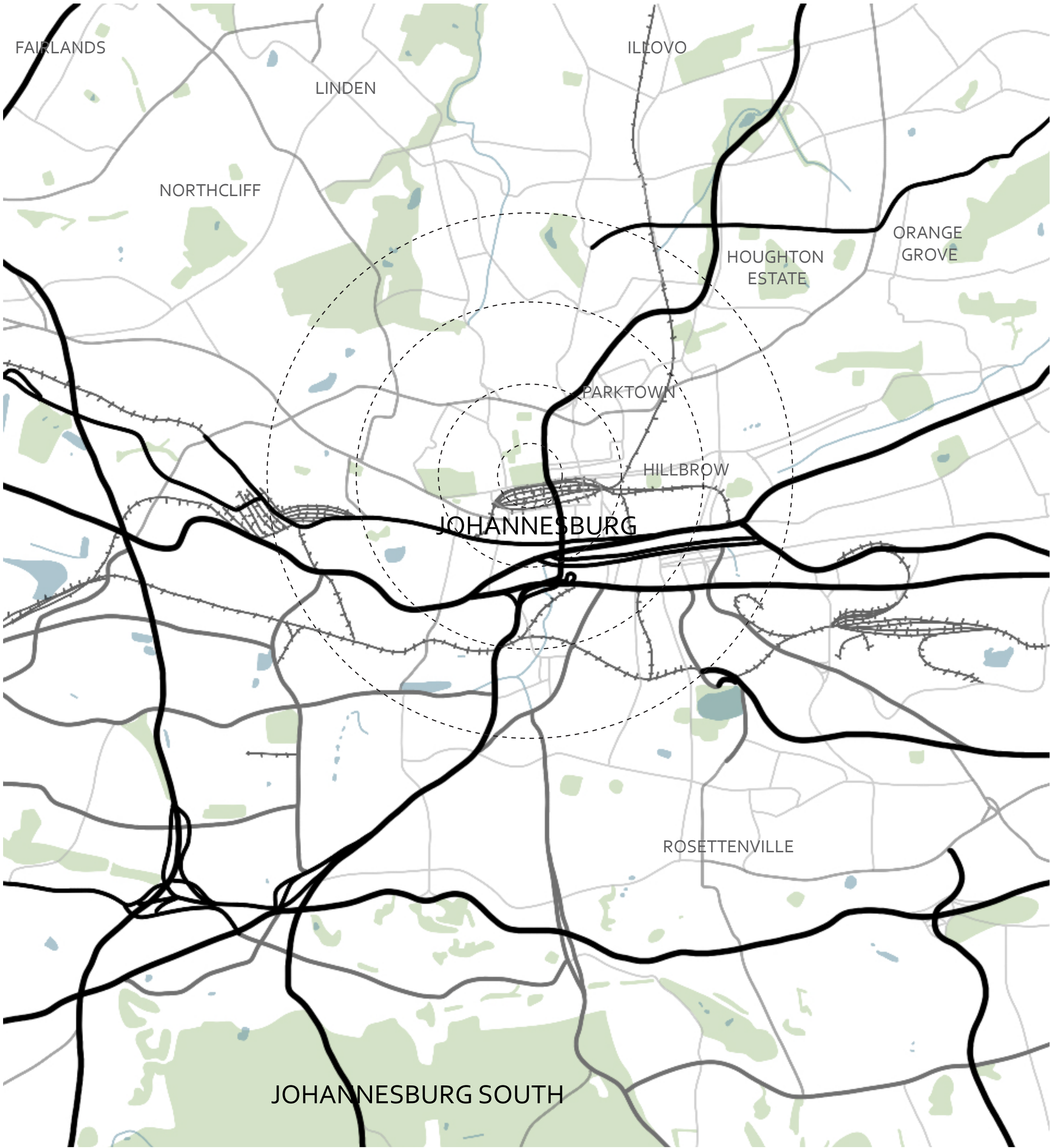
Known throughout history as the “Old Cemetery”, the Braamfontein cemetery is situated in Johannesburg on Enoch Sontonga Avenue. Screened off by trees and nestled between the railway tracks, WITS University, the Enoch Sontonga Lofts and the rest of the city, the cemetery goes quite unnoticed. Many people pass by the cemetery with the assumption that it’s only a park. The entrance to the cemetery is also quite hidden, tucked away on the dead-end Graf Street. It is not visible from the M1, or the surrounding streets. The cemetery becomes a hidden woodland in the centre of Braamfontein, untouched and unvisited.

Gevisser reinforces the above statement in his book ‘Lost and Found in Johannesburg’ (2014:68), “Although it occupies a rectangle of land just off the M1 freeway and across the road from Wits University, it is passed unnoticed by most Johannesburgers and hardly ever visited.” The reason for the cemetery’s abandonment by the people of Johannesburg, is because it is not used for burials anymore and the grave sites within the cemetery date back as far as the 1890’s, so reasons to visit the cemetery have become scarce.

Due to the aforementioned points, the cemetery has become a “dead” space – as in unoccupied and empty – within the city. It is a shame that such a large and verdant space would be so vacant and overlooked, and so that started to form part of the argument for my thesis: how can I socially activate and revitalise Braamfontein Cemetery through architecture?



Fig 1.7
Opposite
Location Map of
Braam Cemetery
(Author, 2024)



1.4 Area of Investigation

The themes of animal-human relationships, humankind’s relationship with death and their past, spaces of comfort, and psychological healing through interspecies relationships and nature permeate this thesis. The theory that links closely to these aforementioned themes are: existentialism, posthumanism, post-anthropocentrism and relational ecology.

Existentialism refers to the human condition of existence and is the belief that we, as humans, are responsible for creating meaning within our own lives. “Existentialists believe that memory guides [humans] in [their] actions in life.” (Ohero, 2017:123). Since memory is an important aspect of the site – it being a historical cemetery – the theory of existentialism becomes relevant because it is closely linked to ideas of death, the human identity and memory .

Posthumanism and *post-anthropocentrism* are both ideals that reject the idea that humans are more important than other non-human species. Both theories emphasise that humans are just one among many entities with agency (Braidotti, 2013). The posthuman and post-anthropocentric approach forms an important branch of this thesis because of the inclusion of animal and ecological well-being in my architectural programme. These theories, as well as their differences, will be analysed and discussed further within my theoretical chapter.

Relational ecology is a theory that focuses on the interrelationships between human and non-human entities. It proposes that spaces of sharing and understanding between humans and non-humans be reintroduced both mentally and physically into human society (Deville and Spielewoy, 2019). Through the introduction of spaces like these, it would allow us – humans – to refresh our knowledge of the links between society and the natural environment, encouraging territorial diversity in order to “provide relevant responses to social and ecological crises” (Deville and Spielewoy, 2019).

With these theories and themes in mind, the question I ask is: how can architecture be used to create meaningful interrelationships between humans, memory, nature, and animals within the context of the Braamfontein Cemetery?

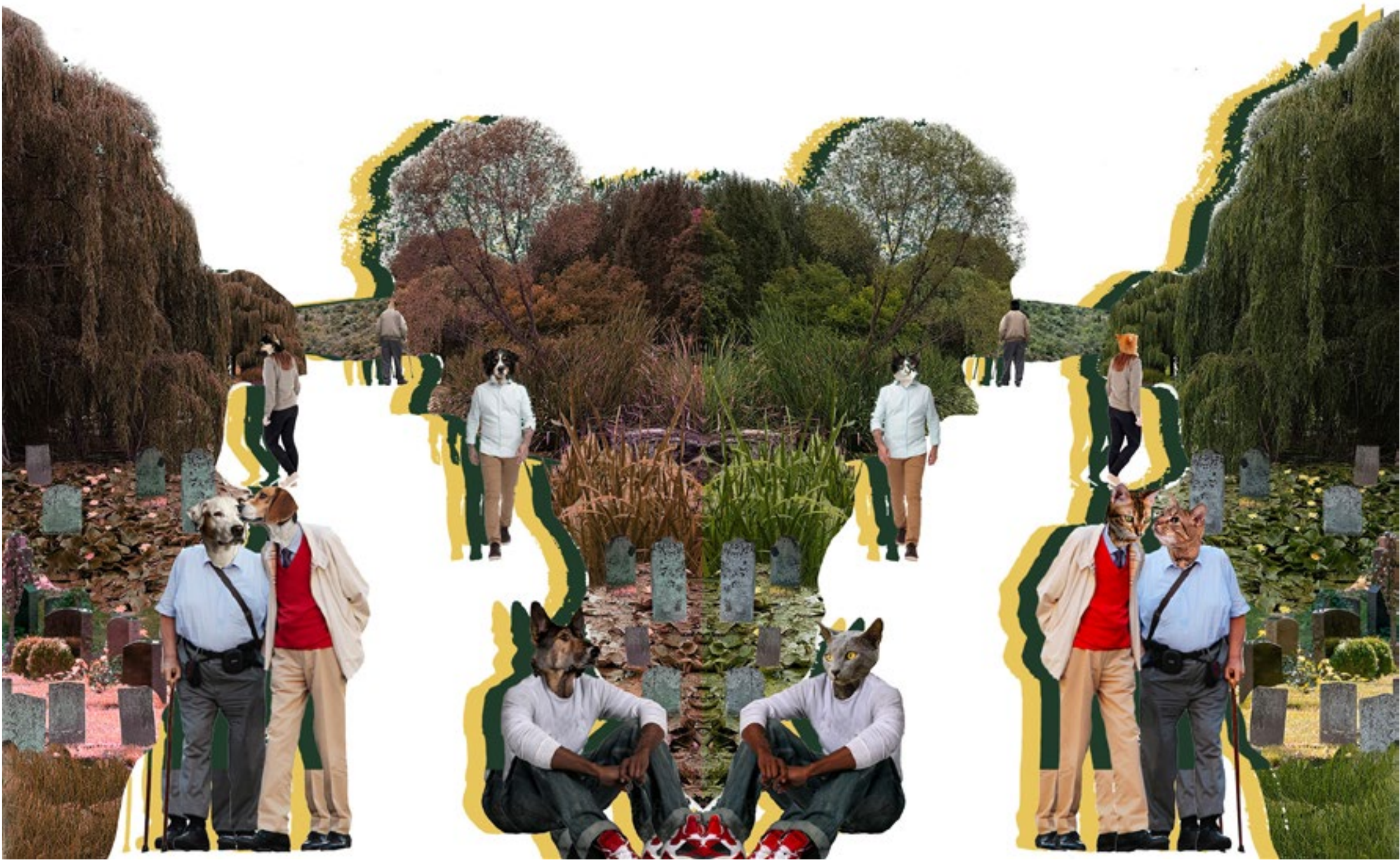


Fig 1.8
Opposite
Investigation Collage
(Author, 2024)

02

Death, the Human and the Animal

The theoretical underpinnings of this thesis form the basis of thinking that drives the architectural design of the intervention within Braamfontein Cemetery. Existentialism, posthumanism, post-anthropocentrism and relational ecology, when broken down, help one understand the themes this thesis deals with and creates a theoretical background that supports the concepts within it.

Existentialism [2.1]

The Existential Landscape of Johannesburg [2.1.1]

The Existential Landscape of Braamfontein Cemetery [2.1.2]

Posthumanism and Post-anthropocentrism [2.2]

Relational Ecology [2.3]

Conclusions [2.4]



2.1 Existentialism

"If I take death into my life, acknowledge it, and face it squarely, I will free myself from the anxiety of death and the pettiness of life - and only then will I be free to become myself." - Martin Heidegger

As mentioned under the Area of Investigation in Chapter 01, existentialism grapples with the human condition, focusing on the themes of existence, freedom, and the inevitability of death. Existentialists like Jean-Paul Sartre and Martin Heidegger believe that humans need to create their own meaning and purpose in life and, as a result, have created stories, myths, religions and similar beliefs to do so (Horn, 2007; Sartre 2007; Heidegger, 1962). In the context of this thesis – revitalising Braamfontein Cemetery – existentialist philosophy offers a comprehensive lens for understanding the space as a site where life, death, and memory intersect.

Central to existentialism is the concept of being-in-the-world. This notion suggests that humans are inextricably linked to their environment and that their experiences are shaped by their surroundings. The cemetery, as a physical manifestation of human mortality and the passage of time, offers an interesting opportunity to engage with this existential concept. Martin Heidegger’s concept of “Being-toward-death” is pertinent in this context, as it emphasizes the role of mortality in shaping human existence and the meanings we attach to our lives (Heidegger, 1962).

Memory is another branch that links to the idea of Existentialism (Ohero, 2017). Memory is an important aspect in life as it creates a connection between the present version of you and the past version of you, this then shapes the decisions you make as a human being in the world. Memory also forms part of history, especially in South Africa where there are many oral histories that have been passed down and lost over the course of time. Bringing history and memory into the foreground creates a better understanding between people and the history of the society they lived in (Fauske, 2023). Understanding your historical context is important because it infuses you with the knowledge to care about your existence and where you come from.

Fig 2.1
Previous
Anglo Boer War Graves
(Author, 2024)

Fig 2.2
Opposite
Existential Thoughts
(Author, 2024)



2.1 Existentialism

"I love memories. They are our ballads, our personal foundation myths... Memory is often our only connection to who we used to be. Memories are fossils, the bones left by dead versions of ourselves. More potently, our minds are a hungry audience, craving only the peaks and valleys of experience. The bland erodes, leaving behind the distinctive bits to be remembered again and again... Memory may not be the heart of what makes us human, but it's at least a vital organ."

- Brandon Sanderson, 'Tress of the Emerald Sea'

Fig 2.3
Opposite
Existential Being
(Author, 2024)



2.1.1 The Existential Landscape of Johannesburg

“For Johannesburg was still busy growing out of a mining camp, like it will to the end of all time still be growing out of a mining camp” (Hall, 2012:1569 cited Bosman 1986:87)

To expand on the existential challenges of being in the Johannesburg context, it is crucial to consider the city’s complex and layered history, marked by imported identities, short histories, and erased pasts. These factors contribute to a sense of dislocation and fragmentation that characterises life in Johannesburg, hence the lack of a sense of rootedness to the city. This fragmentation and lack of roots in the city is due to the element that Johannesburg is a self-erasing city (Charlton, 2017), that is ever-dynamic and unnerving (Nuttall and Mbembe, 2008).

The reason for Johannesburg’s existence as a city is the gold mines – underground and invisible. Discovered by Mr. George Harrison in 1886 the “largest gold field on a farm in Langlaagte” (Swart, 2018) became the start of the story of Johannesburg. Although the reason for the city’s existence might be invisible, there is importance in “the underneath, the below surface, the underground which...essentially fuels what happens on the surface” (Stiebel, 2008:121). Instead of the traditional process of settling historically characterised by most cities, Johannesburg started as an impermanent city with the sole purpose to extract gold.

Being a mining town, Johannesburg is littered with mountains – that are not mountains at all – made up of mine dumps that create a toxic environment for the people living in the settlements surrounding them – this links to the idea above that what goes on underground affects what happens on the surface. These dumps are a tangible representation of the history of Johannesburg, but being full of uranium, they are incredibly toxic adding to the inhospitable nature of the landscape.



Fig 2.4
Opposite
Landscape of Joburg
(Author, 2024, after
Edgar, 2024)

2.1.1 The Existential Landscape of Johannesburg

While the physical landscape of Johannesburg is existential in its own way – through its harsh climate and toxic mining landscapes – the social history of Johannesburg is much the same. Lindsay Bremner in “Writing the City into Being: Essays on Johannesburg, 1998-2008” (2010) reflects on Johannesburg as a space that constantly rewrites itself, both physically and socially. She discusses how the city is characterized by rapid urban development juxtaposed with decay, highlighting the transient nature of its landscapes and the sense of impermanence that pervades daily life.

Through her essay “Six ways of being a stranger”, she explores the city through the experiences of individuals facing the extremities of what it is to live in South Africa. She takes on the narratives of “The exile”, “The underground operative”, “The colonists”, “The migrant worker”, “The mercenary” and “The expat” shedding light on the complex lives that take shape under the “postcolonial project in South Africa” (Du Toit, 2011). Bremner’s insights align with the idea of Johannesburg as a self-erasing city, where the physical and social infrastructures are always in a state of demolition and reconstruction, reflecting broader socio-political dynamics.

In conclusion, Johannesburg’s identity is deeply entwined with its origins as a mining town, a foundation that continues to shape its existential landscape. The city’s rapid growth, constant state of flux, and the ever-present tension between its visible and invisible histories create an environment of perpetual impermanence and dislocation. As a self-erasing city, Johannesburg’s physical and social structures are in a constant cycle of renewal and decay, mirroring the complex and fragmented lives of its inhabitants. These qualities underscore the unique character of Johannesburg that links to the idea of existentialist theory. As a city forever in the process of becoming, yet never fully settled (Nuttall and Mbembe, 2008), memory becomes an important aspect of connecting to the city and its history.



Fig 2.5
Opposite
*The Existential
Landscape of Joburg*
(Author, 2024, after
Lewis, 2022)

2.1.2 The Existential Landscape of Braamfontein Cemetery

Braamfontein Cemetery, established in 1888, is not merely a final resting place for the dead but also a significant cultural and historical site within Johannesburg. As an archive of the city's past, it holds the graves of notable figures and ordinary citizens, each representing a unique story and a life once lived. The cemetery can be seen as a historical and cultural artifact of Johannesburg and stands as a poignant testament to the city's past, as well as a reflection of its present.

In the article "Gravestones, zombies and dead siblings: graveyards as artefacts for children's existential questions" (2023), the author speaks about a case study where children were taken to a cemetery as part of a school trip to introduce them to the idea of death and the meaning of death. "The graveyard provided a natural context for interacting and negotiating questions about death and functions as a material artefact, which makes the narratives present, and leads to new negotiations" (Fauske, 2023:156). These narratives are what open up the collective memory of the artefact which include parts of the cemetery such as the graves and memorials. The collective memory is brought into the foreground through the narratives and information found within the cemetery (Fauske, 2023).

The cemetery's current state of neglect, as seen in its own artefacts – weathered headstones and overgrown vegetation – raises existential questions about the nature of memory and the fate of those who are forgotten (Fauske, 2023). The cemetery represents a collective memory that is at risk of being lost – or already has been lost to most. The artefacts of the cemetery stand as a testament to the lives that once were, asserting the existence of individuals in a world where time marches on. And as time passes, the memories attached to each individual fades, in turn, making the cemetery fade in the minds of the Joburger's that pass by it every day. Sartre's notion of "bad faith"—the denial of the reality of death and the avoidance of confronting our own mortality—can be seen in the neglect of the Braamfontein Cemetery (Sartre, 2007).

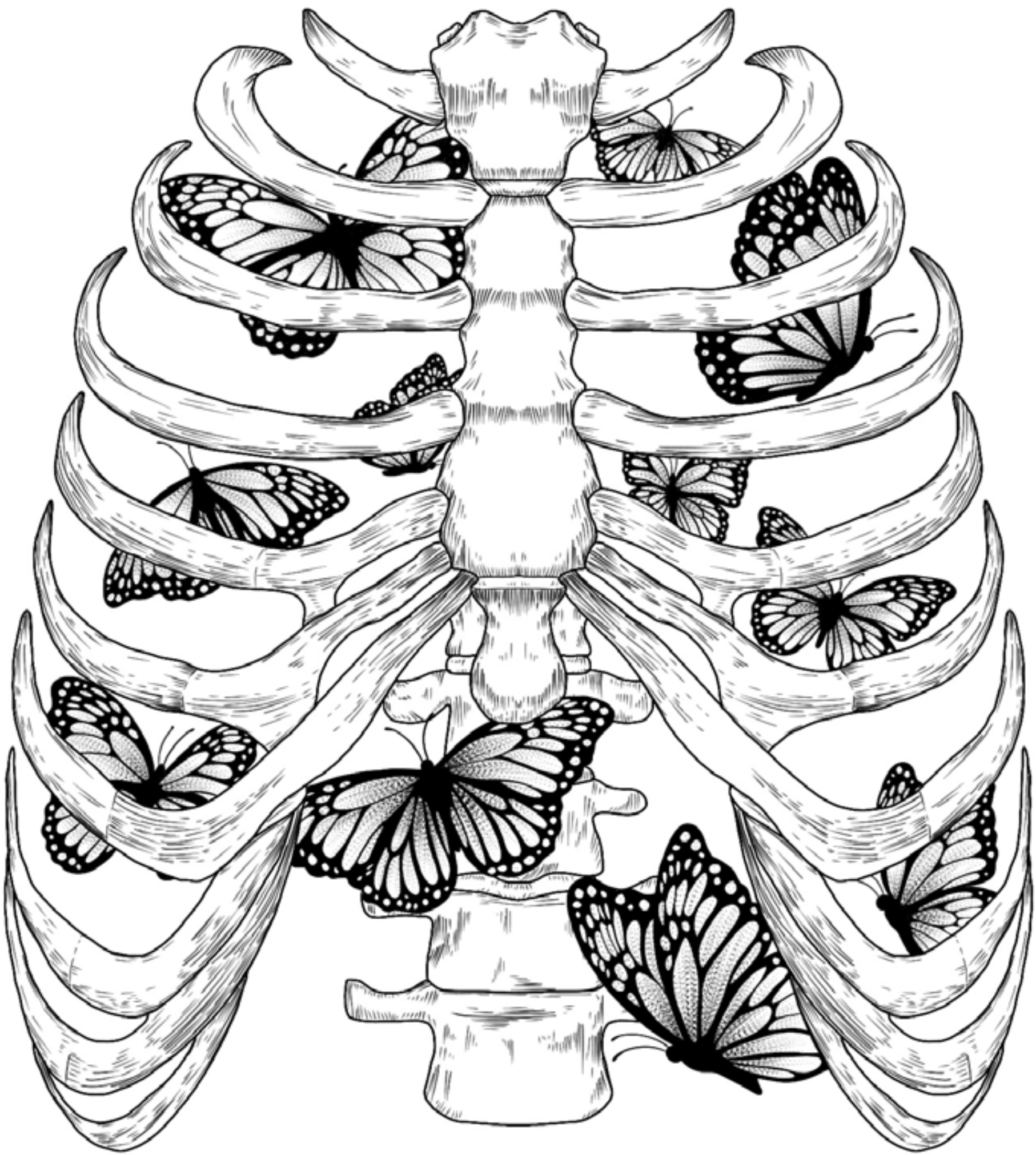


Fig 2.6
Opposite
*The Existential
Landscape of Humans*
(Author, 2024)

2.1.2 The Existential Landscape of Braamfontein Cemetery

Looking at the cemetery as an artefact becomes an interesting way to engage with the existential questions all human beings have from time to time. Through the engagement with the cemetery's "artefacts" one could connect to one's cultural identity (Fauske, 2023) and history, as well as the history of the society they live in. These concepts are something that could be brought into the design intervention to bring meaning to Braamfontein Cemetery.

The challenge lies in creating a design that both restores memory and acknowledges the impermanence of memory. Examples of this could be integrating digital technologies to preserve and share the stories of those buried there, creating an interactive space that bridges the past and present like in the Park of Memories in Aš, Czech Republic (see Chapter 06). This would reflect the existentialist idea that memory is not static but an active, living process that continues to evolve as times goes on (Nora, 1989).

Existentialism grapples with the tension between life and death, permanence and impermanence, and so, using elements within the architecture of my building that age and change over time could speak to this idea of existential reality – that nothing truly lasts forever, much like our lives and memories.

The aging of materials helps humans place themselves within a longer timeline. They provide a sense of being just a brief moment in the endlessness of time. These materials existed before us and will exist long after we are gone (Danze, 2024). As humans, we often focus on how 'life is short', so without this broader perspective, we could risk becoming overwhelmed by own short-sighted concerns. Aged materials give a sense of continuity and connection to the past and the future (Danze, 2024) – fitting in with the idea of memory and existentialism, especially in context of the Braamfontein Cemetery.



Fig 2.7
Opposite
Unmarked Black Graves
(Author, 2024)

2.1.2 The Existential Landscape of Braamfontein Cemetery

Materials that weather and decay could mirror the aging tombstones of the cemetery and symbolise the passage of time and the inevitable decline of all things (Camus, 1942). The architecture could thus serve as a catalyst for personal reflection, offering a space where individuals can confront their own mortality and consider the choices that define their lives (Norberg-Schulz, 1980).

Transforming the cemetery into a usable space within the city, asserts the value of memory, life and the spaces that bear witness to both. This act of reclamation is not only about preserving history but also about creating a living, dynamic space where the past and present can coexist. This means that the cemetery then becomes a place where the existential can be explored, and where people can engage in the continuous process of creating meaning in their lives (Tschumi, 1996).

Braamfontein Cemetery offers a unique opportunity for existential exploration through architecture due to its layers of history and current state of neglect. By embracing existentialist themes such as death, memory, and human experience, this thesis proposes a design that not only revitalizes the cemetery but also redefines it as a space of meaning and contemplation. In doing so, the cemetery can be transformed from a neglected relic of the past into a vibrant, lively space that serves both the dead and the living, offering a place where existential questions can be explored and where meaning can be continually created.



Fig 2.8
Opposite
Aging Muslim Graves
(Author, 2024)

2.2 Posthumanism and Post-anthropocentrism

"When species meet, they do not come together as fixed units. Rather, all participants are becoming with each other in "a subject- and object-shaping dance of encounters"" (Rossini, 2008:309)

Posthumanism and Post-Anthropocentrism are similar philosophical frameworks that critique traditional human-centred ways of thinking, although they do so with distinct emphases. Posthumanism is the rejection of "'the humanist ideal of 'Man' as the allegedly universal measure of all things,'" and post-anthropocentrism is the rejection of "species hierarchy and human exceptionalism'" (Gorur and Dey, 2023).

Posthumanism seeks to remove the human subject from the centre of all beings by questioning the boundaries between humans, animals, and machines. It challenges the notion of human exceptionalism (Braidotti, 2013) and deconstructs the view that humans are the sole bearers of agency. Posthumanism critiques the idea that humanity is the pinnacle of evolution and embraces technological and biological developments that blur the lines between human and non-human beings (Hayles, 1999).

In a similar vein, post-anthropocentrism critiques the human-centric view that humans form the centre of all ethical and ecological concerns. The post-anthropocentric vision is one where both human and non-human species are integrated into a shared, symbiotic environment (Latour, 2017). It specifically critiques the hierarchical structure that humans place – and have historically placed – above all other beings. Post-anthropocentrism aims to dismantle the anthropocentric worldview that has historically justified the exploitation of non-human entities and ecosystems (Braidotti, 2013). It focuses on environmental ethics and the moral aspects of human interactions with the natural world.

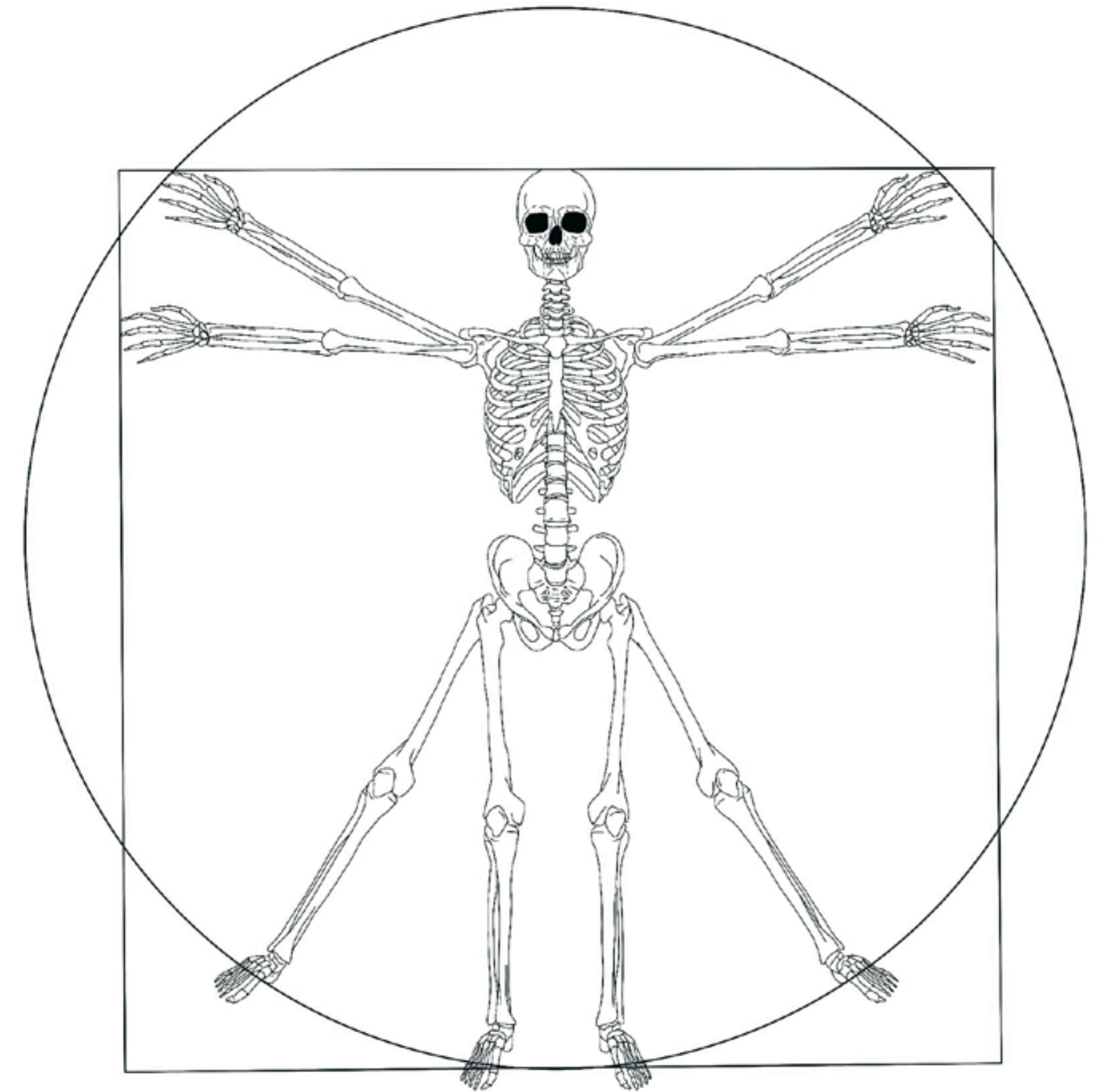


Fig 2.9
Opposite
The Vitruvian Skeleton
(Author, 2024)

2.2 Posthumanism and Post-anthropocentrism

In the context of designing a sanctuary – or place of rehabilitation – for both animals and humans, posthumanism and post-anthropocentrism challenge traditional human-centred approaches. Posthumanism emphasises the idea that humans are not the sole agent in ethical and environmental considerations, and advocates for a more inclusive understanding of agency and interspecies relationships (Braidotti, 2013). It calls for the recognition of non-human species as active participants within the natural and built environment. Post-anthropocentrism is rooted in the belief that non-humans have intrinsic value (Tsing, 2015) and capabilities that must be taken into consideration when creating spaces and building cities. Posthuman and post-anthropocentric ideals prioritize the needs and well-being of non-humans alongside that of humans, rather than human needs above that of non-humans (Wolfe, 2010).

Donna Haraway has delved into these ideologies within her books, namely “When Species Meet” and “Staying with the Trouble: Making Kin in the Chthulucene”.

In her book, “When Species Meet”, Haraway writes about the complex interrelationships of different species, questioning the typical idea of anthropocentrism in modern society. She believes in the idea of fostering a more symbiotic relationship between humans, nature, animals and technologies in her book. Her work forms a link between posthumanism and “the question of the animal,” (Chute, 2013:137) which is pertinent to this thesis as it brings together the concept of the human worldview and the theme of animal well-being and architecture for animals.

Haraway argues throughout the book against “the culturally normal fantasy of human exceptionalism” which is “the premise that humanity alone is not a spatial and temporal web of interspecies dependency” (Heinricy 2009:287, cited Haraway, 2008:11). This is not the case in reality, she maintains that the human body itself is an intermingled ecosystem of many different species such as the bacteria that form part of our gut or skin. This is in addition to the species that humans have co-evolved with for “food, labour, and companionship which have shaped both human bodies and the bodies of these species.” (Heinricy 2009:287-288). Animals have always been part of humankind and have, in turn, helped shaped humankind, so why do many people still view them as objects of human desires and needs?

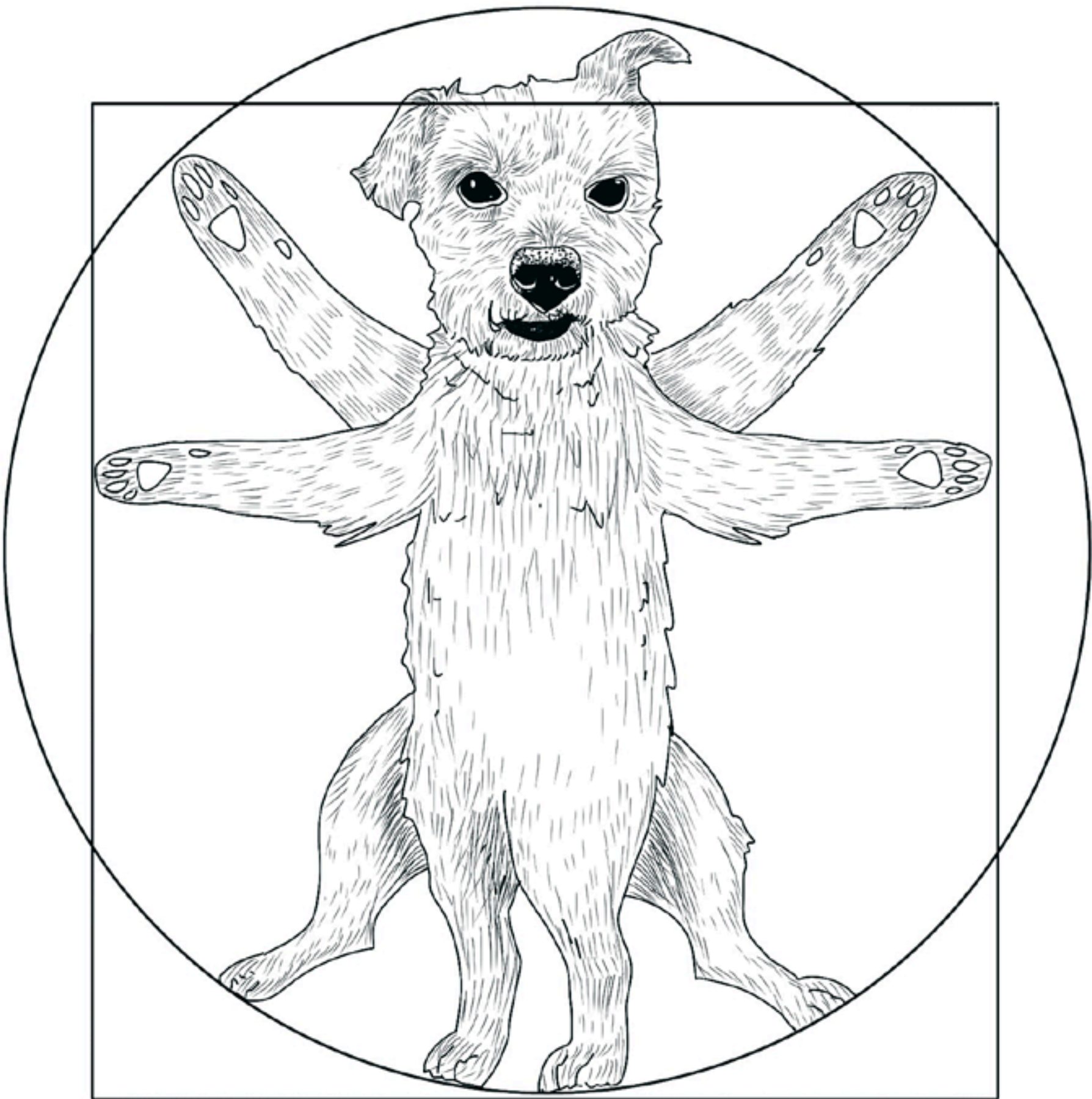


Fig 2.10
Opposite
*The Vitruvian Dog (based
on my own dog, Pepe)*
(Author, 2024)

2.2 Posthumanism and Post-anthropocentrism

Haraway brings up the concept of “companion species” accentuating interdependence and a more collaborative approach to relationships with nature and animals. Through this, she encourages that there should be a shift from our hierarchical way of thinking to a more interconnected understanding of nature and the beings that surround us. This highlights her post-anthropocentric view of the world. Haraway explains in her book “Staying with the Trouble: Making Kin in the Chthulucene” that “all our human and other-than-human kin urgently need to make more trouble as a resurgence of life” (Wolfstone, 2019:389). In this she means that making kin is more than the kin we are genealogically related to, but includes the non-human or more-than-human species that we coexist with (Wolfstone, 2019). She believes that this process of “kinmaking” with companion species is what will help humans “attend to the realities of living and dying in the world” (Wolfstone, 2019:391). This will, in turn, begin to address the issues that plague the world due to anthropocentric interference.

In this book, Haraway’s notions of care through the lens of post humanist and post-anthropocentric ideals shine through. The belief that the existence of all beings is intertwined and that it is important to encourage people to care for each other’s well-being, as well as the well-being of all other species permeates her writing. Haraway’s analogy of this concept is in her view of the body as a “knot”, or “an entanglement of connections” (Heinricy, 2009:289). This idea that the body is a system of species and tissues that connect and create the human being mirrors her insistence that all humans and non-human entities are connected and that one cannot function without the other. This is why she encourages care towards other species, in hopes of encouraging people to “make kin” with the non-humans that co-inhabit the world with them.

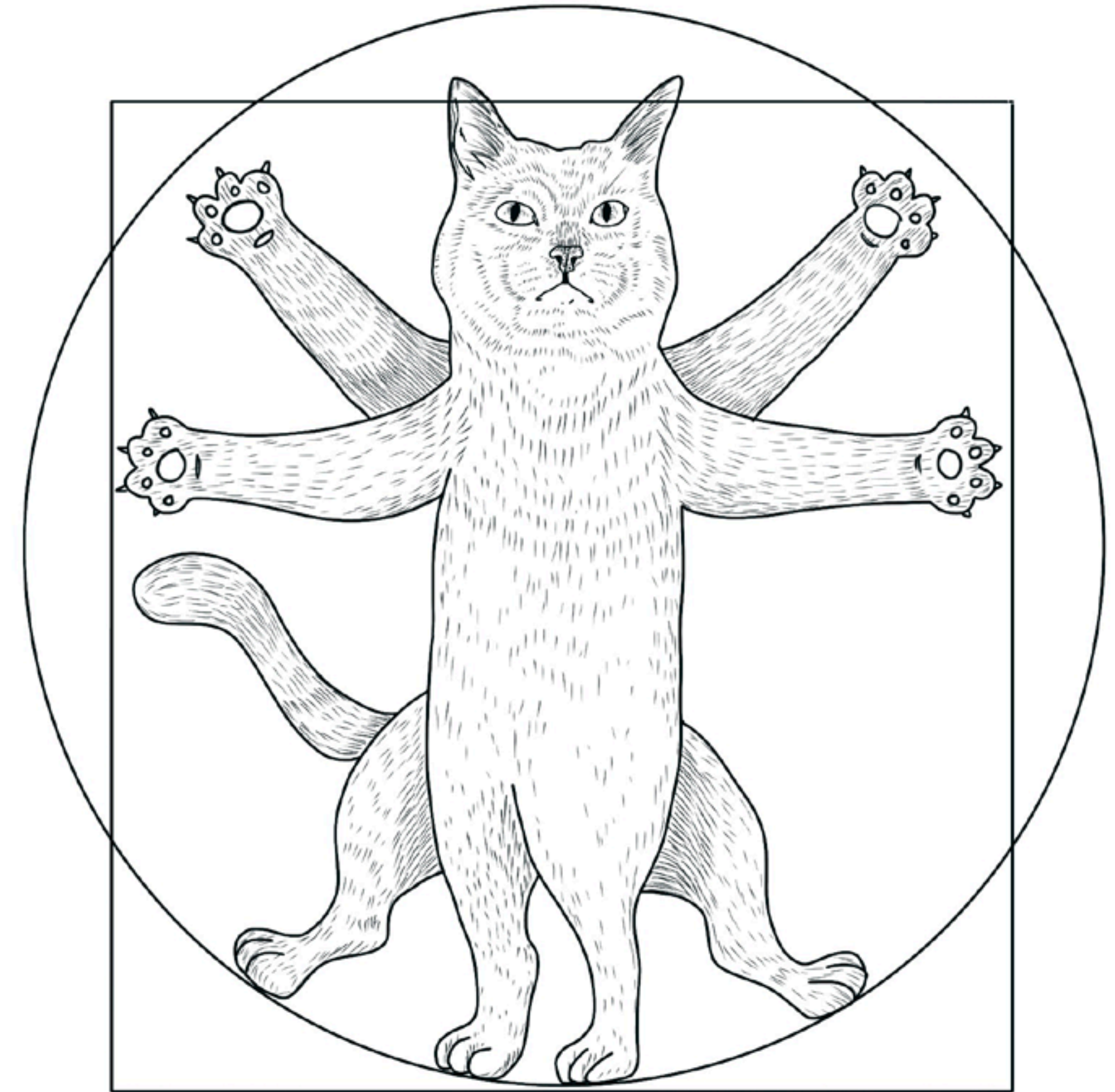


Fig 2.11
Opposite
*The Vitruvian Cat (based
on my sister's cat, Galileo)*
(Author, 2024)

2.2 Posthumanism and Post-anthropocentrism

These concepts are revealed in the thesis through the revitalisation of Braamfontein Cemetery into a centre for interspecies interaction and rehabilitation, striving for a more sustainable relationship between humans and other species. This creates a design that shifts the traditional anthropocentric view and considers a different approach to include design that caters for animal's and nature's needs. This approach advocates for the integration of systemic care practices into the urban fabric, challenging Johannesburg's characteristic harshness (as discussed in chapter 01) by creating spaces imbued with empathy, compassion, and interconnectedness.

This shift towards a more ecologically responsive design aligns with trends in sustainable architecture, where the goal is to foster environments that support biodiversity and coexistence (Whatmore, 2002). By adopting a posthuman and post-anthropocentric lens, the design of my intervention can contribute to a more harmonious and balanced relationship between humans and the natural world – specifically the ecosystem of Braamfontein Cemetery.

Applied to sanctuary design, these concepts encourage the creation of spaces that accommodate the diverse needs of various species within an ecosystem. It calls for the design of environments where the boundaries between human and non-human lives are fluid and mutually supportive. Such designs might include habitats that mimic natural ecosystems, facilitate interspecies communication, and employ adaptive management strategies that respect the autonomy and agency of all inhabitants (Haraway, 2016). Prioritizing interconnectedness, inclusivity, sustainability, and participatory design can help develop spaces that reflect a more equitable and compassionate understanding of our place within the natural and built ecosystem. Embracing these philosophies will be crucial in fostering harmonious relationships between all life forms, allowing humans to heal the damage they have done to the world (Haraway, 2016).

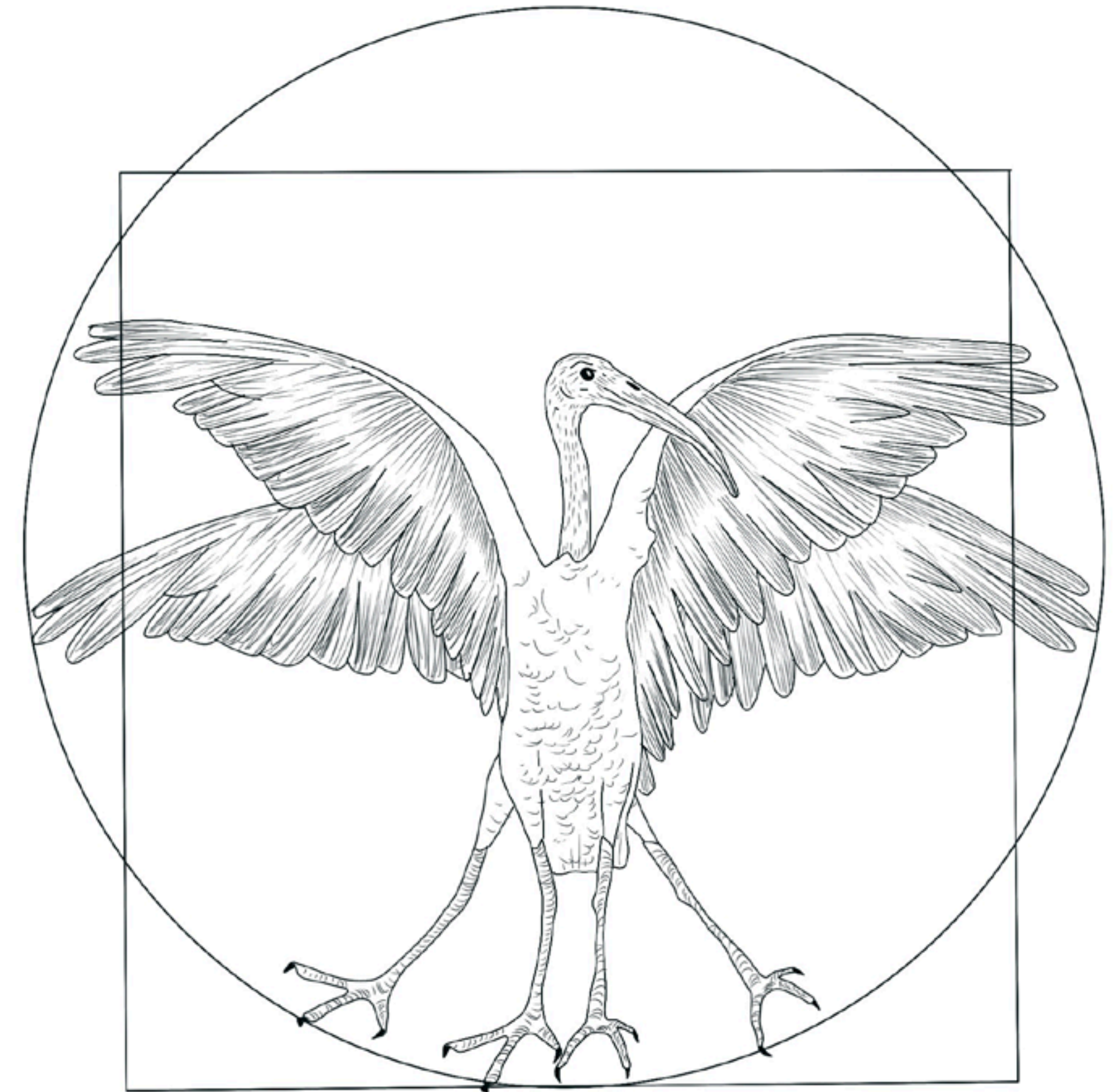


Fig 2.12
Opposite
The Vitruvian Hadedu
(Author, 2024)

2.3 Relational Ecology

"I am a creature of the mud, not the sky." (Haraway, 2008:3)

This quote from Haraway’s book “When Species Meet” embodies the idea that life within our multispecies world is not a “clean, pristine theory of the sky but instead lays in the mud and knots of bodies.” (Heinricy, 2009:287). The “mud and knots” refer to the complex interrelationships between species – human and non-human. This is where the theory of relational ecology comes into my thesis. The connection between humans and non-human species is something that can be highly beneficial and fulfilling for both parties, and so it becomes important when speaking about the idea of escape from the human-oriented way of life.

Relational ecology refers to the relationship between humans and their animal counterparts. It specifically speaks to the interactions between humans and non-human species, usually companion species. Relational ecology “bridges psychodynamically informed theory and an ecological perspective to explain how animals help shape humans' identities and foster well-being.” (Putney, 2013:57).

Literature pertaining to the relationship between dogs and human well-being proved that dogs can prevent and detect illnesses like cancer, as well as provide support in the recovery of illnesses and situations of bad-health such as heart attacks (Putney, 2013). Dogs can also alleviate hardships associated with negative mental health like stress, anxiety and depression. "There is well-documented evidence to show that animal companionship can have significant positive effects on people's emotional, social, psychological, and physical well-being" (Putney, 2013:59 cited Sharkin & Knox, 2003:415).

In a study done on the relationship between elderly queer women and their relationship with their companion animals, it was found that the entire group of participants viewed their animals as beloved family members, and one participant even referred to her animal as her “souldog” (Putney, 2013:63).



Fig 2.13
Opposite
Cats strolling in
the Cemetery
(Author, 2024)

2.3 Relational Ecology

"She is my souldog ... The love that she has given me, and the love that she has taught. I could say I don't deserve that. But I know I do. And the look in her eyes tells me that she's giving me that love, and that I deserve her love ... She's part of me. She makes me more than I am without her, by myself." (Putney, 2013:63)

This passage stood out in this study because the participant speaks about the "love that she [the dog] has taught". This links to Donna Haraway's view of "becoming-with" another species that she mentions in "When Species Meet". In Haraway's case, "becoming-with" her dog was facilitated through the agility training of her dog, whereas with the participant in the study mentioned above, the act of "becoming-with" her dog manifested through the dog teaching her how to love.

The animals in this study also provided these women, that experienced marginalisation and discrimination due to their queerness, with support by helping connect them to parts of the community that they could find solace within. A sense of stability and comfort was also something the animals would exude when the owners went through life-changing events such as the loss of loved ones or diagnosis of a fatal or incurable disease (Putney, 2013).

Caring for their animals came with its challenges, whether financial or time-related, but in the act of caring, the participants found that it "was meaningful in that they needed to attune to something beyond themselves." (Putney, 2013:65). This notion of care of another being bringing meaning into one's life reinforces Haraway's (2008) principle that caring for non-human entities is something that should be intrinsic to human behaviour and brings a larger meaning into human life.



Fig 2.14
Opposite
*Dogs strolling in
the Cemetery*
(Author, 2024)

2.3 Relational Ecology

This compassionate and empathetic bond between human and animal, although evident throughout history, is not something that permeates the western view of animal and human companionship. This view being that humans are superior to animals and must reign over them (Beck, 2014). The animals that supersede this view “force us to re-think notions of humanity, animality, pedagogy, and kinship in ways that will have significant consequences for reconceiving our relationships to the earth, the environment, animals, and 'ourselves'” (Putney, 2013:75 cited Oliver, 2009:22). Through quoting Oliver (2009), Putney (2013) maintains that animals and humans have differences and similarities to humans, but that does not mean that they are any less valuable. It means that humans must critique their relationships with animals in ways that might be uncomfortable (Putney, 2013 cited Oliver, 2009), in order to overcome their own anthropocentric way of living and thinking.

According to Alan M. Beck (2014), the biophilia hypothesis (Kellert and Wilson, 1993) relates to the idea of the human-animal bond. The biophilia hypothesis refers to human's innate interest and admiration for nature and animals. It is in the human instinct to be in awe of the nature that surrounds them, and so humans have an innate sense of care for nature and animals - whether conscious or subconscious (Beck, 2014). I think that throughout the process of the industrialisation and modernisation of the world, humans have strayed away from nature and animals and so have forgotten their instinctive connection to both.

Although humans might have become more disconnected from their ecosystem and the non-human beings that co-inhabit it, “The importance of viewing nature, especially animals, appears to be deep-seeded into the human psyche” (Beck, 2014:34). The author suggests that one’s yearning to own companion pets might be a way of tapping into humanity’s collective attraction to nature.



Fig 2.15
Opposite
*People strolling in
the Cemetery*
(Author, 2024)

2.3 Relational Ecology

But it is not only humans that benefit from interspecies relationships. The companion pet benefits as well. Oxytocin – a pair-bonding hormone released by the brain of all mammals – is released by both the human and the animal when they interact positively. This hormone then creates a feeling of well-being and bonding in the body of both parties, providing a mutually beneficial reaction (Beck, 2014 cited IsHak et al., 2011; Nagasawa et al., 2009; Mitsui et al., 2011; Kis et al., 2014).

Through the domestication of animals, particularly dogs, a deep connection was formed between human and animal. Domestication is “both a physiological and a morphological process” (Beck, 2014:35) and it strengthens the bonding between humans and their companion pets. Due to this mutualistic relationship, humans learned compassion towards animals (albeit mostly just dogs, cats and birds), and the dog learned to read and anticipate a human’s emotions just from viewing their facial expressions and behaviour (Beck, 2014).

As mentioned before and proven through the research provided, humans and companion species benefit from their relationships with each other and, in turn, reap health benefits from it, such as reduced stress, a feeling of companionship, increased compassion and others. It is therefore a need in society to nurture these interrelationships in order to better the lives of both humans and animals. And this is what my intervention strives to do.

I believe that this understanding between dogs and humans that was fostered through evolution (Beck, 2014) reinforces the need to continue to connect and interact with non-human species like Haraway (2016) mentions. Through these interactions, humans could become more in tune to their ecological surroundings and the non-humans included in the exchange could benefit in their own ways, forming a symbiotic relationship that is focused on the mutual benefit of each party, rather than the benefit of solely the human. This theory of relational ecology, and a post-anthropocentric way of being in the world becomes a tool to better humankind.



Fig 2.16
Opposite
Robin
(Author, 2024)

2.4 Conclusions

Through the analysis and understanding of the aforementioned theories, this thesis attempts to transcend conventional boundaries by merging existentialism, posthumanism, post-anthropocentrism and theories of relational ecology into a cohesive design narrative - through an architectural intervention in Braamfontein Cemetery.

By engaging with the idea of existentialism, the cemetery is reconceived not just as a resting place for the dead, but as a dynamic space where life, memory, and death coexist. The architectural intervention seeks to be a medium that fosters personal reflection, allowing individuals to confront the impermanence of memory and existence in order to connect to their own identities and histories.

Moreover, the incorporation of posthumanism and post-anthropocentrism challenges the traditionally human-centric lens through which we perceive our environment. By prioritizing the needs of both human and non-human entities, the design endeavours to create a sanctuary where interspecies interactions are nurtured and where ecological balance is restored. This holistic approach to design, rooted in empathy and sustainability, resonates with contemporary trends in architecture that advocate for a more inclusive and interconnected world.

Finally, relational ecology underscores the importance of the bonds between humans and other species, particularly companion animals. By acknowledging and fostering these connections within the cemetery space, the thesis not only revitalizes a neglected historical site but also contributes to the well-being of its inhabitants — both human and non-human.

Through these layered theoretical frameworks, the Braamfontein Cemetery is transformed from a relic of the past into a living, breathing ecosystem where life, in all its forms, can thrive. This thesis represents a call to reimagine urban spaces not just as physical entities but as complex, interwoven systems of life, memory, and meaning. By doing so, it offers a vision of architecture that is not only functional but deeply philosophical, addressing the fundamental questions of existence, identity, and our place in the world.



Fig 2.17
Opposite
*Strolling in the
Cemetery Triptych*
(Author, 2024)

03

Excavating Histories

As I dove into the historical research of the Braamfontein Cemetery, I fell into a rabbit hole of incredibly interesting information which led me to further engage with the site and its history through the use of my architectural intervention. When dealing with a historically sensitive site like the Braamfontein Cemetery, it is important to understand the history of the site to uncover the historical and cultural value the site might hold.

- A Cemetery Unnoticed [3.1]
- A Racist Cemetery [3.2]
- A Western Cemetery [3.3]
- A Tragic Cemetery [3.4]
- An Ordinary Cemetery [3.5]
- An Archive within the City [3.6]
- An Active Cemetery [3.7]
- Atmospheric Experience [3.8]



3.1 A Cemetery Unnoticed

The Braamfontein cemetery has stood for over 130 years but has remained, for most, “as little other than a void in [their] urban consciousness.” (Charlton, 2017:14). It is a baffling thought that the cemetery is unknown to so many when it’s been around for so long, seen so much of, and literally contains Johannesburg’s history. The cemetery is wedged between WITS campus, student accommodation, a group of lofts and the railways that separate the north of the city from the south. Due to the placement of the railways, there is very little activity on the southern border of the cemetery.

The entrance to the cemetery on the eastern edge, as mentioned in chapter 01, is inconspicuous, one cannot accidentally stumble upon it but must actively be looking for it to find it because it resides on a small, dodgy dead-end street right next to the M1 highway. On the western edge there is a canalised ‘spruit’ or small river that completely separates the lofts placed there from the cemetery grounds. On the northern boundary the cemetery appears as a grassy park, but people rarely visit it. I believe this is because Enoch Sontonga Avenue is not a very active road and since WITS is across the road, most people passing by notice the campus more often than the cemetery. Sturrock Park and its sports fields sit adjacent to WITS almost mimicking the grassy portion of the cemetery on Enoch Sontonga Avenue reinforcing the indifference in the minds of people passing by. For these reasons, the cemetery remains a void in the minds of Joburgers.

Fig 3.1
Previous
*White Christian Graves
of the Cemetery*
(Author, 2024)

Fig 3.2
Opposite
*A gravestone in the
process of being
refurbished*
(Author, 2024)



3.2 A Racist Cemetery

Cemetery land was allocated by the City Council in 1886. In 1888, burials started to be administered by the Johannesburg Sanitary Board (Dennie, 1997: 26-27). In 1909, the cemetery became known as the Braamfontein Cemetery. The crematorium was built in 1888 and is still in operation today performing cremations as much as twice a day. The columbarium surrounding the crematorium are also active, with visitors coming to pay their respects to those they have lost. Contrarily, the rest of the cemetery is passive, meaning there are no longer burials being performed due to a lack of space. From 1886 to 1896, both black and white people were buried in the same soil, but not only that, they sometimes attended funerals together and even mourned together in their time of grief. That all changed by 1906, the cemetery authorities transformed the cemetery from a “democracy of death” to a “hierarchy of death” through the segregation of people according to race and religion within the cemetery (Dennie, 2009:313). Integrated burial grounds became non-existent and now people’s loved ones were being buried according to their religious beliefs, nationality, and their race.

The southern part of the cemetery was used for the ‘Dutch Reformed’, Nonconformist’, ‘Roman Catholic’ and ‘Church of England’ – while the northern part was used for other ‘faiths’ like Chinese, Coloured, Muslim, Black and “Christian” black people, “exposing the fiction that it was about religion at all. It was, of course, about race.” (Gevisser, 2014).

This segregation and subdivision of the cemetery became the start of a dark history for the Braamfontein Cemetery. From then on, "City Council sought to create and reinforce the image of the African as alien in Braamfontein Cemetery" (Dennie, 1997:63). For instance, trees were planted between the “Black” and “White” parts of the cemetery to shield the view of black people mourning from the eyes of their white counterparts. These trees still reside in the cemetery today. The Jewish section of the cemetery also becomes a “figurative ‘buffer’ between black and white” (Charlton, 2017:24), much like how the railway lines act as a buffer between the north and south of the city – which were historically inhabited by white people and black people respectively. Since it is fenced off, it completely separates the cemetery down the middle, creating a disconnect between the more formal graves of the historical white people of Johannesburg and the other non-white races.

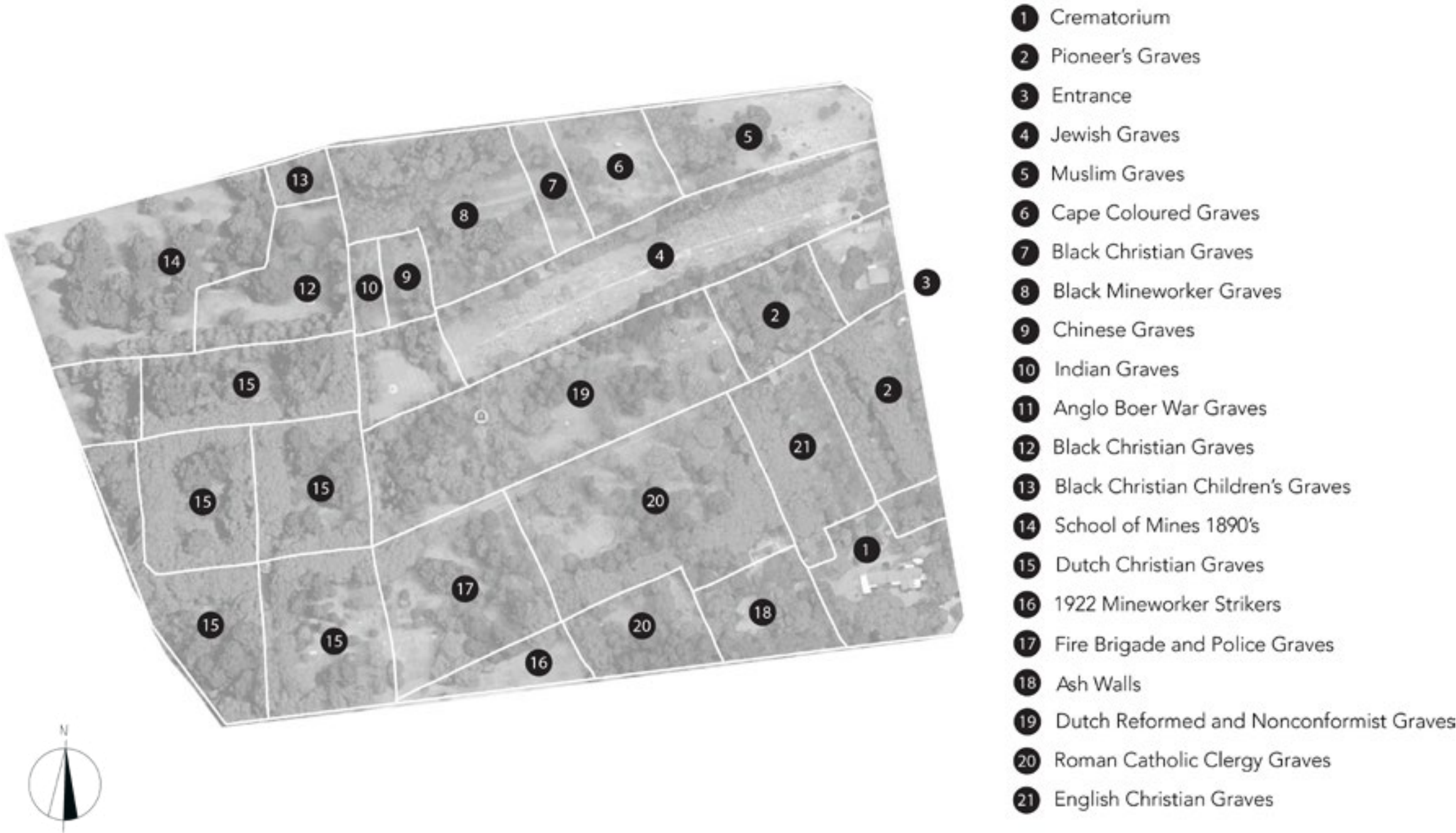


Fig 3.3
Opposite
Map of Braam Cemetery
Grave Sections
(Author, 2024, after
Google Earth, 2024)

3.3 A Western Cemetery

The cemetery’s design was heavily influenced by western culture – specifically European. This is because of the influence of the colonial powers at the time the cemetery was being created. Things like gardens were designed and planted on the “White” side of the cemetery in hopes of creating a peaceful “place of refuge from the noise and clutter of Johannesburg's urban sprawl”, while the black side of the cemetery was described as a “slum of the dead” by Ebenezer Congregational Church (Dennie, 1997:93, 109). The idea that the cemetery was planted to create a place of refuge from the business of the city closely relates to the proposal mentioned at the start of this thesis. The cemetery was once a refuge from the city – albeit for white mourners – so I believe it can be made into a refuge again, for all forms of life.

This increasing westernisation persists into present day, bringing along its own sets of issues (Himmel, 2017:7). This can be seen in the sectarian design that the cemetery embodies, the trees planted so long ago that separate the white and black parts of the cemetery, and through the juxtaposition between the “forest of commemoration” (Gevisser, 2014:79) on the white side and the emptiness and bare grassy earth on the black side. With this in mind, bringing in an aspect to the cemetery that opposes these western routes within the architectural design could be an interesting contrast to the existing cemetery and its history.



Fig 3.4
Opposite Top
Black Section of Cemetery
(Author, 2024)

Fig 3.5
Opposite Bottom
White Section of Cemetery
(Author, 2024)

3.4 A Tragic Cemetery

The Braamfontein Cemetery houses many monuments and memorials dedicated to significant events in South Africa’s history, such as the 1922 Rand Revolt – where miners protested for their rights – the 1896 Braamfontein station explosion (Ahnje, 2017), several mining disasters, the Anglo Boer War and both World Wars (Rodonakis, 2022). The Jewish section of the cemetery is home to a holocaust memorial where people come to pay respects to Jews lost during the second World War.

The memorial that I find myself most interested in, is the Enoch Sontonga Memorial. The memorial consists of a large, engraved granite block that was laid by Nelson Mandela in 1996 to mark the remains of Enoch Sontonga – which were found by Alan Buff after teaming up with WITS to facilitate an archaeological dig (City of Johannesburg, 2019b). Sontonga is the composer of South Africa’s national anthem, Nkosi Sikelel ’iAfrika (Gevisser, 2021:79) and his remains, as well as the graves of approximately 12 000 other black South Africans (Mchunu, 2014:3), occupy this northern edge of grassland in the Braamfontein Cemetery.

The monumental granite block lies at the centre of what would have been the black burial section of the cemetery, and also commemorates the lost lives of black migrant miners that were dumped into unmarked graves. The "remains of dead miners never returned home, leaving them eternal migrants in the afterworld" (Gevisser, 2012:80). The reason for this was because the families of miners could not afford to transport their bodies back to their homes, nor were they able to afford gravestones. So, they would mark the graves using wooden crosses that eroded and decomposed overtime, leaving absolutely no trace of the graves of these miners. (Gevisser, 2012:80).



Fig 3.6
Opposite
Enoch Sontonga Memorial
(Author, 2024)

3.4 A Tragic Cemetery

A truly traumatic event that is also marked by the Enoch Sontonga memorial is the removal and digging up of the black and coloured sections of the cemetery to make way for park land (Rodonakis, 2022:9). A truly diabolical act reinforcing the idea that City Council wanted to alienate black Africans on their own land.

The Enoch Sontonga Memorial is not the only one in the cemetery that commemorates an unmarked mass grave. The 1922 Rand Revolt memorial on the site honours the lives lost during the Rand Revolt battle. The battle was fought on what is now the southern boundary of the site – along Smit Street – and resulted in countless deaths. Several victims of the battle were buried in a mass grave on this southern boundary. Today, this section of the cemetery simply looks empty save for the trees and grass growing from the soil. This is due to the fact that “in the early 1970s, the city council covered much of the long-disused cemetery with a metre of soil, and grassed it over, hiding all traces of the older graves.” (SouthAfrica.info, 2011).

The Braamfontein Cemetery is truly a "palimpsest of the history of Johannesburg" (Rodonakis,2022:3) where history has been brought to the foreground, suppressed by those in power, erased, and overwritten with a thick layer of soil and grass. The edges of the cemetery house an incredible amount of turmoil, as explained above, while the center – and white – sections of the cemetery have remained the same save for the weathering of gravestones and vandalism of the columbarium. This shows the traces of power that have been historically inscribed onto the site, making the site a visual memory of the racial conflict that was suffered in Johannesburg.

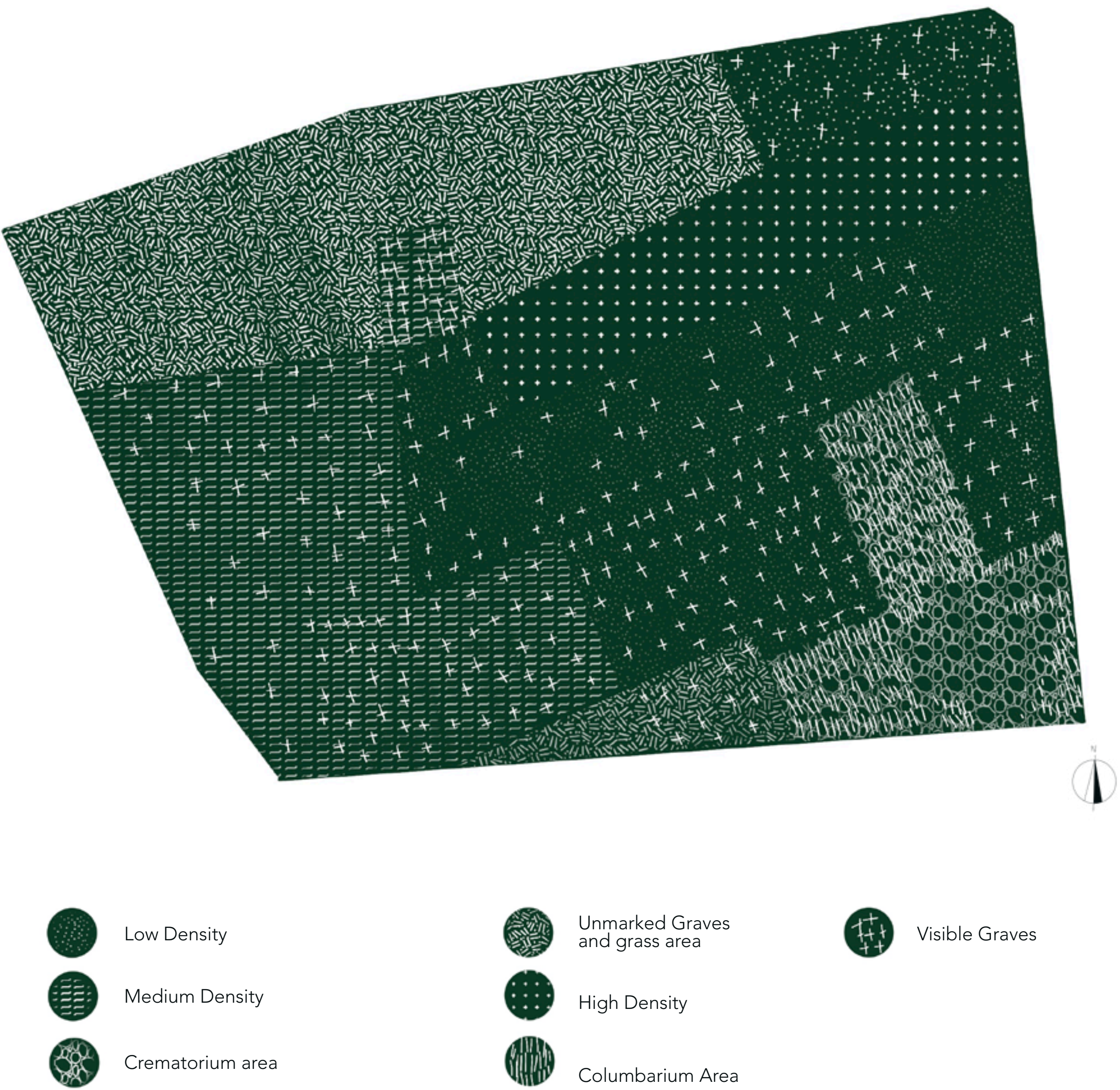


Fig 3.7
Opposite
Density Map of
Braam Cemetery
(Author, 2024)

3.5 An Ordinary Cemetery

Though the Braamfontein cemetery is home to well-known graves, famous tragedies and significant events, it is also a home for all the ordinary people buried there. Preserved within the soil are the private histories of regular people whose stories remain silent. There is a beautiful poignancy to this, even though many are long gone, their memory could be excavated by anyone interested enough to put in the effort.

This notion can be seen in “The Story of ‘Grannie’s Grave’ in Braamfontein Cemetery” (Johannesburg Heritage Foundation, 2024). In this story, a volunteer that helps take care of the cemetery stumbled upon a grave with a name that they found intriguing – ‘Grannie’. All that was part of the inscription on the grave was the name, the date of birth, and the date of her death. After part of an afternoon spent looking through the registers of the cemetery, they finally found the full name of the woman buried in ‘Grannie’s’ grave – Eliza Julia Smith.

Once they had found her name, the rest of Eliza’s story was easy to find through some research. What was found was that she was part of an important and wealthy family within South Africa, but other than that, Eliza lived her life ordinarily. She married, had children, her children had their own children, she moved to a different part of the country after losing her husband and she wrote her own will.

“Ellen to have my dear little dog Aleck’s photograph. My knitting needles and books divided among Alice, Minnie and Enid if they care to have them, the rest of my belongings that would not be of use to any one might be given to a Jumble Sale.” (Johannesburg Heritage Foundation, 2024).

In her will, she also instructed that she be buried with the “very simplest Cross standing only on one step with the word ‘Grannie’ on it & [her] age. No text or words of any kind besides.” (Johannesburg Heritage Foundation, 2024). This explained the name and lack of inscriptions on the grave. A story and history of a life was revealed.

This is but one life of the many buried in Braamfontein Cemetery. Some have interesting, chaotic histories and lives, while others lived mundane and predictable lives – neither existing with more value than the other. Whether their histories are dug up by the people that visit the cemetery or not is up to fate and circumstance. There is an existential peacefulness to the idea that some stories will be found out while others will be left to rest along with the deceased that slumber under the soil.



Fig 3.8
Opposite
Main Road of the
Cemetery
(Author, 2024)

3.6 An Archive within the City

The Braamfontein Cemetery can be seen as an archive within the City of Johannesburg. It is filled with the stories of every person buried there – whether silent or revealed as mentioned previously. This creates a collection of memories and significant events that make up the history of the city. By delving into the stories of the past, one can make connections with the society of the present, and form a deeper connection with their own cultural identity (Fauske, 2023).

A most interesting story ‘archived’ within the Braamfontein cemetery is the story of the Foster gang. Made up of William Foster, Jack Maxim and Carl Mezar, the gang was guilty of a string of robberies, as well as, the murder of a detective. Due to their actions nine people died because of them, whether directly or indirectly.

They were able to evade the police for months in 1914 and quickly became the head of a full-on police chase. Roadblocks were situated across Johannesburg in hopes of catching the three criminals. Two innocent people got caught in the crossfire during this chase, losing their lives to the bullets of police guns too hastily fired. Their names were Dr Gerald Grace and General de la Rey – an Anglo-Boer War general.

While the police were frantically searching for the gang, Foster, Maxim and Mezar had made a seemingly perfect hideout within a small cave. Stacked with food and drinks, they thought they would be able to evade the police for even longer. They were shortly found after police dogs had sniffed out their hideout and a stakeout had begun.

Rather than giving themselves up to the police, the three decided to commit suicide. Mezar went first, Maxim went second, and Foster refused to go through with it until he saw his family. With permission from the police, Foster’s family along with his wife Peggy were allowed into the cave to see Foster. After a while, the family trickled out of the cave, all but Peggy. Two shots were fired, and that was the end of William and Peggy Foster – who had decided to die with her husband, leaving their young baby behind.

Fig 3.9
Opposite left
The Grave of Valliammal Munusamy
(Author, 2024)

Fig 3.10
Opposite right
Enscription on Munusamy’s Headstone
(Author, 2024)



3.6 An Archive within the City

An Inspector working on the case felt immense guilt due to the deaths that had occurred and felt that it was his fault. This drove him to suicide as well, marking the end of the Foster Gang string of deaths.

“The Foster Gang and Peggy are buried at the Braamfontein Cemetery. Peggy and Foster are buried in the same grave, alongside Mezar, and next to the 1922 Miners’ Strike graves. John Maxim is buried in the general section.” (City of Johannesburg, 2019a). Unfortunately, these graves remained unmarked and covered by a large bush so this story becomes inaccessible to those that visit the cemetery. Maybe in addition to the architectural scheme, markers can be placed throughout the cemetery that can be digitally scanned to access the stories of the people that reside in the cemetery. This would allow visitors to connect with the residents of the cemetery and may prompt reflection on their own lives and identity.

There have also been remains that have been removed from the cemetery and then, years later, returned to their original resting place, like the Ottoman Empire Diplomat Mehmet Remzi Bey. Mehmet Remzi Bey served with distinction at the Ottoman diplomatic missions in various countries and was appointed Consul-General to South Africa in Johannesburg in 1914 (Kandas, 2022). In 1916, he died after serving detention for his actions and was buried in the Muslim Section of the Braamfontein Cemetery.

His remains were then removed and placed at the Midrand Mosque for 106 years until, by order of the Pretoria High Court, he was exhumed from the Midrand Mosque and placed back into the Braamfontein Cemetery – his original resting place. “Ambassador Kandaş emphasised... his legacy as a bond of friendship between Turkey and South Africa.”, and a tombstone was built to keep his legacy alive (Kandas, 2022). This demonstrates that the cemetery continues to be home to historical events, raising the question of what future discoveries could contribute to its already extensive past.



Fig 3.11
Opposite
Braam Cemetery Ash Walls
(Author, 2024)

3.7 An Active Cemetery

Unfortunately, the Braamfontein Cemetery falls victim to vandalism more often than not. The "copper number plates on the tombs had been pillaged" in the Jewish section of the cemetery about decade ago to be sold in order to obtain some money (Gevisser, 2012:72). One of the more recent incidents, in 2023, with vandalism involved the "marble and granite plaques [being] taken off the [ash] walls and smashed on the floor" (Mafisa, 2023). These ash walls contain the remains of almost 4000 people. The actions performed by these vandals is truly the epitome of disrespect as there was no evidence that anything was stolen, so one can deduce that the reason for the vandalism was purely a desire to destroy.

The Friends of the Cemeteries – a moderately established group of volunteers that takes care of cemeteries across Gauteng – has appealed to the City of Johannesburg to upgrade security at the Braamfontein Cemetery because of this vandalism. The fencing around the cemetery has also been stolen in many places, leaving the cemetery open for anyone to waltz into, especially on the northern side off Enoch Sontonga Avenue.

Without the volunteers from Friends of Cemeteries, the Braamfontein Cemetery would be completely derelict. They have worked hard to put back together broken gravestones, fix the name plates and secure them back onto the ash walls, and neaten up the cemetery as a whole. But all their efforts where in vain after another vandalism was performed on the ash walls – that had just taken a year to fix – in July this year (2024).

Bringing a sense of safety to the cemetery would be a very valuable gift to Friends of Cemeteries, as well as anyone who comes to visit the cemetery.



Fig 3.12
1st Opposite
Vandalism of Ash Walls
(Welham, July 2024)

Fig 3.13
2nd Opposite
Vandalism of Columbarium
(Welham, July 2024)

3.7 An Active Cemetery

Thankfully, along with the negative comes positive. Sometimes on weekends, the Joburg Sketchers come to the cemetery to sit and draw some of the beautiful gravestones, statues and scenery within the cemetery. Their drawings are then posted onto several social media platforms which provide a sort of advertisement for the cemetery – this could help people take notice of the cemetery.

On June 16, 2010 there was a “gathering of youth on a cold morning at Braamfontein Cemetery, in Johannesburg, at the gravesides of Valliammal and Nagappen.” (Anon, 2010). The purpose of this gathering was to pay homage to Valliammal Munsamy, Swami Nagappen (1914) and Hector Peterson (1976), who all gave their lives to fight oppression in their respective eras.

The youth, along with the chaperones, laid wreaths on the graves of Valliammal and Nagappen. Children from the Aryan Benevolent Home in Lenasia also sang the South African national anthem at the Enoch Sontonga Memorial where Enoch Sontonga’s remains reside, creating a poetic moment since Sontonga wrote the national anthem (Anon, 2010).

Even though the cemetery is usually empty – especially during the week – there are still activities that take place on the grounds – good and bad as described. But most of the city’s citizens still remain aloof towards it. It is a shame that a place so rich in history, ecology and beauty remains so hidden and neglected.



Fig 3.14
Opposite
Headstones get a Wash
(Author, 2024, after
Gatland, 2023)

3.8 Atmospheric Experience

The main entrance of the cemetery is quite grand and situated further into the actual cemetery, not on the street edge. In this building is the security and admin offices where the registers of the cemetery are kept. Thereafter, the topography slopes slightly downwards towards the far northern corner of the property. It draws one into the cemetery where one can get lost looking at the peaceful scenery and intriguing gravestones.

The layout of the Dutch and English part of the cemetery is more spread out, allowing one to wander between graves and marvel at the grand trees that line the avenue that runs down into the cemetery. Contrastingly, the Jewish section of the cemetery has its gravestones very close together, and the entire section is fenced off within the cemetery and almost completely screened off by trees, bushes, and shrubs. The Jewish and Muslim graveyards also have their own entrances on Graf Street.

Gevisser (2012) paints a wonderful picture of the Jewish section of the cemetery with his words in his book "Lost and Found in Johannesburg":

"It swept up the gentle rise of the cemetery in its own gentle arc, the tombstones so close together that they appeared, as you looked up along them towards the setting sun burning peach and violet into the thunderclouds, to be cobblestones of the dead along some eternal avenue." (p.72)

The cemetery contains yet another contrasting section that creates a striking difference once you've moved from the white and Jewish sections of the cemetery. Gevisser (2012:79) describes the Jewish section as being a "forest of commemoration" of the Jewish community in Johannesburg, whereas the black section of the cemetery has no sign of gravestones, only "grassy fields, a few derelict mounds and a forest of blue gums" (Gevisser, 2012:69).

The psychological feeling going from one side of the cemetery to the other starts with a feeling of serenity and then transforms into a feeling of eeriness and sadness once you make your way to the seemingly empty black section of the cemetery. The psyche feeds one's experience in the cemetery – the empty part of the site feels eery whether one knows the history or not, simply because of the drastic contrast between the marked graves and the unmarked graves.

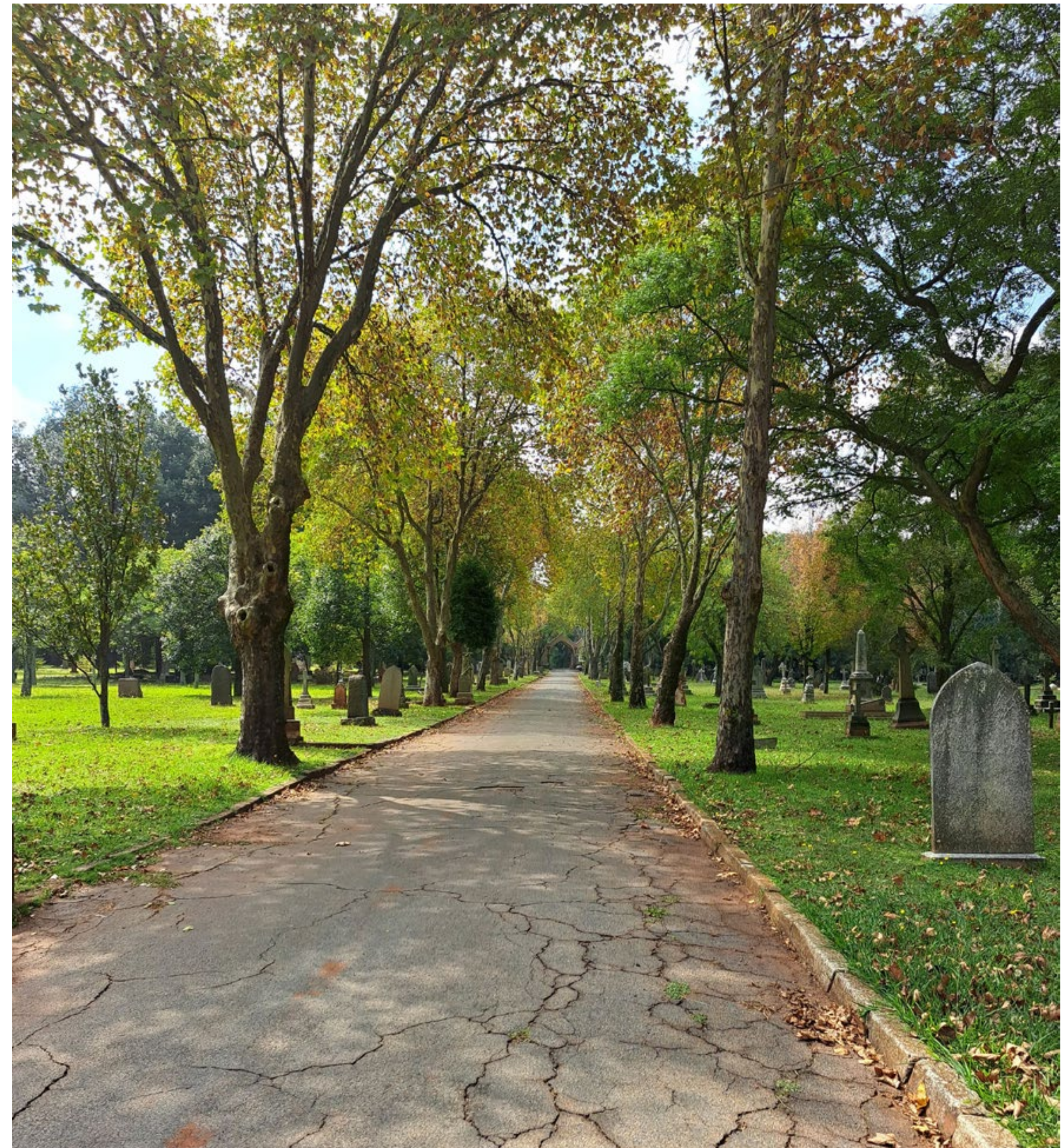


Fig 3.15
Opposite
Braam Cemetery
Entrance Road
(Author, 2024)

3.8 Atmospheric Experience

The Jewish and Chinese section of the cemetery are well taken care of by their respective communities. In their cultures, the dead are incredibly important, and keeping the surroundings of the graves respectable is something that they hold at a high esteem. For instance, one will often see flowers placed on the graves in the Chinese section, and the Jewish community put up the fence around the Jewish section to keep the graves from being vandalised (Gevisser, 2012). This contrasts to the other parts of the cemetery that have been neglected and forgotten, such as the black and coloured sections.

A sense of existentialism permeates the cemetery. It invites one to think about death and the briefness of life. It makes you think about your loved ones and their lives. It is an almost melancholy feeling for me, but when I look at the beautifully carved statues of angels atop some of the headstones and see the wondrous trees that filter dappled light throughout the site, when I smell the scent of leaves and grass and hear the rustling of leaves in the wind, when I watch the chirping birds and spot interesting bugs buzzing around in the air, and when I smell the flowers and blow the dandelions apart to see their seeds float in the breeze, I feel at peace and that melancholic feeling dissipates. I think the cemetery should be a place that everyone needs to go to see at least once, it is just too mystical to pass up.

As discussed in this chapter, the Braamfontein Cemetery, with its rich history and deeply ingrained social and cultural complexities, stands as a neglected yet powerful testament to Johannesburg's past. Despite its historical significance and potential to be a place of reflection and reverence, it remains overlooked and underappreciated. The cemetery's stark contrasts — between the cared-for and the forgotten, the marked and the unmarked — mirror the divisions and traumas of the city it has served for over a century. Reviving this space, not just as a green space but as an active and inclusive part of the urban fabric, could transform it from a forgotten void into a meaningful archive of memory and identity. The cemetery offers an opportunity to confront the past, connect with the present, and contemplate the future, making it a place where history and life converge, inviting all who visit to engage with its stories and find peace amidst the echoes of Johannesburg's complex legacy.

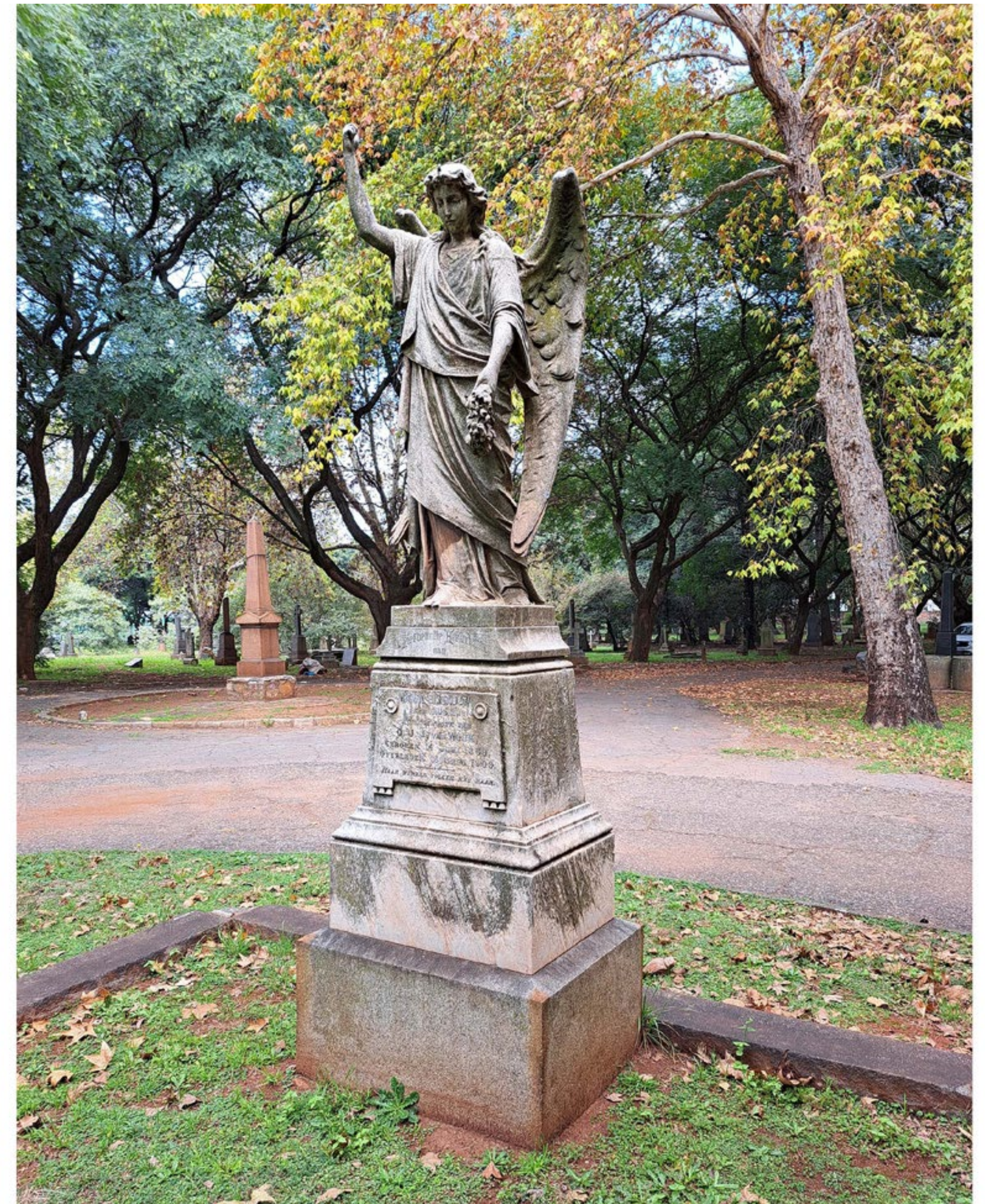


Fig 3.16
Opposite
Stone Angel Headstone
(Author, 2024)

04

Guardians of the City

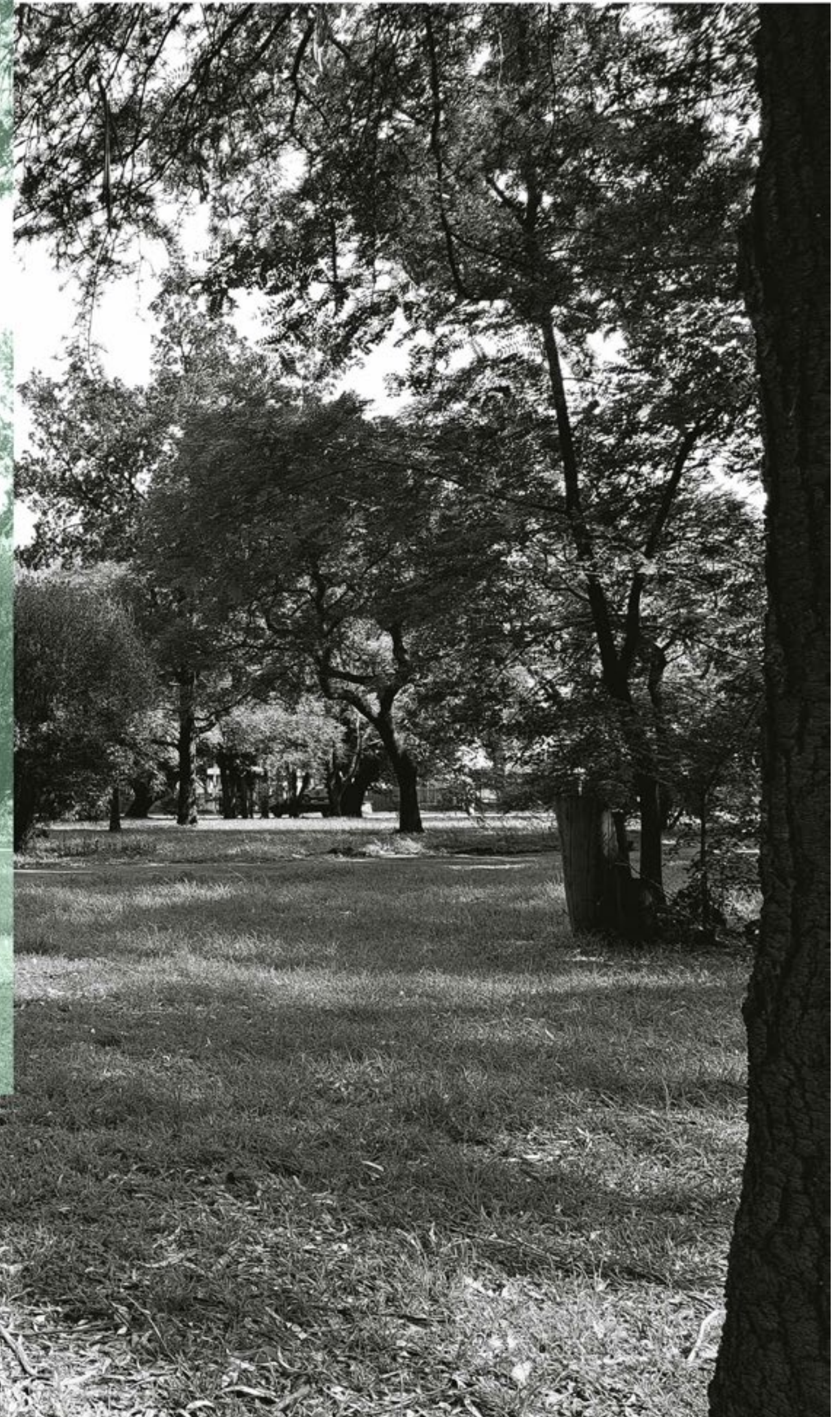
“There are more than three times as many of them as there are of us. Some are youngsters but are already taller than most of us. Many are older than we are yet they will outlive us. Some grew here by accident, many were planned. Some have ancestors across the world, others became memorials for our ancestors, gave us meeting places, cooled us down or soothed our souls. They are our green canopy, the millions of trees of Joburg.” (Flanagan, 2012)

The Trees of Johannesburg [4.1]

The Trees of the Cemetery [4.2]

Beings of the Cemetery [4.3]

Conclusions [4.4]



4.1 The Trees of Johannesburg

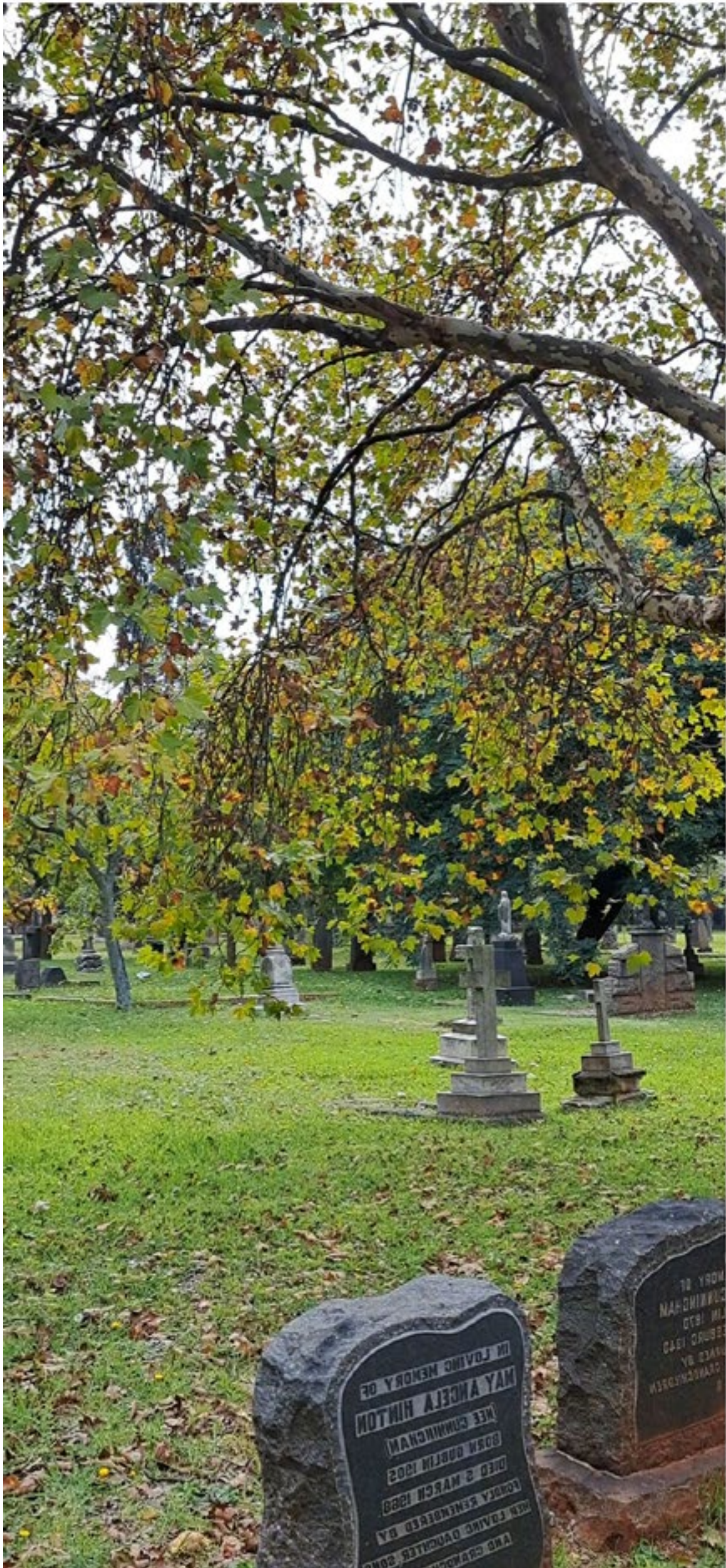
Johannesburg is home to a diverse array of trees that have their origins in many parts of the world. The suburbs are densely filled with trees, bringing a sense of peacefulness to environment for the residents. The Jacaranda tree, although an alien plant that is a pest within this country because of its tendency to slurp up all the ground water and leave the surrounding plants thirsty, is "[exempt] from prosecution in our suburbs because they predate the law" (Flanagan, 2012).

This is a fact for many of the trees in Johannesburg. They have been around for most of the history of the city. "A lot of history is made under trees," says Buff." (Flanagan, 2012), therefore it is important to preserve them to keep Johannesburg's cultural identity alive. Buff goes on to say that "trees are a living memory of the past and the future" (Flanagan, 2012) because they have been here before us and will continue to live on after we're gone. Trees also form homes for many animals and insects that make up the diverse ecosystem of Johannesburg. They are an incredibly valuable addition to the city and the lives of its dwellers. Trees "brings biodiversity, insects, birds, movement, smell, beauty, carbon offsets, tranquillity, air filtration, rainwater absorption and even health benefits because they clean the air and absorb dust." (Flanagan, 2012).

Although Johannesburg is densely populated with trees in the suburbs, in the city centre it's a different story. Dominated by buildings and tarmac roads, the city is scattered with few trees, leaving it dusty, polluted and unpleasant. This is why this thesis strives to create a usable green space out of the Braamfontein cemetery, to bring peace and tranquillity to the residents of the inner city.

Fig 4.1
Previous
Bluegums in the Cemetery
(Author, 2024)

Fig 4.2
Opposite
London Plane canopy above gravestones
(Author, 2024)



4.2 The Trees of the Cemetery

"Trees are a living memory of the past and the future," says Buff" (Flanagan, 2012).

The cemetery is beautifully wooded. With a few grass patches free of trees that bask in the sun, the rest of the cemetery becomes a woodland forest of dappled light falling onto intricately carved headstones and statues. The rustling of leaves and chirping of birds fills one’s ears when wandering through the cemetery. The cemetery stands as a complete opposite to the surrounding city, creating a place of escape and refuge to anyone that happens to visit it. This contrast makes it “all the more desirable to inhabit” (Mchunu, 2014:25).

A Belhambra planted in the 1920’s sits at the entrance of the cemetery and “shades Braamfontein mourners" (Flanagan, 2012), while the avenues are lined with grand pin oaks and mature London plane trees (Rodonkanakis, 2022; Gevisser, 2014). But the most significant tree within the cemetery is the blue-gum.

The majestic and tall blue-gums are found mostly in the northern sections of the cemetery sinking their roots into the unmarked black and coloured gravesites of the cemetery. These trees hold traces of power and a significant cultural value in the context of the cemetery. Planted by the City of Johannesburg a century ago, blue-gums were placed on the border between the black and white gravesites (Dennie, 1997) in order to “screen their messy affairs from the white burial park beyond” (Gevisser, 2014:80), further separating the cemetery in terms of race and reinforcing the cemetery’s racist past.

These blue-gums became part of a cultural tradition for the black mourners of the cemetery. The mourners would pick the fragrant branches of the eucalyptus trees and place them atop of their loved one’s graves (Gevisser, 2014; Dennie, 1997; Flanagan 2012). Some of these trees were felled during the battles that occurred on the site, and by the City of Johannesburg throughout the years, but many still remain (Gevisser, 2014; Flanagan, 2012). This tradition survives today, as it is believed that the blue-gum branches keep evil spirits at bay (Gevisser, 2014).



Blue Gum or Eucalyptus



Jacaranda



London Plane



Pine

Fig 4.3
Opposite
Drawing of trees found
in Braam Cemetery
(Author, 2024)

4.2 The Trees of the Cemetery

These blue-gums represent a paradoxical interplay of power in the city’s history, where an act by those in power was transformed into a thoughtful tradition by those oppressed. The blue-gums stand tall in the northern part of the cemetery marking the lives of black South Africans that were lost during the conception of Johannesburg. These trees also mark the School of Mines and the mineworkers that lost their lives to mining disasters, quite poetic since the wood of blue gums were used as props in the mines of early Johannesburg.

The image of these trees creating traces of history within the site and protecting those who slumber in their graves provides an opportunity to bring the symbolism of these trees into the architectural design. Lightweight timber materials and lifted buildings that form a canopy speak to the nature of the wooded site and sensitively interact with the earth that preserves Johannesburg’s heavy history.



Fig 4.4
Opposite
Bluegum Bark
(Author, 2024)

4.3 The Beings of the Cemetery

The cemetery can be seen as an ecosystem of ecosystems. The trees themselves form their own complex ecosystems of insects, birds, bacteria, mosses and fungi, while the cemetery houses each and every tree forming a large interrelated ecosystem of living beings.

The flora that forms part of the cemetery is made up largely of trees and grasses, with some weeds, shrubs and smaller bushes scattered throughout. The smaller shrubs and bushes seem accumulated around the fence of the Jewish section of the cemetery, it allows for them to attach to the fence and grow along it. The trees consist of oaks, London planes, blue-gums (as mention before), jacarandas and more; each attracting their own species of birdlife. The trees offer a peaceful and cool atmosphere for the visitors of the cemetery, buffering the noise of the M1 highway (Leuta, 2017) and filling the air with soft rustling sounds as the breeze gently pushes the leaves on the trees. Jacaranda trees, characteristically known for their indigo-coloured flowers, populate the floor of the cemetery with a carpet of purple in the months of Spring, painting the cemetery with a whimsical and magical aura. Dandelions are scattered across the gravesites, swaying in the wind, creating spots of bright yellow in between the green grass that grows abundantly throughout the cemetery.

Insects thrive in the woodland nature of the cemetery, with dragonflies perching themselves onto the gravestones, while butterflies flutter around the dandelions. Spiders can find cervices in the tree bark or on carved headstones to weave their webs and catch their prey. They feast on the large number of small flies and gnats that swarm around moist tree branches. Guineafowl prowl through the northern, grassy areas of the cemetery looking for insects and worms hiding in the earth, competing with hadeda's that are doing the same. Turtledoves and pigeons wander from the city into the cemetery and perch themselves in the trees to build their nests and find rest. Weavers and sparrows also inhabit the trees – a perfect place for them to nest and lay their eggs in the months of Spring.



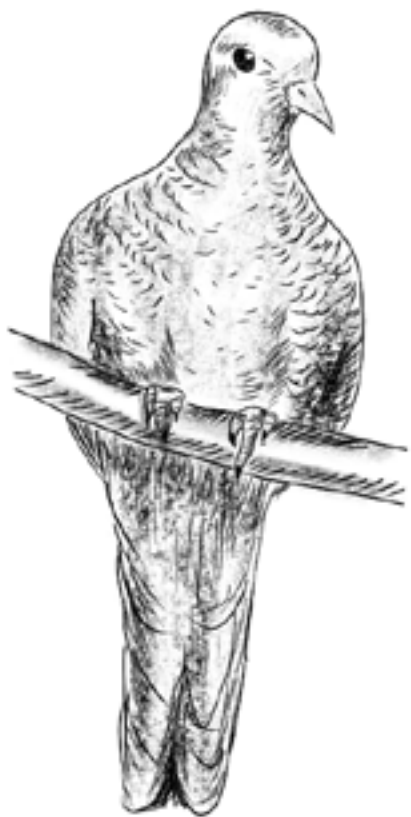
Hadedda Ibis



Guinea Fowl



Cape Sparrow



Turtle Dove

Fig 4.5
Opposite
*Drawing of birds found
in Braam Cemetery*
(Author, 2024)

4.3 The Beings of the Cemetery

Every fungus, plant, tree, insect, arachnid, and bird form a living ecosystem within the cemetery, each depending on each other in a circle of life. The plants and trees rely on the soil in the earth for much needed nutrients and minerals, the insect relies on the plant or fungi for food and shelter, the birds and arachnids then eat the insects keeping the insect population controlled while sustaining themselves, and the trees form a home and protection for them all.

Anna Tsing, in her book “The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins” (2015), speaks about this notion of multispecies entanglements, emphasizing how humans, animals, plants, fungi, and other organisms coexist and interact in complex, interdependent ways – just as illustrated above in the context of Braamfontein cemetery. Her ideals align with that of post-anthropocentrism (see chapter 02) as she advocates for decentring the human from ecological and social systems, and instead calls for a more nuanced understanding of how life-forms shape and are shaped by their environments. (Tsing, 2015). Tsing emphasises the agency of non-human entities – linking also to posthumanism (chapter 02) – and the importance of acknowledging the interconnectedness of all species. She argues for an appreciation of these entanglements, suggesting that recognizing the agency of non-human life forms can lead to a more ethical and sustainable way of living in the world (Tsing, 2015).



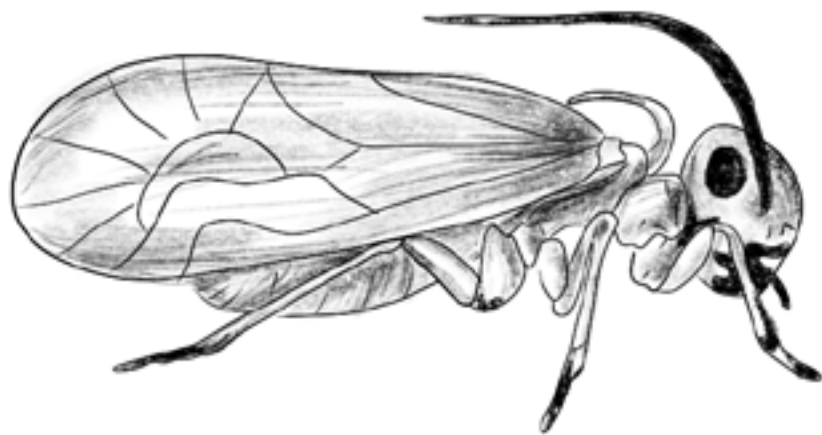
Dragonfly



Honey Bee



Butterfly



Barklice

Fig 4.6
Opposite
Drawing of Insects found
in Braam Cemetery
(Author, 2024)

4.4 Conclusions

The Braamfontein Cemetery stands as a living testament of the intricate interplay between nature, culture, and history in Johannesburg. The cemetery's rich canopy of trees offers a serene refuge amidst the city's urban sprawl while also serving as a living memory of Johannesburg's past. From the symbolic blue-gums, which transformed from tools of segregation into emblems of cultural resilience, to the myriad of ecosystems that thrive within this green space, the cemetery reflects the complex entanglements of life forms that Tsing (2015) discusses in her work on multispecies coexistence.

This thesis underscores the importance of preserving and revitalizing these green spaces within the city, not only to honour the memories of those who rest here but also to reintroduce a sense of peace, biodiversity, and cultural identity to Johannesburg's urban core. Reimagining Braamfontein Cemetery as a usable green space can bridge the gap between past and future, human and non-human, creating a place that is as much about life as it is about memory. Enhancing the ecosystem of the cemetery by adding plants that attract various species of insect and birds, as well as, the addition of dogs and cats onto the site, would add to the richness and biodiversity of the cemetery, creating a safe haven and sanctuary within the city.



Jacaranda



Dandelion



Wild Grass

Fig 4.7
Opposite
*Drawing of plants found
in Braam Cemetery*
(Author, 2024)

05

A Note on Animals

It has already been discussed that animals provide humans with many benefits and vice versa (Chapter 03, under Relational Ecology), but how do architects, and how does architecture start to put the animal's wellbeing first?

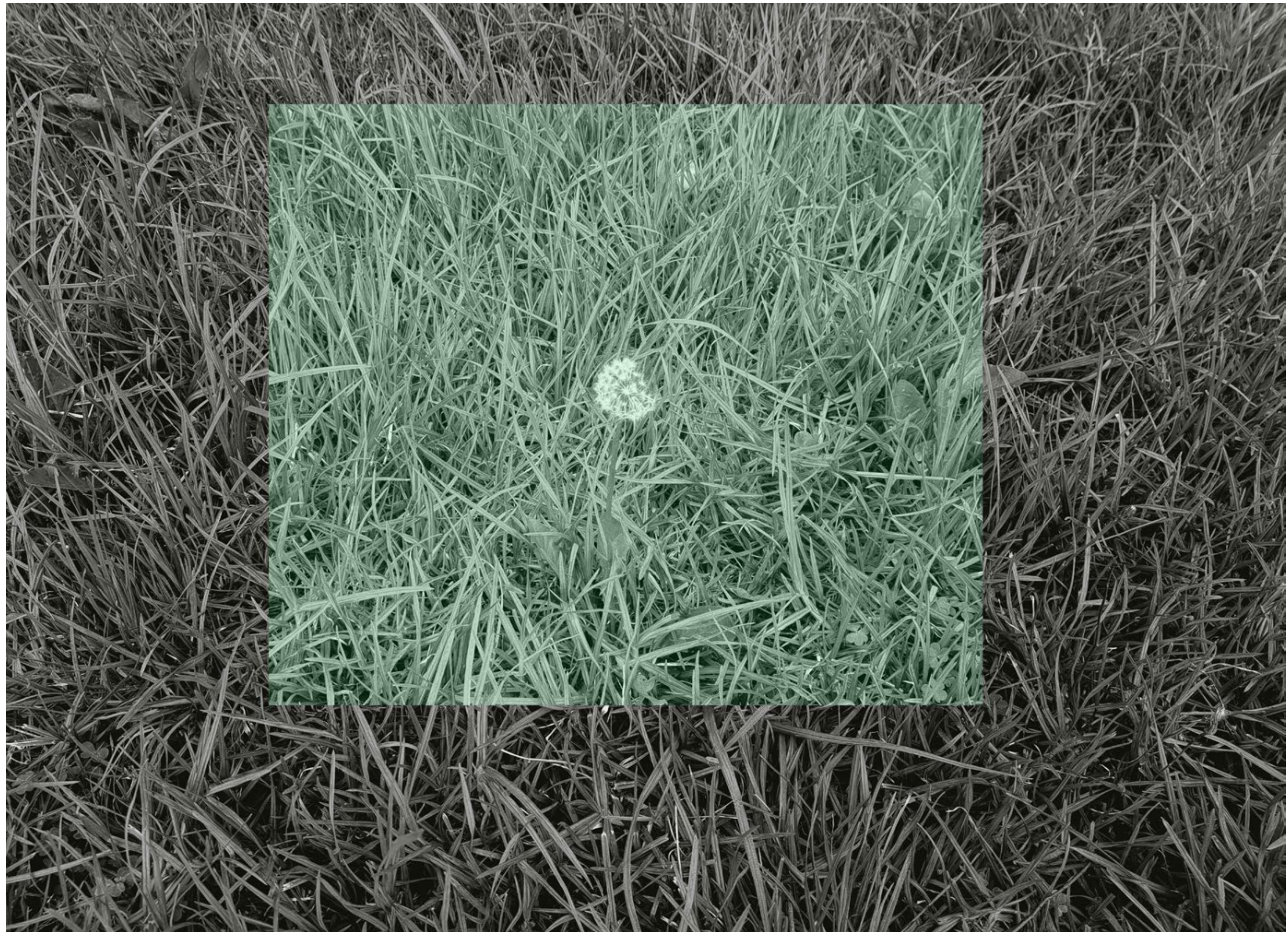
In this chapter the relationship between animal and architecture is explored in order to inform the design decisions to come.

Dogs [5.1]

Cats [5.2]

Dogs and Cats [5.3]

Birds [5.4]



5.1 Dogs

“Well, perhaps there was more to complicate a horse’s life than a man could ever see.”
Brandon Sanderson, Excerpt from Rhythm of War, Stormlight Archive.

The concept of post-anthropocentrism and posthumanism become important when designing for animals. Architecture is often made only for humans and so the idea of putting the animal in the forefront is rare. “Designers ought to treat their subjects with compassion, as their worlds are also subject to management through design.” (Wolch and Owens, 2017:22). No matter the subject, this statement holds true, the idea that animals do not need fulfilling spaces is inconsiderate, and so as a designer, I want to push past the traditional ways of seeing and designing for animals. To do this, I first need to know the basic and minimum requirements for animal architecture through some research. Due to my scheme dealing only with cats, dogs and birds, those are the animals I will be discussing in this chapter.

Dogs are quite social and benefit heavily from human interaction (Otto, 2022). They seem to prefer being housed in groups and show signs of anxiety when housed alone. Dogs that are more aggressive, and have a tendency to act out, show less aggression when housed alone. Dogs should be able to have views out of their homes in order to take in their surroundings, and studies show that they prefer slightly raised beds that are soft (Otto, 2022).

Double compartment housing is also something that is beneficial for dogs and cats. This is where there are at least two compartments in a dog’s home – a sheltered place where they can retreat to in order to be on their own (this place is usually darker and cosier) and a place that allows views out and interaction with other species (this is usually an outdoor area) (Otto, 2022). Dogs become more physically active and energetic when they have more headroom in their homes making sure that they do not become claustrophobic. It has also been found that circular spaces are more comfortable for dogs, physically and mentally. So, an architectural manifestation of this could take the form of circular huts for the dogs, arranged around a central core that allows for humans to circulate around them. (Otto, 2022).

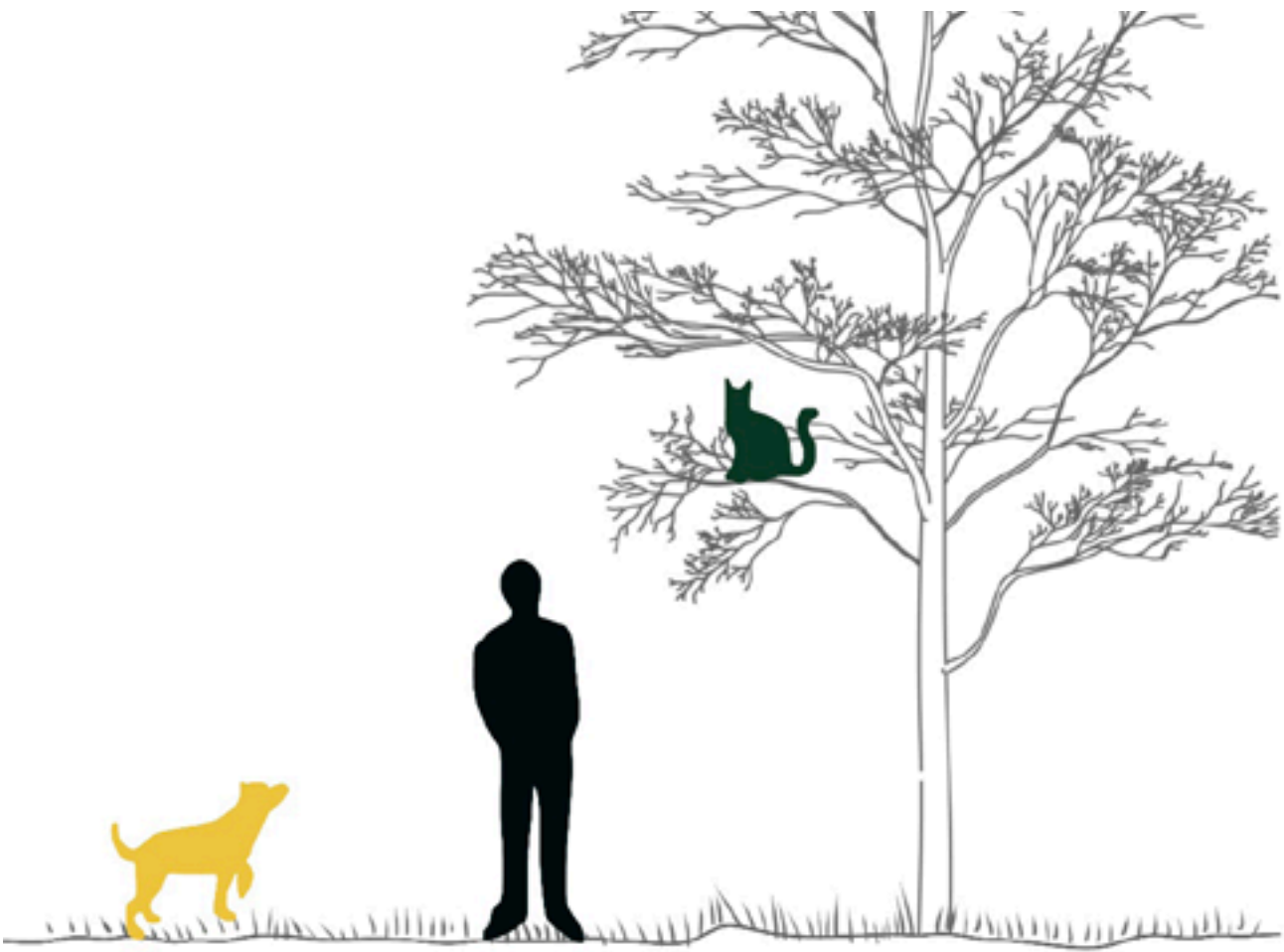
Fig 5.1
Previous
Dandelion in the Cemetery
(Author, 2024)

Fig 5.2
Opposite top left
Placement of Beings in Section
(Author, 2024, after Mostafavi, 2017)

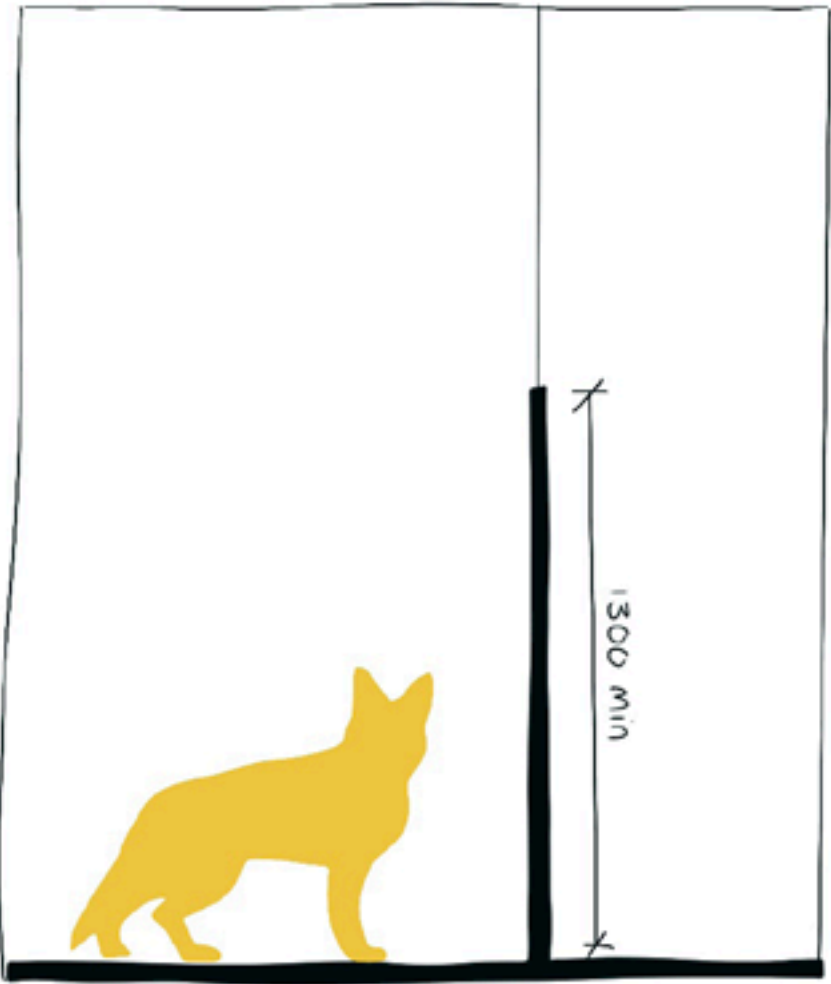
Fig 5.3
Opposite top right
Minimum height of screen walls between dog homes in clinic
(Author, 2024, after Mostafavi, 2017)

Fig 5.4
Opposite Bottom
Minimum sizes of dog homes in clinic
(Author, 2024, after Mostafavi, 2017)

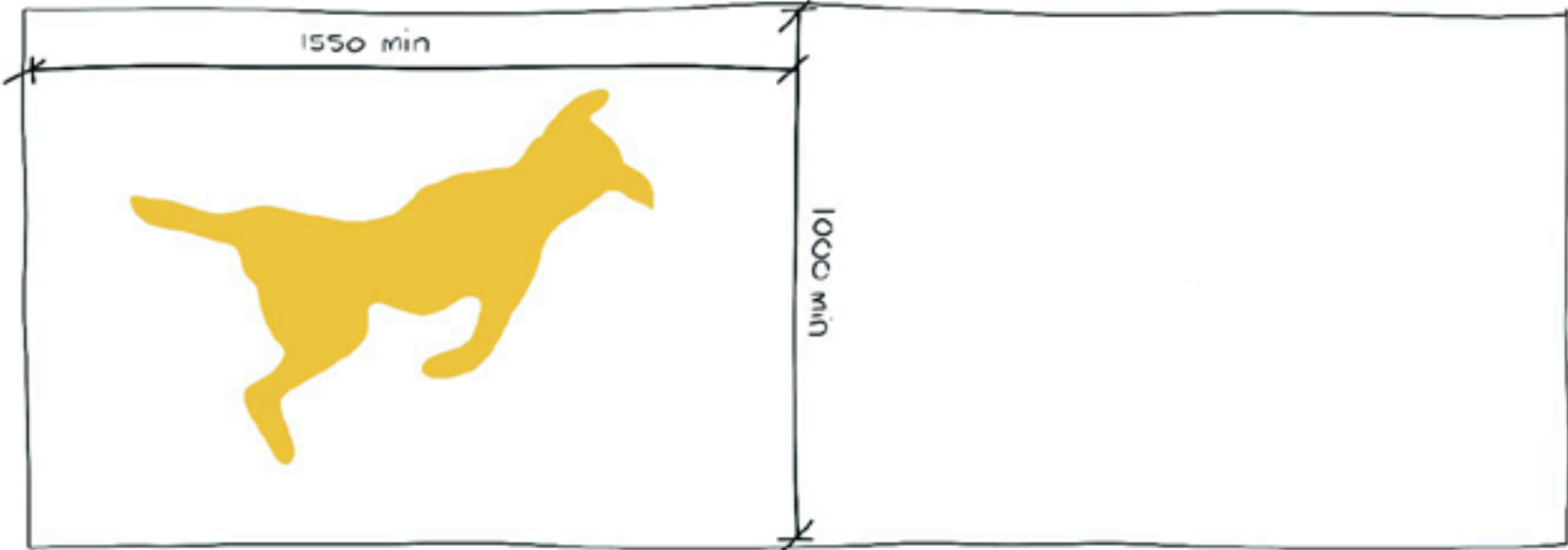
It is important to note that the sizes shown in these figures are related to economical housing in animal clinics. For permanent housing, larger sizes are required. Having a minimum size is helpful for designing.



Placement of Beings in Section



Minimum height of screen walls between dog homes in clinic



Minimum sizes of a dog home in a clinic

5.2 Cats

Fig 5.5
Opposite top left
Minimum sizes of a cat home in a clinic
(Author, 2024, after Mostafavi, 2017)

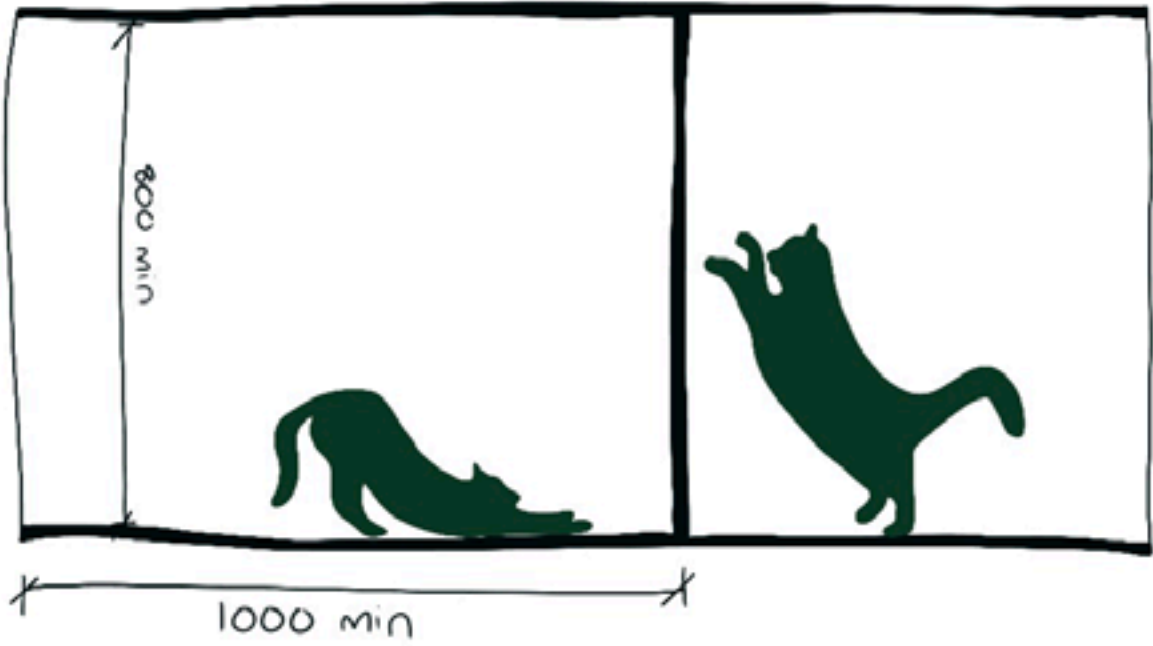
The minimum requirement for cat housing is 0.6 animals per square meter to avoid the animals becoming stressed (Otto, 2022). This is a small space so increasing it would definitely be something that I would consider. Cats are the opposite of dogs and prefer to have space away from other cats. They can become territorial and so each cat needs a ‘hiding place’. This is usually a dark, warm and soft space that the cat can retreat to when they feel overwhelmed, or a place where they can just be on their own to avoid anxiety. Cats with hides available to them recover faster when exposed to new environments and so they are incredibly beneficial (Otto, 2022).

Fig 5.6
Opposite bottom left
Minimum sizes of a cat home in a clinic including litter
(Author, 2024, after Mostafavi, 2017)

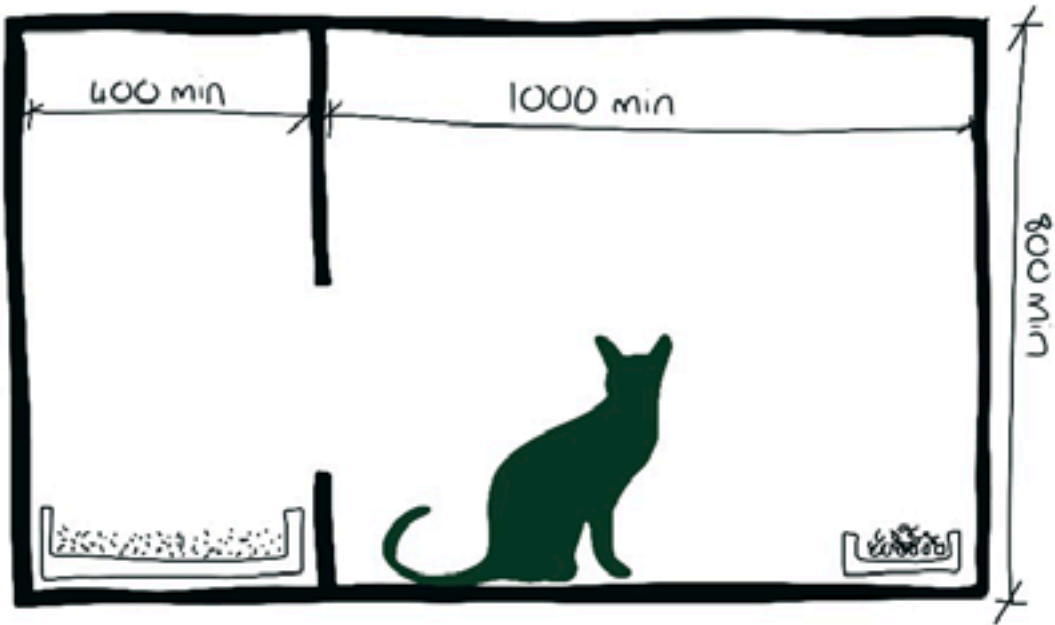
Vertical space should also be maximised for cats because they can become anxious when situated on floor level (Otto, 2022; Mostafavi, 2017) – being looked down upon, and close to people stomping by would be scary for anyone. This vertical space can take the shape of ledges the cats can sit on, as well as surfaces they can climb on. Cats also seem to be drawn more to scratchers with rope or cardboard than other materials (Otto, 2022), this is knowledge I put to use during my charette (chapter 07).

Fig 5.7
Opposite centre right
Minimum area of a cat home in a clinic
(Author, 2024, after Mostafavi, 2017)

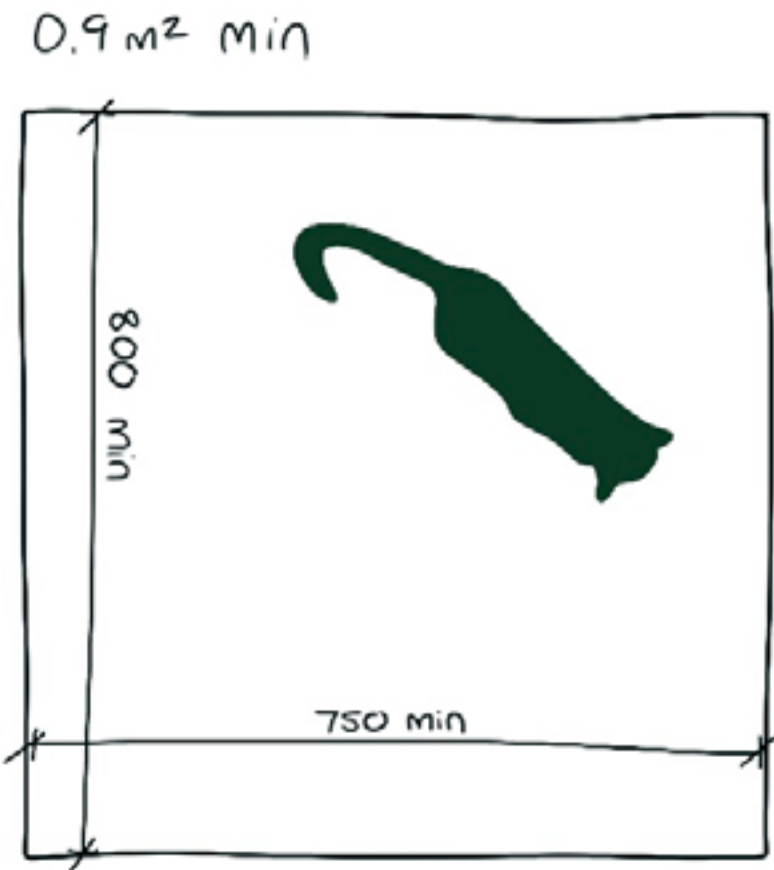
It is important to note that the sizes shown in these figures are related to economical housing in animal clinics. For permanent housing, larger sizes are required. Having a minimum size is helpful for designing.



Minimum sizes of a cat home in a clinic



Minimum sizes of a cat home in a clinic including litter



Minimum area of a cat home in a clinic

5.3 Dogs and Cats

Dogs and cats can become distressed when housed together so housing them separately is a better solution. Making use of different plants and textures can repel or attract certain species in order to keep the animals from becoming aggressive towards each other or causing stress in each other (Otto, 2022). This helps with free roam animals because it keeps them in their general areas without the use of walls or fences.

Plants that attract cats are:

Catnip (*Nepeta cataria*), Catgrass, Asters, Sweet Geraniums (*Pelargoniums*), Blue Mist shrub (*Caryopteris*), Sunflowers, Cosmos and Maiden grass (*Miscanthus*).

While plants that attract dogs are:

Forsythia, Echinacea, Buddleja, Lilac, African Daisy and Purple Basil.

Plants that repel both cats and dogs are:

Scaredy-cat Plant (*Coleus canina*), Rue, Lavender, Rosemary, and Pennyroyal.

This list will help when designing and landscaping my architectural intervention. The site has a sensitive history of being separated so the use of fences and walls to separate the animals within it would oppose the idea of breaking down this historical hierarchy, therefore planting specific plants could be a solution.



Landscaping Section



Sweet Geranium (*Pelargoniums*)



Lavender



African Daisy

Fig 5.8
Opposite top
Landscaping Section
(Author, 2024, after
Mostafavi, 2017)

Fig 5.9
Opposite centre left
Sweet Geranium
(Author, 2024)

Fig 5.10
Opposite bottom left
African Daisy
(Author, 2024)

Fig 5.11
Opposite right
Lavender
(Author, 2024)

5.4 Birds

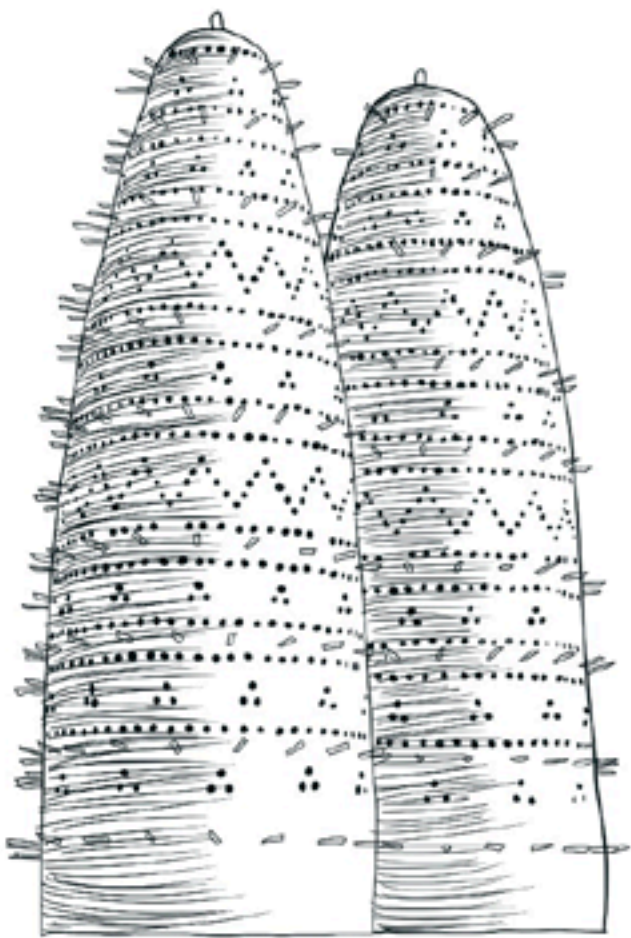
Birds are tough to put into homes, so in my scheme they will only be kept in homes when they are being treated in the animal centre, after that they will be set free. With this in mind, there is an architectural element that could be useful when designing for birds. This is the ‘bird tower’ or, historically called a dovecote.

Many countries around the globe have preserved the dovecotes made hundreds of years ago. These towers were used by nobles to house their pigeons, as breeding them was of great value in terms of meat and eggs (Patowary, 2015). On the other hand, in the middle east, these towers were used to harvest the manure of pigeons for fertiliser, gunpowder or leather tanning (Ebert, 2020). Dovecotes usually consist of tall brick or earth towers with hundreds of small holes in them for birds to inhabit. The dovecotes found in the middle east become quite beautiful pieces of architecture because each tower is poked with holes that create a pattern on the façade which, while the building only serves a purpose for birds, is an aesthetic quality humans can admire as well.

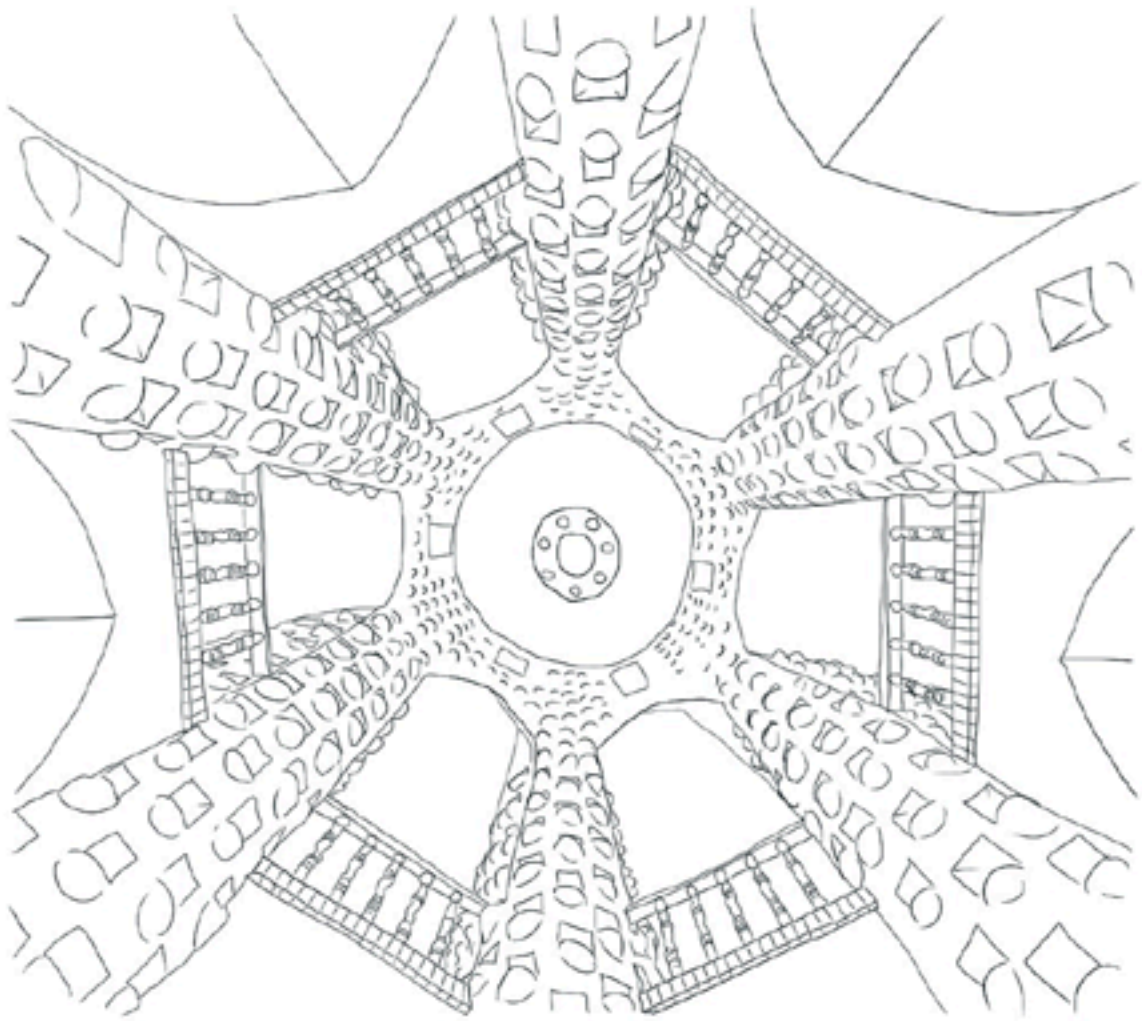
Some dovecotes take on ornate sculpting on the interior to create a spectacular space for people to look up into and see the birds in their hides and the sunlight beaming down through the centre of the structure.

The architectural design and importance of these towers is something that links with my thesis – it is a precedent of a building created for birds while also being an architectural landmark for the places they are found in. Using the idea of a bird tower within my design could create an interesting and beautiful space within my scheme.

This chapter underscores the importance of prioritizing animal well-being in architectural design, challenging the anthropocentric norms that typically dominate the field. By exploring the specific needs of dogs, cats, and birds this chapter lays the groundwork for creating environments that are not only functional but also compassionate and enriching for animals. The insights gained here will inform the subsequent design decisions, ensuring that the spaces created are as fulfilling and thoughtful for animals as they are for humans.



Bird Towers



Interior of Bird Tower



Modernised Bird Tower (Section)

Fig 5.12
Opposite top left
Bird Towers
(Author, 2024)

Fig 5.13
Opposite bottom left
Interior of Bird Tower
(Author, 2024)

Fig 5.14
Opposite centre right
*Modernised Bird
Tower (Section)*
(Author, 2024, after
Mostafavi, 2017)

06

Designing in a Cemetery

To begin to design within the cemetery, it is helpful to take a look at a few concepts and case studies. These ideas inspired parts of my design concept, helping me shape my design and my programme.

The Flaneur [6.1]
The Park of Memories [6.2]
The Case of The Wilds [6.3]
Design Brief and Programme [6.4]



6.1 The Flaneur

“Sometimes the best way to explore a city on foot is to simply wander, with no goal in mind other than to follow the sound of church bells, or drift across a leafy square.” (Rosenbloom, 2023).

The Flaneur is a term brought about in Paris during the early 19th Century while the city was becoming modernised and increasingly populated. The idea of the flaneur, or aimless wanderer, is to become a wanderer in the city – to be led by sense, sounds or visuals that you may spontaneously find appealing or intriguing (Rosenbloom, 2023). “To walk a city led by your senses rather than a destination is to awaken to the city and, possibly, to yourself.” (Rosenbloom, 2023). This allows one to give into spontaneity and delight that might not have been possible if they were aiming to get somewhere. The journey becomes aimless and the destination non-existent.

The act of the flaneur encourages one to savour their surroundings, to become freer, and to pursue a slower, looser way of experiencing a city which forces them to become mindful. Mindfulness is a term often used in cognitive behavioural therapy to describe a cognitive process of perceiving one’s surroundings in order to combat anxiety and panic (Hofmann and Gomez, 2017). It is a very useful tool for people that struggle with mental health issues, as well as for people who do not because it allows one to connect to their surroundings and be in the moment – which is something that is rarely done in today’s day and age.

This notion of taking things slow, allowing yourself to wander and, in turn, savour your surroundings, is something that does not exist in Johannesburg. People do not wander the city aimlessly for fear of being robbed, hurt, kidnapped or worse. As mentioned in chapter 01 of this thesis, Johannesburg is characterised by a sense of restlessness and rush, this keeps the idea of the flaneur alien to Johannesburgers. My architectural intervention aims to create a space where the flaneur can be explored in a safe space. Taking the cemetery and making it a space that is no longer unsafe and uncontrolled could provide such a site.

The act of dog walking provided by the scheme reinforces the idea of wandering – where one is led by the whims of the dog, or perhaps the sound of birds in the trees. The cemetery then becomes a sanctuary for wandering which creates a space where people can also connect to their histories and wonder about their past. In summary, my architectural intervention transforms the cemetery into a safe space for mindful wandering, introducing the concept of the flaneur to Johannesburg by encouraging unhurried exploration and connection with the city's self-erasing history.



Fig 6.1
Previous
Cemetery Avenue
(Author, 2024)

Fig 6.2
Opposite
The Flaneur in Joburg
(Author, 2024)

6.2 The Park of Memories

The Park of Memories is an intervention in Aš, Czech Republic by local architecture firm, SOA Architekti. The intervention takes shape as an elevated pathway through a cemetery in Aš, as well as, a memorial, repaired stone bridges and cellars (Astbury, 2024).

The project reacts to the tragic history of the cemetery. In the 1970s, the cemetery along with many buildings in the town were destroyed resulting in the loss of cultural and historical values representing Aš, the Czech Republic, and even their neighbour Germany. This also stripped Aš of its architectural and historical identity (Shilling, 2024) leaving the townspeople feeling lost. To commemorate the loss of these graves and values, SOA Architekti created a large granite slab sculpture made of blocks of varied sizes with cut outs to allow for candles to be placed by people coming to visit. This allows for the lost graves to be remembered and for the community to connect with their ancestors (SOA Architekti, 2022).

The elevated pathway through the cemetery shows care in not disturbing the natural ground with its small footprint but at key points, it touches down to liven up the park, connecting with wooden platforms, walkways, and a children's playground (Shilling, 2024). Using an archaeological survey, it was found that there were old graves, human remains and the remains of buildings in the ground (SOA Architekti, 2022), and so the sensitivity of a small footprint was necessary. The path takes the form of a "space-time" (De Castro, 2024) route that transitions one from the historical forest to the urbanised park – going from historical land to modernised life.



Fig 6.3
Opposite
Park of Memories Walkway
(Alex Shoots
Buildings, 2022)

6.2 The Park of Memories

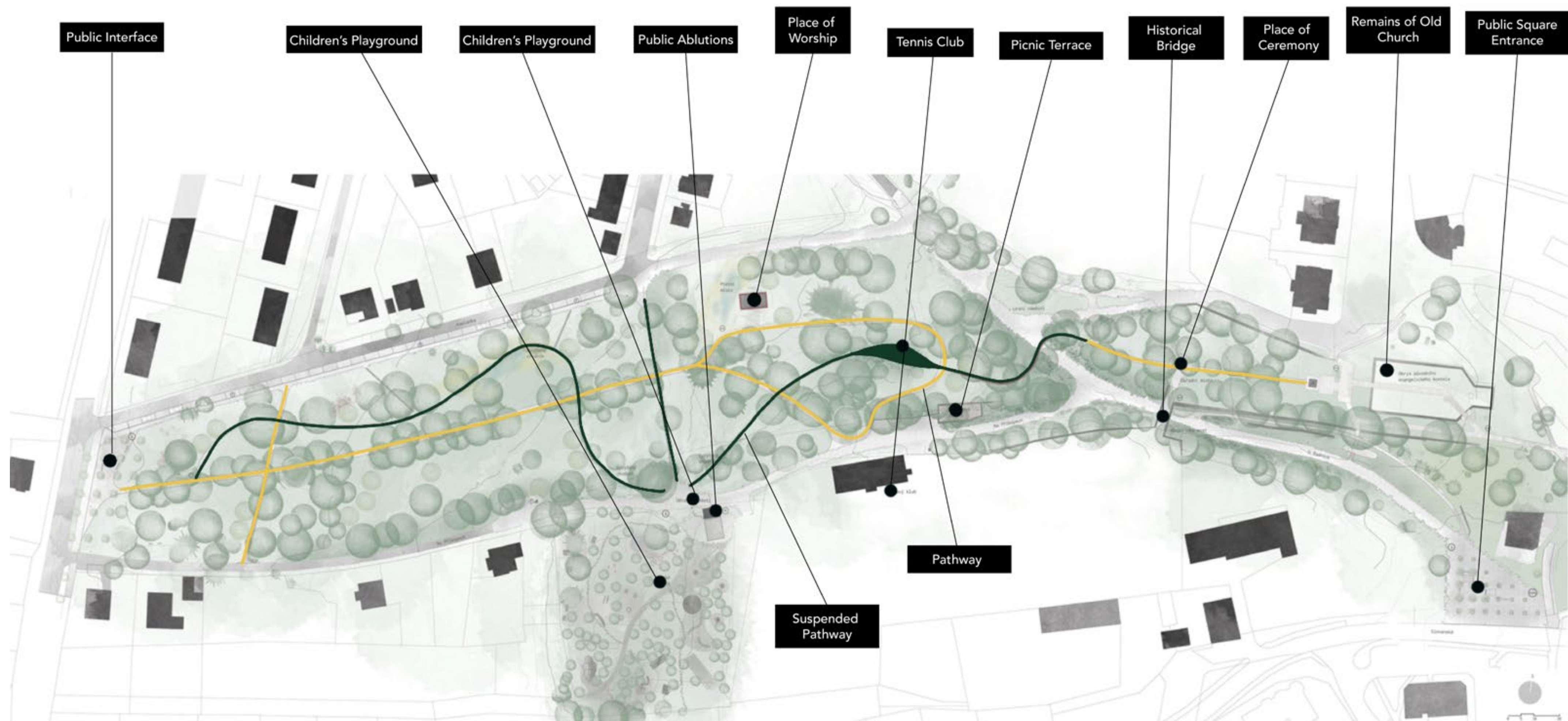


Fig 6.4
Plan of Park of Memories
(Author, 2024, after
SOA Architekti + Atelier
KONCEPT, 2022)

6.2 The Park of Memories

The visitor begins on the eastern edge of the park where they are introduced to a public square, this primes the visitor to leave the town and enter the park. There are then cobblestone pathways that lead to the remains of the evangelical church that allow visitors to see some of the town’s past. From there, the visitor walks along the paths leading to the suspended walkway allowing them to wander through the historical park. The scheme allows visitors to take many pathways through the cemetery, creating the opportunity for the act of flaneur (mentioned earlier).

The aim of the project is to “recall the forgotten values of the past and guide visitors through the city’s turbulent history.” (SOA Architekti, 2022). The elevated walkway exists as a new layer above the existing footpaths and allows the visitor to be closer to the tree canopies and see the cemetery from a different point of view. At certain interactive spots within the scheme, the visitor can use an app called Time Trip to access information about the site and its history while strolling through the site itself (Astbury, 2024). This app uses VR to display historical objects and events at their original locations, transporting the visitors back in time where they can connect with the city’s past (Shilling, 2024).

The scheme also includes a paved square with fountains and seating areas that provide a meeting space for the community, and also functions as a source of information for the park users. The combination of a square, an elevated walkway, quiet existing footpaths and a central memorial creates a scheme that runs along the entire cemetery and connects the old and the new sections of the site.

This case study becomes an interesting comparison to my own scheme because it deals with similar ideas – such as the sensitivity to the ground so as to not intrude on the historical value that is hidden beneath, the connection to history and memory of the site, and the idea of a walk through the site that provides the visitor with a different context to what they might be used to. Taking these ideas forwards would help me with my scheme in terms of the historical value and would help tie my concepts to the site more readily.

Fig 6.5
Opposite top
Aerial of Walkway
(Alex Shoots
Buildings, 2022)

Fig 6.6
Opposite bottom
Public Square
(Alex Shoots
Buildings, 2022)



6.3 The Case of The Wilds

The Wilds, a park in Killarney, Johannesburg, was a place of uncertainty and fear for many years until an ordinary citizen, James Delaney, decided to do something about it. The Park was suffering from neglect and was rarely visited because it was deemed a “no-go area, a place where you would be murdered...” (Lamb, 2024). To this Delaney questioned why murderers would go to a place where there were no people to murder. This is something that runs through my mind when I think of the cemetery. The security guards of the site are too afraid to walk the site because of violence that might take place – but there are rarely any people in the cemetery, especially at night. This shows that the feeling of fear – linking with the perpetual urban fear of Johannesburgers in chapter 01 – is the most significant factor keeping these green spaces from reaching their potential. It goes to show it is all the more important to rejuvenate these parks as it is to change the mindset of the people using – or not using – them.

Delaney describes the Wilds as “a magical enchanted forest, all overgrown and crazy but magnificent, full of birds and animals” (Lamb, 2024). This inspired him to adopt the park and also create a campaign to reclaim Johannesburg – and reclaim the urban fear within it.

Delaney realised that the only feasible way to make the park safer was to have people flowing through it, and so he came up with the idea to sculpt 67 brightly painted, metal owl sculptures to place around the park and in the trees. Each owl has its own facial expression and soon it became a game of whether visitors can spot all the owls hidden in the park. A network of volunteers also teamed up with Delaney to clean up and restore the park to a pleasant space, since Johannesburg City Parks was not adequately taking care of the site. With these simple solutions, Delaney was able to get more people interested in the so called “no-go” park and brought a sense of whimsy and playfulness to the Wilds. This playfulness combats the fear prevalent in the lives of Johannesburgers. Bringing a light-heartedness and sense of play into the park making the park feel less scary and more desirable.

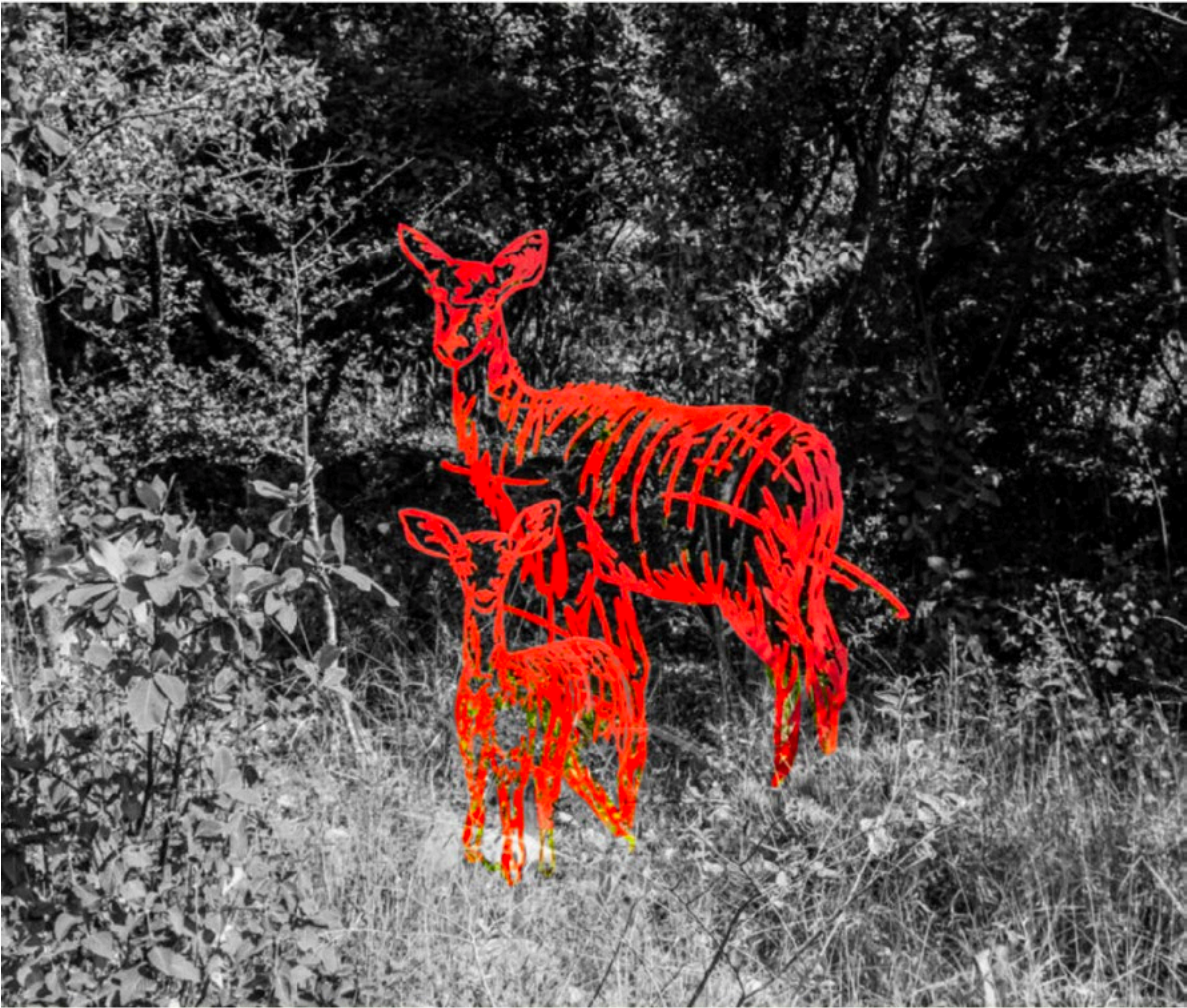


Fig 6.7
Opposite
*Kudu sculptures
in the Wilds*
(Author, 2024, after
Thorne, 2023)

6.3 The Case of The Wilds

As time went on, Delaney added more and more sculptures of different animals all brightly coloured throughout the park. Now there are more than 100 sculptures in the park, and the Wilds has 10 000 visitors a month (Lamb, 2024). By putting the effort into making these sculptures and placing them throughout the 40-acre park, Delaney was able to bring a sense of value to the park that the community of Johannesburg appreciates. The Park is “always clean, even at the end of a busy weekend” (Lamb, 2024). This is because the people of the city have become invested in the park and have a respect for it.

This case study truly shows that even one person can make a difference in a community. In a city like Johannesburg where no one feels safe virtually anywhere, transforming a green space into a safe and usable space – even if just for the weekend – holds tremendous value. This is exactly the aim I want to accomplish with my scheme. Taking hints from this precedent, like using the flow of people to create safety, getting the community involved, and adding whimsy to the park, I would further develop my own scheme to transform Braamfontein Cemetery – the unsafe and ‘creepy’ graveyard – into a green sanctuary for people and animals.



Fig 6.8
Opposite
*Mushroom Mosaic
in the Wilds*
(Auther, 2024, after
Moulder, 2024)

6.4 Design Brief and Programme

The scope of work is to create a centre for the well-being of animals within Braamfontein Cemetery that helps care for all domestic animals that reside in the urban environment. It is also to create a space that people can visit to escape from the hustle and bustle of the city and interact with nature, the history of the cemetery and the animals of the centre. This intervention strives to encourage peaceful interrelationships between humans, animals and nature, restoring the surrounding ecosystem. The idea of interspecies relationships permeates this project and is the backbone of this thesis and the design to follow.

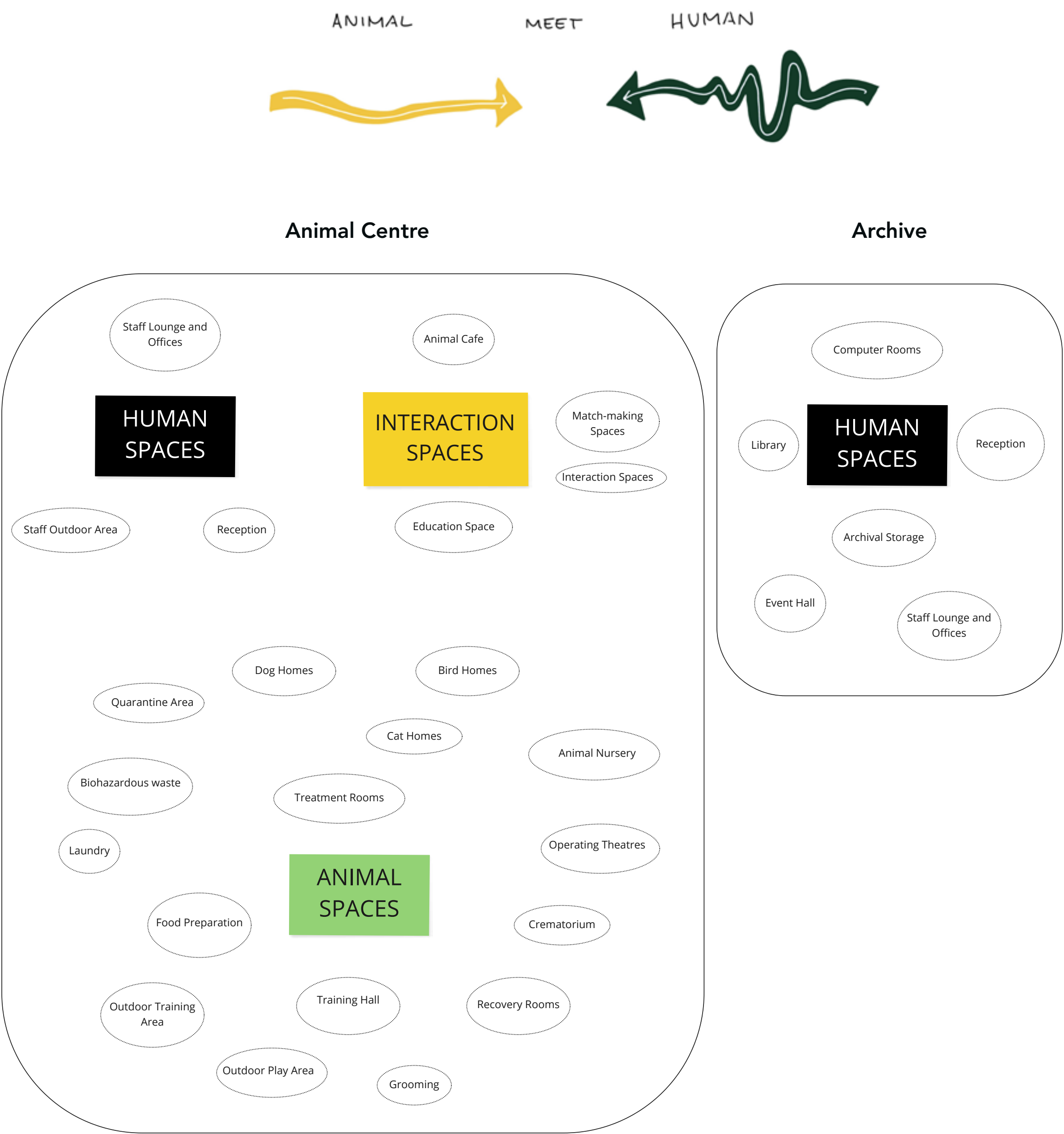
The scheme will include spaces where people and animals interact, safe spaces for the animals such as homes for them, an animal clinic to rehabilitate strays, spaces for humans to interact and escape from the stress of life in the city, plus a surrounding park including spaces that allow for the needs of animals.

Another aspect of programme that I brought into my scheme later on in the design process was the idea of the archive. Since the site is full of historical value, an archive would be suitable to hold the information of the site – of the past, present and the future discoveries that might be found. This archive would serve to keep the memories held within the cemetery alive, and it would be a place that could help people find their ancestors buried in the cemetery. The archive facility would be tasked with researching the people buried in the cemetery and storing the information found within the archive – whether physically or digitally.

Due to the subject matter of this project being heavily rooted in posthuman and post-anthropocentric ideals, the naming of spaces becomes an exercise of centring the animal rather than the human. Instead of animal welfare, the term animal well-being is used to encompass not just the physical health of the animal, but the mental and emotional health of them as well. The word “enclosure” and “cage” are deeply rooted in anthropocentric and humanist views making them unsuitable for this project which aims to look past the humanist view that animals are ‘less than’ humans. Therefore, I propose the use of the word “home” in my project. The animals will be housed in dog homes, cat homes and bird homes. “Home” is something that people view as their personalised safe space making it a suitable word to remove the anthropocentric view that the words associated with animals conventionally portray.

Fig 6.9
Opposite Top
Programme
Concept Sketch
(Author, 2024)

Fig 6.10
Opposite bottom
Programme Diagram
(Author, 2024)



07

Developing a Design

This chapter encompasses the process of design that took place throughout the year. It shows early explorations of conceptual ideas, as well as, design iterations and technical explorations through the use of a precedent.

- Site Analysis [7.1]
- Design Explorations [7.2]
 - Early Sketches and Concepts [7.2.1]
 - Conceptual Charette [7.2.2]
 - Placing on Site [7.2.3]
- First Design Iteration [7.3]
- A Design in Process [7.4]
- Technical Systems in Design [7.5]



7.1 Site Analysis surrounds

This map helps one become familiar with what surrounds the site.

The Braamfontein Cemetery, as mentioned in Chapter 01 and 03, is an isolated space within the city. Flanked by the railways, the southern edge is inactive, while the western edge is bordered by residential lofts screening the view of the cemetery on that side. The northern edge faces the metrobus building, WITS, and an empty, fenced-off site. The eastern edge is bordered by the highway and a small dead-end street, creating an unsafe and hidden nook on the eastern border of the cemetery.



- 1 Braamfontein Cemetery
- 2 Smit Street Industrial Buildings
- 3 Railways separating north and south
- 4 Newtown and Oriental Plaza
- 5 Railways
- 6 Student Housing and Accommodation
- 7 WITS East Campus
- 8 WITS West Campus
- 9 Sturrock Park Sports Fields
- 10 Egoli Gas Works
- 11 University of Johannesburg Campus
- 12 Vrededorp Suburb Houses
- 13 Sontonga and The Exchange Lofts

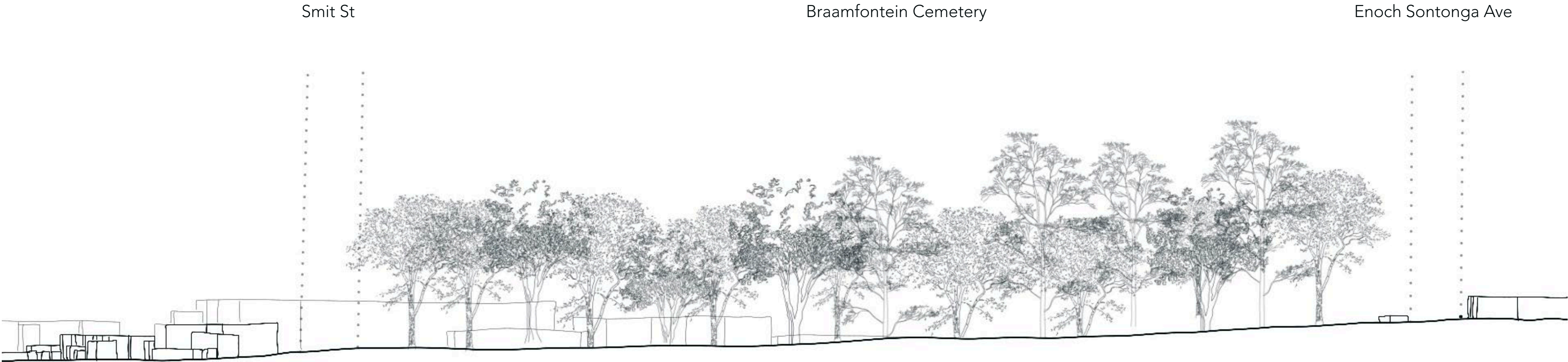


Fig 7.1
Previous
Chinese and Indian
Section of the
Braam Cemetery
(Author, 2024)

Fig 7.2
Map of site surroundings
(Author, 2024, after
Google Earth, 2024)

7.1 Site Analysis Site Section

Simple Section through Braamfontein Cemetery



Railways on the south of the site

The site itself is wooded - trees are all that is visible from the neighbouring roads and buildings

Fig 7.3
Section through
Braam Cemetery
(Author, 2024)

7.1 Site Analysis Trees on Site

Since trees are an important political and spiritual tool in the history of the cemetery, it is necessary to map them.

The site is incredibly wooded, as mentioned before, and so mapping the trees helps determine where design interventions can be placed.

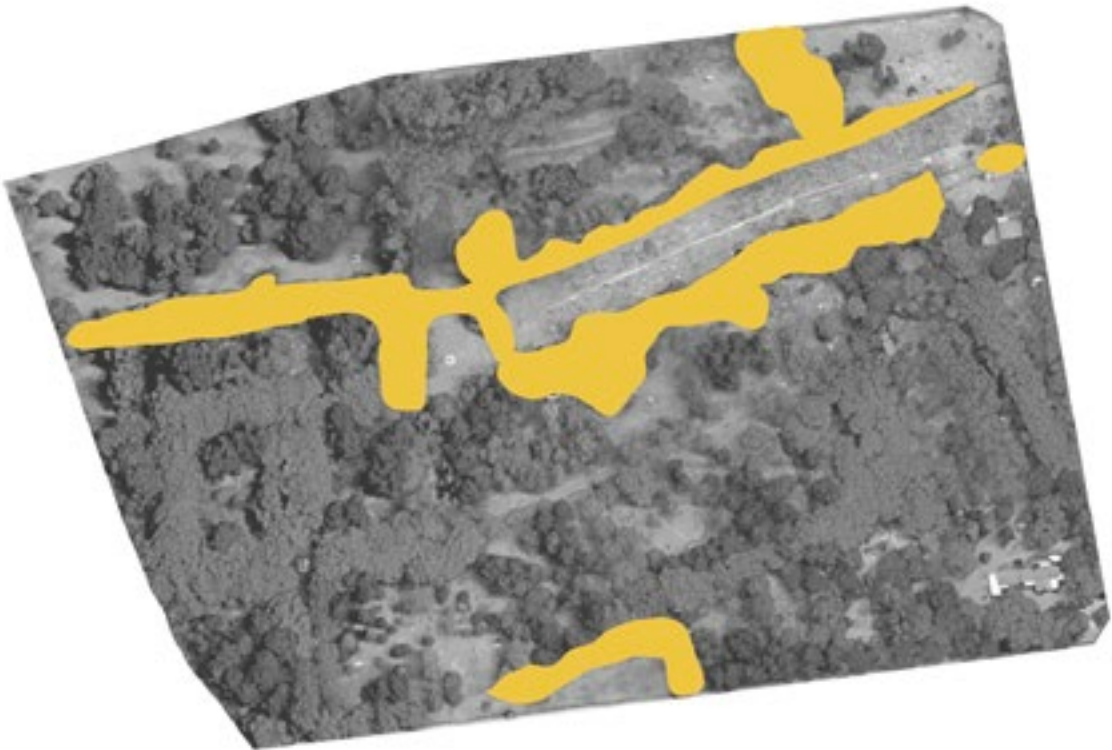
Trees were also used as barriers between sections of the site and are shown in this diagram. In my design, I want to break these barriers to create a more cohesive design to the cemetery and create connections between the racial sections of the site.

Physical barriers within the cemetery, like the fence around the Jewish section would be removed in my design to allow for people to walk more freely through the cemetery.

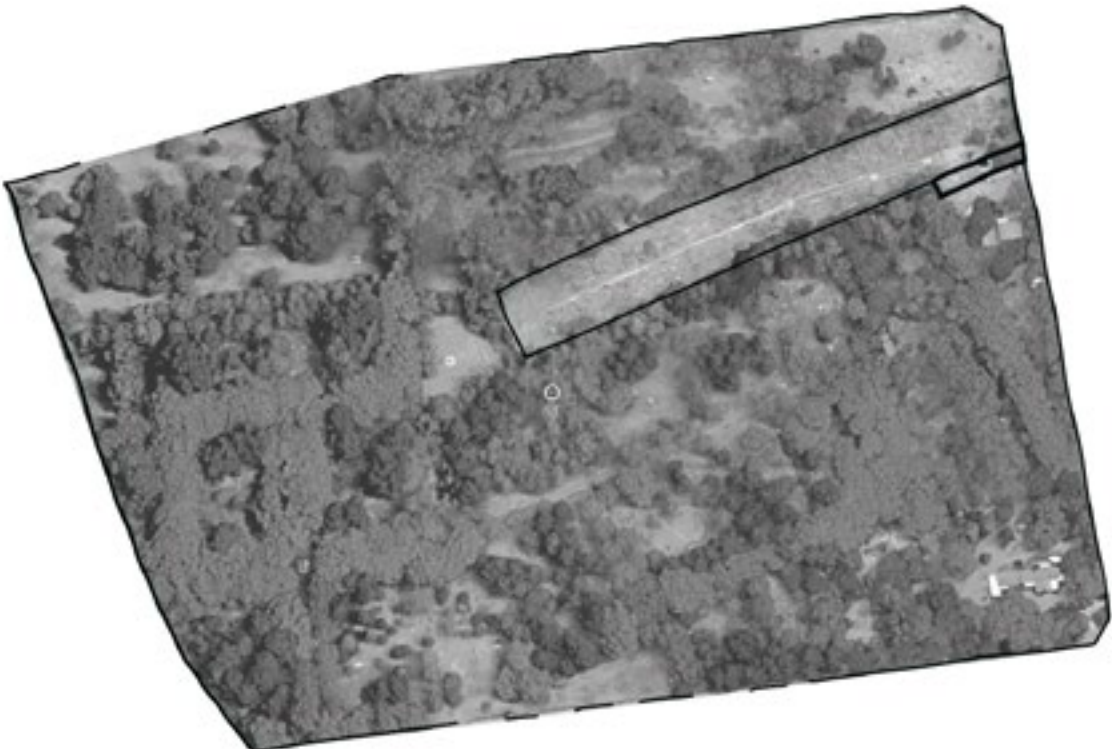
The boundary of the cemetery often has missing gaps due to vandals stealing the fence. To create a safe space within the city, a boundary would need to be designed.



Trees on Site



Trees as barriers



Physical Site Barriers

Fig 7.4
Map of Barriers
(Author, 2024, after
Google Earth, 2024)

7.1 Site Analysis Spaces for Intervention

This map shows where possible design interventions could be placed.

Due to the site being a cemetery, especially one with unmarked graves, one must be sensitive to the ground when designing.

Although, where the existing staff quarters are on the site, there is an opportunity to use conventional foundation methods during design and construction.

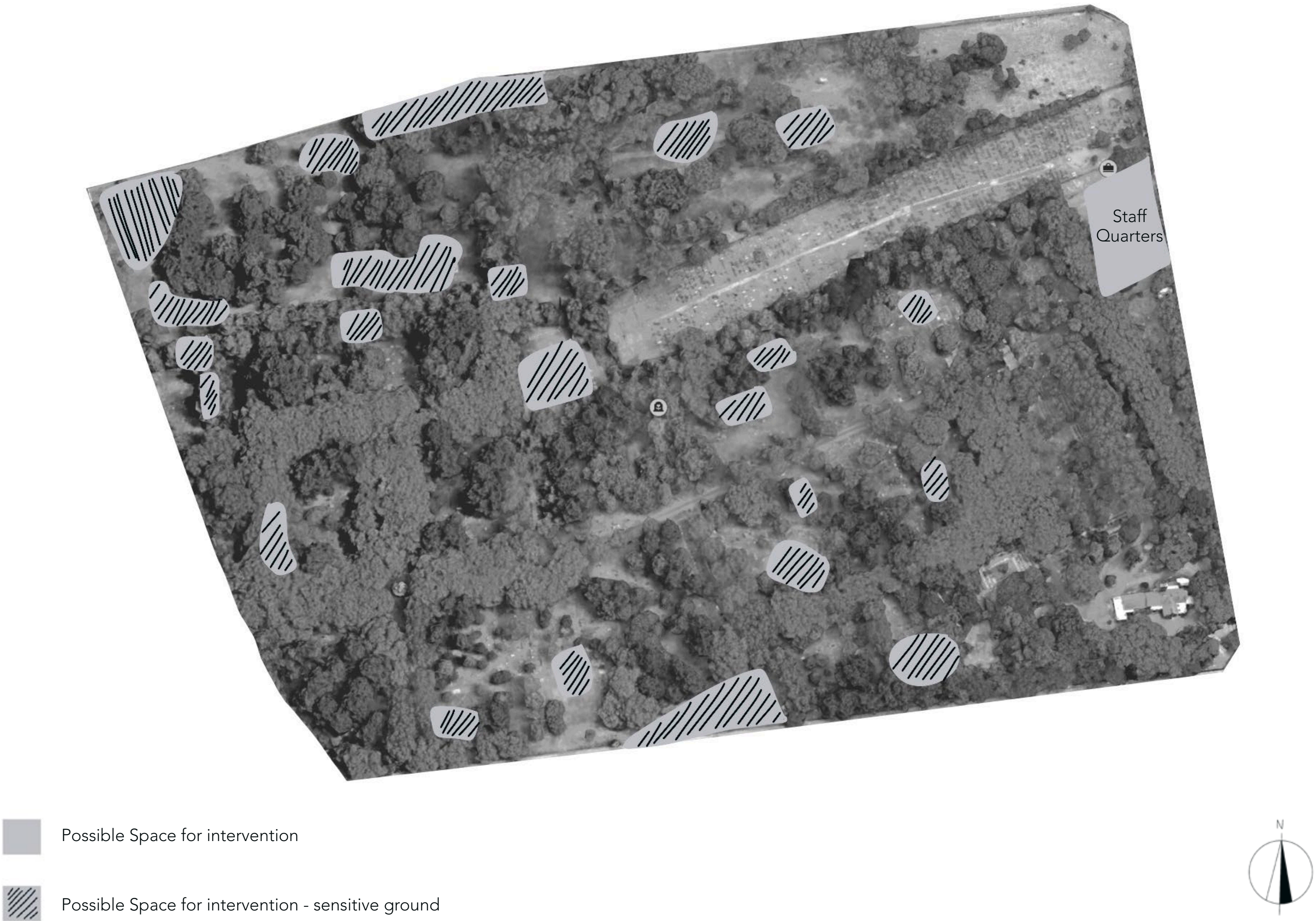


Fig 7.5
Map of possible
intervention spaces
(Author, 2024, after
Google Earth, 2024)

7.1 Site Analysis Entrances



1 Main Entrance on Graf Street

Fig 7.6
Left
Main entrance on
Graf Street
(Author, 2024, after
Google Street View, 2024)



2 Jewish Entrance on Graf Street

Fig 7.7
Opposite Top
Jewish entrance
on Graf Street
(Author, 2024, after
Google Street View, 2024)

There are three entrances to the site: the main entrance, the Jewish cemetery entrance and the staff quarters entrance. The main entrance is protected by a gate, but is open during the day - this is where cars and hearses will enter when there is a cremation or ceremony being done. The Jewish cemetery entrance is usually closed, it protects the gravestones from vandalism - that is why there is also a fence around the Jewish section. The staff quarters entrance is private and closed, you cannot see through the gate and cannot enter.

Fig 7.8
Opposite bottom
Map Key 1
(Author, 2024, after
Google Earth, 2024)



Map Key



7.1 Site Analysis Edges



3 Smit Street



4 Enoch Sontonga Avenue



5 Graf Street



Map Key

Fig 7.9
Left top
Smit Street
(Author, 2024, after
Google Street View, 2024)

Fig 7.10
Left bottom
Enoch Sontonga Avenue
(Author, 2024, after
Google Street View, 2024)

Fig 7.11
Right top
Graf Street
(Author, 2024, after
Google Street View, 2024)

Fig 7.12
Right bottom
Map Key 2
(Author, 2024, after
Google Earth, 2024)

7.1 Site Analysis summary of Site Conditions

Spaces of intervention mapped on an axonometric of the site, layered atop other mappings.

Spaces of unmarked graves mapped clearly to show most historically sensitive areas.

Racial and religious sections of the cemetery mapped on an axonometric of the site, layered atop other mappings.

Paved roads and paths in the cemetery mapped for ease of reference.

Buildings on site consist of staff quarters, a mosque prayer building, crematorium, ash wall, columbarium, memorials, garden sheds, security and an admin building.

Site slopes downwards from the entrance on Graf Street towards the western edge by the spruit and lofts.

Spaces of possible Intervention

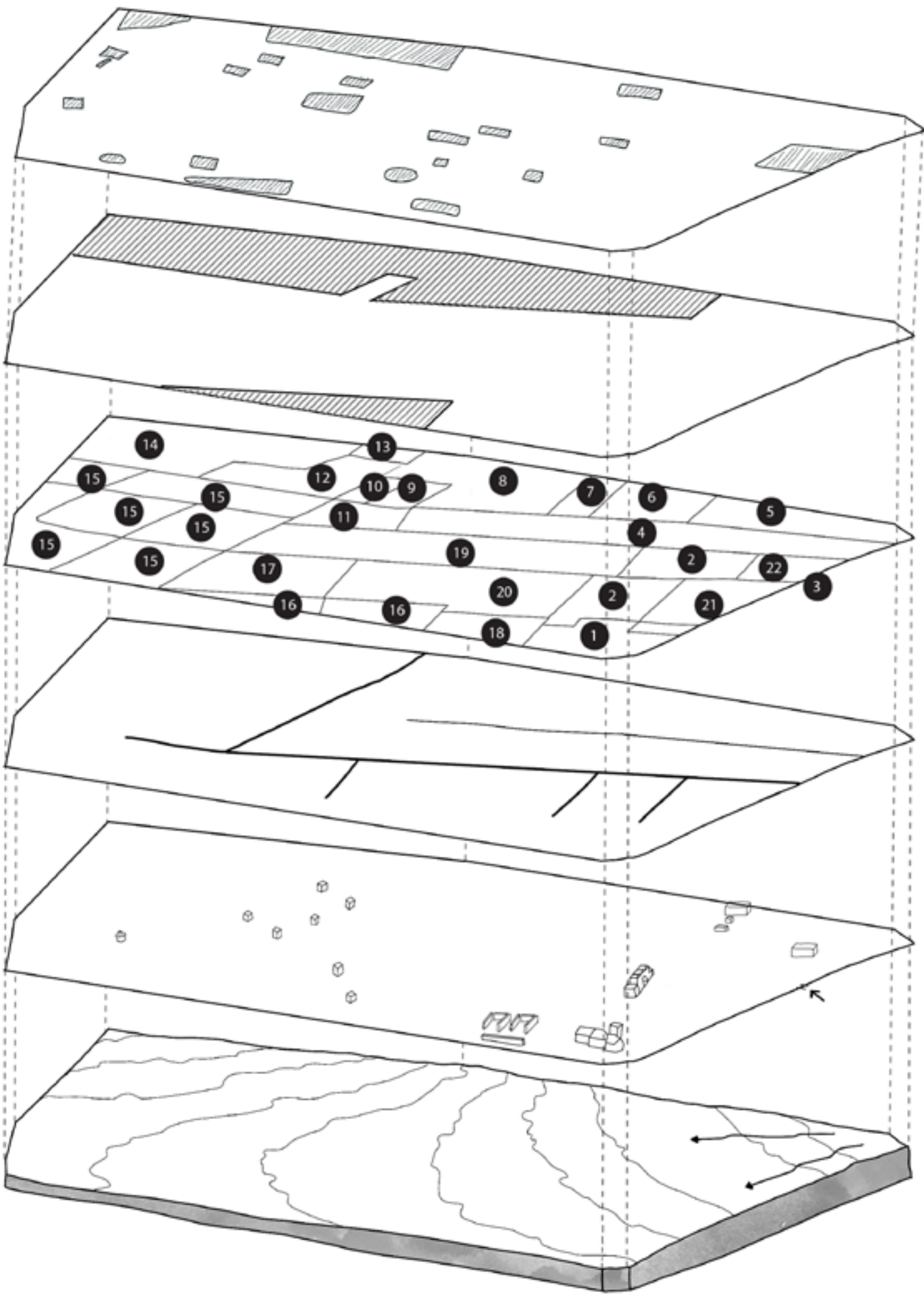
Spaces of unmarked Graves

Divisions

Roads/paths

Buildings/ memorials

Topography



- 1 Crematorium
- 2 Pioneer's Graves
- 3 Entrance
- 4 Jewish Graves
- 5 Muslim Graves
- 6 Cape Coloured Graves
- 7 Black Christian Graves
- 8 Black Mineworker Graves
- 9 Chinese Graves
- 10 Indian Graves
- 11 Anglo Boer War Graves
- 12 Black Christian Graves
- 13 Black Christian Children's Graves
- 14 School of Mines 1890's
- 15 Dutch Christian Graves
- 16 1922 Mineworker Strikers
- 17 Fire Brigade and Police Graves
- 18 Ash Walls
- 19 Dutch Reformed and Nonconformist Graves
- 20 Roman Catholic Clergy Graves
- 21 English Christian Graves
- 22 Staff Quarters

Fig 7.13
Summary of Site Analysis
(Author, 2024)

7.1 Site Analysis Materials of the Site

Grass



Fig 7.14
Left
Grass of the Cemetery
(Author, 2024)

The site is covered in a layer of grass and plants, colouring the ground a vibrant green in the summers.

Stone and Brick

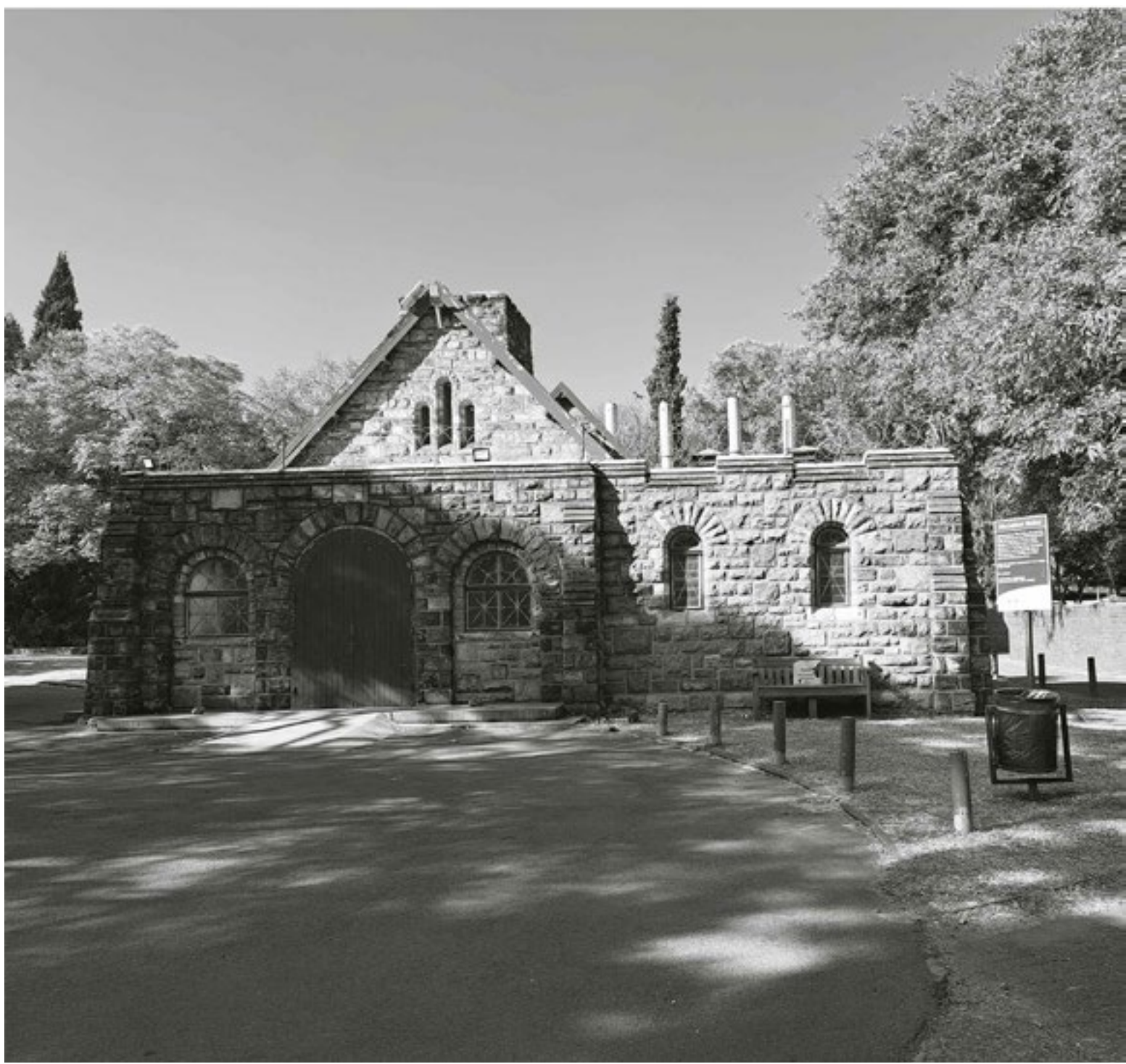


Fig 7.15
Centre
Braamfontein Crematorium
(Author, 2024)

The crematorium is made of stone and has influences of old, classical architecture, albeit in a simple way. The ash walls surrounding are made of brick. Stone and brick are the materials that dominate the built structures on the site - using stone or brick in my design could speak to the site surroundings and history.

Wood



Fig 7.16
Right
Wood of the Cemetery
(Author, 2024)

Trees are scattered throughout the site creating imagery of wooden, leafy canopies. In my second iteration of my design, this idea of the canopy and wood start to be adopted.

7.2.1 Design Explorations Early Sketches and Concepts

The idea of animals has permeated my thesis from the very start, as described in my preface, so the very early sketches of my ideas took the form of sketches of spaces for animals. I was also interested in evoking emotions in humans that might mirror the feelings and experiences that animals – abandoned, or free – might feel.

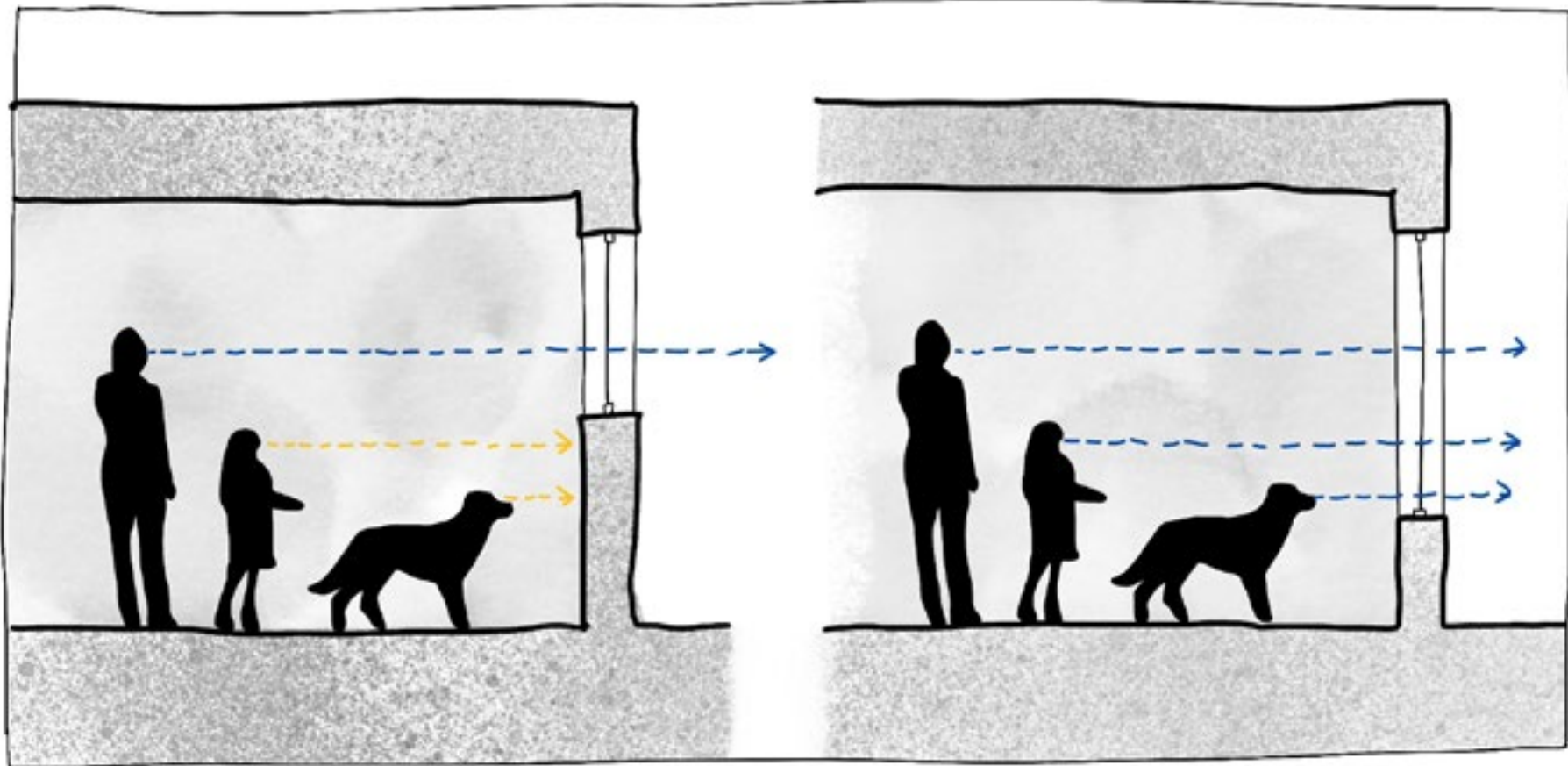
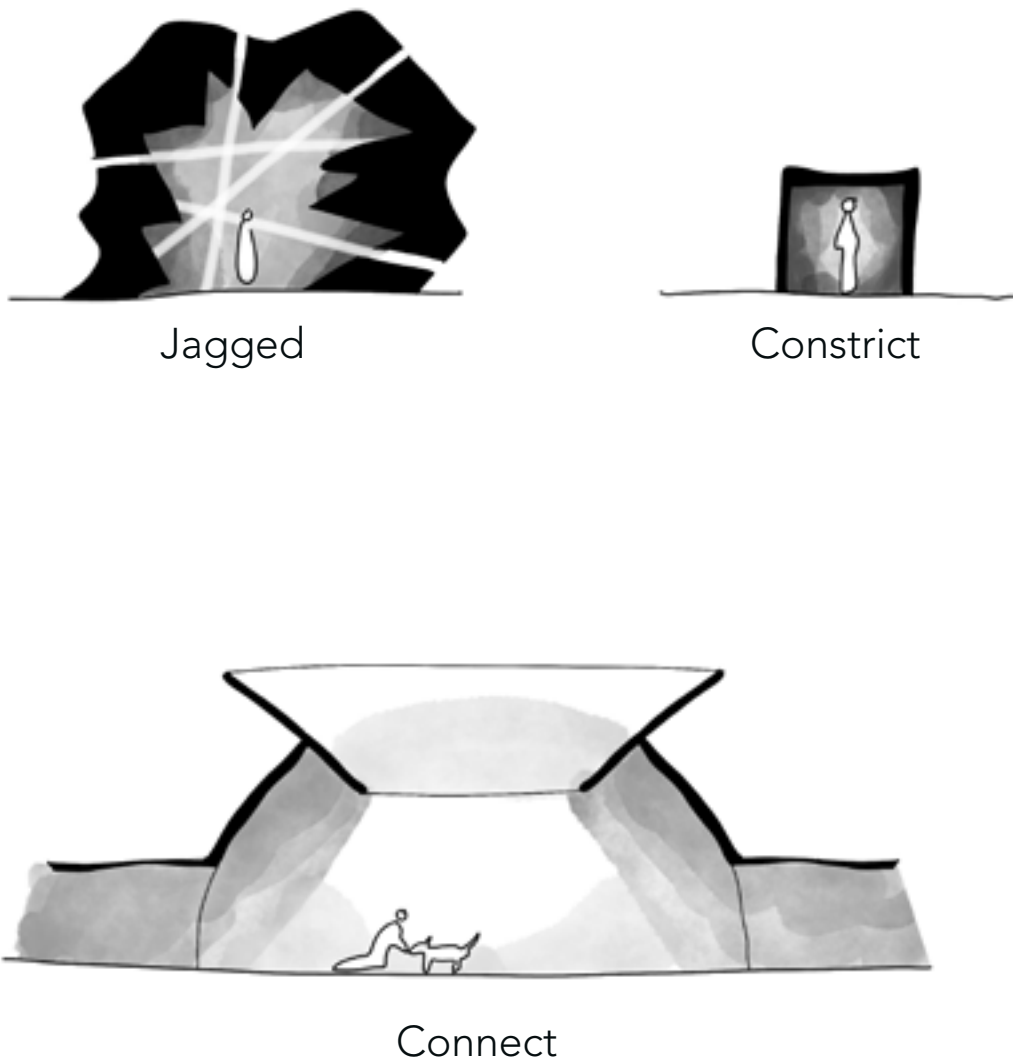
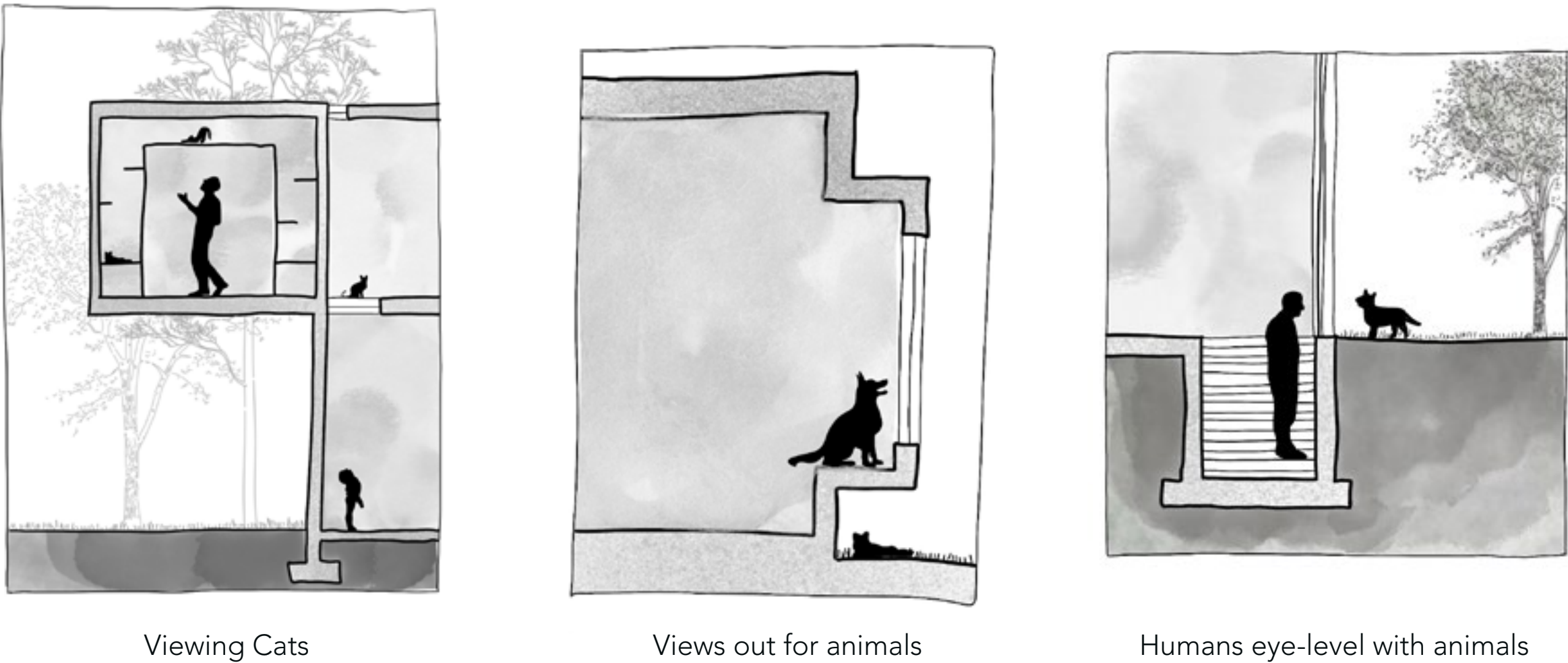
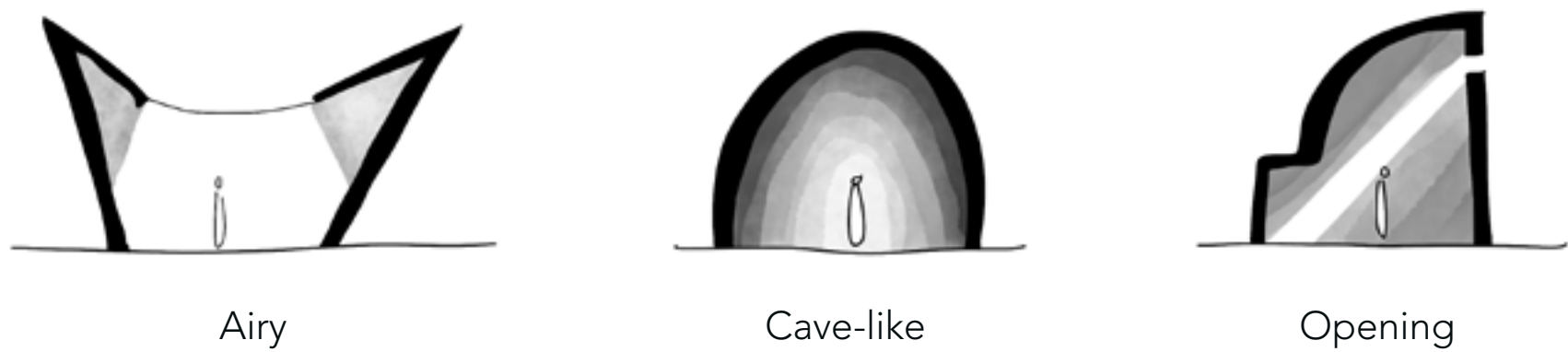


Fig 7.17
Left
Conceptual Spaces
(Author, 2024)

Fig 7.18
Opposite
Animal Spaces
(Author, 2024, after
Mostafavi, 2017)

7.2.2 Design Explorations Conceptual Charette

The theme of post-anthropocentrism in design came about during the conceptual charette held in the first half of the year.

This is when I laid out the core concepts of my thesis and created mind maps and diagrams that broke these core concepts into spatial concepts that I then experimented with using modelling materials like clay and fabric.

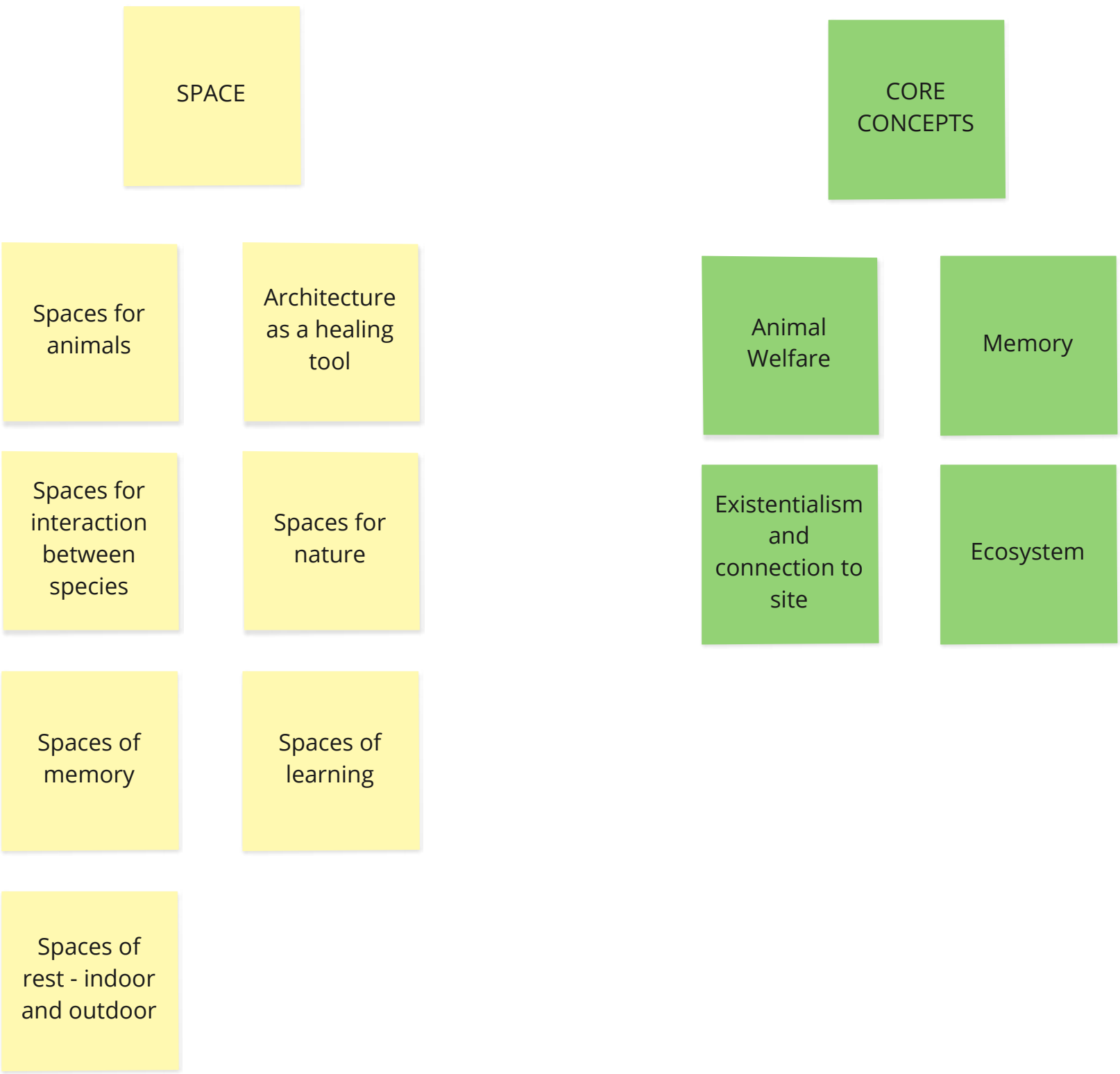


Fig 7.19
Left
Space and Concepts
(Author, 2024)

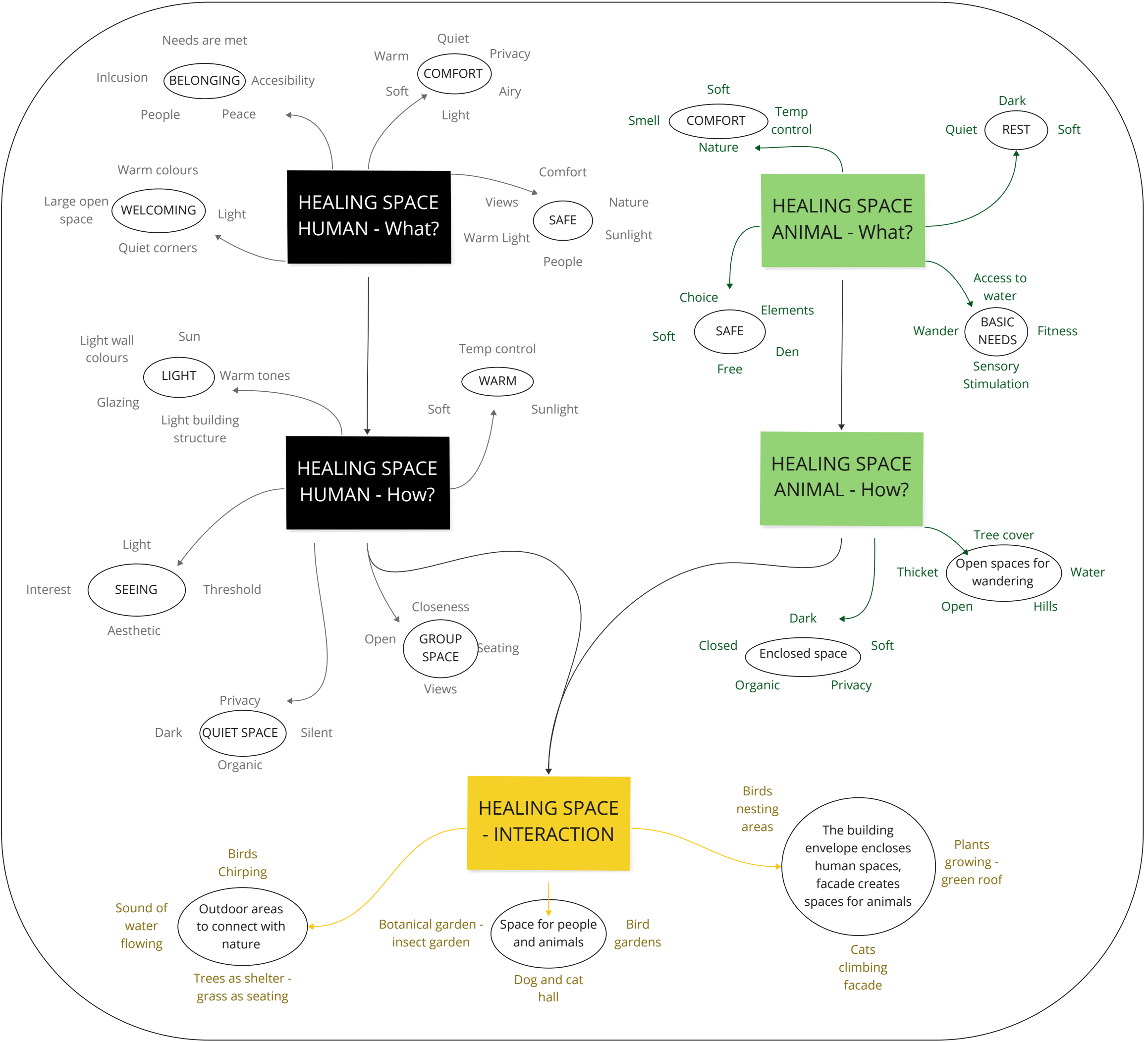


Fig 7.20
Opposite
Charette mind map
(Author, 2024)

7.2.2 Design Explorations Conceptual Charette

My approach to building these conceptual models was to imagine what an animal would like to inhabit, or feel safe in. I used fabric stretched over toothpicks to create web-like structures, as well as clay and cardboard to create smooth, cave-like structures. The idea was to emulate soothing, healing and safe spaces for animals and humans using experimentation with these materials. I then categorized the models according to their similarities to create a lexicon of charette models to look back throughout the year.

Sharp

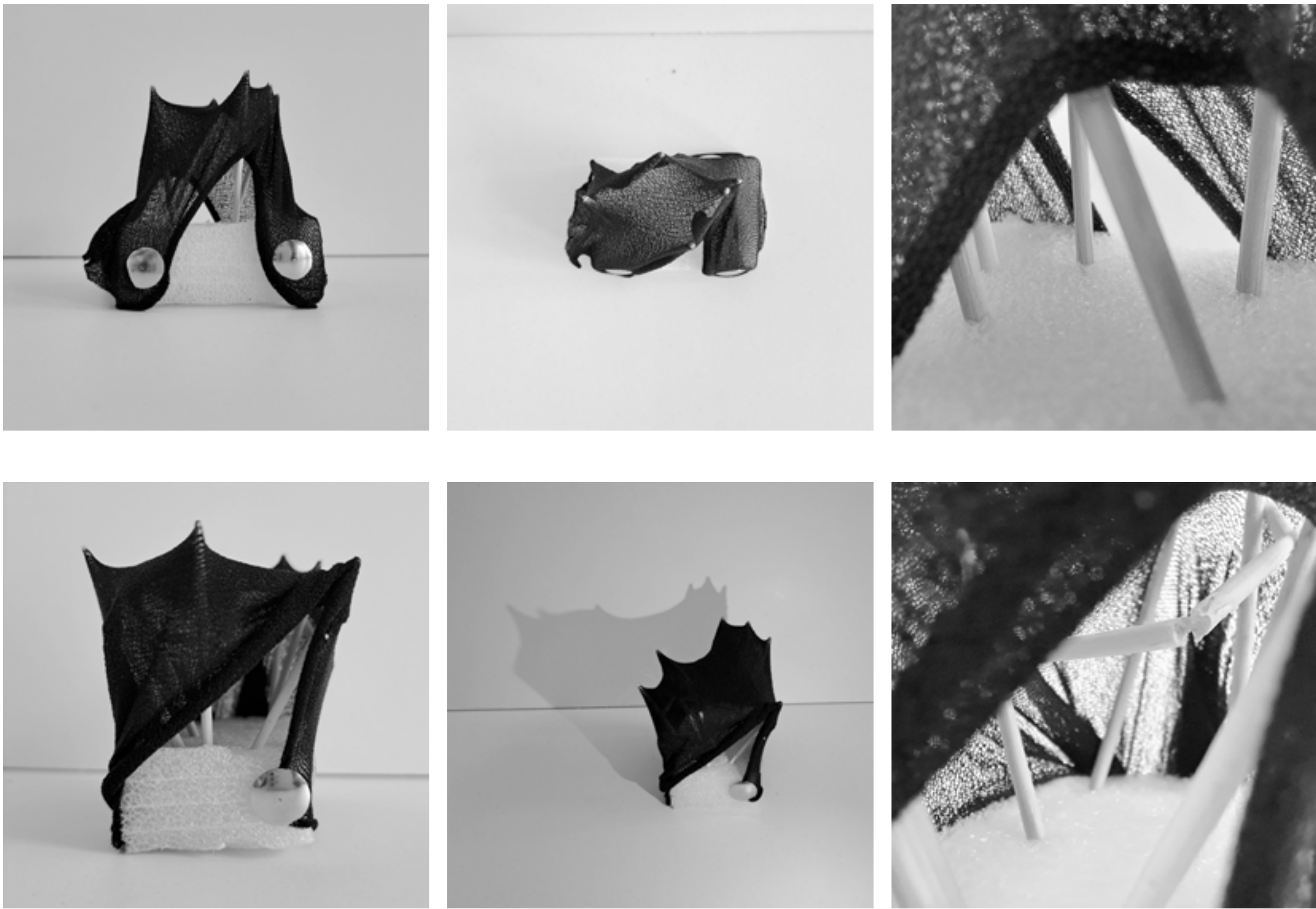


Fig 7.21
Left
Sharp Charette
Model Photos
(Author, 2024)

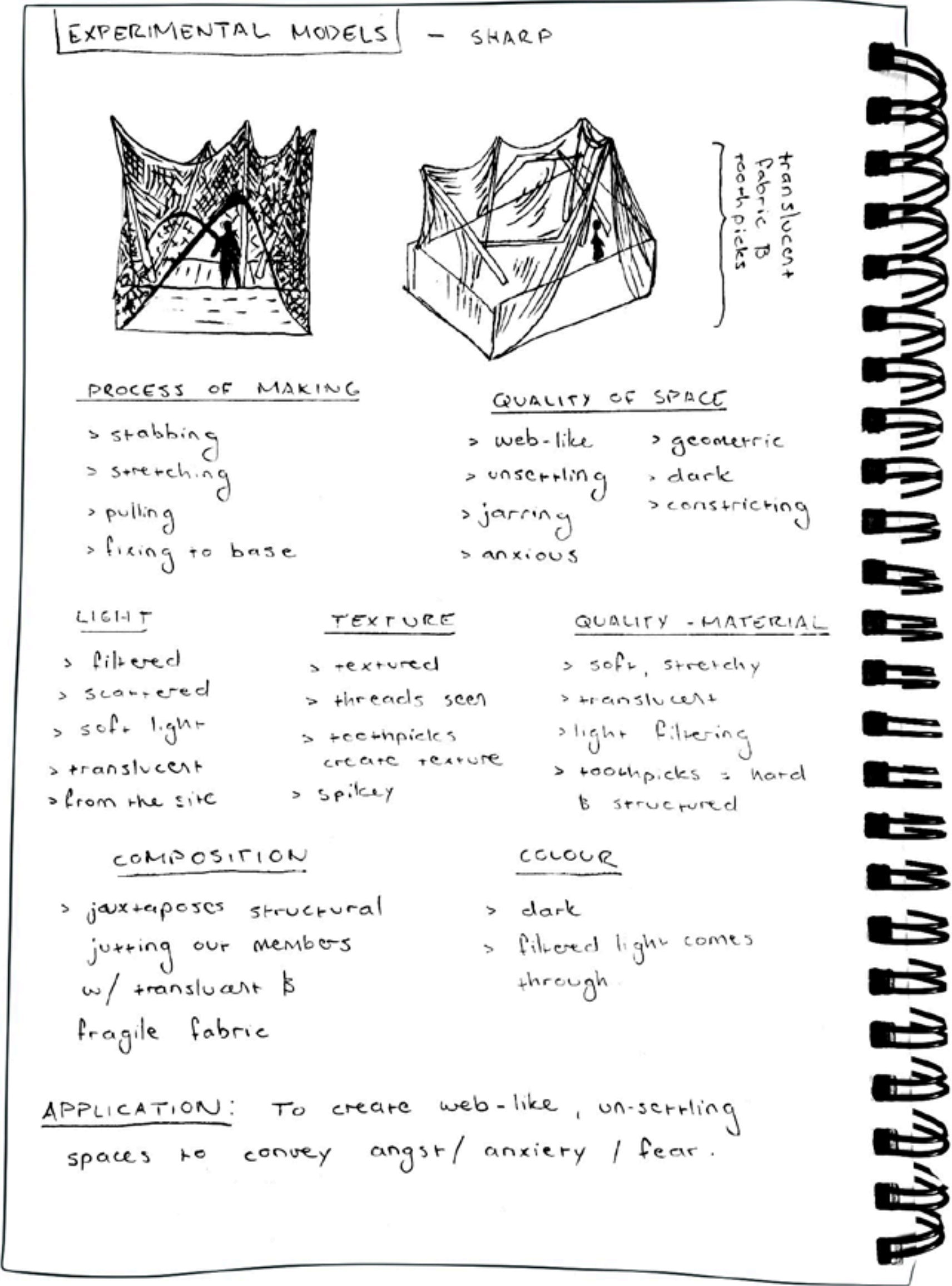


Fig 7.22
Opposite
Sharp Charette
Model Sketchbook
(Author, 2024)

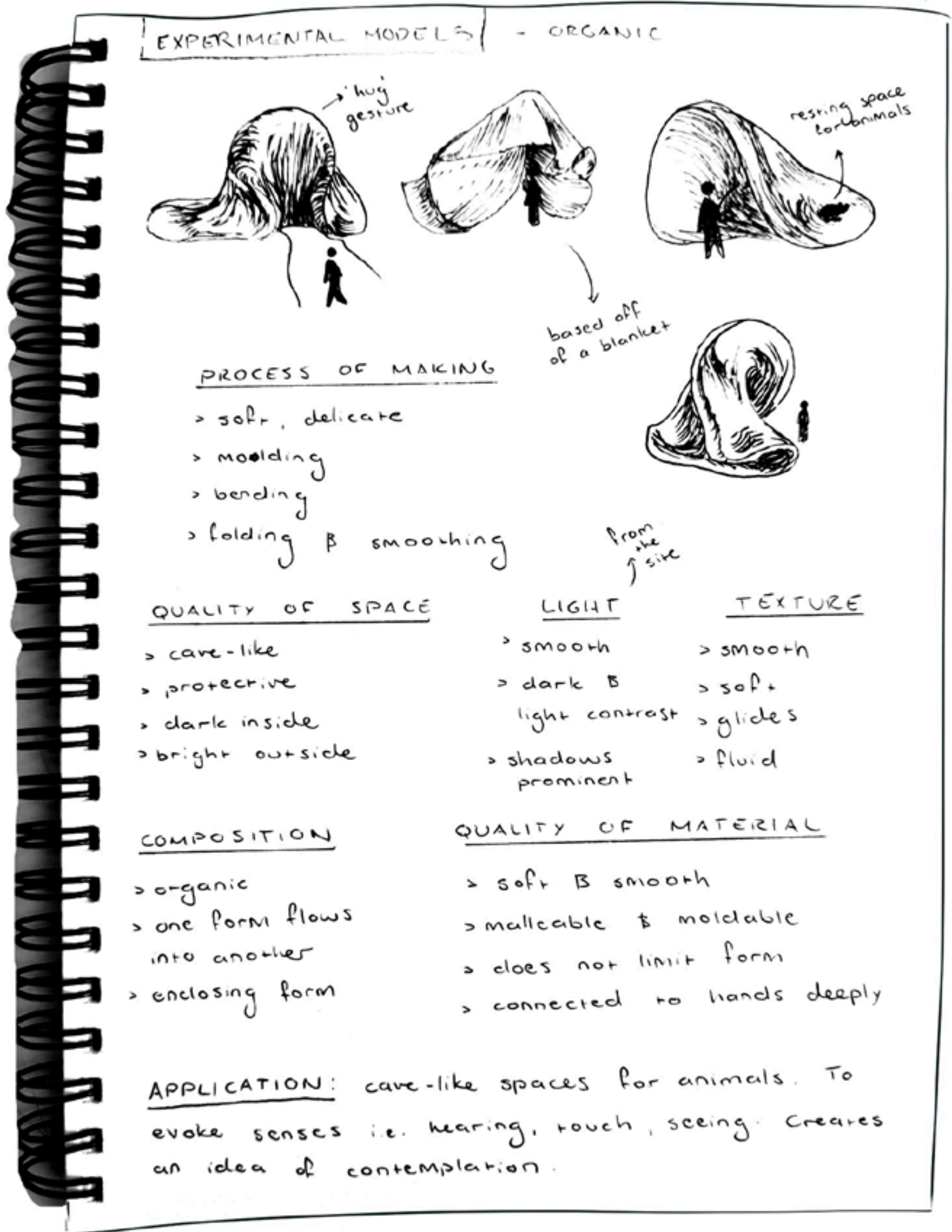
7.2.2 Design Explorations Conceptual Charette

Smooth



Fig 7.23
Left
Smooth Charette
Model Photos
(Author, 2024)

Fig 7.24
Opposite
Smooth Charette
Model Sketchbook
(Author, 2024)



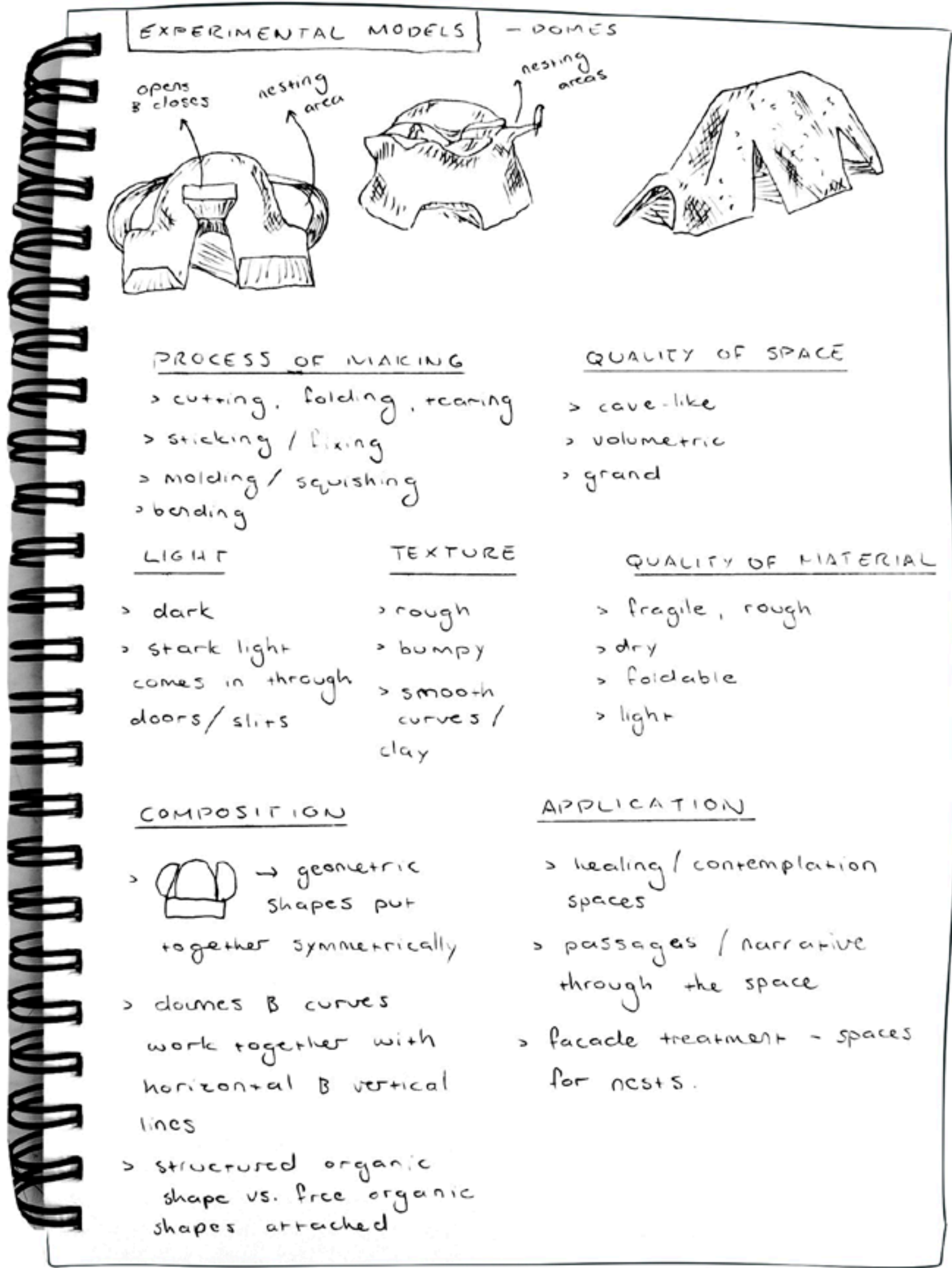
7.2.2 Design Explorations Conceptual Charette

Cave



Fig 7.25
Left
Cave Charette
Model Photos
(Author, 2024)

Fig 7.26
Opposite
Cave Charette Model
Sketchbook
(Author, 2024)



7.2.2 Design Explorations Conceptual Charette

Light

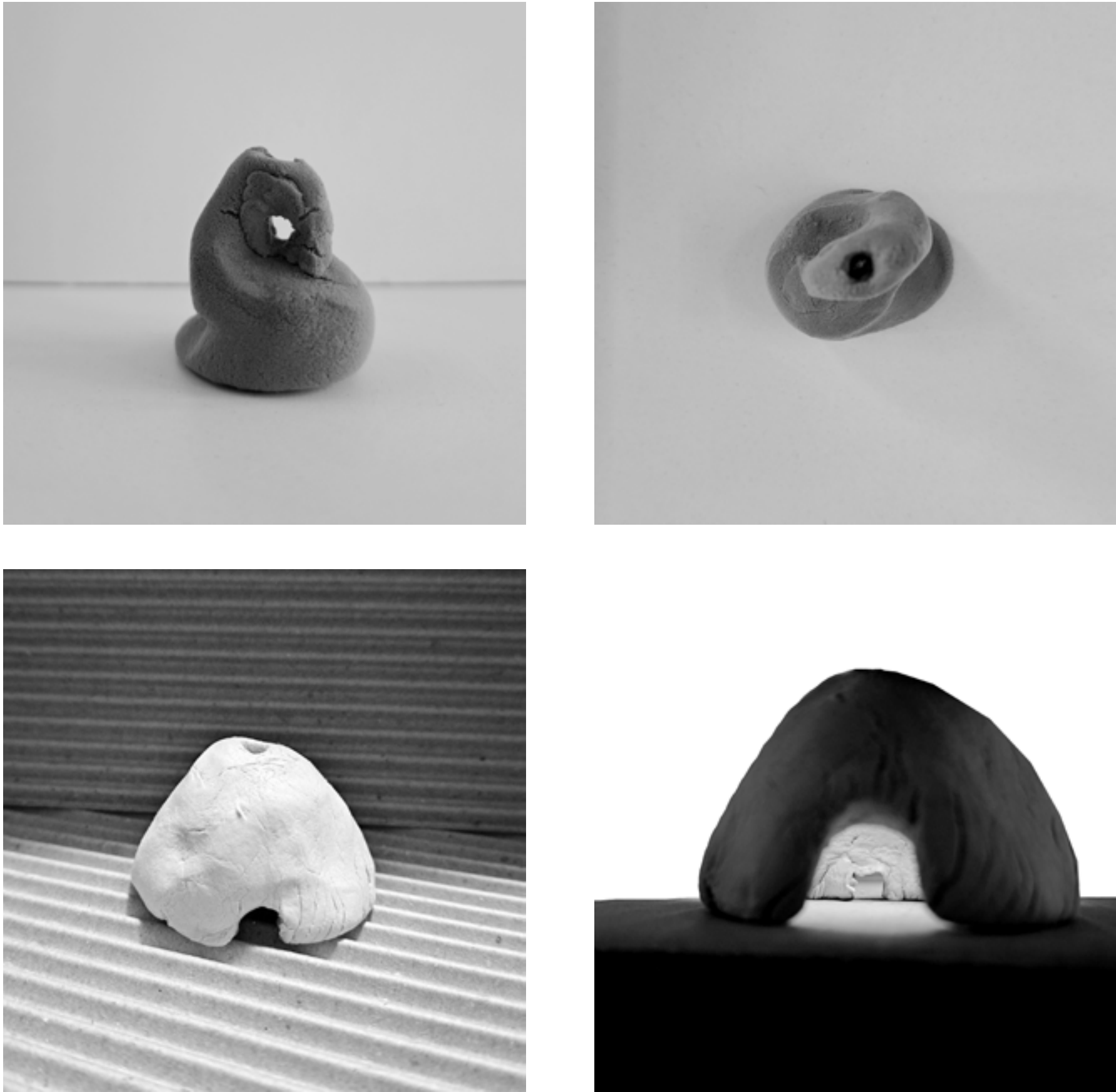
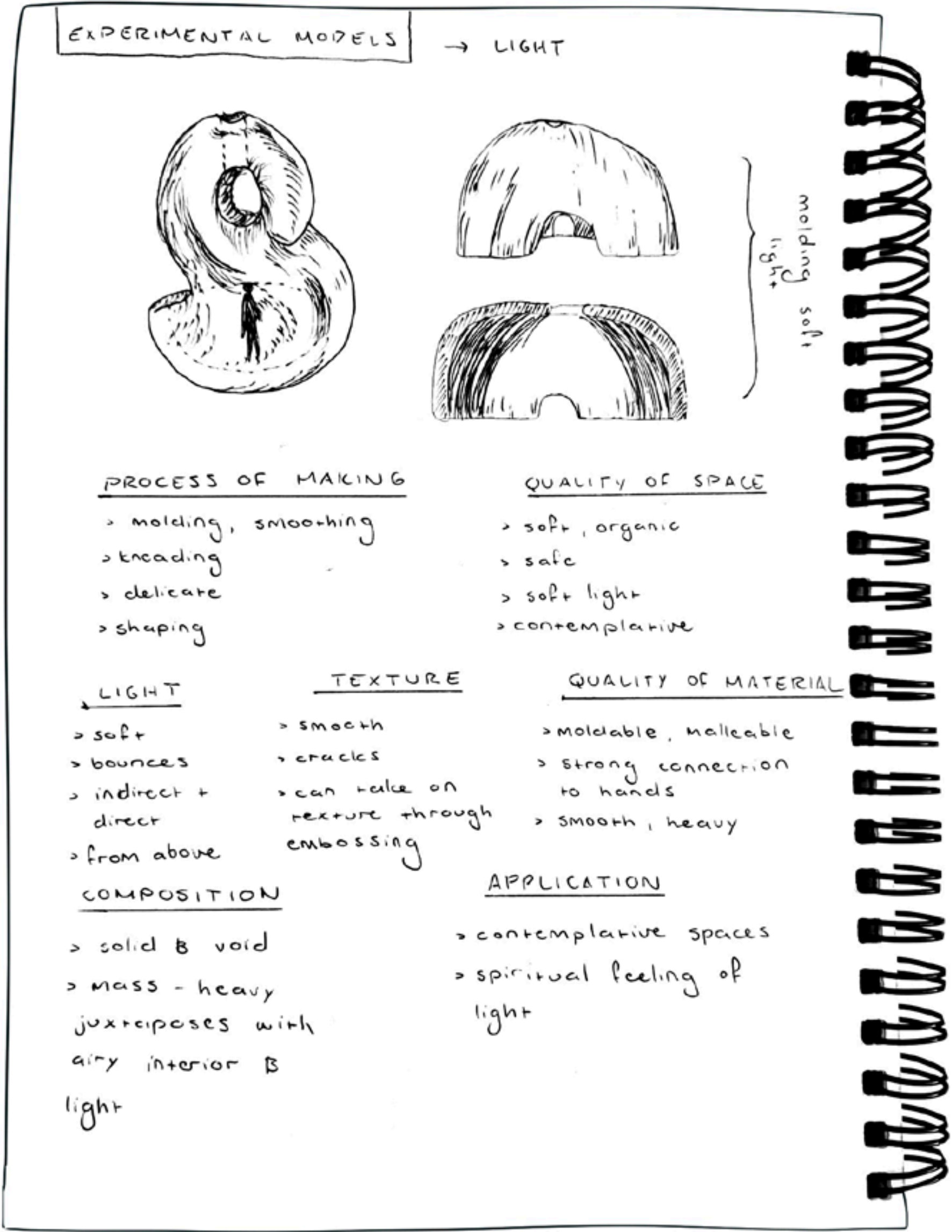


Fig 7.27
Left
Light Charette
Model Photos
(Author, 2024)

Fig 7.28
Opposite
Light Charette Model
Sketchbook
(Author, 2024)



7.2.2 Design Explorations Conceptual Charette

Tunnel

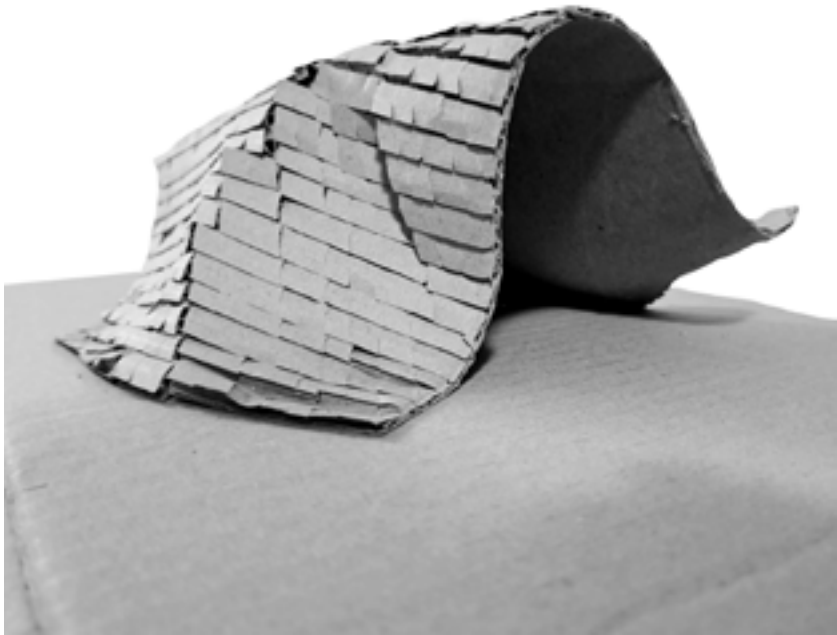
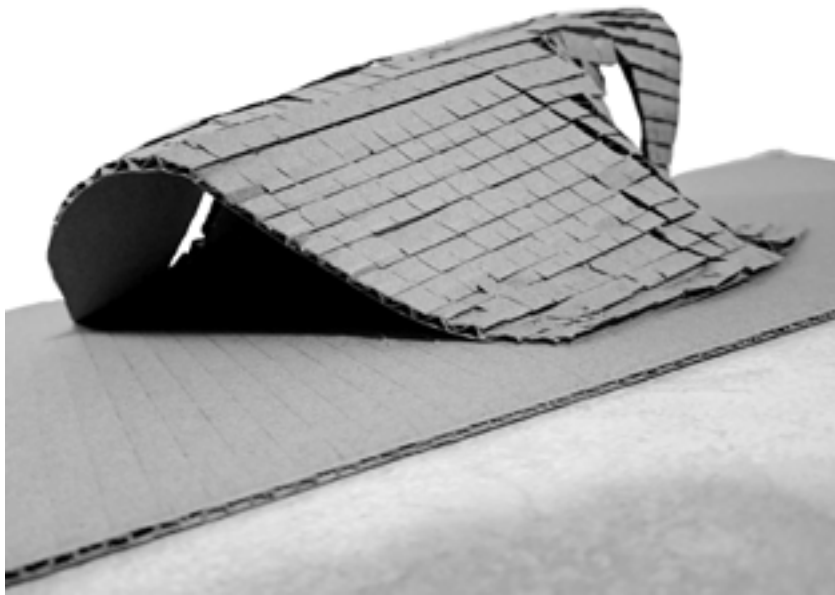
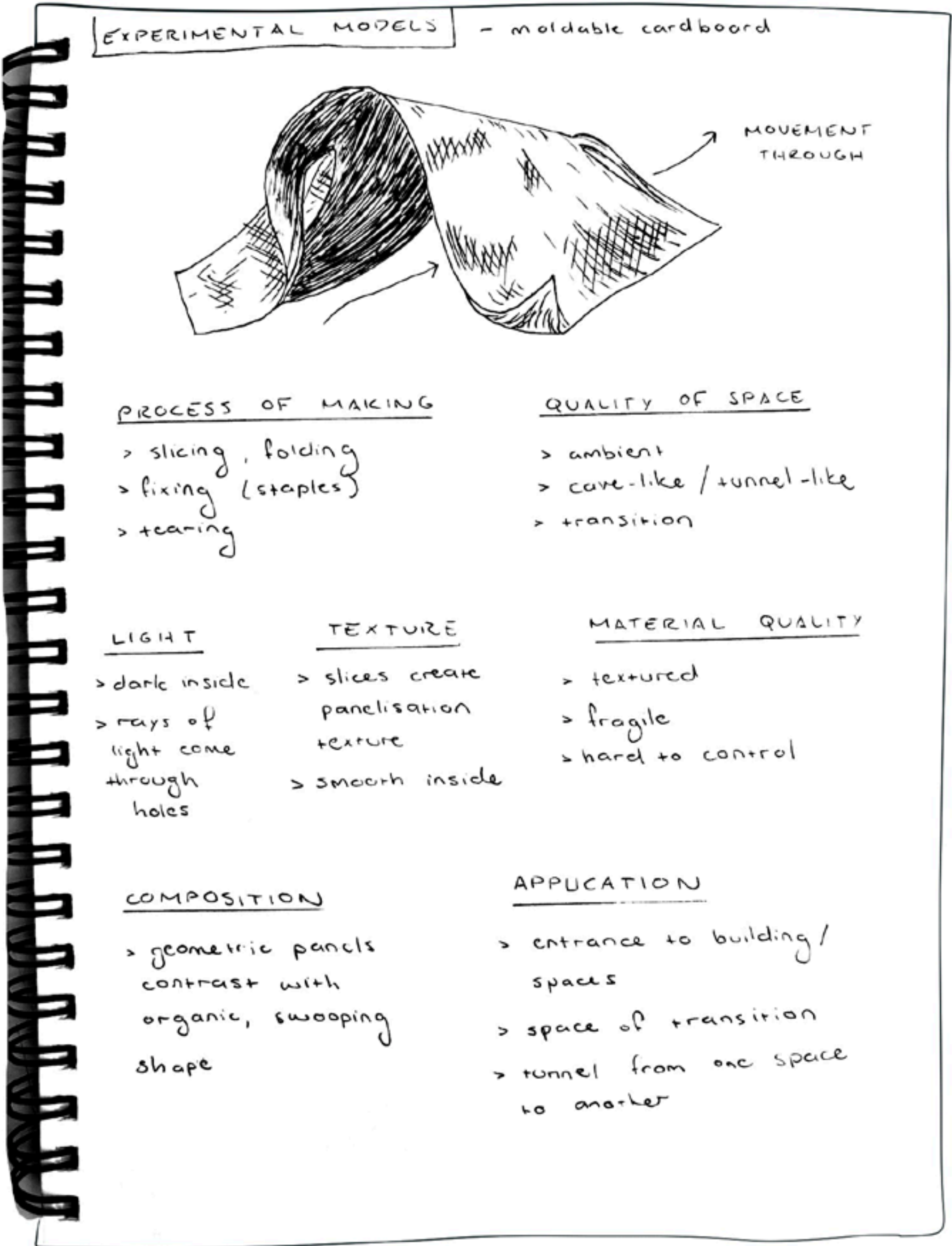


Fig 7.29
Left
Tunnel Charette
Model Photos
(Author, 2024)

Fig 7.30
Opposite
Tunnel Charette
Model Sketchbook
(Author, 2024)



7.2.2 Design Explorations Conceptual Charette

Facade

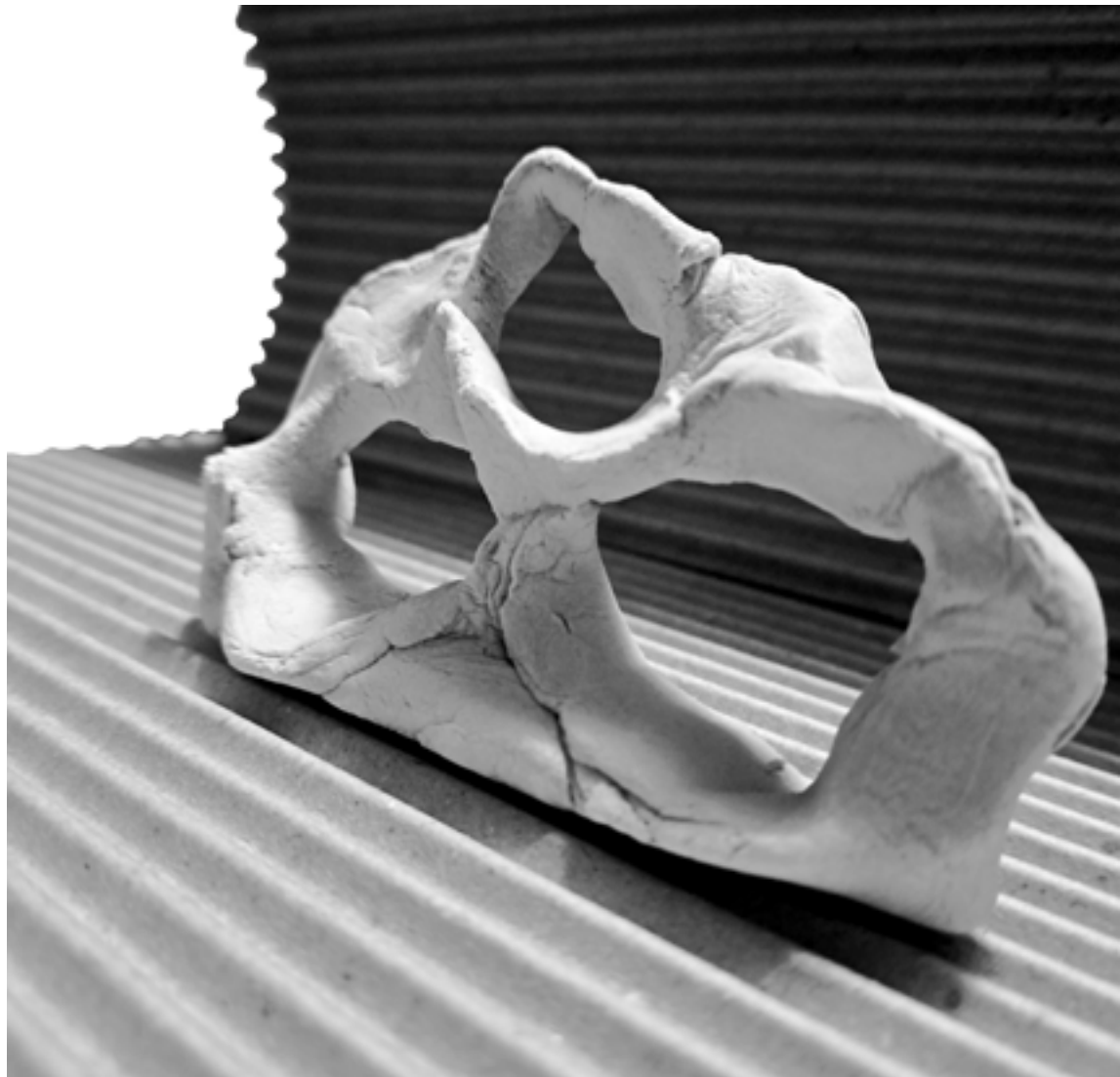


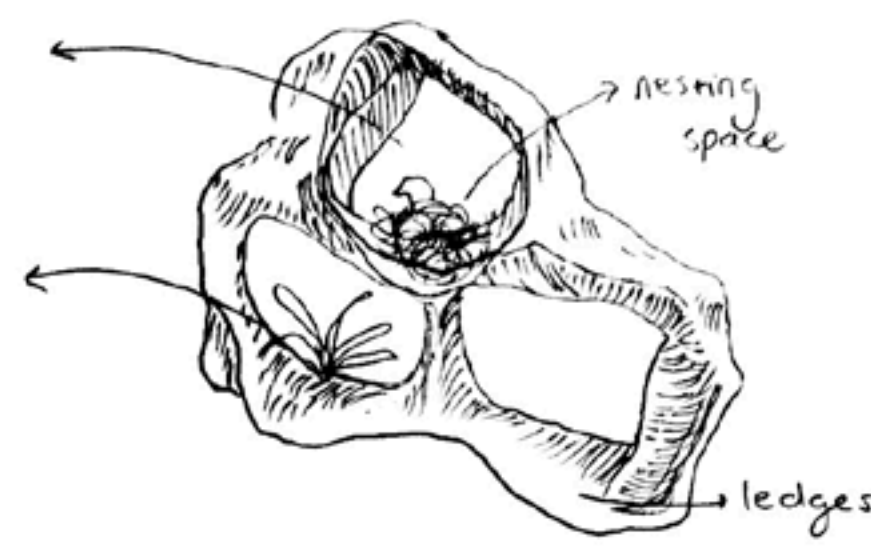
Fig 7.31
Left
Facade Charette
Model Photos
(Author, 2024)

Fig 7.32
Opposite
Facade Charette
Model Sketchbook
(Author, 2024)

EXPERIMENTATION W/ MODELS - FACADE

ventilation & view out from building

spaces for planting onto the facade



PROCESS OF MAKING

- > molding
- > pulling, pushing
- > pinching

QUALITY OF SPACE

- > enclosing, protective
- > airy
- > not constricting

LIGHT

- > shapes create a lot of shadow & light
- > light from site

TEXTURE

- > smooth
- > organic
- > chippy

MATERIAL QUALITY

- > soft, moldable
- > brittle when dry
- > heavy
- > not sturdy
- > wet

COMPOSITION

- > irregular organic shape
- > irregular solid & void shapes create a feeling of alive-ness
- > movement

APPLICATION

- > facade system - can provide shading & shelter for birds
- > allows for planting

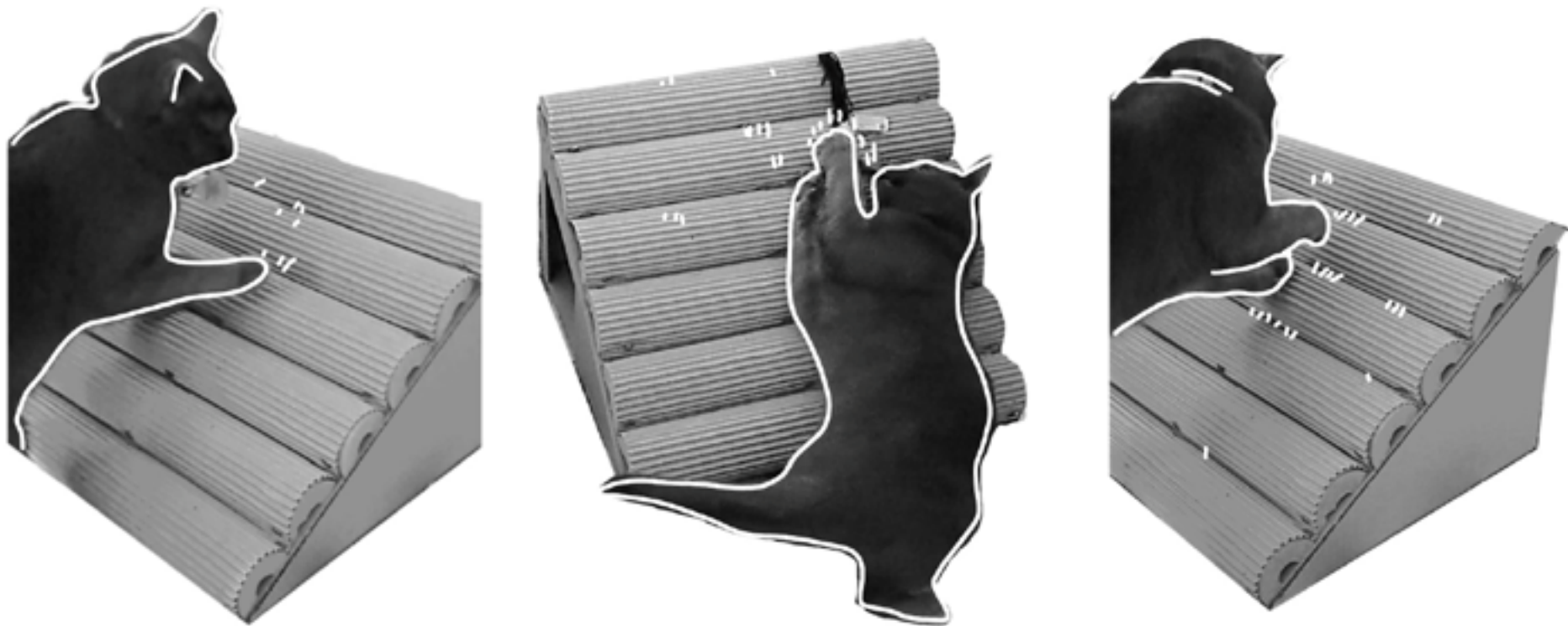
Developing a Design

157

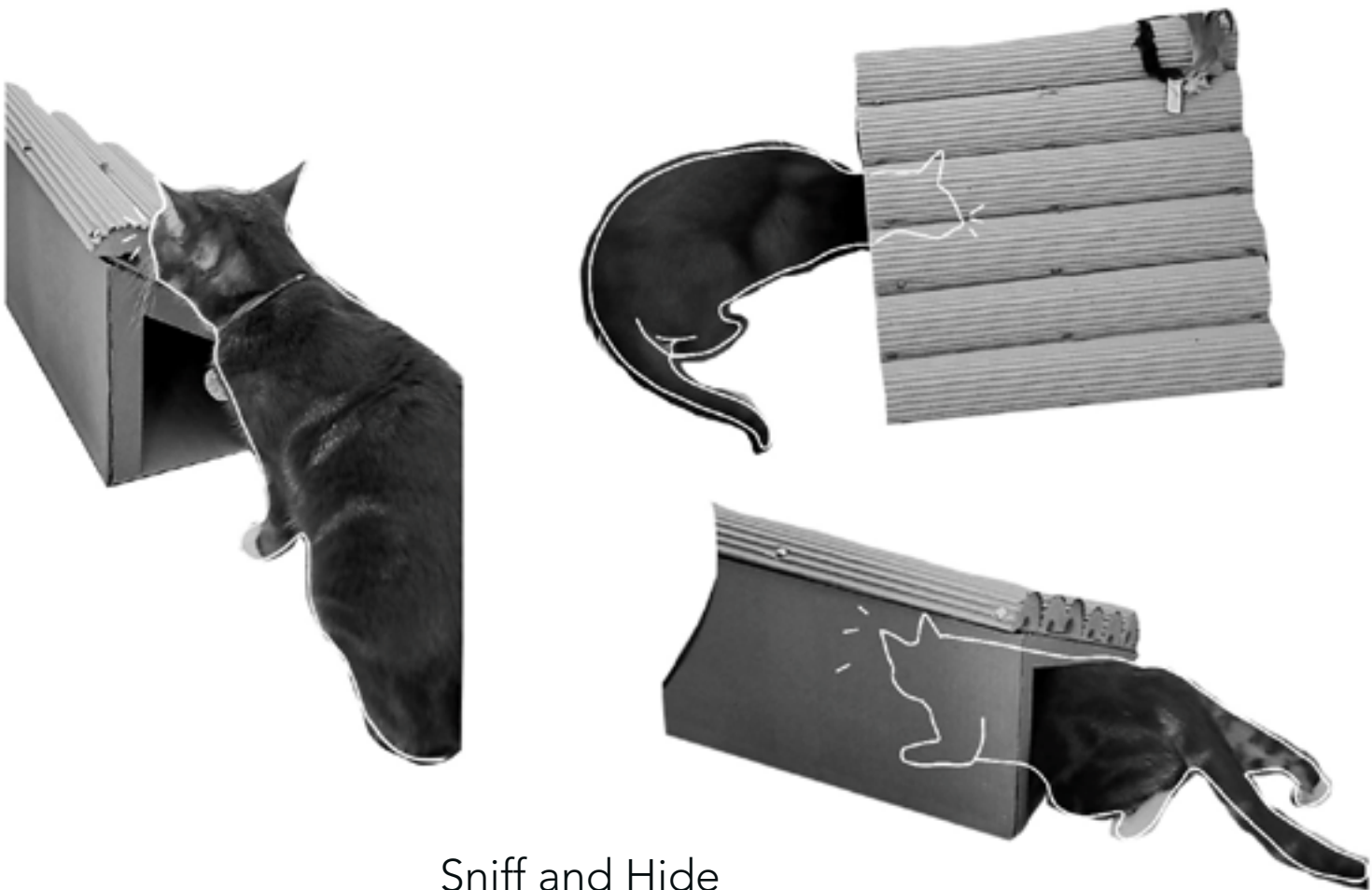
7.2.2 Design Explorations Conceptual Charette

Cat Tree/ Cat Home

I further experimented by making a cat home that doubled as a hide and a play toy. I then gave the toy to my sister's cats allowing them to explore it for a little while. They seemed to enjoy it, climbing, scratching and biting the cardboard. They also tried to hide inside the structure.



Bite, Scratch and Climb

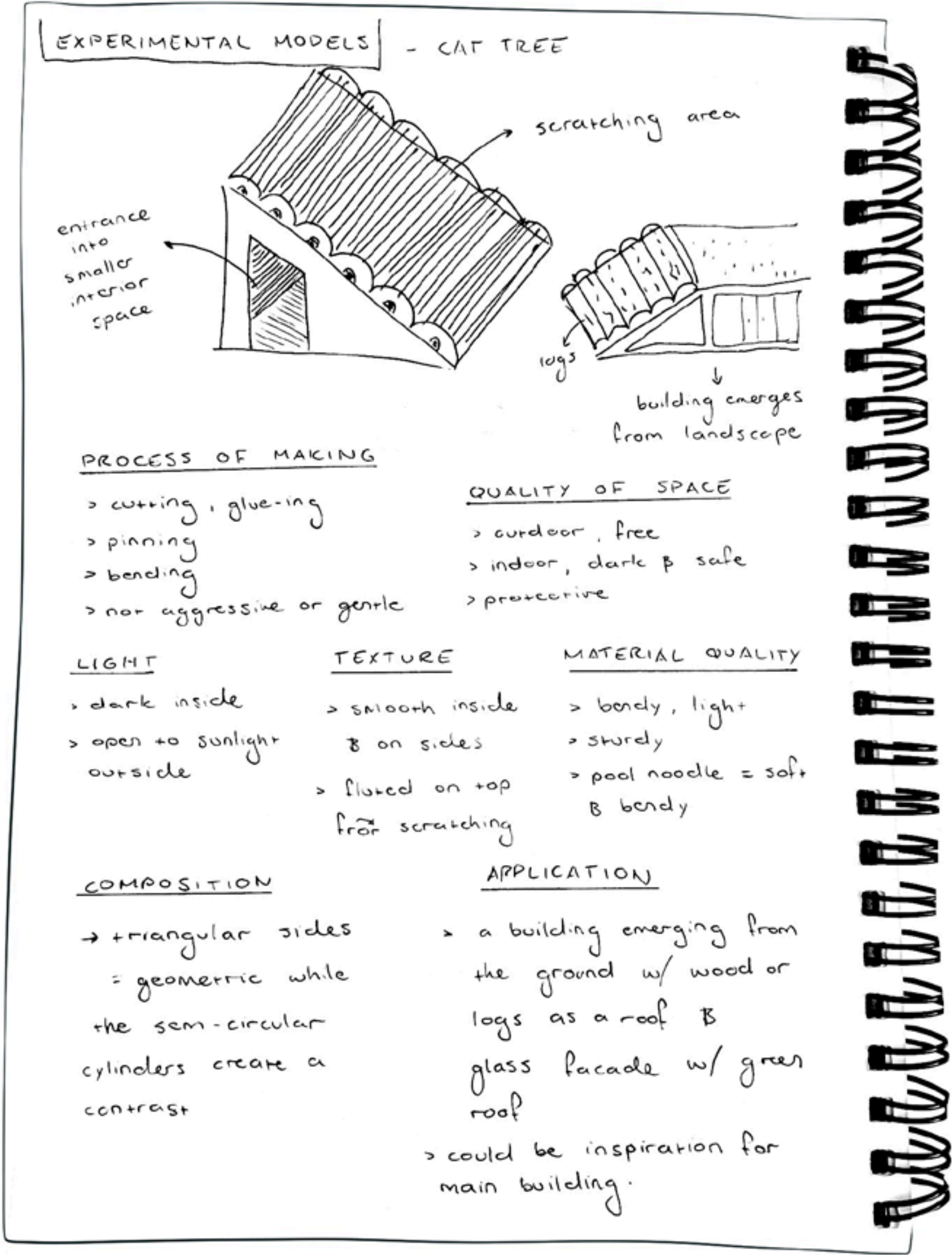


Sniff and Hide

Fig 7.33
Left top
Bite, scratch and climb
(Author, 2024)

Fig 7.34
Left bottom
Sniff and hide
(Author, 2024)

Fig 7.35
Opposite
Cat home charette model sketchbook
(Author, 2024)



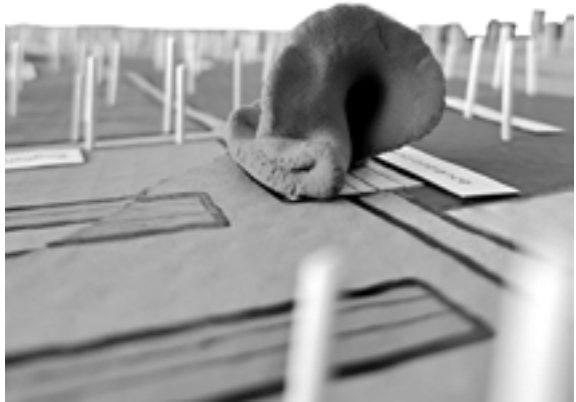
7.2.2 Design Explorations Conceptual Charette

Charette Models on Site

Sharp



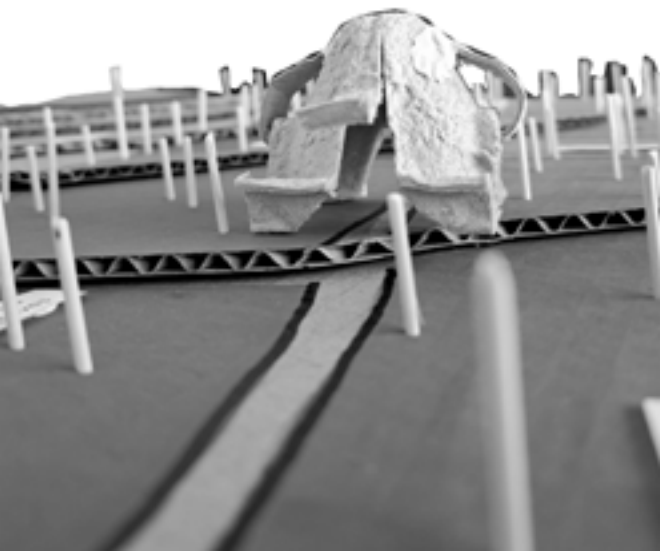
Smooth



Light



Cave



Facade

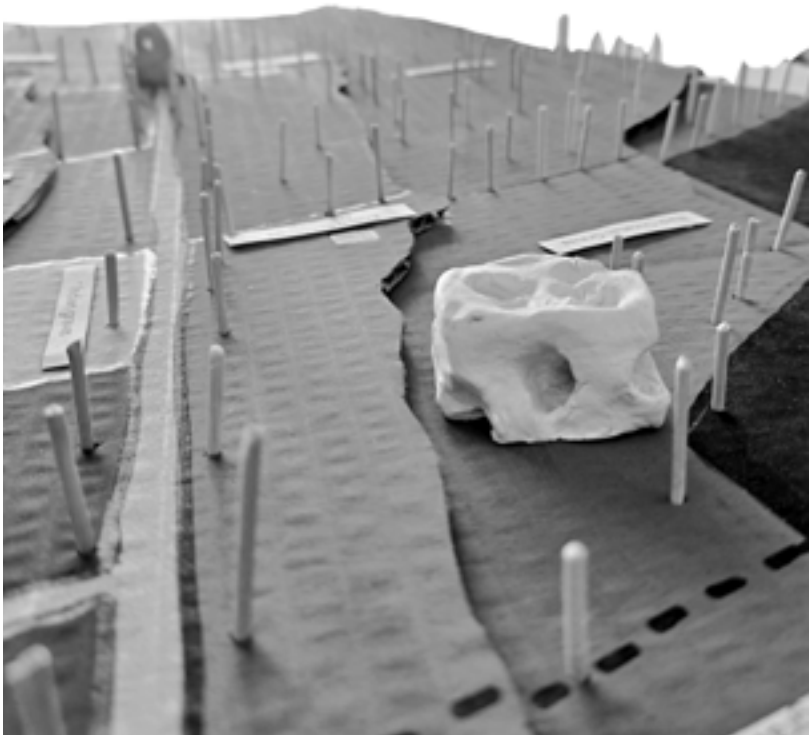


Fig 7.36
Charette models on site
(Author, 2024)

7.2.2 Design Explorations Conceptual Charette

Conclusions and Takeaways

The charrette exercise helped me put the main thoughts and ideas of my thesis into being. By categorising and analysing the models I made according to the process of making, texture, quality of space, light, material quality, composition and application, it helped me organise the different qualities of space that I wanted to be part of my design intervention.

The models under the sharp category inspired the bird homes I then went on to design in my first design iteration. These models provide a sense of hiding and tent-like shelter. They mimic the idea of trees and spider webs, bringing imagery of nature into the design of the structure.

The smooth models were an experimentation of creating comforting spaces. Spaces that mimic caves and blankets where one – animal or human – can hide or rest. These ideas are something that could be used to create spaces where the animal and human connect/interact, or even for spaces of contemplation within the cemetery, tying to the memory aspect of the site.

I used models to play with the idea of controlling light through a structure to evoke a feeling of ethereality. These spaces link to the idea of connecting to the history of the site and recognising one’s own existential being.

Cave-like structures came to mind when thinking of animal spaces. Caves, after all, were what the early humans also used as shelter and so they blur the barrier between animal and human spaces. These spaces have a sense of silence and darkness that create different emotions to the traditional human spaces that we occupy. Creating a primal space allows one to connect to their own ancestry and empathise with the animal.

Dealing with facades came to mind when I thought about birds. Birds are sometimes killed by certain facades and so creating facades that they could nest in and occupy space within is something I also explored in the charrette.

The cat home experiment allowed me to understand that animals are unpredictable, but with some thought, one can create something they will enjoy. The use of cardboard worked well for scratching, which could translate to wood or texture in larger architectural

structures. What I learnt was that more space needs to be designated for animals to be able to hide and rest.

Overall, the charrette was a great way to experiment with something I have never done before – which is design for the animal.

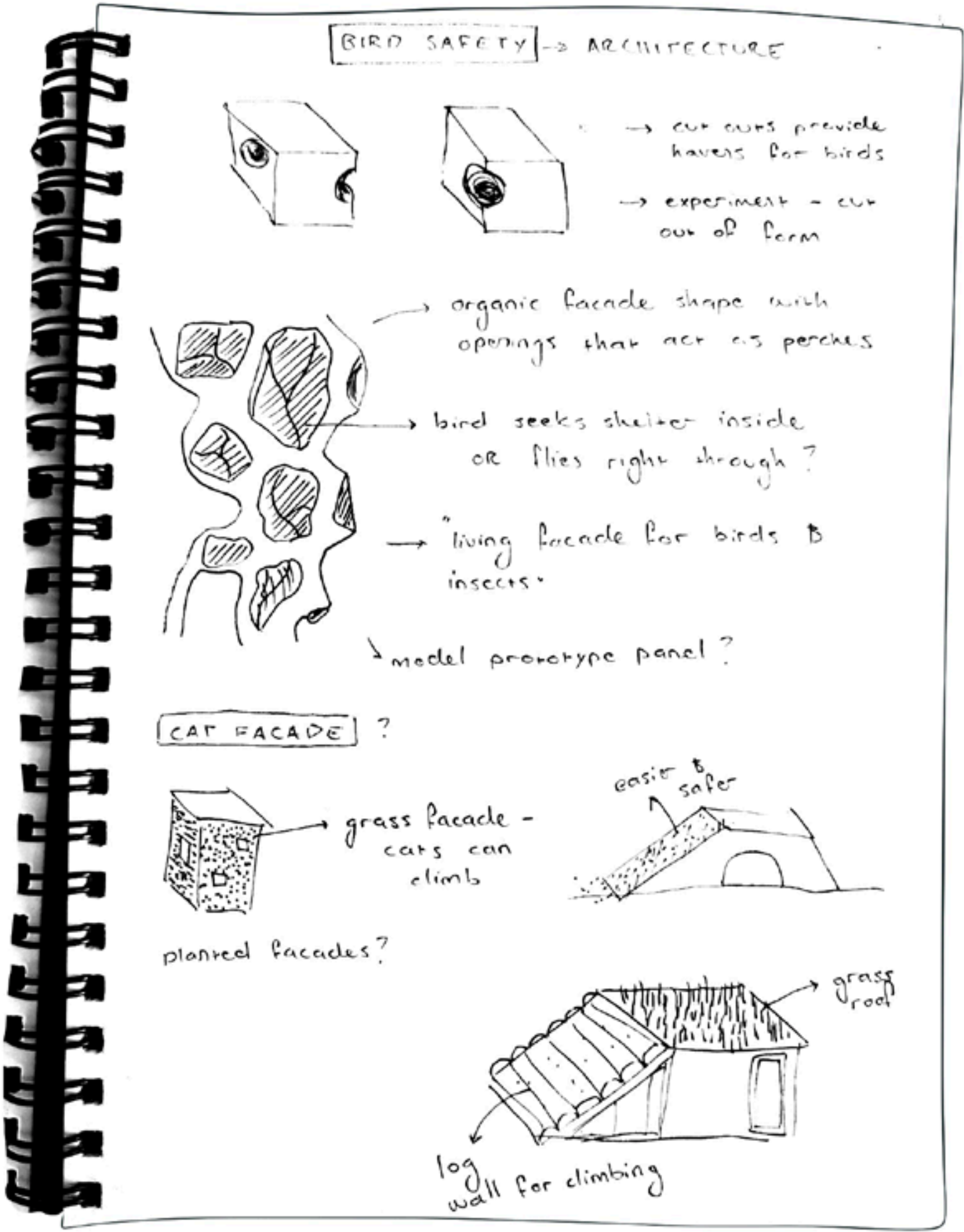


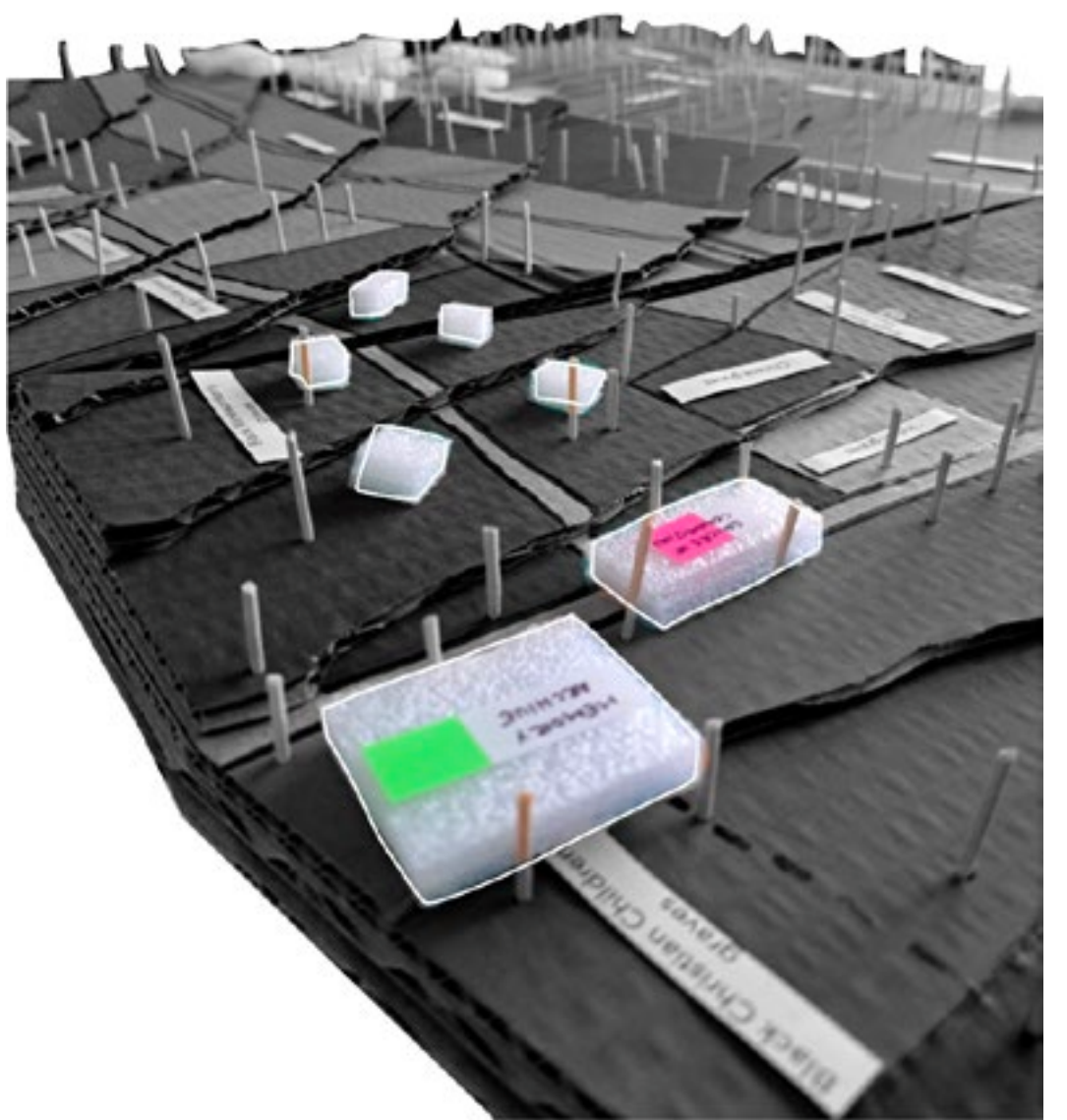
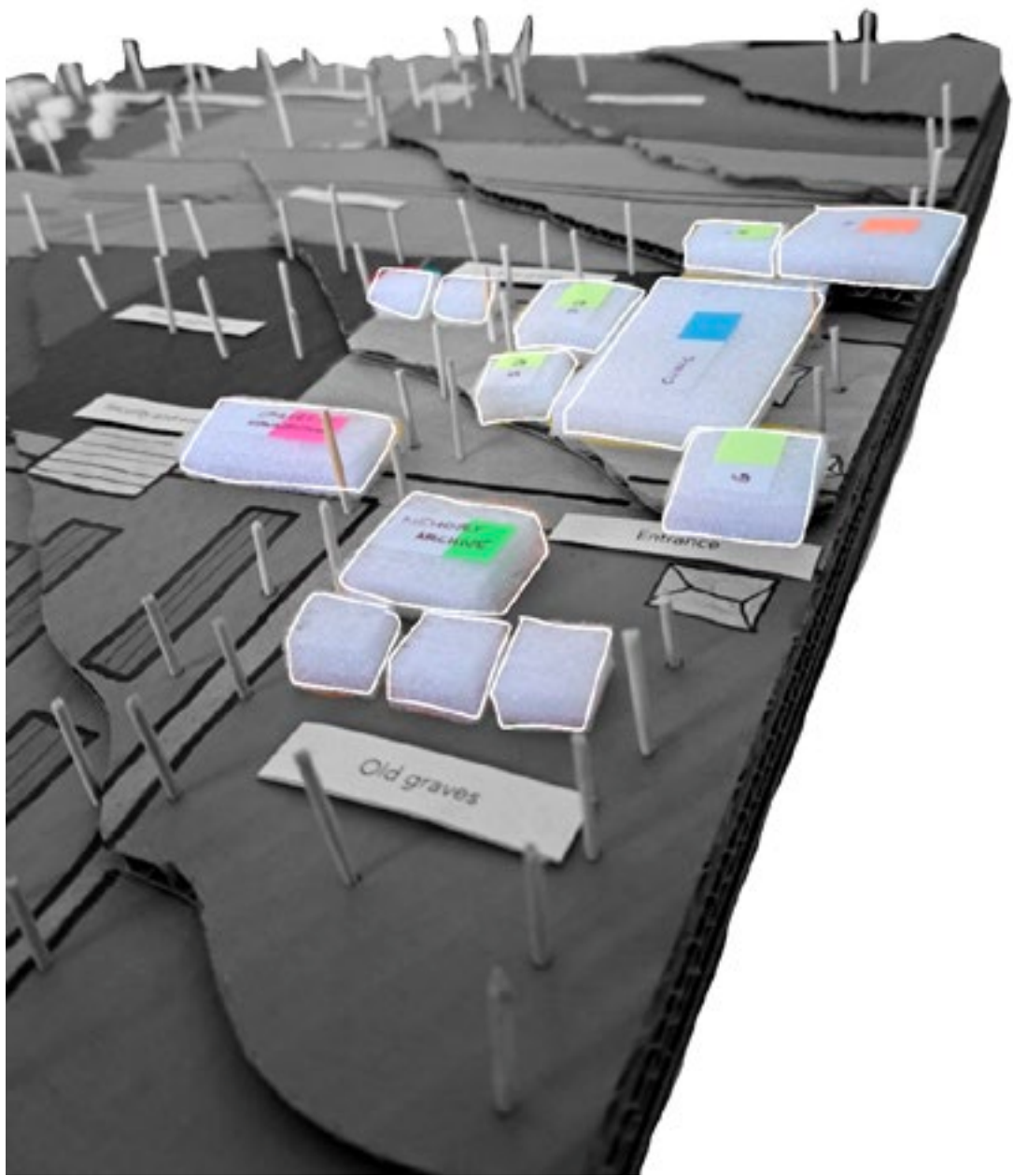
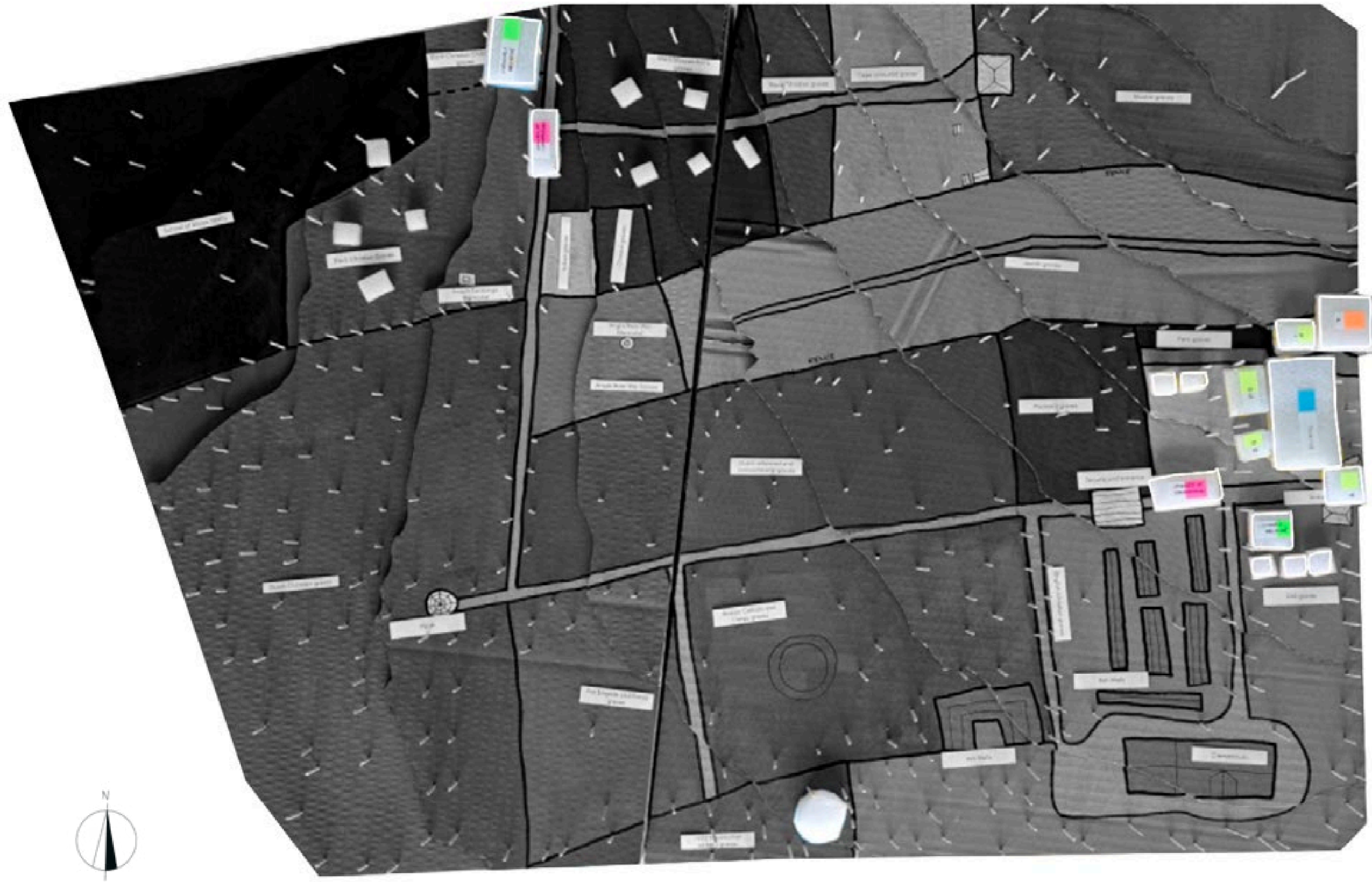
Fig 7.37
Opposite
Charette concept sketches
(Author, 2024)

7.2.3 Design Explorations Placing on Site

Option 1 - chosen for iteration 1

To start the design process of creating an actual architectural building, I created a site model and mapped the gravesite sections onto the model so I knew where everything resided. I then created massing models of programme that I placed in different areas to discover which placements would work best for my scheme.

- Spaces of Connection
- Memory Archive
- Animal Centre
- Parking
- Quarantine/Grooming
- Animal Homes



Pros

- Critical mass on Graf St.
- Archive by main entrance at cemetery.
- Clinic placed on non-sensitive ground.
- Archive placed over unmarked graves - architectural potential.

Cons

- Empty areas on site.
- Archive on Graf St placed atop gravesites.
- Not very bold.

Fig 7.38
Centre
Option 1 scheme plan
(Author, 2024)

Fig 7.39
Opposite right
Option 1 scheme
perspectives
(Author, 2024)

7.2.3 Design Explorations Placing on Site

Option 2

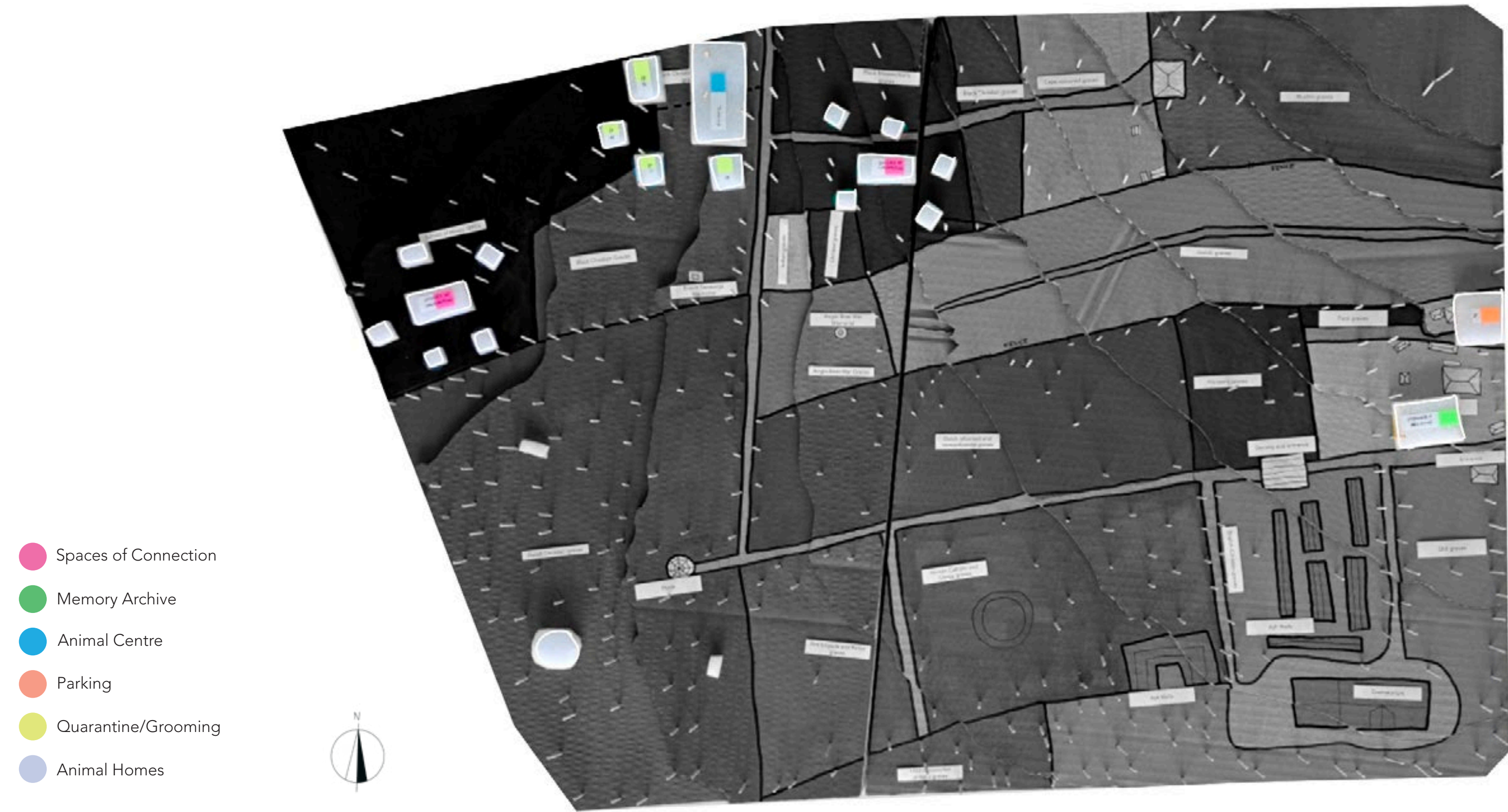


Fig 7.40
Centre
Option 2 scheme plan
(Author, 2024)

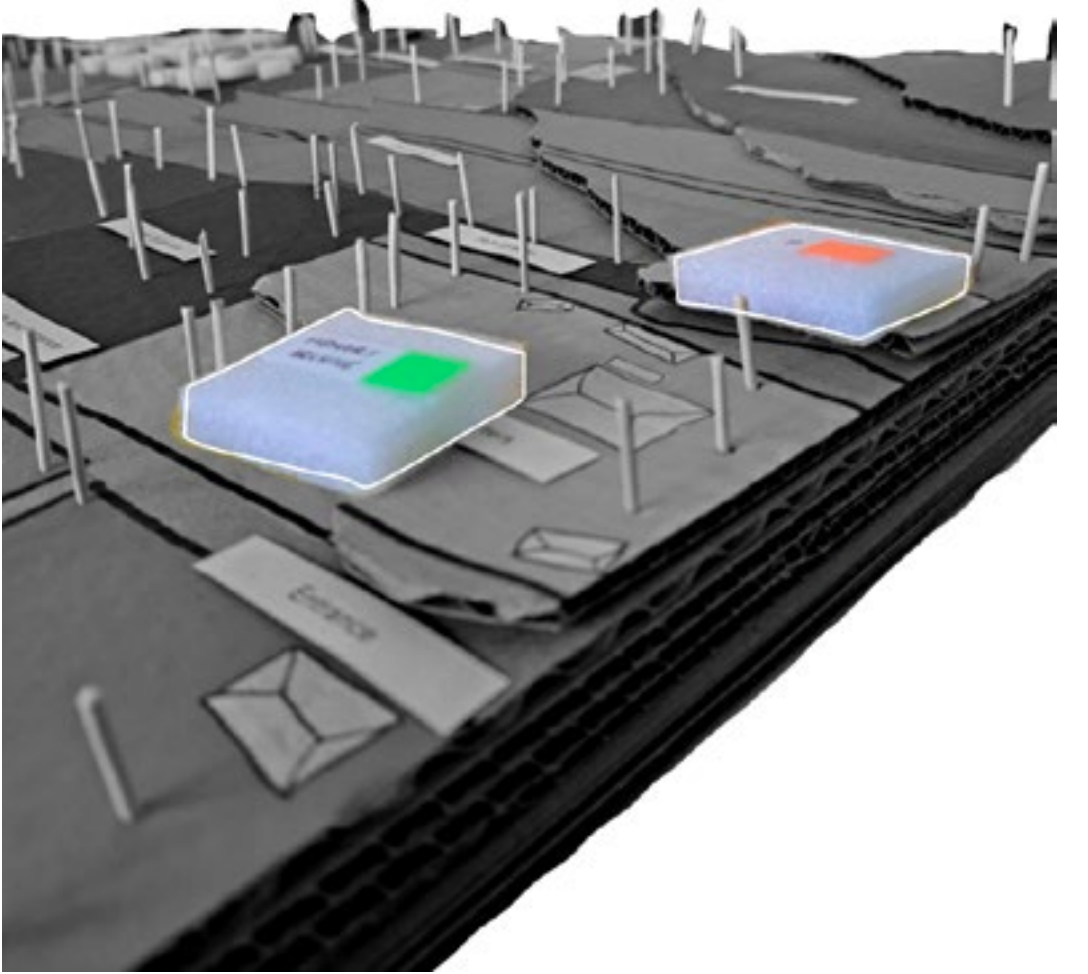
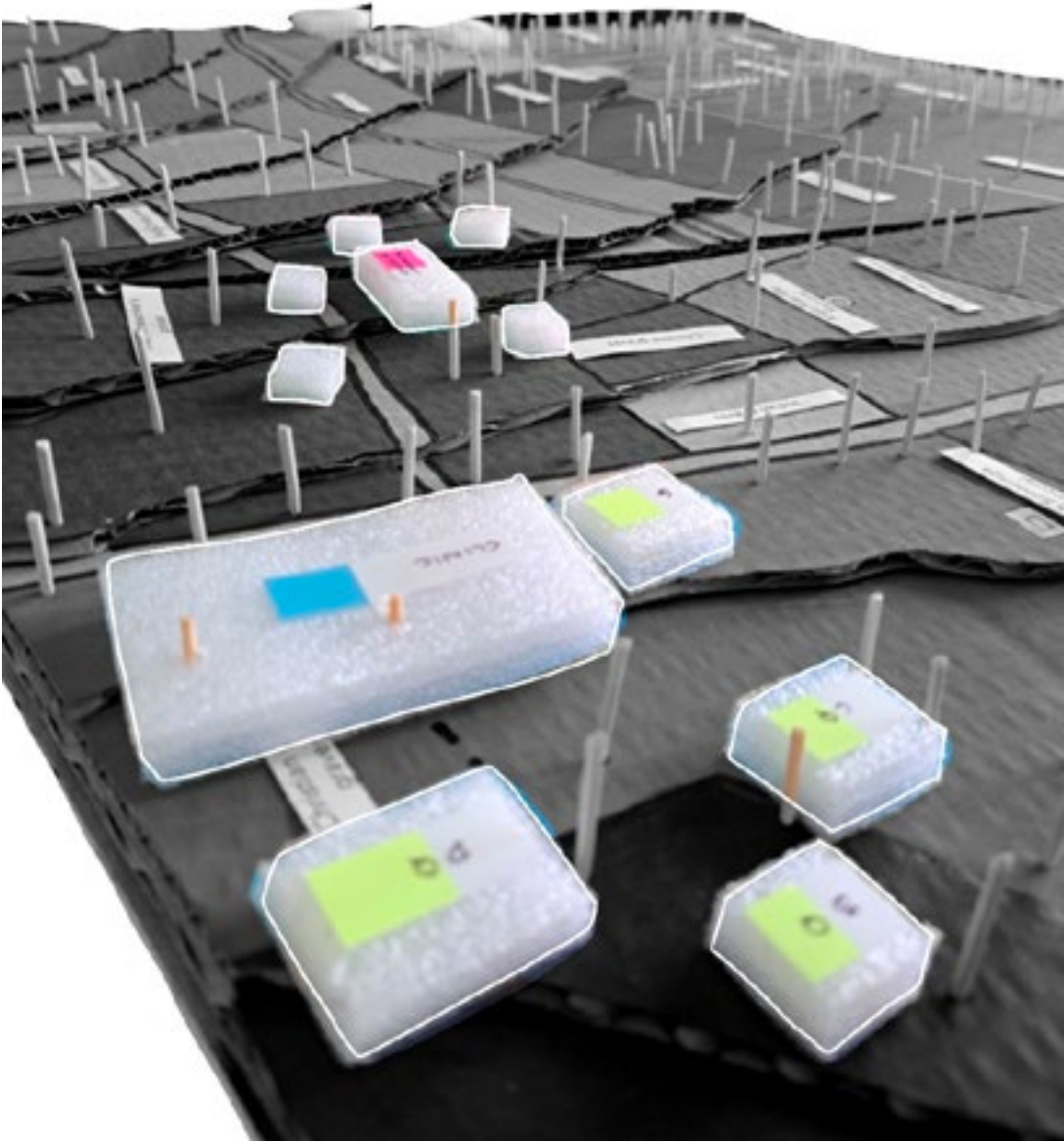
Fig 7.41
Opposite right
Option 2 scheme
perspectives
(Author, 2024)

Pros

- Primary node on Enoch Sontonga.
- Dogs located closer to center - noise is not a problem for surrounding lofts.
- Birds in treed area.
- Archive accessible at main entrance of cemetery.

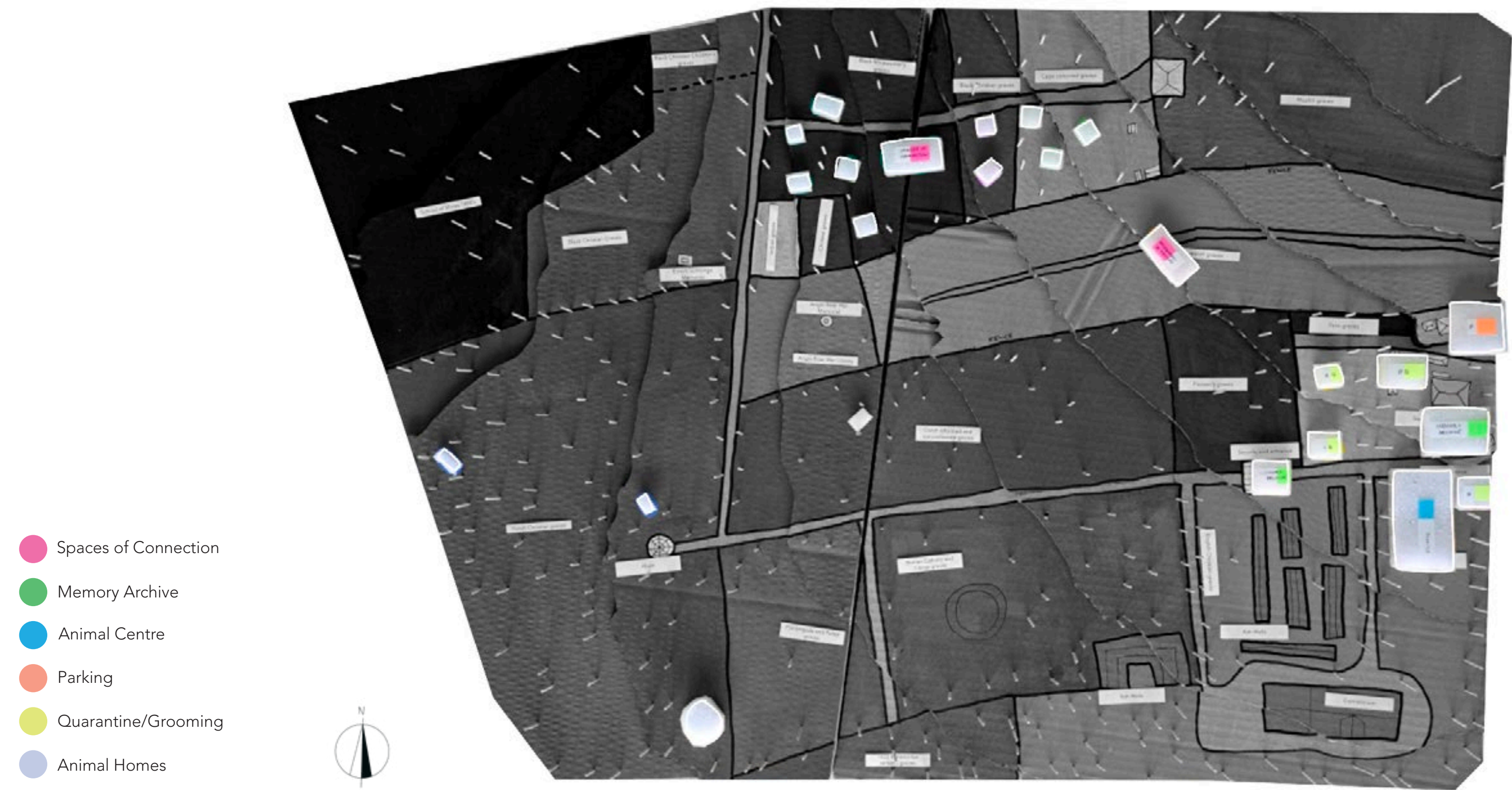
Cons

- Clinic is located atop unmarked graves.
- A lot of empty space in center and south-western boundary.



7.2.3 Design Explorations Placing on Site

Option 3



- Spaces of Connection
- Memory Archive
- Animal Centre
- Parking
- Quarantine/Grooming
- Animal Homes

Pros

- Dogs and cat on Enoch Ave boundary - noise is not a problem.
- Breaking separation between the cemetery - Jewish Section.
- Parking on Graf St.

Cons

- Too empty on western boundary.
- Clinic placement is problematic as graves are located there.

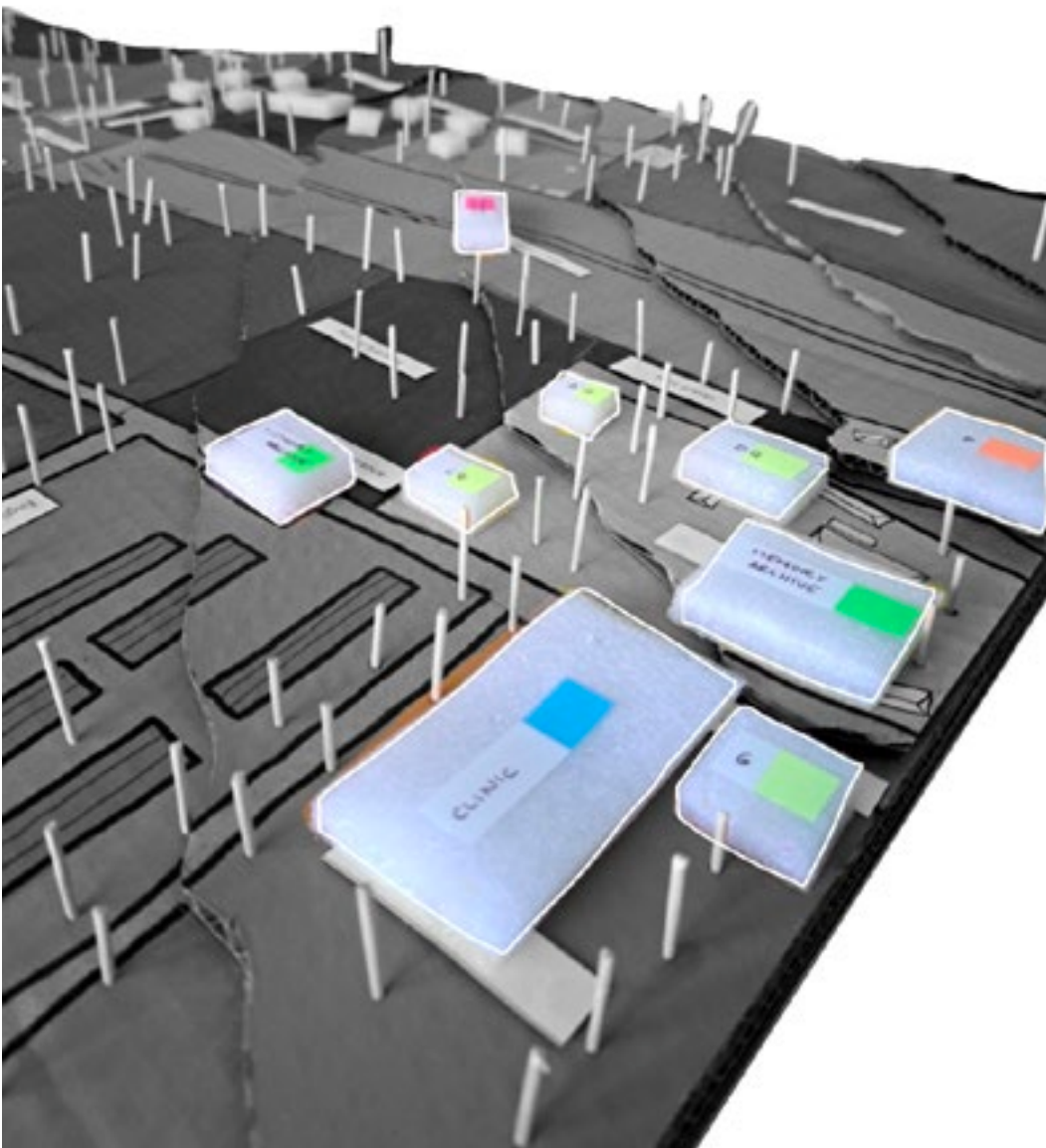
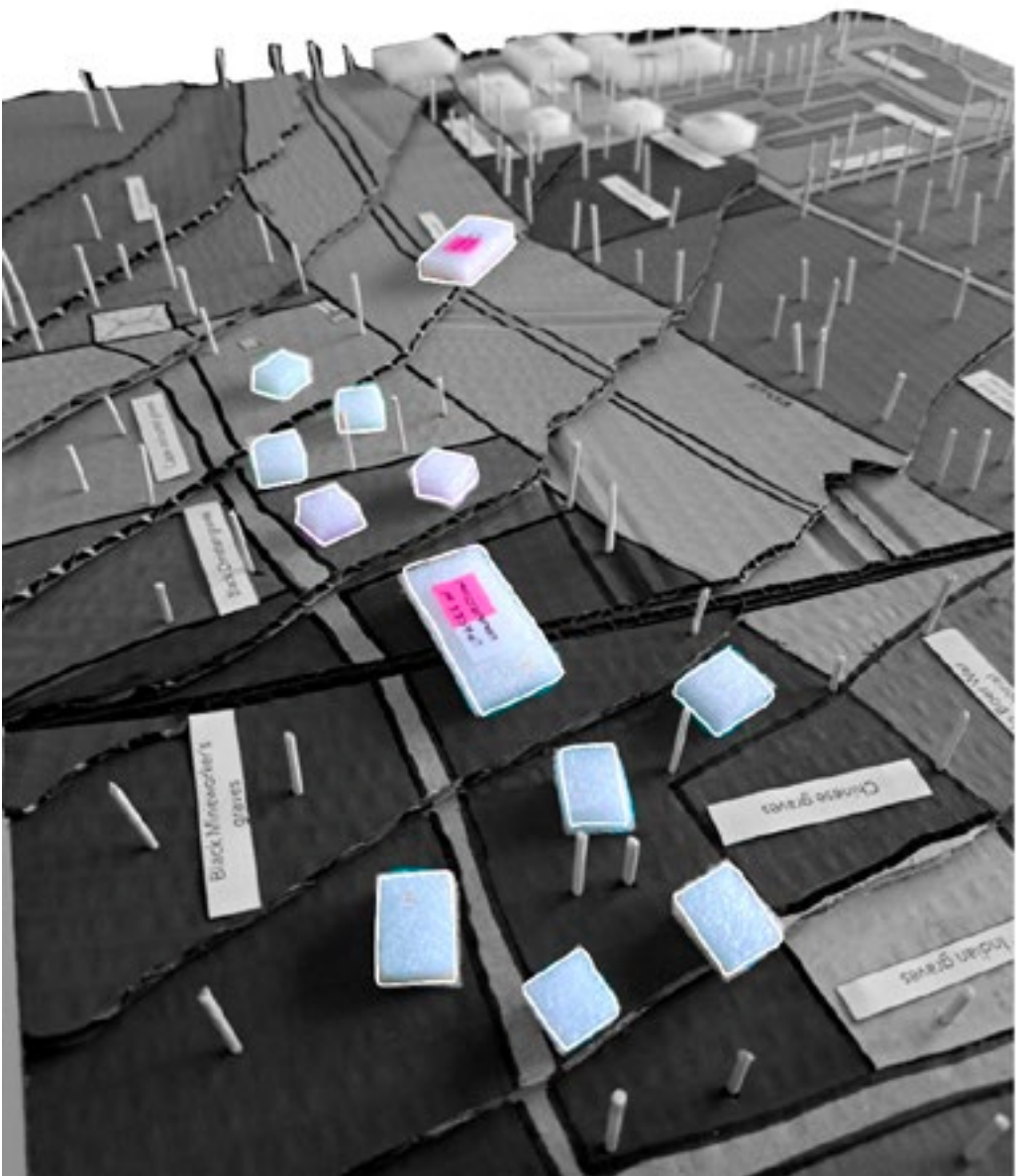
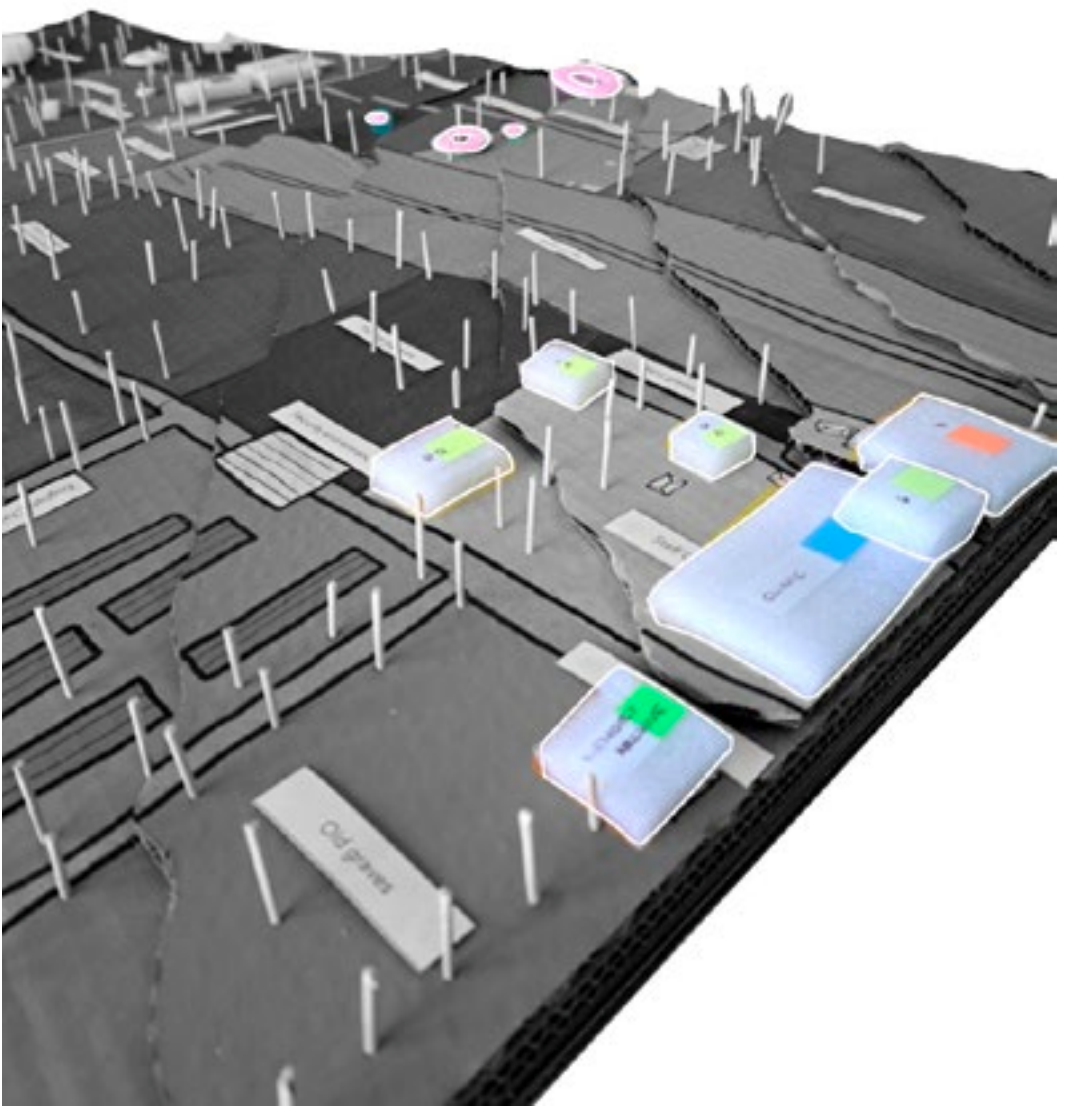
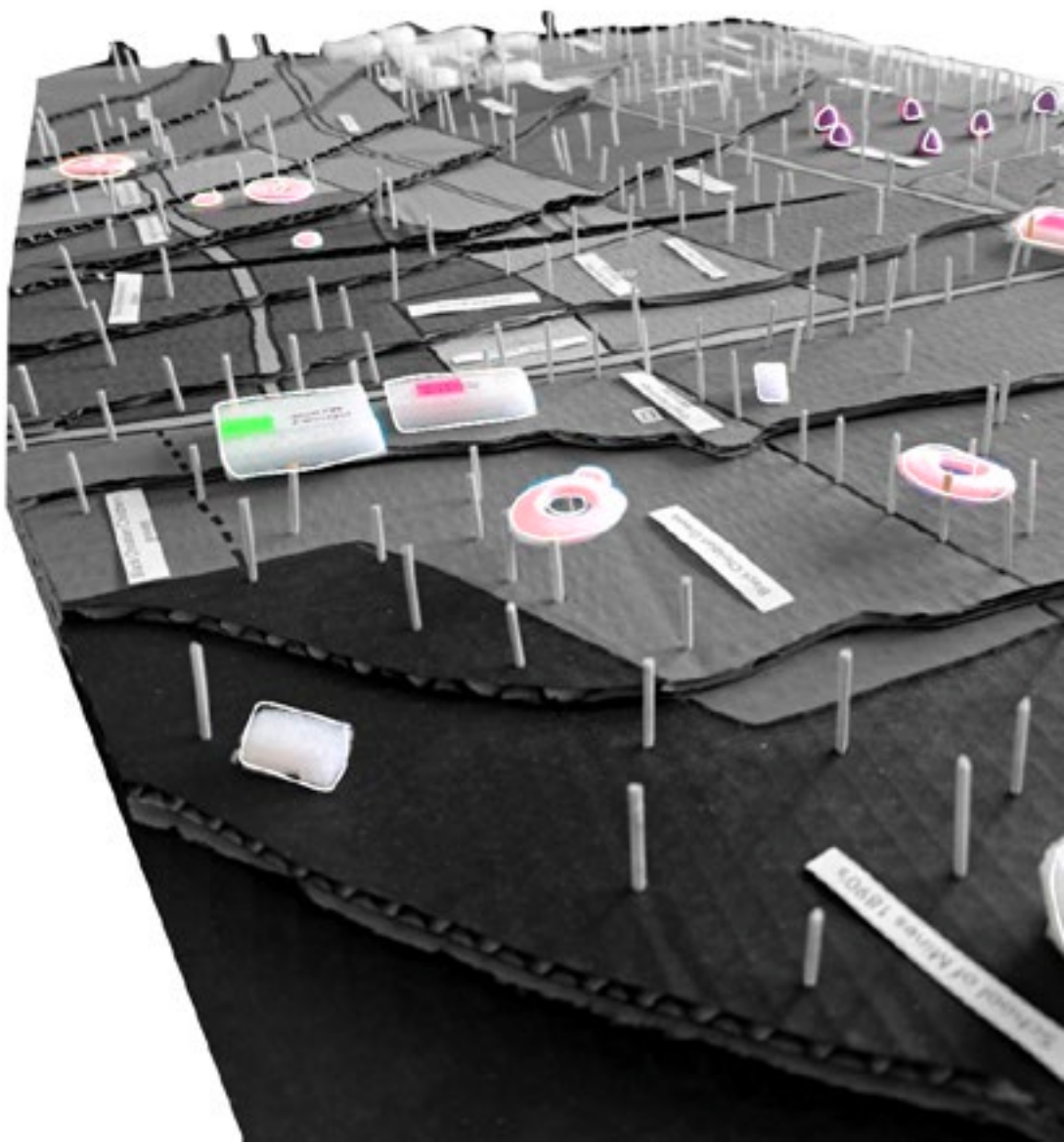
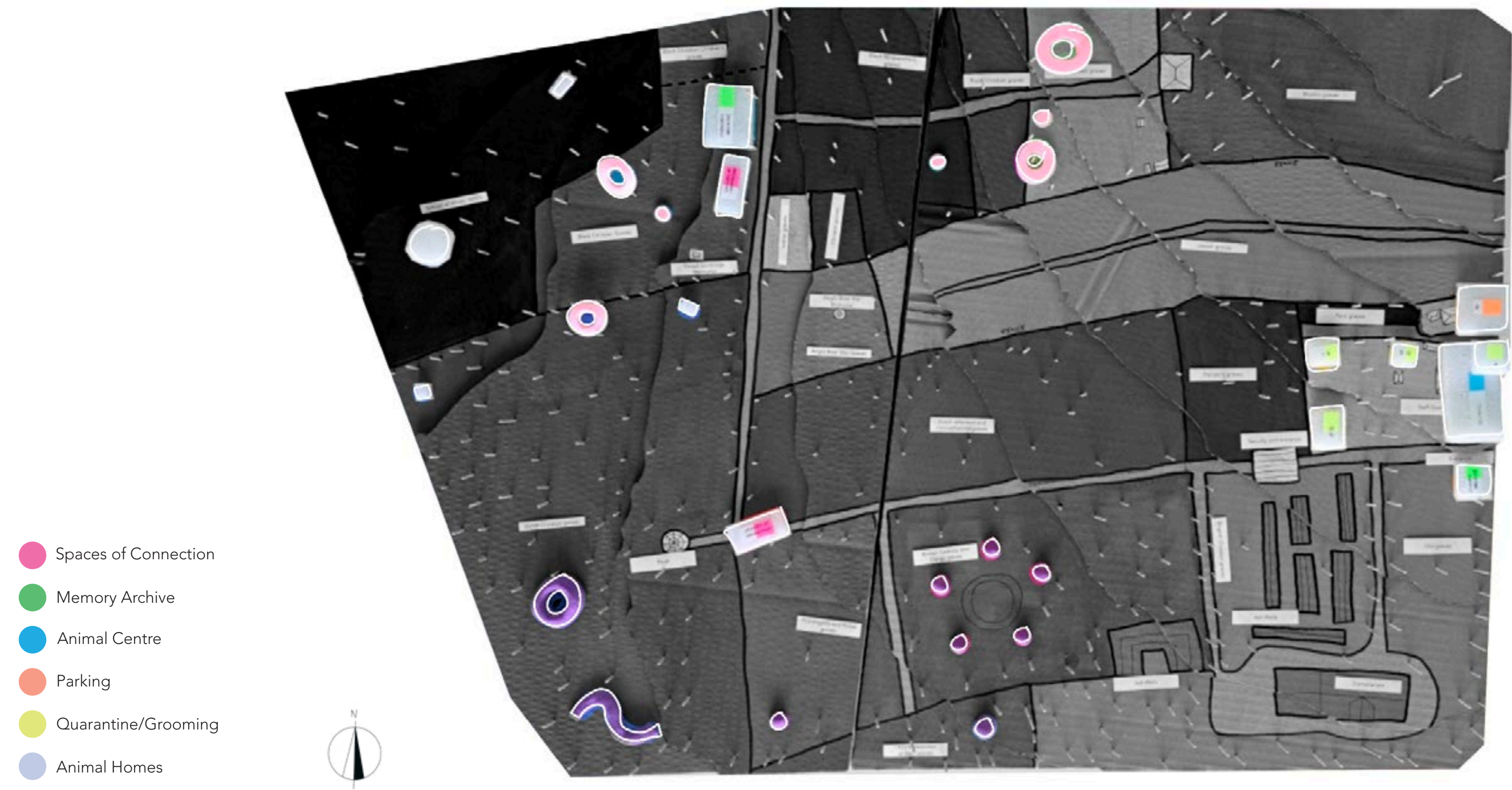


Fig 7.42
Centre
Option 3 scheme plan
(Author, 2024)

Fig 7.43
Opposite right
Option 3 scheme
perspectives
(Author, 2024)

7.2.3 Design Explorations Placing on Site

Option 4



Pros

- Birds and Cats on boundary next to lofts.
- Secondary node on Enoch Ave aids primary node on Graf St.
- Successful access and entrance.

Cons

- Dogs too close to lofts and residential.
- Very spread out.
- No critical mass.

Fig 7.44
Centre
Option 4 scheme plan
(Author, 2024)

Fig 7.45
Opposite right
Option 4 scheme
perspectives
(Author, 2024)

7.3 First Design Iteration

Concept Sketches

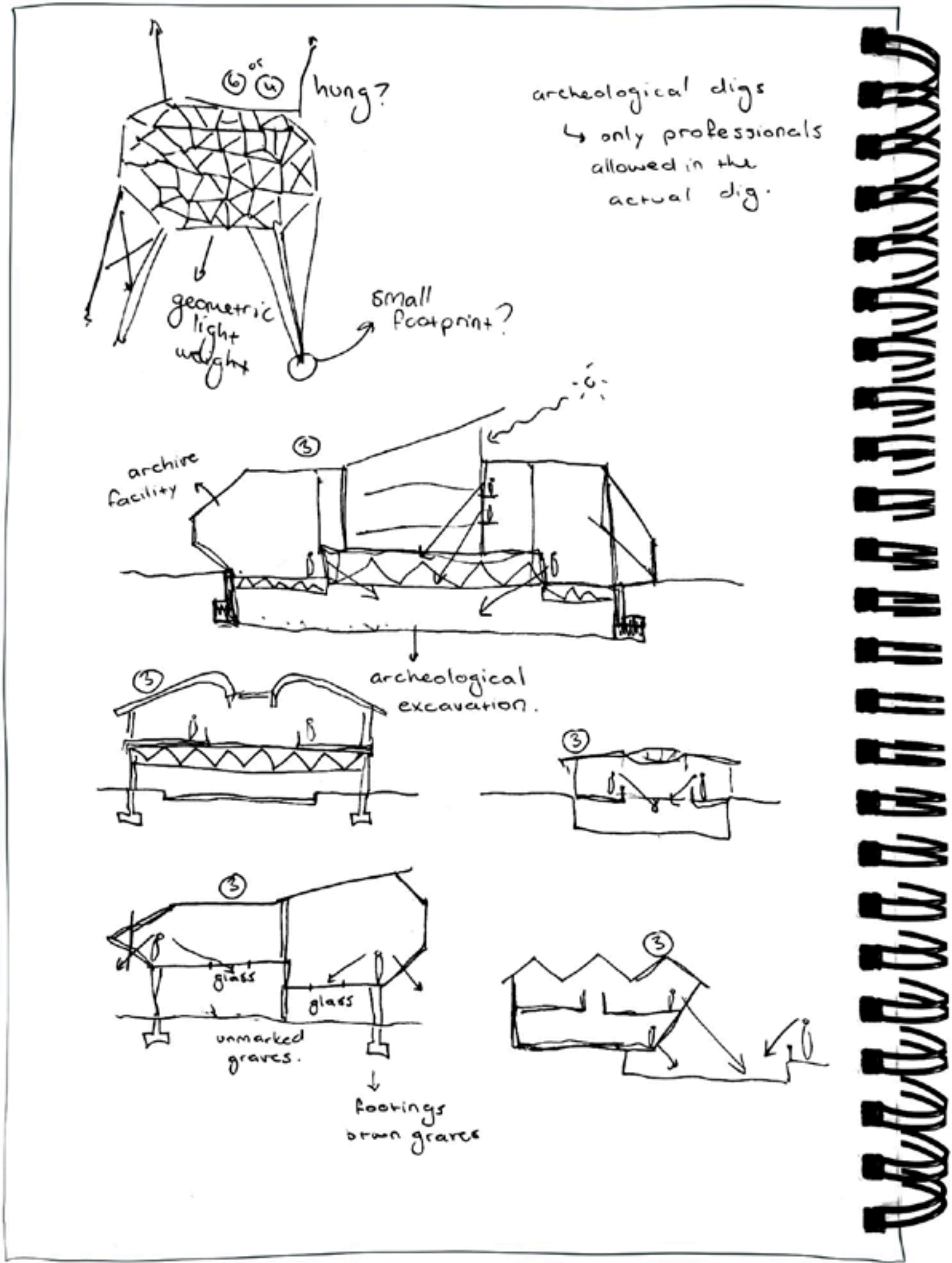


Fig 7.46
Left
Concept Sketches 1
(Author, 2024)

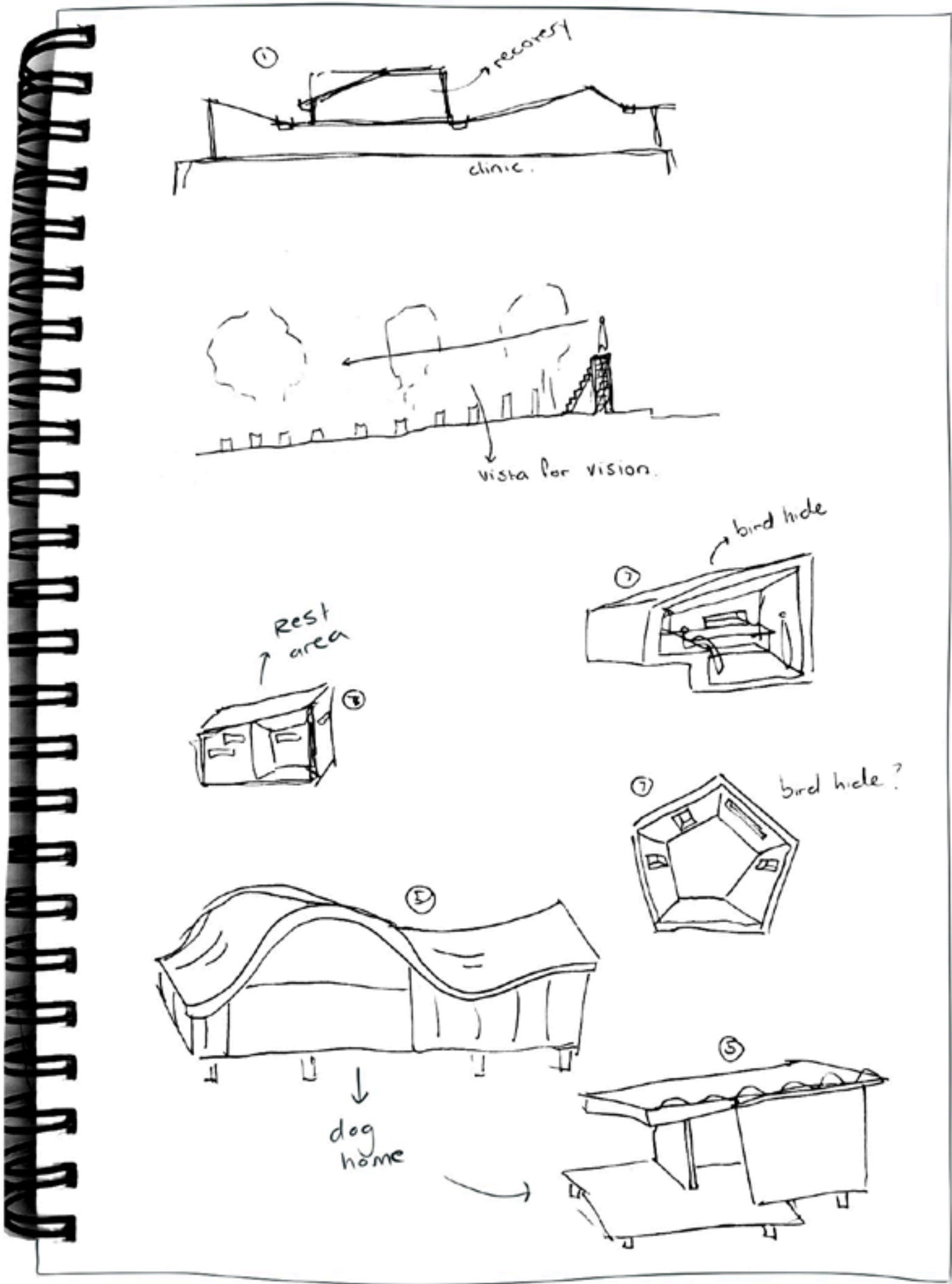


Fig 7.47
Opposite
Concept Sketches 2
(Author, 2024)

7.3 First Design Iteration

Concept Sketches

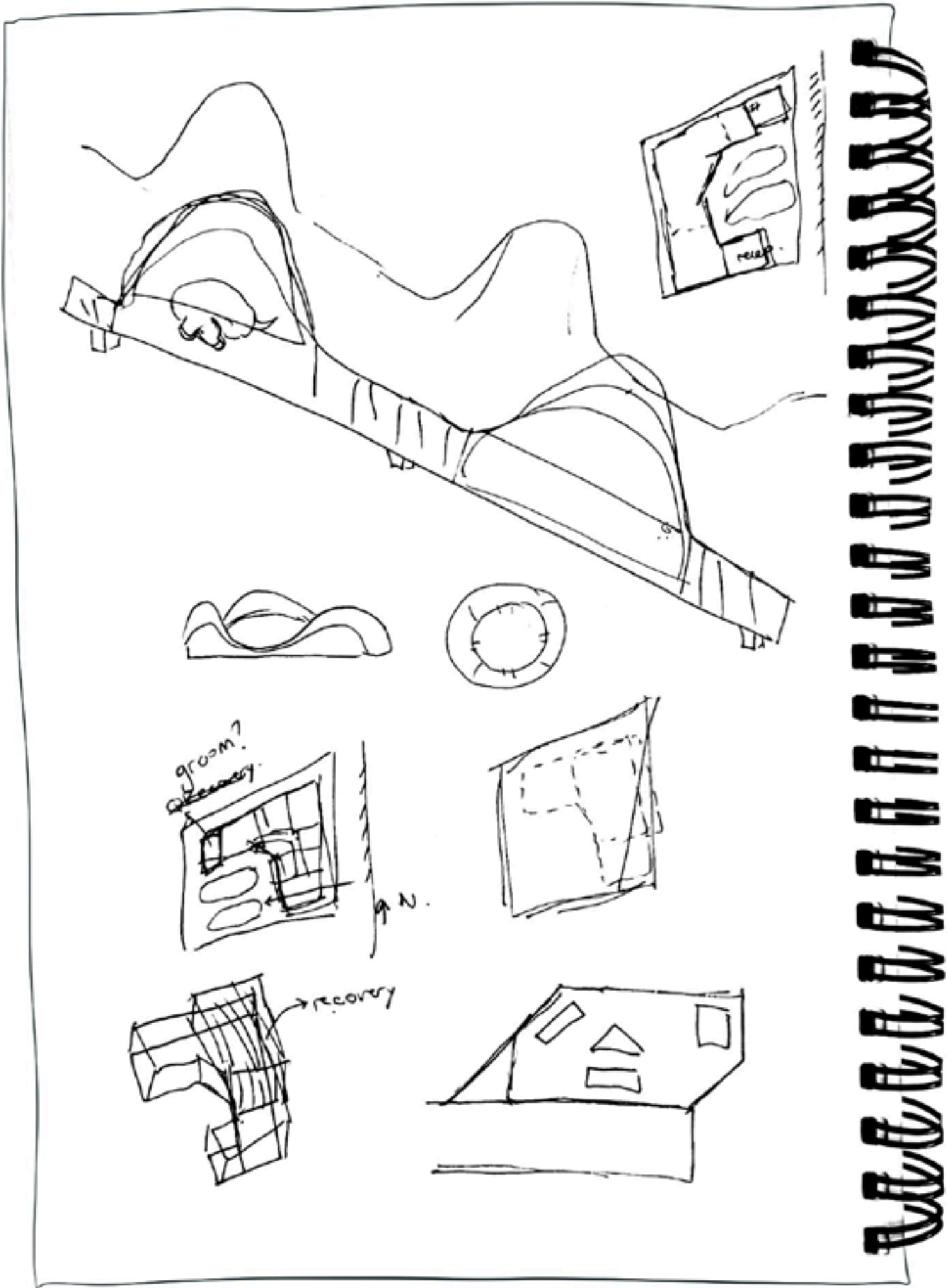


Fig 7.48
Left
Concept Sketches 3
(Author, 2024)

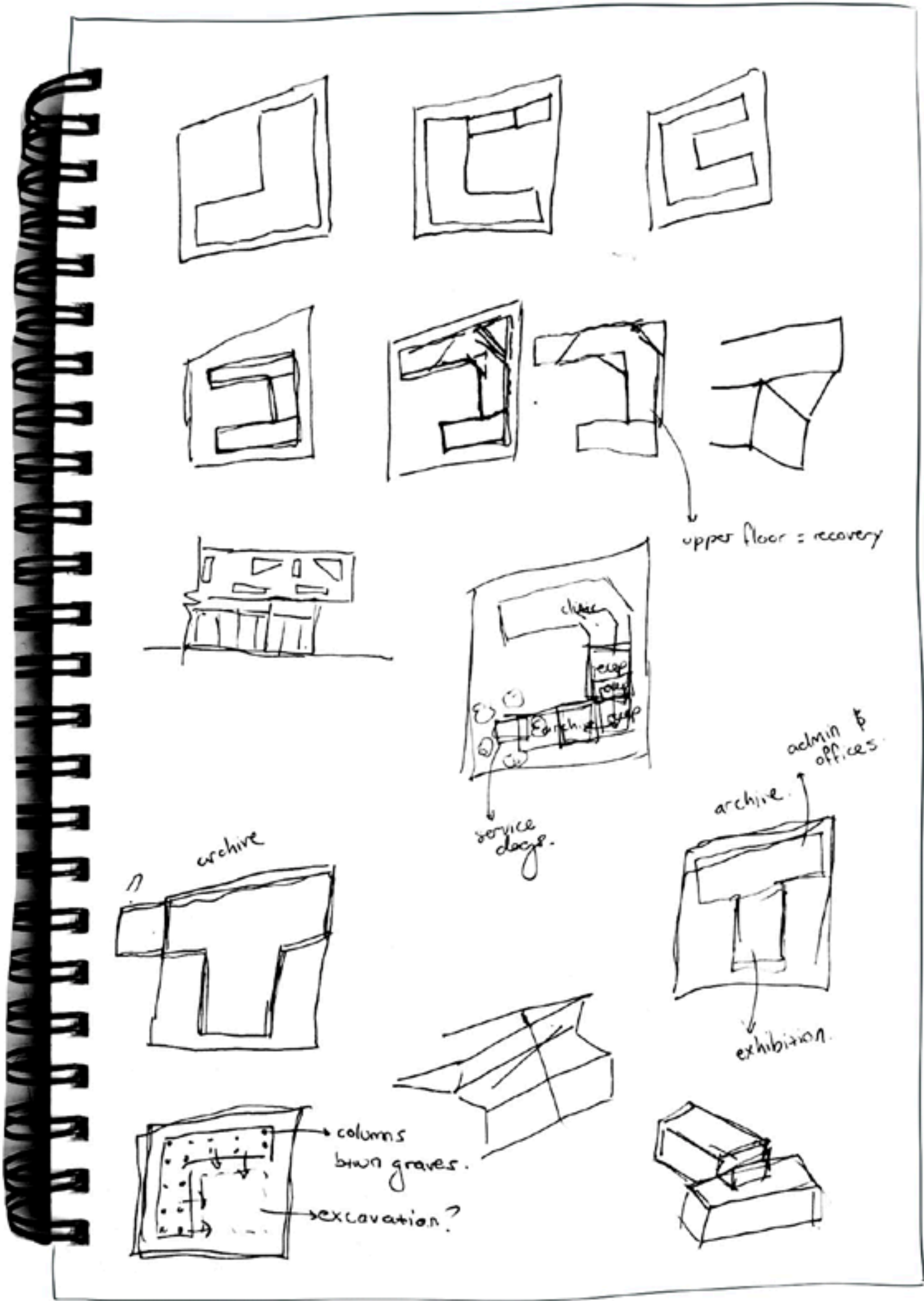


Fig 7.49
Opposite
Concept Sketches 4
(Author, 2024)

7.3 First Design Iteration

This design was a first stab at putting my ideas onto the site. I chose the first option listed under ‘Placing on Site’ to create the first iteration of my scheme.

The scheme consists of two buildings – an animal well-being centre and an archive of memory. The animal centre creates an interesting interaction with the site. I placed it where the existing staff quarters of the cemetery are because the use of normal foundations could be facilitated and not disturb the graves – since the centre has a more pragmatic programme this is appropriate. It is on Graf Street where people can park on the existing street and then enter the centre straight off the street or enter the cemetery if they wish to go there instead.

The archive of memory is a place that people can go to learn about the site, or to get help if they need to find a specific grave of a loved one. This building is placed on Enoch Sontonga Avenue to create a node on the street for activation, because that boundary of the site is quite inactive. The building looks over the ground to speak to the unmarked graves in this location and is held up by stilts to not disturb the unmarked graves.

A person will enter the archival part of the building and be matched with a dog and then take that dog on a walk through the cemetery.

This notion of the dog walk allows for the person to wander like the flaneur – feeling safer with the dog. This wandering through the cemetery can provide calmness and peace of mind. It could also encourage the wanderer to take in the space around them and pay attention to the details of the cemetery – the artful headstones, the stunning statues, and the absence of graves where the lives of people were erased.

Fig 7.50
Left bottom
Concept sketch of vista
(Author, 2024)

Fig 7.51
Opposite top right
Animal centre
ground floor plan
(Author, 2024)

Fig 7.52
Animal centre
first floor plan
(Author, 2024)

Fig 7.53
Opposite centre
Section AA
(Author, 2024)

Fig 7.54
Opposite bottom
Section BB
(Author, 2024)

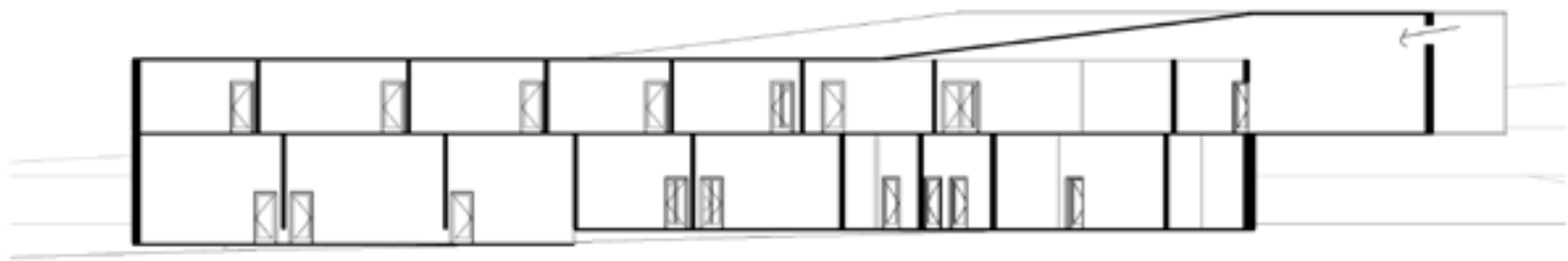


Animal Centre Ground Floor

Animal Centre First Floor



S-02 Animal Centre Section AA



S-03 Animal Centre Section BB

7.3 First Design Iteration

Dogs and cats would be homed on the site as part of the programme. With dogs being placed further into the cemetery to avoid bothering the lofts and apartments on the west, and the cats being closer to the western edge because they’re quieter and so the buffer of trees would be enough to shield any noise from the surrounding residents. The cats and dogs are housed away from the animal centre to provide a peaceful environment for them to reside in. Dogs can also be trained to secure the cemetery at night when crimes and vandalism are more likely to happen. These sketches show some ideas of what these animal homes may look like.

Spaces like “interspecies spaces” or “connection spaces” provide an area where the person and the dog or cat can interact and socialise with one another. It ties in with the concept of relational ecology and post-anthropocentrism - connecting with non-human entities and trying to detach oneself from their anthropocentric way of living and thinking – even if it’s just for a moment.

To begin to deconstruct the hierarchy of space within the cemetery, I chose to remove some of the trees that block views from one space to another – which are mostly invasive species like blue gums – and create vistas from one side of the cemetery to the other. It subtly breaks the separation between the racial segregation of the cemetery and provides views across the site when one stands in the right spot.

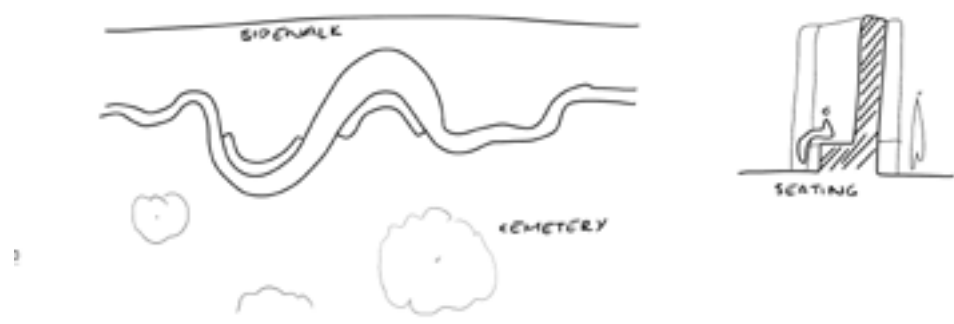
Creating different facets of programme results in a unique mixture of interest within the site that can attract different types of people in hopes of making the site more active and reviving it within the context of Johannesburg.



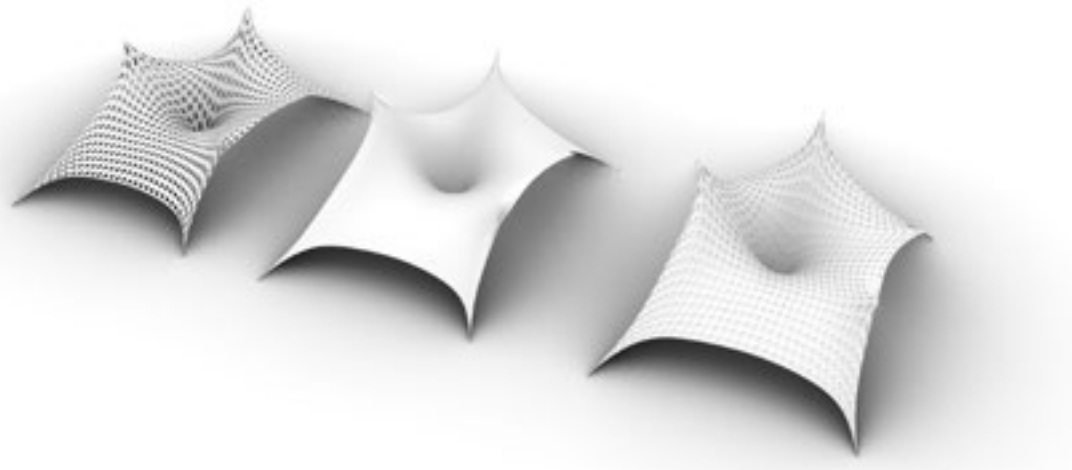
Animal Centre East Elevation



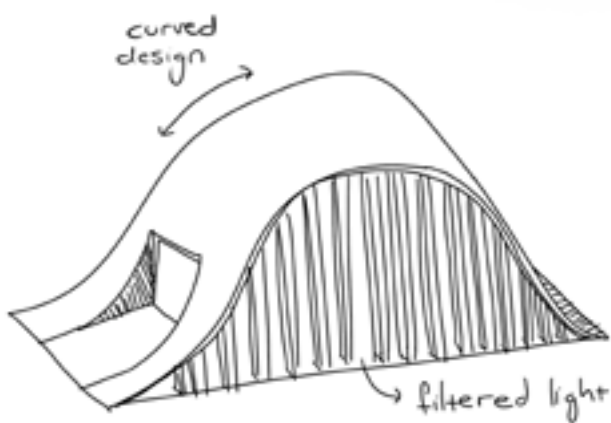
Animal Centre West Elevation



Boundary Wall Concept Sketch



Bird House Concept Models



Connection Space Concept Sketch



Bird Hide Concept Sketches

Fig 7.55
Left bottom
Bird hide sketches
(Author, 2024)

Fig 7.56
Opposite top
Animal centre elevations
(Author, 2024)

Fig 7.57
Opposite bottom
Concept sketches
(Author, 2024)

7.3 First Design Iteration



Fig 7.58
Left top
Archive floor plan
(Author, 2024)

Archive Floor Plan

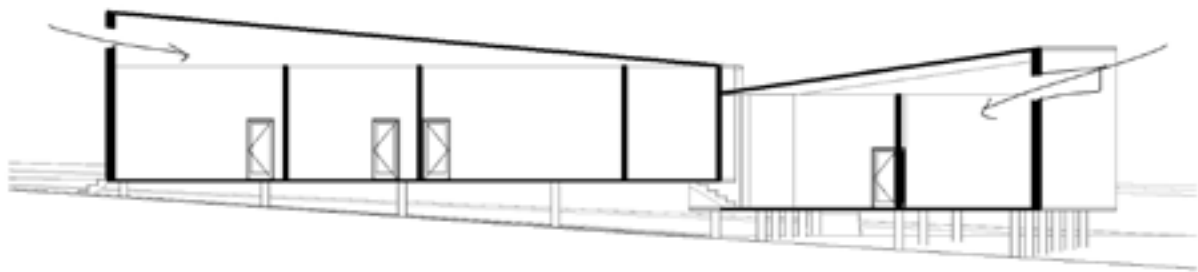


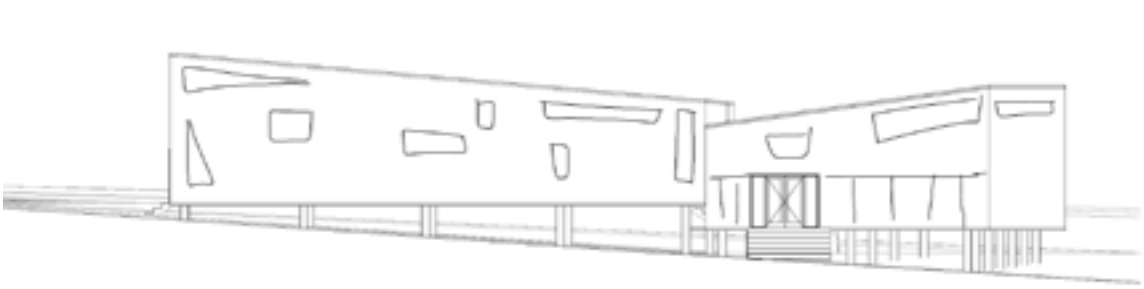
Fig 7.59
Left bottom
Section CC
(Author, 2024)

Fig 7.60
Opposite top
Archive Elevations
(Author, 2024)

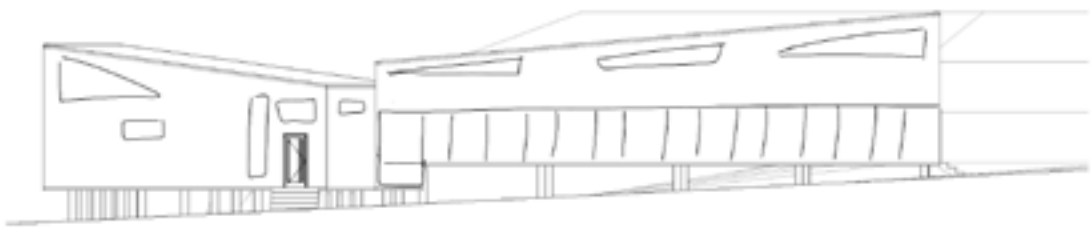
Fig 7.61
Opposite centre
Dog Homes
(Author, 2024)

Fig 7.62
Opposite bottom
Cat Homes
(Author, 2024)

S01 Archive Section CC



Archive North Elevation



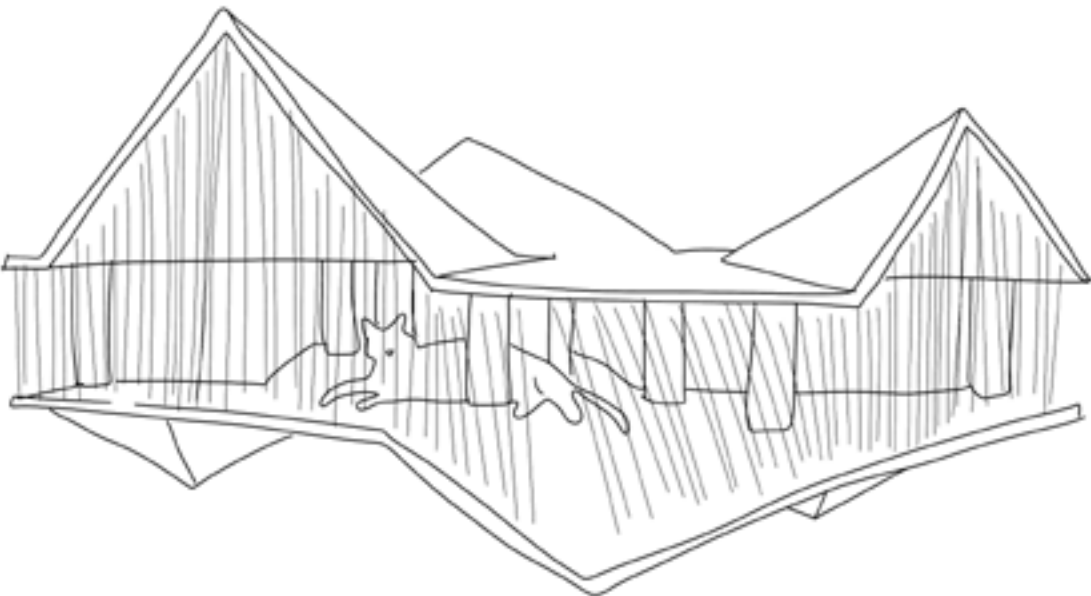
Archive South Elevation



Dog Home Concept Sketches



WOOD FOR SCRATCHING ON THE OUTSIDE



HUNG / ATTACHED TO TREE -> OR SMALL FOOTPRINT ON GROUND

Cat Home Concept Sketches

7.4 A Design in Process

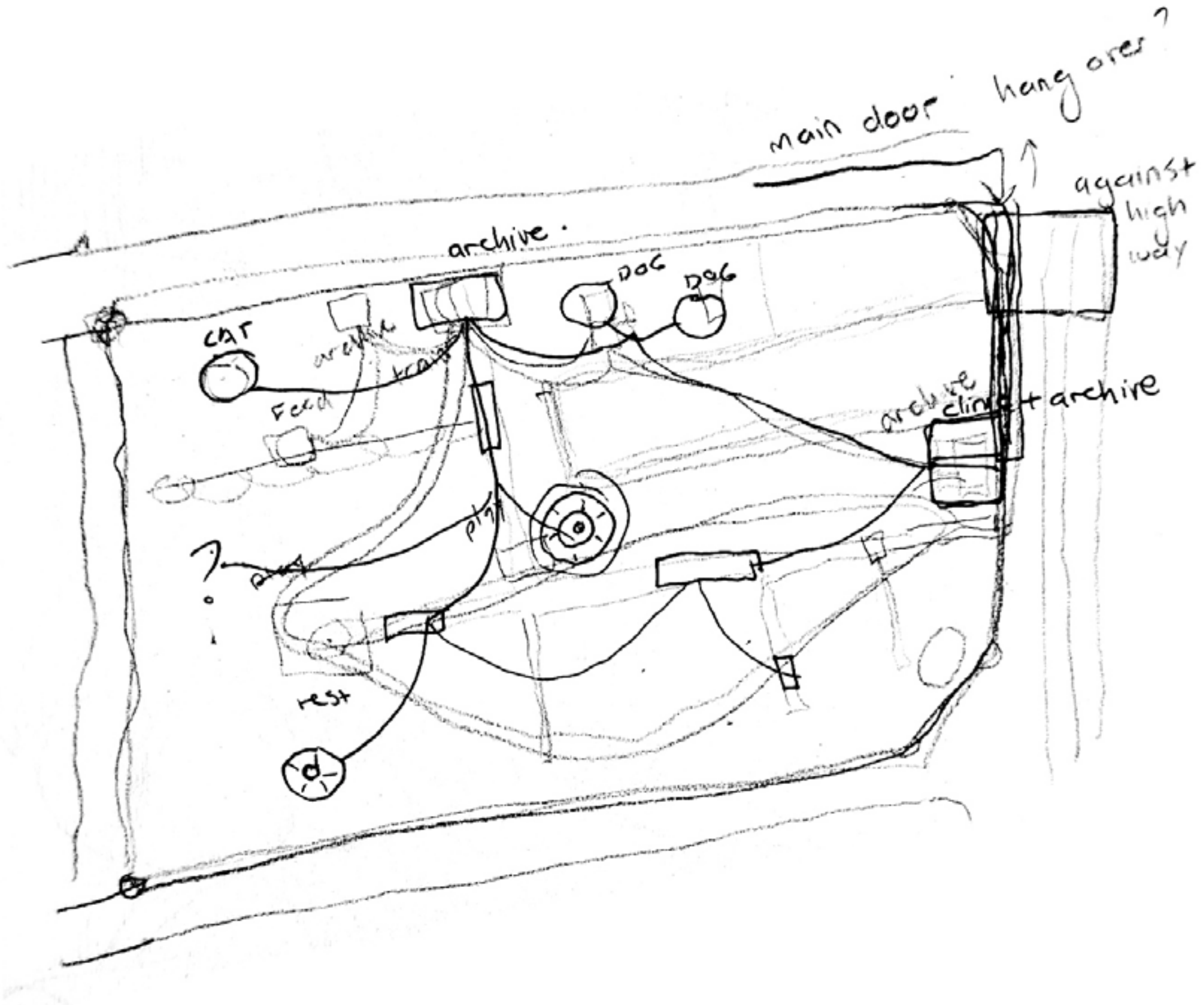
The first iteration of my design was not as successful as I had hoped. The sketches of the smaller aspects of the design were interesting and successful, but the building itself fell short. Too many long corridors and a cold, programmatic aesthetic made the building look generic. I wanted to experiment with more interesting forms that relates more closely to my core concepts, so I embarked on the journey of changing my design. Up to this point, the archive is the building that I have re-designed, and it will influence the look of the animal centre and other architectural elements.

The process of finding this new design can be seen in my sketchbook where I drew over and over again new ideas and iterations of what I wanted to put onto the site. Through these sketches, I found the language I wanted to use within my building.

With more organic and sweeping forms, the architecture starts to speak to the fleeting aspect of life and the ever-changing nature of our existence. Raising the building up quite high allows for an architectural canopy to be created, mimicking the canopy of the many trees of the Braamfontein Cemetery.

The animal centre will take aspects of the archive design into it, but it will touch the ground in a more robust way. This provides contrast to the archive building and also allows for a more pragmatic design for the clinical and care spaces of the centre.

Throughout the next few pages, my process of finding this new language is displayed. It is not a linear process and some drawings repeat themselves, or regress before progressing again, representing how my thoughts were milling around in my head. I believe this is the best way to understand how I got to where my design is at the moment.



Site Plan Concept Sketch

7.4 A Design in Process

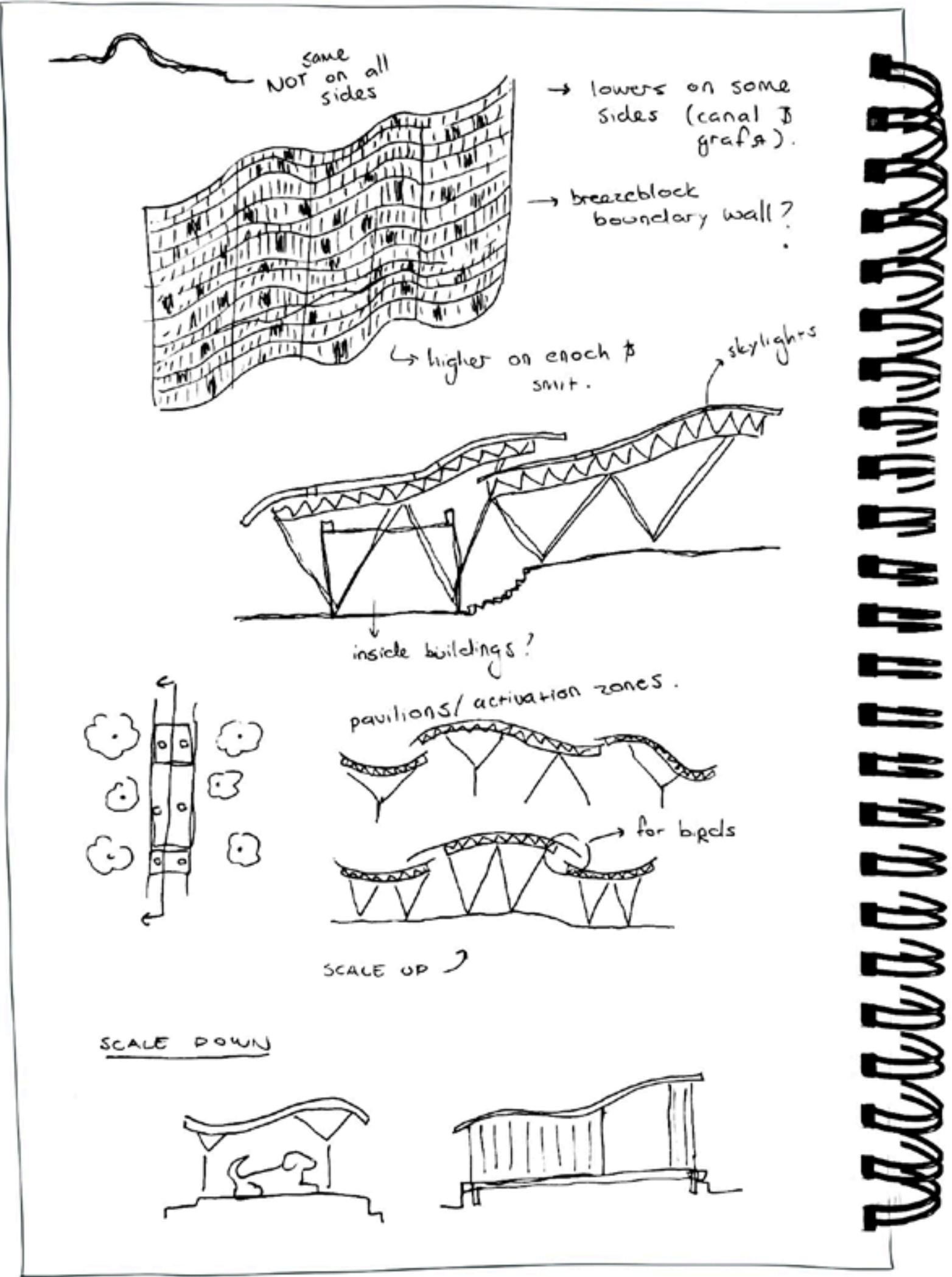


Fig 7.64
Left
Design process sketches 1
(Author, 2024)

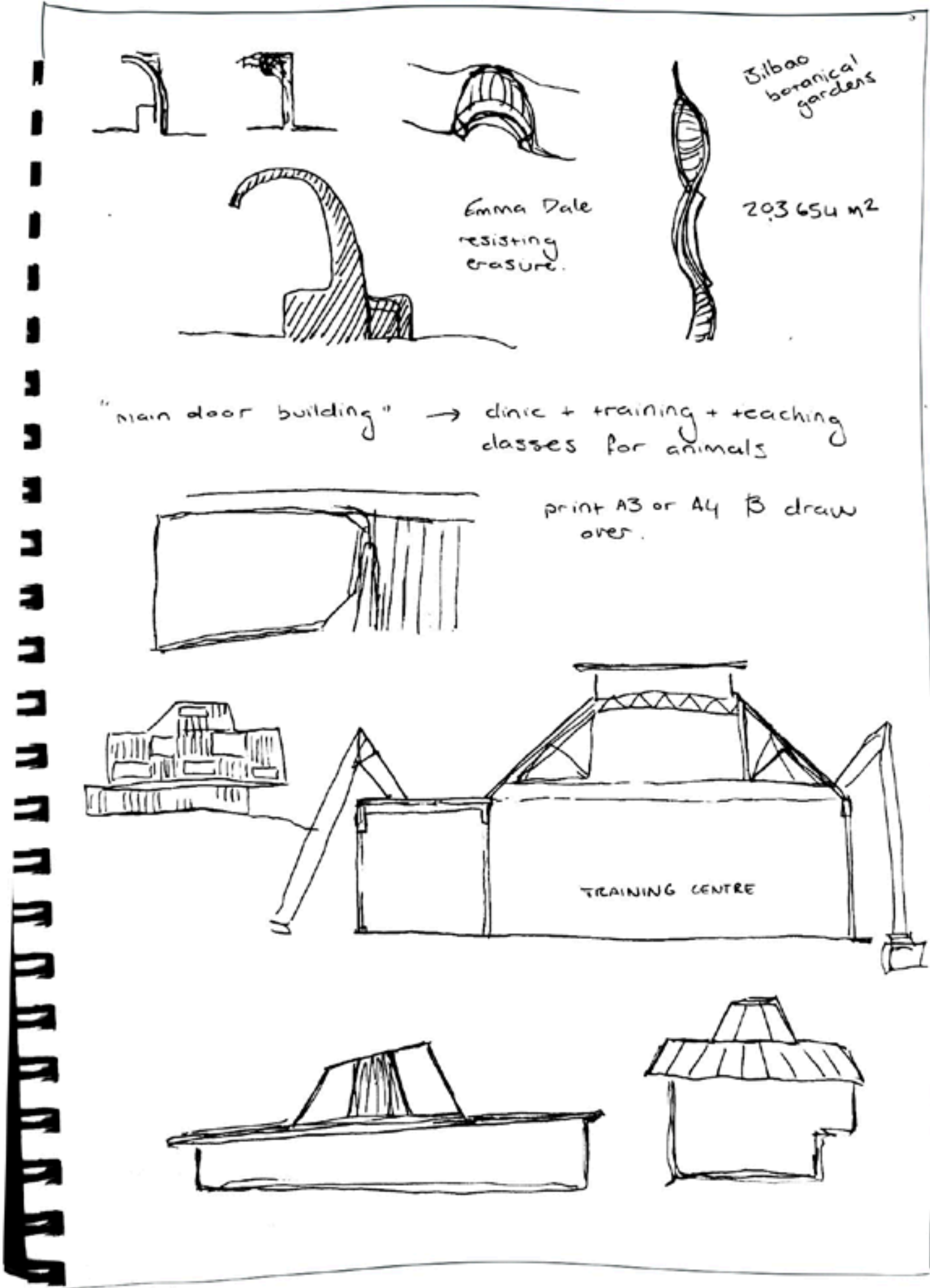


Fig 7.65
Opposite
Design process sketches 2
(Author, 2024)

7.4 A Design in Process

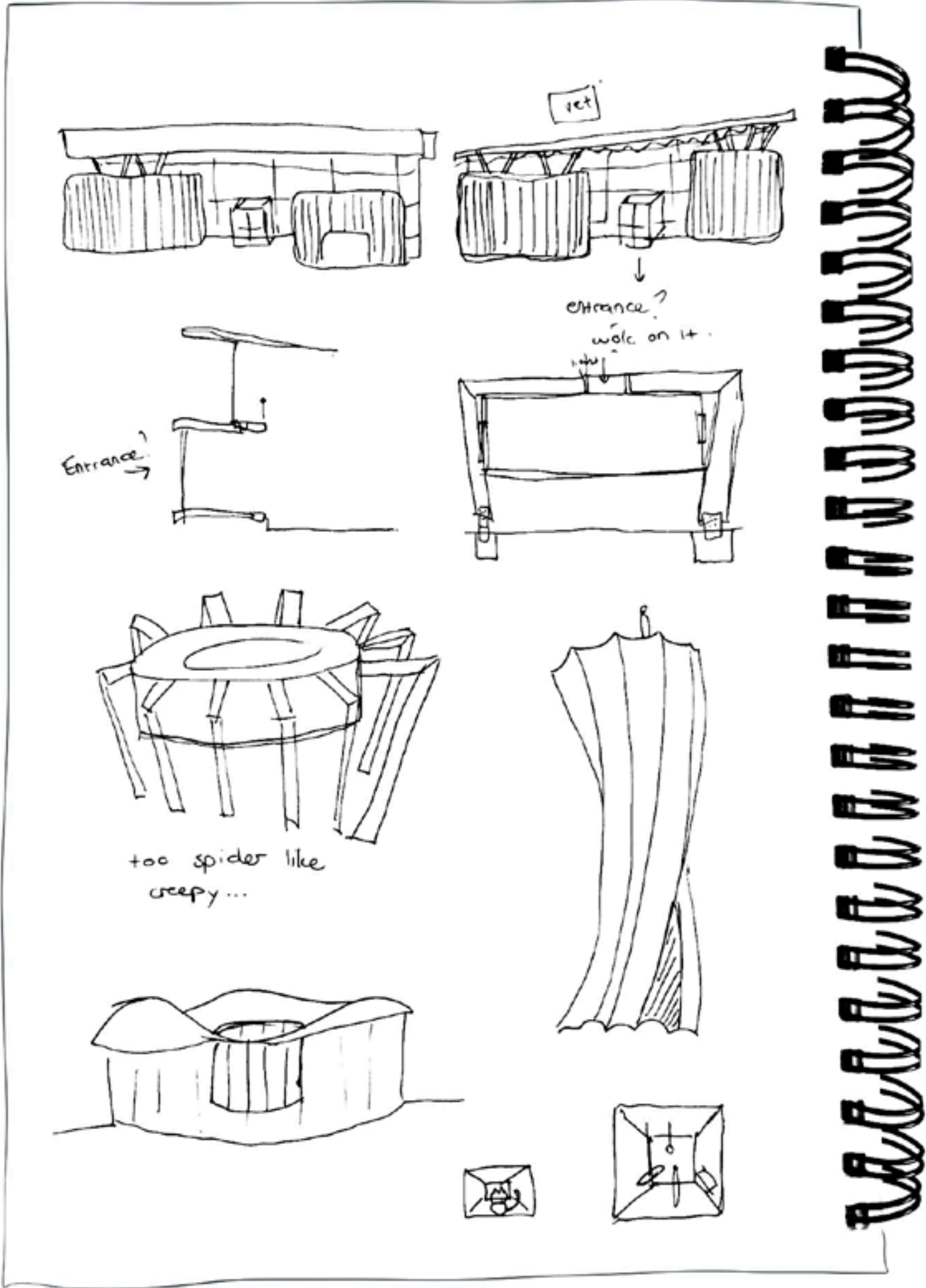


Fig 7.66
Left
Design process sketches 3
(Author, 2024)

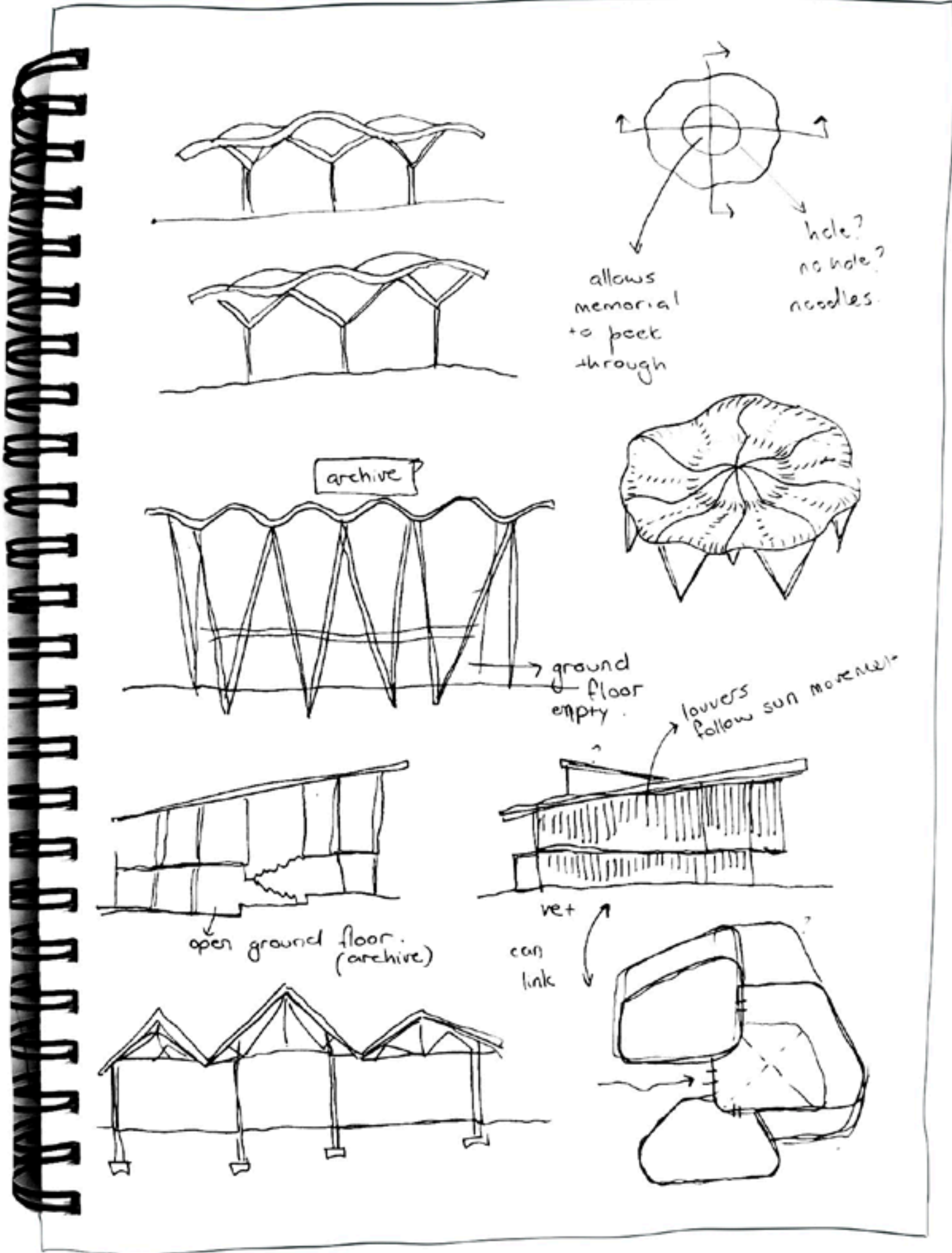


Fig 7.67
Opposite
Design process sketches 4
(Author, 2024)

7.4 A Design in Process

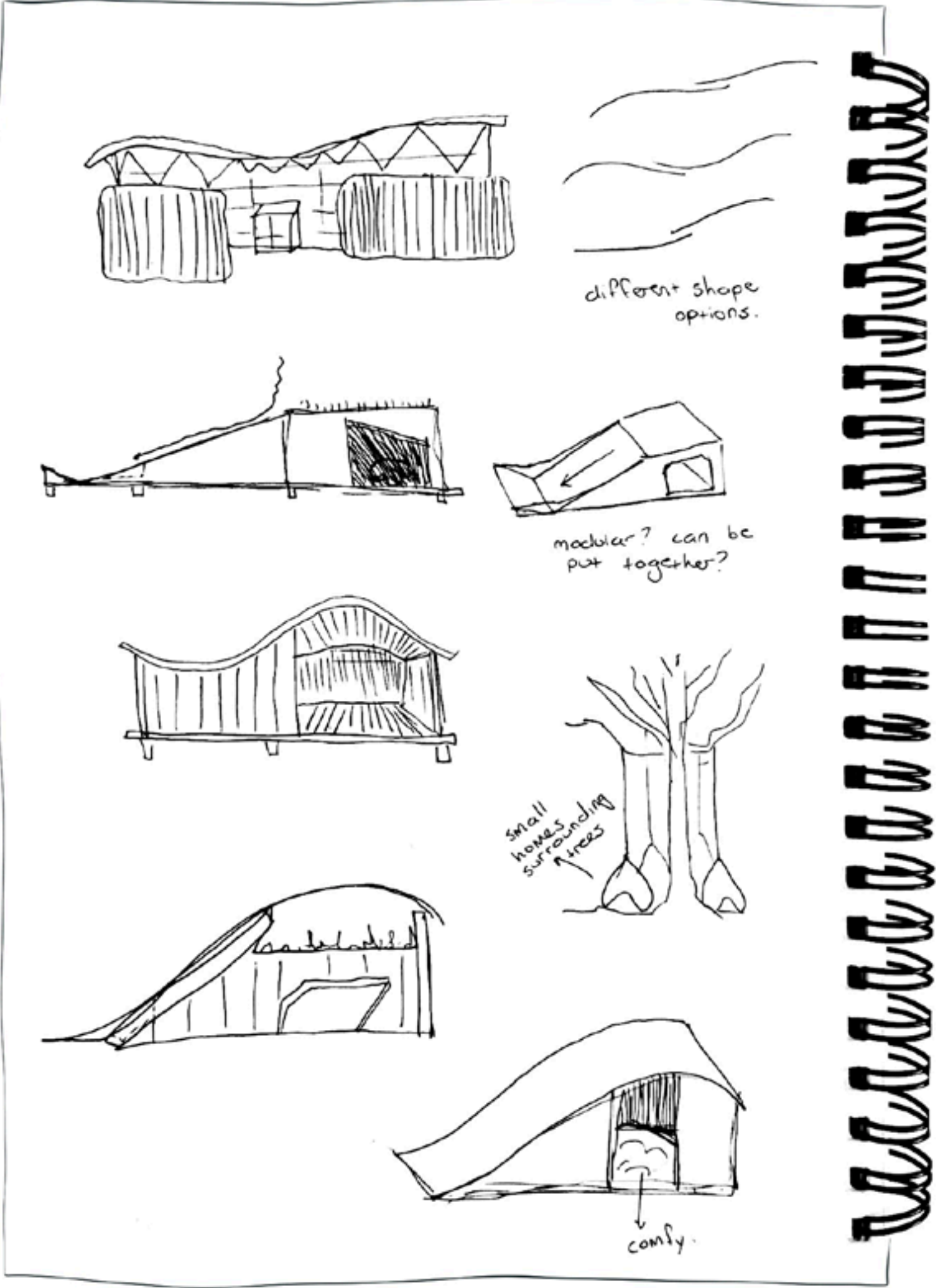


Fig 7.68
Left
Design process sketches 5
(Author, 2024)

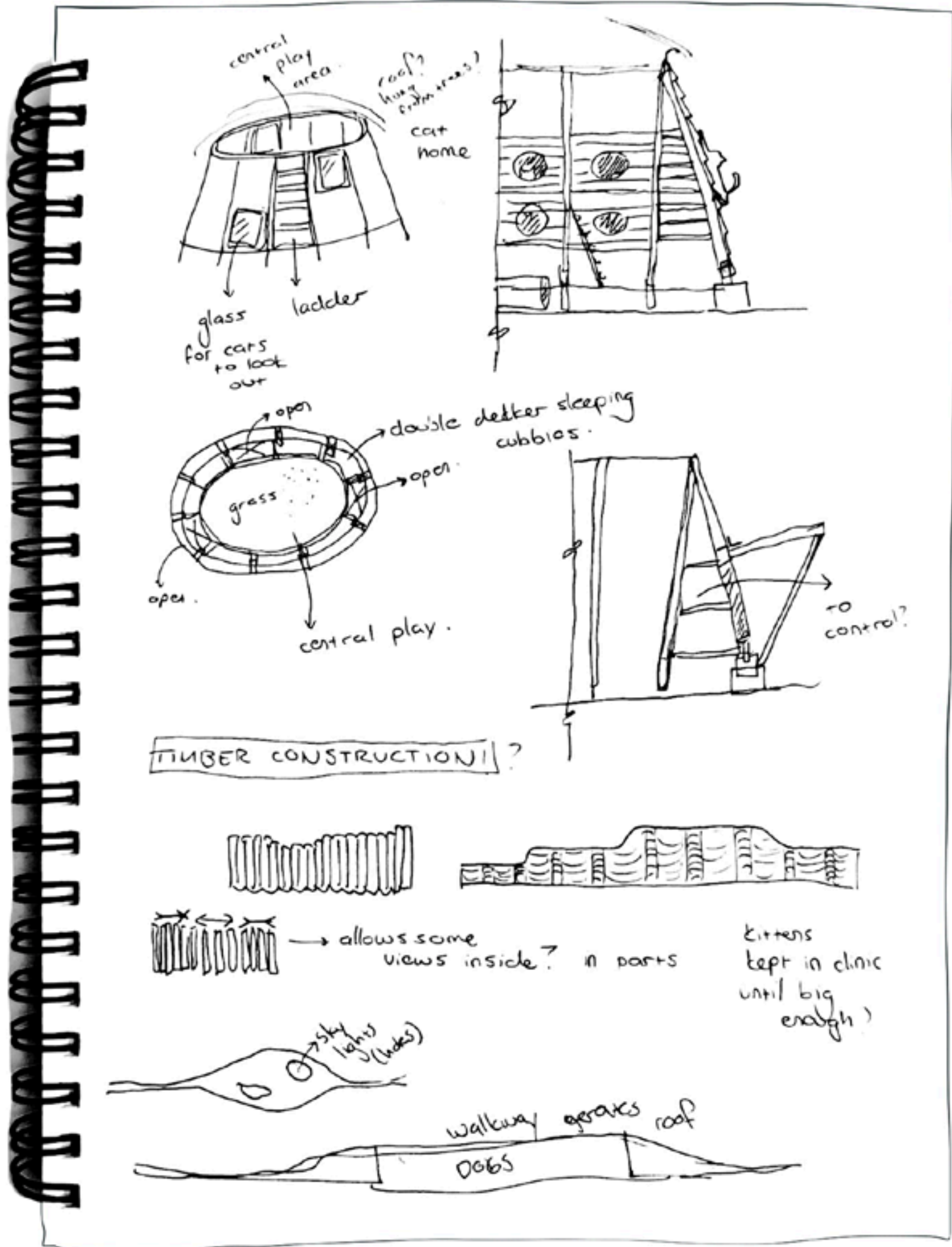


Fig 7.69
Opposite
Design process sketches 6
(Author, 2024)

7.4 A Design in Process

Fig 7.70
Left
Design process sketches 7
(Author, 2024)

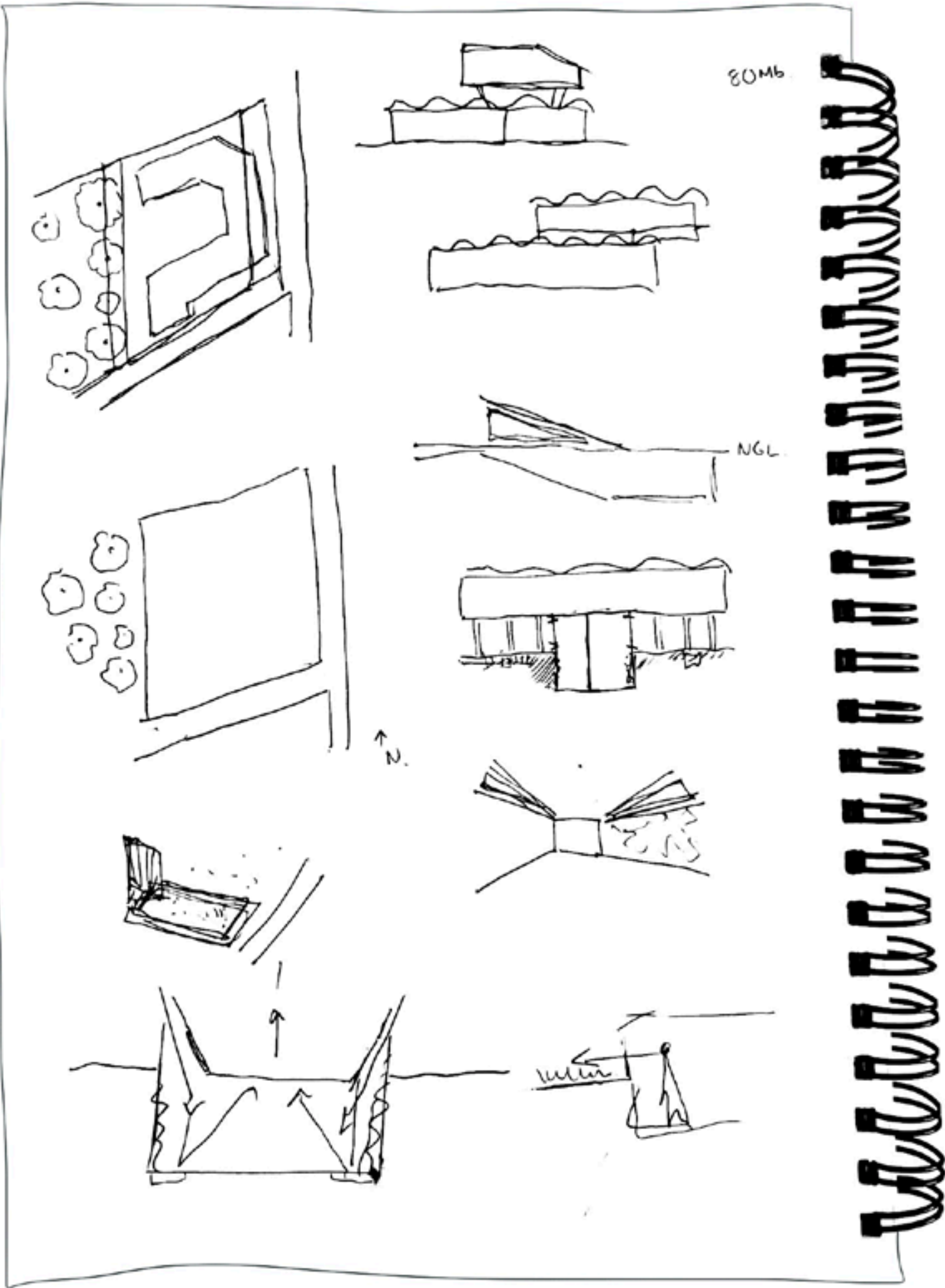
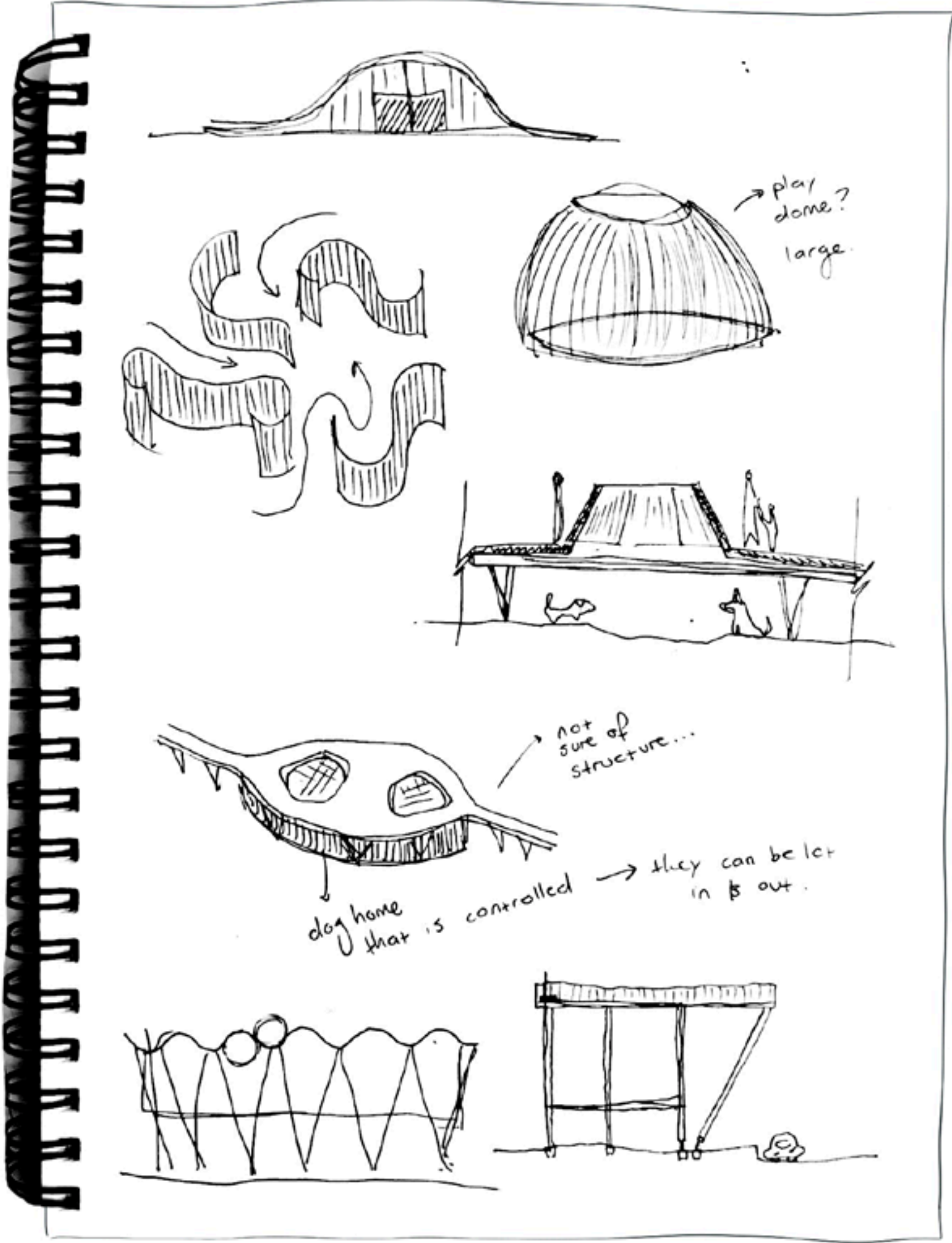


Fig 7.71
Opposite
Design process sketches 8
(Author, 2024)



7.4 A Design in Process

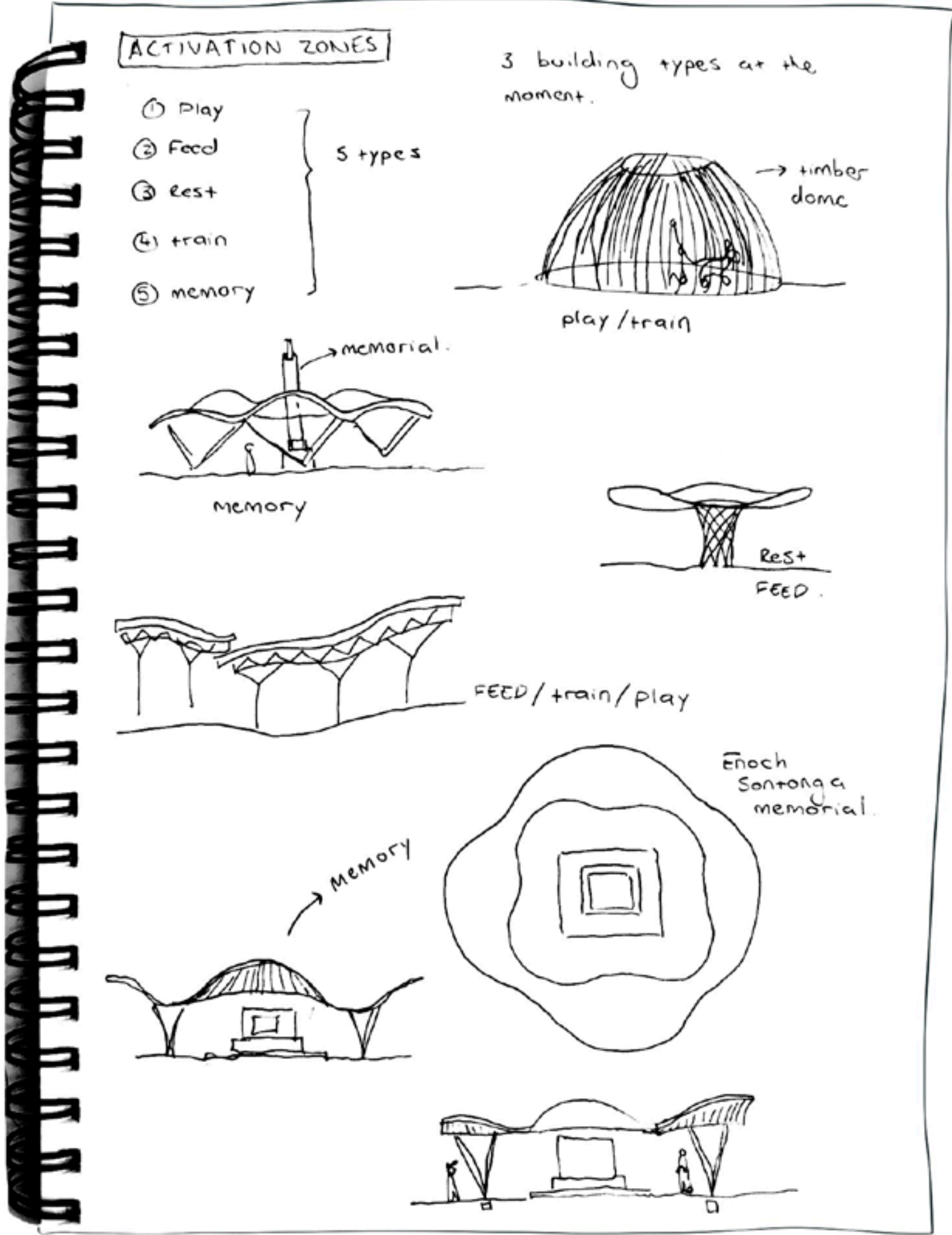


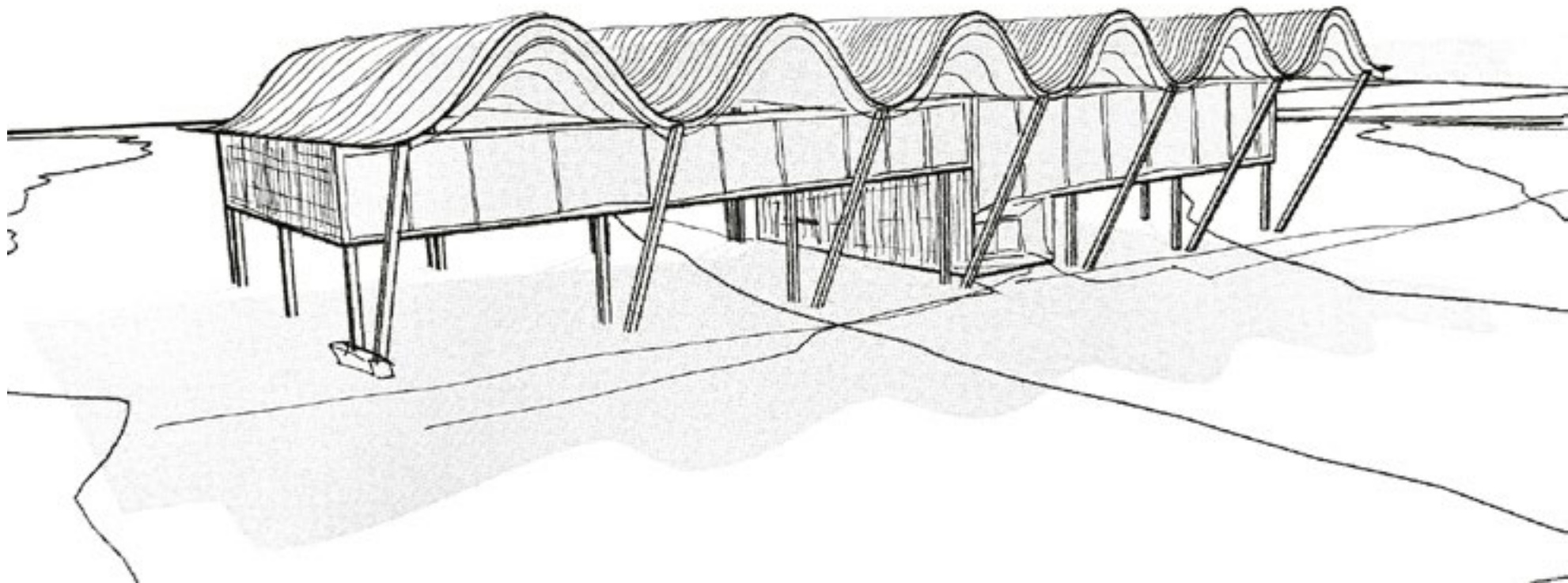
Fig 7.72
Left
Design process sketches 9
(Author, 2024)

Fig 7.73
Opposite top
Pathway Concept Plan
(Author, 2024)

Fig 7.74
Opposite bottom
Perspective sketch
(Author, 2024)



Site Plan Pathway Concept Sketch



Perspective of Archive Building

7.5 Technical Systems in Design

Technical systems are an important aspect of design. Construction details can become a beautiful way of expressing architectural design. In order to bring the core concepts of my thesis into the details of my building, I started detailing part of my archive building as an exercise. I started off detailing the roof. I chose to used a timber structure in the building to speak to the wooded nature of the site and to explore a more lightweight type of construction since the building would be lifted on stilts.

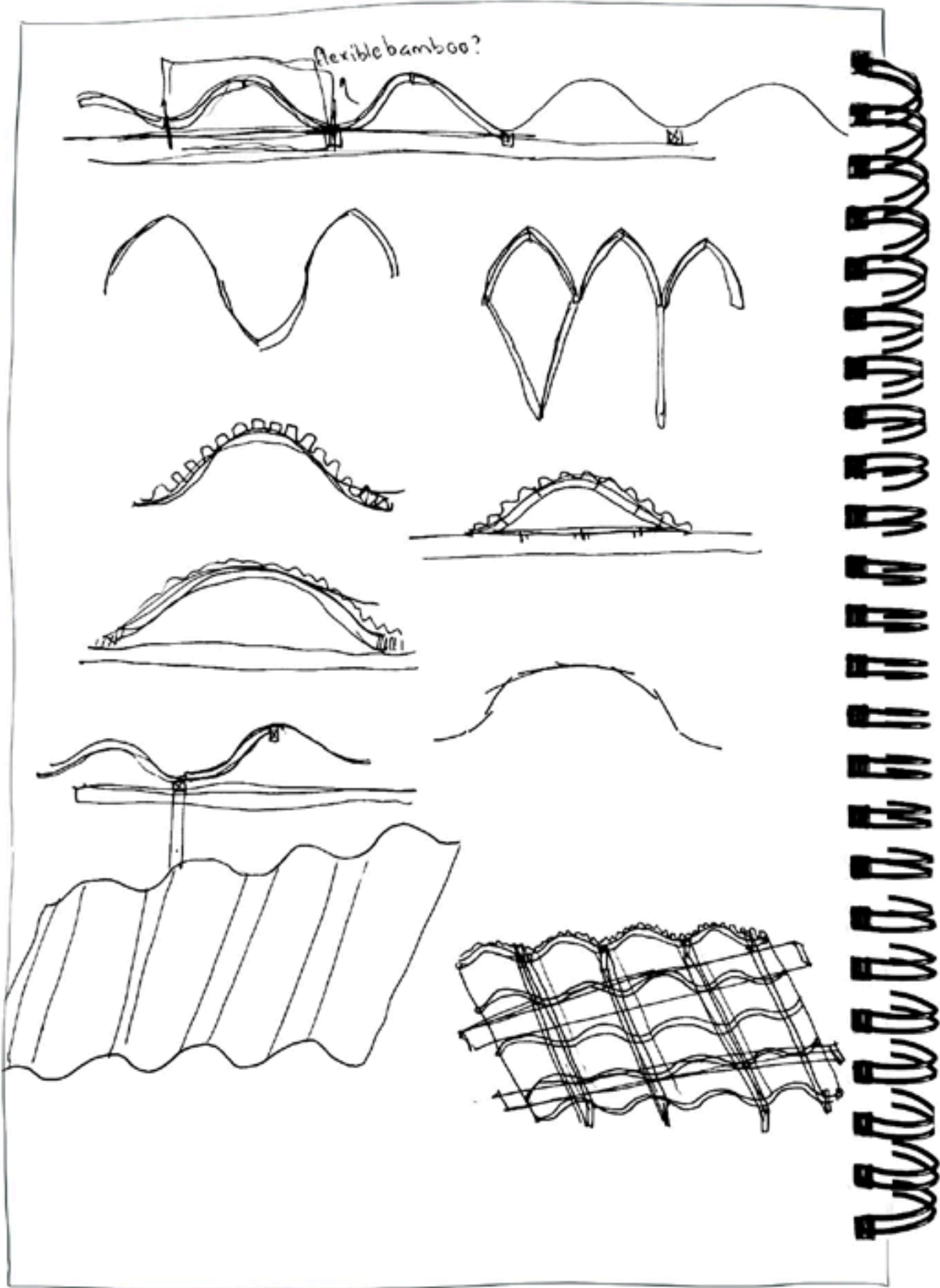
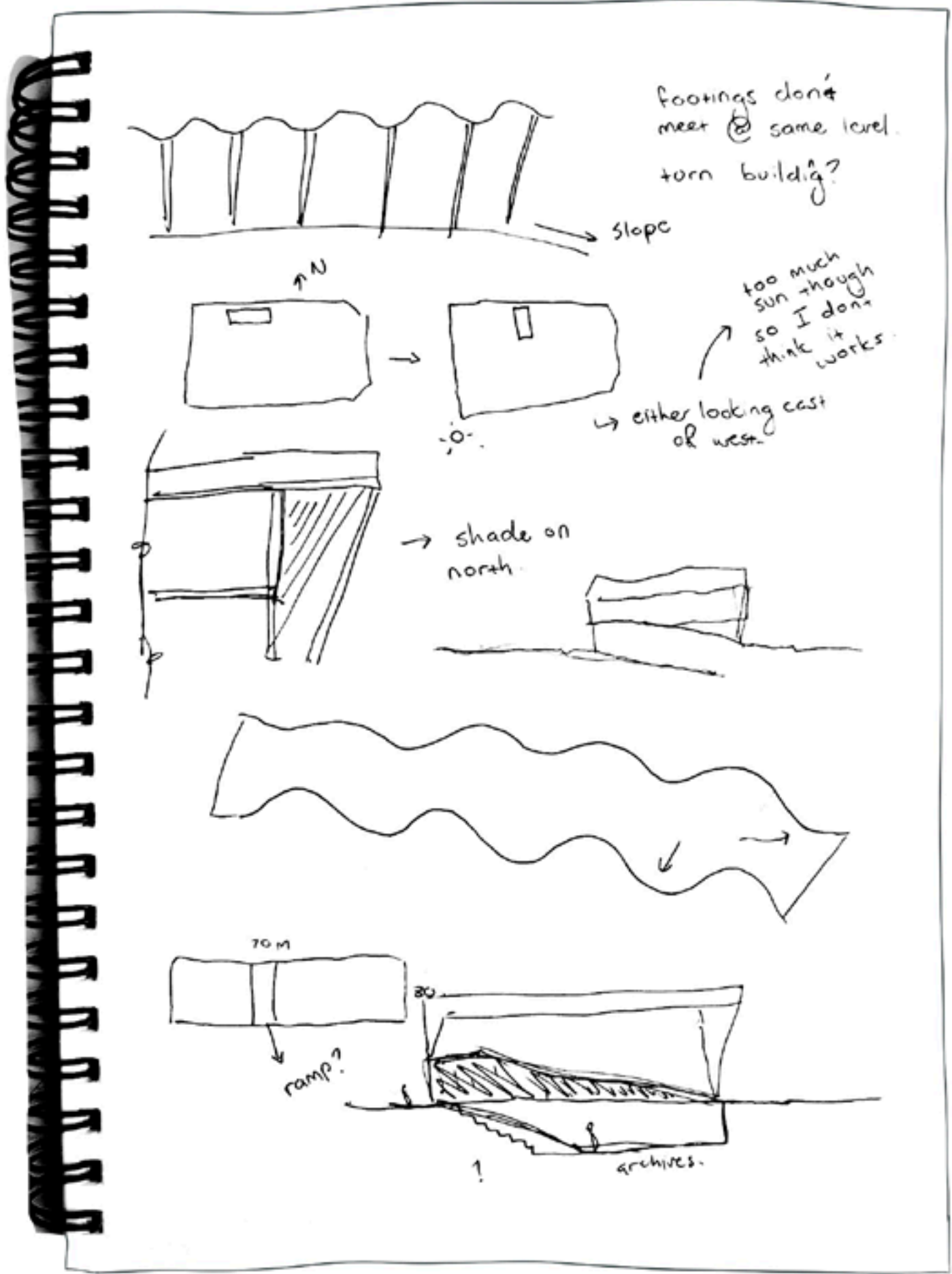


Fig 7.75
Left
Technical Exploration
Sketches 1
(Author, 2024)

Fig 7.76
Opposite
Technical Exploration
Sketches 2
(Author, 2024)

At first I detailed using corrugated roof sheeting but after some critiques and deliberation, I changed that to brick. Brick speaks to the ash walls and crematorium on the site which are also made of brick and stone respectively. The idea of a heavy roof atop a lightweight structure creates an interesting architectural dynamic that symbolises the constrasting memories and histories within the site.

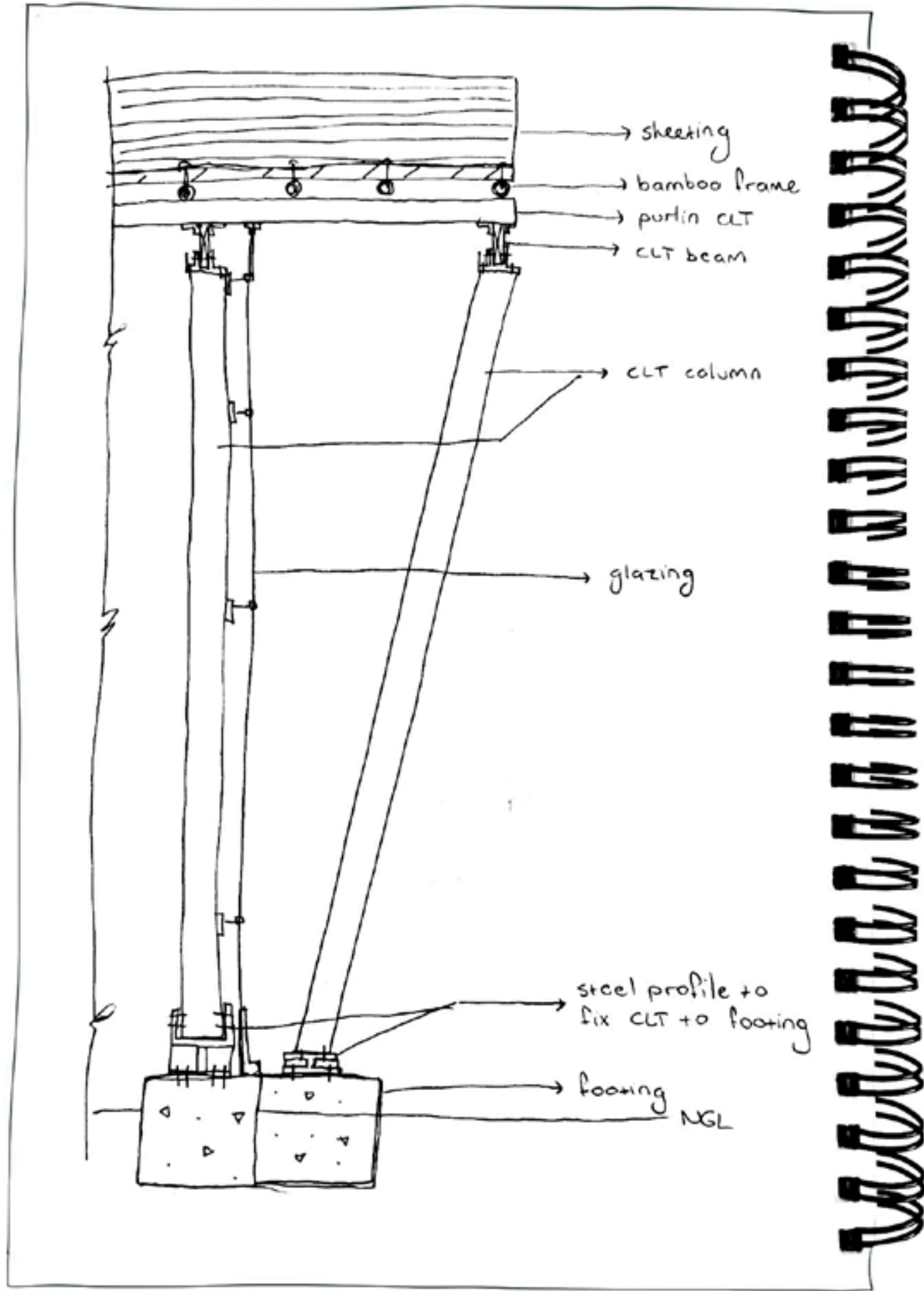
The exploration of detailing my design began in my sketchbook, as shown in the next few pages.



Digging into the ground was something I explored, but I realised that the site does not call for that. The unmarked graves come with spiritual value that should not be disturbed, and so this idea was rejected quickly.

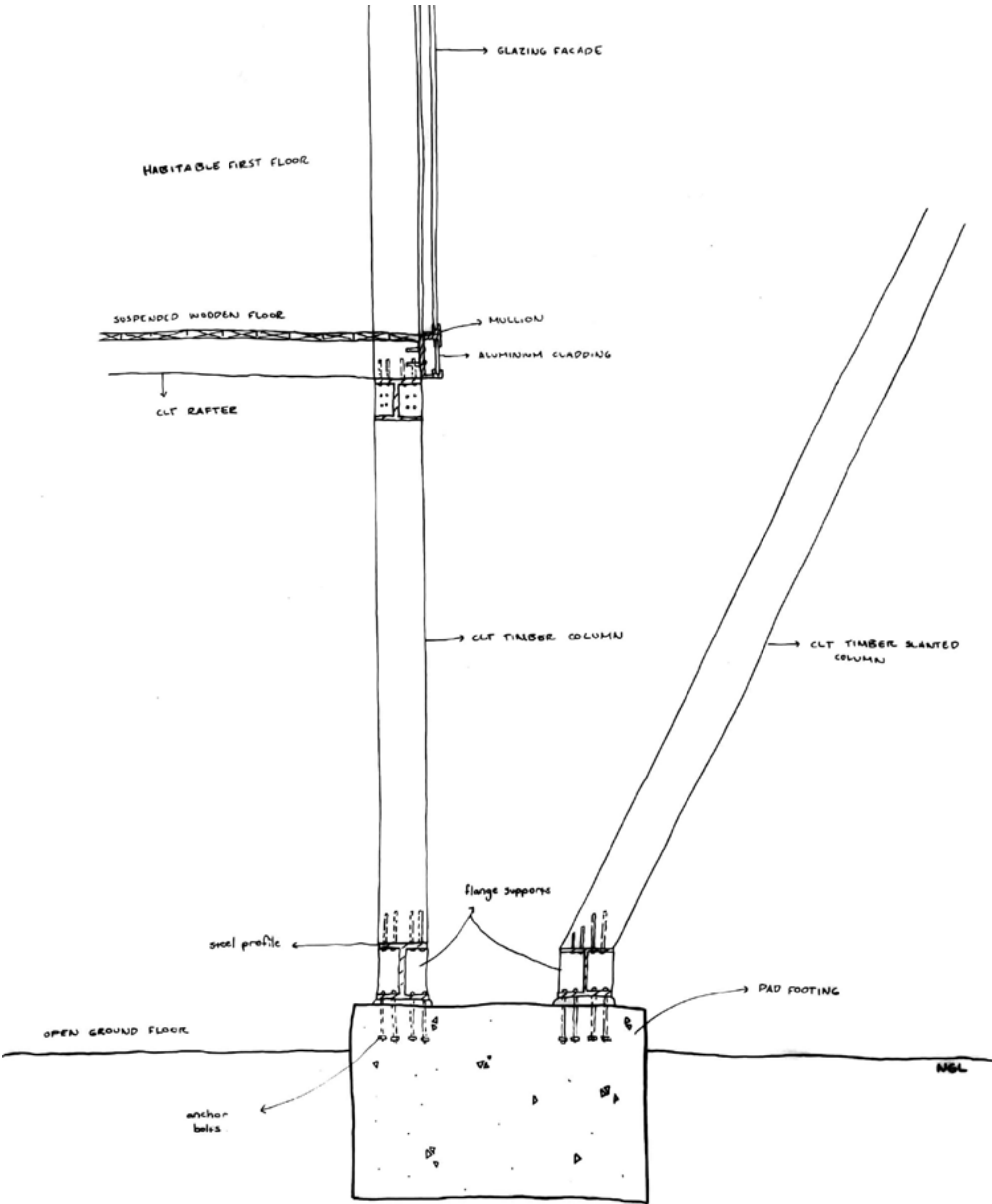
7.5 Technical Systems in Design

Fig 7.77
Left
Technical Exploration
Sketches 3
(Author, 2024)



Concept Sketch of Perimeter Detail

Fig 7.78
Opposite
Perimeter Detail Footing
(Author, 2024)



Initial Footing and First Floor Detail

7.5 Technical Systems in Design

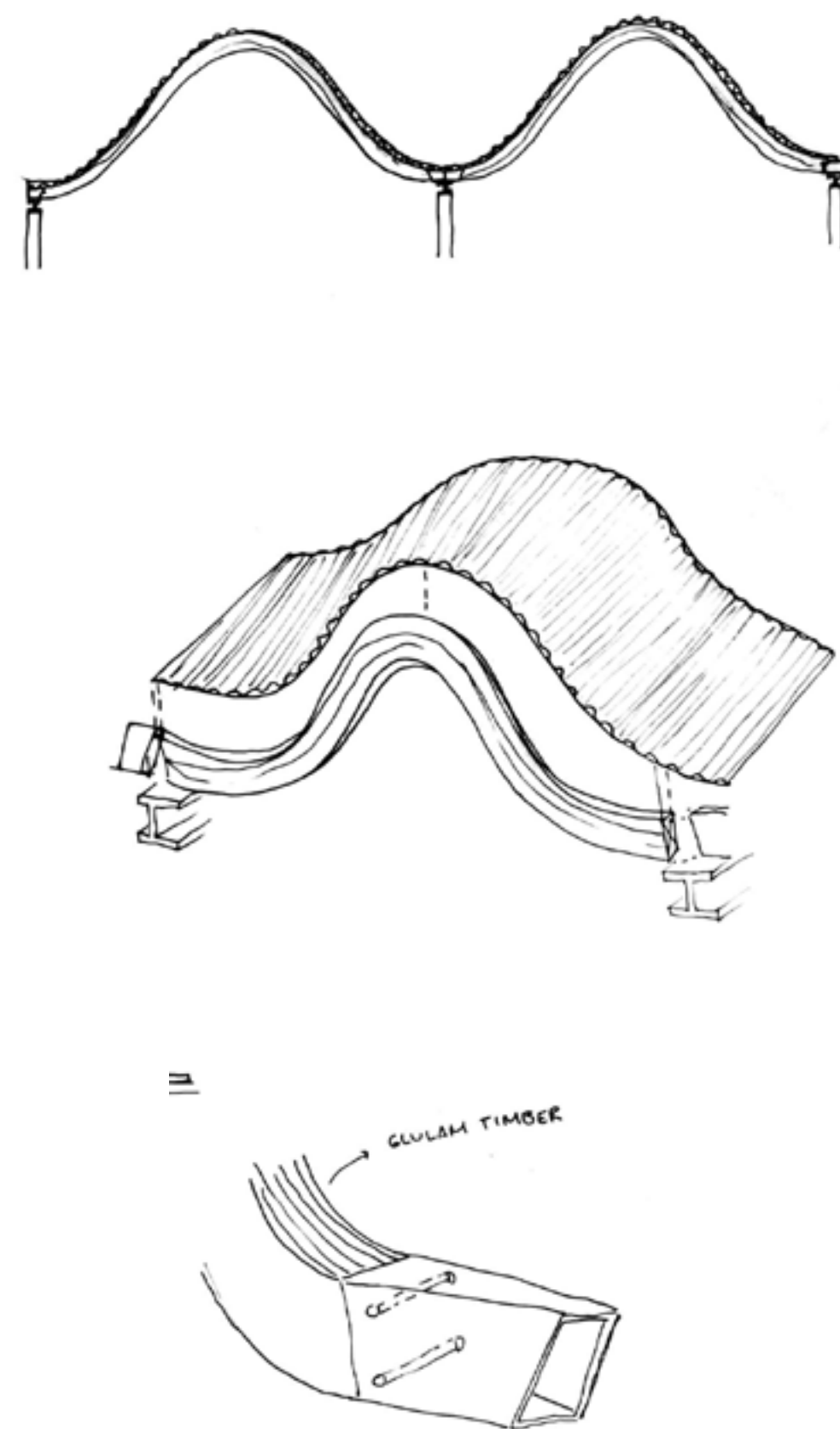
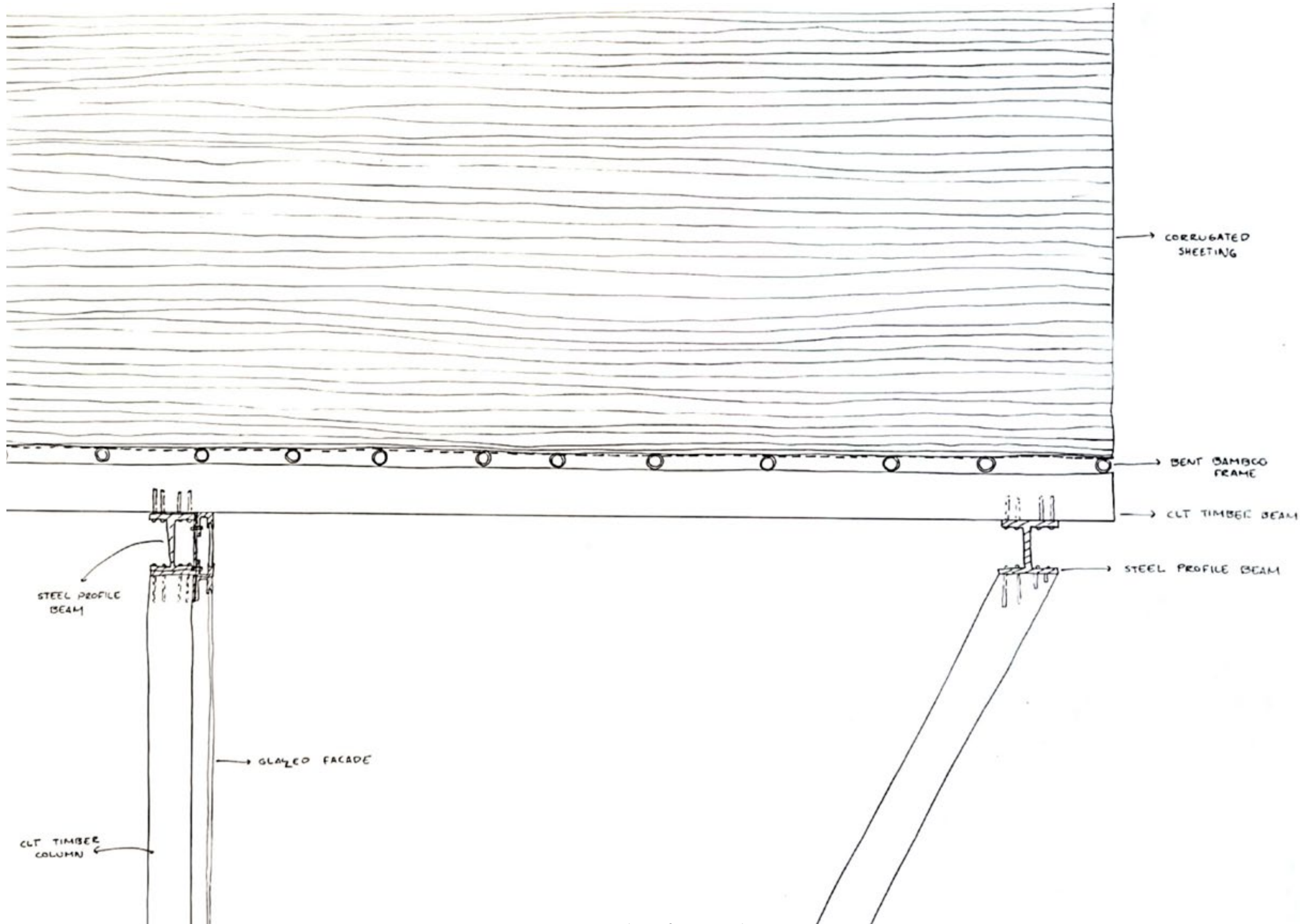


Fig 7.79
Left
Roof Detail
(Author, 2024)

Fig 7.80
Opposite right
Glulam Timber
Exploration Sketches
(Author, 2024)

Initial Roofing Detail

Glulam Timber Exploration

7.5 Technical Systems in Design

Through critiques with my lecturers and supervisor, problems of stormwater drainage pertaining to my roof design became apparent. This led me to change the roof and have it oscillate up and down consecutively on each side - this would allow stormwater to flow off the roof.

The structure of the roof was also questioned, suggesting that there are more interesting ways to detail such a design, like with the use of ruled surfaces. This then became the inspiration for a new detail and a change in materials from metal sheeting to brick.

A micropile foundation was also suggested as a better way of grounding the structure. as it is more stable and has a smaller footprint than a pad foundation.

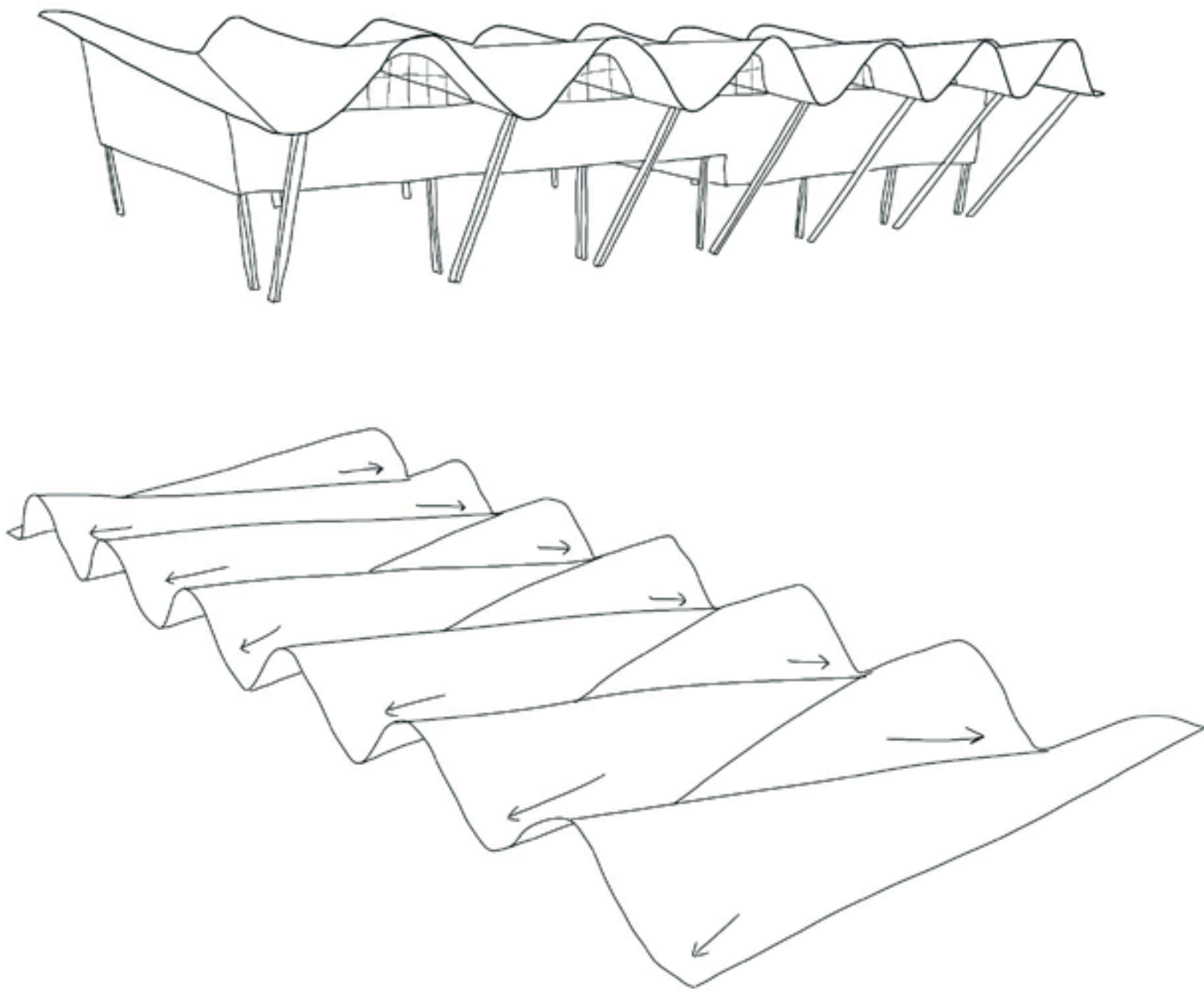
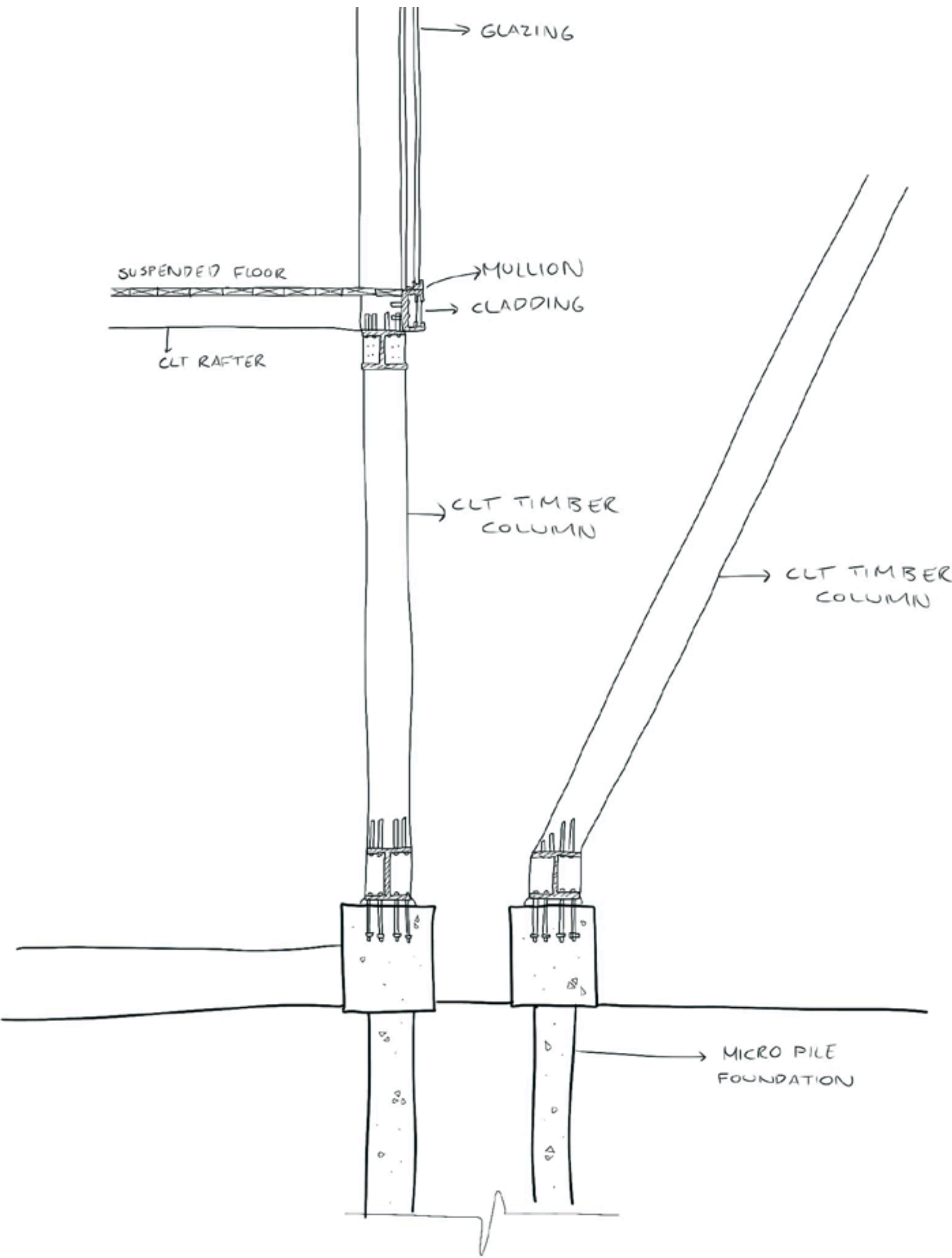


Fig 7.81
Left
New roof design sketches
(Author, 2024)



Micropile Footing Detail

Fig 7.82
Opposite
Micropile footing detail
(Author, 2024)

7.5 Technical Systems in Design

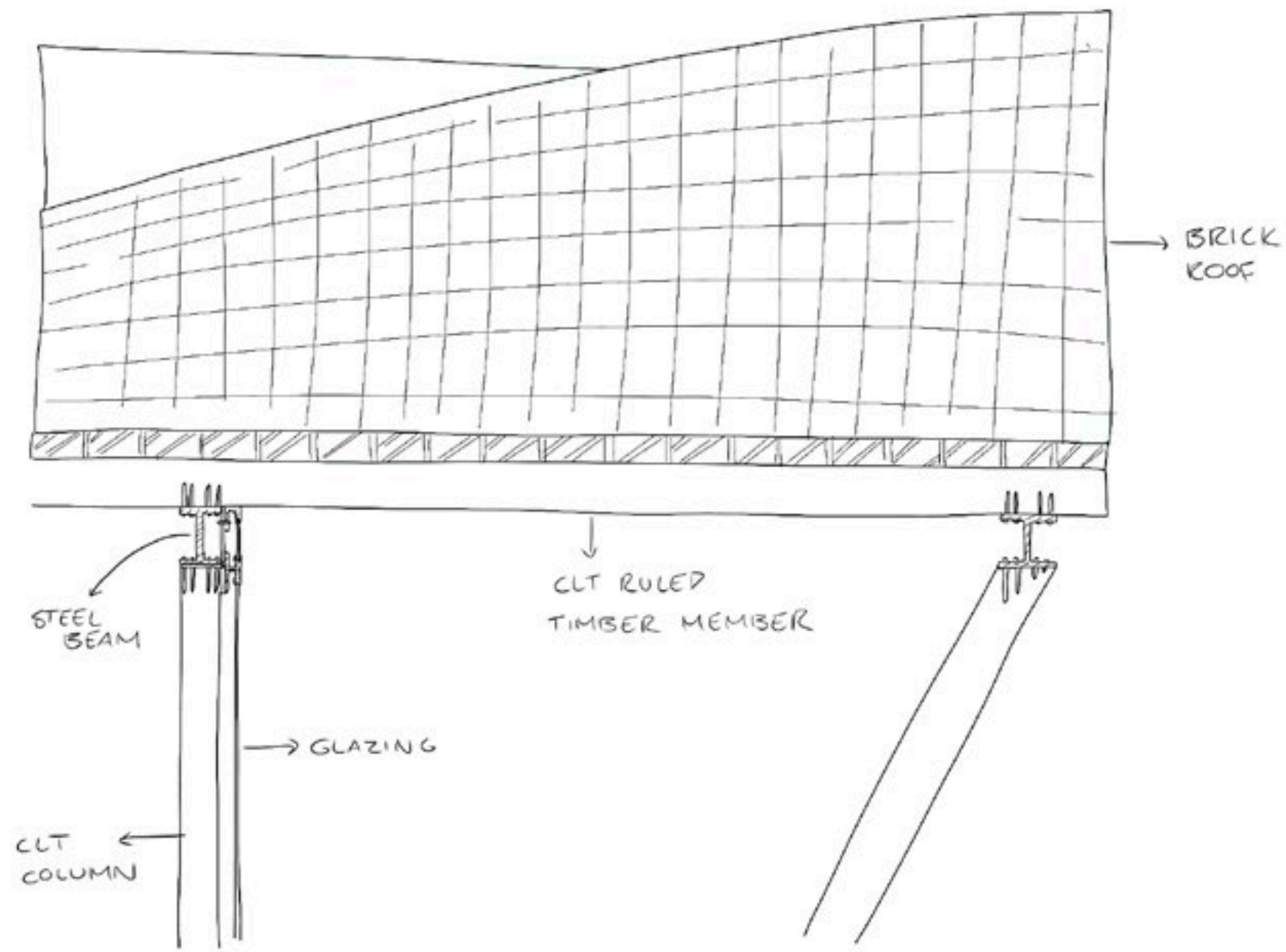


Fig 7.83
Left
New Roof detail sketch
(Author, 2024)

Fig 7.84
Opposite centre
Model of roof structure of
La Sagrada Familia School
(Basilica de la Sagrada
Familia, 2019)

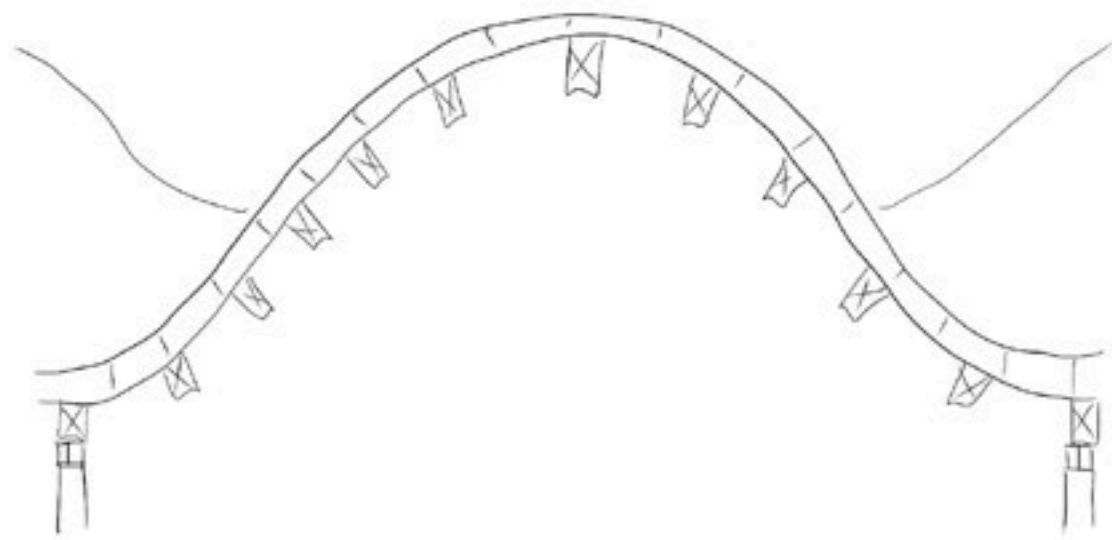


Fig 7.85
Opposite bottom left
Exterior of La Sagrada
Familia School
(Basilica de la Sagrada
Familia, 2019)

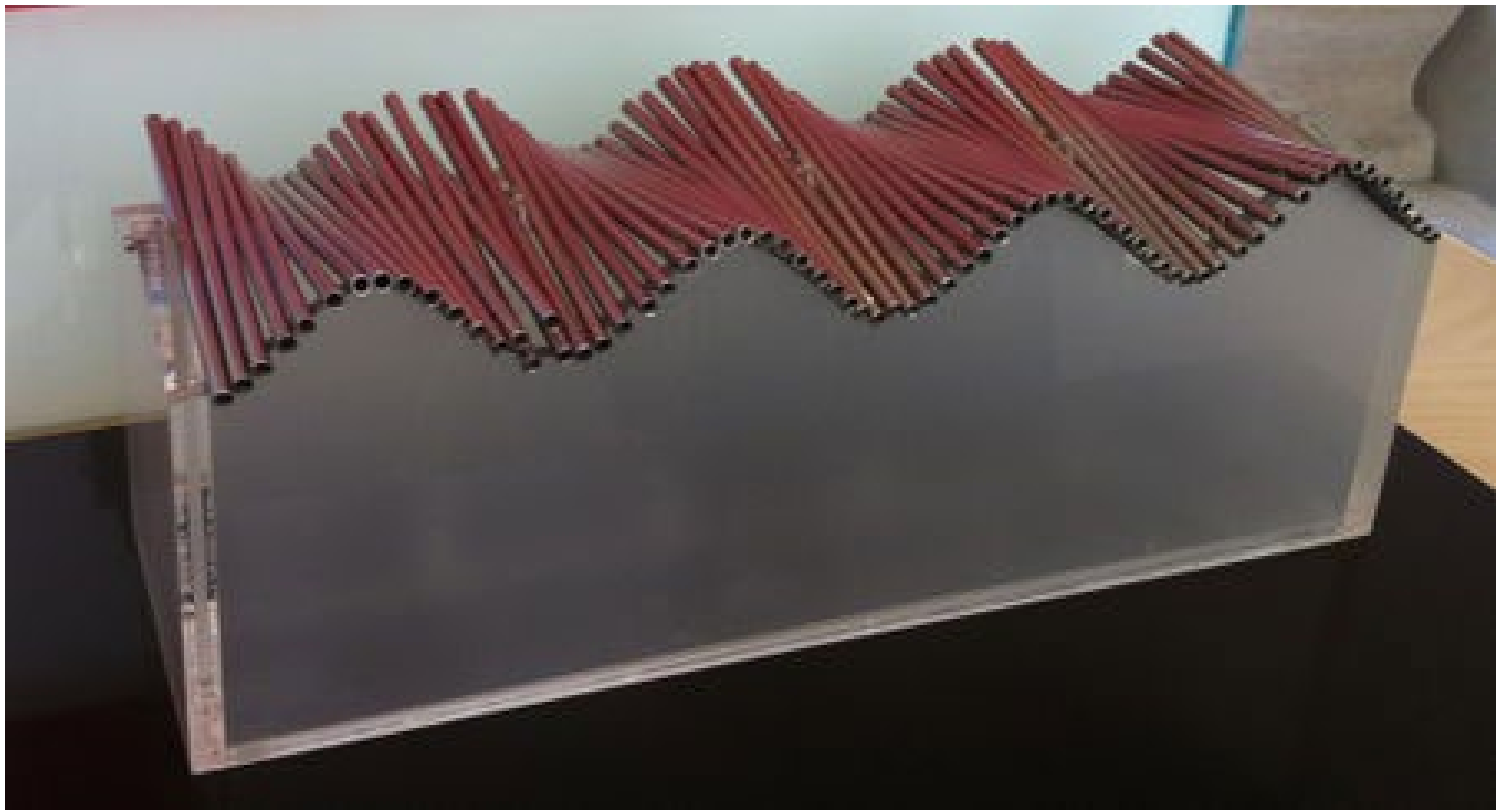
Fig 7.86
Opposite bottom right
Interior of La Sagrada
Familia School
(Basilica de la Sagrada
Familia, 2019)

Roofing Detail

Antoni Gaudi - La Sagrada Familia School

This precedent inspired the structure of my roof. Gaudi uses ruled surfaces to construct the roof of the La Sagrada Familia School. The ruled members are attached to and sit on a long beam that spans horizontally across the building. These ruled members oscillate up and down and slight angles from each other to create a base for the brick shell to sit on top of. The brick shell and ruled members are held up by a steel beam and column system.

It is helpful to have a technical precedent so that I can make my design come to life through construction. Much still needs to be done to fully realise my design scheme and that is to come in the next chapter.



08

Conclude

This chapter encompasses the final design of the project, as well as the conclusion to this thesis. The conclusion covers key points mentioned throughout the thesis and creates an overview of the final design.

Conclusion and Final Drawings [8.1]

Final Thoughts [8.2]

Ethics Certificate and Permission Letters [8.3]

List of Figures [8.4]

Bibliography [8.5]



8.1 Conclusion and Final Drawings



Fig 8.1
Cover page of Chapter 8
(Author, 2024)

Fig 8.2
Perspective of front
(North) facade and
entrance of Centre for the
Well-being of Animals
(Author, 2024)

This thesis has explored the potential of revitalizing the Braamfontein Cemetery through an architectural intervention that fosters empathy, interconnectedness, and ecological rehabilitation. By integrating an animal rehabilitation centre and an archive of memories within the cemetery’s historical landscape, the project challenges conventional perceptions of cemeteries as spaces solely for the dead. Instead, it envisions a multi-species sanctuary that not only preserves historical narratives but also serves contemporary urban and ecological needs.

The project’s core intention is to redefine the cemetery as a living space, where memory and renewal coexist. Achieving this involved extensive research into existentialism, posthumanism, post-anthropocentrism, and relational ecology, all of which informed key design decisions. The positioning of the buildings was carefully considered to reinforce the project’s objectives: the animal rehabilitation centre sits on the eastern edge of the site along Graf Street, while the archive of memories is located on the northern edge along Enoch Sontonga Avenue. These placements serve both practical and symbolic functions—activating previously neglected boundaries, improving accessibility, and reinforcing the site’s connection to the surrounding urban fabric.

8.1 Conclusion and Final Drawings



Fig 8.3
Ground floor of Centre for
the Well-being of Animals
(Author,2024)

8.1 Conclusion and Final Drawings



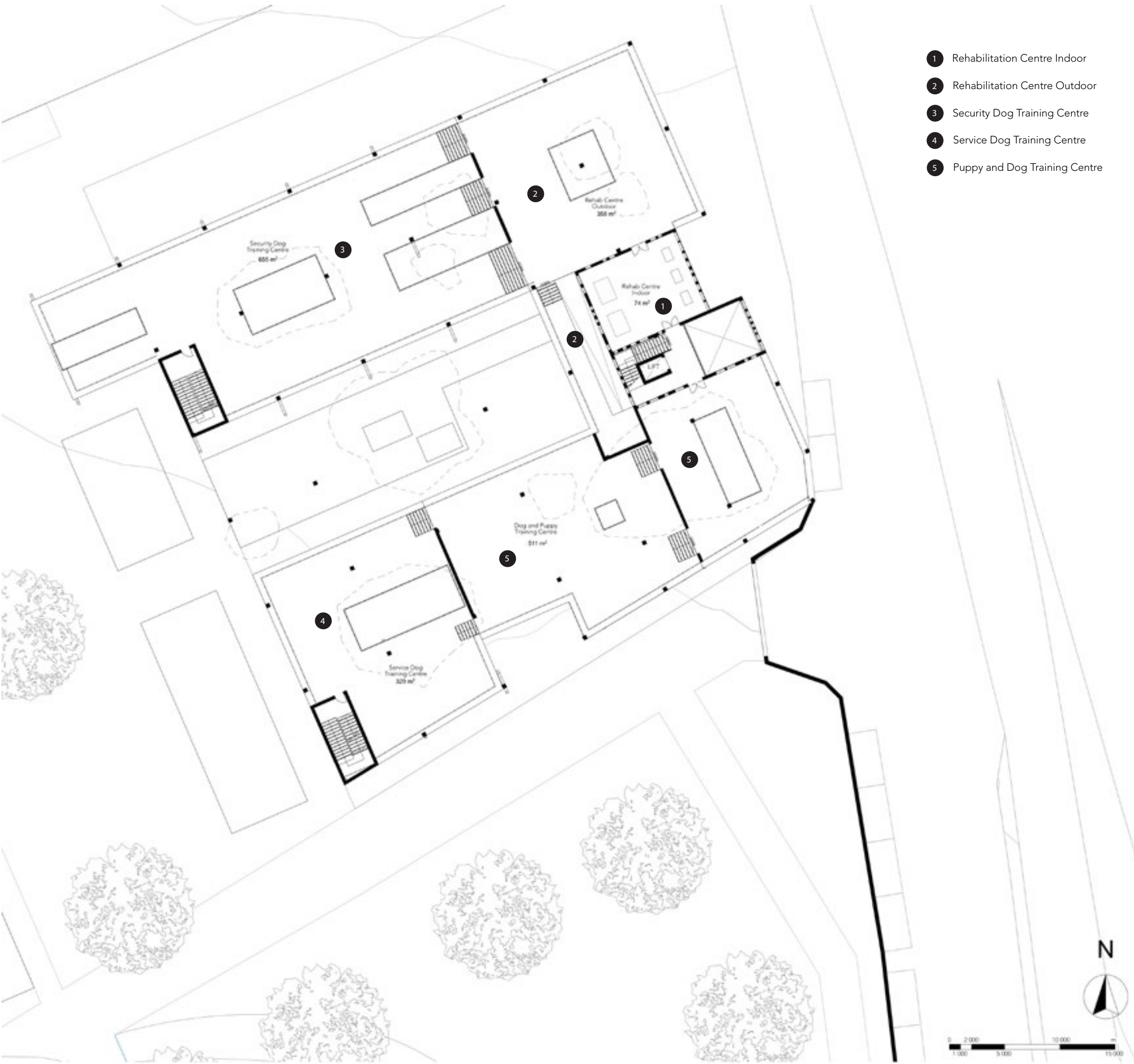
Architectural Strategy and Programme

The programme consists of two primary elements: an archive of memories and a centre for animals, each carefully integrated into the cemetery’s landscape.

The animal centre is divided into two distinct sections:

The animal clinic, which provides medical care, including consulting rooms, operating rooms, and recovery wards. A unique feature of this section is the ‘Last Walk’ ramp, leading to the ‘Last Farewell’ room, a sensitive space designed for those euthanizing their pets, incorporating a skylight and a water feature for quiet reflection.

The animal enrichment centre, which includes adoption matchmaking offices, dog-walking programs within the cemetery, and interactive spaces for visitors to engage with animals. A dedicated education hall teaches visitors how to interact with animals, aiming to dismantle social stigmas around them.



The building itself follows a modular design, with blocks and courtyards cut out to allow for ventilation and create seamless transitions between indoor and outdoor environments. The northern wing houses the clinic, offering private, domed waiting rooms to provide comfort for visitors and their pets. The southern wing is dedicated to animal-human interaction, featuring cat and dog enrichment areas designed to encourage natural behaviours while allowing visitors to observe or engage with the animals.

Fig 8.4
Left
Site Plan
(Author,2024)

Fig 8.5
Right
First Floor Plan of
Centre for the Well-
being of Animals
(Author, 2024)

8.1 Conclusion and Final Drawings

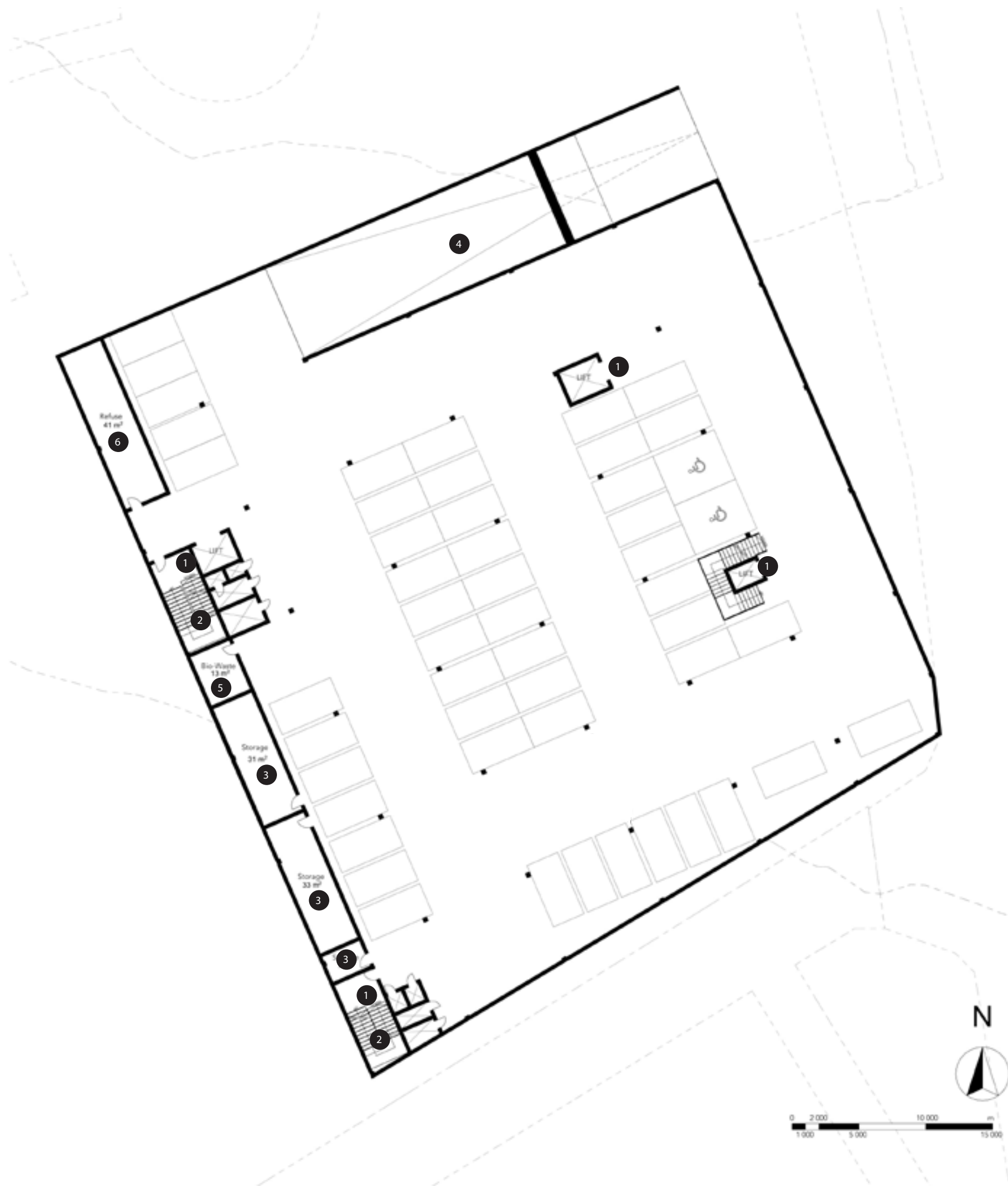


Fig 8.6
Left
Basement 1 of Centre for
the Well-being of Animals
(Author, 2024)

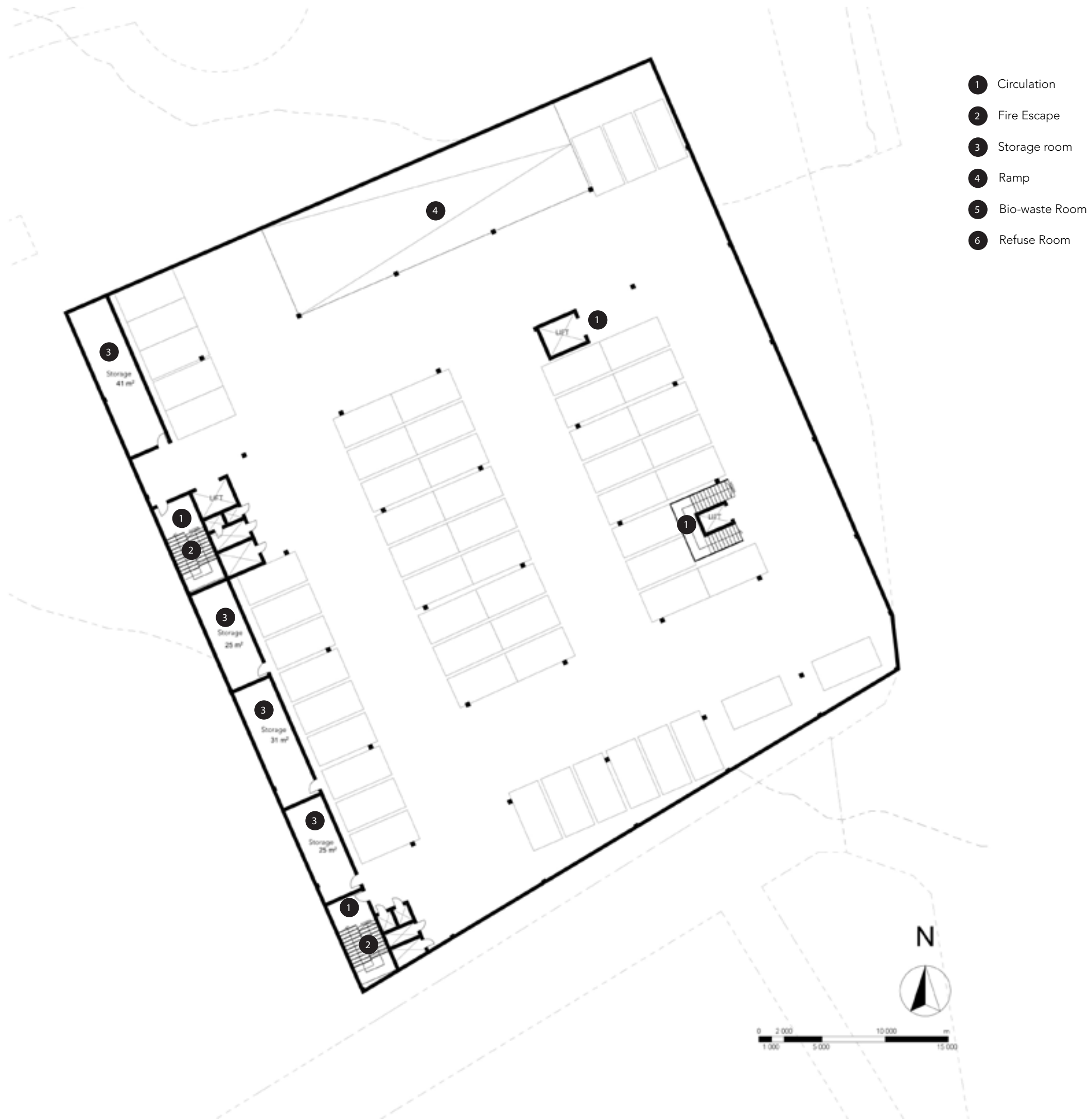


Fig 8.7
Right
Basement 2 of Centre for
the Well-being of Animals
(Author, 2024)

Basements provide parking for staff and visitors of the building.

8.1 Conclusion and Final Drawings

A secondary roof structure floats above the main program, creating an elevated, sheltered outdoor space where dog training, security dog programs, and post-surgery animal rehabilitation take place. This level is enclosed by timber slats, maintaining airflow while ensuring safety. The building’s materiality—brick with a concrete structure and a steel-truss-supported sheeted roof—ensures durability while responding to the site’s environmental conditions. Passive cooling is integrated through roof openings designed to catch summer winds while minimizing heat gain to the concrete slabs below.

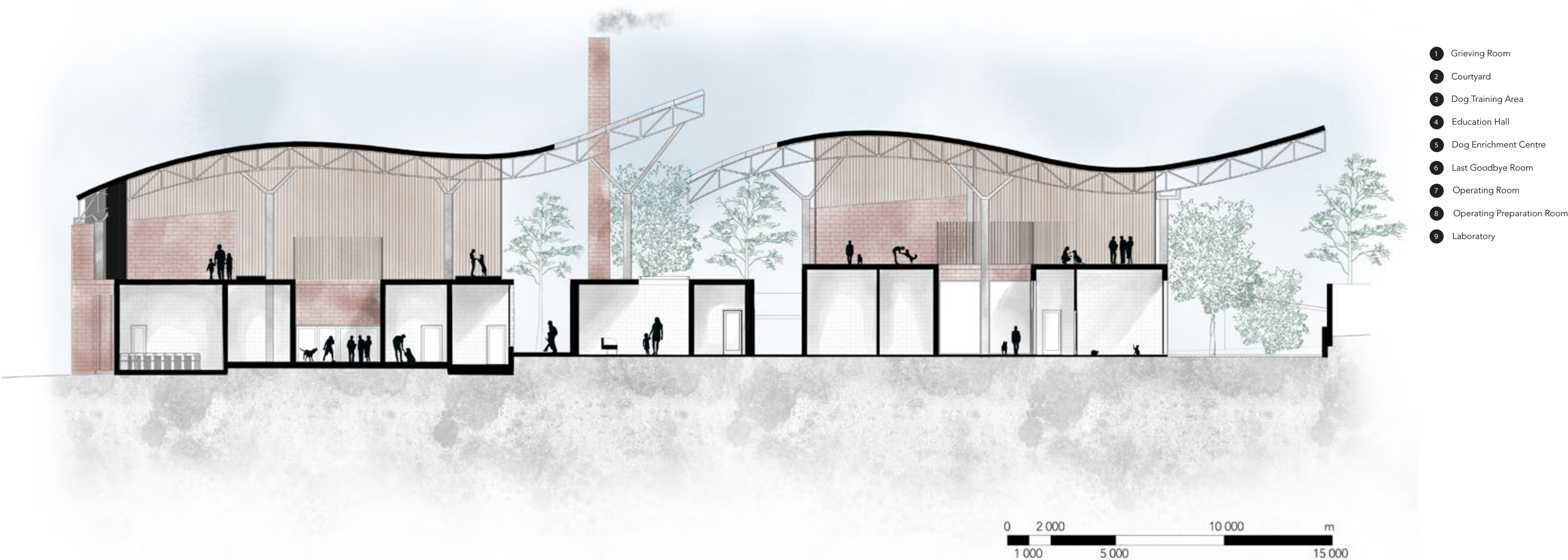


Fig 8.8
Section of Centre for the
Well-being of Animals
(Author, 2024)

8.1 Conclusion and Final Drawings

Boundaries, Accessibility, and the Elevated Pathway

Addressing exclusion and safety was integral to the design. The cemetery’s existing boundaries historically reinforced segregation, both socially and spatially. This project introduces a layered boundary system:

- Soft natural edges like tree lines and topographical shifts define spaces without rigid separation.
- Semi-transparent elements such as perforated fencing allow for controlled permeability while ensuring security.
- Reconfigured circulation through the transformation of Graf Street from a dead-end into a thoroughfare improves accessibility while enhancing urban safety.
- Controlled Access Points: Gated entryways maintain safety while still allowing public engagement with the site. Some areas remain restricted to ensure the privacy of rehabilitation spaces, while others encourage interaction between visitors and the landscape.
- An Inhabited Site: The programme on the site allows for 24/7 security within the cemetery, creating a safer space at night. If security is heightened – also using guard dogs as a means of detecting danger – the fence surrounding the cemetery would be safe and intact.

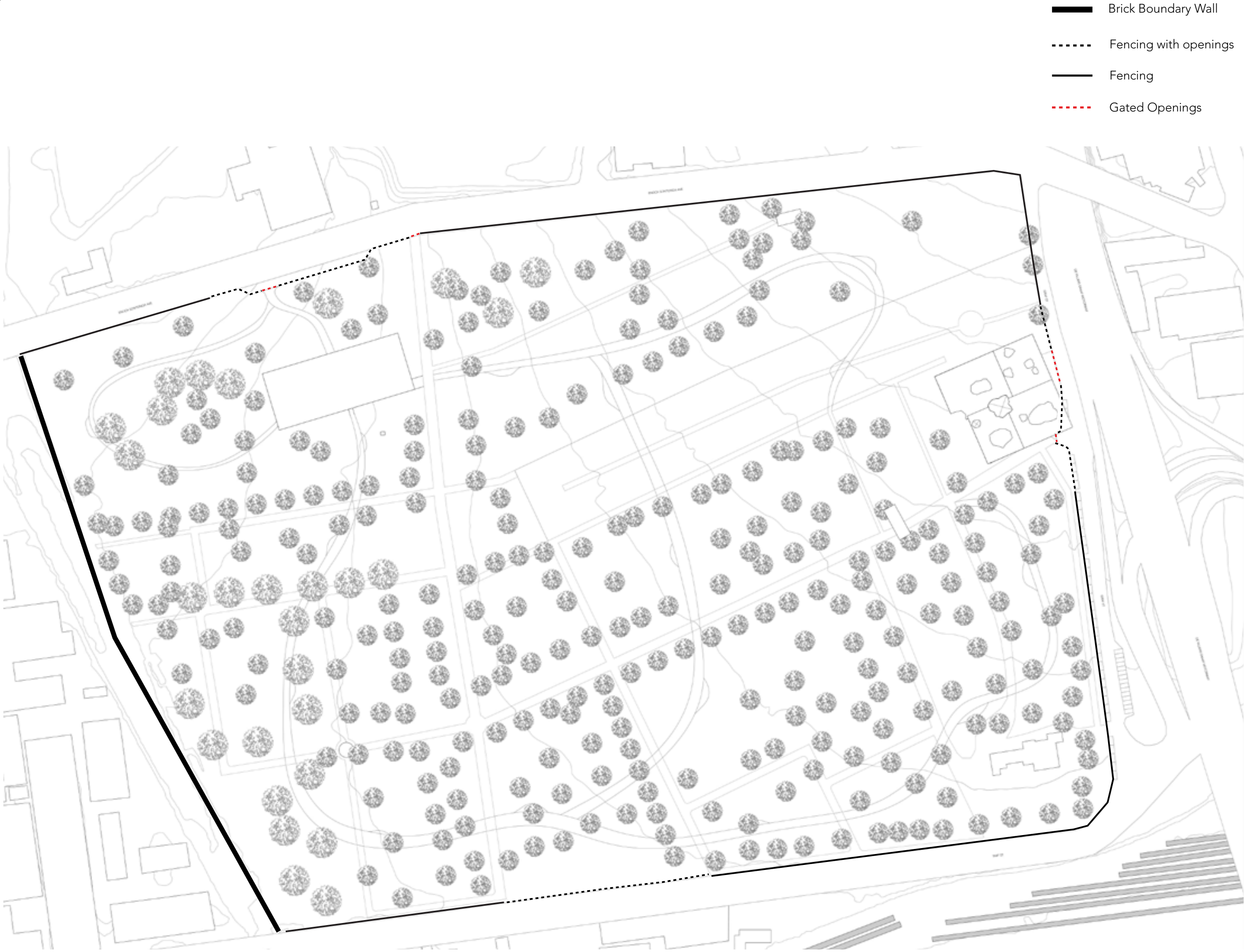
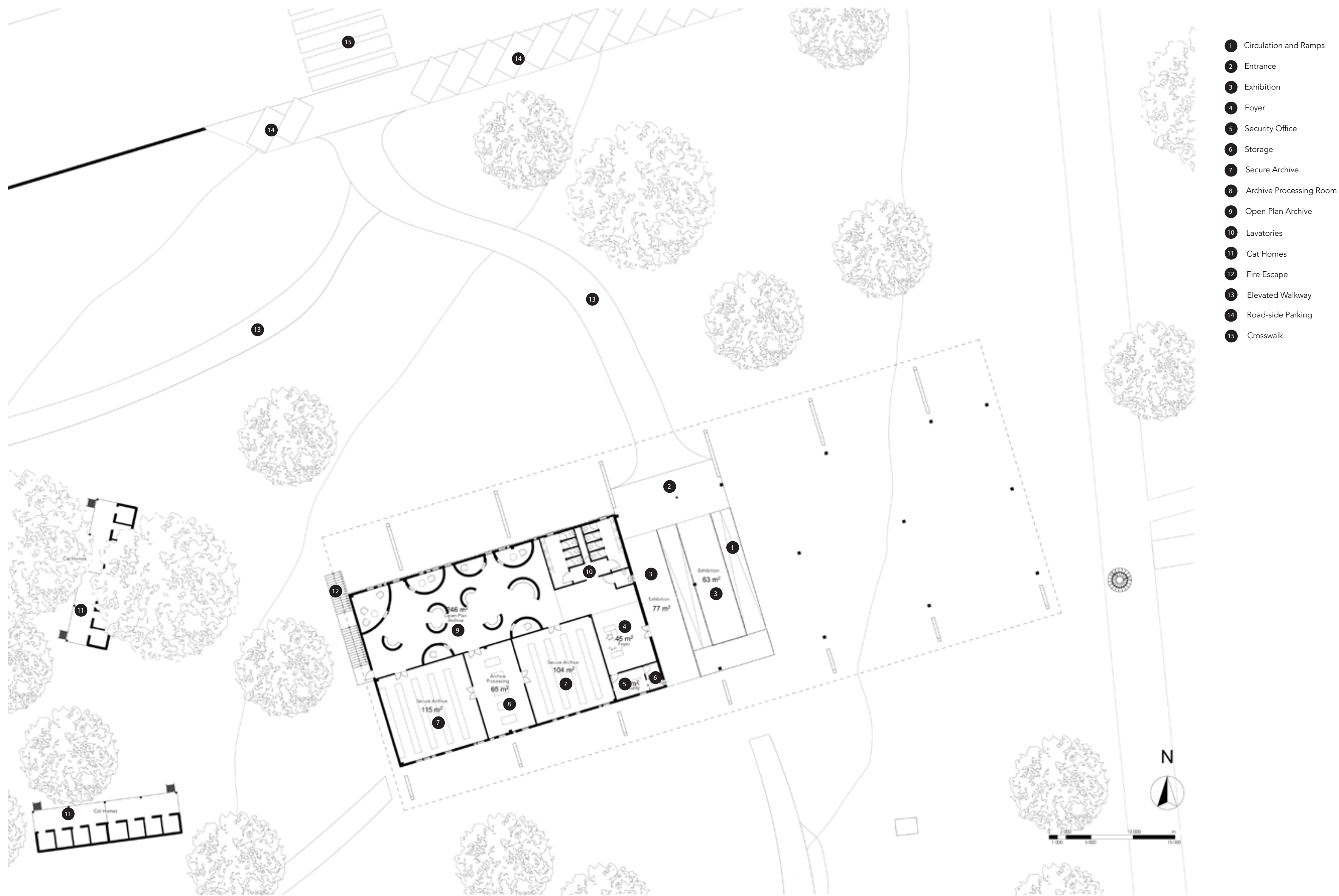


Fig 8.9
Site Plan showing
Boundaries
(Author, 2024)

8.1 Conclusion and Final Drawings



The archive of memories is positioned above the memorial park for unmarked black and coloured graves, creating a poignant dialogue between architecture and history.

Raised on stilts, the building’s light timber structure reflects the delicate nature of the site, while the Corten iron roof, shaped as oscillating catenary curves, references the ephemeral nature of memory and time. Secure archives occupy the ground floor, while the upper floor hosts open-plan archives, a venue space, a restaurant, and an animal drop-off point for visitors walking the resident dogs.

Domed reading pods offer intimate spaces for those engaging with potentially traumatic historical records. Beneath the structure, a memory pond steps down with the landscape, designed to reflect light when filled with water and transform into stepped seating when dry. Concrete block candle holders provide a place for visitors to honour lost histories.

Fig 8.10
Ground Floor of
Archive of Memories
(Author, 2024)

8.1 Conclusion and Final Drawings



Fig 8.11
First Floor of Archive
of Memories
(Author, 2024)

8.1 Conclusion and Final Drawings

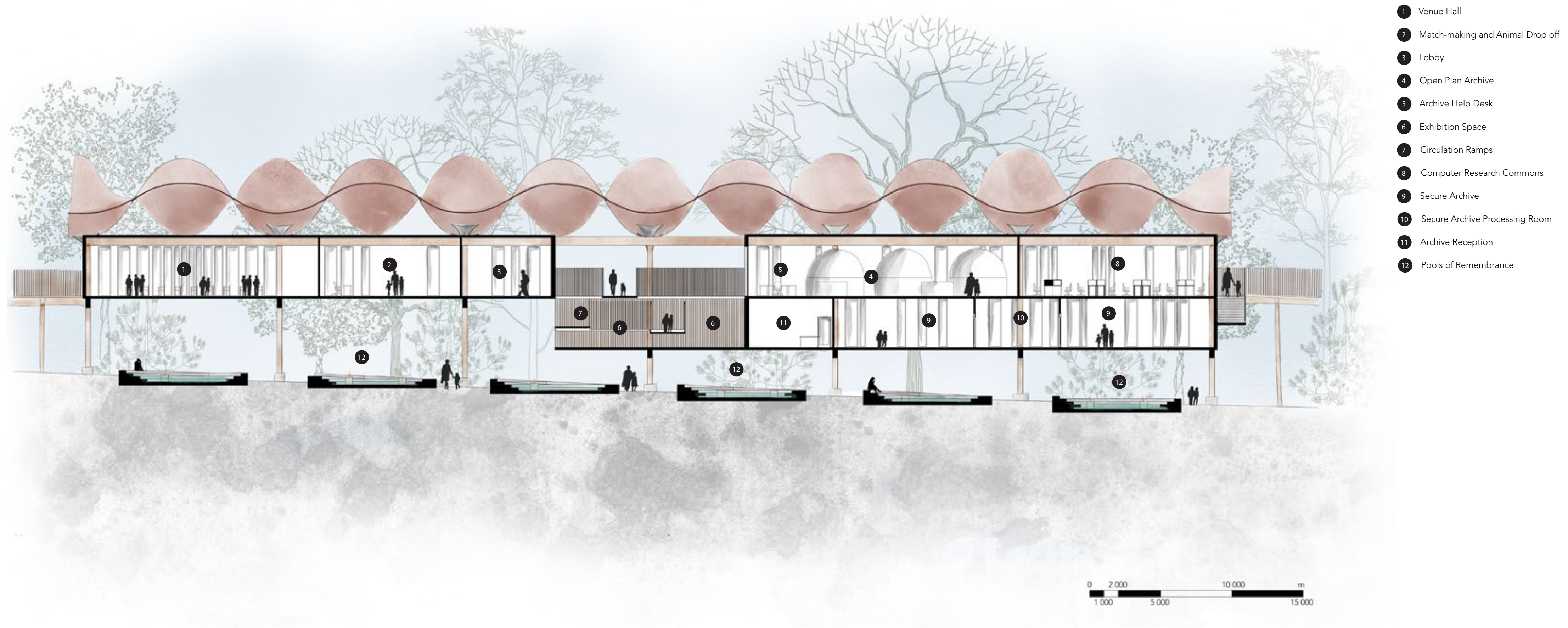


Fig 8.12
Section of Archive
of Memories
(Author, 2024)

8.1 Conclusion and Final Drawings



Fig 8.13
Labeled Site Plan
(Author, 2024)

Conclude

8.1 Conclusion and Final Drawings

A major intervention to enhance movement and exploration is the elevated pathway, designed to encourage wandering and discovery within the cemetery. Given Johannesburg’s reputation as a city hostile to pedestrians, this intervention creates a safer, uninterrupted route that links the various racial and religious sections of the cemetery. The pathway is lightweight, supported by minimal structural footprints, and constructed of perforated sheet metal, allowing dappled light to filter through like a tree canopy. The perforations take the form of engraved names from cemetery records, subtly embedding lost histories into the architecture itself.

At key intersections with the cemetery’s footpaths, colourful spiral staircases drop down to facilitate entry and exit. Each staircase is painted in a different hue, providing intuitive wayfinding while avoiding disruption to the graves below. Widened sections of the pathway create rest areas, offering seating and water stations for both human and non-human visitors.

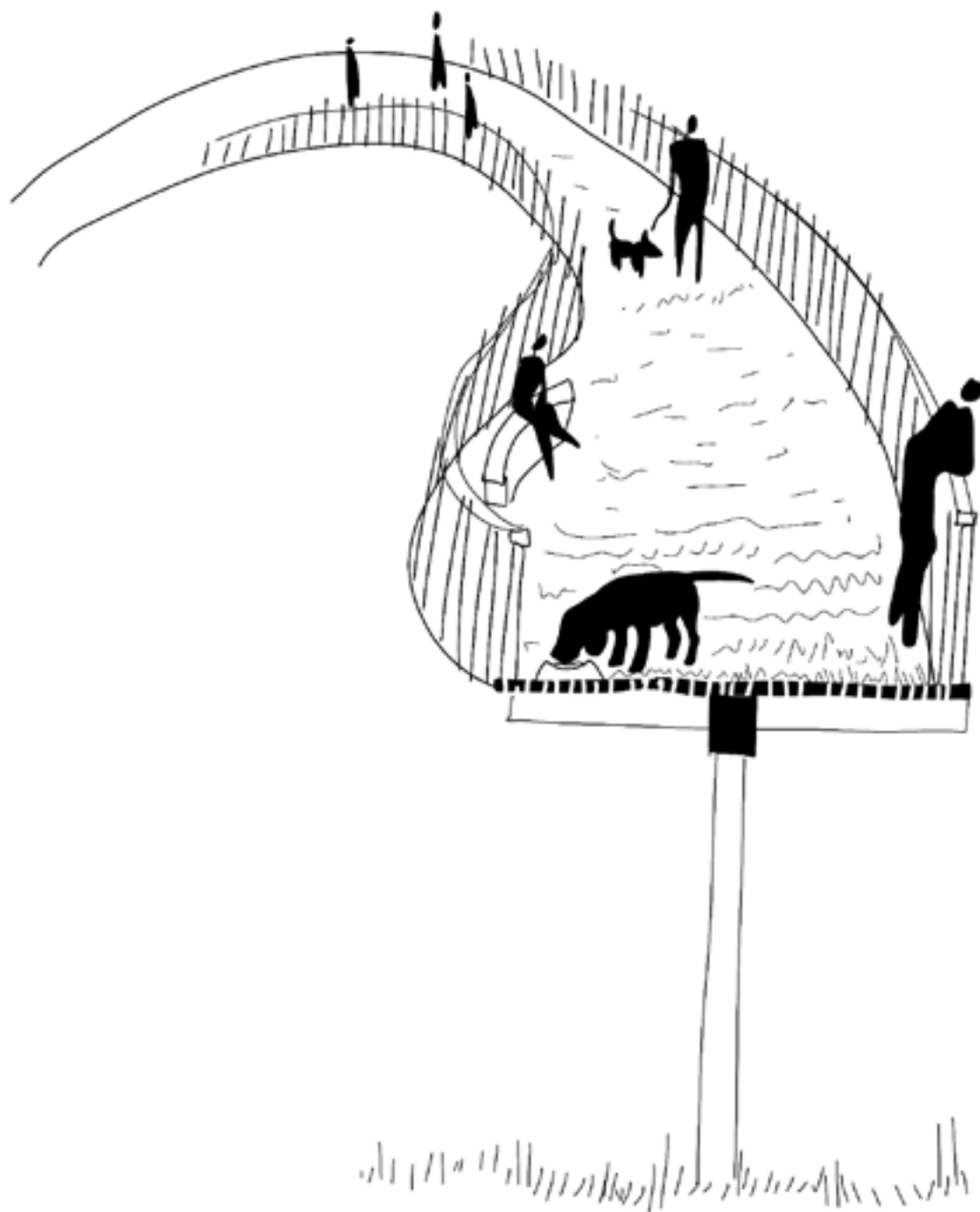


Fig 8.14
Left
Sketch of Elevated Pathway
(Author, 2024)

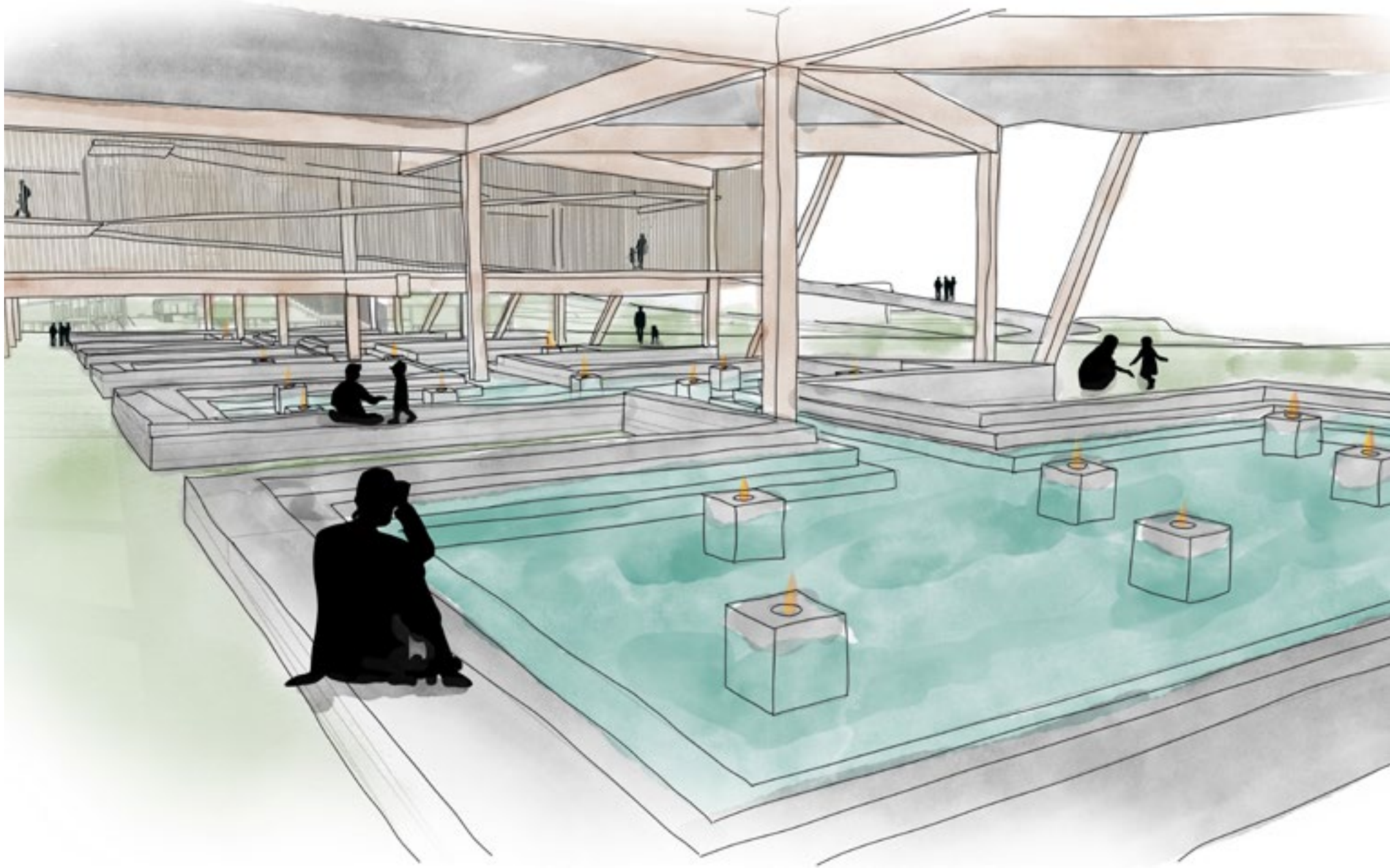


Fig 8.15
Opposite top right
Watercolour Render of Pools of Remembrance
(Author, 2024)



Fig 8.16
Opposite top left
Watercolour Render of Ramps in the Archive of Memories
(Author, 2024)

8.1 Conclusion and Final Drawings

Inclusion of Animals and Urban Ecology

The inclusion of animals within the Braamfontein area was a deliberate decision rooted in urban ecology and social engagement. The presence of an animal rehabilitation centre within the cemetery fosters a deeper connection between people, nature, and non-human species. This challenges the traditional anthropocentric approach to urban design, instead advocating for a shared environment where both humans and animals

find refuge. By doing so, the intervention offers a new model for multi-species urban cohabitation, demonstrating the positive psychological and social impacts of human-animal relationships within dense urban settings.

The integration of animals also enhances the cemetery’s function as a restorative environment. As mentioned under relational ecology, interaction with animals can reduce stress, improve mental health, and encourage social engagement. By providing a sanctuary for both abandoned animals and city dwellers seeking respite, the project transforms the cemetery into a place of healing and renewal.

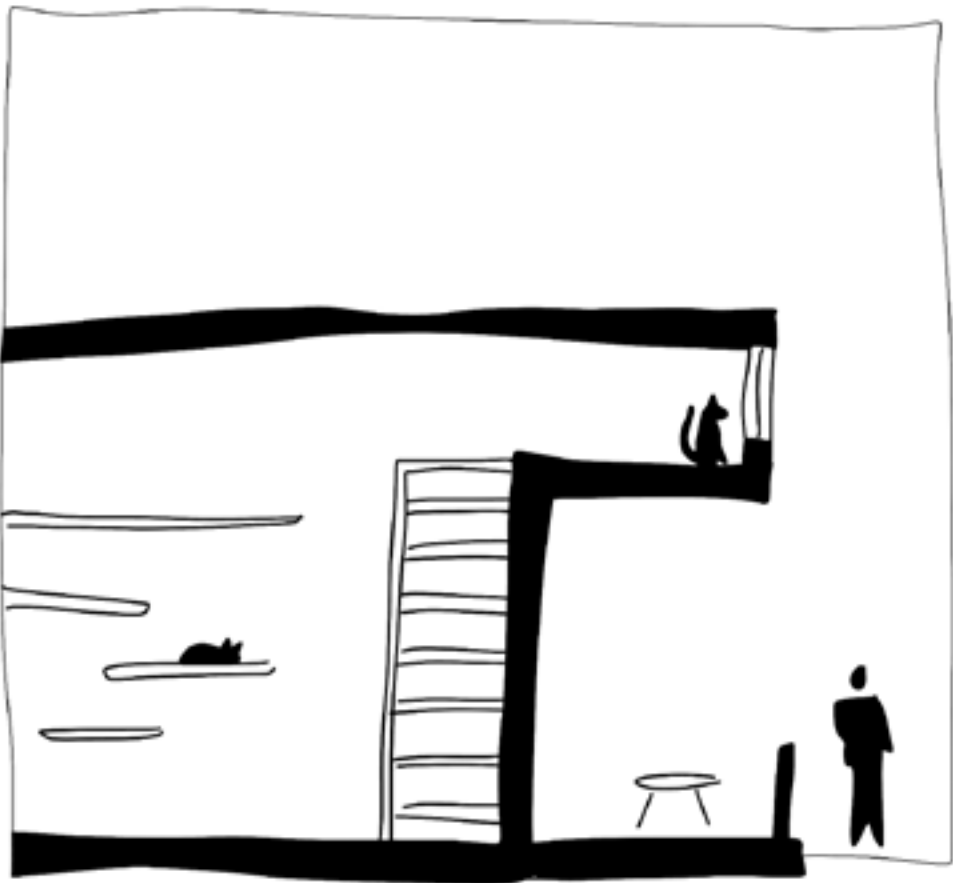


Fig 8.17
Left
Interior render of Cat
Enrichment Room
(Author, 2024)

Fig 8.18
Right
Sketch Section of Cat
Enrichment Room
and outer facade
(Author, 2024)

8.1 Conclusion and Final Drawings

Detail - Perimeter Section

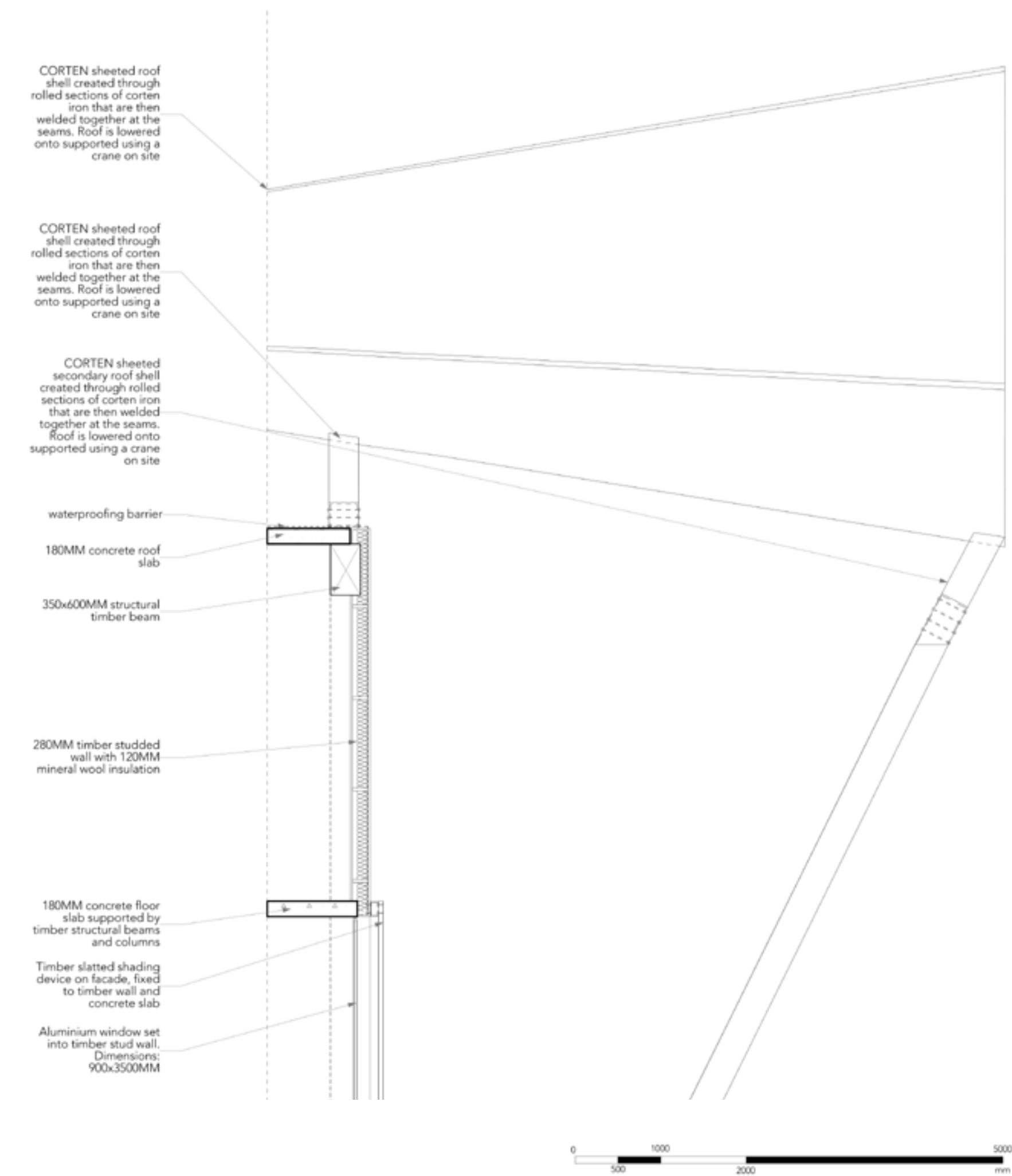


Fig 8.19
Left
Upper Floor and roof
detail for Archive
of Memories
(Author, 2024)

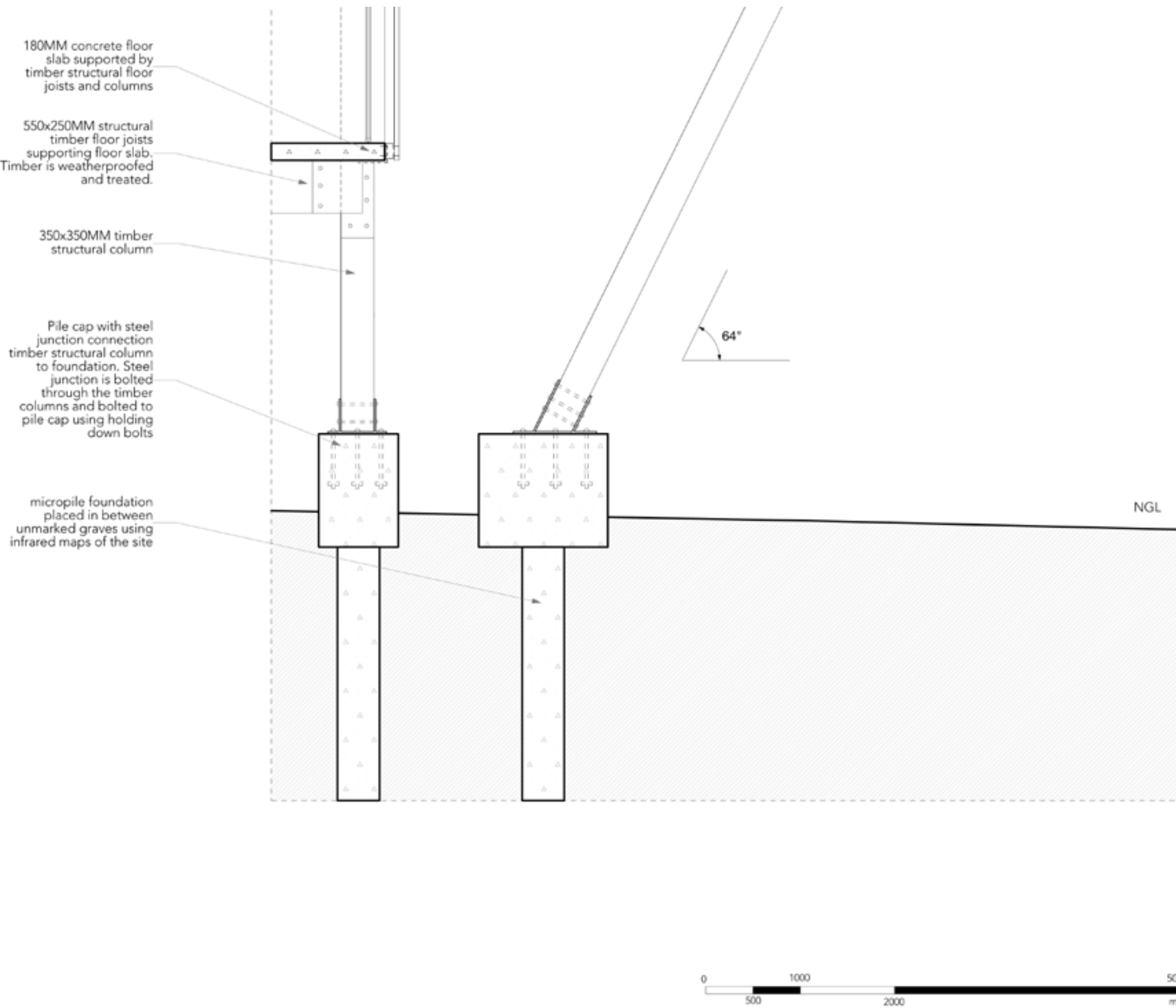


Fig 8.20
Right
Lower floor and
foundation detail for
Archive of Memories
(Author, 2024)

8.2 Final Thoughts



Final Thoughts: Urban Relevance and Future Implications

Moreover, this project represents a broader rethinking of urban cemeteries, advocating for their transformation into functional, inclusive landscapes rather than passive, overlooked spaces. The combination of architecture, ecology, and historical preservation provides a framework for future developments in similar contexts, demonstrating how architectural interventions can reconcile memory, urban life, and ecological stewardship.

Through its synthesis of memory, urban ecology, and human-animal relationships, this thesis offers a vision for a more interconnected and compassionate built environment. It proposes that future architects should not be afraid to be sentimental about their projects because it brings a deeper meaning and excitement to the process of architecture. In this thesis the Braamfontein Cemetery is no longer just a space of remembrance, but becomes a vibrant, evolving part of the city’s fabric—one that encourages reflection, healing, and coexistence across species and generations. This is what should lie in the future cemeteries of South Africa and Johannesburg. These spaces need to be utilised in a multi-faceted way so that they do not become obsolete in the future.

Fig 8.21
Perspective of front
(North) facade and
entrance of Centre for the
Well-being of Animals
(Author, 2024)

8.3 Ethics Certificate and Permission Letters



PERMISSION FOR USE BRAAMFONTEIN CEMETERY 16th APRIL 2024

ATTENTION: DAMJANOVIC A

"THIS IS YOUR PERMISSION LETTER FOR THE USAGE OF BRAAMFONTEIN CEMETERY 16th APRIL 2024. YOU NEED TO CARRY THIS LETTER WITH YOU ON THE DAY OF THE EVENT AT ALL TIMES. FAILURE TO COMPLY WITH THIS REQUEST MAY RESULT IN YOUR EVENT BEING STOPPED."

Dear Ana

Please note that permission has been granted to utilize the cemetery for your proposed research observation subject to the following:

- 1. The client must provide their security litter-picking services for the scheduled event.
- 2. Noise must be limited or reduced to levels that do not disturb the peace and tranquil ambiance of the venue and the surrounding environment or neighboring properties.
- 3. Cleaning of the facility must take place on the same day of the event and the facility must be left q
- 4. Any playback from tapes should not have the names of the deceased families since their prior consent was not sought.
- 5. By-laws must be always adhered to; failing to comply with the municipal bylaw will result in forfeiture of the refundable deposit. If the applicant is unclear about the bylaws, please contact the writer to discuss this further.
- 6. No alcohol is to be consumed or sold during the use of the facility. All other beverages must be decanted before consumption as glass bottles are not allowed in public open spaces.
- 7. Damage to infrastructure will not be allowed. Appropriate penalties may be imposed if necessary.
- 8. Please note that permission is only granted on 16th of April 2024 from 08h00 - 17h00 and not later.
- 9. The City of Johannesburg and Johannesburg City Parks accept no responsibility or liability for any injuries, negligence, or loss of whatever nature during the use of the above-mentioned Cemetery.

Yours truly,

Business Development Department
Facility Hiring Unit
Tel: 011 712 6664

Kindly sign and fax it back to City Parks

I agree with the above terms and conditions.

Signature..... Date 16/04/24.....



Directors: Thembisa Mjoli (Chairperson), Rabene Moripe, Andile Jabavu, Mbuliso Fihla, Peter Kgomo, Yongama Zigaba, Ayanda Hlatshwayo, Winnie Ntshongwana, Lucky Feni, John Madala, Yongama Nyalambisa, Thembiso Mjoli (Managing Director), Floyd Ralibhofo (Chief Financial Officer), Ayanda Shongwe (Company Secretary)

Reg No: 2000/028782/08



20 August 2024

Ana Damjanovic

2070688

TO WHOM IT MAY CONCERN

RESEARCH ETHICS APPROVAL

Rest in Peace: Encouraging empathy, compassion and interconnectedness through the design of a rehabilitation centre within Braamfontein Cemetery.

This letter serves to confirm that the Ethics application for the above titled study has been approved. The researcher has been granted clearance to proceed with the research study or project.

Protocol/clearance number is: SOAP029/03/2024

Yours sincerely

Motsei Choabi
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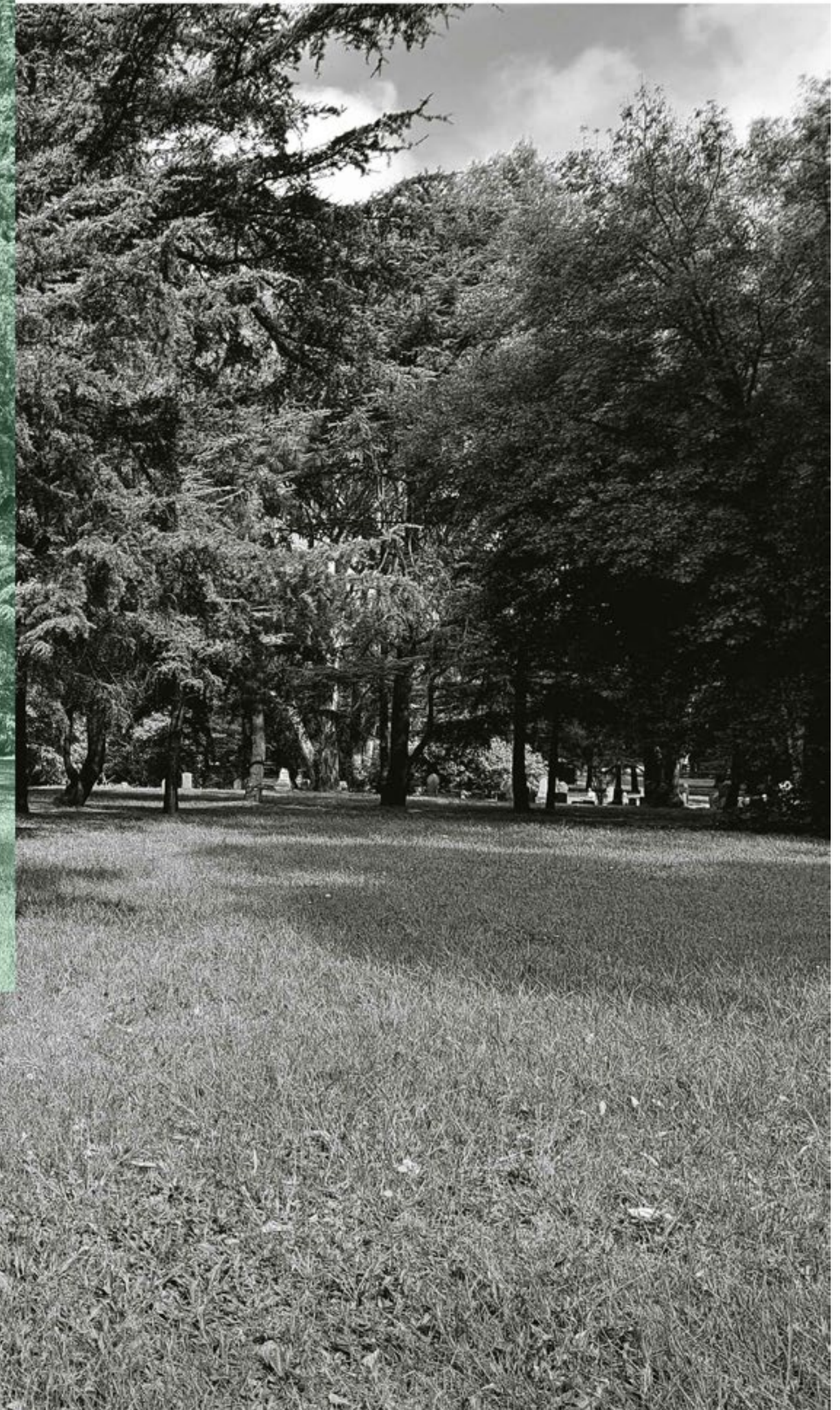
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X

Appendix

This appendix includes a viability report and narrative exercise done in the first semester. Please note that they were done before the building and thesis concept were fully realised and so they do not include the most recent information or design iteration.

Narrative Exercise [X.1]
Viability Report [X.2]



X.1 Narrative Exercise

At the beginning of the year, we were encouraged to place ourselves in another’s shoes and write a narrative in first-person about the experience we wanted our building to convey. This was very early so the imagery of what I had written might not correlate with the final design, but it was a wonderful way to see the intervention and idea in a different perspective. Below are the narratives I created. First, the dog, as my concept was always something that was centred around animals, I thought it prudent. Through this I tried to put myself in the dog’s “shoes” and away from my own anthropocentric bias. The second was the elderly woman, I chose this because I thought that not only would my intervention be a solace for students, but also for the elderly that surround the city – finding comfort in the company found with the animals housed on site.

The Dog

Name - Jock
Breed – Pitbull and Jack Russel mix
Age – estimated 1 years
Personality – energetic and loving
Likes – Chicken
Dislikes – getting shots at the Vet

I’ve been running around the streets for a long time now. I know I’m hurt but I can’t feel it over the pain in my stomach – I can’t remember the last time I’ve eaten. A person found me and took me to this place.

First, I see green, green grass and beautiful trees throwing cool shade onto the ground and the facades of the building. I hear birds in the trees and my heart skips a beat as I imagine how fun it would be to chase them. As I enter the building with this person, I see people playing and interacting with animals like me – dogs, and cats – in a room filled with soft, warm sunlight. The floor is smooth, not like the rough sidewalks and tar roads I’m used to. It smells clean, no exhaust fumes or rotting garbage. I move down a passage with windows looking out at the park surrounding the building and wonder when I’ll be able to play with the other dogs in the park and roll around in the freshly cut grass.

I’m then taken to a room that the person says is my safe space now. It has some windows looking out at the trees and birds – I love that. I see a large food bowl and water bowl – is that all for me? The room is warm, not cold and hard like some places I’ve seen before. It reminds me of the warm feeling I had when I would cuddle against my mom when I was a pup. It also has a soft, comfortable space for me to sleep – a little nook within the room. That’s where I go. I nestle into the softness of the pillowed floor in the nook and close my eyes, feeling safe for the first time in a very long time.

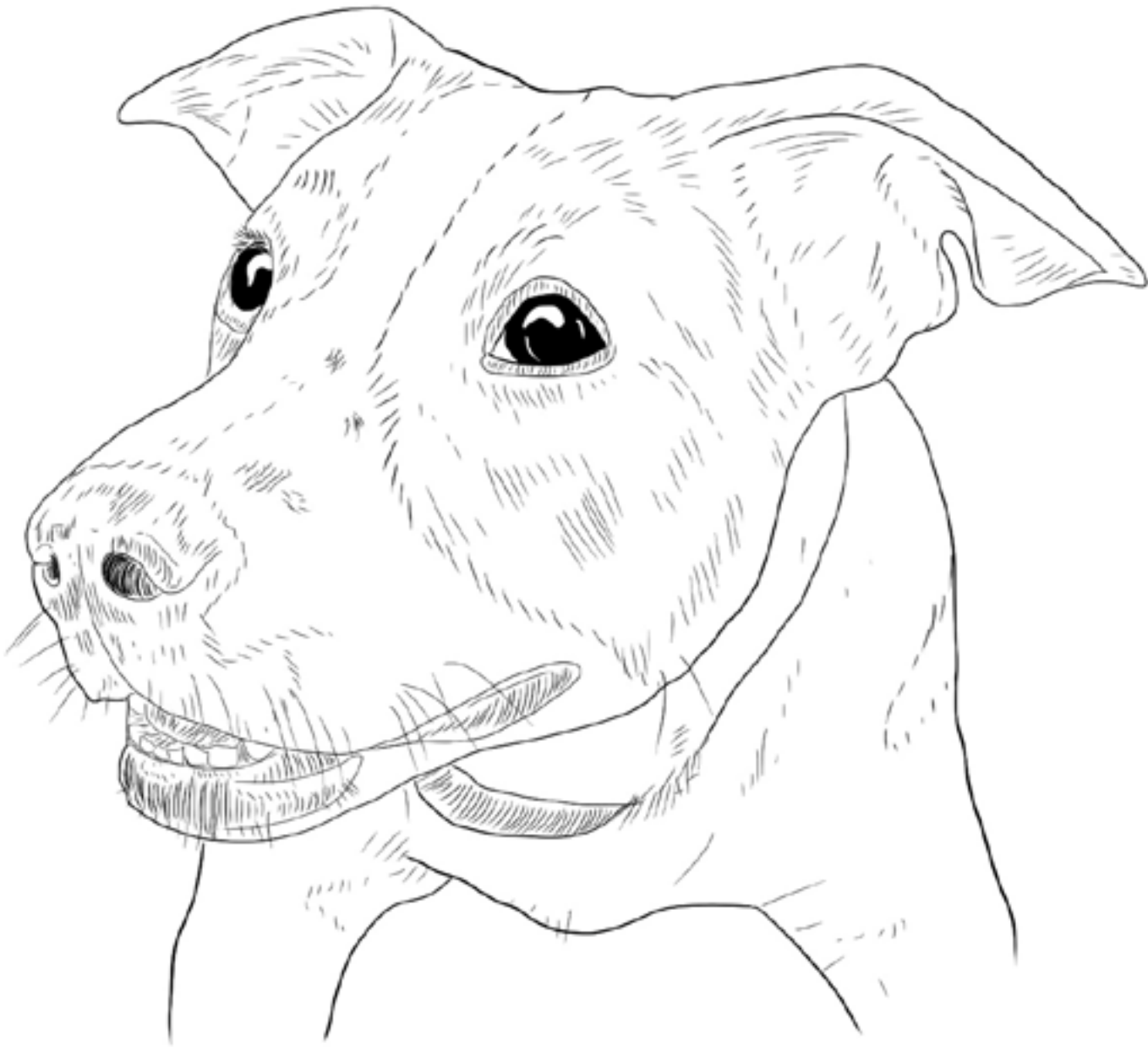


Fig X.1
Previous
Nature of the Braam
Cemetery
(Author, 2024)

Fig X.2
Opposite
Jock
(Author, 2024)

X.1 Narrative Exercise

The Elderly Woman

Name – *Elma Whittaker*
Race – *White, Dutch descent*
Age – *72*
Personality – *Calm, poised, kind*
Likes – *White cats*
Dislikes – *loud teenagers*

Today I went to visit the Braamfontein Cemetery to visit the grave of my long-lost grandmother. I found out a few years ago that she was buried here after connecting with Friends of Joburg Cemeteries. It was always so empty in the graveyard and, usually, I would just walk to her grave alone and pay my respects. But now there’s a new facility that has become part of the park in the Cemetery and it’s made my visits much happier. Now, instead of going down the side road through the original cemetery entrance, I can easily be dropped off on Enoch Sontonga Avenue and arrive at the Animal Centre. From there I enter into the building through a large opening with a cantilever floating above it. The receptionist greets me warmly as I move towards the little flower stall in the lobby of the building. It’s so convenient to just buy them here.

After getting the flowers, I take a walk through the building and see spaces where people and dogs are interacting – they’re probably trying to see which dog they’d like to take home. I also see a room where you can meet cats and I enter to give little Snowball a scratch. She’s sitting on the large window sill and staring out at the birds outside.

It’s now time to go see my grandmother’s grave. I wave goodbye to Snowball – even though I know she doesn’t really understand me – and make my way out into the park. The building opens up into the park with an overhang that also has seating underneath it. The Park is made up of the dog park, the bird park and the walking park. The bird park is on the way to my grandmother’s grave.

It’s almost untouched, there are no imposing structures here, just natural trees and new plants to attract different insects and birds. I love watching the birds sometimes, brings

me some peace, especially after a bad day.

And here it is at last, my grandmother’s grave. I lay the beautiful flowers I bought down onto the stone. It’s been cleaned and I can clearly read the name and date on it again. I stand there and think for a while, and am grateful that she’s surrounded by such a beautiful space.

Things I learnt from this exercise was that my scheme was more about evoking feelings of peace and tranquillity within the cemetery. I wanted to highlight and enhance the beauty that was already there. The idea of a part of the building facing Enoch Sontonga Avenue was conceived early and still persists in my designs, as well as the idea of “no imposing structures”. This helped lead me to concepts of design and construction that touch the landscape gently – being sensitive to the burial ground – and that become part of the landscape of trees and canopy.



Fig X.3
Opposite
Elma
(Author, 2024)

X.2 Viability Report

Scope of Work

What?

The scope of work is to create an animal rehabilitation centre that helps care for all domestic animals within the urban environment. It is also to create a space that people can visit to escape from the hustle and bustle of the city and interact with nature and the animals of the centre. This intervention strives to encourage peaceful relationships between humans, animals and nature, restoring the surrounding ecosystem.

The building will include spaces where people and animals interact, safe spaces for the animals, an animal clinic, spaces for humans to interact and a surrounding park including a dog park.

Where?

The site is Enoch Sontonga Memorial Park because it’s a large and unused green space within the city of Johannesburg so, it has potential to become a usable green space for the city’s population. The site includes the Braamfontein Cemetery which has a rich history that many people overlook. It goes unnoticed and has become unsafe in parts where the surrounding fence has been stolen and removed. Part of the scope of work is to connect to the history of the site while accomplishing the main idea of animal rehabilitation.

The site also allows for space to house animals as well as, allow them to roam around within nature – in designated areas so that the graves are still respected and kept clean. The sounds of the animals within the centre would be buffered by the existing trees on the site so as to not cause people living in the surrounding area distress.

Having a building that is regularly used on the site will also provide a small population of staff that will take care of and clean the site – which is currently left to overgrow with plants and not well looked after by the government.

When?

The building’s animal centre and clinic will operate 24/7 to ensure that animals dropped off at night are taken care of and to allow for 24-hour care of the animals in cases of emergency.

The public park and dog park will have normal day hours (7:00 – 18:00) to ensure security at night. This will help mitigate any vandalism or other criminal activity that could happen during the hours of the night because the facilities will be closed off.

Who?

The building is, of course, mostly for abandoned and wounded domestic animals. This includes dogs, cats, and birds. To take care of the animals, veterinarians and grounds staff will also be needed, and so offices and spaces for them to rest will be accommodated for.

The public and human aspect of the building will be open to anyone that wishes to use it, from children, students in the area, workers, and the elderly. They will have opportunities to interact with the healthy animals within the centre. They can choose to walk the animal around the park and even adopt them if they like. People who would like to learn more about caring for animals and the environment can attend group discussions in the hall to acquire more knowledge and care around the topic. Aspiring vets or animal rescuers can visit the clinic and volunteer their time to help the permanent staff of the centre. Children could visit the site and learn how to behave around certain animals and care would be encouraged when teaching them these behaviours.

Why?

The reason this project is important is because there is a lack of care towards injured and abandoned animals within the city. People should be encouraged to care for them in order to create a better ecosystem within the city. There is no place that takes care of domestic animals found within the urban environment – especially birds – and so it is necessary within this context. If people are given a chance to interact with different species, they can build an understanding of them and therefore acquire a deep respect for them and their surroundings.

X.2 Viability Report

Many South Africans fear certain animals, and so if this fear is combatted, the attitude towards domestic and, especially, stray animals can be improved.

How?

Animal Rehabilitation

By creating an animal rescue centre within the city, more animals will be cared for and taken off the streets. In the case of birds, many will be saved through the proper medical care. Structures within the building and part of the building facades would become their home where they could nest safely.

The biggest problem with animal centres is space. So, providing more space to house these animals until they’re adopted or set free is important because the existing animal rescues (cats and dogs), within Johannesburg and the surrounding area, are at capacity.

Revitalising the Site

By placing edge buildings onto the site and creating a safer green space for people to visit, the site may be revitalised. People in the city need green space to visit for their mental wellbeing, so making a public space within the existing park is fitting.

The Client

1. Johannesburg City Parks and Zoo

JCPZ is a registered non-profit company under the South African Companies Act, No 71 of 2008. It is a merged municipal entity and has been since January 2013. JCPZ is controlled by the City of Johannesburg, and tasked with the management of cemeteries, parks, the Zoo and all designated public open spaces that fall within the municipality.

JCPZ also ensures that the necessary environmental conservation is carried out within all the areas they have jurisdiction over. This includes the maintenance of all street and park trees within Johannesburg, and the preservation of biodiversity within the Johannesburg Zoo.

JPCZ has jurisdiction over the Braamfontein Cemetery and Enoch Sontonga Memorial Park, which is the chosen site for this project. JCPZ maintains and manages the cemetery and is open to rethinking and expanding on the function of the cemetery, and so is fit for this project.

2. FreeMe Wildlife

FreeMe Wildlife is an organisation within South Africa that provides healthcare services to all and every animal that might come through their doors. From injured birds, to sick servals, FreeMe rehabilitates these animals and then sets them free back into their environment. FreeMe was developed by Adel Malan, who saw a need for a rehabilitation centre for the wildlife within South Africa.

FreeMe Wildlife has expressed an interest in expanding their facilities into the city to care for the domestic and other animals found in the urban context of Johannesburg. This is where the project comes in.

3. National Council of SPCA’s

The NSPCA endeavours to prevent cruelty of all animals and tirelessly promotes animal welfare through their self-funded and donation-based animal welfare centres throughout the country. Also looking for expanding their range and make an animal centre within the city, the NSPCA has partnered up with FreeMe Wildlife and JCPZ to make the project a reality.

The NSPCA already has experience in dealing with many animals, from dogs and cats, to farm animals like pigs and ducks. Having an animal centre in the city would allow them to not only expand their reach but also start taking care of animals that people might find more mundane, like pigeons and other birds.

4. The South African Veterinary Foundation

The SAVF is an organisation that funds projects that will benefit the health and welfare of animals as well as projects that lead to greater understanding of animals and their problems.

Due to the nature of the animal welfare centre proposed, SAVF would provide the finds for the clinic and veterinary aspects of the project. Because the animal clinic makes up half of the project, that means that SAVF would fund half of the project and Johannesburg City Parks and

X.2 Viability Report

Zoo would fund the other half.

FreeMe Wildlife and the NSPCA would provide their support through marketing the project and creating drives to bring in donations.

The Project

The Brief

The brief is to design and build an animal rehabilitation centre that helps care for all domestic animals within the urban environment in Braamfontein Cemetery. As well as, a public space that people can visit to escape from the hustle and bustle of the city and interact with nature and the animals of the centre all while being sensitive to the site and its history.

The Programme

The bulk of the programme consists of a veterinary clinic (or rehabilitation centre), a public space, and an interactive animal and human space.

In the table all the spaces are listed and broken down into their areas.



Fig X.4
Left Bottom
Bubble Diagram Showing
Early Programme
of the Scheme
(Author, 2024)

Fig X.5
Opposite
Table showing programme
of scheme and areas
(Author, 2024)

NO. ROOMS	ROOM NAME	SQUARE METERS (m²)	TOTAL (m²)
2	Staff Ablutions	30	60
2	Public Ablutions	50	100
50	Dog Enclosures	10	500
50	Cat Enclosures	5	250
25	Bird Enclosures	5	125
1	Dog Park	500	500
1	Bird Park	500	500
1	Walking Park	500	500
10	Examining Rooms	15	150
4	Operating Rooms	40	160
10	Small Quarantine Enclosures	5	50
15	Large Quarantine Enclosures	10	150
3	Veterinary Ward	100	300
10	Rehabilitation Rooms	50	500
10	Small Office	15	150
1	Lobby	50	50
1	Lobby Reception	20	20
1	Clinic Reception	50	50
2	Multipurpose Hall	200	400
4	Retail	20	80
2	Waiting Room	40	40
4	Dog grooming rooms fitted with shower heads and ventilation	25	100
1	Dog grooming reception	20	20
2	Dog grooming office	15	30
4	E-Lounges fitted with plug points and computers	100	400
1	Parking	500	500
		TOTAL	5685

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The Site

The site selected is the Braamfontein Cemetery. This includes Enoch Sontonga Memorial Park. It is situated in Braamfontein right across the street from WITS University on Enoch Sontonga Avenue.

The constraints of the site are outlined in the table below:

CONSTRAINT	PERMITTED
Use Zone	Cemetery
Height Zone	Three Storeys
FAR	2.1
Coverage	70%
Density	N/A
Building Lines	3m
Parking	5/100m²

Heritage value

The site comes with its challenges. Due to it being a cemetery, there are many sensitivities that must be taken into account. Such as, the graves and historical value of the site. This is where close co-ordination with a heritage specialist would be helpful in keeping the design process wary of the sensitivities of the site.

Site Accessibility

The cemetery is accessed using the main entrance on Graf Street. Smit Street borders the southern edge of the site, while Enoch Sontonga Avenue borders the northern edge. On the western edge, the site is bordered by residential flats – The Sontonga Lofts, The Exchange Lofts and the New Braamfontein Lofts.

Unfortunately, due to vandalism and theft, the fencing on the edges of the cemetery is missing in many places. This means that anyone can walk onto the site from Enoch Sontonga Avenue or Smit Street. This poses a safety issue for the cemetery.

Fig X.6
Left top
Site Constraints
(Author, 2024)

Fig X.7
Opposite
Cost Estimate
(Author, 2024)

Demographics

The area is of very high density, with residential buildings, offices and institutional buildings surrounding the site. South of the site are the railway tracks which creates a divide between the cemetery and Newtown.

Student accommodations are also present in the area, making the demographic not only city dwellers and workers, but also largely students.

Services

Since the site is situated in the city, there are many services running along the boundaries of the site that could be of use. It is important to take into account the power crisis within South Africa and account for it when designing by using sustainable implementations like solar panels etc.

Cost Estimate

A cost estimate of the building was determined using the Property & Construction Africa Cost Guide 2022-23. The higher estimate in the cost bracket was used to create this estimate.

SPACE	M²	RATE PER M²	MEDICAL EQUIPMENT INTALLATION	TOTAL (RANDS)
HOSPITAL	1310	R31 300		R41 003 000
OFFICE	740	R 9 300 – R 11 500		R8 510 000
RETAIL	80	R9 100 – R12 000		R960 000
STUDIO (Multi-purpose Hall)	400	R16 000 – R23 000		R9 200 000
ANIMAL ENCLOSURES	875	R650 – R800		R700 000
MEDICAL EQUIPMENT		R300 000	R100 000	R400 000
ABLUTIONS	160	R9 300		R1 488 000
LANDSCAPING	1500	R850		R1 275 000
GROOMING FACILITIES	120	R9 300		R1 116 000
PARKING - BASEMENT	500	R5 300 – R9 300		R4 650 000
TOTAL	5685		TOTAL	R69 302 000

X.2 Viability Report

Professional Team

Architect

They are responsible for the entire scope of work and as Principal Agent, must manage all consultants throughout the project. The Architect’s job is to fulfill the client’s brief using their skills and knowledge of design. It is fitting to appoint an architect for this project as there is a strong design aspect.

Attorney

They take care of legal aspects like site handover and government amendments and documents.

Land Surveyor

The Land Surveyor will inspect and survey the site and provide all information needed to proceed with construction.

Town Planner

They will provide the architect with the title deed, zoning certificate etc. of the site. They are responsible for the proclamation of the site as well as consolidations if any are needed.

Structural Engineer

The structural engineer takes the architect’s drawings and design, and helps provide the correct specifications to make sure the building is built properly. The structural enginner will specify column and beam sizes, as well as, concrete strength etc. It is important to include a structural engineer in the professional team because they have the expertise for building and are laible for the structural integrity of their projects.

Lanscape Architect

Since there is a large portion of the project that will be public open space, a landscape architect must be included on the team. The head architect is busy with designing the

building and would need the skills of the lanscape architect to help fulfill the brief for the public space.

Heritage Specialist

Due to the sensitive history of the site and the age of the site, a heritage specialist becomes helpful. They would know what the architect can and cannot do in terms of the site. Heritage restrictions must be followed and the architect must be aware of them from the early stages of the project.

Geotechnical Engineer

The site is a cemetery and, therefore, the soil of the site should be approached carefully. A geotechnical engineer would assess the soils and be able to assist with designing the proper systems for said soil.

Mechanical Engineer

The project involves the design of an animal welfare clinic which includes surgical rooms to perform procedures on the various animals. Because of this, a mechanical engineer would be appointed to ensure that the mechanical ventilation and temperature systems in these spaces are adequate.

Special Equipment Suppliers

Due to the project having a veterinary aspect to it, specialty equipment will need to be sourced and aquired to fit the requirements for the animal welfare clinic.

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Below is a diagram showing a breekdown of the professional team:

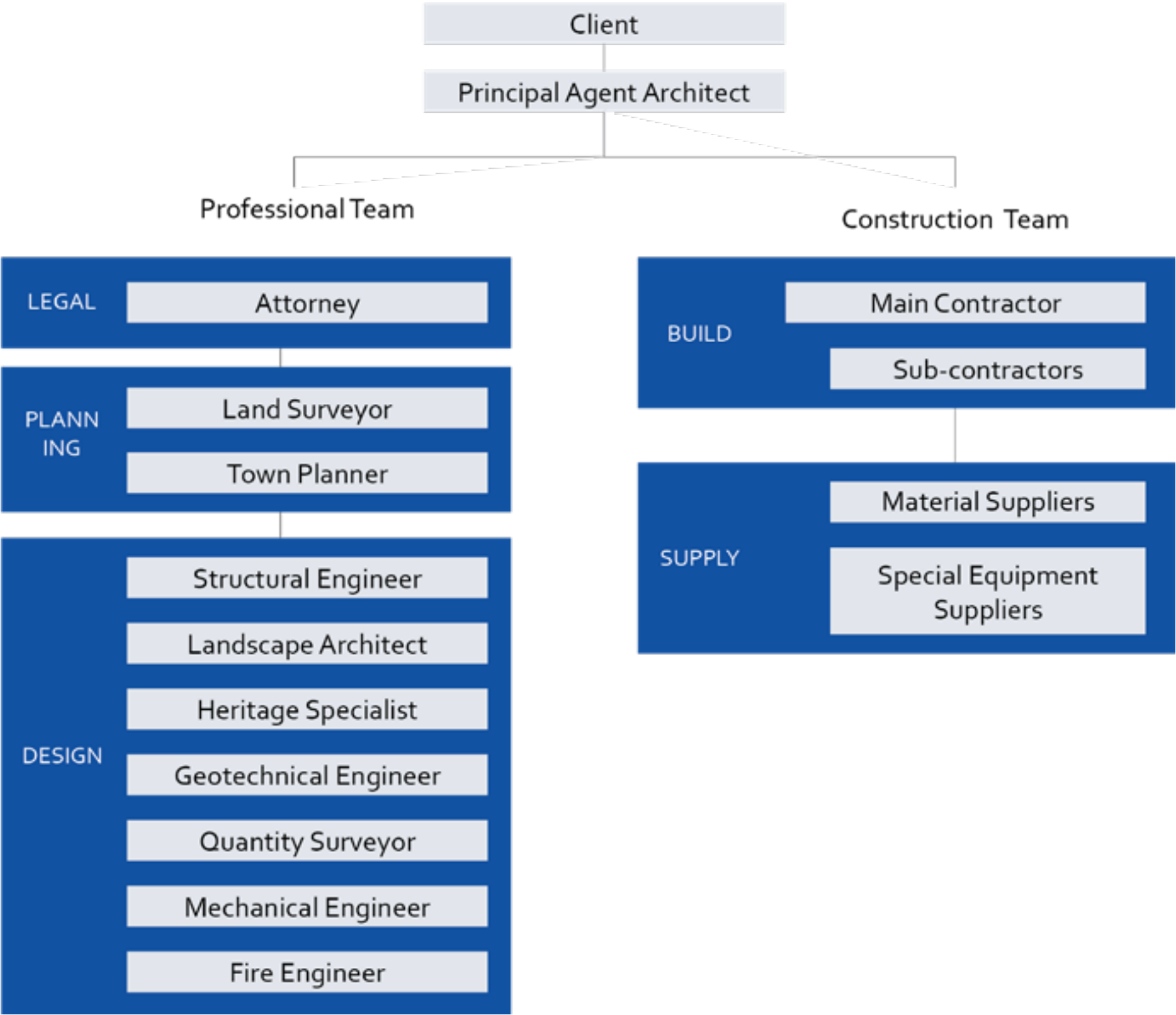


Fig X.8
Left
The Professional Team
(Author, 2024)

Professional Fees

In this project, the architect would be appointed for the full scope of work, and so a project based fee would be appropriate.

This project is high complexity and as stipulated before, will cost about 70 million Rand.

The fee calculation shown was done using the Board Notice of 2023 document.

Professional fees of other consultants would be quoted by them.

	BUILDING
COST OF WORKS	69 302 000,00
TYPE OF WORKS	New Building
ADDITIONAL FEE	N/A
COMPLEXITY	High

FEE CALCULATION - WITH ARCHITECT AS PRINCIPLE AGENT

	BUILDING 01
PRIMARY FEE	5 230 998,63
PERCENTAGE	0,12
COST OF WORKS	69 302 000,00
BALANCE	29 301 999,00
SECONDARY FEE	3 612 936,48
ADDITIONAL FEE	N/A
TOTAL FEE	8 843 935,11

Fig X.9
Opposite
Fee Calculation
(Author, 2024)

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Social Impact

The project aims to create a public space for people in the city to visit, as well as, an animal welfare center for the stray and injured animals within the city.

Animal Welfare

Animal Welfare within South Africa leaves much to be desired. 1 out of 4 cats and dogs are strays in SA and are subjected to abused daily (Claasen, 2022).This causes problems such as disease and overpopulation. This just adds to the number of sick strays on the street and the cycle only continues. Even though there are spaces like the SPCA that provide shelter and medical care to these animals, they are still subjected to depressing circumstances.

As a nation that is rich nature and wildlife, creating equality between animals and humans is important in order to foster a deep respect for the ecosystems that surround us.

Green Spaces in Johannesburg

It is imperative that cities have green public spaces within them to create a happier state of mind for its inhabitants. Johannesburg lacks these spaces because (1) there are few, (2) when there are green spaces available, they are unsafe or unkempt, and (3) when they are safe and clean, they are usually not open to everyone. This is why I want to revitalise the cemetery, because it is an accessible and large green space that, at the moment, is dead and unused.

Mental Health

Mental Health concerns and stress have been on a steady incline within the past few years within South Africa, and globally. Approximately 70% of South African students suffering from mental health issues, do not receive help (Universities South Africa, 2022). This is another driver for my thesis because people need a place to escape and rest their minds. Interactions between humans and animals have proven to decrease symptoms of anxiety and depression (Fine, 2010).

Job Opportunities

The implementation of an animal welfare centre would also provide jobs for vets, vet technicians, animal handlers etc. A cleaning staff would also be needed and because the cemetery surrounds the site, grounds staff would also be needed to keep the open public space and landscaping up to par.

Conclusion

The project would be a valuable addition to the lives of stray and injured animals in Johannesburg and would also provide a peaceful place for the people of Joburg to escape to.

Public space is important within a city and, archtiecturally, is a tool used to create spaces in between other spaces.

The cemetery is a rich site, with much biodiversity and a history that dates back to the 1880's. This goes unnoticed in Johannesburg, and so bringing people and life into the space would not only add to the ecosystem of the site, but also create a sense of mindfulness in the users of the site.

RIP

