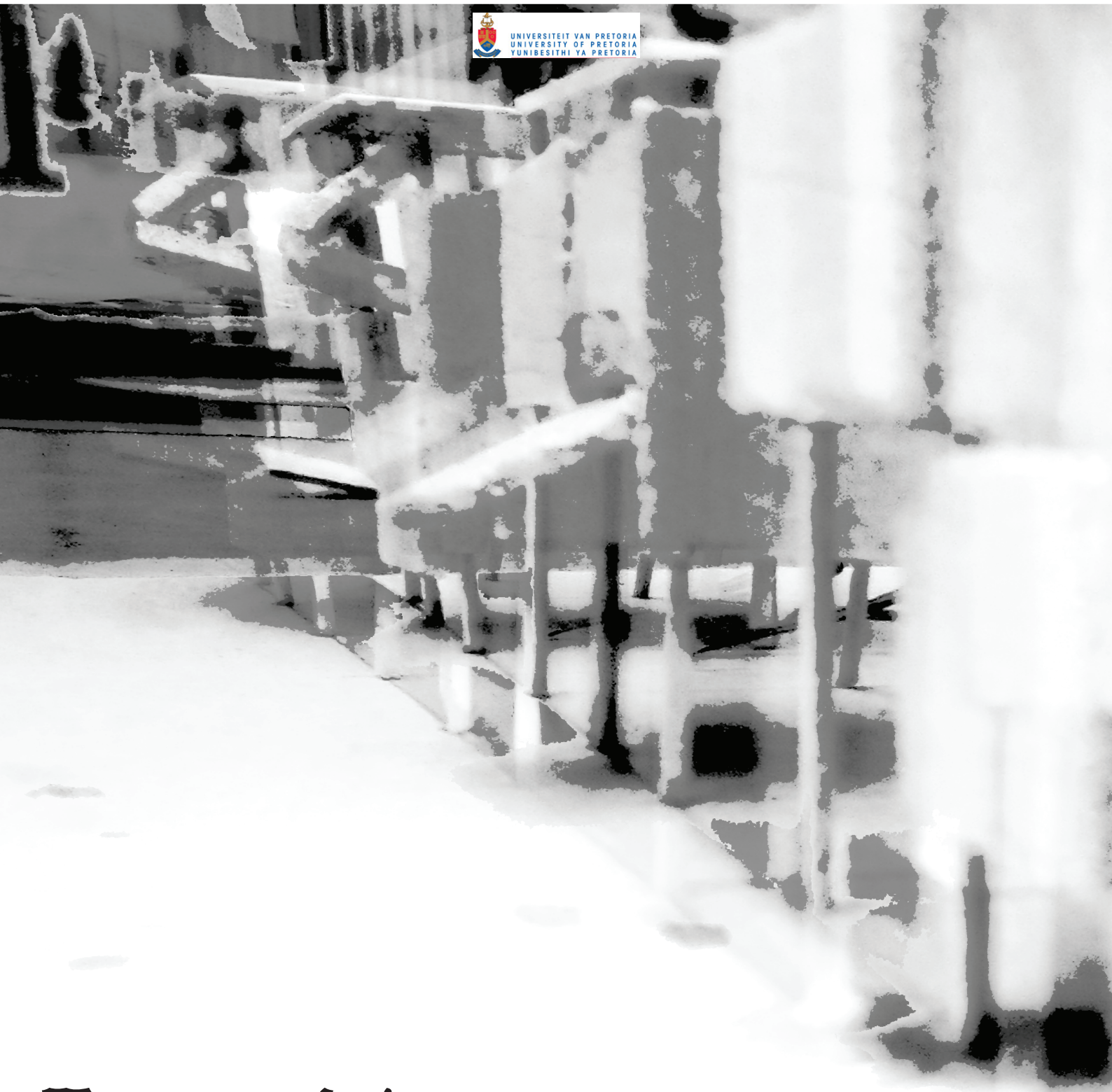

# Territory

## An area of knowledge or interest

An investigation into the contemporary musical territories of Marabastad.

Allan Steyn
Mprof(Architecture)
28193042

- To my parents Allan and Louise

-To my sister, Alex, who was first to say just keep on keeping on, may peace find you where you rest

- To Trudi, and all my friends who helped over the past five years

- To Rudolf van Rensburg, for the guidance and calming words in anxious times throughout the year,

I thank all of you without you none of this would be possible .

UNIVERSITEIT VAN PRETORIA
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YUNIBESITHI YA PRETORIA

# Preamble

A foreword to the project

# ABSTRACT

Marabastad has a history characterized by strife and turmoil on one end and jubilation and decadence on the other. To preserve sanity within these hardships, residents often turn towards music as a socio-economic emollient to relieve the burdens of everyday life. As a result music (specifically jazz) has embedded itself into the historical narrative of Marabastad and its people.

Today, the area is no longer comprised of a homogenous demographic; it is home to a diverse populace of a multi-national origin. What once was a precinct characterized by its strong association with the 'timiti" and 'Marabi" cultures, it is now composed of a plethora of varying cultures, and as a result - musical genres.

This study seeks to identify the historical importance of music within Marabastad, through identifying varying 'territories" of the environment which are utilized as a means of promoting music within the region.

Once these have been identified, the application of these territories and their associated principles within a built form is intended to provide a social platform for music to be enjoyed, while allowing for the cross-pollination of the varying musical genres which exist within the precinct.

*Figure i__ concept image*

*Figure ii__ photo of the Orient*

Project information

Name: Allan Steyn 28193042

Title: Territory __ an area of knowledge or interest

Programme: Music performance/ production space.

Site description: Jazz square, Marabastad, directly North on vacant lot(Brownfield).

Site location: Marabastad

Address: c/o 6th and 10th Streets, Marabastad, Pretoria CBD, Gauteng

GPS Coordinates: 25'44' 27.00" S, 28' 10' 41.00"

Research Field: Heritage and Cultural Landscapes

Client(s): COPA Lynwood, Tshwane.

Keywords: public space, thresholds, storytelling, technology, multi-use.

Study Leader: Rudolf van Rensburg.

Year Co-ordinator: Arthur Barker

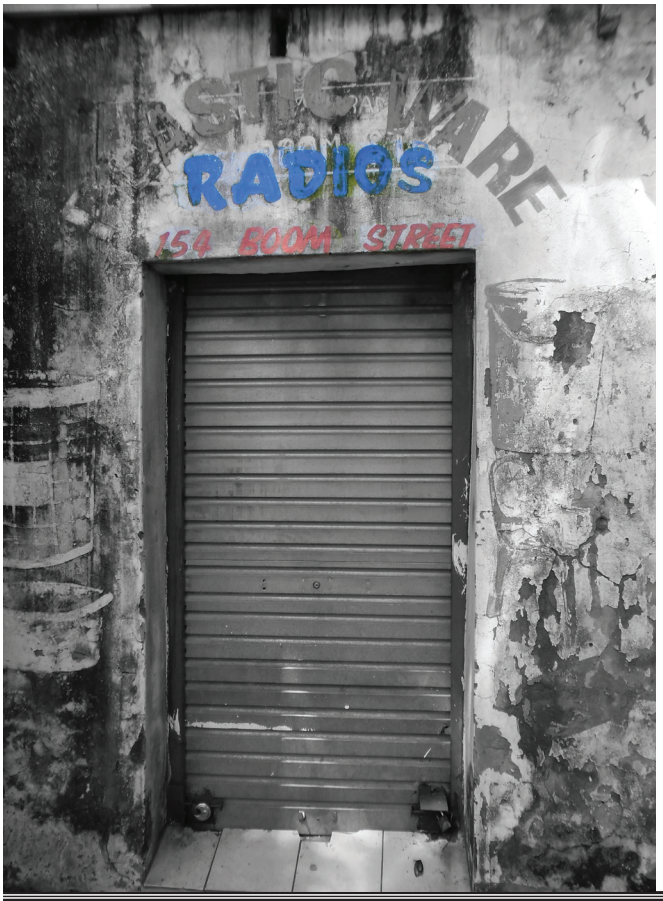
# _TABLE OF CONTENT

# Chapter One
# Intentions

This chapter briefly introduces the background to the study in an effort to contextualize the project within the context of the design discourse. The projects intentions within the context are identified and the methodology is briefly defined.

*1.1__ Scrap yard in Marabastad*

*1.2__ Plastic ware radios, alley shop*




# Chapter One
# Intentions

*"The South African music industry is founded upon a rich and resourceful cultural heritage which is borne by a conglomerate of cultures with strong elements of* ***demographic diversity, cross-cultural influences****, social development and emotionally deep-rooted musical development. As such, it has* ***influenced the*** **sociopolitical** ***development*** *of South Africa, playing an important role in engaging the thoughts, opinions and development of society"*

*(de Villiers, 2006: 2).*

This dissertation investigates the potential of architecture to incubate creative expression, specifically that of music, as a means of conserving intangible heritage. The first notion of investigation is regarding the current condition of the music industry within South Africa and the influence that digitization has on the industry. This investigation leads to specific focus on the lost '*Marabi*' culuture and its gravitation towards jazz in Marabastad.

A particular reasoning for this investigation is the revolution of society, and by extension, cultural exchange towards a virtual realm, away from a physical realm (Horan, 2000: 91). This revolution has resulted in a major reform in the way many cultures interact and produce contemporary cultural artefacts. As a result, traditional genius loci is replaced with a global loci removed of socio-political context, through the advent of global connectivity via digital networks. Therefore, local heritage is superceded by global relevance and slowly erodes into a memory.

This is evident in Marabastad as the displacement of the local populace, due to the Group Areas Act 1950; the lengthy process of the land restitution. Marabstad, being an area of ideal small scale business oppurtunity has resulted in the influx of a large international contingent of people. As a result, the populace has become fragmented and disconnected as a community and the once strong musical-centric culture has been diluted. As an extension, the contemporary model of creating static museums to **contain** cultural heritage is critically evaluated and compared with an alternative **conservation** approach as a means of actively promoting participation with heritage.

The intention of the study is to investigate an architectural means of conserving, through active participation, the intangible music culture and practices of the Marabastad region in a manner which responds to:

1. The historical importance of the study area as a musical precinct.

2. A means to rehabilitate lost connections between people, place and music within the precinct.

3. An appropriate response to the contemporary condition of the global music landscape, specifically the disconnection between specific musical instruments and genres to specific places.

4. Address the lack of public space to provide a platform for social interaction as a means of promoting social cohesion.

To successfully achieve these prescribed principles the context of Marabastad has to be invetigated to identify applicable principles to be utilized in preserving the heritage of the precinct. In conjunction with a literature review and precedent studies the documentation of the site will form the major basis for the methodology of the study.

What follows within this chapter is a brief background to the influences within Marabastad and the intended study area.

*1.3 The internalisation of music*

1.2.1
## THE STATE OF THE SOUTH AFRICAN JAZZ MUSIC INDUSTRY

*"It is Friday night in Kippies International Jazz Bar. Smoke hangs heavy in the air. The sounds of at least half a dozen of South Africa's official languages compete for airspace with the experimental jazz that pumps out of huge speakers. The proprietor climbs onto stage and lifts his hands. Whilst he waits for silence to descend he looks out at the crowd, a crowd that reflects South Africa in all its diversity. He introduces Moses Molelekwa as the young lion of South African jazz, a symbol of the future of a vibrant South African jazz tradition. Sharing the stage with him that night would be 18 year old saxophonist, Moses Khumalo, who time and time again evoked spontaneous whistling and applause, expressions of wonder at the skill of the young artist. Hundreds of people are crammed into the small club and still people manage to find a little more space to fit in a fellow lover of South African music. Hugh Masekela, a giant of South African music, is in the audience. He is promptly invited onto the stage where he proceeds to weave his magic. Moses Molelekwa then introduces his band. The bassist breaks into the riff of Weekend Special, a South African hit, and the crowd roars approval. Then the young saxophonist steps forward and launches into a popular international number. The club continues to bounce.*

*That is the potential of South African music, people of all cultures and races packed into a club having a great time supporting local musicians together. The meeting of the legends and the young heroes of the music world, the mixing of international and domestic music and the creation of memories. Daily, South African music fuses the experiences of Soweto with the compositions of living legends such as Miriam Makeba and the beat of Los Angeles. Developing South Africa's cultural endowments into internationally marketable products is the challenge that faces this strategy and the South African music industry."*

This is an extract from a report to the Department of Arts, Culture, Science and Technology (CIGS, 1998: 35) concerned with strategies to improve the development of the music industry to promote specifically the advancement of South African repertoire of music. Unfortunately the vision above was not accomplished for jazz music.

Although the South African music industry has demonstrated a unique aspect of sustained growth in sales over the past decade (Joffe and Newton, 2007), it has not demonstrated the desired growth of sales in the local repertoire market.

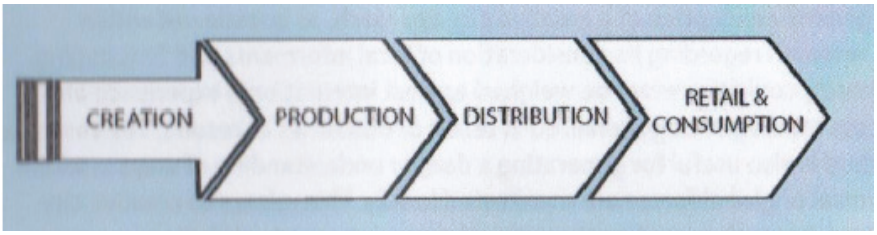
Furthermore the demonstrated growth is seriously threatened by the encroachment of piracy within the market. Piracy is not unique to the South African market and is a worldwide dilemma. What is unique about our market is the fact that it still lags behind the world in terms of digital sales of music (Joffe and Newton, 2007).

The shift from buying tangible copies to downloading music is inevitable. The question is can we provide a structure to the industry which can learn from other industry mistakes which negates the effects of piracy? In my opinion the progression of the industry will largely be towards the development of online infrastructure to allow a larger market share access to digital media.

With the digitization of the industry, the need for production and distribution of musical artefacts such as cassettes, CDs and DVDs become redundant (Joffe and Newton, 2007). The advantage of this is that record companies no longer have to invest in the production of large quantities of stock with no guarantee of return.

The aim is not to disinvest in the music industry through no longer producing CDs and DVDs but rather to adapt the investment within the value chain to defend it against piracy. Investment should shift from production and distribution towards the polar extremes of the chain, creation, retail and consumption.

If we follow the value chain within the South African music industry and we assume the removal of the need to produce and distribute music on a mass scale due to the advancements in technology, we find that the need for multi-national organisations are limited. Therefore if these organisations redistribute their investment priorities they can fill new niches to find returns such as advertising on albums/ downloads, marketing music stations online and so on.




*1.4__ Value chain of music*

This shift in investment from production to point of sale, dictates the need for a development from the traditional cd/record store, to promotion of a live performing space coupled with the technology to download music from these spaces.

Through an investment in smaller scale spaces to produce and upload music locally, investment can facilitate the development of the local music industry to increase awareness and sales of local musicians.

Finally, with the reduced capital expenditure to sell music as downloadable content, as well as a physical artefact, coupled with the popularity of mobile devices amongst all income classes within South Africa, these conditions allow access to local and international musicians to a larger market.

The result is that the traditional recording studio, record shop, performance stage and busking corner has been displaced. Where previously it was contained within a physical realm of existence, it has now been transformed into a virtual realm of transference. This virtual space fundamentally functions as a connection between creator and consumer and principally transfers information from one to the other.

It is evident from global trends that this digitizatal displacement of spaces within the music industry is inevitable. The architectural issue which arises from this is how do we create contemporary spaces which mediate between the physical realm and the digital realm. An architecture which acts as a portal allowing democratic access to this online information plethora.

*1.5_Locality map, nts*

# HISTORICAL INTRODUCTION TO MUSIC IN MARABASTAD

*"How could we understand the music if we were ignorant to the historical circumstances and the cultural milue of it's early development?"*

(Ballantine, 1993: ix)

Jazz within South Africa has been shaped by a definitive historical condition. The result being it forming a means of resistence to the social and political repression and exploition of early South Africa (Ballanitine, 1993: 1). The result of this is a subversive activity which unites the participants in song, dance and performance.

To understand African music it should be viewed as fundamentally as an art of fusion (Ballantine, 1993: 2). The roots of jazz in South Africa began as early as 1848, when minstrel shows were performed in Cape Town.

Minstrel, a show were perfomances are done in black face, was exceptionally popular amongst Europeans of the time. The result being that in 1890 McAdoo, a popular African-American Minstrel performer toured South Africa (Ballantine, 1993: 3) , bringing with him a model of what Africans can achieve through his performances filled with song and dance.

McAdoo was idolized by local Africans as a model of what Africans can be in America, as a result his performance and music was accepted wholeheartedly. Nowhere was he more popular than in Natal, where he performed on six occasions, and as such the mining community of labourers began thier own version of song and dance called *"Isicathamiya"*, the most important vocal style of African music from our Century (Ballantine, 1993: 5).

Meanwhile in the ghetto's of the Johannesburg and Pretoria an originally instrumental music style of *"Marabi"* was being refined. With the influx of migrant workers from Natal we see the cross pollination of indigenous African music styles. *"Isicathamiya" meets "Marabi"* and artists begin to experiment and explore this fusion in an effort to bring the listener a new high.

*"Marabi"* drew inspiration not only from the indigenous styles, *"Isicathamiya"*, but was a style forged by unschooled keyboard players, which drew it's melodic inspiration ecclectically, while harmonically it was grounded in the endlessly repeating chord of *"Blues"* (Ballantine, 1993: 5). The *"Marabi"* style, and it's association with illegal slumyard liquor dens, was as seminal to South African popular music as the *"Blues"* was to American people.

The "Marabi", as mentioned before, was a style of fusion. Like many musical genres it drew basis from "Blues", while fusing the improvisation of Jazz with the narratives of minstrel and "Isicathamiya" performances. This was the early sounds of African music within Marabastad.

Unfortunately for almost everyone not condemed to living in the ghetto, "Marabi" and its subculture was evil and with it came sex, illegal liquor, inevitable police raids and a desperately impoverished working class, it was villified as a corrupting menace. (Ballantine, 1993: 5).

As a result, little to no music from the genre was ever recorded, paired with the reality that most of the meistros of the early style have passed away, it has resulted in an absence of any kind of noteworthy database of the genre. Subsequently, the influence of this music style will slowly fade from the memories of those who listened and danced to the music into eventual oblivion, being lost forever, unless it is actively celebrated and enjoyed.


*1.6_A glimpse into the past*

*"...emerging African working class in Pretoria played a crucial role in shaping their world and in so doing, forced the urban planners continually to adapt their vision of an ordered urban environment over which they sought complete control." (Friedman, 1994: 1)*

The roots of Marabastad can be traced back officially to have begun from 1867 to 1888, when the locus of the African population of Pretoria was centred around Schoolplaats (Friedman, 1994:18) under the aegis of the Berlin Mission society. Schoolplaats was originally located on the land between the Apies river in the north, Boom street to the South, Steenhovenspruit in the west and farmland to the South (Friedman, 1994: 20). This area consisted of 23 Morgen 25 sq. roods of land and was subdivided into ninety eight stands varying from one hundred square feet to fifty square feet.

According to Friedman (1994: 20-24) these plots made provisions for one hundred families at an annual rent of £1, and provided accommodation, mission church, school and parsonage, of which attendance was compulsory. Accommodation that was close to the economic opportunities of the city centre was the main drawing factor of the mission, however it came at a cost. Every African male living in Schoolplaats was required to be employed by a white employer in town. The government, and the mission, saw the need of the 'Urban Bantu" to be subjected to a Paternal type of social structure to replace that which functioned within a rural context utilizing a chiefly authority.

This all changed in August 1888 when the state assumed control of the urban African population of Pretoria through the establishment of the government-controlled location of Marabastad, which included sixty seven erfs newly laid out west of of Schoolplaats, between Skinnerspruit and the Apies River (Friedman, 1994: 25). This new extension was the first official black location in Pretoria to be controlled by the government and did not form part of the original mission society.

A key aspect of this was that the new location provided accommodation without the compulsory doctrines of the Lutheran church dictated within the confines of Schoolplaats. This had its advantages and disadvantages. Within Schoolplaats, residents were obligated to attend school, which provided them with some form of education, albeit minimal. The previously rural families were provided with some sort of identity, albeit one based on a system of inequality, within a new urban context. This resulted in a development of a perceived upper-class of individuals within Schoolplaats, compared to those within Marabastad (Friedman 1994: 28).

Marabastad, now free from the Paternalism of the mission, was greeted with the neglect of the state department who provided little to no formal infrastructure, and was unperturbed by the overcrowded nature of the area (Friedmann 1994:28-30). This new neglect allowed African families to inhabit Marabastad without conforming to the Lutheran doctrines of the mission society of Schoolplaats.

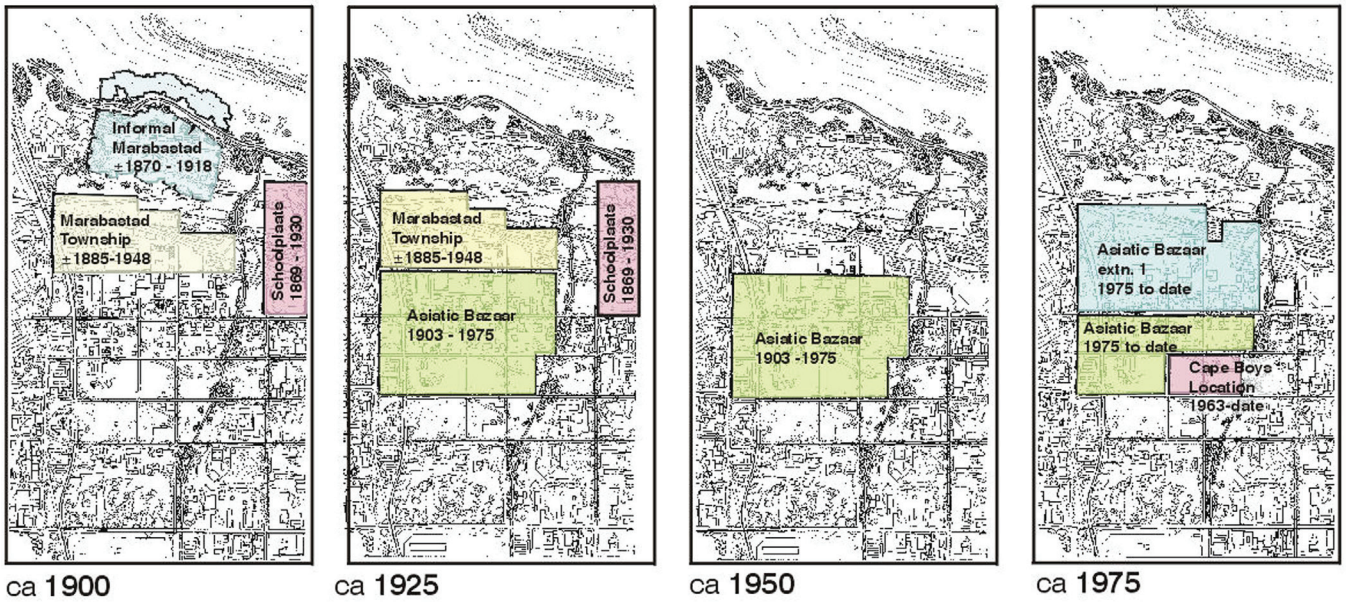
This absence of prescribed social identity, which was previously provided by the Paternalism of the Schoolplaats mission, within the urban context of Pretoria, resulted in a cultural striving of African city-dwellers to establish a new identity for themselves within the newly established Marabastad. From within this suppression and subjugation grew cultural movements such as 'Timiti" and 'Marabi".

The eventual destruction of this cultural identity, through suppression, is identified further on within this document. What is noteworthy though, is the development of a specific identity within the Marabastad community, which was eventually lost due to a range of political and economic influences.


Aerial photograph of Marabastad (1934)


Aerial photograph of Marabastad (1965)


Aerial photograph of Marabastad (1998)




ca 1900 ca 1925 ca 1950 ca 1975

*1.7__Change of Marabastad from 1934 to 1998*

# PROBLEM STATEMENT

1.3.1

## PROBLEM STATEMENT

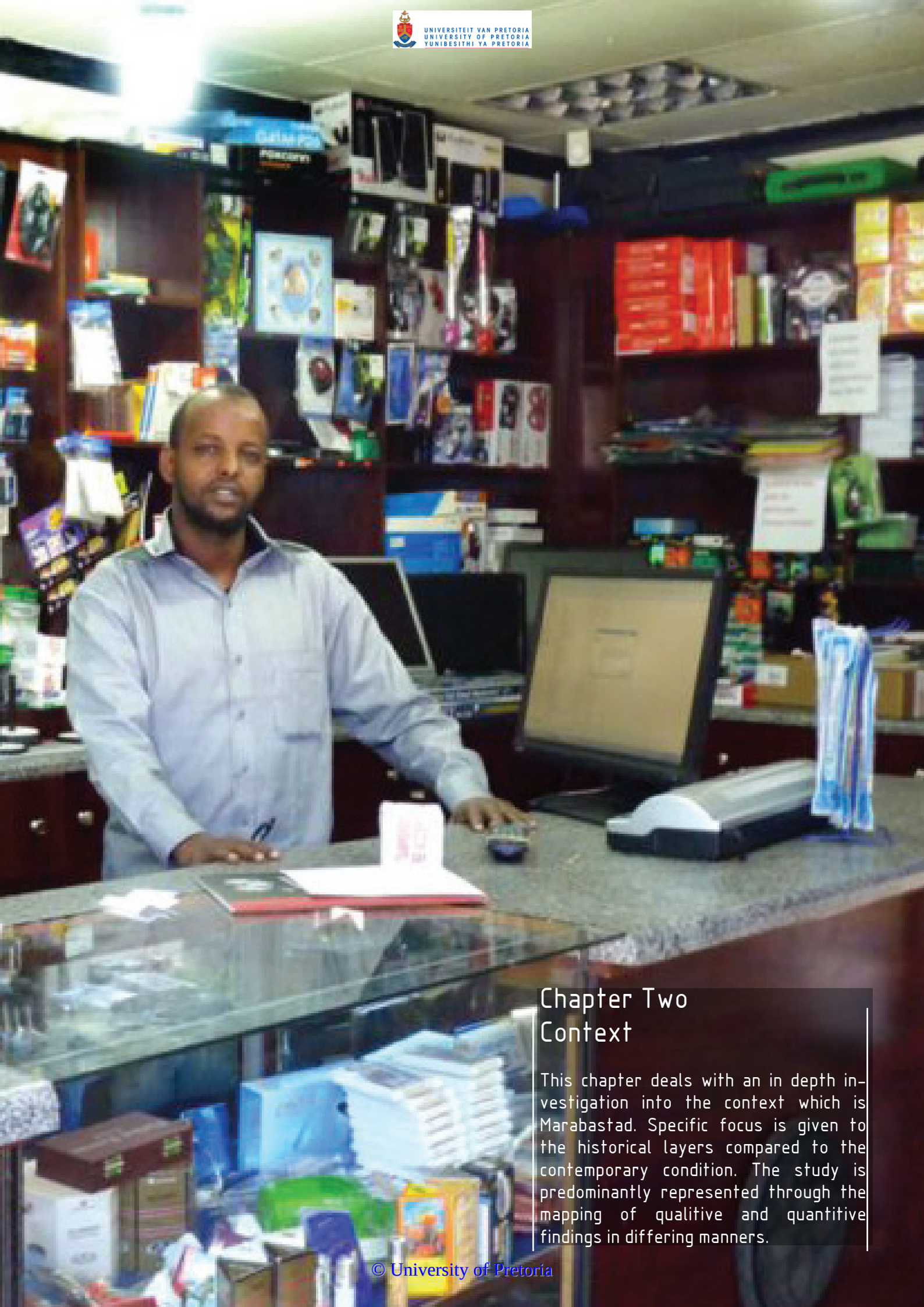
Undeniably intrinsic to the plight of Marabastad residents, is the solace offered by music. Not only the melody itself but the associated rituals alike. Debauchery to outsiders, but escape to partakers, the *"timiti"* culture of Marabastad has all but been replaced by enchroachment.

Firstly the enchroachment of legislation, then the enchroachment of the masses and finally the enchroachment of others, the culture has slowly been eroded into a memory of those who took part. Today Marabastad is nomadic in function, as travellers, shopkeepers, tenants and traders commute in and out on a daily basis.

The result being that the Marabastad of today has become somewhat schizophrenic in its daily happenings. It holds no definitive anchorage to a single vision for its inhabitatants and is instead exploited by all that use it in a unique manner. Each of these individual exploitations are accompanied by specific rituals adhering to the exploiters customs.

The existing socio-economic condition within Marabastad has resulted in a dispersion of active music generation within the area. Congruently, the avid digitization of the global music industry has further impeded local musical artists from creating music. This raises the following research question:

*Is it possible to create an architectural intervention within the area which acts as a platform to the music industry, allowing for democratic access to relevant technology, infrastructure, skills and tutorship, resulting in a public platform for low threshold public interchanges?*



# Chapter Two
# Context

This chapter deals with an in depth investigation into the context which is Marabastad. Specific focus is given to the historical layers compared to the contemporary condition. The study is predominantly represented through the mapping of qualitive and quantitive findings in differing manners.

*2.1__ Shopkeeper selling music in Marabastad*

*2.2__ Cellphone alley shop*


# Chapter 2
# Context

Today Marabastad is situated to the north-west of Pretoria CBD, and its borders are defined by the Bellombre train station and its associated lines to the north, the Steenhovenspruit to the east, Bloed Street to the south and E'skia Mphahlele drive to the west.

Contemporary Marabastad is a shadow of its former self. Previously a vibrant residential neighbourhood, today Marabastad is majorly a collection of formal and informal businesses and traders, void of its former residential component.

Illustrated in figure 2.4 is the gradual recession in territory of Marabastad over the past seventy years. This decline in size can be attributed to varying factors, predominantly political, which resulted in the decline of Marabastad area and population over time.

The most prodigious political action was Act 41 of 1950, the Group Areas Act, which dictated that residents be divided to only live in areas dedicated to their race. This resulted in many families within Marabastad being forcefully relocated to designated locations outside of Pretoria.

Unlike residents of 'Sophia Town" and 'District six" the stories of displaced residents from Marabastad were rarely published within the post-1994 society. Today the scars of this past are still visible throughout Marabastad and residents are still seeking to restitute land which was originally theirs.

This has created a new dilemma within Marabastad, squatting, as stagnant lots cannot be developed due to restitution claims on them. This has provided foreign nationals to occupy this land, and with no authority, has created areas of criminal ellicitation.

# URBAN ANALYSIS

2.1

## GROUP AREAS ACT NO 41 OF 1950

The Group Areas Act 41 of 1950 changed Marabastad significantly in 1950. The effect of this act has still not been effectively alleviated from the area today. The influence on Marabastad can be definitively divided into two clear periods, pre- and post-1991

2.1.1.

### INFLUENCE PRE-1991

The Group Areas Act 41 of 1950, herewith referred to as the act, was passed on 27 April 1950 (SAHO 2013), had a devastating effect upon the urban landscape of Marabastad. In principle, the Act was created to enforce the segregation of people into proclaimed areas according to race.

The enforcement of the act resulted not only in the relocation of residents from within Marabastad to allocated townships, but also had a profound effect on the social workings of Marabastad, as a result the entire typology of Marabastad was changed.

The Act capitulated the expropriation of unmovable assets from people of colour to white people. Furthermore it also prevented the acquisition or ownership of land by coloured people within proclaimed white areas as illegal.

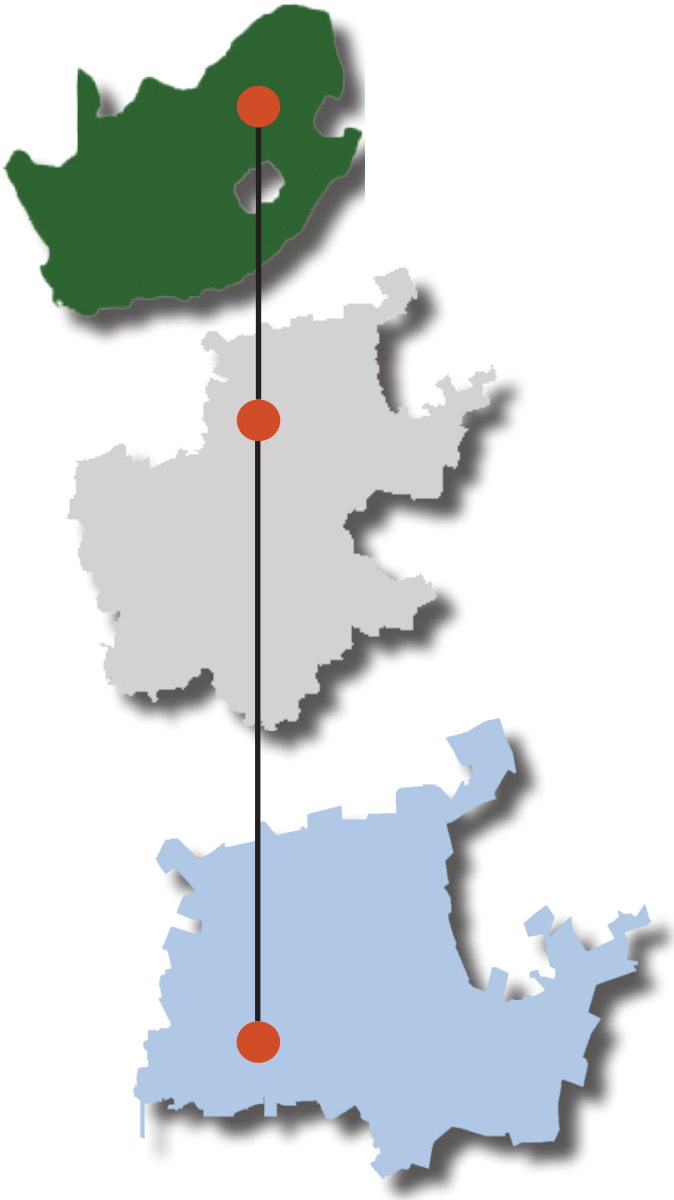
This resulted in a large number of coloured people being displaced from within Marabastad to surrounding locations such as Soshanguve, Atteridgeville ,Mamelodi, and Laudium. Beyond the mere displacement of persons from their residences the Act had a profound impact on the community structure of Marabastad.

Prior to the enactment of the legislation Marabastad was composed predominantly of family households, and functioned primarily as a residential area which was supported by auxiliary infrastructure in the forms of schools, small shops and the Asiatic Bazaar.

With the relocation of a vast majority of residents from Marabastad the established community structures of Marabastad was indefinitely altered. The result of which was the replacement of predominantly residential nature of the area, with the traditional auxiliary interactions of commerce.

The main driving force for the increase of commerce within the area was due to the increased difficulty, due to the Asiatic Land Tenure and Indian Representation Act No 28 of 1946, of relocating a bona fide employee or business by applying the Group Areas Act of 1950, from an area in comparison to relocating a residential household.
Therefore, a majority of people established businesses within their dwellings and used these as a front to be within the area for an extended period of time. From this developed a subversive lifestyle, and subsequently, a subversive architecture, an architecture which was microcosmically vernacular within South Africa as a response specifically to the Group Areas Act of 1950.

The architecture was characterized by very specific areas, or territories, within the dwellings to operate with a decisive connection to the street edge and as a result, the public interface. Through this measure of control it became possible to create hidden abodes, while fronting as a place of business within the area. Beyond just the development of a subversive architecture, the displacement of the community resulted in a vacuum in the "spirit of the place", or genius loci. The extent of this vacuum was prolific. With the physical removal of the existing residential community from Marabastad, also came the removal of most of the established rituals, cultures and social connections which had been established.



*2.3 Contextualisation of site*

The result being that places such as the Orient theatre, the Royal Theatre, the Empire, Steves Jazz Records and various other taverns and dancehalls were no longer supported by local patronage on a regular basis and therefore could no longer remain successful.

The closure of these venues resulted in a stagnation of socio-cultural evolution within the area due to the traditional community members no longer having access to established social interaction platforms within Marabastad to actively converse concerning socio-economic matters.

The decline of active social exchange and interaction resulted in a loss of integrity of the areas community structures. The remaining residents were left to fill this void in a subversive lifestyle.

In 1991 president F.W. de Klerk announced at the opening of Parliament that legislation dictating the allocation of specific land and its use to specific racial groups would be repealed. A white paper was tabled in parliament to this effect on 12 March 1991 and signed by President F.W. de Klerk on 27 June 1991 and came into power on 1 June 1991.

2.1.2

## INFLUENCE POST 1991

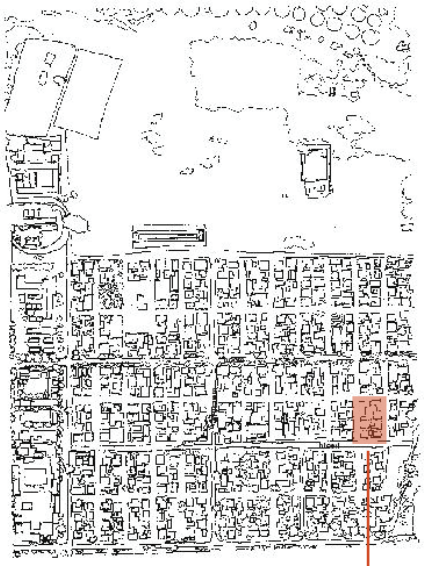
Due to its proximity to Pretoria CBD, refer to fig 2.5, Marabastad was a prime location for residential influx after the abolishment of racially discriminative legislation in 1991. Not only due to its proximity of urban employment was Marabastad ideally situated, but also due to its low cost of living.

This low cost of living and potential for employment, allowed Marabastad to draw a diverse demographic of international and local people to take up residence within the area. This heterogeneous influx of people created a different community to the original homogenous demographic of the area. The new residents of Marabastad were in essence filling the void left by the displacement of people in 1950. The result is the development of varying subcultures, rituals and identities developing within Marabastad. The coagulation of these identities within certain areas of Marbastad has resulted in differing international, ethnic and religious communities developing within the area.

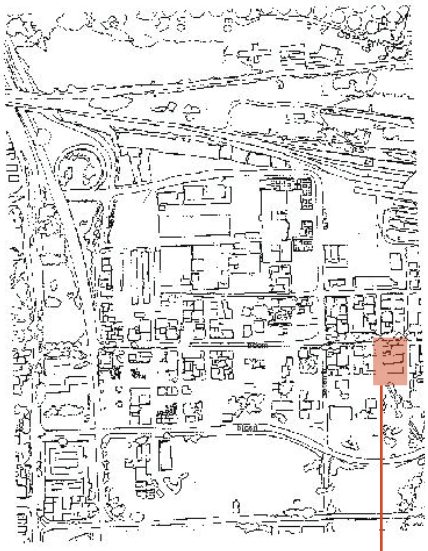
This diversification of the areas inhabitants has resulted in very diverse objectives for the area expressed by the community. As a result, the people of the area are not always in agreement with the developments which occur within the area. As an example the Jazz Square was completed in 2009 and still stands only partially utilized. When we questioned local business owners they informed us that the square had been handed to the business organisation of Marabastad as a place to hold functions. However as is later discussed the square is devoid of even the basic necessities.

The opposing visions for Marabastad have resulted in members of the community often locking horns concerning issues within the area. Fuelling these disparities is the contemporary issue of land reform and restitution within the area. Many legitimate claims have been logged against land within Marabastad, however these claims still remain unresolved. Due to the nature of land restitution the process is understandably lengthy.

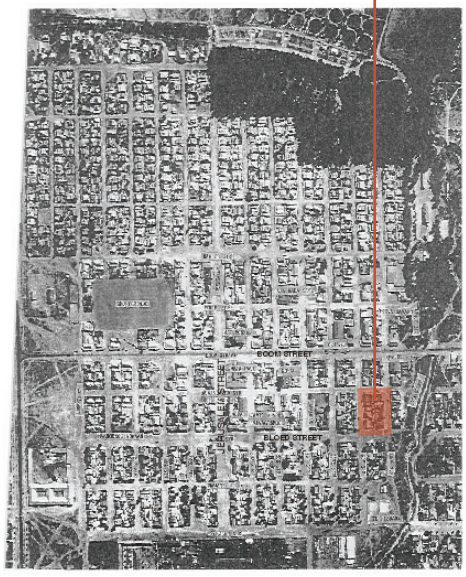
Marabastad - 1934



Marabastad - 1965



Marabastad - 1998



Aerial photograph of Marabastad (1934)

Aerial photograph of Marabastad (1965)

Aerial photograph of Marabastad (1998)

*2.4_Influences of time on site*

Unfortunately, during this process many erfs within Marabastad have stood vacant for a number of years, and consequently been occupied illegally by squatters. This occupation has occured in some cases up to several years, which has allowed for these squatters to establish themselves within the community, the result being a tripartite dispute between the municipality, the original owners and the current squatters.

This tension for land restitution has further aided to the fragmentation within the community as a whole. The differences between community stakeholders within Marabastad are restricted to minimal public platforms for resolution. The inadequate platforms for social interactions has resulted in the further fragmentation of the community.

*2.5 Locality map of site , filled in, and study area dotted around*

2.2

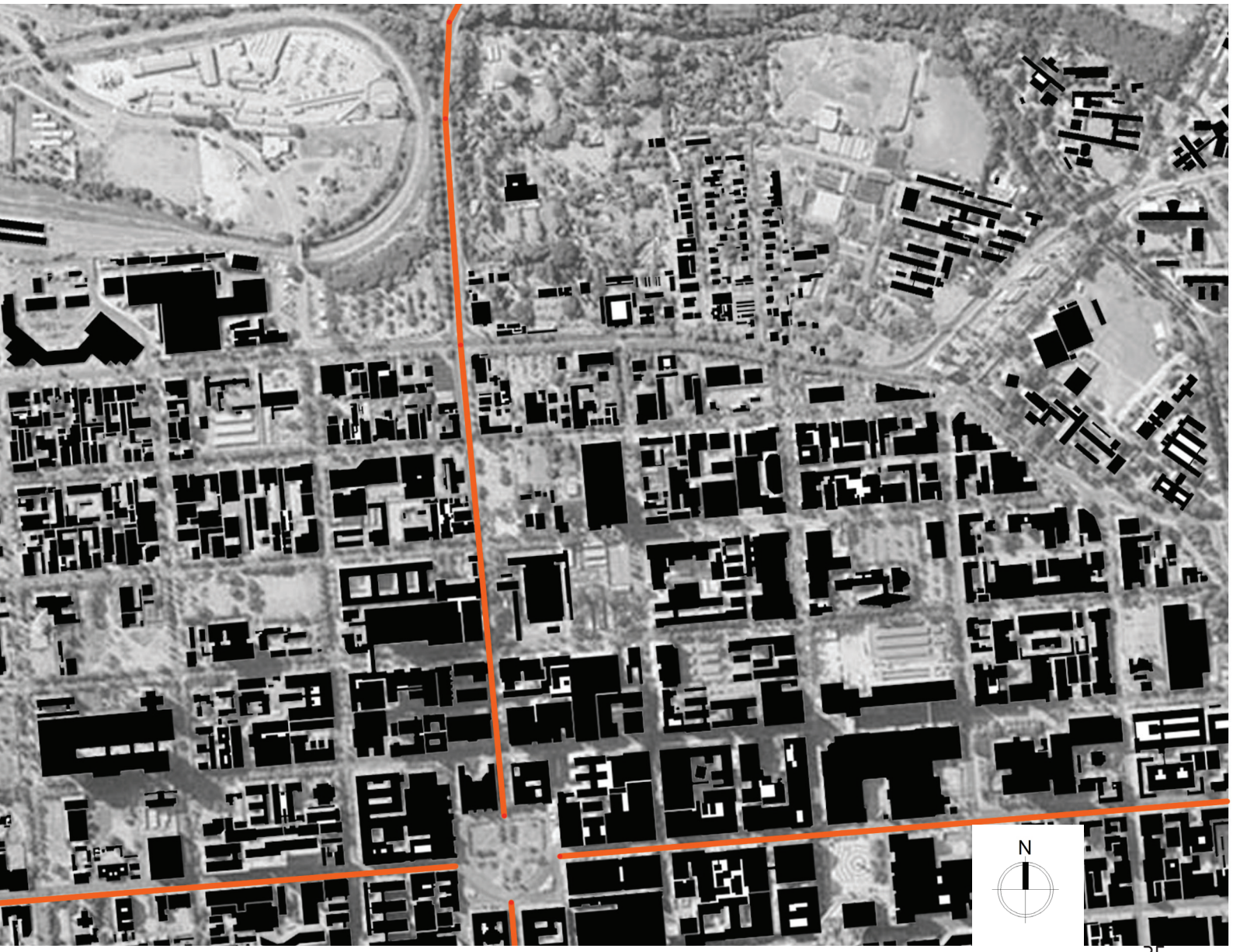
# MAPPING MARABASTAD

The mapping of Marabastad occurred in two distinct phases. Each of which were based on numerous site visits and the data collected from the varying visits. The focus was to map varying events and the rituals associated with them, including the spaces utilized and the characteristic of architecture utilized while executing these rituals.

The ideal was to identify which spaces were utilized for which activities and why. The rituals and happenings to be mapped were identified within our urban group as activities which were applicable to our research questions.

The first part of the mapping is represented graphically through a collection of maps, diagrams and collected data tables. This, in essence, is was a quantitative driven mapping exercise.

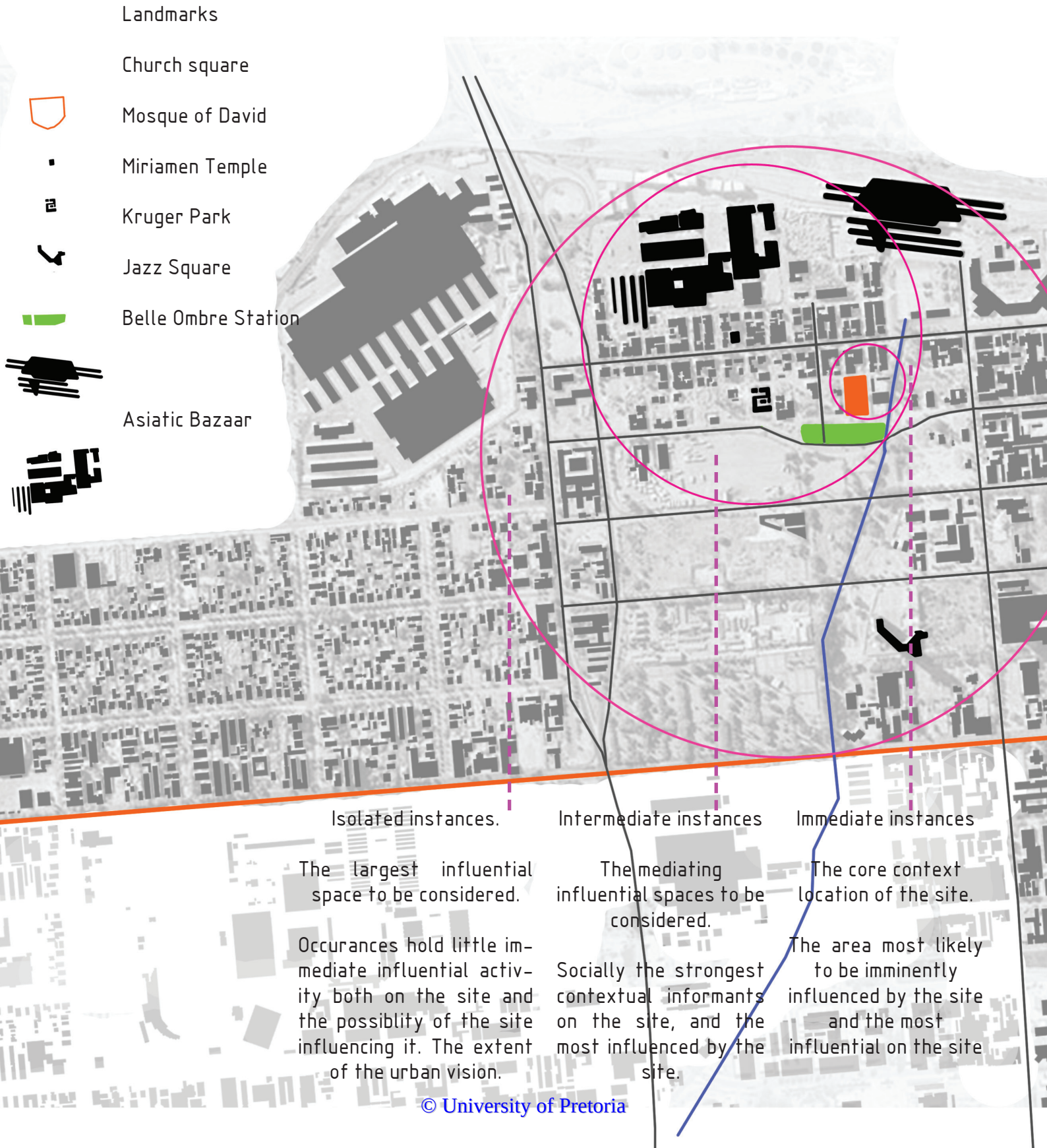
The second part of the mapping exercise was a qualitative interpretation of the experience of Marabastad, translated into a form of music. Ideally the listener will be allowed to experience Marabastad, via an alternative sense beside sight, while not having to travel to Marbastad. This part of the mapping exercise was a personal interpretation of Marabastad.



2.2 .1

# BROAD CONTEXT MARABASTAD

Marabastad is situated in the North Western perimeter of Pretoria city. The borders are defined by the Soshanguve-Belle Ombre railway to the North, Steenhovenspruit to the East, Bloed Street to the South and Es'kia Mphelele drive to the West. Marabastad can be viewed as a conglomeration of instances and occurances. Each instance presents itself as a urban energy which can be utilized. These instances, events or happenings were investigated as bilaterally influential on the site, and the site on it.




**Isolated instances.**

The largest influential space to be considered.

Occurances hold little immediate influential activity both on the site and the possiblity of the site influencing it. The extent of the urban vision.

**Intermediate instances**

The mediating influential spaces to be considered.

Socially the strongest contextual informants on the site, and the most influenced by the site.

**Immediate instances**

The core context location of the site.

The area most likely to be imminently influenced by the site and the most influential on the site

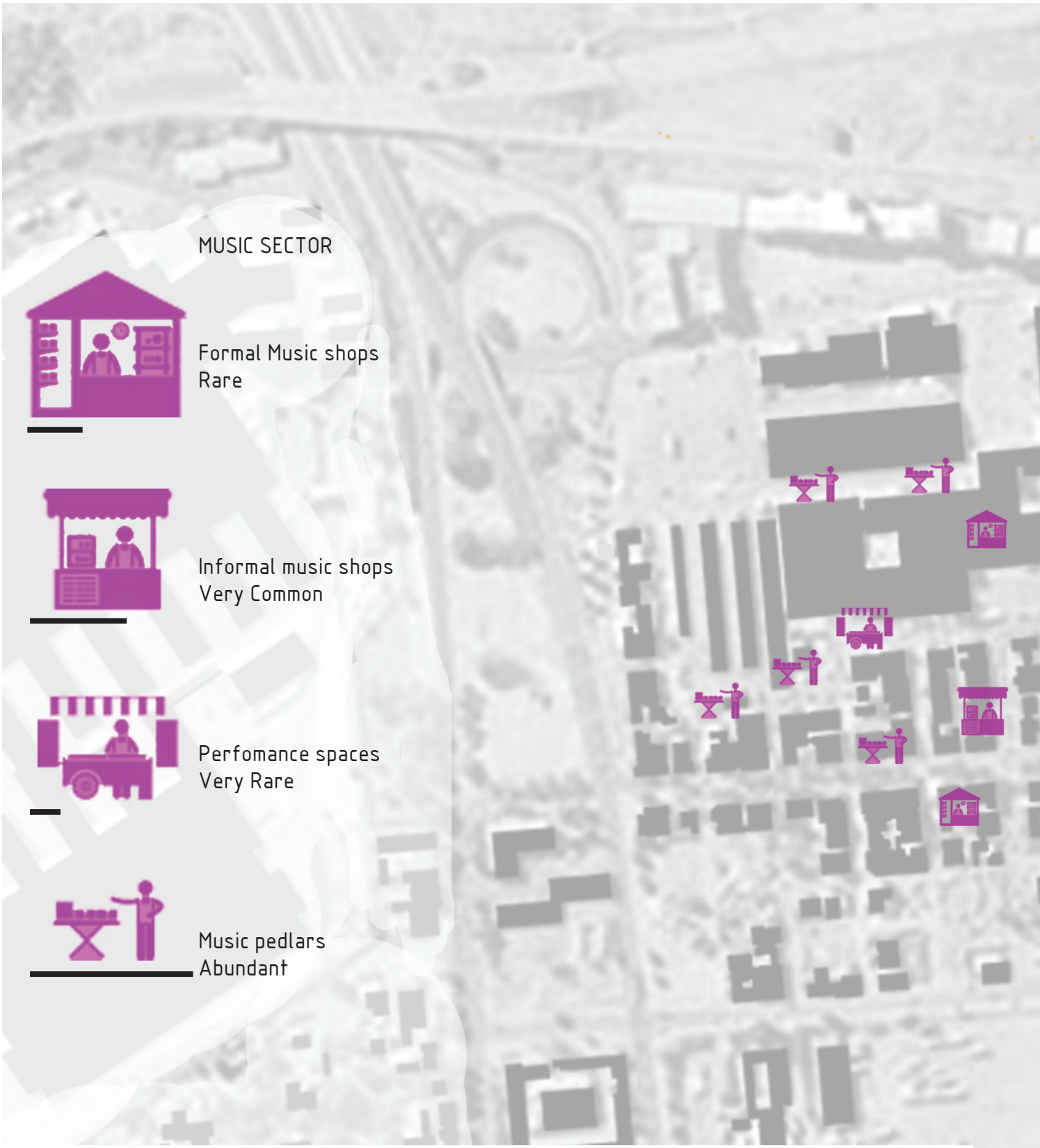
*2.6__ Urban context of area*


Marabastad acts as a major transport nodal interchange. Due to its geographic location between Pretoria CBD and outlying rural areas, Marabastad has become a thoroughfare for people travelling to and from Pretoria CBD. Accompanied with the lack of permanent residents and the large number of travellers passing through Marabastad daily, each instance of movement has presented the area with an economic oppurtunity to capitalise on the activity presented. This has resulted in a large influx of small businesses which have aimed to exploit these oppurtunities specifically along movement routes.


*2.7_ Movement system in Marabastad*


Due to the precinct acting majorly as a thoroughfare, a large populace of people are in search of nourishment before embarking on thier journey. As a result there are a large number of formal and informal food vendors throughout the area servicing hungry commuters. The result is that a large amount of food is produced and sold within the area, however very little is onsumed at the point of sale, or even within the area. Perhaps this is due to a lack of comfortable public space to enjoy something to eat, as most outlets act as take away shops.


*2.8__Food system in Marabastad*

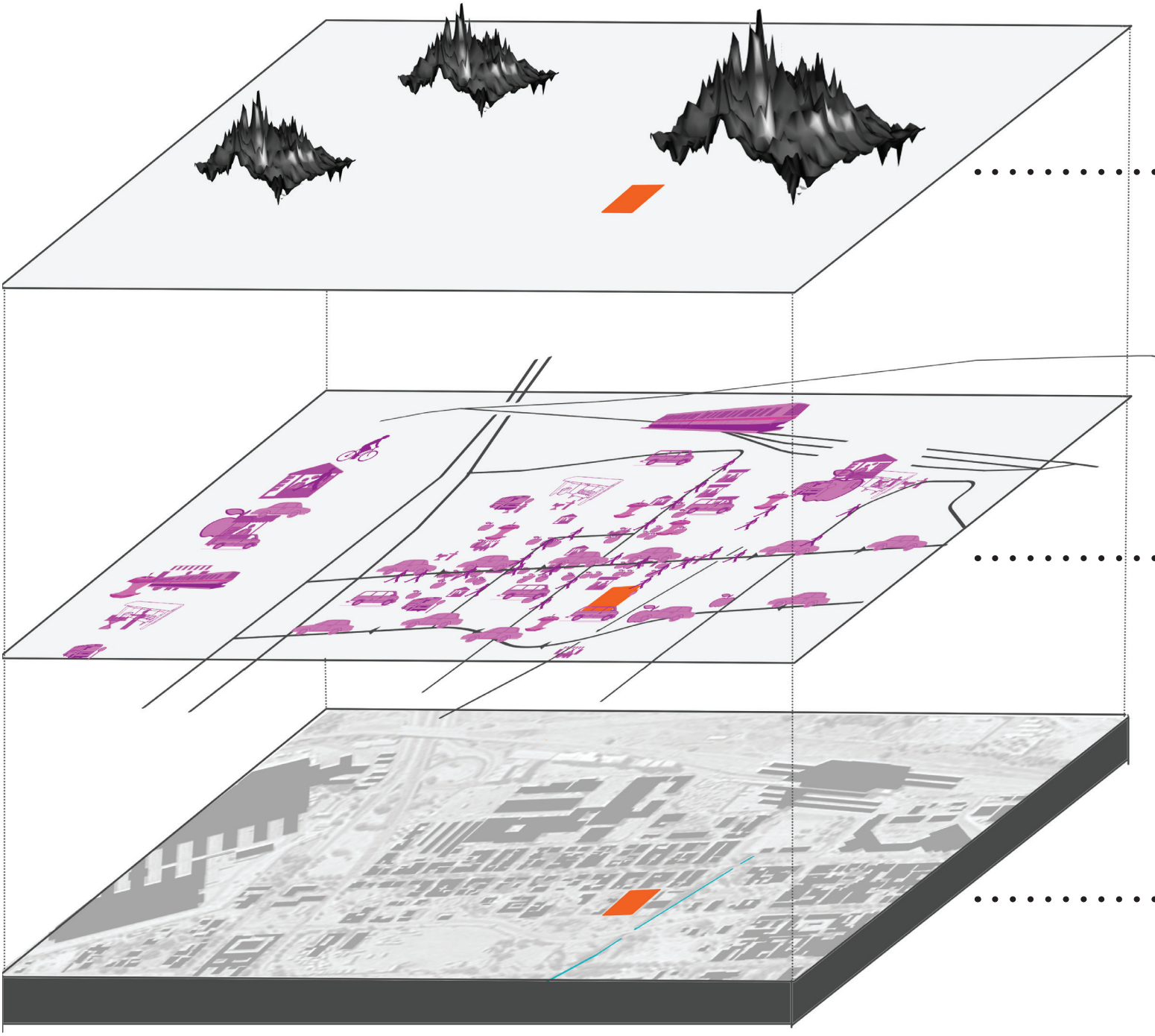



The advancement of technology globally has dictated the evolution of business to follow. The result of this is evident within Marabastad. It is illustrated by the large number of micro-electronic stores which advertise to repair, install and sell electronic goods. Coupled with these is also the sale of musical CDs, DVDs and videos. This diversification of services makes good business sense to increase the target market and as a result these traders have replaced the traditional music stores. These instances of music transactions provide a large oppurtunity to utilize as a means to increase local artists sales. It is noteworthy that the level of piracy is astronomical within Marabastad.


*2.9__Music system in Marabastad*

*'I had travelled from Durban, over four hundred miles by train, to start working as a journalist. After work I often slept on a desk at the office or stayed overnight when friends invited me to dinner in their homes. This was not because of a Bohemian bent in me. Far from it. According to the law, 'native' bachelors are supposed to live in hostels in Johannesburg. I should have shared a dormitory with ten or more strange men... Instead of this, I chose to be a wanderer. I didn't really want a hostel bed', ...Thus, for roughly eighteen months, on and off, I wandered about without a fixed home address. I determined to make the best of it.'*

Nat *Nakasa, Johannesburg Johannesburg (1999:3)*



Much like the places described in Nat Nakasa's writings, Marabastad in a sense houses the African Flanuer. The journeys to and from the precinct made it evident that it was composed of mainly business outlets for the anonymous passer through to consume goods. This condition is enhanced by the fact that very few residents remain within the area and as a result it is largely devoid of any communal identity.

This condition however does present the opportunity to exploit these instances, as a group, to provide a public platform to incubate a stronger communal identity for the users of Marabastad. These aims are identified within the urban vision.

*2.10_ Layers of interchange*

Activity layer

The most experienced layer of Marabastad is the activity layer. It includes all the social transactions. These form nodes of heightened activity, which are generally linked by desire lines between destinations, bus station, train station and so on. Along these desire lines is where the opportunity lies to utilize this energy as part of the design intervention.

Infrastructure layer

The layer of abilitation which provides the infrastructure for the interactions that occur within Marabastad.

Physical layer

The physical environment which provides a historical reference to the occurances and developments of Marabastad. It also houses contemporary Marabastad.

*2.11_ The African Flanuer*


*2.12_Integrated development of node*

2.2.1.

## MUSICAL MAPPING OF MARABASTAD

A major theme of this dissertation is the restoration of Marabastad as a musical precinct within Pretoria. It dictates the translation of musical principles into a built form. The inverse of this is the translation of the existing built fabric, people and place into a musical representation.

As it is logistically difficult for each individual to visit Marabastad, I believed it would be effective as a means of representing the *zeitgeist* of the place through music as a means of mapping the tangible and intangible character of the area.

This is both a quantitative, through maps, photographs and diagrams, as well as a qualitative, through music, effort of mapping the context of Marabastad. It is important to note that the response to spaces, and selection of music was a personal expression of how I perceived and experienced the spaces.

2.2.2.

## STRUCTURE OF MAPPING

Five specific routes were selected to be represented by a musical track. Visually each route is mapped and accompanied by a filmstrip of photographs captured while on the route. Two of these tracks were included within the document. A hardcopy of the music was included on a CD. All of the tracks and sounds recorded from the precinct can be accessed online at www.soundcloud.com/fymar.

2.2.3.

## TRACK ONE

Track one is a depiction of the initial journey to Marabastad. It is divided into eight definitive parts.

Part 1 Departure (00:00- 00:15)

The first departure takes place from the University of Pretoria, and is characterized by a romanticised perception of Marabastad as a precinct rich in cultural heritage and rooted within the musical genre of Jazz.

Part 2 Entering the city (00:15-00:31)

Heading west from the University of Pretoria along Jorissen Street, you enter Pretoria CBD as you cross over Nelson Mandela street. This immediately becomes evident in the change of scale in the urban fabric. This change is represented with the introduction of an additional baseline. The city is currently under constant construction, BRT, and the sound of the cowbell represents this.

Part 3 Empty jazz square (00:31-00:36)

As you travel up Lilian Ngoyi Street you experience the city centre and the deeper baseline becomes more evident. Heading west on Bloed Street your first experience of Marabastad is the Jazz square, this is where the romanticised Jazz perception ends, as you see the jazz square empty.

Part4 Eskia mPhela drive (00:36-00:54)

The introduction of the shakers and the bass drum are an interpretation of bustle of E'skia Mphahlele drive as a main road. There is a build to anticipate the arrival at your destination.

Part 5 Arrival (00:54-01:22)

The track grinds to a halt as you stop at the Parking to the Asiatic Bazaar, the silence represents the anti-climax of arrival in a somewhat dirty parking lot. This is then followed by an interpretation of anxiety and racing heart beat before you exit the perceived safety of your own car and enter the un-explored.

Part 6 Asiatic Bazaar (01:22-01:58)

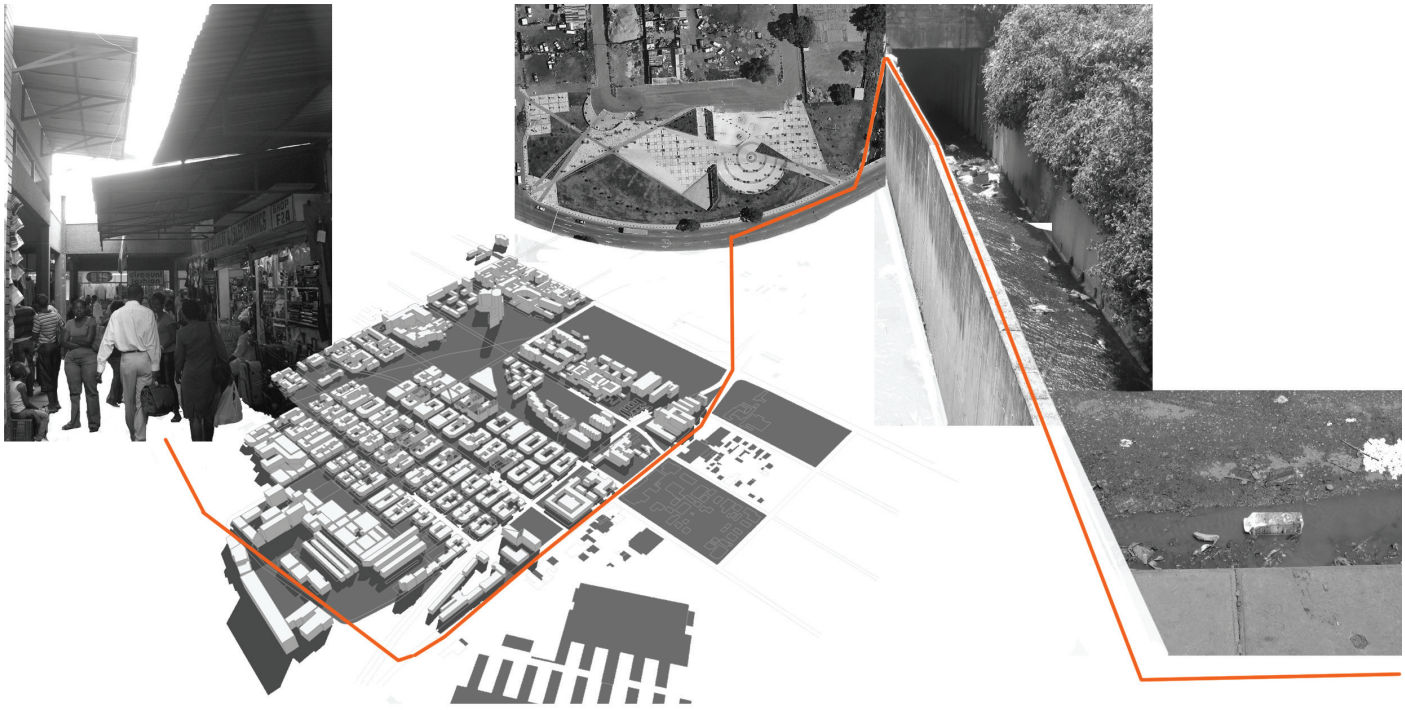
The Asiatic Bazaar is bustling with activity, however like a hive, each individual knows exactly where to go, represented by the increased tempo and rapid sounds of hi hats and symbols over a constant bass line. The Asiatic Bazaar interior is similarly hiving, in layout and activity.

Part 7 Traders (01:58-02:15)

Once you exit the interior of the Bazaar and walk out onto 7th Avenue there is immediately less people, represented by the ceasing of the hi hats, and you head South, you are confronted with a steady pro-cession of traders stalls along the sidewalk, illustrated by the individual pulses.

Part 8 Boom Street (02:15-03:01)

After crossing Mogul Street you begin to hear the vibrance of Boom Street. You enter Boom Street in the heart of the street and are greeted by the heritage significant built fabric and you once again greeted by the romanticised vision of Jazz Marabastad.



Part 5 Arrival (00:54-01:22)

Part 6 Asiatic Bazaar
(01:22-01:58)

Part4 Eskia Mphahlele drive
(00:36-00:54)

Part 7 Traders
(01:58-02:15)

Part 2 Entering the city
(00:15-00:31)

Part 8 Boom Street
(02:15-03:01)

Part 3 Empty jazz square
(00:31-00:36)

Part 1 Departure
(00:00- 00:15)

*2.13 Track 1 route through Marabastad*

2.2.3.

## TRACK TWO

Track two is a depiction of a route travelled through Marabastad. It is divided into seven definitive parts, beginning on Boom Street and terminating at Steve's Jazz records.

Part 1 People on Boom Street (00:00- 00:07)

The sound of people on Boom street is played over a drum beat representing the activity and tempo of the street.

Part 2 West on Boom (00:07-00:22)

Heading West on Boom Street against the one way traffic heading into town, the sound of cars, especially taxi's hooting becomes evident. This layer of traffic, which is integral to the character of Boom Street is represented by the introduction of a trumpet sound.

Part 3 Shoppers (00:22-00:53)

The longer you spend on Boom Street the more evident it becomes that the street functions as a modern day shopping centre, people on the street hustle and bustle between stores purchasing goods before heading home or to work. This bustle is represented by the layering of a keyboard sound illustrating the tempo at which the street moves.

Part4 Western Bus station (00:53-01:16)

The introduction of the deep sounding oboe is an interpretation of the busses you experience as you turn north onto 2nd Street.

Part 5 Mogul Street (01:16-01:58)

Mogul Street is introduced with fear and distortion. The street itself is untidy and unwelcoming. This is represented through the synth phaser.

Part 6 Nyaope (01:58-02:25)

Nyaope is not only a social crisis within Marabastad, but also a national pandemic. Nyaope is a drug based in Herion, a morphine style drug, and causes a loss with reality. This is represented by the extremity of distorsion within the music.

Part 7 Steve's Jazz Records (02:25-03:18)

Steve's Jazz Records store is represented by an actual soundclip which was recorded upon a visit there. The jazz in the background is juxtaposed with the sound of sirens, just a typical day in Marabastad.


*2.14 Track 2 route through Marabastad*

# ROBERT DE LONG GLOBAL CONCEPTS

*I think it burns my sense of truthto hear me shouting at my youth*
*I need a way to sort it out.*

*After I die, I'll re-awake,*
*redefine what was at stake*
*from the hindsight of a god.*

*I'll see the people that I use,*
*see the substance I abuse,*
*the ugly places that I lived.*

*Did I make money? Was I proud?*
*Did I play my songs too loud?*
*Did I leave my life to chance*
*or did I make you f***ing dance?*

*Symmetry exists only in our mind.*
*Our brain is shaping squares.*
*So I woke up with entropy defined*
*but the forms still linger there, in my head.*

*I'll see the people that I use,*
*see the substance I abuse,*
*the ugly places that I lived.*

*Did I make money? Was I proud?*
*Did I play my songs too loud?*
*Did I leave my life to chance*
*or did I make you f***ing dance?*

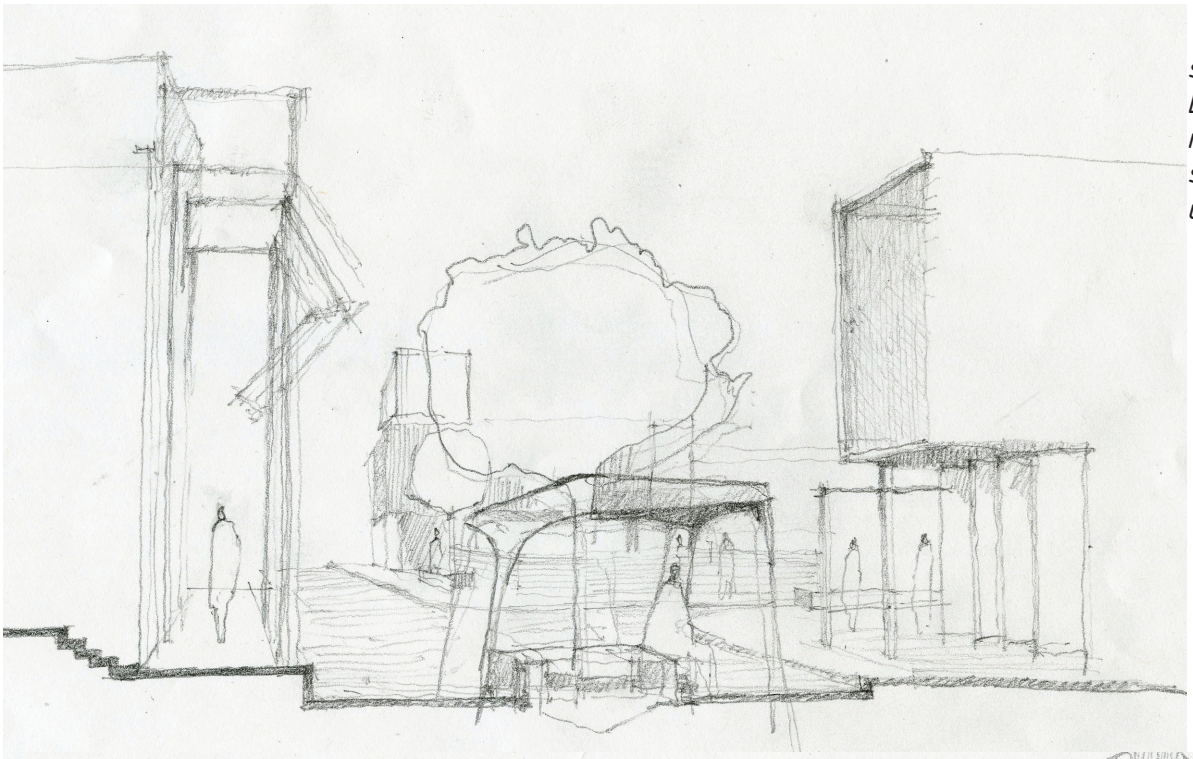
*Global concepts uncommon the world round*
*but we share a mortal frame*
*that if you can hear reacts to every sound*
*but no two people move the same.*
*I think it burns my sense of truth*
*to hear me shouting at my youth*
*I need a way to sort it out.*

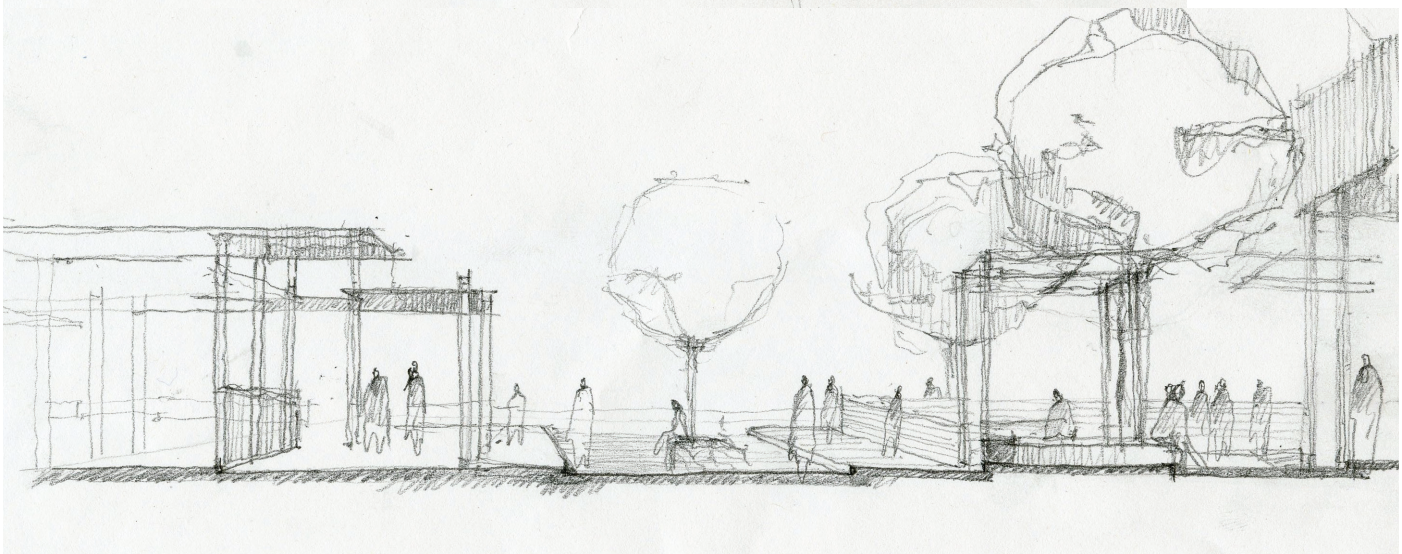
*After I die, I'll re-awake,*
*redefine what was at stake*
*from the hindsight of a god.*

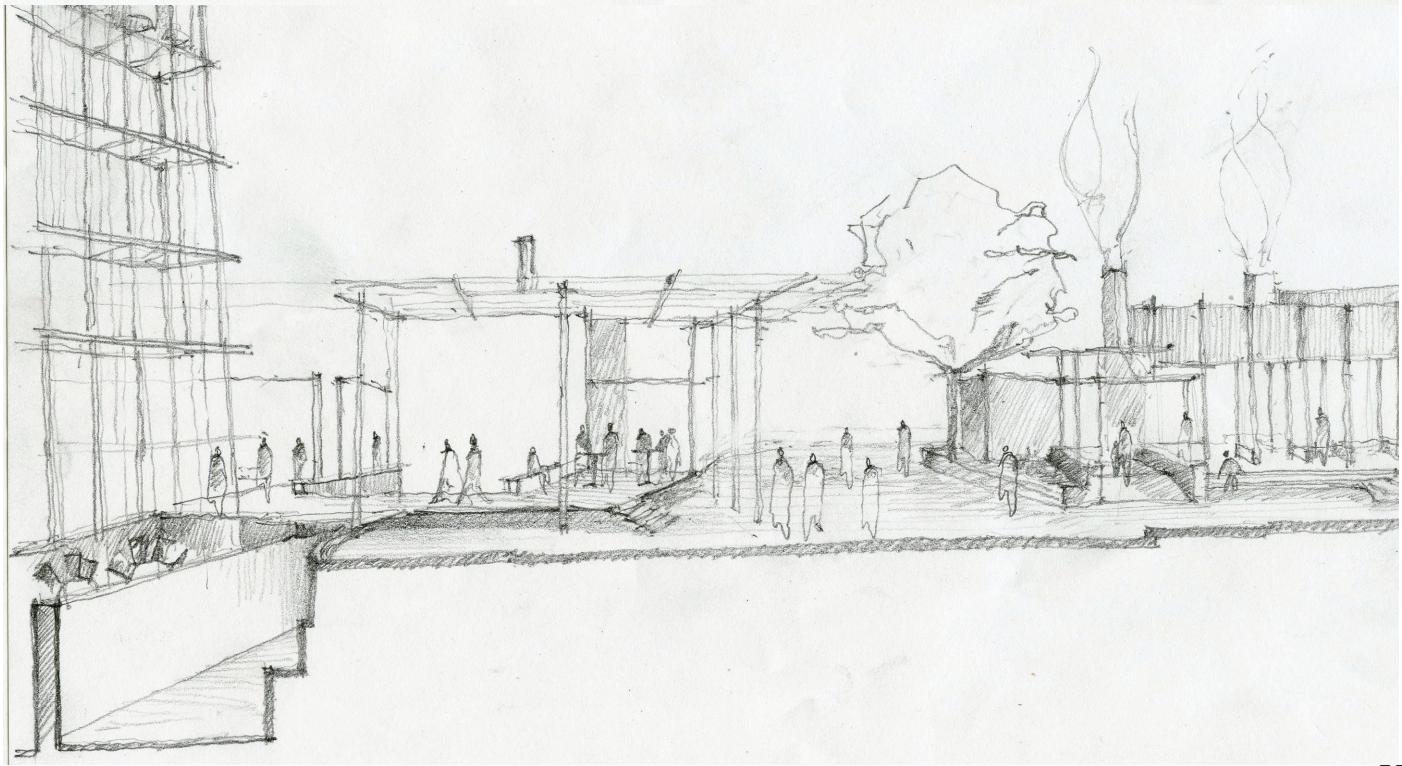
*I'll see the people that I use,*
*see the substance I abuse,*
*the ugly places that I lived.*

*Did I make money? Was I proud?*
*Did I play my songs too loud?*
*Did I leave my life to chance*
*or did I make you f***ing dance?*

Robert de Longs Global Concepts, The song featured as our Urban Vision Video Soundtrack.







*2.14_ Urban vision, sketches between buildings demonstrating our urban vision*

# URBAN VISION

## 2.2.1.
## PROPOSED ARUP URBAN VISION

From the outset of the project, it was assumed that the Tshwane municipality would eventually execute the proposed ARUP framework for the development of Pretoria and its surroundings. However the latest information is that this proposal will not reach fruition.

This framework however was adopted, as a group, critically evaluated and adapted as the basis for our eventual urban vision.

## 2.2.2.
## ADAPTED ARUP URBAN VISION

The ARUP urban vision for Marabastad is focused on increasing the residential component of the precinct, and thereafter increasing densification within the area. The actualisation of these aims, is envisioned through the introduction of medium to high density living blocks (ARUP 2013: 25).

This is sure to increase the residential component of Marabastad, which is undeniably vital to the success of any urban initiative undertaken within the area.

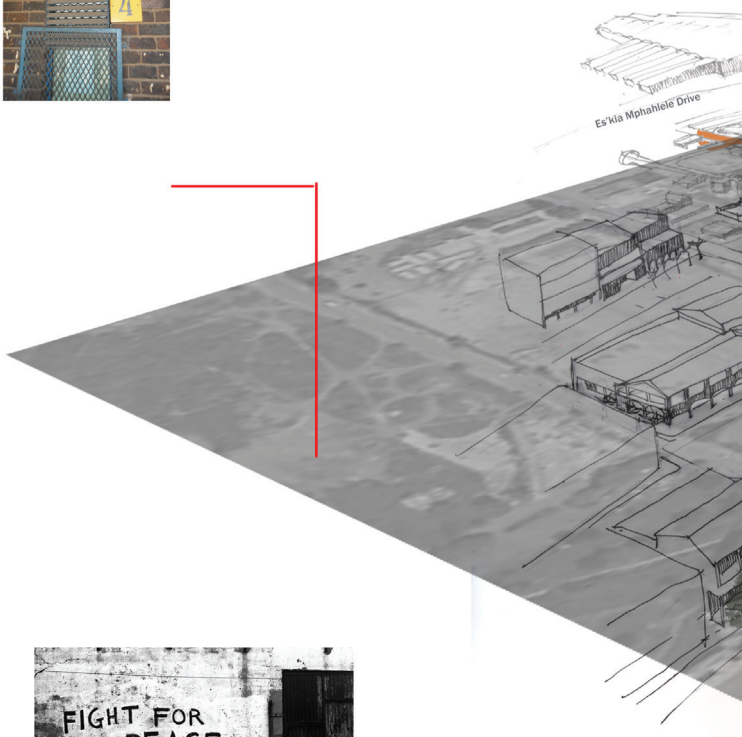
The proposed plan entails a large scale demolition of existing urban fabric to make space for the planned development.

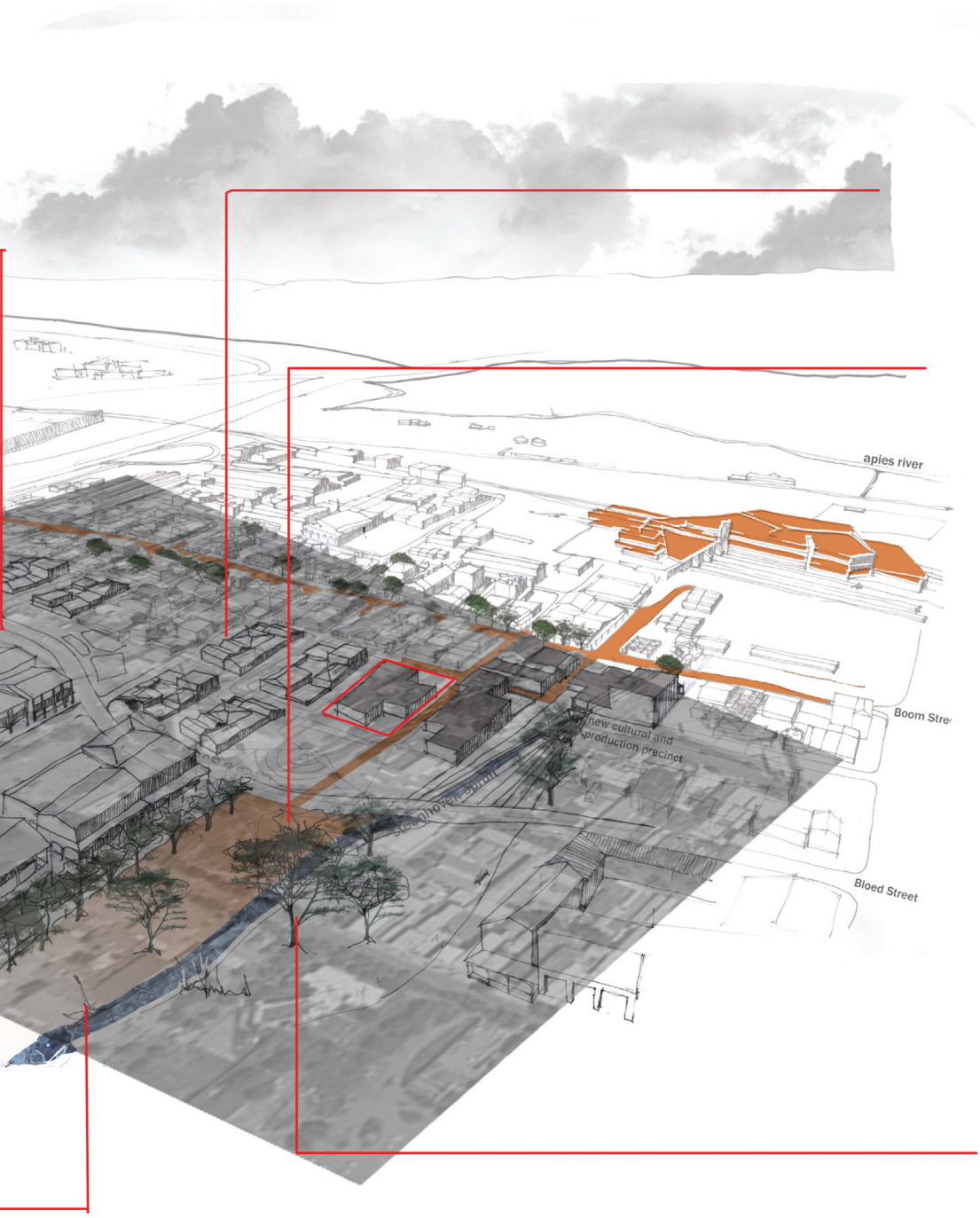
This, in all honesty can be perceived as slum clearance. This will most likely destroy most of the physical and historical layers of Marabastad (identified before), and thereby dis-abilitate the remaining layers from functioning efficiently.

Not only is the existing urban fabric of significant importance to maintain the established socio economic interactions, it is also of heritage importance. Unlike Sophia Town and District Six, Marabastad is the only relocated location which was not subsequently demolished.

As a result it is of heritage importance to maintain the historical layer of Marabastad; especially the original urban fabric as it is a unique example of the architectural subversive typology which was adopted by residents under the apartheid regime.






*2.14 Urban vision*

Beyond the preservation of structures of heritage significance, the re-establishment of the connection between residents and the Steenhovenspruit is of utmost importance to our urban vision.

The current condition of the river is deplorable. It is being utilized as a rubbish conduit, a bath, a toilet and unfortunately a source of cooking water.

The lack of other infrastructure for these activities has resulted in the river being the only viable medium to serve these needs of the people in the area. The goal is to alleviate the dependance on the river by providing the alternative resources to meet the needs of the people.

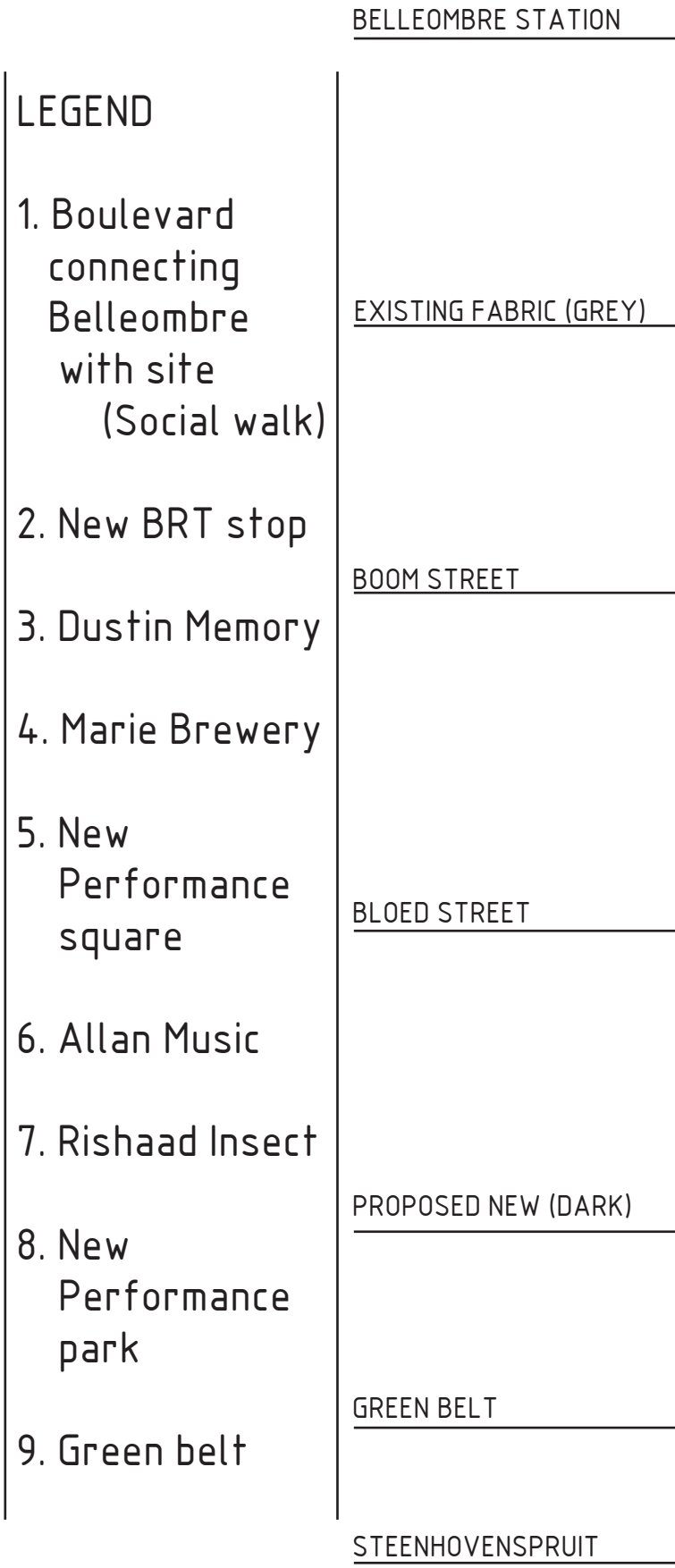
Along with revitalising the river, the lack of comfortable public space is a dilemma within the area. Although there are adequate public gathering spaces for informal trade, often in the form of squares, there is inadequate soft spaces within the area.

The provided Jazz Square is inadequate in fulfilling its roll as a public performance space. It is lacking in soft, shaded and climatically comfortable spaces. It does not provided the basic required infrastructure for public performances and as a result is underutilized.

Finally, the urban vision dictates the introduction of each of the group members schemes. The four schemes are envisioned to work coherently at providing a cultural public platform for social exchange.

Within a micro-context, the schemes aim to capitalize on interactions of trade and exchange as a means of creating a cultural district within Marabastad. The ideal being that these low threshold periphery activities, and as a result of the interventions, will increase social bonding capital within the precinct.

The translation of this on a macro-context is the grounding of Marabastad, and its future residents as part of Pretoria through this cultural precinct, and not merely a point of departure.




*2.15 Proposed layout*


UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
station walk
11th avenue
7th avenue
mogul street
boom street
grand street
social walk
new jazz
bloed street
performance
park
struben street
cowie street
johannes ramokhoase street
kgosi mampuru street
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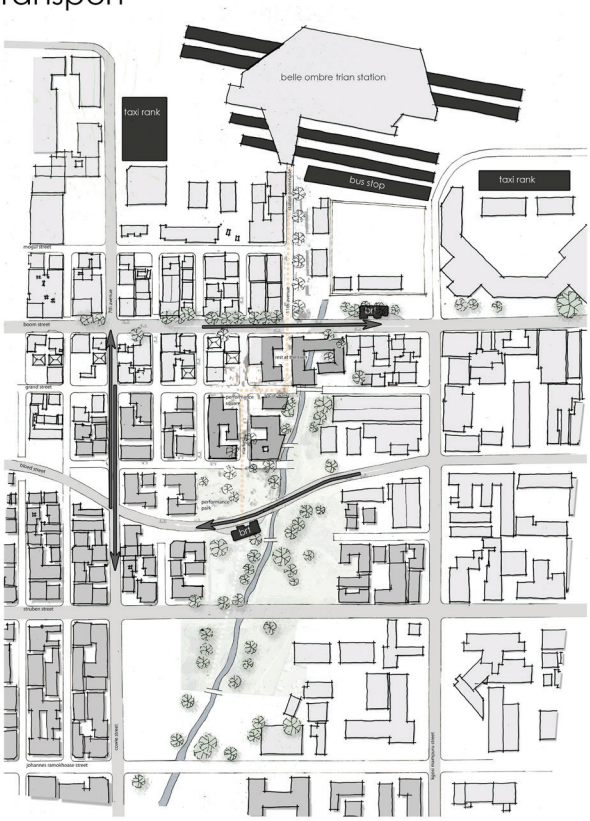
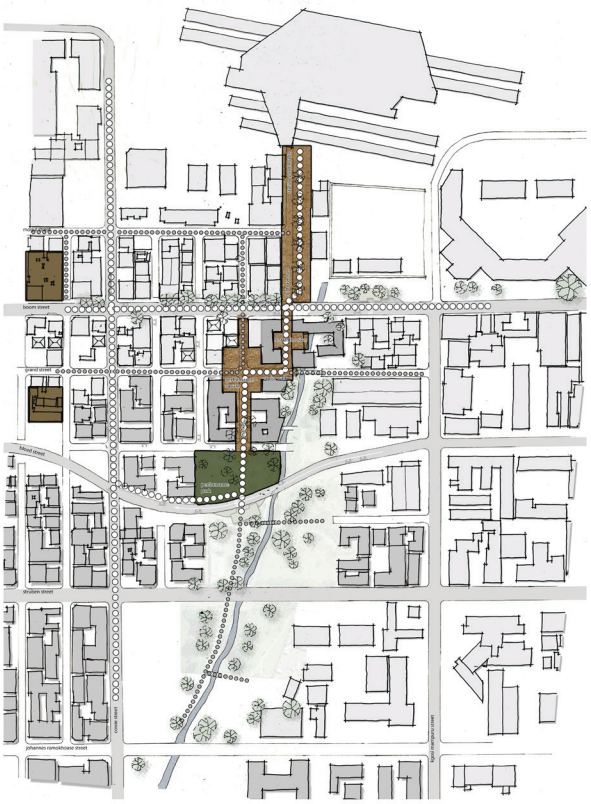
© University of Pretoria

# Framework

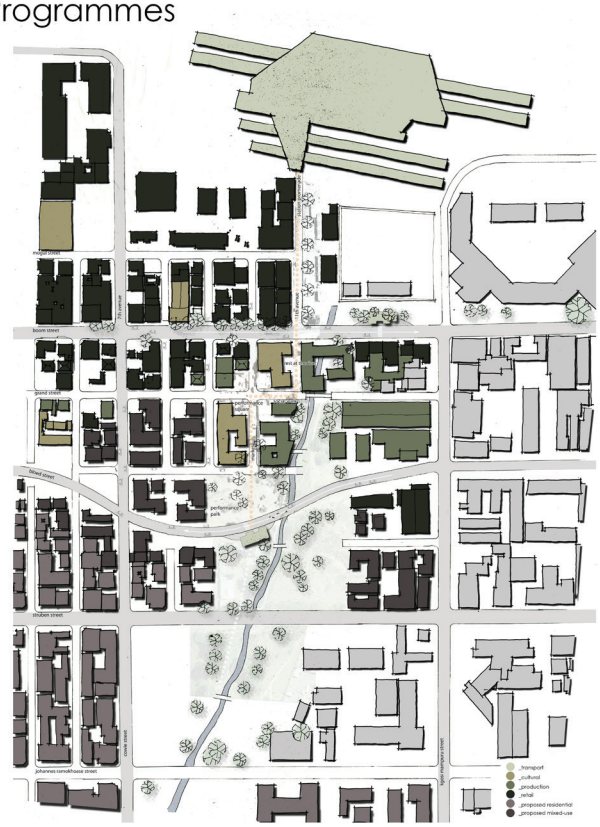
## Transport




## Pedestrian movement



## Programmes



## Natural systems

# Chapter Three
# Theoretical discource

This chapter deals with an evaluation of contemporary theories in respect to the threat of digitisation and the preservation of heritage within a global and local context and how it relates to the preservation of music within Marabastad.

*3.1_ Abandoned mosque of the followers of David*

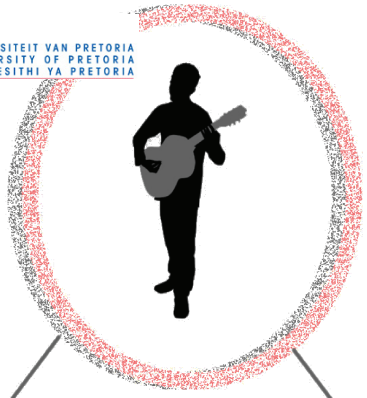
*3.2_ Zia cell shop*


# Chapter 3
# Theoretical Discourse

*"At the Northern end of Chandigarh- Le Corbusier's famous monument of mid-century Modernist urban design- is a vast plaza with a gigantic open hand at its heart. It expresses a very beautiful idea, and it looks great in the drawings, but it just doesn't work. It's too big, too hot and too far removed from the city's residential and commercial areas. Most important it's too late; India's political discourse no longer takes the forms (if it ever did) of the agora-centred, face-to-face public debate that the scheme implies. In fact, political violence in public places has become such a concern that the plaza is largely ringed with barbed wire and under close military surveillance.*

*William J. Mitchell (2000)*

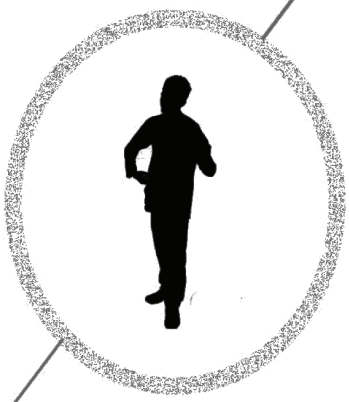
*3.3_ Evolution of music due to digitization*



## Artist and Instrument

Originally the artist and the instrument were an inseperable entity. The artist was dependent on his ionstrument to perform, and both occupied the same space and time as the other.

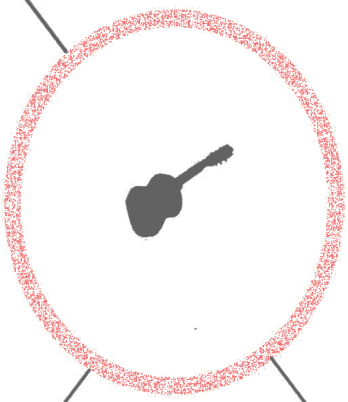
One was notheing without the other.



## Artist

With the the inventions of Thomas Edison in 1877-8 we see the artist being able to be seperated from his instrument to an extent.

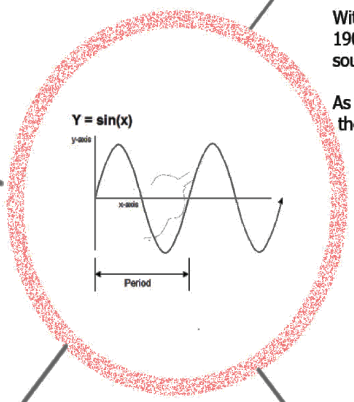
The artist is now able to perform and record, then replay the music without having to repeform the piece this allows the artist to not be bound by time, but is still bound by space.



## Internal Artist

For the very first time in the history of music the artist is not forced to share his music with those around him and can internalize it, due to the invention of headpones.

This is the first time the artists territory "swallows" the instruments territory.




## Modulation of Sound

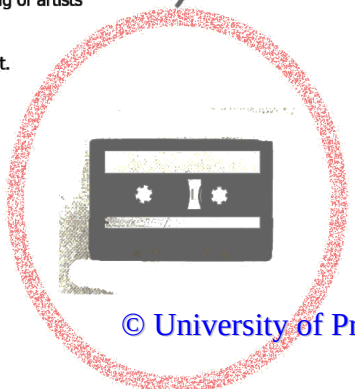
With the invention of the vacuum amplifying tube 1906 it made it possible for the modulation of a ce sounds through a certain frequency.

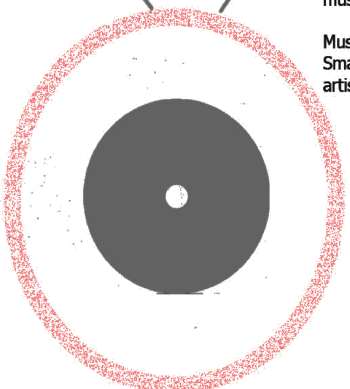
As a result the Artist is completely freed from the need of a traditional instrument.

## Analogue Medium

Originally the first modern portable storage devices were Vinyl recodrs and cassettes. These analogue mediums allowed the widespread playing of artists music.

Liberating the instrument from the artist.





## Digi

With mains music

Music Smar artist

1400 BC

325 -Constantine declares Christianity the official religion of the Roman Empire. The spread of western world spurred the development of European music.

850 -Western music begins to move from monophony to polyphony with the v church music moving in parallel intervals.

1578 -A group of musicians and intellectuals gather in Count Giovanni de Bardi's camerata(salon experiment with music drama. It is during this period that opera is born.

1600 -The Baroque period, characterized by strict musical forms and highl works, begins in Europe. This period signals the end of the Renaissa

1675 -Matthew Locke composes Psyche, the first surviving English opera.

1750 -Bach dies. The end of the Baroque period is often seen in conjunction wi death.

1839 -The New York Philharmonic is established.

1860 -The slave trade introduces West African rhythms, work so and spirituals to America, which strongly influence blues a

1876 -Tchaikovsky completes Swan Lake. It opens in 1877 at Moscow's Bolshoi Theatre.

1877-8

1877 -Thomas Edison invents sound recording.
1878 -Thomas Edison patents the Phonograph.

1883 -The Metropolitan Opera House opens in New York.

1890 -Tchaikovsky's The Sleeping Beauty debuts in St. Petersburg.

1896 -Ragtime, a combination of West Indian rhyt European musical form, is born.

1902 -Claude Debussy introduces impressionism t Pelléas and Mélisande at the Opéra Comiqu

1904 -The London Symphony Orchestra is established.

1906 -Audion tube, Lee De Forest invented the wo amplifying vacuum tube. This led to new technologies, including radio and sound filn entertainment.

1906

1908 -A major change in classical-music style comes about with the releas Schoenberg's Book of Hanging Gardens. The harmony and tonality c classical music are replaced by dissonance, creating what many liste to be noise.

1919 -After moving from its southern rural roots, jazz establishes Chicago as its capital.

1932 -Jazz composer Duke Ellington writes "It Don't Mean a Thing, If It Ai Swing," a song that presaged the swing era of the 1930s and 1940s

1936 -Electric guitars debut.

1948 -Columbia Records introduces the 33 1/3 LP ("long playing")

1949 -45 rpm records are sold in the U.S.

1951 -In an effort to introduce rhythm and blues to a broader white audience, which was hesitan music," disc jockey Alan Freed uses the term rock 'n' roll to describe R&B.

1954 -Bill Haley and the Comets begin writing hit songs. As a white band using black-derived for into rock 'n' roll.

1960 -John Coltrane forms his own quartet and becomes the voice of jazz's New Wave movement.

1963 -A wave of Beatlemania hits the U.K. The Beatles, a British band composed of John Lennon Ringo Starr and Paul McCartney, take Britain by storm. The Rolling Stones emerge as the aggressive, blues-derived style.

1969 -In August, more than half a million people attend the Woodstock music festival in

1970 -The Beatles break up.

1977 -Saturday Night Fever sparks the disco inferno.

1978 -Sony introduces the Walkman, the first portable stereo.

1981 -MTV goes on the air running around the clock music videos, debuting with "Video Killed the Radio Star."

1982 -Michael Jackson releases Thriller, which sells more than 25 million copies, becoming the biggest-selling

1983 -With the introduction of noise-free compact discs, the vinyl record begins

1987 -Though African, Latin American,and other genres of international music have beer centuries, a group of small, London-based labels coin the term "world music," w sellers find rack space for the eclectic music.

1988 -CDs outsell vinyl records for the first time.

1992 -Compact discs surpass cassette tapes as the preferred medium for

1999 -The merger of two major recording labels, Universal and Polygram, causes uphea industry. It is estimated that the new company, Universal Music Group, controls 2 worldwide music market.

2000 -The Internet transforms music scene as cor offer free music over the Internet without p copyright fees. Music industry executives ta issue to court. A ruling prompts Napster to distributing copyrighted music free and tea industry giant Bertelsmann to provide mate fee.

2003 -Apple Computer introduces Apple iTunes Mu which allows people to download songs for each.

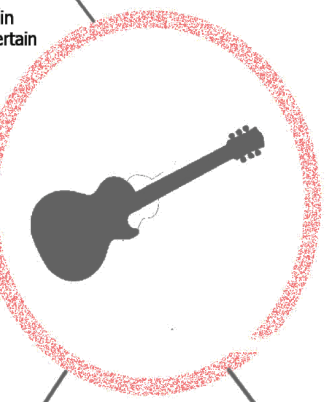
2000 -Crackdown on Piracy campaign

## Instrument

The instrument is now no longer reliant on an atrist after the initial recording to be replayed to produce sound.

The instrument in a sense is free from both time and space of the artist as it is no longer needed for the artist to repeform.

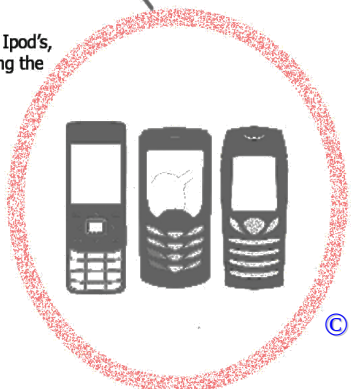
in
ertain



## ital media/digitization

the arrival of the computer and the internet, stream digital exchange of information, including , has revelutionized the storage of music.

is now stored on mobile devices, such as Ipod's, tphones and Mp3 player's. Further removing the from the Instrument.



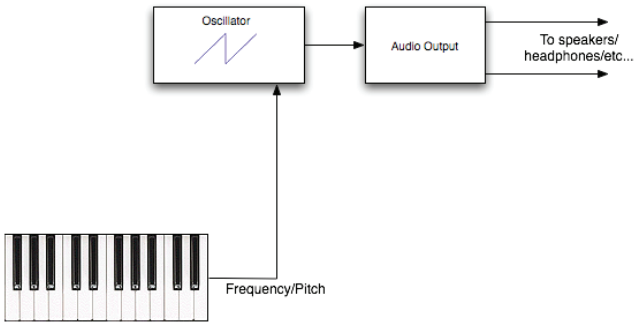
3.1.

## TECHNOLOGY AS AN INSTANCE

Each instance of technology arises from a certain set of circumstances, gives rise to a certain economic and social set of activities, and then results again in an innovative technology. This cycle is continual and is often a perpetual result of improvement on existing technology.

Though ubiquitous today, found in any device which emits sound in the form of a microchip, the synthesizer is a prime example of this development within technology. It has had a profound impact on the production of music and the spaces associated with it (Pinch and Trocco, 2002). Simply put the synthesizer was revolutionary; it was the first modern instrument to provide the artist with an entirely genuine new source of sound, in the form of electronics.

Euphoria struck the music industry and many artists where swept up in the techno revolution. The advantages of utilizing electronics as a means of generating sound became an immediate fascination to many artists (BBC 2010). Artists such as Depeche Mode even went as far as recording the sound of a rock rolled across an aluminium door frame as a means of generating an unique sound to be utilized within a track.



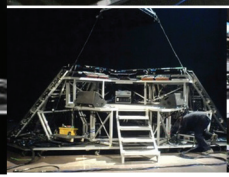

*3.4__(Left) Synthesiser process*

*3.5__(Right) Daft Punk*

Depeche Mode truly exploited the early synthezisers to the fullest, creating tracks containing sounds of hammers striking walls, demolition sites and heavy machinery (BBC 2010), all mixed together with traditional lyrics and instruments. Although few artists utilized this electronic medium as potently, it soon became evident to all artists that the synthesizer held the potential to generate, capture and recreate an unfathomable number of sounds.

Key to the synthesizers ability to this is the microchip. The microchip allows the artist to utilize a mathematical algorithm to modulate the frequency of a sound and then customize its structure, through adjusting pitch, tempo, timbre, reverberation and so on (Souvignier 2003). This allows the user to generate any sound from a single device. The result is that an artist who can master a syntheziser can create a multitude of instrumental sounds without having to master each individual instrument.

This freedom to become a multi-instrumentalist through the garnering of instruments into a single device, was part of the appeal of the device and genre to the artists of the time. As a result, a multitude of artists abandonned traditional means of creating sounds, to adopt the syntheziser as the core instrument in thier arsenal of sound generation.



3.2.

## ARTIST AND INSTRUMENT

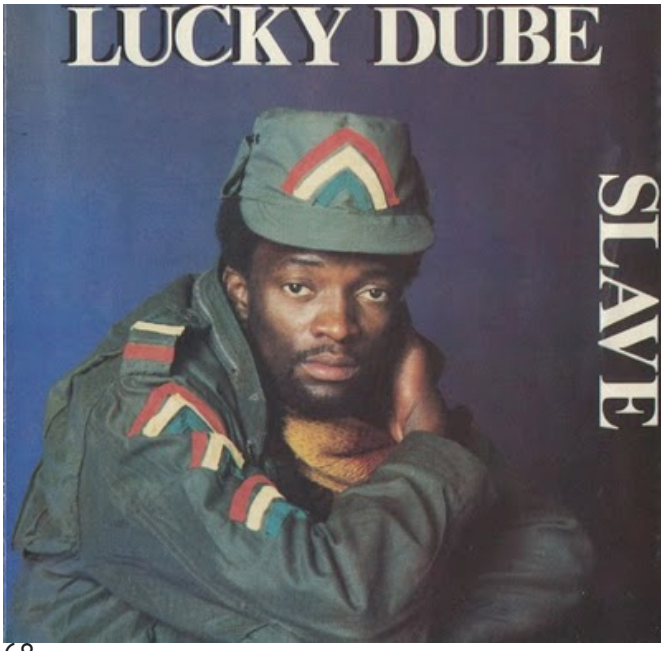
As the ability to generate almost any sound from one device became more accessible it became no longer necessary for an artist to master every instrument to create their desired sound. The inverse of this was that no longer did an artist master a single instrument, but rather a device which could produce multiple.

Consequently a new profession was born, that of the sound engineer (BBC, 2010). The sound engineer, described by many as a jack of all trades but master of none, was at the forefront of electronic music. Perhaps not a master of an instrument but, but definitely the master of sound manipulation through an electronic medium.

The development of this profession was unlike that of the traditional artist. An artist was required to hone his craft through diligent practice and hours of tuition with a single instrument. The result was a greater appreciation for the instrument and its workings. Through this process of perfection the artist exposing himself to the instrument in a tactile manner (BBC, 2010). The result is that the analog production of sounds is dependent on the Somatosensory system. Inversely the synthesizer stimulates the artist in an information sense, by challenging the artist to manipulate the electronic modulations of sound through knowledge to achieve the desired sound.

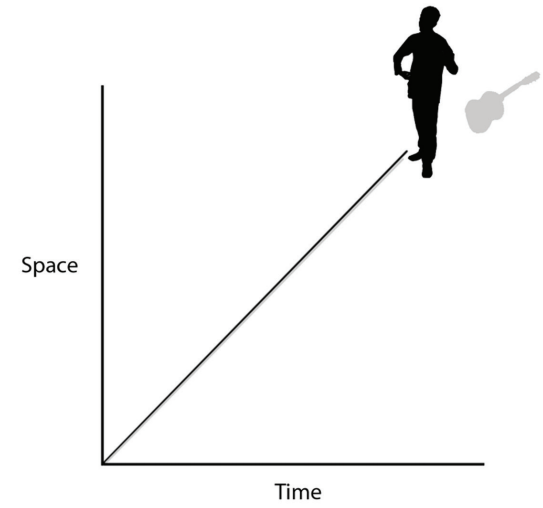
The result is an under developed sense of proprioception. Proprioception is the kinesthetic sense that provides the parietal cortex of the brain with information on the relative positions of the parts of the body (Brown, 2013:1). Neurologists test this sense by telling patients to close their eyes and touch their own nose with the tip of a finger. Assuming proper proprioceptive function, at no time will the person lose awareness of where the hand actually is, even though it is not being detected by any of the other senses. Proprioception and touch are related in subtle ways, and their impairment results in surprising and deep deficits in perception and action.

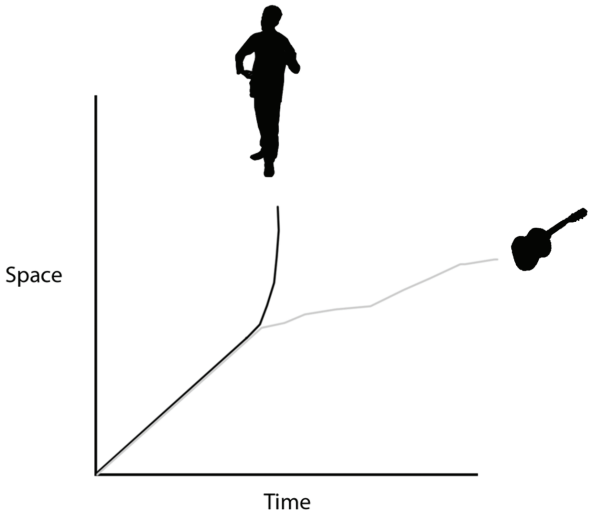
It is this proprioception that Juhani Pallasmaa (2009) identifies as possessing the ability to transfer, store and recall information as mnemonic device of the body. Ultimately he identifies the challenge as how to promote the development of an artist's brain in learning through the hand. If the hand becomes a master at an instrument, then the brain can comprehend that instrument in its entirety. This digital disassociation of person from instrument has resulted in the passing on of embodied knowledge of instruments to be disrupted by the passing on of embodied knowledge of the synthesizer.

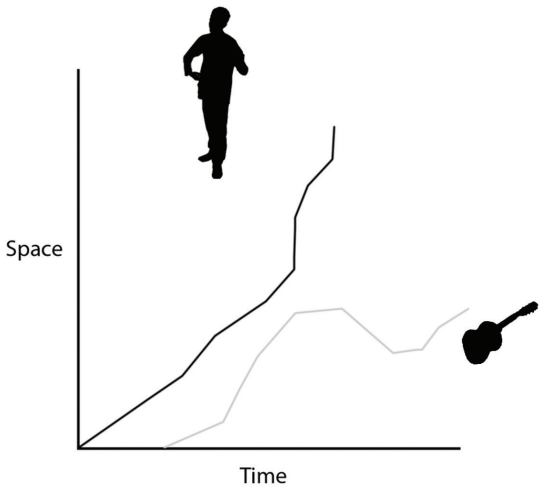



The synthesizer being a multi-instrument, results in a loss of specific association of place with instrument. In otherwords, traditionally the *"Didgeradoo"* has been a specific instrument associated with the Aboriginee culture within Australia .Most people would have had to have been exposed to someone who plays, makes or records this instrument to build a knowledge of it. However with the arrival of the synthesizer, it has allowed the user to modulate the sound of the instrument without having ever seen, touched or played the instrument. Resulting in a disassociation of instrument from place.

This is particularly evident within South Africa, illustrated by the best-selling album in our history, the synth-heavy reggae of Lucky Dube.




*Once upon a time, sounds were attached to places. Rock'n'roll travelled the Atlantic and docked at Liverpool, giving birth to Merseybeat.*

*Manchester married raving and rock music, and spawned Madchester.*

*Grunge formed under Seattle's gloomy skies and then took over the world.*

*The local scene – the notion of several bands and musicians from the same area appropriating a similar style of records – would begin with friends listening to the same music and forming bands that would play in the same clubs, before record labels, DJs and writers would take note, at which point a city's bands would find themselves the centre of worldwide attention.*

*Hazel Sheffield, Has the internet killed local music scenes? (2010)*

As technology has advanced, so too has the production and distribution of music.The result being that eventually the artist and the instrument have been dissasociated from ever having to inhabit both the same time or space continually again.

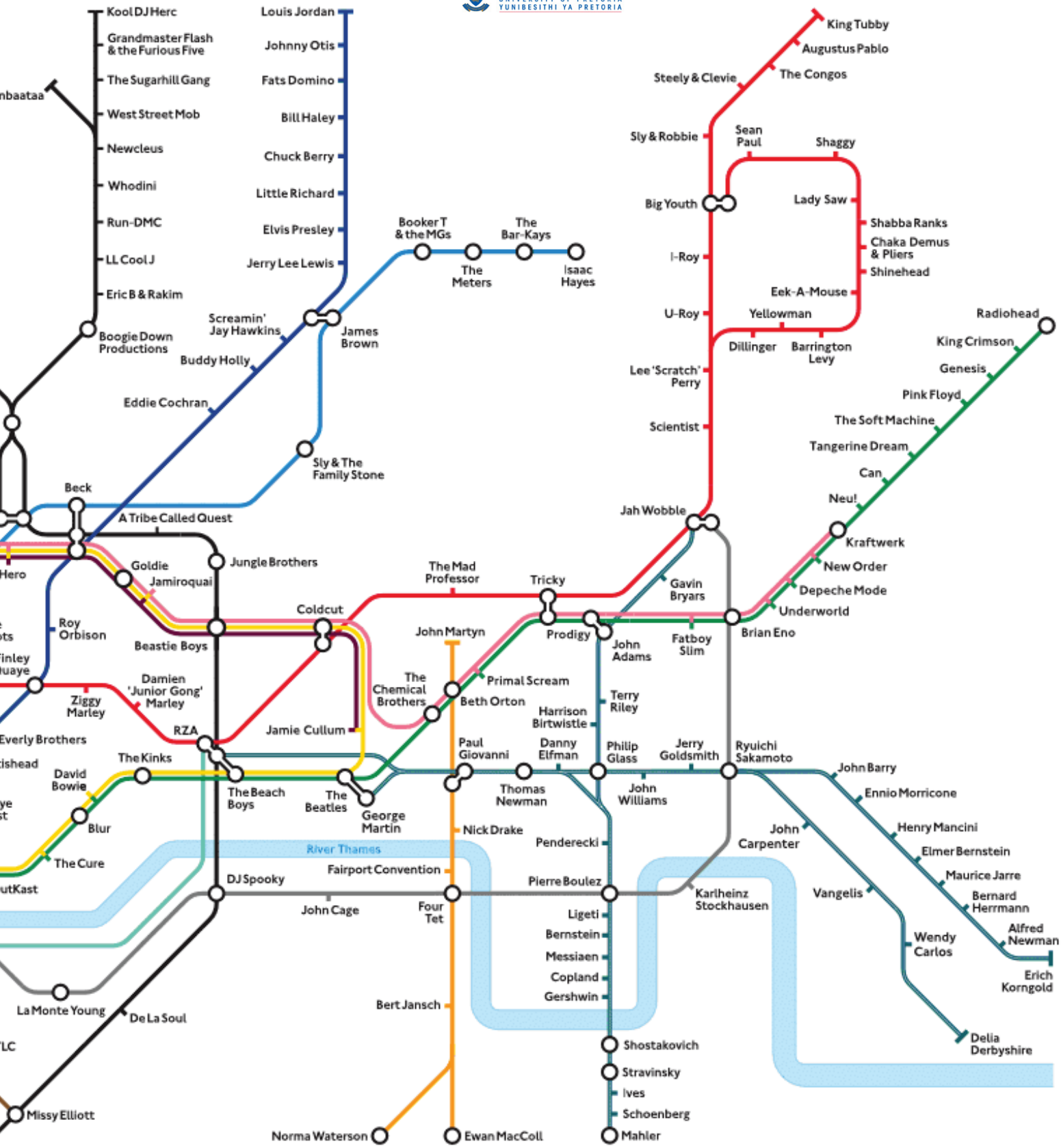
Initially the artist and the instrument had to occupy both space and time continually to produce music in the form of live renditions.

As technology progressed and the it bacame possible to record music, the artist and the instrument only had to initially occupy the same space and time to produce the original recording.

Finally, with the advent of the semiconductor diode, the artist and the instrument had to no longer ever have to occupy the same space or time, as sound could now be modulated and no longer had to be created by analog means.

*3.6 (Far left) Lucky Dube Slave album cover*

*3.7 (Left) Seperation of artist and instrument due to digitasation.*




MAYOR OF LONDON

Transport for London

UNDERGROUND

*3.8__Musical genres mapped according to their origin in London*

3.3.
## THE INFLUENCE ON SPACE

This progression in technology has resulted in the validity of traditional acoustic recording spaces within the digital era being questioned (Homer, 2009: 2). This debate, whether or not traditional recording spaces are a necessity, is paralleled by the global contemporary converse happening around the digitisation of traditional interactions. Thomas A. Horan (2000: 53) describes this phenomenon as a dance between the electronic and the physical world.

This dance has slowly been progressing deeper and deeper into the virtual realm, through social media platforms, online banking, online shopping and global communication, and further and further away from physical interactions. The result of this, according to Horan (2000: 23), is the conundrum of erecting a city adept at facilitating this transformation from physical to digital.

The total transformation of society from the physical to the virtual, in my opinion, is unfathomable. The simple need for physical human stimulus through interactions, such as touch, will prevent this from occurring. However, there is large movement globally to engage with this notion of an absolute virtual representation of reality.

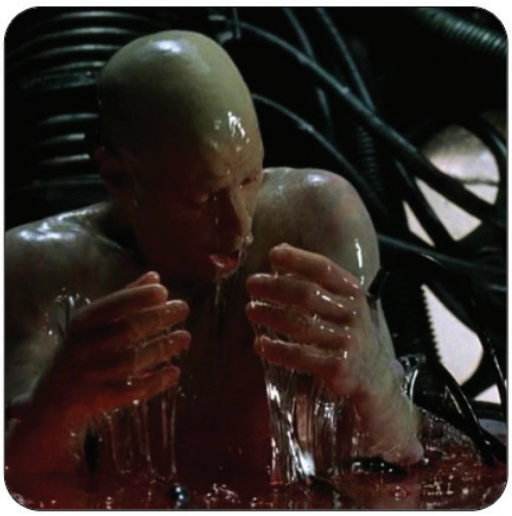
Architecture has not been spared from this discourse either. Architecturally the discourse has centred on how to design spaces should mediate the intersections between cyberspace and physical space (Horan, 2000: 6). Much like the Wachowski brothers science fiction epic, the Matrix, which depicts a fantasy world constructed of bytes, Manuel Castells (Horan, 2000: 14) describes this new digital space as a space in which issues of power, conflict and identity can thrive.

Similar to the Matrix, contemporary society often resolves sociopolitical, economic and environmental problems within a virtual realm. The result is that cyberspace is a region with further reaching influence on sociopolitical decisions than what is initially thought. This influence is extended to beyond merely problem resolution, but also the enhancement of social progression. Modern society utilizes cyberspace as a platform to increase culture exchange, beyond geographical limitations. This directly impacts on the cultural identity of a place. Grobbelaar (2011) identifies this interaction as a dilution of individual cultures, specifically in Marabastad, with the influences of global cultures and a striving to be globally accepted.

The problem with contemporary architectural discourse is the lack of engagement with the advancement of technology as a design informant. As mentioned above architecture is concerned with the successful mediation of physical spaces to allow for access to the virtual realm. This raises the question, should architecture rather be utilizing technology as an informant to promote cyberspace as part of physical spaces as a means to ensure the grounding of a place within its *genius loci* ?

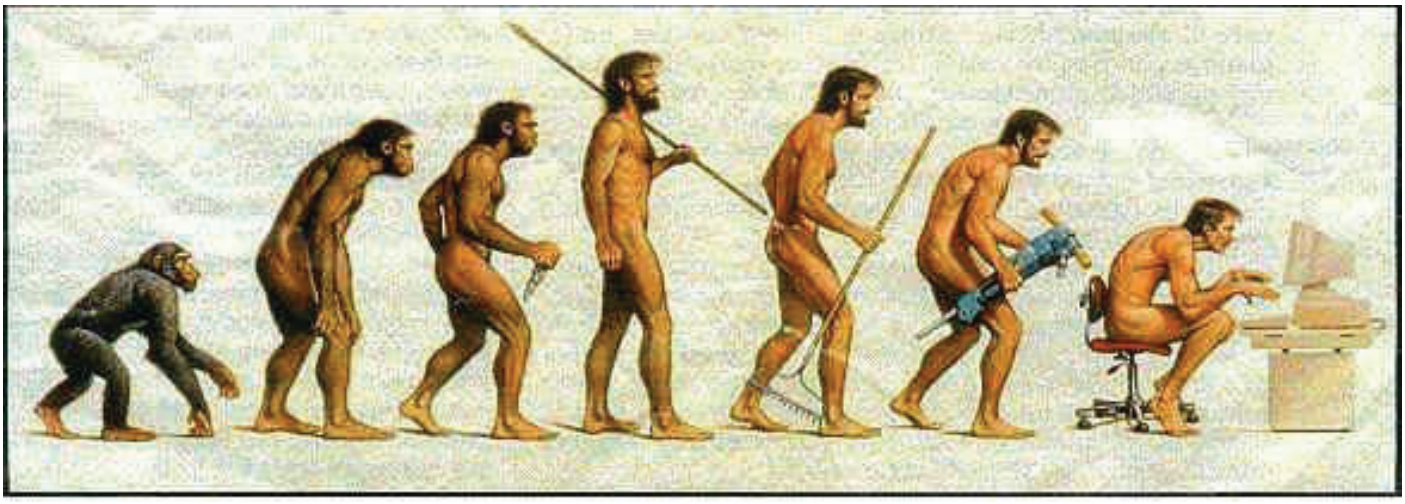
*Genius Loci* can be described as the spirit of a place, and is defined by the predominant contemporary and historical physical, social, political and environmental aspects of the place (Grobbelaar 2011). This is the crux of the technological argument, will the influence of the internet and its associated digitisation of actions, result in the dilution of specific *genius loci?*

Architecturally the craft-centric discourse promoted by practitioners such as Juhanni Pallassma (2009) has been on the importance of the artisan. Within the Marabastad context I propose an alternative approach to the reestablishment of these mnemonic methods of preserving memory. An approach which dictates the function of the building to be the core measure to promote the conservation of craft centric traditions.


*3.9__Post modern culture and the striving to the virtual*

*3.10 De-evolution*



*"The real danger is not that computers will begin to think like men, but that men will begin to think like computers."*

*Sydney J. Harris*

3.4.
## HERITAGE APPROACH

*"The government shall discover, develop and encourage national talent for the enhancement of our cultural life; All the cultural treasures of mankind shall be open to all..."*

*The Freedom Charter (1955).*

The Freeom Charter is the tangible rendition of a nation's dreams. The document concisely identifies the ideals of a people who strived for equality. Clearly it identifies the vision of equality and democracy as the governing principles to provide cultural accessto everyone.

The reciprocal responsibility of this notion, is the active preservation of cultural and heritage resources to ensure that every individual is afforded the oppurtunity to access this knowledge. To achieve this active preservation of tangible and intangible heritage and culture is a necessity.

As part of the strategy to ensure and maintain the integrity of our international, national and local heritage sites, South Africa is part of the ICOMOS (International Council on Monuments and Sites) membership body (ICOMOS, 2013). This council deliberates amongst its member body as to how it can successful preserve cultural and historical artefacts, while maintaining its integrity while not impeding necessary development.

The result is that an assorted charters are conscripted as guiding principles which provide valuable direction on how to respond to culturally sensitive resources. A particular charter, Charter for the conservation of historic towns and urban areas (Washington Charter 1987), disseminates a list of values to identify and preserve tangible and intangible heritage within an urban area.

*1. In order to be most effective, the conservation of historic towns and other historic urban areas should be an integral part of coherent policies of economic and social development and of urban and regional planning at every level.*

*2. Qualities to be preserved include the historic character of the town or urban area and all those material and spiritual elements that express this character, especially:*

*a) Urban patterns as defined by lots and streets;*

*b) Relationships between buildings and green and open spaces;*

*c) The formal appearance, interior and exterior, of buildings as defined by scale, size, style, construction, materials, colour and decoration;*

*d) The relationship between the town or urban area and its surrounding setting, both natural and man-made; and*

*e) The various functions that the town or urban area has acquired over time.*
*Any threat to these qualities would compromise the authenticity of the historic town or urban area.*

*3. The participation and the involvement of the residents are essential for the success of the conservation programme and should be encouraged. The conservation of historic towns and urban areas concerns their residents first of all.*

*4. Conservation in a historic town or urban area demands prudence, a systematic approach and discipline. Rigidity should be avoided since individual cases may present specific problems.*

According to the Washington Charter (1987) the integration of coherent policies within a design approach is the most effective way of preserving the tangible and intangible aspects of an urban area. To achieve this though the particular facets which are to be preserved should be clearly identified.

As was mentioned in the second chapter of the document Marabastad presents an unique situation, as it is currently one of the few still intact townships which were not demolished during the displacement of its residets.

With this in mind as a group, through a number of visits, we identified a particular section of Marabastad which is of particular importance to maintain its integrity as an example of the townships character. The identified section presented a significant proportion of the townships original urban fabric, and as a result maintains a desirable characteristic worth preserving. This particular characteristic is demonstrated within the street edge and how the building interface includes the sidewalk.

This precinct is highlighted within the map which follows. As part of the contextual analysis of Marabastad I read a book written by a previous resident, Jay Naidoo, called Coolie Location. As part of the mapping excercise to identify historically significant sites I marked out specific landmarks according to the narrative of the book. These are illustrated within the map and identified in the legend.

1. Jay Naidoo's house, 226 Jerusalem, born in 1941 he refers to Operation Barbossa as a key event during the year of his birth.
2. 1941 boundaries of Marabastad for residents, North 'die kaakdraai", East Steenhoven Spruit,South Struben Street and to the West Von Wielligh Street.
3. Corner across the street 226, on the corner was Lalies café, known for its fish and chips. Also the scene of a brutal stabbing which resulted in the death of the victim.
4. Christian promenade of coloured girls down Jerusalem Street from Grand Street.
5. Giant Eucalyptus tree across from 226 known as 'die grootboom".
6. Laksmi grocery shop cnr Bloed and Fourth
7. Pretoria Boys Indian School, five blocks West of Jerusalem street, on Lorenz Street.
8. Pretoria Indian Ground for soccer.
9. Abdul supplies store close to Hindi temple, between Fifth and Bloed Street.
10. Coloured eating house
11. Sawmiss Printing shop and Grocer, between fifth and Bloed
12. Area in front of temple used for informal soccer.
13. Tip Top Printers further down the street on Grand.
14. The Royals stoep across from the temple to the west.
15. The dairy next to the sand football ground, putco depot.
16. Jeevan's outfitters; American importers, zoot suits. Along boom Street.
17. Kalla's cycle store, along Boom Street, sold vinyls played music.
18. Mooloo's café, along Boom Street.
19. Barren field close to ABC Bakery,
20. Zcc close to Barber street
21. Butcher Shop on Grand Street.
22. Market close to Prinsloo Street.

*3.11_ Map of historically significant buildings in node*

3.4.1.

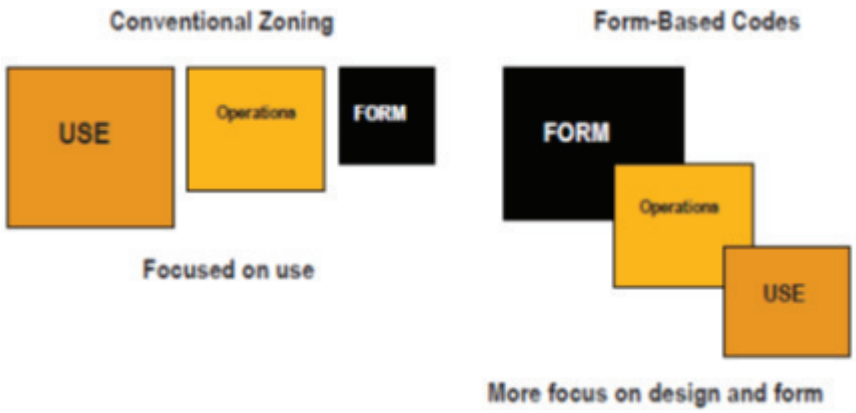
## CODING

Modern town planning practices arose from the need to resolve, or at least alleviate, urban issues associated with cities in the late 19th Century (Baba 2009: 201). The implementation of these practices has since resolved or alleviated many urban crises; unfortunately this practice has subsequently triggered an array of alternative urban predicaments.

Although there is now less hygienic concerns within modern cities, they are still a far cry away from being perfect. Contemporary town planning, through zoning regulations, has not succeeded in addressing the creation of integrated spaces and places within cities which allow for optimal habitation by residents.

In 1980, the New Urbanism movement proposed creating walkable, mixed used neighbourhoods which provided dense, diverse and desirable living spaces within a city (Purdy 2007: 8). Associated with the New Urbanism movement is the ideal that formal coding should replace that of traditional zoning which is only concerned with the use of a building.

The advantage of formal coding is that it dictates the position, form and relationship with the street (Purdy 2007: 12). Thereby the creation of successful integrated spaces is more likely within an urban setting




Formal coding is not without its setbacks though. Formal coding can cost up to four times the amount of conventional zoning and requires the use of a more intricate set of drawings and diagrams than a conventional zoning plan. (Purdy 2007: 17). These drawings and diagrams are unfortunately viewed by developers as too rigid and prescriptive, which results in formal coding being avoided. Joined with the lack of legislation to promote the use of formal coding, it has resulted in most planning to remain with conventional zoning.

Formal coding, however, provides the opportunity to de-emphasize and divide a community into neighbourhoods or specific street corridors, which have a distinct and consistent character, while allowing a mixture of compatible uses. (Purdy 2007: 10).

This breaks with the ideals of conventional zoning to create uniformity throughout an area by applying uniform intensity parameters such as setback, height, density, and floor area ratios.Form-based codes promote diverse integration into areas by reflecting different standards for a variety of varying structures. Since use and building type are closely joined, formal coding ensures that the building communicates properly with the streetscape and the adjoining uses.

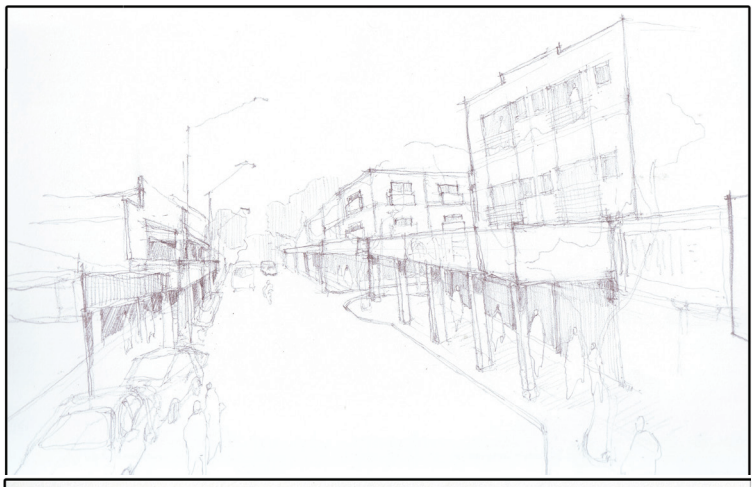
Conventional zoning creates a building envelope and the final location and form of the building within the envelope is unpredictable. The result is that conventional zoning focuses on the erf, its use, building size and deemed to satisfy regulations where as formal coding takes a more holistic approach through considering the structure, its form, use and edge condition with the street.

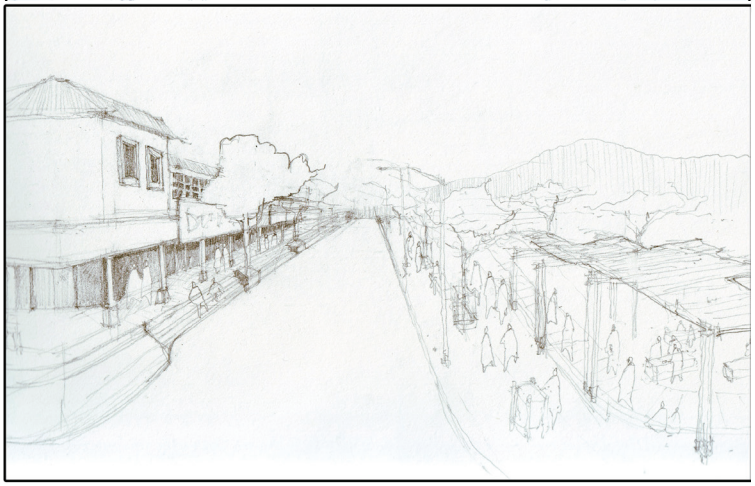
Conventional zoning has limited the ability to effect change, while promoting the preservation of a precinct's character. This is due to the nature of conventional coding focusing on prohibiting certain uses instead of promoting positive development.

Formal coding is more prescriptive and does a better job of describing the desired urban form. The result is the development of a neighborhood that encourages pedestrian activity, social interaction and local investment.

As part of the ARUP framework GWA Architects have suggested a formal code for the Marabastad area, which we have accepted as part of our urban framework. We have found that the code was lacking in its prescription of where to plant trees, as this is a major characteristic of Boom street we decided to add this as a criteria to the code.

Along with vegetation we included an Informal Trade Promotion Zone which promotes the inclusion of informal trade within the streetscape which is a very important character of Marabastad. Therefore we believe the coding will be able to promote new development to maintain the original character of Marabastad.

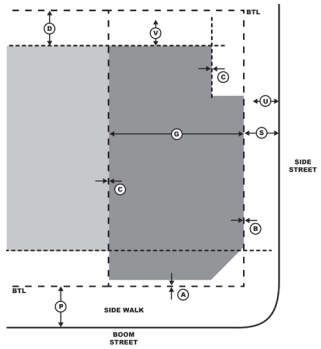




*3.12__(Left) Conventional zoning compared to Form based codes*

*3.13__(Right) Depiction of spaces*

## Typical Coding Condition C._. Cultural Precinct Public Building Along Boom Street




Plan

Section

| Building Placement | | |
|---|---|---|
| **Build-to line (Distance from Property Line)** | | A |
| Front | 0m | |
| Side Street | 0m | B |
| **Setback (Distance from Property Line)** | | |
| Side | 1.5m | C |
| Rear | 2m | |
| *Adjacent to other Zone | NA | D |
| **Building Form** | | |
| Primary Street Façade Built to BTL | 50% | E |
| Side street Façade built to BLT | | F |
| Erf Width | Existing TPS | G |
| Erf Depth | Existing TPS | H |
| *Street façade must be built 30% from corner, remaining 70%: 50 % on building line, 20 % on 1.5m setback line | | |

| Use | Vegetation |
|---|---|
| Ground Floor | Commercial, Retail, Recreation & Offices Ex I |
| Upper Floors | Residential, Commercial be reta J |
| **Height** | |
| Building Min | 2 Storeys/7.5m K |
| Building Max | 3 Storeys/11.25m L |
| Building Max | 4 Storeys/ 15m M |
| Finishing Ground Floor Level | 170mm cor N |
| Finished Floor Ceiling Height | 7m should b |
| Upper Floor Ceiling Height (Allowance for lofts) | 7m All buildings sh tha O |
| *All heights measured to eaves or base of parapet service | entries are prohib |

**ting Planting**

Indigenous plants to P

nts to be emoved P

**roposed Planting**

Planting should be trated within zone P

ndigenous species selected

**OTES**

ld have a ground floor entrance

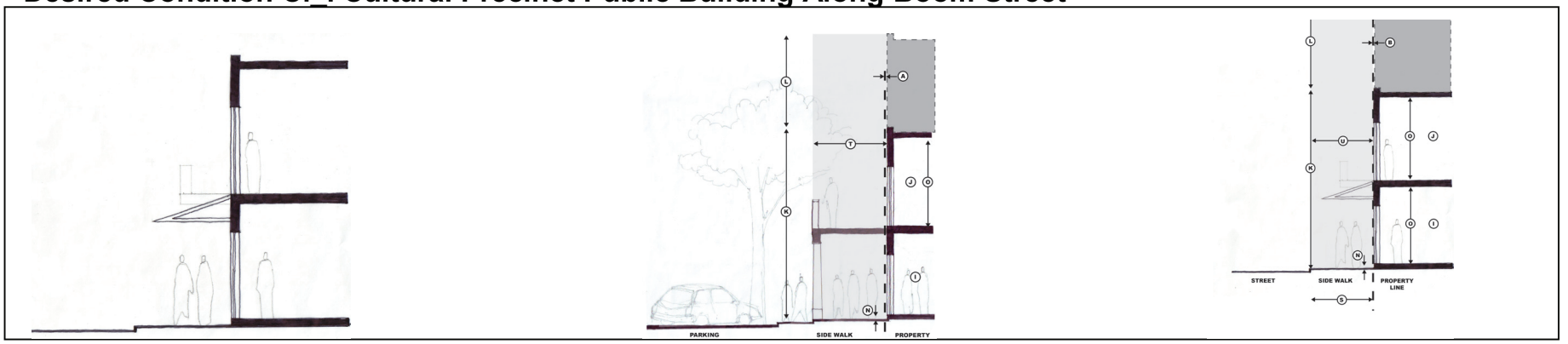
s the primary street

Loading docks, overhead doors, and other

d on street facing facades.

e greater than 40m must be broken g

## Desired Condition C._. Cultural Precinct Public Building Along Boom Street




Section

| Parking | | |
|---|---|---|
| **Location (Distance from Property Line)** | | |
| Front Setback | 3m | Q |
| Side Setback | 0m | R |
| Side Street Setback | 2.5m | S |
| Rear Setback | NA | |
| **Required Spaces** | | |
| Ground Floor | | |
| Light Industry/ Business | 1 Private space/100sqm | |
| Retail | 0.5 Public space/100sqm | |
| Government | 1,5 Private space/100sqm | |
| | 0.5 Public space/100sqm | |
| Upper Floor | | |
| Residential Uses | 0.5 space/unit | |
| Other uses | 1 space/100sqm | |

| Encroachments | | |
|---|---|---|
| **Locations** | | **NOT** |
| Front | min 1500; max 2500 | T |
| Side Street | min 1500; max 2500 | U |
| Rear | 1m (not ground floor) | V |
| | be located on | |

| Allowable Frontage | | |
|---|---|---|
| **Collanade Stoep** | | in a |
| Clearance | 3500 min, allowing for max step of 500mm to adjacent buildings | 40 |
| Height | 4500 min, allowing for max step of 500mm to adjacent buildings | Bc |
| | | no other optic |
| **Informal Trade Promotion Zone** | | may enc- |
| **Location( Distance from property line** | | sides, W |
| Front setback | 2m | as sh |
| Side Setback | 0m | X |
| | | must not be |

**S**

Parking access from Boom Street

Parking Entrance Width NA

corner erven, parking drives shall not
mary street.

must be provided on and

ecure environment

Parking may be provided off-site within
or as shared parking.

arking drive are highly discouraged on
street and only permitted if there is
for access parking.

Canopies, Awnings and Balconies

roach over the BTL on the street

n in the section.

storey galleries facing the street

d to meet primary s

3.5
# CONCEPT

Fostered from the urban analysis, theoretical discourse and urban vision the concept is an investigation into the creative territories and their associated spaces. The goal being to identify specific territories which can promote specific creative interactions. These interactions vary in formality between artist, instrument and listener.

The ideal being to promote differing levels of formality, to allow for differing musical interaction, which will result in differing creative outlets. Simply put different levels of stringency within a space dictate certain creative outlets.

As a result of digitization the exclusivity of musical creation has been nullified from those who have mastered an instrument to those who have access to technology. With the advancement of the microchip and synthesizer, the result is that even the most basic of technologies can in some way act as an instrument. This is demonstrated by the hand-held device being able to be used to generate drum-loops, rythm sections and baselines for musical tracks.

Consequently this has lead to a larger populace of artists and musicians being laymans or autodidacts. Subsequently stringent traditional acoustic spaces have become redundant to these creatives. The result is that interaction between artists, instrument and listeners are stifled.

*3.15__ The musical spectacle and the idea of scene and be seen*

By identifying the nature of these interactions, in terms of stringency, it becomes possible to better provide spaces which nurture the creative outlets of all instrument types through artists. The acceptance of the effect of digitisation on the musical profession and the subsequent catering for it, creates a possibility for the reconnection of listener to artist.

The celebration of the spectacle of creating music allows the listener to gain a deeper understanding of the process of creation. The unveiling of the process in all its dimensions furthermore allows for the re-empowerment of the instrument to a place. As a result the instrument becomes a key part of the process.

By allowing for the process to occur in its entirety it allows the growth and redifinemant of the genus loci, within the production process of musical artefacts.

In summary the concept is to provide spaces of varying degrees of formality to empower the connections between artist, instrument and listener, in an attempt to recreate a contemporary genius loci for Marabastad, thereby promoting social cohesion.


# Chapter Four
# Programme

This chapter deals with an evaluation of the required pragmatic requirements to be housed within the structure to allow for the successfull achievement of the set out goals.

*4.1 (Precious page) Sheebo's Tavern*

*4.2 (Top right) Fixing radios*

# Chapter 4
# Programme

Identified within chapter one, the intended client of this building is COPA (Campus of Performing Arts), currently situated within the Lynnwood Area. To address the identified issues within Marabastad the programme was investigated firstly within the pragmatical attributes of three aspects:

1. The Artist

Programme which revolves specifically around the needs of performers. Spaces which allow for active performances, with an audience, and passive performances, as practice spaces. Artists spaces should vary in formality, allowing for formal and informal performances.

2. The Instrument

Functional spaces revolve around the instrument and the knowledge required to play/maintain and repair each instrument. Spaces should account for the traditional and electronic instrument and the varying degrees to which each differs.

3.The Listener

Less formal spaces which allow for the non-delimitation of traditional specific seating arrangments. This allows for impromtu creative perfomances to be enjoyed, in part or in full depending on the viewers will. It also prevents the stifling of certain creative genres while promoting others. Formal spaces for the technical appreciation of music genres should also be provided to allow for a level of academic enjoyment of musical performances.

Adjoining these spaces are auxiliary spaces which serve administration, support and logistical functions which allow the building to operate successfully within its context. The ideal of the building is to replace the function of the existing Jazz Square, while furthering this initiative to provide a holistic creative platform focusing on music within Marabastad. This chapter deals predominantly with pragmatic concerns, haptic qualities are investigated within the design development chapter.

Skills train
technician
of modern
pc/synth e

Tutoring of musicians in the art of playing an instrument, utilizing the knowledge gained by the hands.

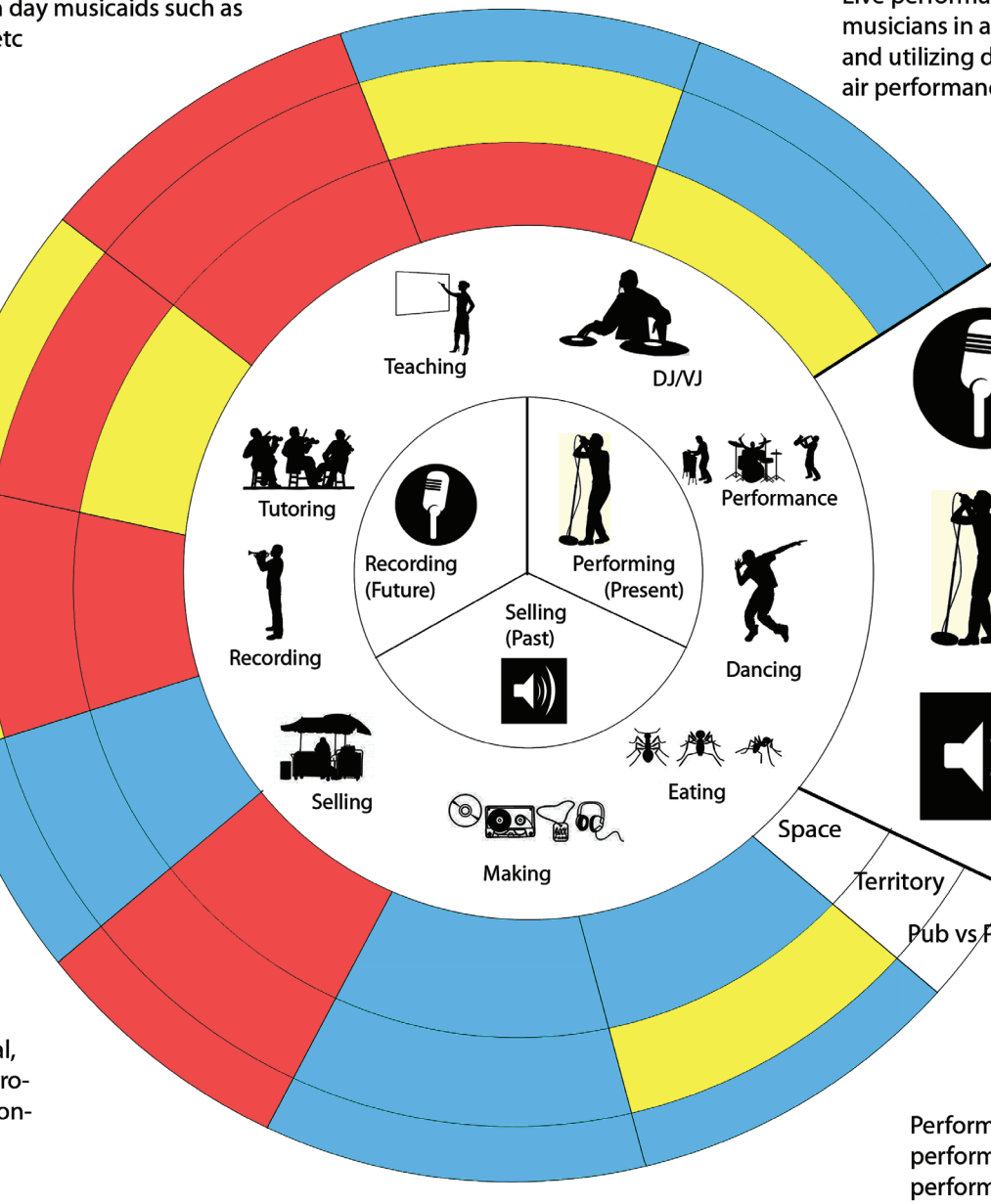
Recording of music, by musicians for creating albums and distributing performances.

NOT formalising the informa
but creating spaces which p
mote the sale of music, by c
trolling territory

Live indoor performances of music, much like a nightclub. Promote social echange in the evenings.

ing of prospective musicians,
s in the use and development
day musicaids such as
tc

Live performances of music by musicians in a traditional sense and utilizing digital aids. Open air performances




Recording
An event where music is captured/perfected for future listening.

Performing
An event where music is performed live.

Selling
An event where previously perfected music is enjoyed.

l,
ro-
on-

Performance and spaces for performing dance and arts performances associated with music

The production of musical artefacts for marketing or sale. Also as part of precinct to be deposited into the Memory Bank

Spaces to enjoy live music while eating, differing from spaces dedictaed to music this is prioritized for food more.

# PROGRAMME

4.1.

## THE ARTIST

*I can imagine many questions that human composers would like to ask whales. It would be nice to know, for instance, whether whales are aware of intentions as they compose and sing, and how they experience their own and other whales' songs. In deep water, when the sea is calm and singing whales are a certain distance away, all the sounds are resonant and followed by echoes – from the bottom of the sea, from the walls of underwater mountains, and from the under surface of waves.*

Ludwig Pesch, (2000: 140).

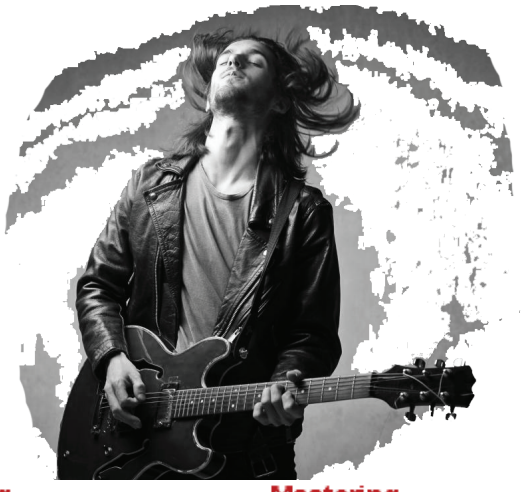
Sound and silence are the basic components of music. Music characterized by its structure in comparison to noise, is most commonly constructed of elements which vary in pitch (which governs melody and harmony), rhythm (and its associated concepts tempo, meter, and articulation), dynamics, and the sonic qualities of timbre and texture.

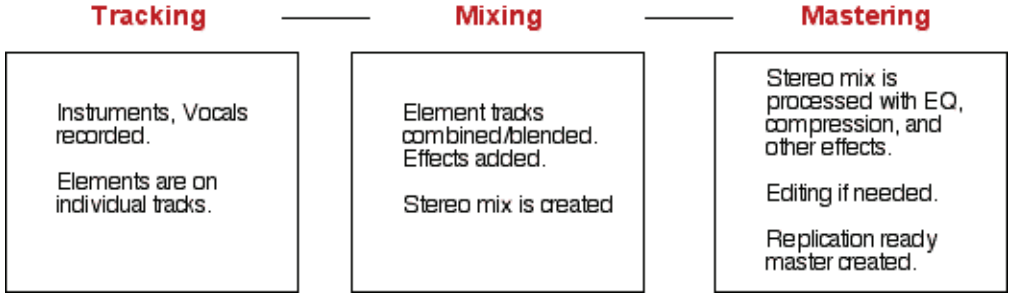
Where music became music, is still a debatable topic todat. Western idealogy would have it during the medieval ages when court-musicians were first employed by royalty to entertain and perform. Simultaneously traditional beliefs of Native Americans and Indians would suggest it was when humankind and first heard and perceived the songs of animals and nature (Pesch, 2000: 132-137). However the existence of the artist undeniably came into being the same time.

Even though the origins of music, and by extension the artist, remains a subjective topic amongst differing cultural groups, it is undeniable that the evolution of the artist has been closely associated with the evolution of the instrument. As technology has advanced, so too has the artist had to adapt to successfully manipulate the instrument to achieve the desired melody.

This continual development of technology within the industry has resulted in the contemporary model of music production utilized today(White, 2001):

Step 1: Writing the SongStep (Tracking)
2: Recording a DemoStep (Tracking)
3: Rehearsals (Tracking)
Step 4: Basic TracksStep (Tracking)
5: OverdubbingStep (Mixing)
6: Editing Music (Mixing)
Step 7: Music Mixing Part 1 (Mixing)
Step 7: Music Mixing Part 2 (Mixing)
Step 7: Music Mixing Part 3 (Mixing)
Step 8: Mastering (Mastering)





*...music is more than an arrangement of patterns of sounds–it is a complex phenomenon which has aspects that music lovers or even practitioners not fully aware of. It has yet to yield all of its secrets to mankind. The key to unlocking its mysteries lie in the human mind...*

*Ludwig Pesch, (2000: 140).*

The analogy of Ludwig Pesch, between music and a complex phenomenon, can be further extended to the spaces within which the creation of musical pieces occur. Each having its own unique characteristics. The common attribute of all these spaces alike is that, like music they are grounded by a set of definitive pragmatic prerequisites to function coherently. These are the basis for identifying the programmatical requirements within the building.

In conjunction with the spaces required by the production process, COPA campus in the Lynnwood area was used as a yardstick in identifying the required spaces to be included within the programme. In specific reference was given to a programme which would allow for the successful utilization of the structure and its associated spaces through the Pretoria COPASA campus.

According to COPA (2012), the Pretoria campus includes the following spaces:
*"...facilities include a resource centre, rehearsal rooms, demo rooms (production suites), a recording studio also hosting an Apple Mac equipped technology room and a Live Performance Venue."*. This illustrates the need for the campus to include all facets of the musical creation process, from conception to performance and post production editing.This gave rise to the following functions and spaces to be housed within the structure.

## TRACKING

Tracking is the general term which refers to the processes which occur before a definitive song structure is recorded or finalized (White, 2001) . This stage is the architectural equivalent of concept phase to a sketch plan development.

Like most development phases, tracking is cyclical in nature, and often completes certain steps of the process more than once. This entails that this is often the longest process of the songs production. As a result pragmtically the most amount of physical space is often required to allow for multiple artists at varying stages of the tracking phase to simultaneously utilize these spaces.

In concern to the artist themselves, spaces need to provide for the conceptualisation of music pieces within an environment which allows for the interchange of ideas and interplay of melodies. Currently this is provided within the COPA campus through the resource centre, rehearsal rooms and demo rooms. These spaces provide the artist with sufficient space to both perform melodies live, record and digitally replay them, amongst fellow students and music enthusiasts.

The tracking phase is also the phase with the most input from multiple differing sources. This entails that adequate space needs to be provided for the *"demoing"* (testing) of the piece at certain phases to allow for varying inputs.

*4.4__(Bottom left) Tracking mixing mastering, music production process*

# MIXING

Mixing is the general term which refers to the processes which occur after a definitive song structure is recorded or finalised, but before a final product is released (White, 2001) . This stage is the architectural equivalent of a concept sketch plan to a working drawings development.

The mixing phase is an unique phase, as it is usually the phase which witnesses the first shift of creative control from the artist exclusively to a more collaborative process between a sound engineer / technician and the artist. This process much like the tracking phase is cyclical in nature and often requires a back and forth between the artist and the technician.

During the tracking phase, the bulk of recording is usually completed. These recordings are done individually according to instrument, vocals and effects and are rarely recorded together. The result is that during the mixing phase these individual recordings are combined, levelled, edited and finaly refined to achieve the desired sound.

In concern to the artists themselves spaces need to provide for, most importantly, the feedback of music pieces within an environment which allows for the interchange of ideas between the artist and the technician. Currently this is provided within the COPA campus through the demo rooms.

These spaces provide the artist with sufficient space to digitally replay musical samples and tracks, allowing for fellow students and music enthusiasts to provide input and suggestions on how to digitally alter certain aspects of the sound.

The mixing phase is the first stage which nullifies the connection between the artist and the instrument physically, as most of this phase occures on a digital medium. This means that spaces need not be provided for the active playing of instruments within this phase.


# MASTERING

Mastering is the general term which refers to the processes which occur after a definitive song structure is recorded or finalised, edited and then final adjustments are made to enhance the quality of the track (White, 2001) . This stage is the architectural equivalent of the actual building of a plan.

Mastering is technically much like the mixing process which followed before, however it is usually concluded with very little input from the artist or other musical entities beyond the producer or technician. It involves the minor editing and equalization of the musical piece.

Mastering is the final step of the process which ensures that the mixing process was of such a nature that it has produced a satisfactory piece of music in line with the desired sound of the artist. The process is usually linear from the mastering studio back to the artist and intended audience.

THE ARTIST

THE MAKING

*The arriving artist(top) is exsposed firstly to the spaces demonstrating the actual making of music .*

*The progression is then to interact with these spaces.*

*Depending on the level of the inter-action the artist can choose which space is most applicable.*

*These interactions can be seen as loops within loops as music is edited back and forth.*

*Eventually the product is available as a track, to perform, listen to or sell.*

THE MIXING

THE MASTERING


THE ARTIST

THE TRACK

4.2.
## THE INSTRUMENT

*"[N]o honest craftsman or maker knows in the process of working whether he is making or creating ... [t]he first, the second, and the last reality for him is the work itself, the very process of working. The process takes precedence over its result, if only because the latter is impossible without the former."*

Juhani Pallasmaa, (2009 :80).

Alike to the craftsman the instrument knows no other reality but that of the artist that plays it. A piano, no matter how hard it is struck, can produce the sound of a drum, and a drum inversely cannot produce the sound of a piano. This relationship between the artist and thier instrument share a connection which allows the artist to achieve a certain sound from their instrument.

Juhani Pallasmaa (2009) writes about these connections between learning and the hand. He describes the relationship as didactic, and that the brain learns as much from the hand as the hand learns from the brain.

He elaborates on this passage of learning as a means of transferring embodied knowledge from the muscular movements of the hand into the memory bank of the brain, to be recalled when needed in the future. This transferal of skills, or knowledge, from the hand to the brain he describes as only able to happen through the actual exercising of a craft or skill.

The threat of separation between craft and genus loci, through the propogation of information via cyberspace, was identified in the previous chapter. This explosion of information has resulted in the absence of connections between apprentice and master being formulated in the exercise of creation. The resulting void has caused the loss of embodied memories being transferred.

This transferral of the embodied energy which Pallassmaa refers to can be witnessed extensively in the development of the contemporary acoustic six stringed guitar. The contemporary European guitars origins are unknown, however it is clear that it evolved from the progression of a former chordophonic instrument (Jayson Kerr and Powers, 2013: 2).

It was most likely introduced to medievel Europe from the middle east. It is also possible that the Roman or Byzantine lute was adopted from Egypt (Jayson Kerr and Powers, 2013:2). Regardless of its origin, the contemporary six stringed acoustic guitar has formed the base of countless genres, and as a result, the maintenance of its associated embodied memories is of importance.


*4.5 Guirars through the ages*

The instrument forms the fundamental basis for the creation of sound. Even within accapella the human body fulfills the role of the instrument. One of the most influential instruments across a number of societies has been the guitar (Jayson Kerr and Powers, 2013:2).

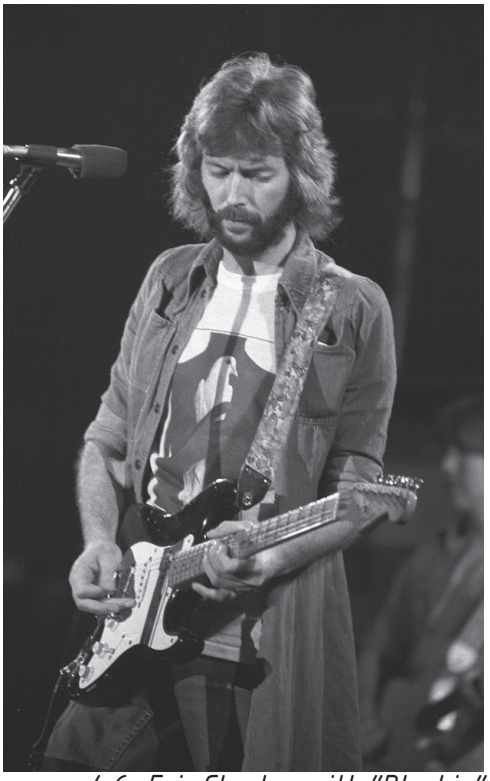
The guitar, since its beginnings, has influenced both varying genres of sound and their associated visual styles. As a result the guitars evolution has been closely associated with the development of contemporary musical image, branding and visual impact. In a sense the guitar has evolved from its beginnings as a practical chordophone, lute, to a personification of the artist themselves.

This personification of artist through instrument emphasizes the importance of understanding the mechanics of the instrument which is to be played.

Plato describes the qualites of music as follows,
*"Music gives a soul to the universe, wings to the mind, flight to the imagination and life to everything"*

Music hence becomes the personification of an instance of a particular individuals life which allows the communication of a specific idea, and not merely a collection of notes.

However, like a writer who must first identify the constraints of a language, so too must an artist identify the limitations of his instrument. These limitations are only revealed through the actual handling, maintaining, repairing and experimenting with an instrument. Once these limitations are identified they present opportunities for the instrument to be manipulated to achieve a desired outcome.



*4.6_Eric Clapton with "Blackie"*

Eric Clapton is a prime example of this idealogy applied to his instrument. In 1970 he purchased six Fender Stratocasters guitars from Sho-bud guitar shop in Nashville, Tennessee. He gave away three of these six guitars. He then assembled the best components from the remaining three guitars to create *"Blackie"*. This remained his favourite guitar until the day he retired.

In respect to actual instrument training provided by COPA, beyond instruction on playing the instrument, COPA does not currently cater for the interaction and exchange of knowledge through the actual creation, maintenance and reparation of instruments within its current programme. It does however provide for the theoretical discourse around how instruments function.

It is envisioned to include this aspect to the COPA programme to allow for the successful re-establishment of the process of transferal of embodied memories from master to student through the art of creating. This act of creating is not only essential to re-establishing the connections of transferral for memory, but also as a means of re-establishing a genus loci between artist, instrument and place.

Historically specific instruments, played by specific people within specific places has resulted in the definition of a genus loci (Ballantine 1993) being within an area through the transferal of knowledge between master and student. This knowledge attached people to a culture by association, and thereby created a genus loci for the area. This relationship was exceptionally evident historically within Marabastad.

## REPARATION

The predominant connection between the layman of the area and the instrument, will be in the form of a service which allows for the minor repair and restoration of instrumental artefacts. This includes instruments, recording devices, playback devices and paraphernalia. A focus is on the repair of movable instruments such as guitars, drums and trumpets.

Furthermore the focus is on instruments which are not labour intensive to repair, as to prevent the extensive requirements of technically specific spaces which require large ancillary spaces to enable the repair of these instruments. The result of these limitations is the refocusing on a handcraft based repair process. Minor repairs could include renecking of guitars,rebridging instruments and replacing wind instrument valves. The programme should also facilitate for the repair of electronic instruments.

## CREATION

In 1967, Eric Clapton as part of the band Cream, recorded *"Sunshine of your love"* . This track was characterized by the *"woman tone"*, informally named by Clapton himself, which is a characteristic over-driven sound that is articulate, yet "thick".

This distorted, fuzzy and quite muted sound is how he articulated his music during the mid- to late-1960's. He achieved this electric guitar sound by compiling a custom guitar out of a Gibson SG solid body guitar and Humbucker pick-ups played over a Marshall tube amplifier.

Eric Clapton is no doubt an extraordinary example of an artist who understands his instrument. This understanding is what has enabled him to continually reinvent his sound through different self created instruments. This process of creation is vital to him representing his ideals through music and allows him to create specific desired sounds.

Therefore, the programme should include spaces which allow for the tinkering and experimentation with instruments in an attempt to achieve the artists desired sounds. This space can form part of the repair and restoration space discussed above.

COPA does not currently provide any spaces which deal with the instrument explicitly.

## TESTING

Within the process of creation and restoration adequate space should be provided to allow for the testing and tuning of instruments.

THE ARTIST

THE INSTRUMENT

THE REPERATION
AND CREATION

The arriving artist(top) is exsposed firstly to the spaces demonstrating the actual making of music .

The progression is then to interact with these spaces.

During these interactions if the instrument needs repairing then the facilities are available.

The occasional artist can also utilize the space to have their instruments repaired.

Finally students can learn to repair and create instruments through the art of doing.

THE MIXING


*4.8 Pieces of a guitar*

4.3.
# THE LISTENER

*"One good thing about music, when it hits you, you feel no pain."*

Bob Marley.

As the instrument is fundamental to the production of music, so too is the listener a prequisite to the existence of music, for without them music would be irrelevant. The listener's connection to music is not as easily defined as that of the artists or the instrument. The artist is easily recognized as the perfomer, the instrument as the object being manipulated to produce the sound. The listener, however, is not only the person or people being performed to but also the passerby, the artist themselves and any person who can hear the music.

As a result, the physical definition of space in regards to the listener is more challenging than defining the spaces required for the artist or instrument programmes. It becomes evident that defining the spaces in regards to the manner in which the listeners connects to the music will be easier than defining the function to occur within the space .

To illustrate this approach, consider a traditional concert hall. This space is pragmatically defined by the function designated to the space. As a result, the space is arranged to allow for optimal execution of the designated function, for example, the sight lines are the primary design driver in designing the seating within a cinema.

Inversely the level of interaction between the listener and the music can be utilized as a means to define the required spaces. As an example, a public house would encourage the listener to participate in singing, clapping and dancing with the music, while a concert hall would require the listener to engage with the music in a more stifled manner.

These varying levels of interaction and formality between the listener and the artist dictate the spaces required, and describe their attributes to allow for these interactions.


Due to the proposed site of the building and the urban vision, the programme is of a civic nature. The result of this is that a large percentage of public around the building will utilize these spaces as a means to enjoy music. In a sense, this is the liminal space between the specific, and the impromtu.

Meandering through these liminal spaces they should function as circulation, but allow for the informal exchange and interaction between music and the listener.

COPA currently does not provide unrestricted access to any part of the campus.

## OBSERVER

Spaces which allow for observers to both appreciate and influence the progression of music throughout and after the performance. These spaces usually function as pedastal for the showcasing of intermediate musical pieces. The result is that the interactions between the observer and the artist are of an informal nature and usually happens between people of an equal stature.

COPA currently provides these spaces in the form of practice rooms, demo rooms and an indoor theatre space.

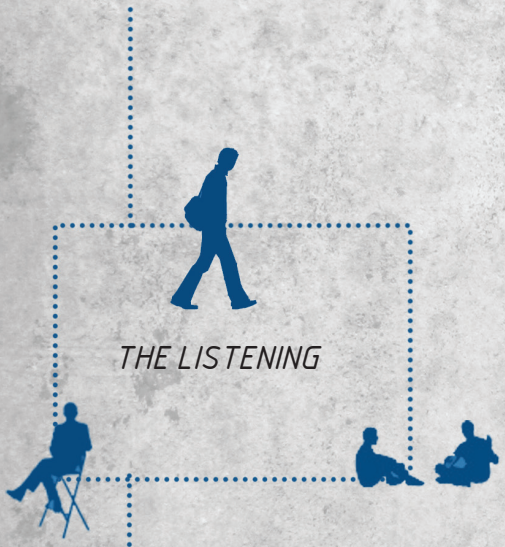
## AUDIENCE

Audience members have been entertained by court musicians since the medieval period. Generally the artist will perform and the audience will listen, the interaction is very linear and rarely is the audience actively involved in the creation of the music.

As a result the spaces associated with these interactions are predominantly static and linear in nature. Large enough space has to be provided to allow for the comfortable seating of audiences which allows everyone to experience the performance holistically. This can be seen as your more traditional theatre spaces.

Currently COPA campus has facilities which provide this function in the form of indoor theatre spaces.

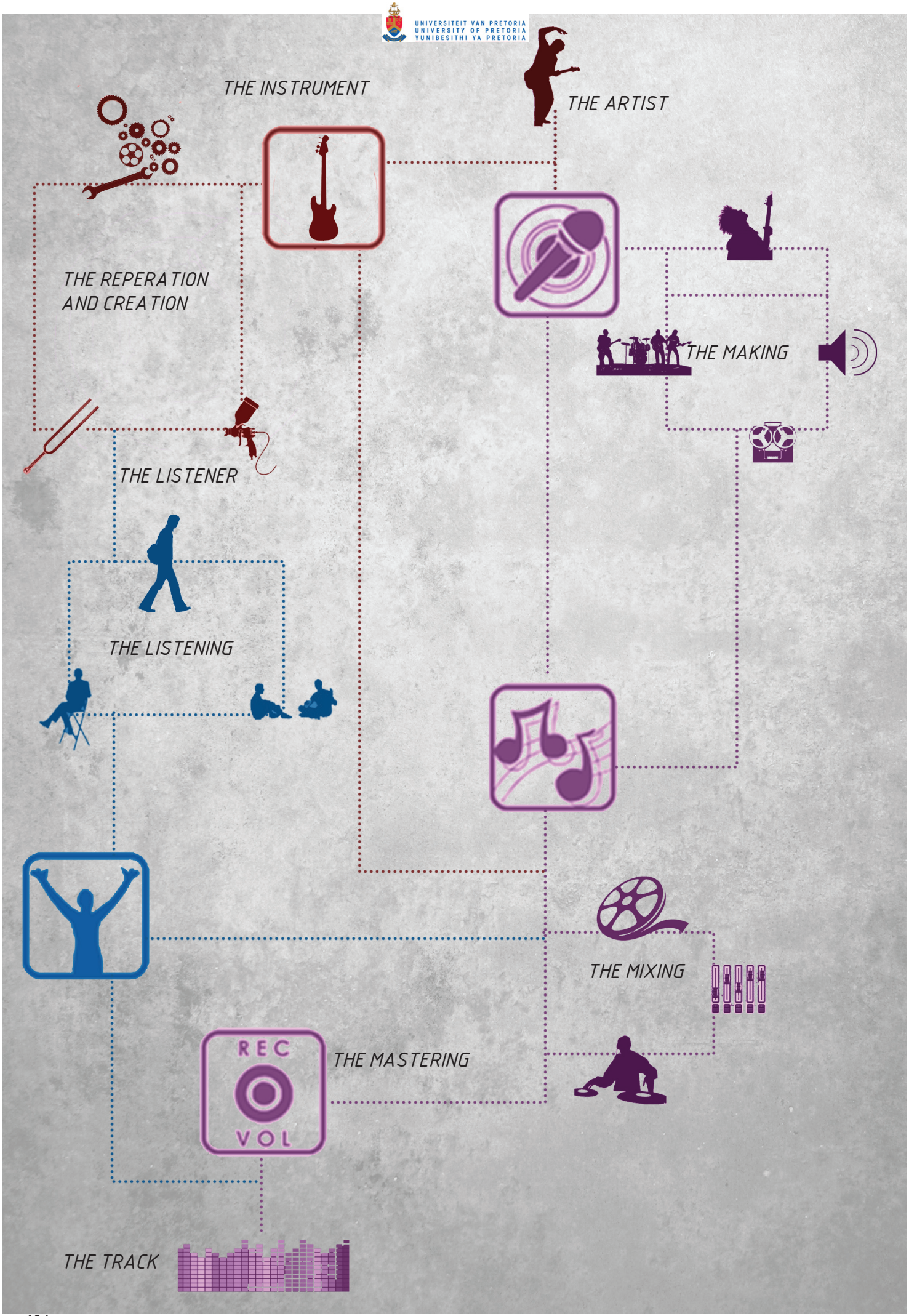
THE LISTENER




*The flanuer passes the building and is enticed to enter by the emanating sound.*

*They are exsposed by passing, sitting or formally engaging ( as an audience) to local artists and genres.*

*4.9 Programme: Flaneur, Observer, Audience*




# Chapter Five
# Design development

This chapter deals with the development of the design through the conceptual phase up until the current design point.The process was in no way linear, but is presented as such, to allow for better communication. It delves into the design drivers and informants both physical and theoretical. The gaol being to inform why decisions were made.

*.5.1__(Previous page) Bottle store*

*5.2 (Top right) Walking past existing site*

# Chapter 5
# Design development

*"Yet the laboriously sought musical epiphany rarely compares to the unsought, even unwanted tune whose ambush is violent and sudden...The collector is haunted by the knowledge that somewhere on the planet an intact chunk of his past still exists, uncorrupted by time or circumstance."*

*Geoffrey O'Brien, Sonata for Jukebox: An Autobiography of My Ears, 2001*

This violent and sudden ambush (O'Brien, 2001) can be compared to the involuntary hearing of a track or piece of music which is played on a bus, in a store or by a rowdy teen in public via their cellphone. It ambushes the unexpecting listener with sounds of delight or distraction. According to Julian Treasure (2009), in his TED talk on sound and its influence, music has the most predominant effect on human emotions. The mnemonic result is that the piece of music is often associated with a particular emotion, and subsequently this emotion is recalled whenever the sound is again heard.

The *"Earworm"* phenomenon, when a specific piece of music is repeated in your head continually, often has a direct influence on the mood or actions of individuals (Treasure, 2009), mimicking that of when the piece was first heard.

As was identified in the theoretical discourse chapter, the concept is to create spaces with varying levels of formality, i.e. territories, as a means to promote planned and impromptu musical performances. The goal being to maximize the interactions between artist, listener and instrument. The display of this process from beginning to end, allows the listener to become informed as to the steps involved in producing music, while simultaneously being able to enjoy music performances. The goal being to reconnect the user to the historical layer of music within the precinct. These identified goals gave rise to the following precedent and design developments.

# PRECEDENT STUDIES

5.1.1.

## SUBCAT STUDIOS, FIEDLER MARCIANO ARCHITECTURE

Name: Subcat Music Studio.
Location: New York, United States of America
Date constructed: 2001
Size: 1700 sqm
Architect: Fiedler Marciano

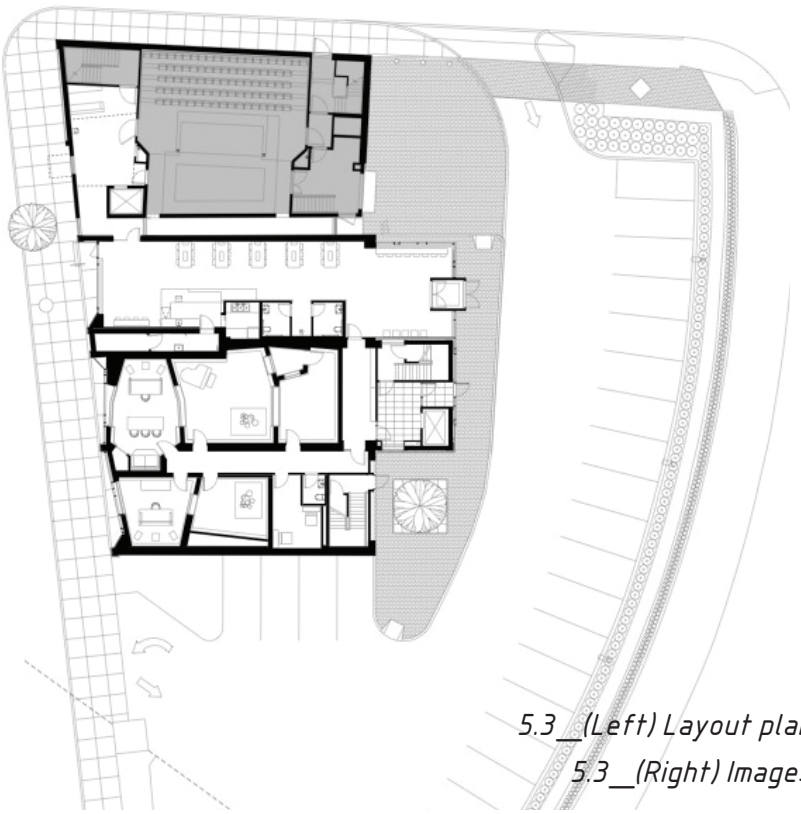
Summary: The project forms part of a renovation initiative completed on an existing building within the urban precinct of sycaresse, NY. It features mulitple recording studios, performance spaces, a community centre and accomodation.

Relevance:

Contrasting with the strict acoustic and vibration requirements necessitated by the recording studio, the exterior skin is characterized by its openness. Large storefront windows that create a dialogue between the studio and the urban environment open up the primary facade.

These large storefront windows, unlike most recording facilities (which are sealed acoustic territories) allow the passersby to peer into live recording sessions at SubCat Studios from outside.

As part of the technological approach inside the building, the architect replaced the existing floor framing with floating concrete slabs to buffer sound and vibrations from passing trains.



*5.3__(Left) Layout plan of Subcat Studios*
*5.3__(Right) Images of Subcat Studios*


5.1.2.

# SCHOOL OF MUSIC THE LPI, JOAO LUIS CARRILHO DA GRACA

Name: School of Music Lisbon Polytechnics Institute
Location: Lisbon, Spain.
Date constructed: 2008.
Size: 1560 sqm
Architect: João Lućs Carrilho da Graca and design team.

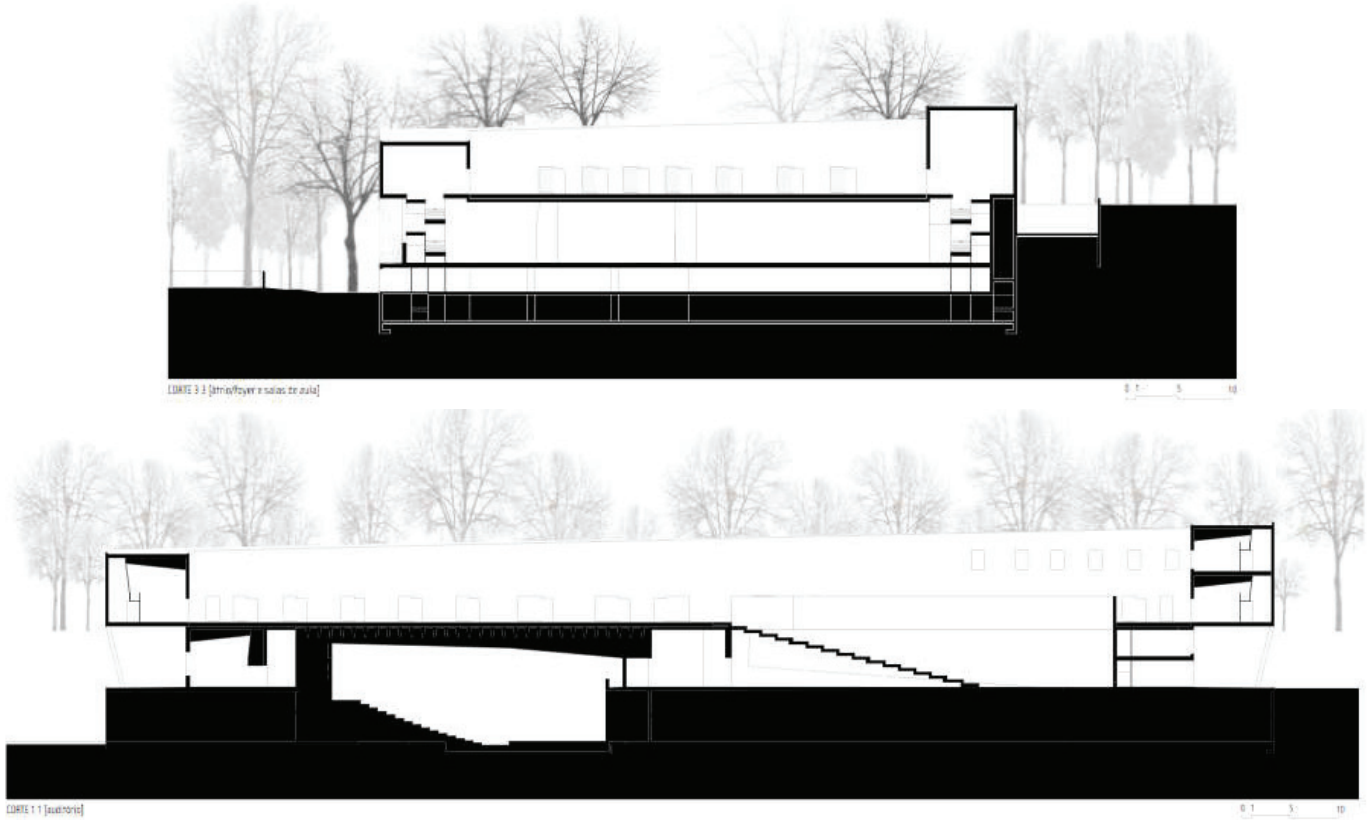
Summary:
The project is based in a dense urban precinct of Lisbon, Spain. From its outset, the project faced challenges on how to insulate certain spaces from the intrusive urban noise. The projects program caters for a wide variety of unique musical functions in its classroom, practice rooms and theatre spaces.

Relevence:

The relevence of this project is summarized well in description given by the architect concerning his aims: '*When I first started working on this project I happened to be visiting Eero Saarinen's School of Music in Ann Harbor. Even though the building is interesting, it struck me as odd that no music could be heard in the passageways, not even in the common spaces. At about the same time I watched a documentary about the Music Conservatory in Santiago de Cuba, it was an old colonial house filled with people, joy and music. For this project, I wanted to push to the limits the possibility of acoustic excellence – and also the seclusion and soundproofing of every space – as well as convey the conviviality and extroversion particular to certain musical practices.*"

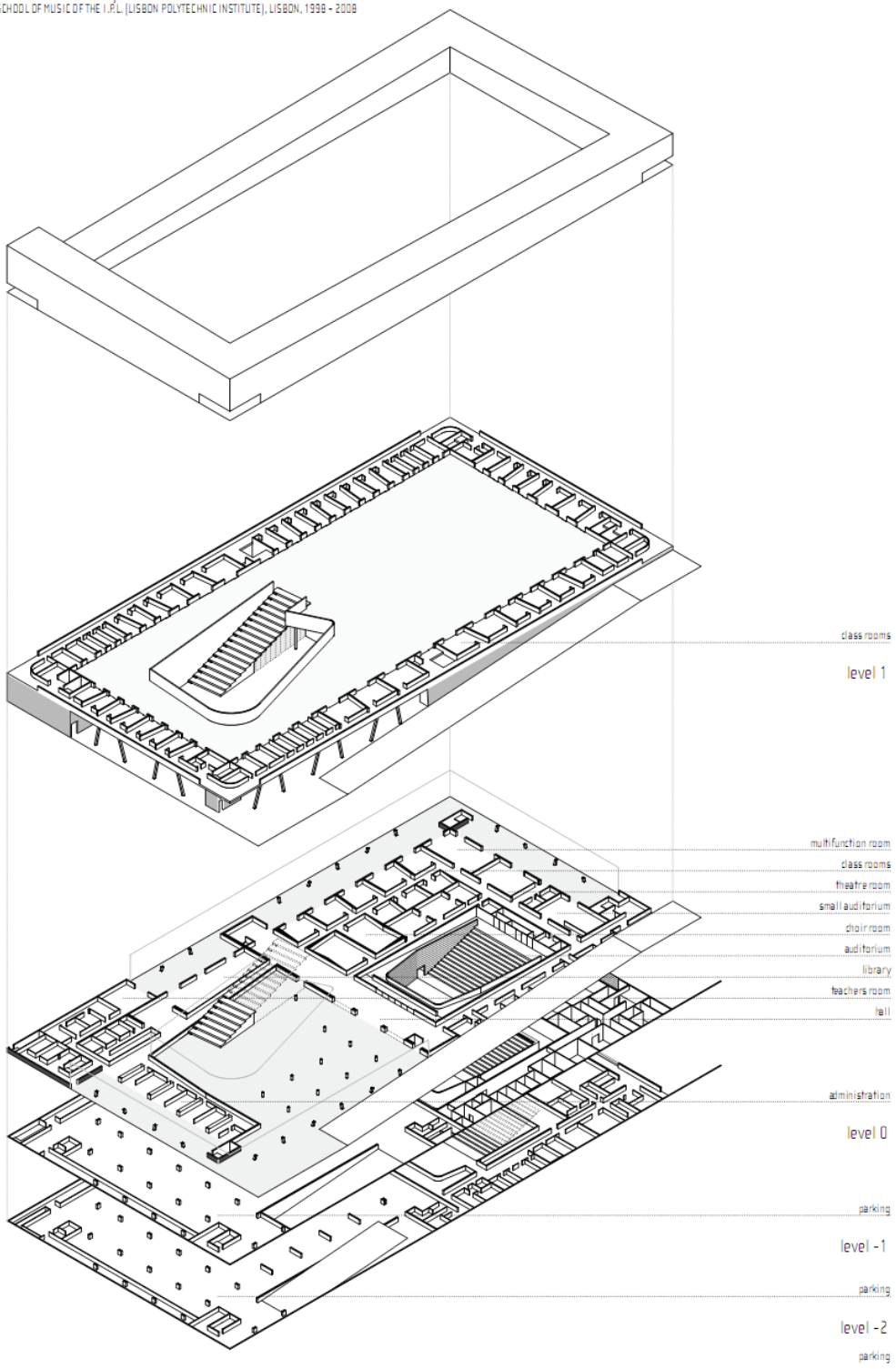
This precedent is a particularly relevant example of planning in the way it deals with its urban context. It successfully creates acoustic insulated and isolated spaces for certain practices, while for others it allows the escape of sounds from the spaces to be shared with common spaces. Isolation of spaces is achieved by the use of concrete as the main building material, while the interior finishes are predominantly timber to allow for a warm touch and lively sound.

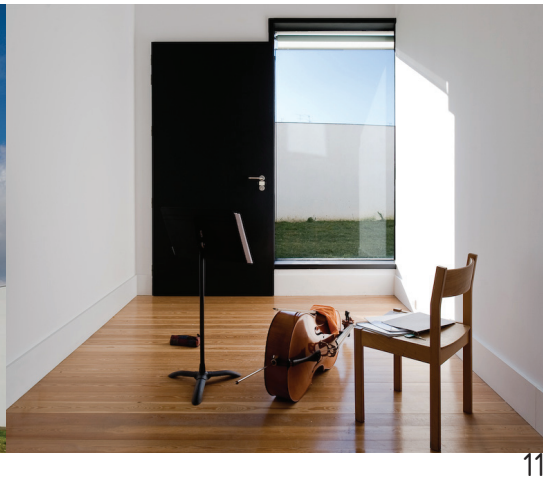
*5.4__Section of The LPI*



## 5.5__School of Music The PLI

JOÃO LUIS CARRILHO DA GRAÇA
SCHOOL OF MUSIC OF THE I.P.L. (LISBON POLYTECHNIC INSTITUTE), LISBON, 1998 - 2008



5.1.3.

# NEW ROYAL THEATRE, LEON GROBBELAAR

Name: New Royal Theatre
Location: Marabastad, South Africa
Date constructed: 2011
Size: N/A
Architectural Student: Leon Grobbelaar

Summary:
The project was submitted for fulfillment of an MProf(Architecture) degree for the student Leon Grobellaar in 2011. It dealt with the reconnection of place and people with the historical tradition of oral story-telling.

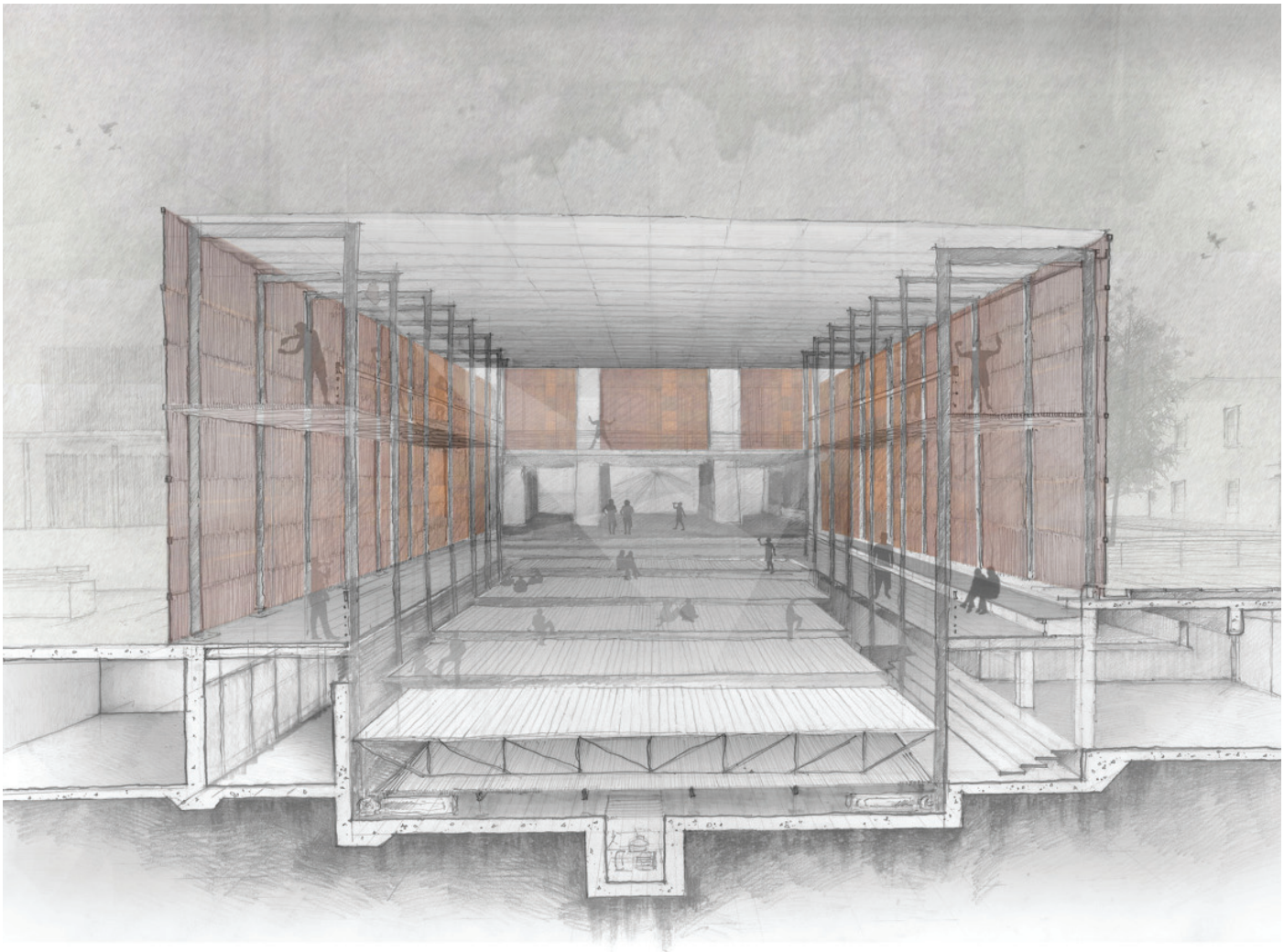
Relevance:
The project holds relevence, due to the similar ideals identified within the project and the ideals identified within this investigation. The projects identifies a unique way of ordering space to allow for the integration of building interior, with the street edge in a manner which promoted the established urban condition.

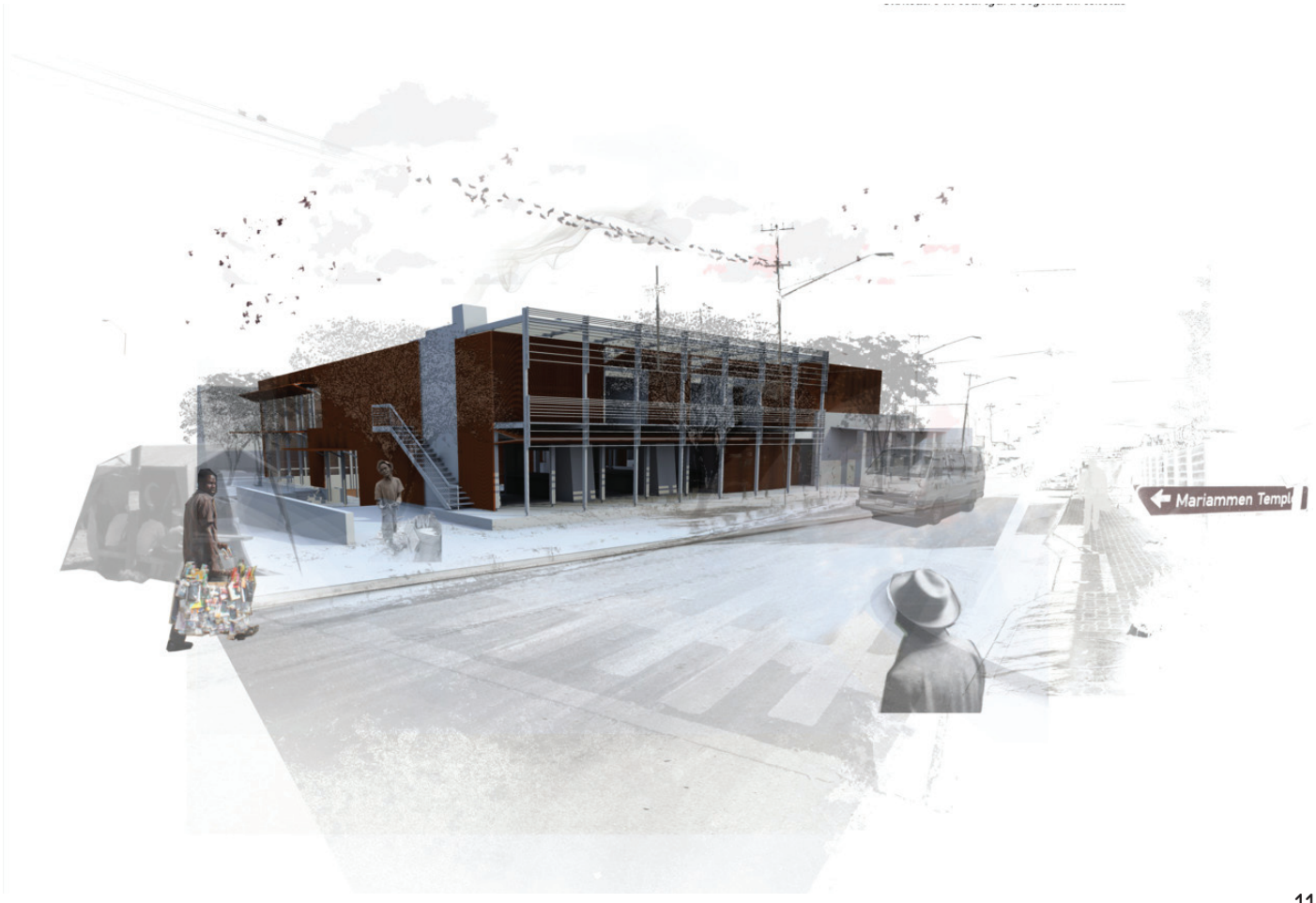
The adaptability of the interior spaces are noteworthy, as they allow the creation of spaces for varying functions without compromising the form. This allows the structure to cater for a range of activities.

The precedent also serves as a technical informant in the manner in which the floor plane was manipulated as a means of manipulating space.

*5.6__(Top right) Section of the New Royal Theatre*

*5.7__(Bottom right) Illustration of the New Royal Theatre*





5.1.4.

# WINDMILL LANE STUDIOS

Name: Windmill Lane Studios
Location: Dublin, Ireland
Date constructed: 2011
Size: N/A
Architect: N/A

Summary:
This is not per se an architectural precident. It is more of an urban condition which arose from a very specific set of circumstances. The following summary is not based at all in published fact, but merely an account of this street from my own visit there.

Windmill Lane Studio is a traditional studio housed close to the docks of Dublin. It is famous for recording artists such as U2 and Van Morrison. During their early years U2 utilized this studio exclusively and established a bond with the surrounding community.

Soon they began a project which promoted aspiring artists to utilize the building as a canvas for street art. At first it was restricted to only the studio wall, but soon it grew to include the street and adjoining buildings, all of which wished to be included.

In 2007, the Bank of New York financial management company, relocated their Dublin offices to Windmill Lane. I was fortunate to be amongst the installation team for the companies interior. This was when I experienced the street on a daily basis.

Relevance:

The project allows for the mediation of insulated spaces, due to their acoustic requirements, with the urban condition by appropriating the hard edge into a representation of creativity. Some would say that it even represents the internal creativity on the external.

This is a noteworthy example of how urban management can change a design difficulty into an opportunity.

*5.8__Windmill Lane Studios interior*


*5.9__Windmill Lane*

*5.10__Windmill Lane Studios*

*5.11__Windmill Lane*

# IDENTIFYING TERRITORIES

From this concept, it became evident that identifying which prominent territories would have to be recreated would be paramount to the success of the project. What follows is a summary of these territories, represented through multiple maquettes, built in an attempt to understand the territories in three dimensions. The majority of these territories occur within Marabastad, but are not restricted to those identified there. Finally this is a distilled version of these spaces as in reality they would most likely occur as a hybrid of these territories.

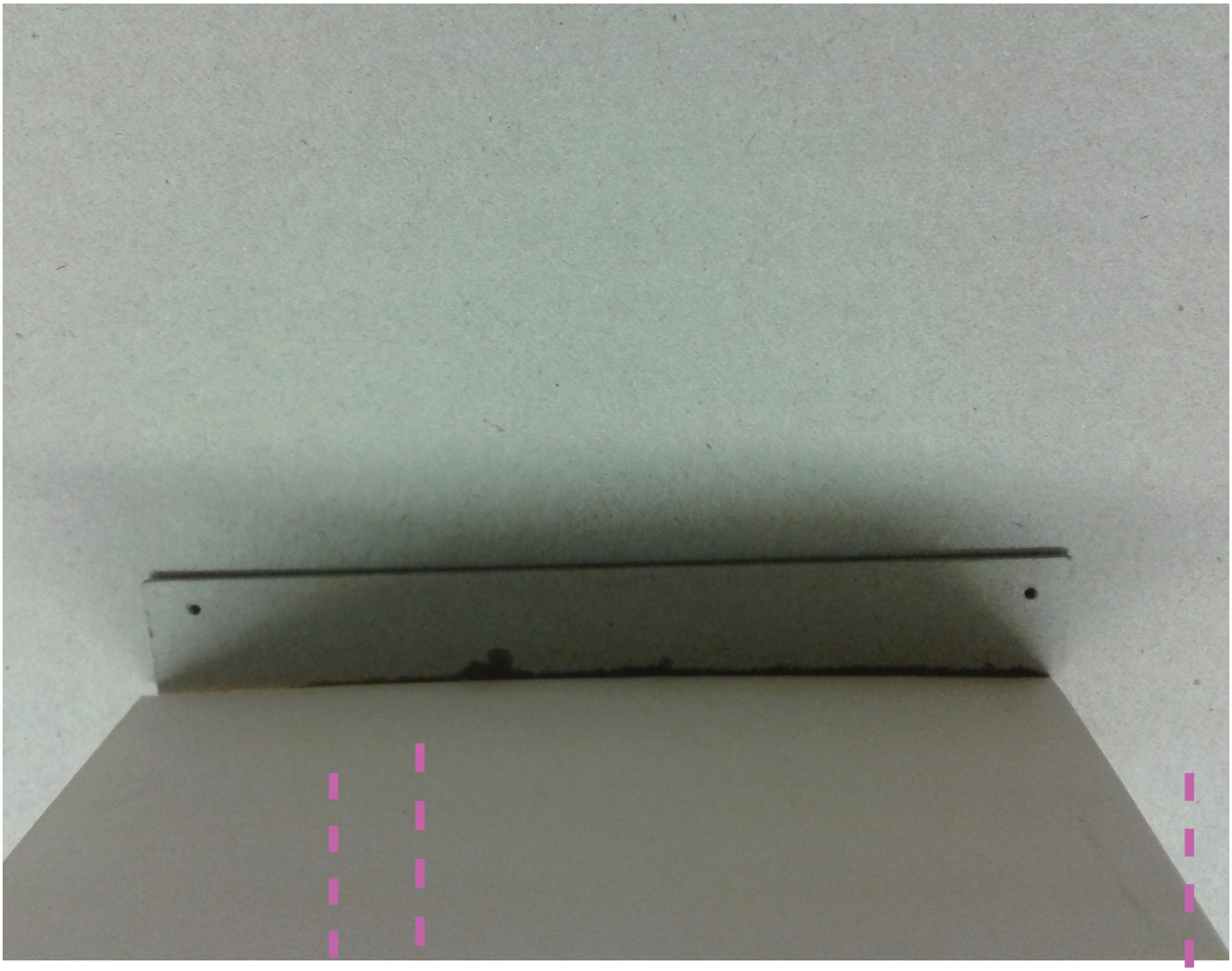
5.2.1.

## THE EVERYWHERE TERRITORY

The most basic requirement for music within Marabastad is space. Space is sometimes ingeniously created out of shopfronts, unused alleys and open street corners. This territory is extended through the use of music. The extent of the territory is thereby determined by how far the music can be heard. Often the boundaries of these territories intersect and as a result multiple music pieces can be heard.

Noteworthy is that within Marabastad these territories are often located close to a power source. They are used to attract people to business, and as a result electricty is often laid on via extension cables over long distances to ensure that it can enable the territory in the desired place.

Typically these territories are located on vibrant street edges or close to trade hot spots.



5.12__The Everywhere Territory

5.2.2.

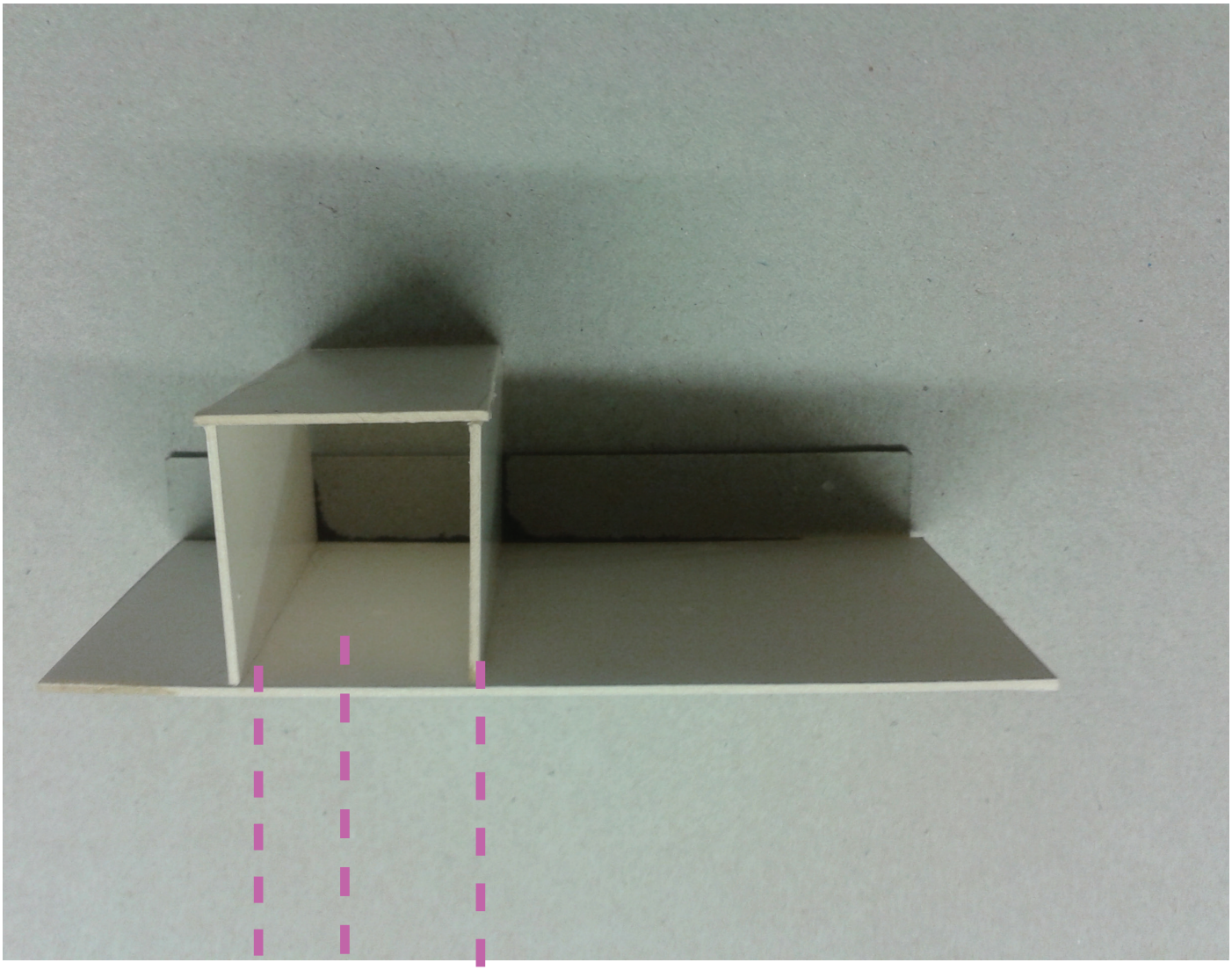
## THE ISOLATED TERRITORY

Isolation, the act of setting something apart from others, is important in certain acoustic settings. This territory traditionally promotes the formal interactions of music. Due to digitisation, this territory has been become more common outside of the limiting confines of a recording studio.

Traditionally this territory is composed of spaces which are of a production level such as recording studios. Today , in my opinion, this is the most compromised territory due to digitisation. Digitisation has allowed for the free access to information and technology which allows lay persons to create this territory within their own households.

Within Marabastad, these types of territories are limited. Little to no formal production of music actually currently occurs within this area and as a result none of these territories exist within the precinct that cater specifically for music. There are however similar territories defined within the region in the remnants of religious buildings, abandoned bioscopes and Steve's Record store.

This territory is clearly defined by a solid insulative edge. The existance of this territory concomitantly requires space, electricity and insulation.



*5.13__The Isolated Territory*

5.2.3.

## THE DEFINED TERRITORY

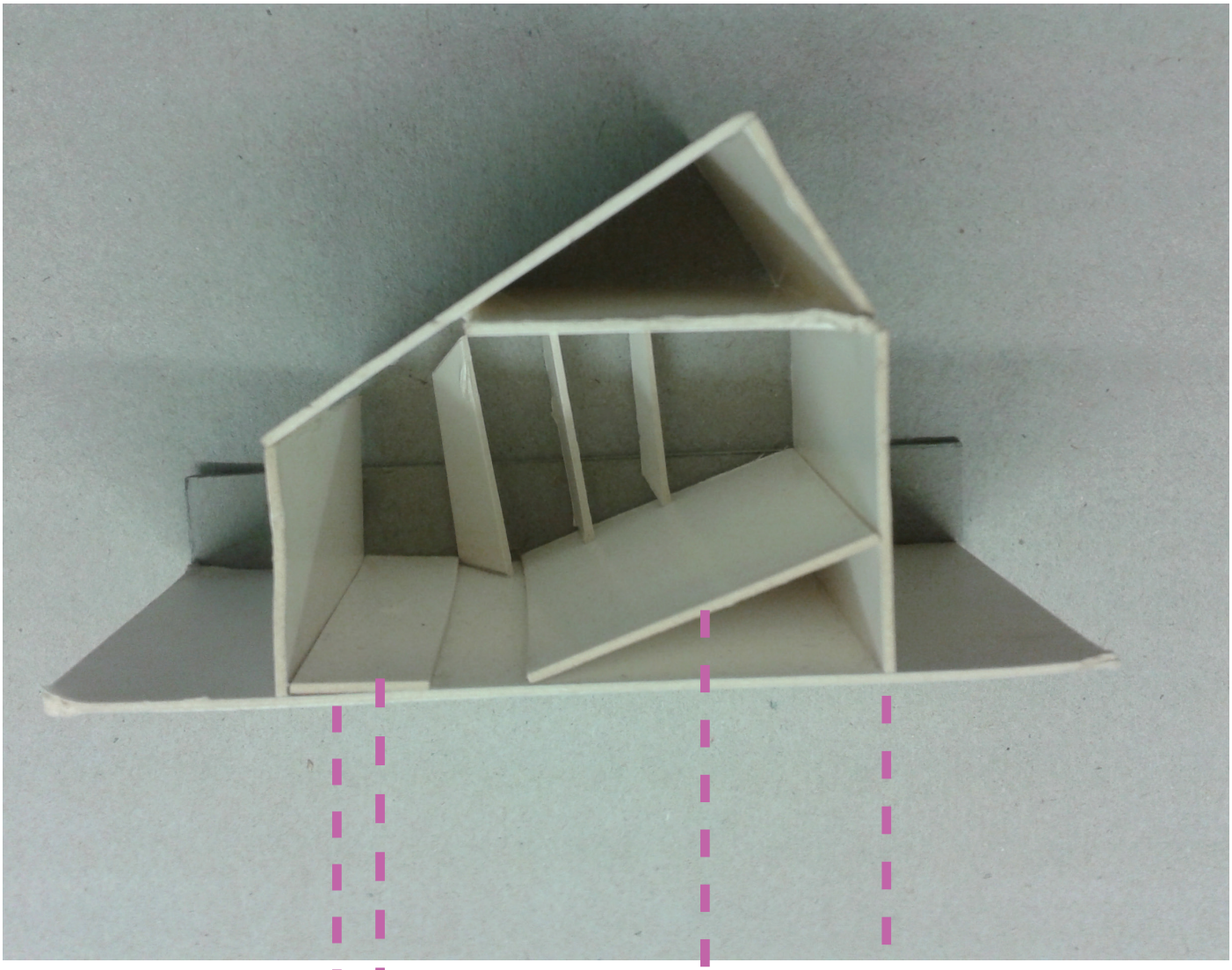
The defined territory, much like the isolated territory, promotes more stringent interactions with music. The defined territory, however, allows for the additional interaction of the listener. Traditionally these spaces are adequate to accomodate an audience, usually seated.

The presence of audience is what separates this territory from the isolated territory. It is usually characterised by a stringent connection with music, and therefore explicitly defines where the artist performs, and where the listener listens.

The influence of digitisation on music has had a minimal effect on this territory.

Within Marabastad these types of territories are limited. They are generally restricted to indoor spaces such as a few taverns and the abandoned theatres.

This territory is clearly defined by a solid insulative edge, and demarcated by specific regions for specific functions. The existence of this territory concommitantly requires space, electricity, insulation and infrastructure.



*5.14__The Defined Territory*

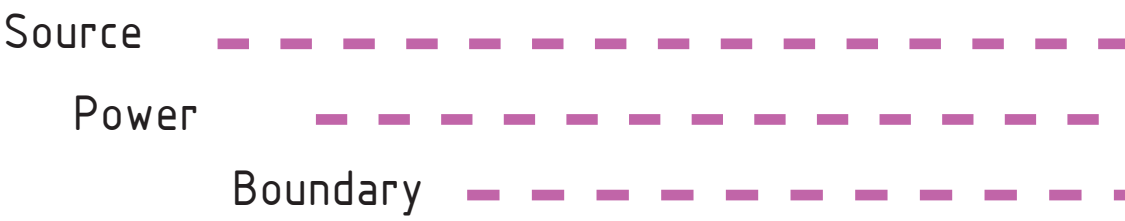
5.2.4.

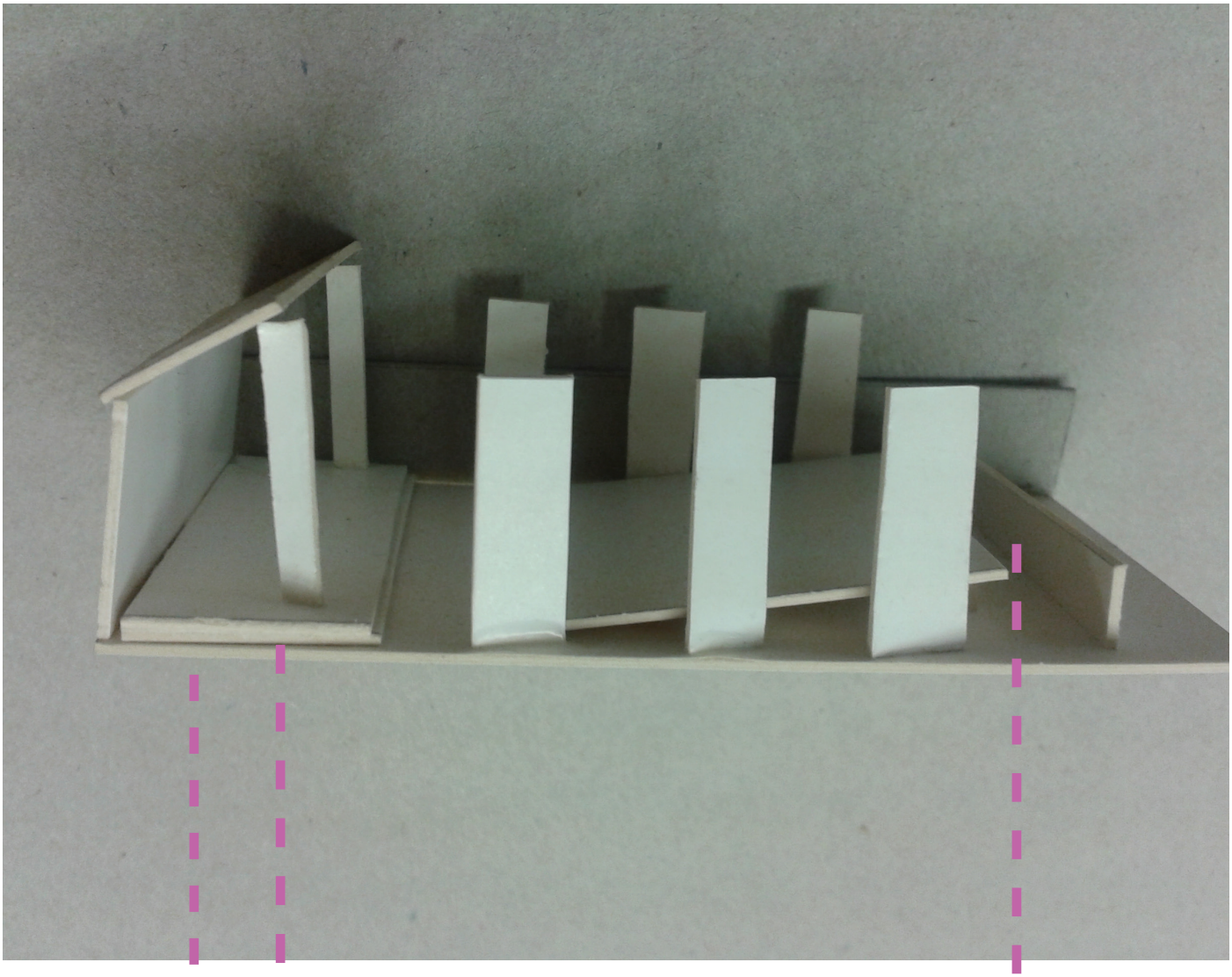
## THE UNDEFINED TERRITORY

The undefined territory is not as much an undefined territory as what it is a less defined territory. This territory is, in essence, the deformalised rendition of the defined territory. Like the defined territory, the undefined territory accomodates a formal audience. However, it does not explicitly demarcate the boundary of the audience space.

The territory is not clearly physically defined, and like the everywhere territory, it relies on the limitation of where the sound can be heard to define the boundary of the territory.

Within Marabastad this territory forms part of the gateway to the proposed site in the form of the jazz square. The jazz square is an outdoor musical space, which is unfortunately not utilized. For this territory to succeed, it requires a degree of separation from outside sounds, while providing the users with a sense of shelter from the elements. Electricity is not a prerequisite, but depending on the scale of the space it is ideal for larger spaces.





*5.15__The Undefined Territory*

5.2.5.

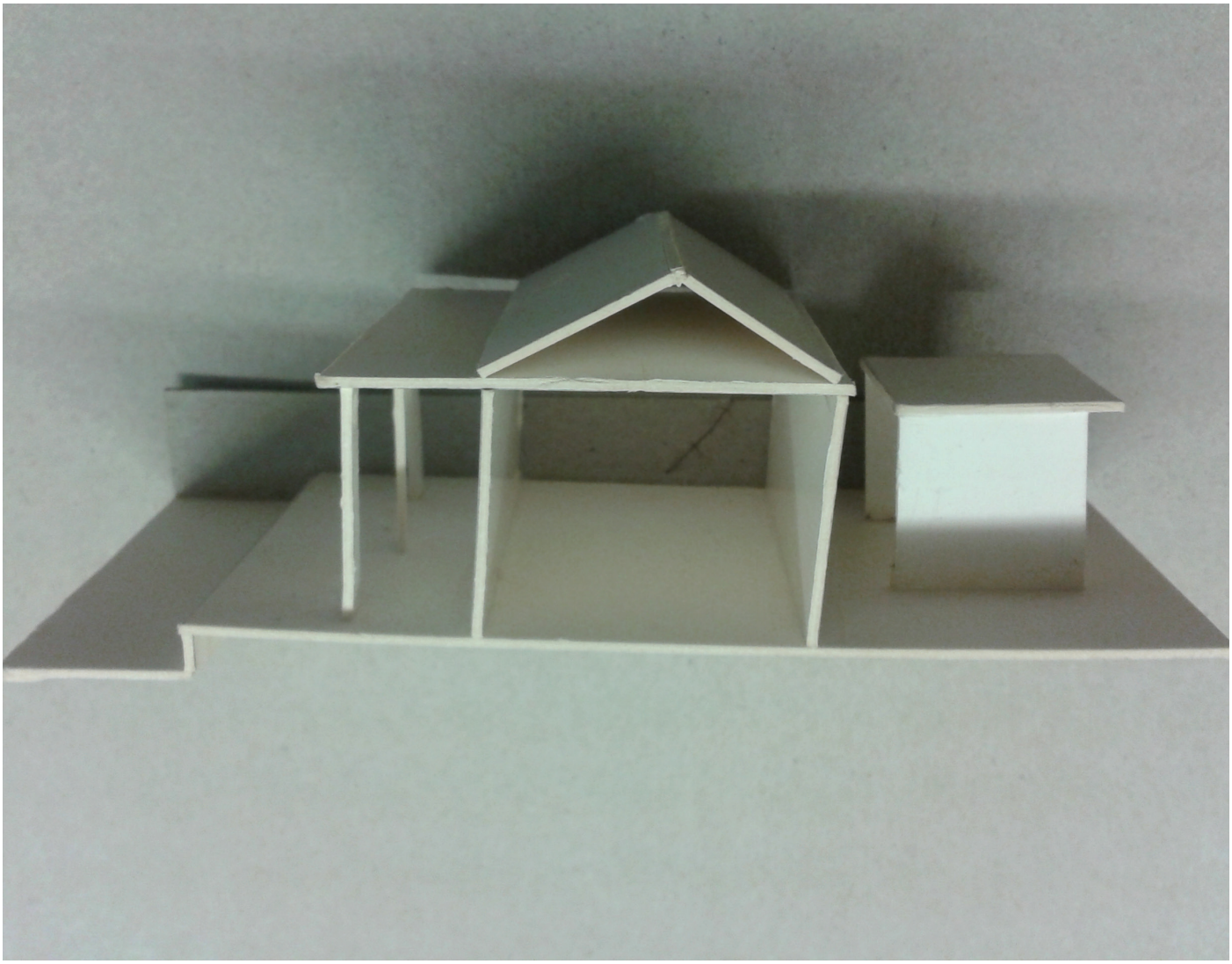
## THE HISTORICAL TERRITORY

The historical territory of Marabastad refers to the existing condition and organisation of spaces within Marabastad. The preservation of these territories is paramount to the preservation of the urban character within the precinct.

The territory is defined by its connection to the street edge, and how it communicates with the public. These connections and boundaries are ingrained within the historical urban fabric of Marabastad. This is not per se a musical territory but still forms part of the identified territories which should be maintained within the urban context to promote musical connections and preserve heritage.

This territory is the most complex of all the identified territories and is distinguished by the multiple interactions which vary in nature and duration throughout the spaces. It is characterised by its progression from public and temporal on the street edge, to formal and permanent in its courtyard spaces. These interactions are juxtaposed by the permanence of the structure on the exterior in comparison to the permanence of the structure on the interior.

This in essence is a culmination, or hybridization, of parts of all the identified territories. In contrast though the territory is physically defined, whereas the previous musical territories where defined both in physicality and in range of sound.



*5.16__The Historical Territory*

5.2.6.

## THE MANIPULATION OF TERRITORY

The identified territories form the backbone for the design language to be utilized in the creation of spaces to promote the interactions between artist, instrument and listener. These territories rarely occur as static isolated spaces which are purely defined. Generally they occur as part of larger territories or as a an amalgamation of varying territories.

The result of this is the need to manipulate these spaces to function as a coherent composition of parts forming a whole. Therefore, the need to identify how these territories could be manipulated to achieve the desired spaces within the territitories was investigated and is summaraised through a collection of thumbnail sketches.

These are based on observations made throughout musical spaces observed in Marabastad and other similar spaces.

*5.17__Manipulation of Territory in space and on the plan*

Undefined

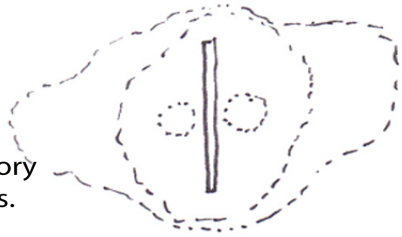
No seperating plane or surfaces between territories in essence forms a single territory.

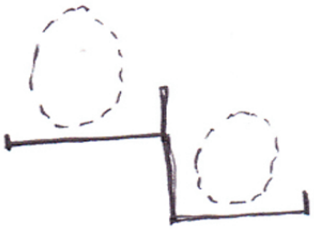
Stepped

Minor step in continuity of horizontal or vertical plane. very little definition to territory.

Change in level

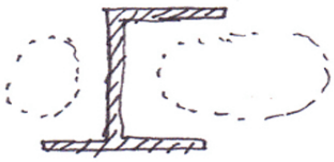
Level change, or change in vertical plane condition, results in the seperation of a territory and the creation of smaller isolated territories.

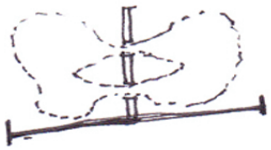




Exagerated change in level

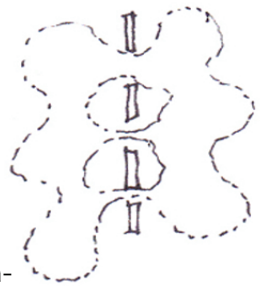
An exagerated level change, or change in vertical plane condition, results in the seperation of a territory completely.





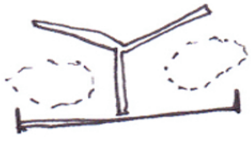
Permeable seperation

The permeable seperation of a territory results in the leaking of conditions from one territory to the other.



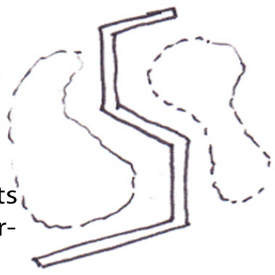
Defined seperation

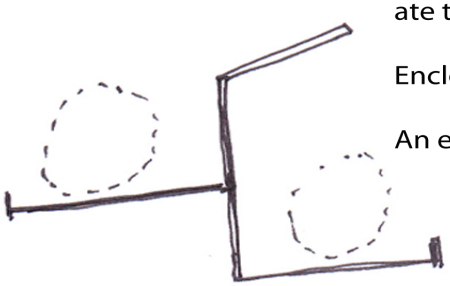
A defined seperation of territory results in the creation of two seperate territories clearly defined. Sometimes territory can leak.



Exagerated defined seperation

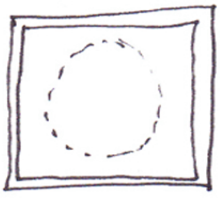
An exagerated defined seperation of territory results in the creation of two completely distinct and seperate territories clearly defined.





Enclosed territory

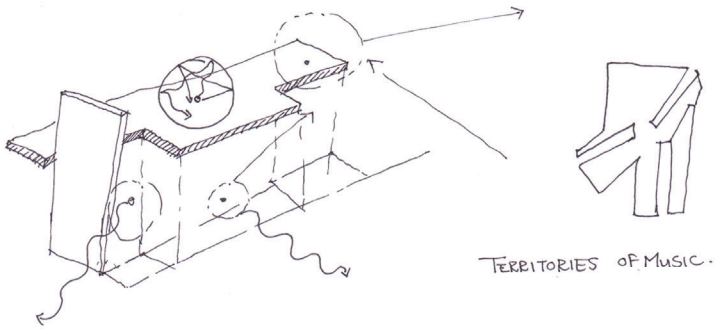
An enclosed territory is completely isolated.



SECTION

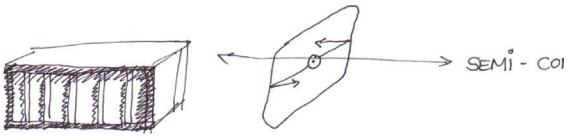
PLAN

SIMPLE
CLEAR.

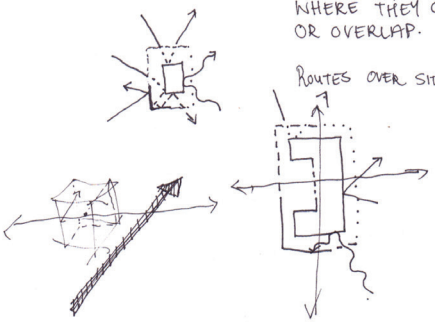


TERRITORIES OF MUSIC.

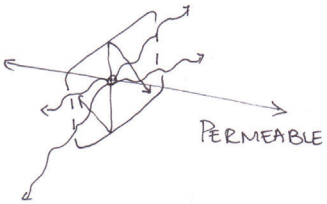
SPACIAL QUALITIES OF AREAS/ ROUTES WHERE THEY CROS OR OVERLAP.



SEMI - COI

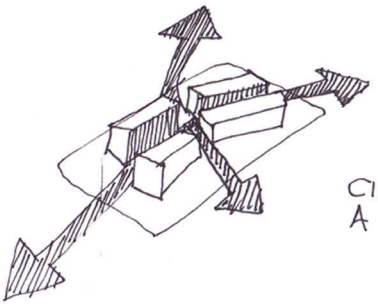


ROUTES OVER SITE.

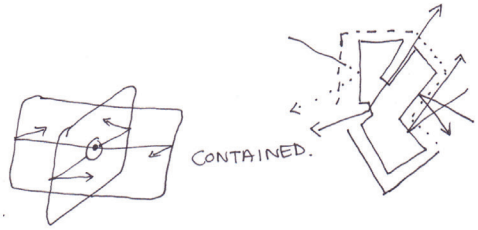


PERMEABLE

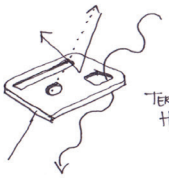
BENISCH
↳ ~~DECK~~
DECONSTRUCTIVIST.



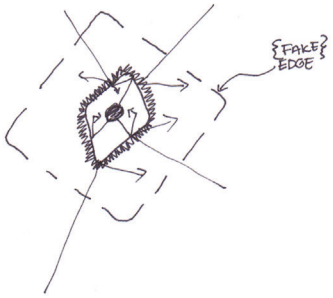
CIRCULATE THROUGH A TERRITORY.

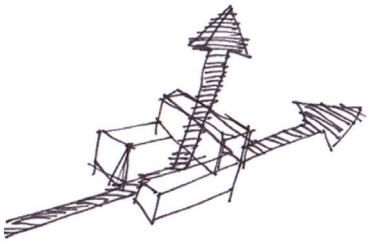


CONTAINED.

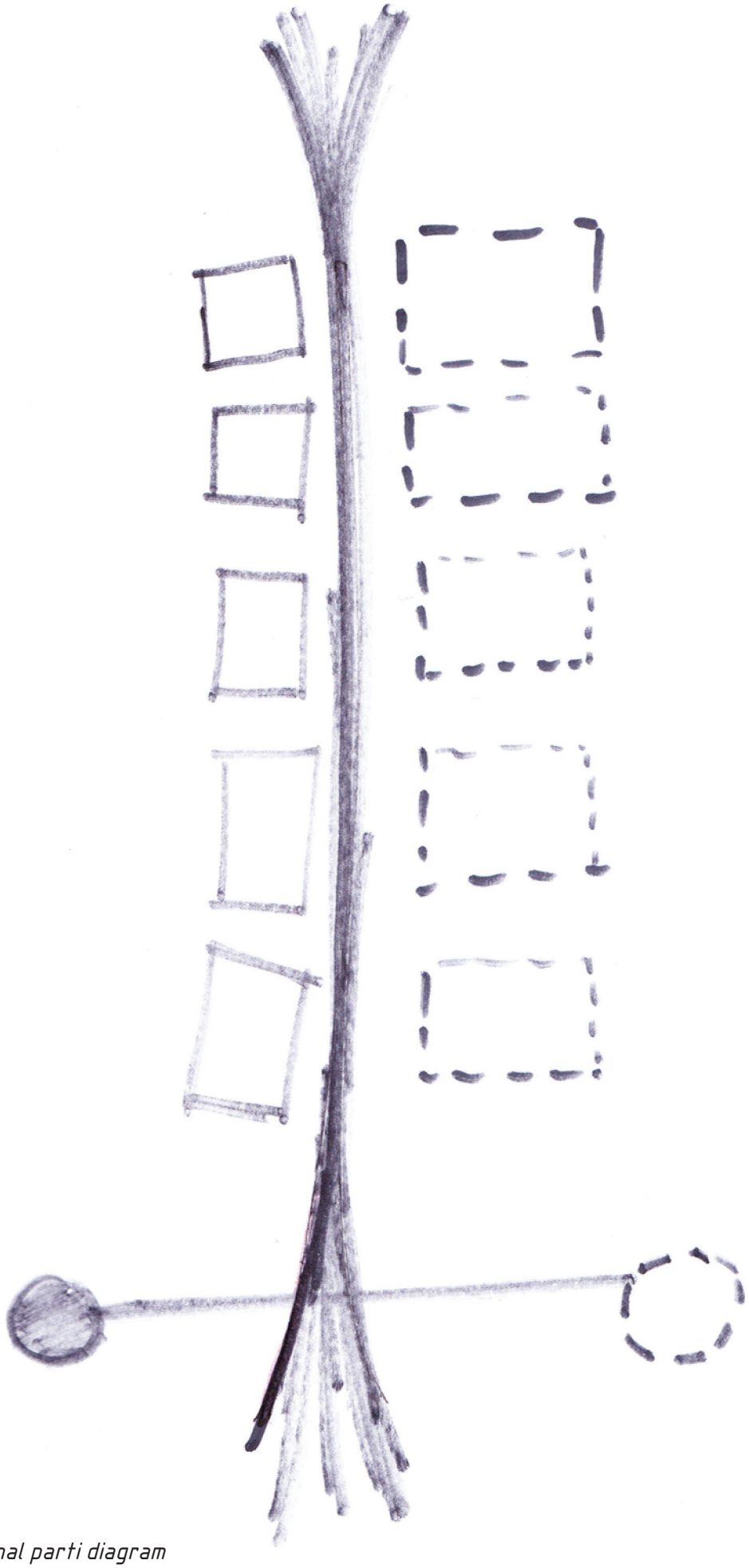


TERRITORIES INFLUENCED HORIZONTALLY.



TERRITORIES SEPERATE VERTICALLY.



*5.19__Original parti diagram*

Existing uncovered, unpowered and un-utilised jazz square stage

Informal trade on corners

Ruins of a former building, exstensive research has not revealed any significance to this substructure

Site

Proposed memory building

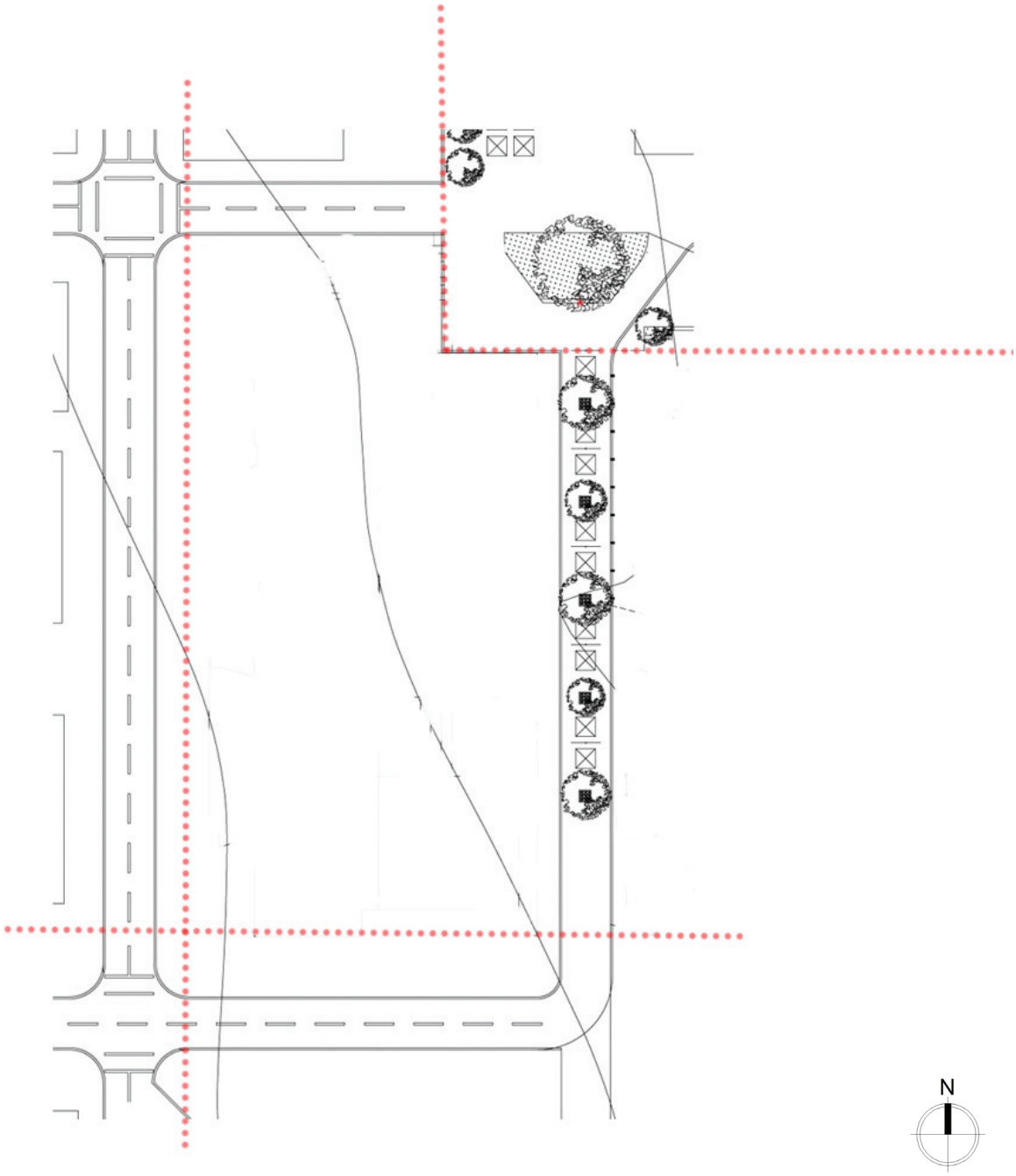
Proposed entamophagy building, currently an unofficial ZCC church

# SITE INFORMANTS

5.3.1.

## CODING GUIDELINES

In adherence to the suggested coding guidelines, the building site is restricted to a certain footprint and edge to comply. This is particularly defined on the Northern edge where the new performance square is proposed. These proposed coding restrictions form part of the restrictions that determine the build to lines which determine the maximum size of the site.

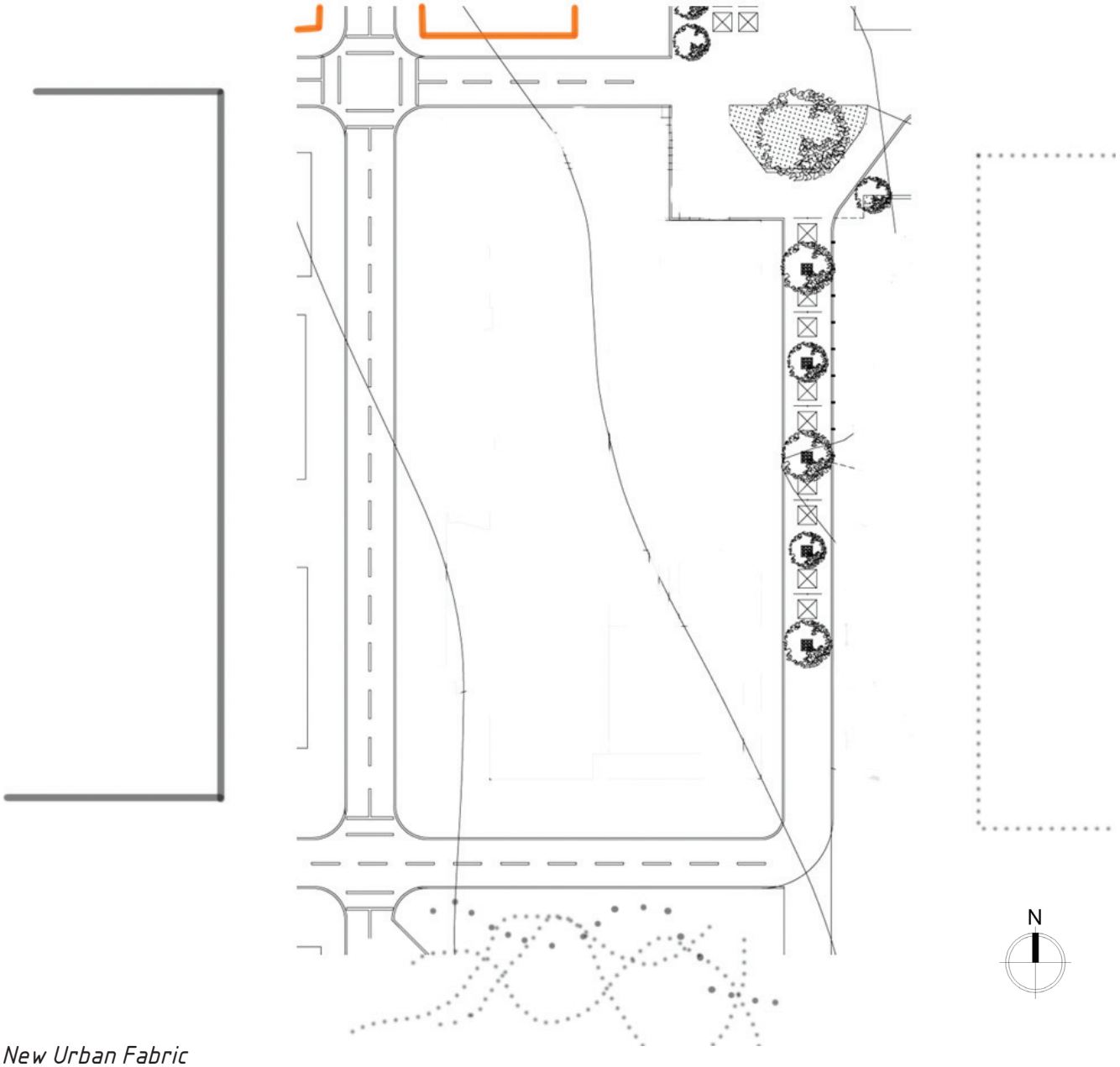



*5.23 Coding guidelines*

5.3.2.

## NEW URBAN FABRIC

The proposed development of Marabastad to include a large proponent of new residential urban fabric, a change in the road network and the development of the site and its surroundings as a group has resulted in determining which of the building's edges should be public and which should be private.

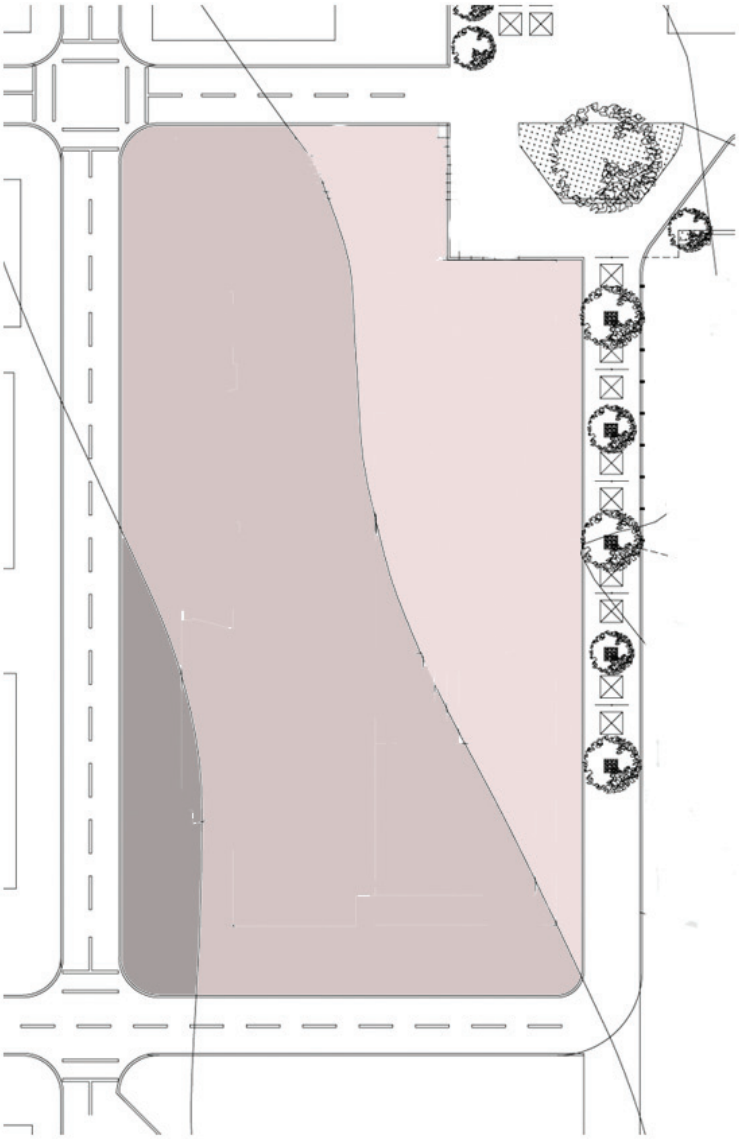


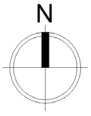

*5.24 New Urban Fabric*

5.3.3.

## TOPOLOGY

The site slopes from the North-Western corner downwards gradually towards the South-Eastern corner. This is a result of the natural relief of the land being sloped downwards towards the Steenhovenspruit.





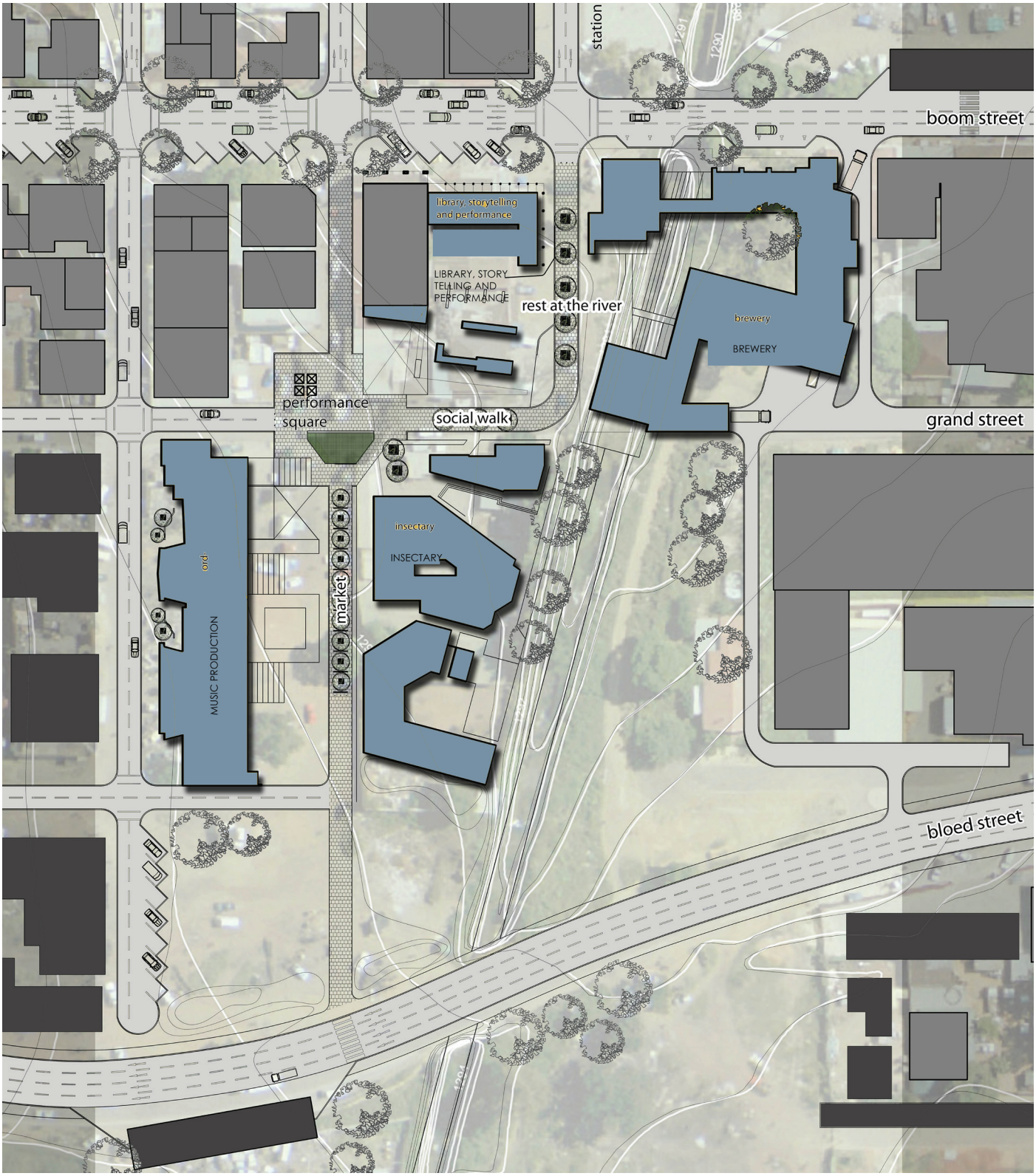

*5.25 (Above) Topology*

*5.26 (Right) Framework*

5.3.4.

# FRAMEWORK

The Framework, beyond dictating a certain number of restrictions, also prescribes a definitive desired relationship between the proposed projects and their functions. Consequently certain spatial planning is desirable to allow for the desired interaction between buildings to be coherent, easy and efficient.



# INVESTIGATION OF FORM AS A RESPONSE

5.4.1.

## DEFINING THE SITE

The site is defined by the urban, physical, and coding paramaters. The maximum size of the site is determined by these factors and provides the extremities for the footprint of the building.

The current site is a brownfield site, and the usable space is not restricted by the need to retain any urban fabric on the site.

5.4.2.

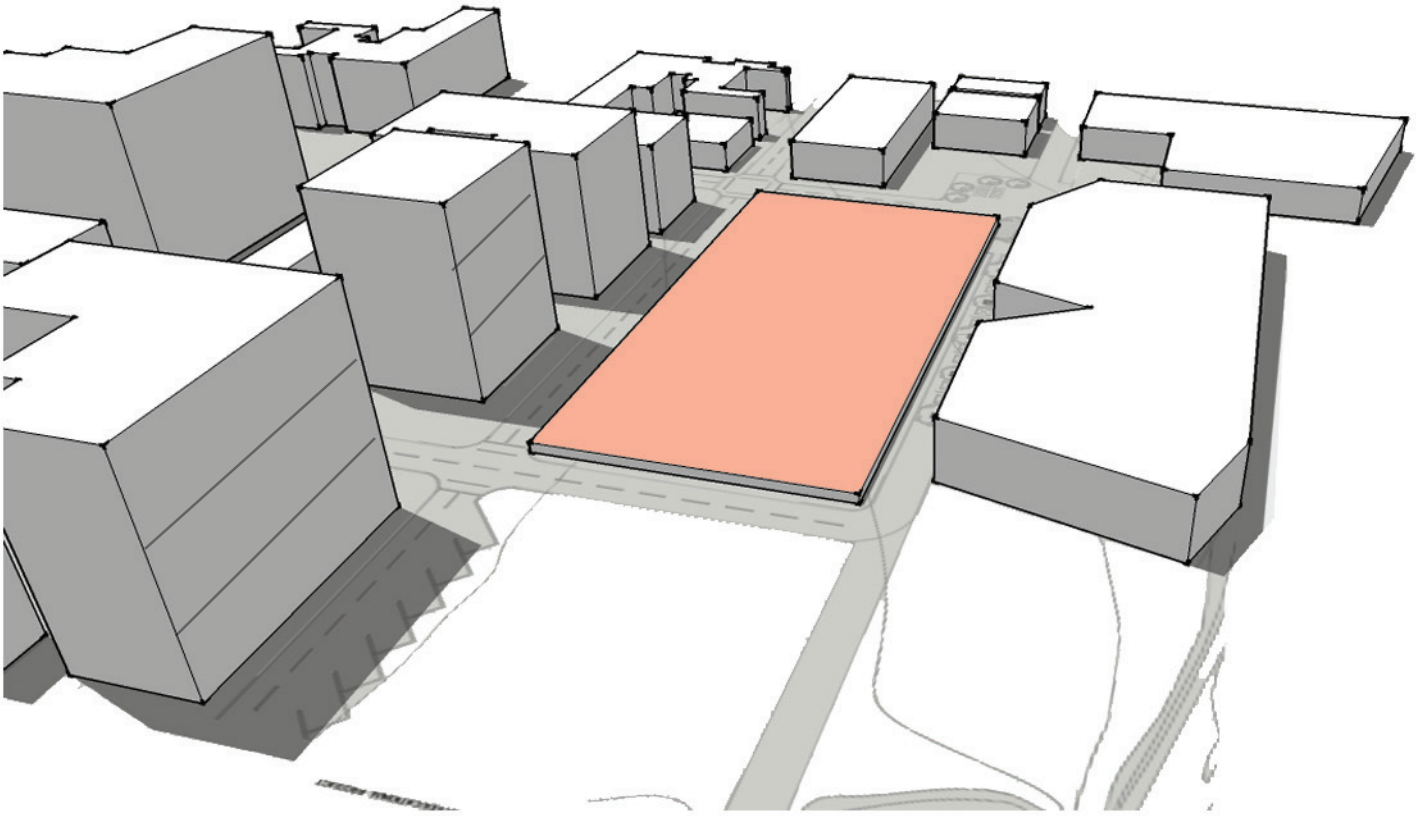
## PUBLIC VS PRIVATE

Due to the proposed urban framework featuring predominantly residential development on the western edge, and a public market space on the eastern edge, it was decided to split the site to feature predominantly public territories on the eastern edge and majorly private functions on the western edge.

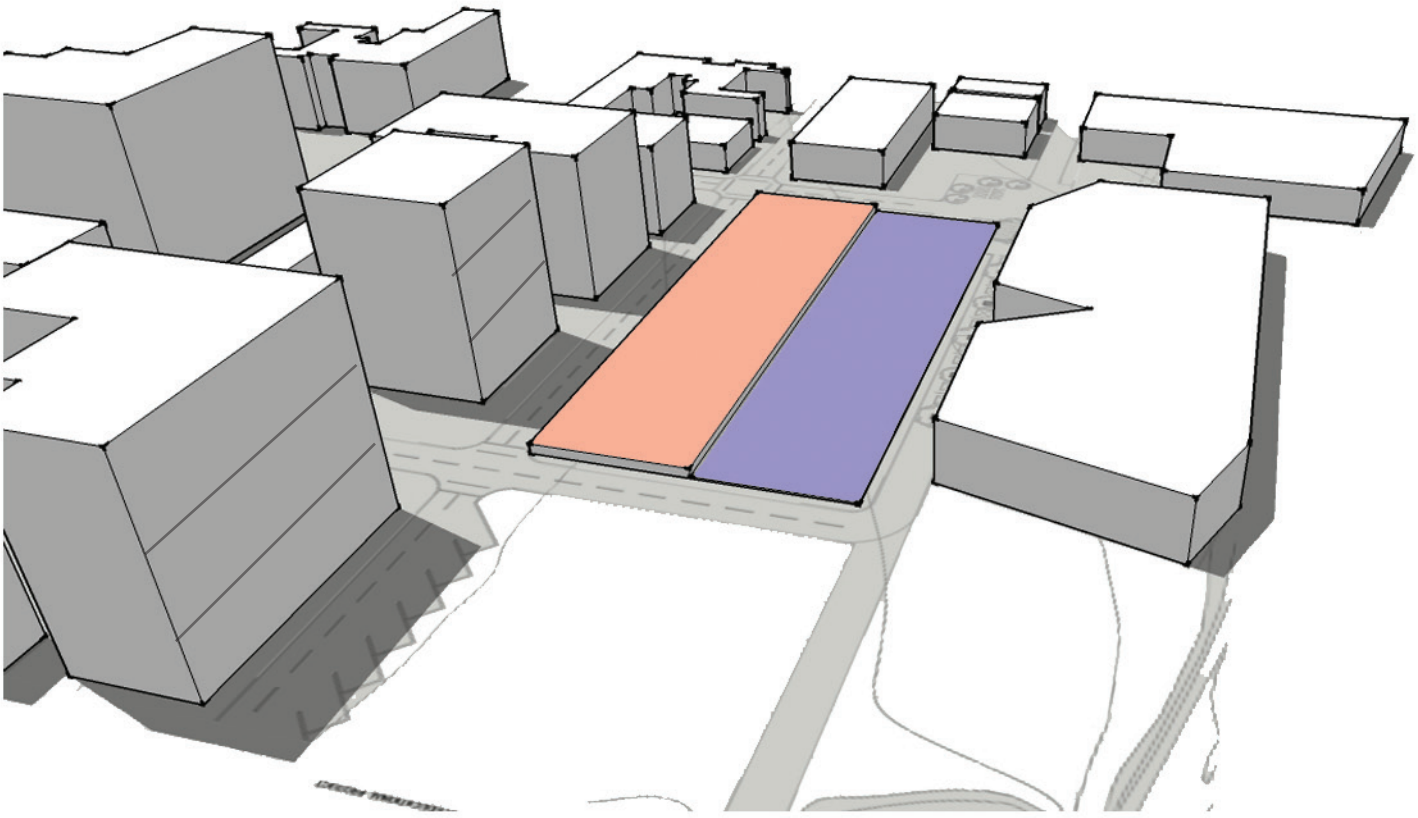
To discern between the two sides a change in ground level was decided upon. This would allow for a cut and fill construction method to be used to level the site, allowing it to match the existing ground levels on either side while allowing for a change in levels to dictate a change in territories.

Cut and fill was also selected as an economical approach.

The result is that the western edge is at a higher level than the eastern edge. This allows for the functional placements of protected territories on the more isolated western edge and the permeable territories on the eastern edge to act as an interface for the building.



*5.27_ Existing site*



*5.28_ Stepping site to define edges*

5.4.3.

## GROUNDING ELEMENTS

Vertical circulation placed within the existing green space and the northern most space of the structure allows for the grounding of the building as these elements act as visual anchors. They allow for the development of a heirachy of spaces (portrayed through height) as these act as connecting spaces between the different territories of the building.

By using these elements to create a sense of height, in comparison to the surrounding urban fabric, it allows them to become landmarks within the urban context. These elements form the primary vertical circulation within the building and connected the isolated territories to the rest of the territories.

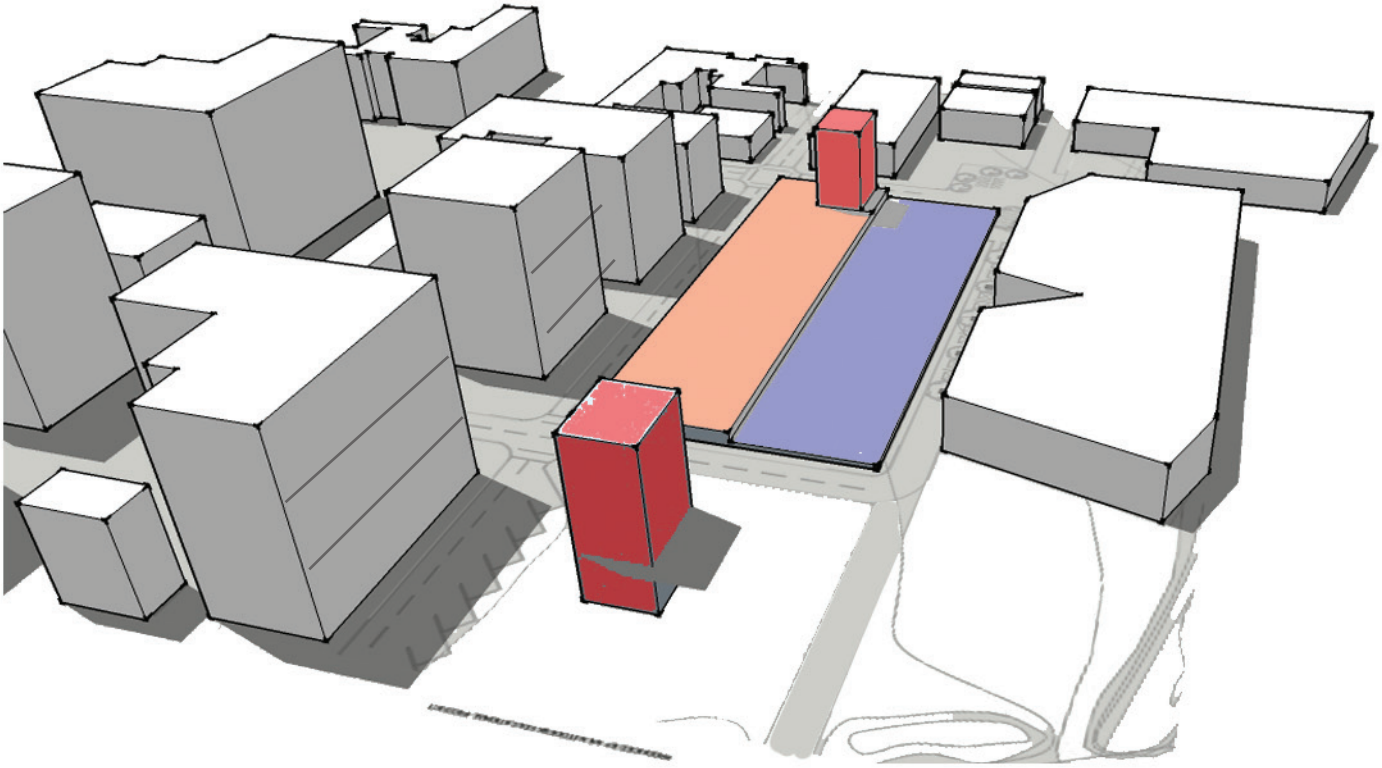
By emphasizing these elements, the legibility of the building can be improved. Through the placement of entrances close to these vertical circulation elements, entrances can be easily defined by proximity to these spires.

5.4.4.

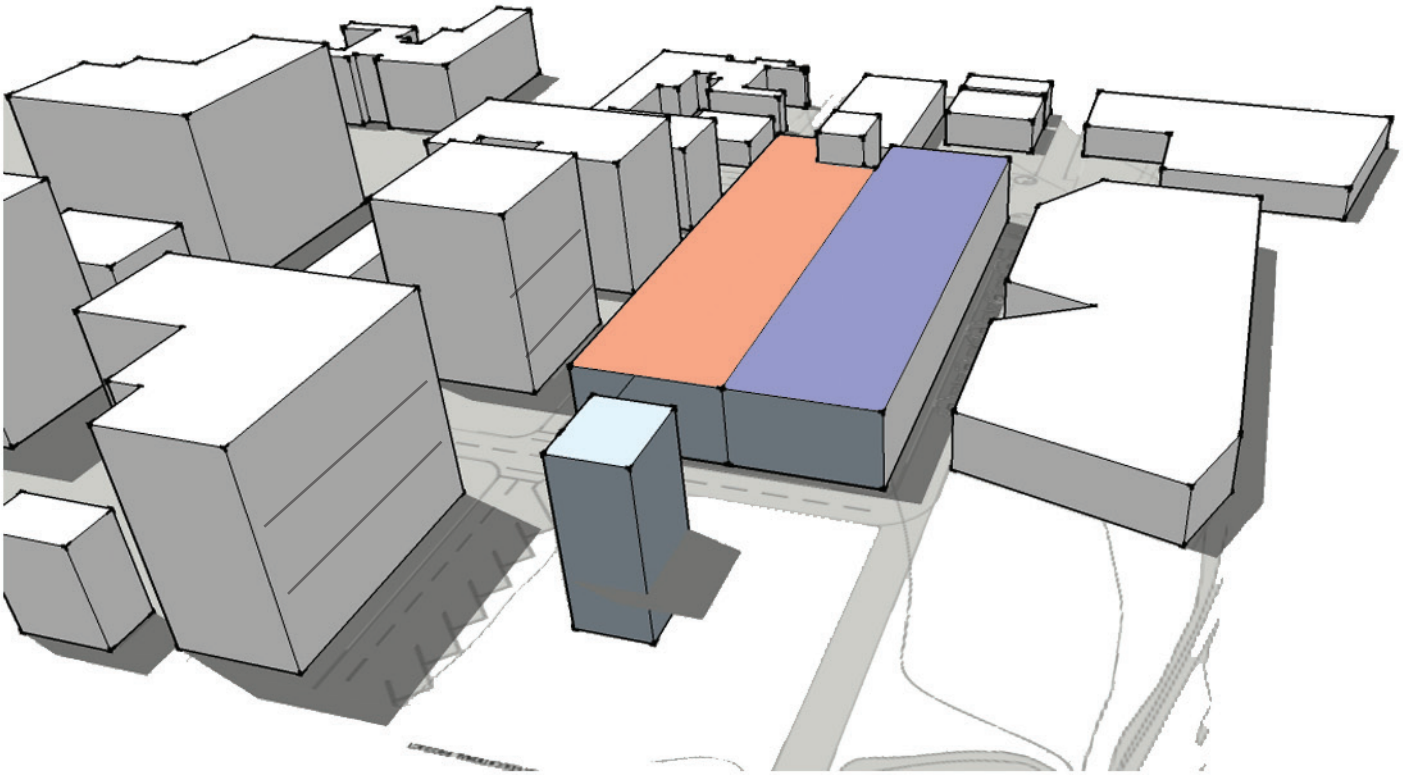
## MASSING/VOLUME

To abide by the coding, the volumetric restrictions on the structure are between two to three storeys (7m - 12m) along Boom street and around the proposed square. However, along the side streets the coding is more lax.

As the structure mediates between the existing fabric of Marabastad, traditionally two to three storeys, and the proposed four storey walk-up residential blocks, the structure should be of an appropriate scale to mediate this transition.



*5.29 Anchor elements*



*5.30 Massing*

5.4.5.

## PERMEABILITY

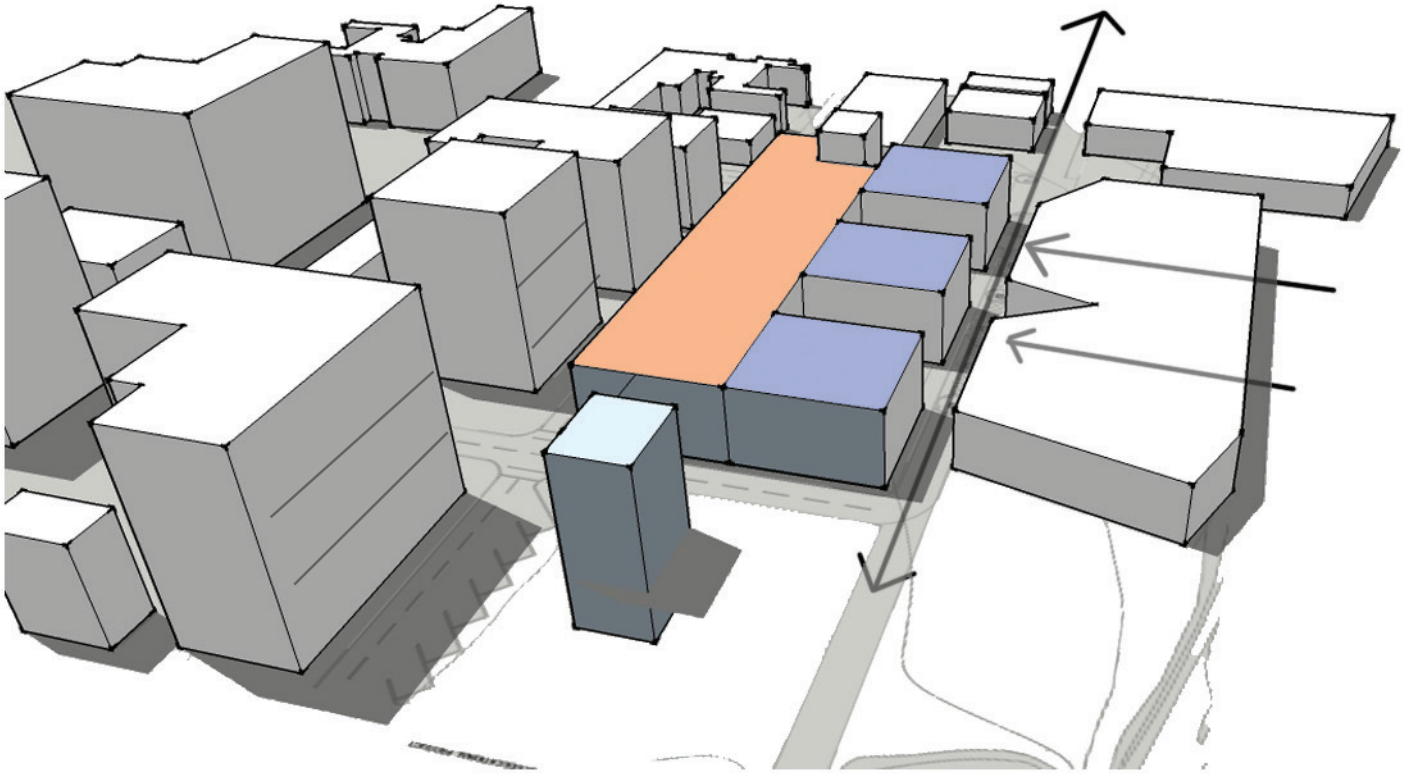
The eastern edge, being a public edge, should be permeable in nature. This allows for the access of of users from the market space. The space should also act as a courtyard space, defined by the divided masses, market space and structure alike. The result of this is that the street and market edge extends to become part of the building.

By allowing for this fragmentation of the eastern edge into separate masses, democratic access to light and ventilation within these spaces can be provided. This is particularly important to allow for light to penetrate into the deeper spaces.

5.4.2.

## THEATRE SPACES

The theatre spaces are the most defined and stringent spaces in terms of acoustics. The placement of them on the western edge allows them to be shielded from the busy eastern edge by the circulation of spaces in between. It also allows the courtyard spaces on the eastern edge to act as "spill out" spaces for the theatre.



*5.31 Allowing permeability to people and ventilation/light*

*5.32 Insertng the theatre spaces*

# EXPLORATION THROUGH MODELS

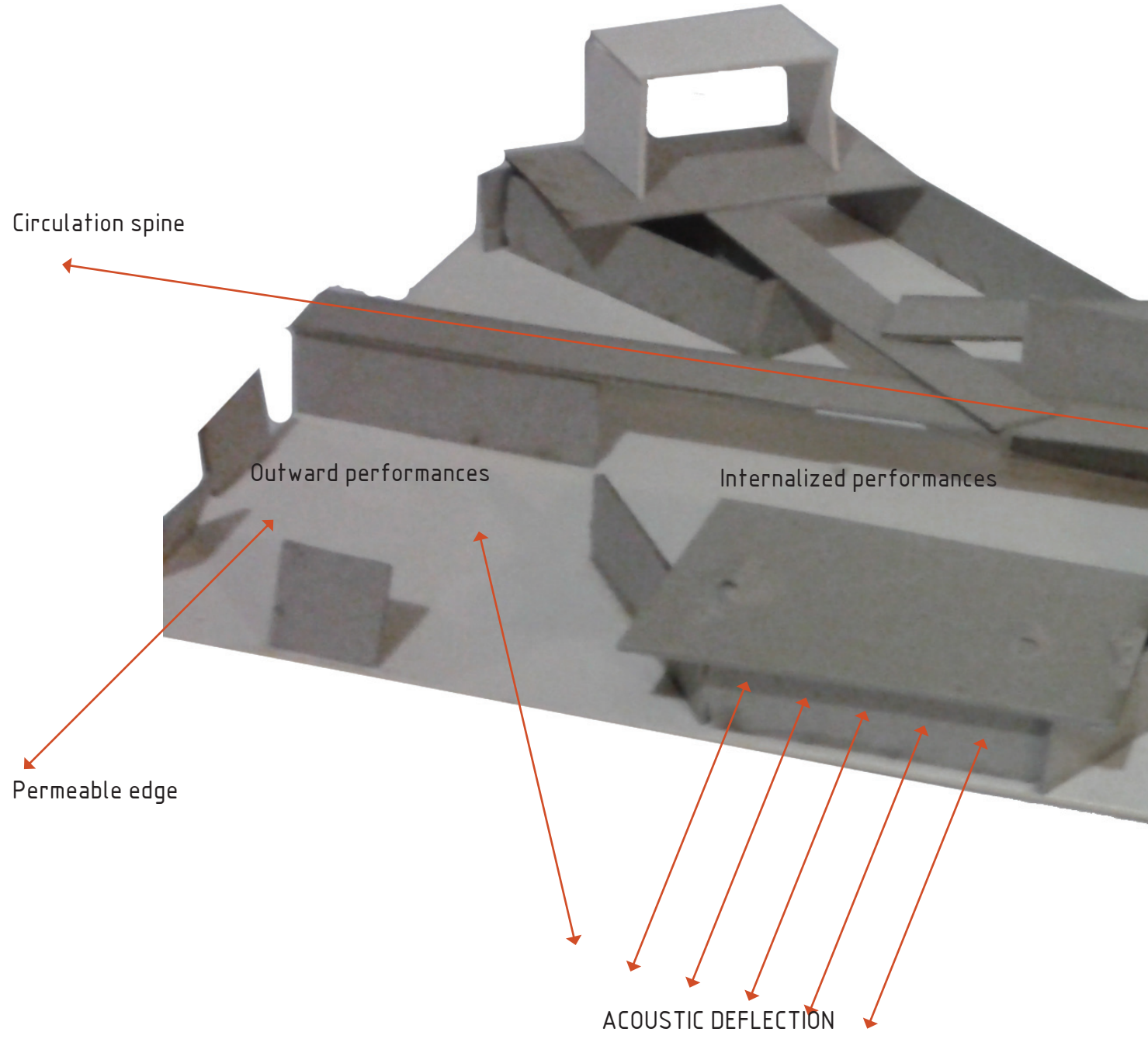
5.5.1.

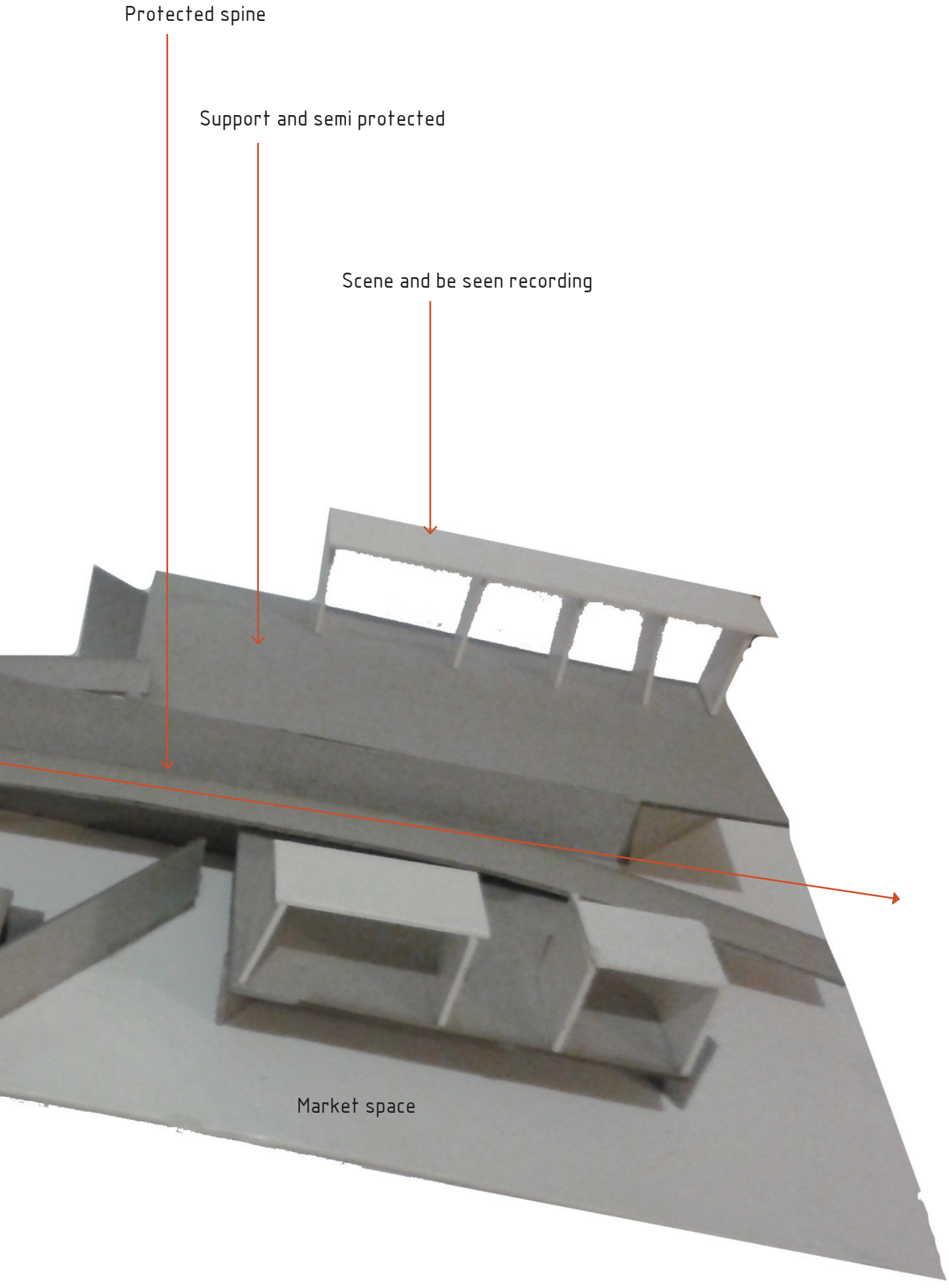
## THE MAQUETTE

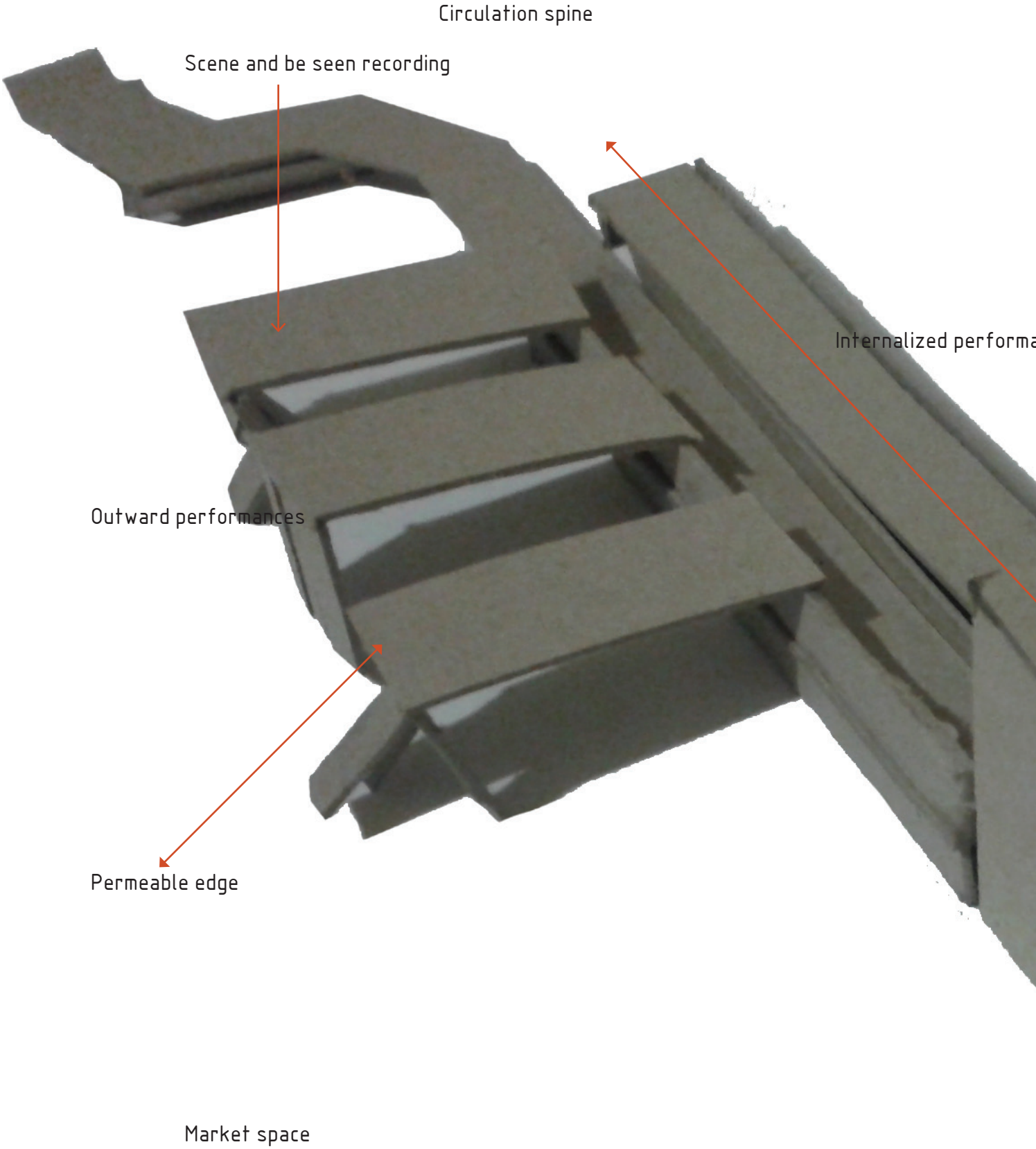
*"There are several reasons why models should be part of every design process. Perhaps the most important one is the understanding to be gained by seeing form in physical space."*

*Criss B. Mills, author of "Designing with Models" (2013)*

The building of maquettes and models have always been a task which I enjoy. They are not always one hundred percent accurate, but like Lego they allow you to explore the basic organisation and formal response of a design through the stacking of *"bricks"*, much like a child playing with Lego. What follows is a collection of maquettes which were built as part of an exploration into the building and its potential forms.

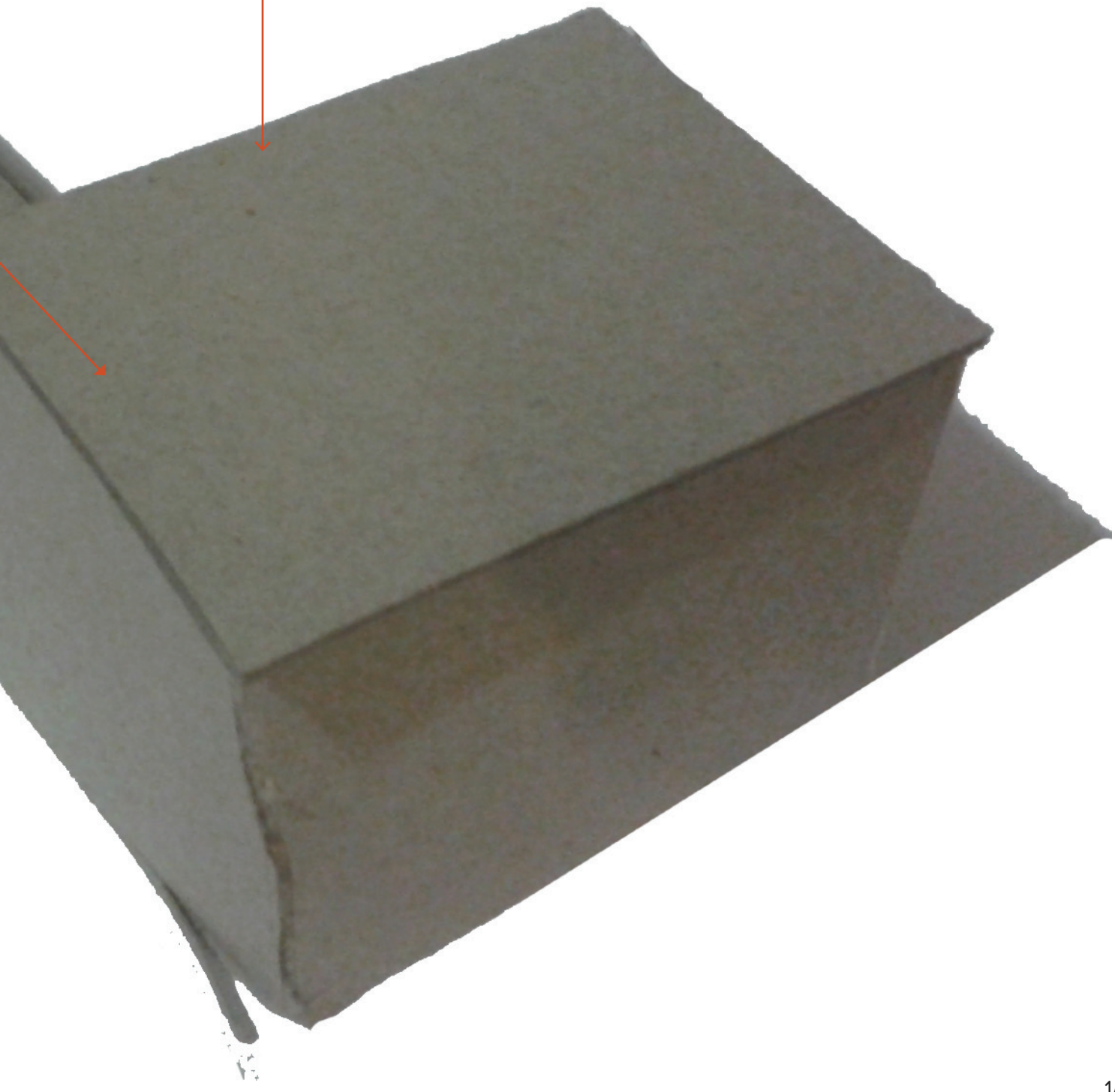


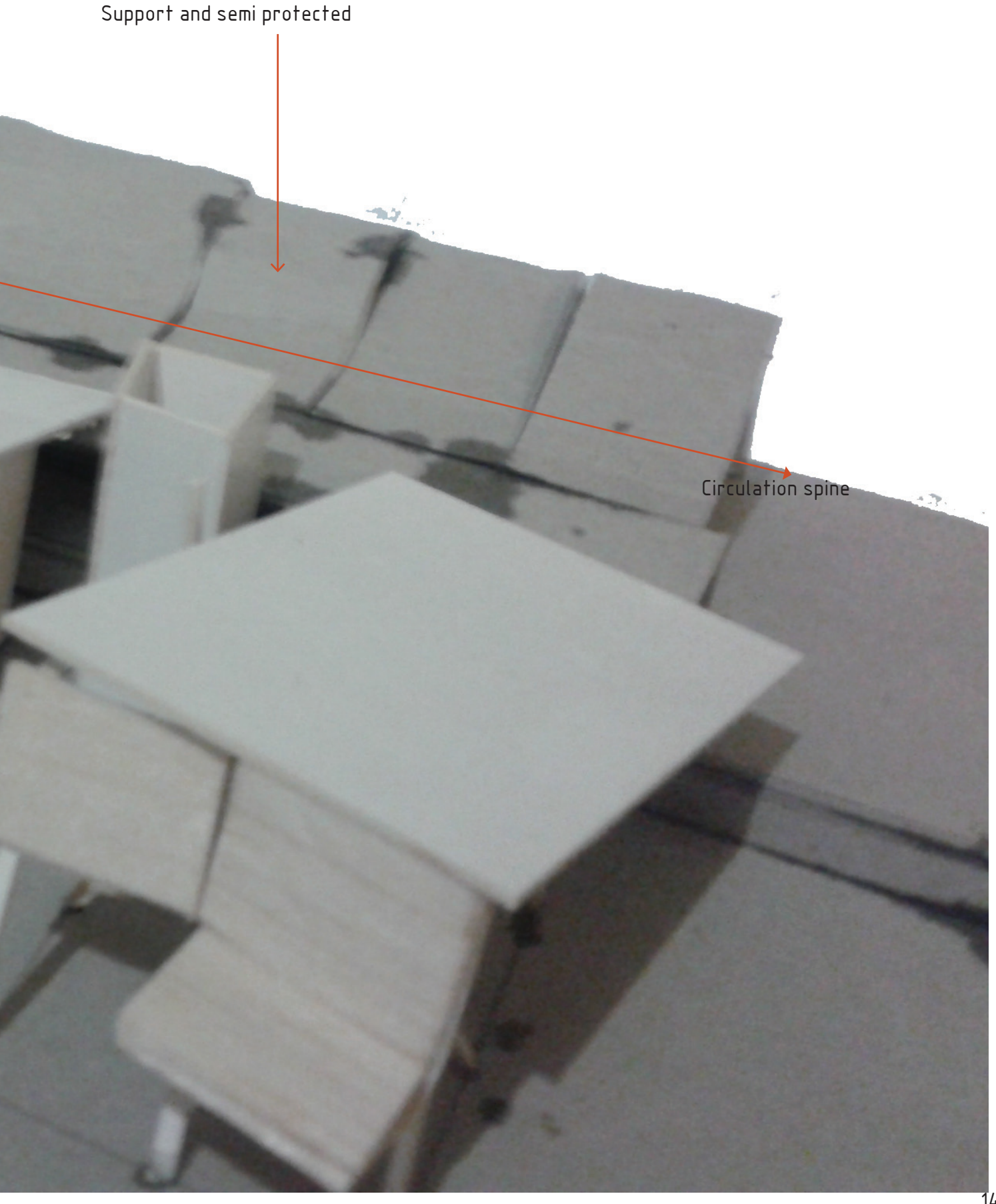


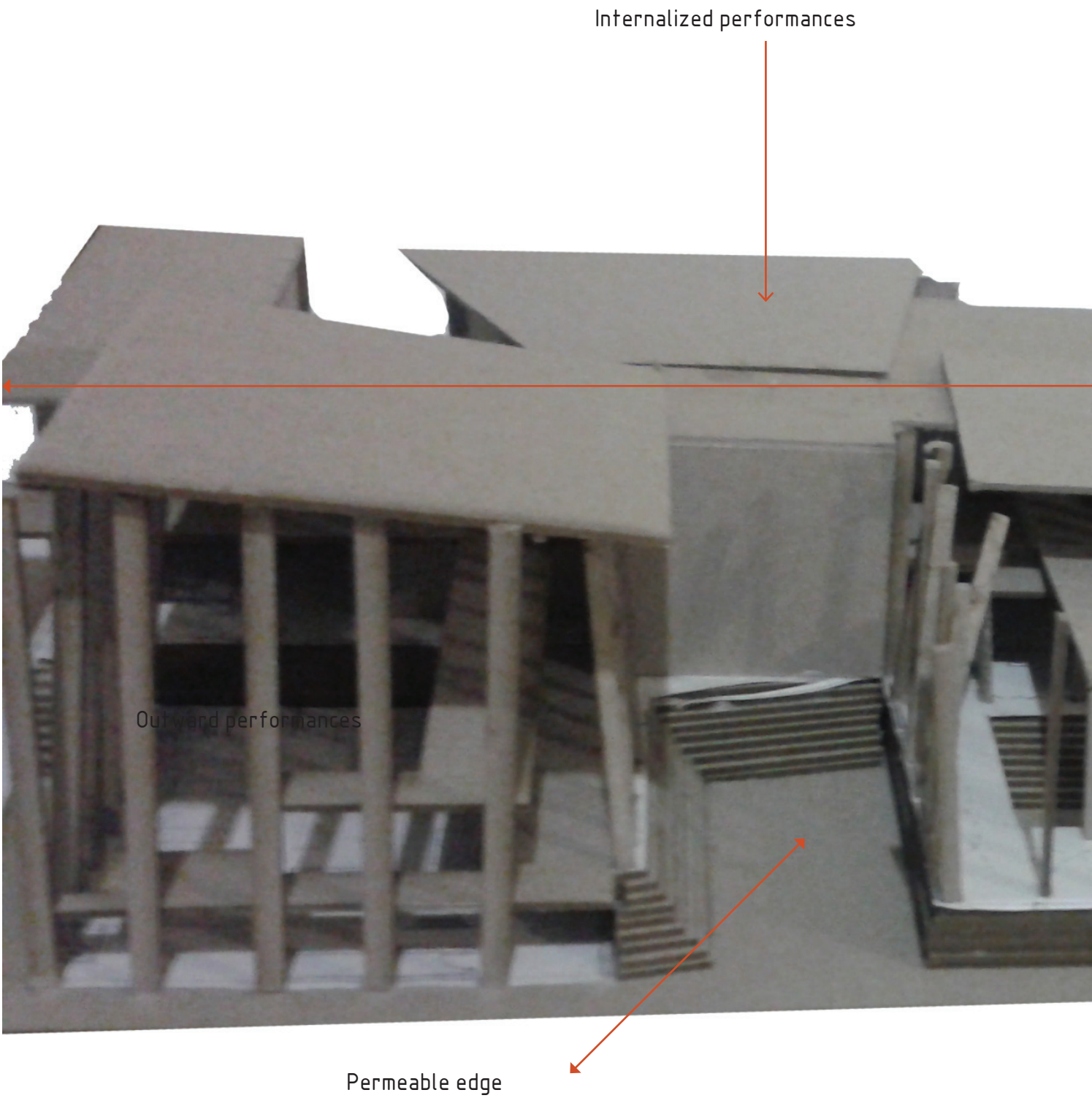


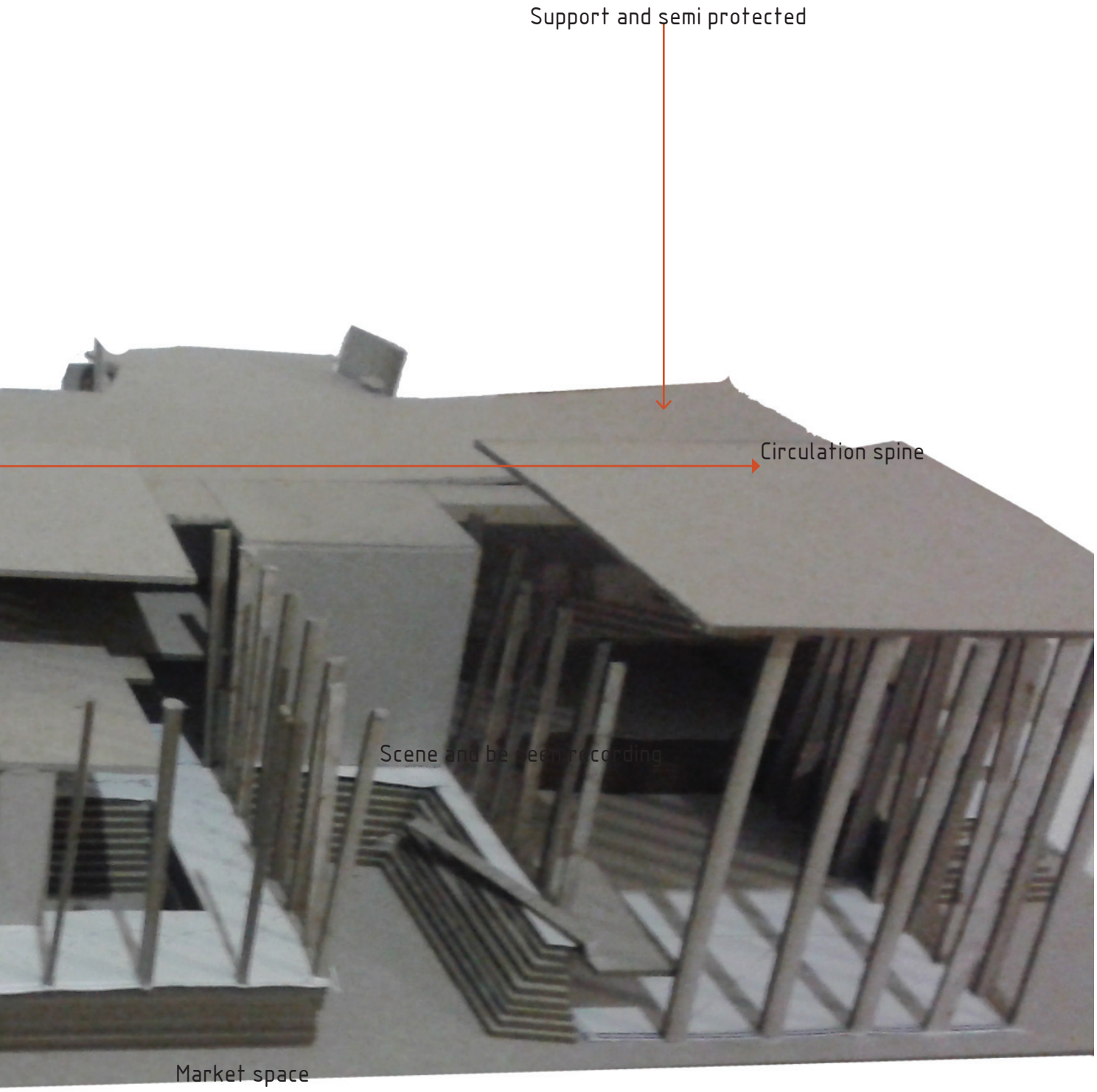
Support and semi protected

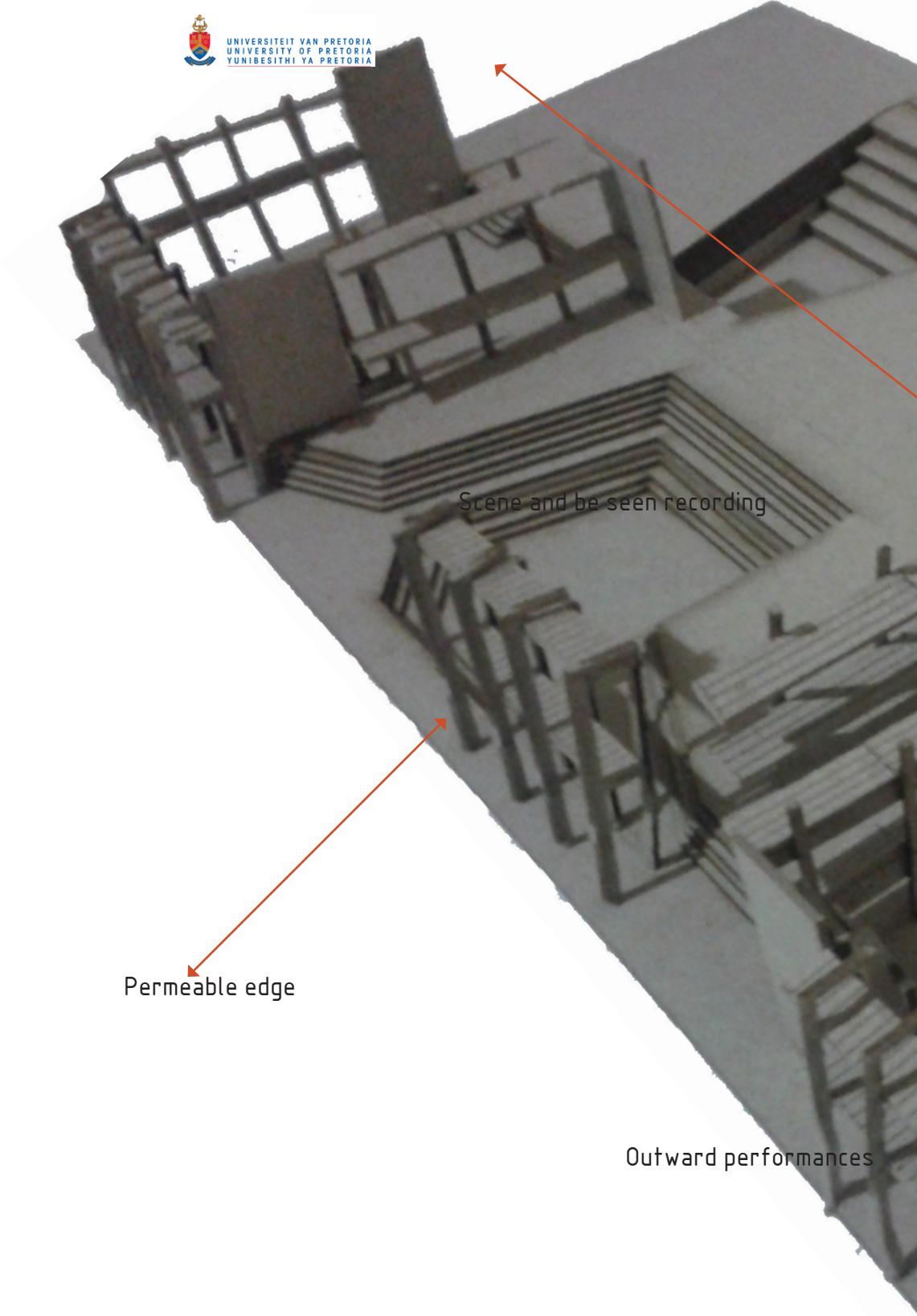
ances



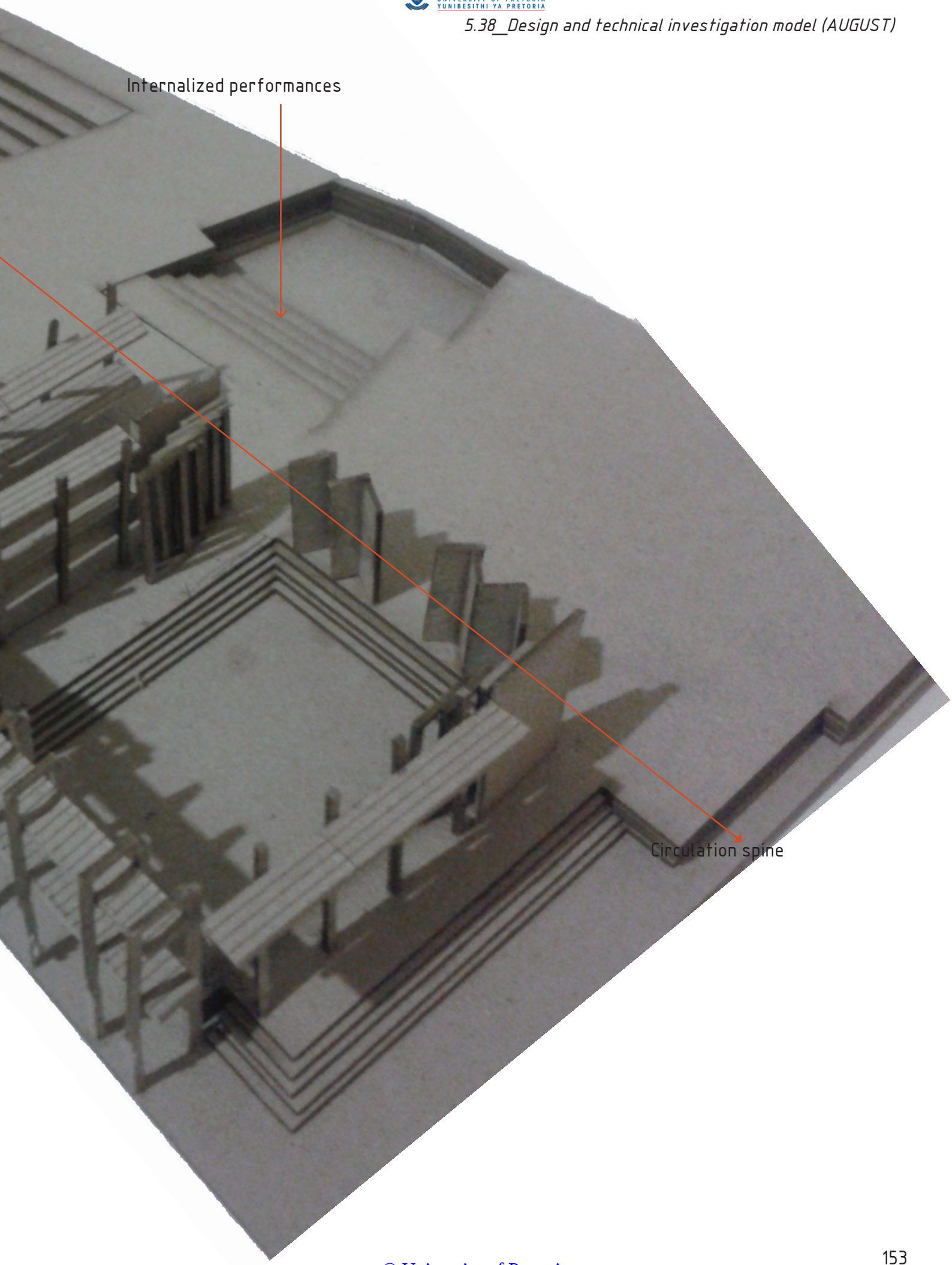


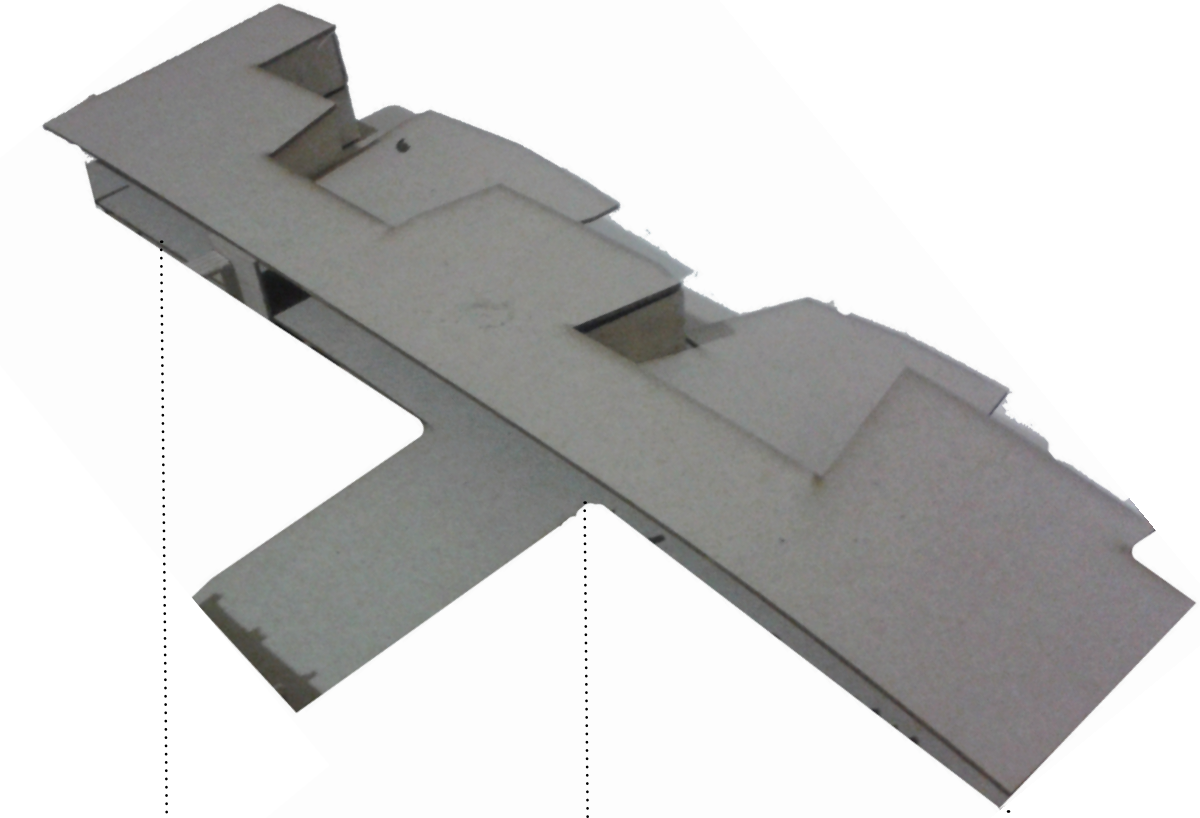


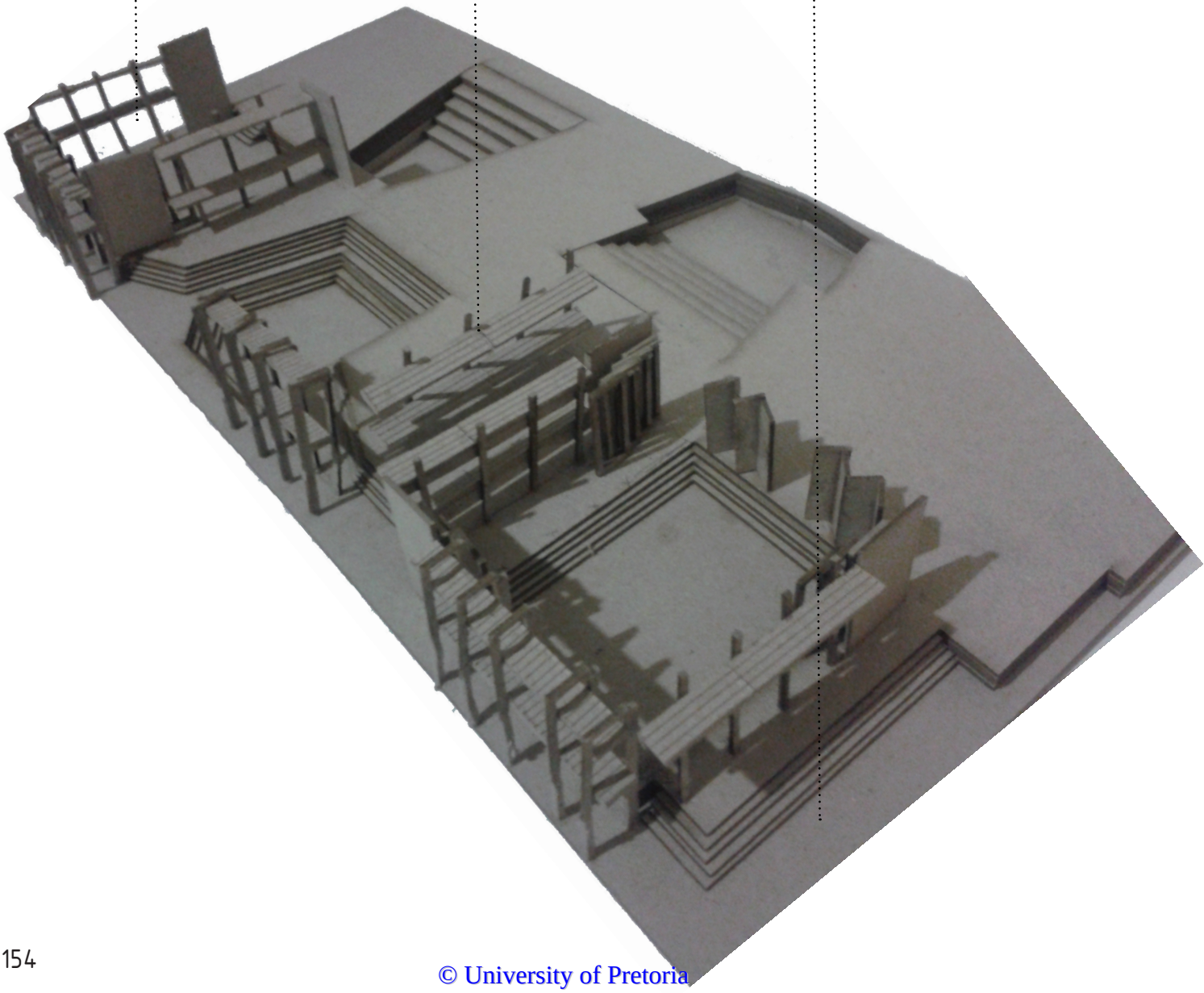




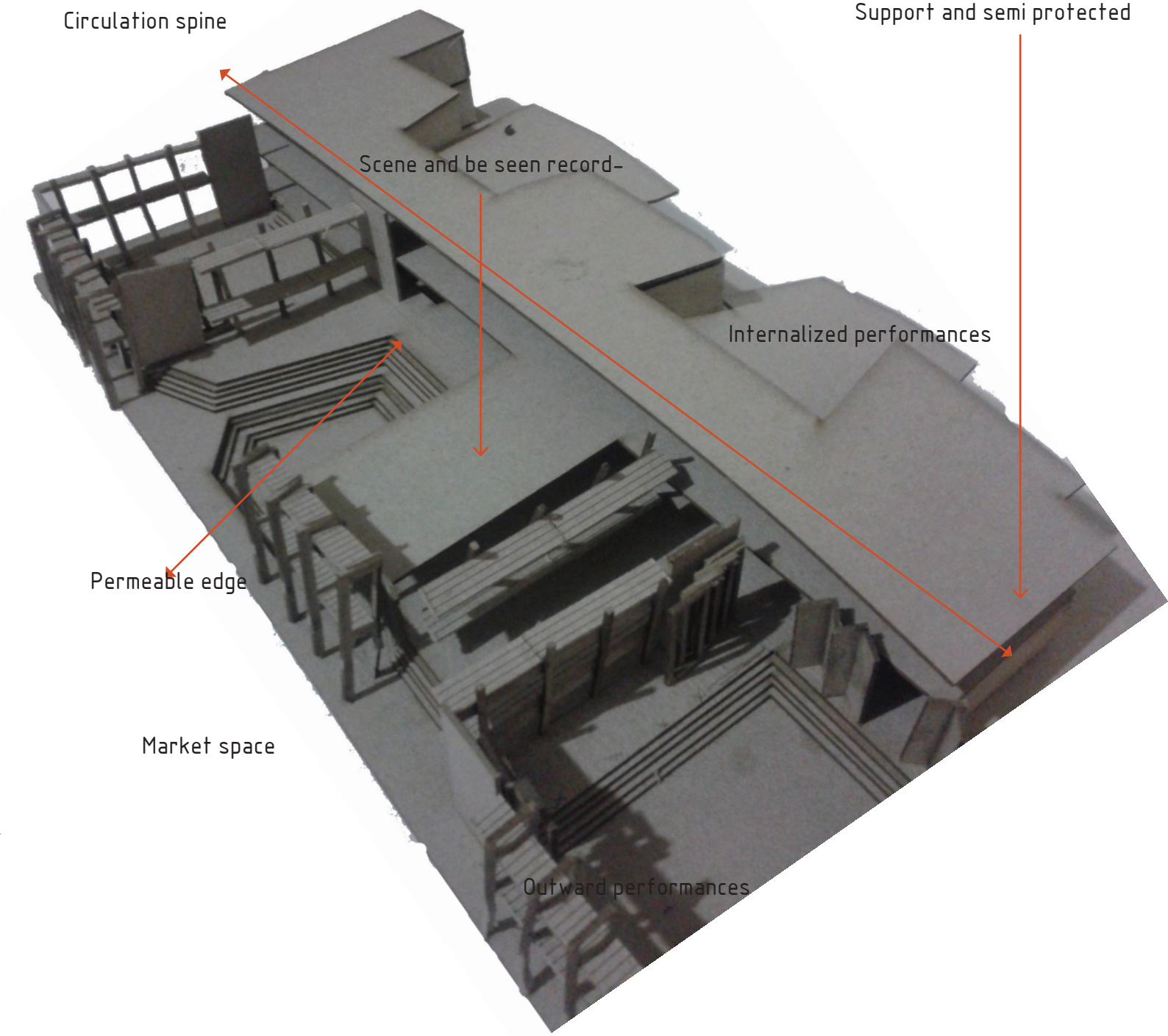
*5.38_Design and technical investigation model (AUGUST)*

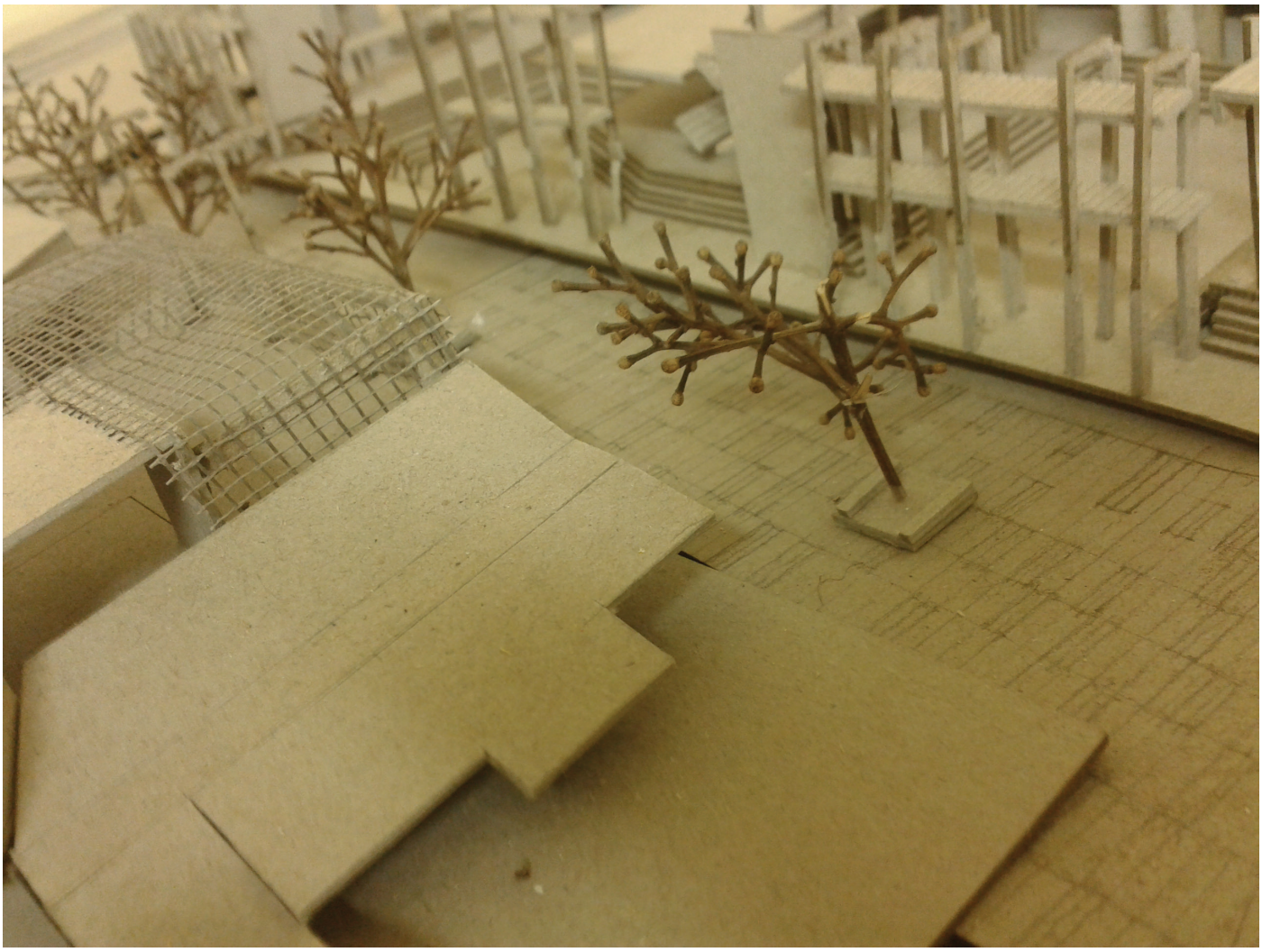




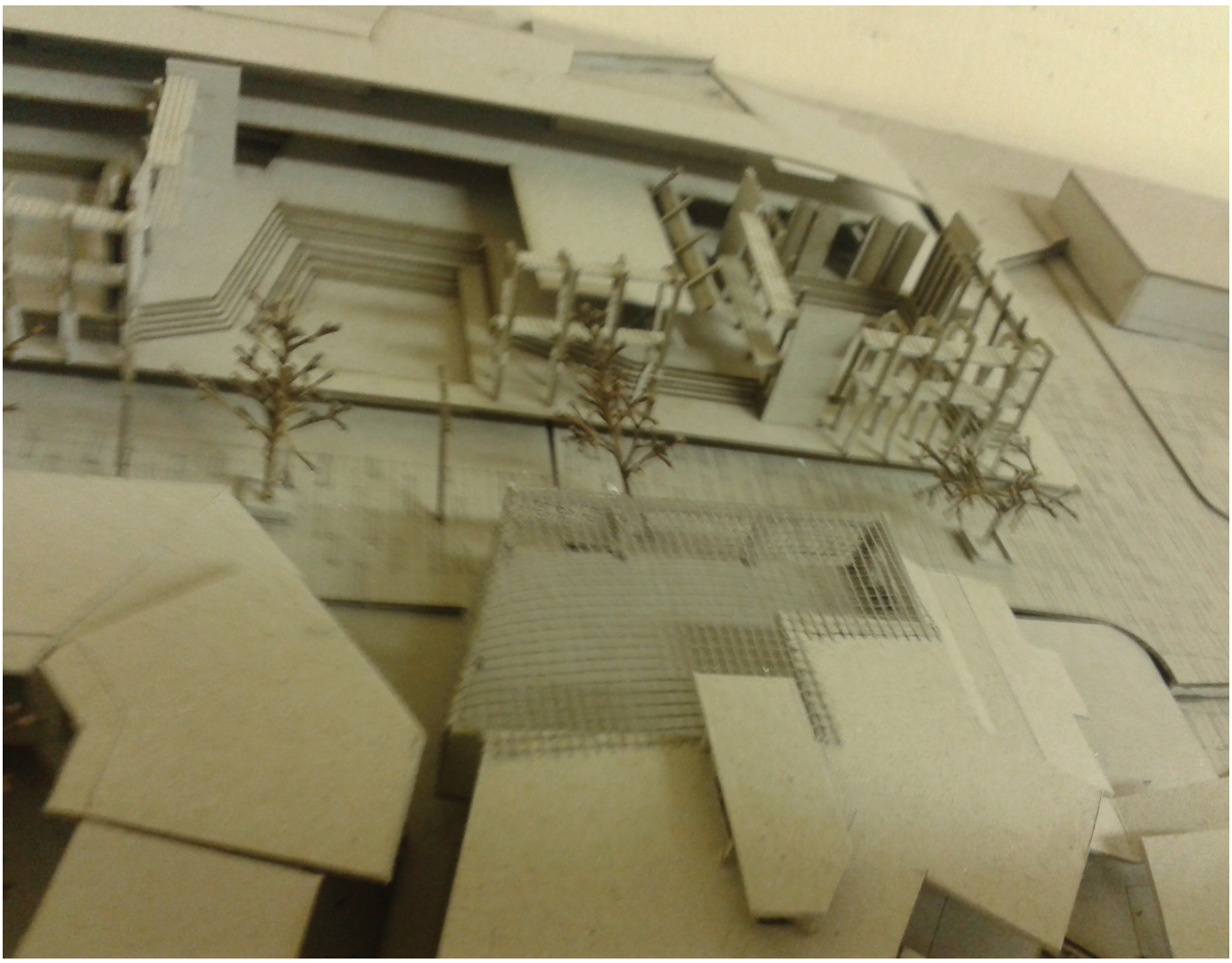


*5.39_Compostion of model(AUGUST)*





*5.39_Model in context*



5.4.2.

## TERRITORIAL RESPONSE

From the contextual analysis and identification of varying territorial typologies within Marabastad it became evident that an amalgamation of all the identified principles into a response was necessary. This response was based on five approaches to reinforce the concept of creative territories as a means to promote creative interaction.

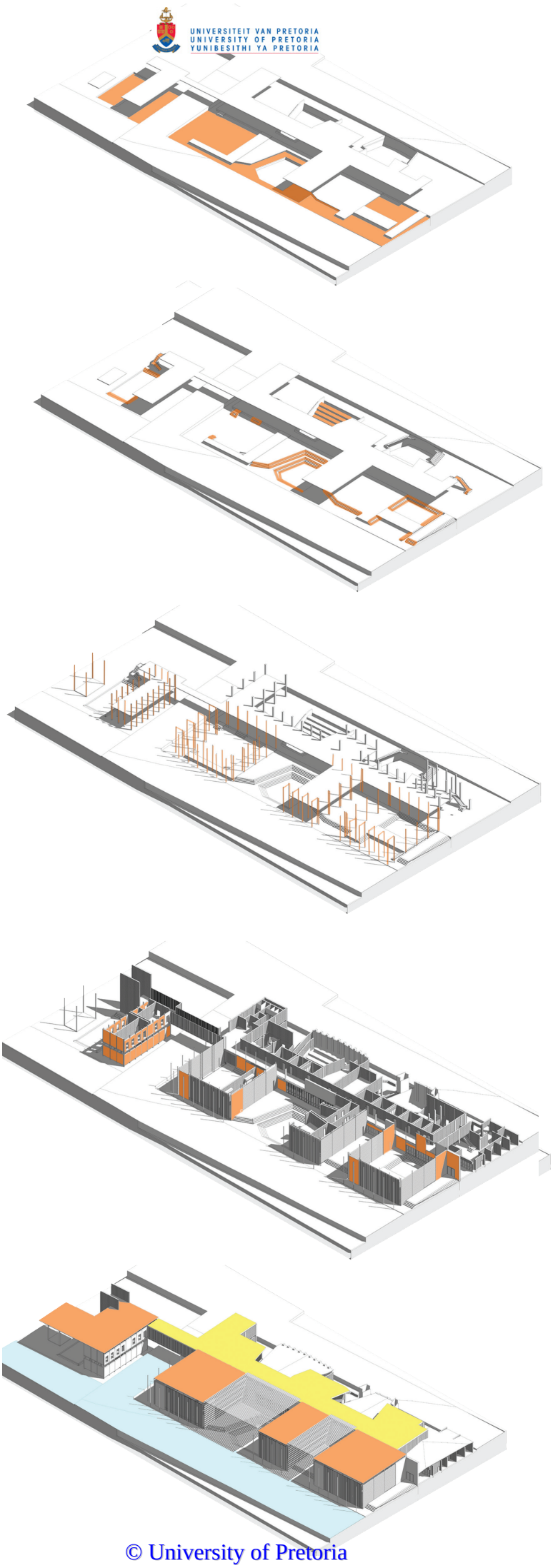
*1. Manipulation of the ground plane:* the change of levels allows for a definite separation of certain territories from one another. It allows for the spatial planning to locate ideally isolated territories from public noise intrusion.

*2. Circulation as a means to regulate:* the change of levels, necessitates the need to move between levels. The result is a method to control the movement of the user from one territory to another. This liminal space also becomes ideal for social exchange and unprogrammed interactions between users. The result is a juxtaposition of definitively regulated and unregulated spaces.

*3. Structure to reinforce:* the structure becomes a tool which can reinforce how spaces are perceived, and thereby reinforce the formality of a territory. If the structure is stereotomic, the space is perceived as heavy and closed, alike the territory would be perceived as formal and defined. If the structure is tectonic, the space is perceived as light and open, consequently the territory might be perceived as informal,

*4. Adaptable infill:* identified early in the chapter was the ideals to manipulate territories. By manipulating these territories it becomes possible to hybridize differing territories to create an applicable territory. This hybridization is essential. Due to the growing global movement towards a digital production age in music, many artists now utilize a single device to produce multiple instrument sounds, the synthesizer identified in the theory chapter. By definition, traditional acoustic spaces were constructed predominantly for a single use, or at most a few closely related acoustic activities. However with the arrival of the synthesizer a single person can now produce an infinite number of sounds resulting in a space which needs to provide optimum acoustic for all these sounds. Therefore the infill needs to be adaptable.

*5: Urban canopy:* to maintain the historical territory identified within the precinct, it is crucial that the structure provides a degree of coverage to the street edge. This street coverage begins to harbour the everywhere territory and promotes a high degree of interchange between users.

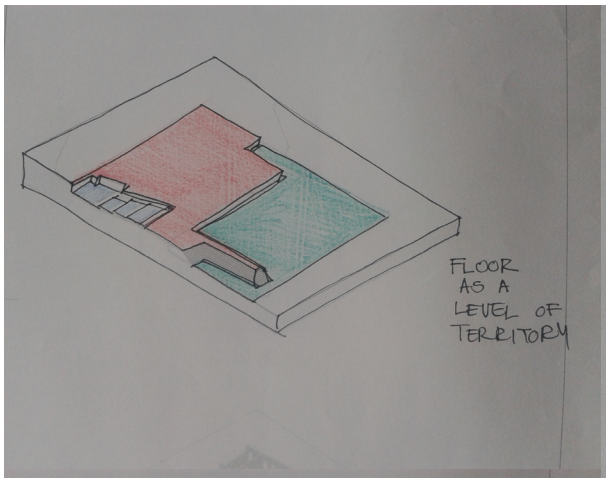


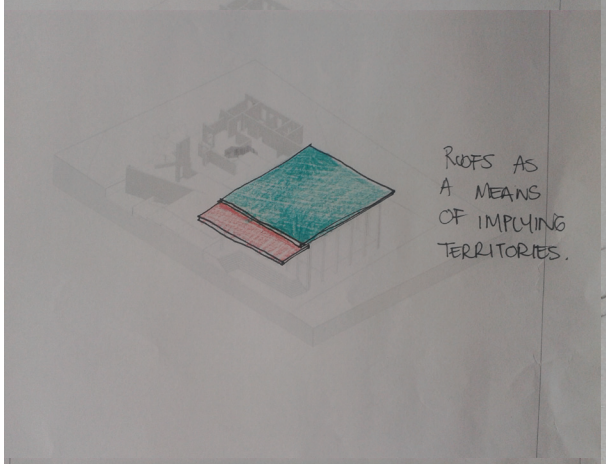
*5.40_ Defining territories approach and concept*

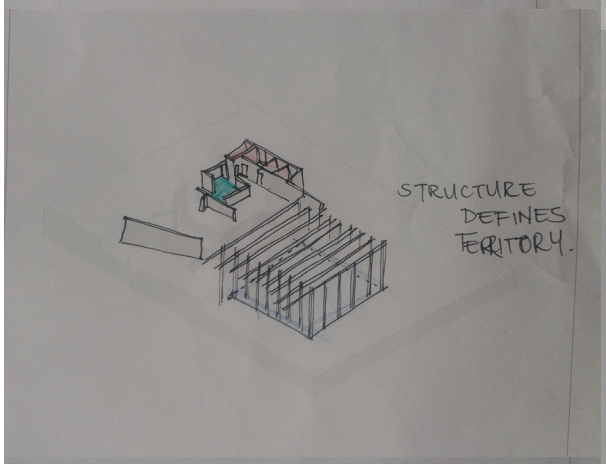
5.4.3.

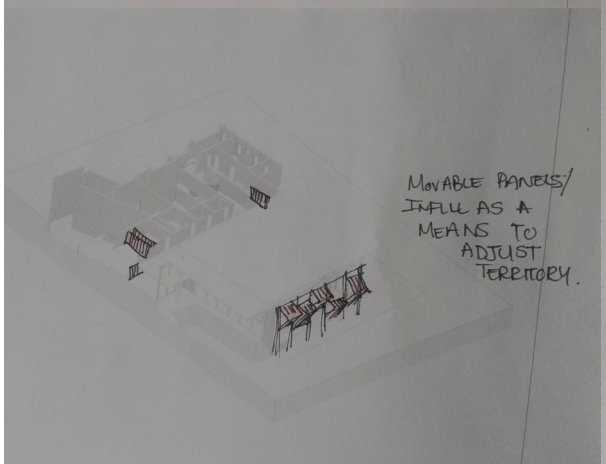
# THE SKETCH BOOK

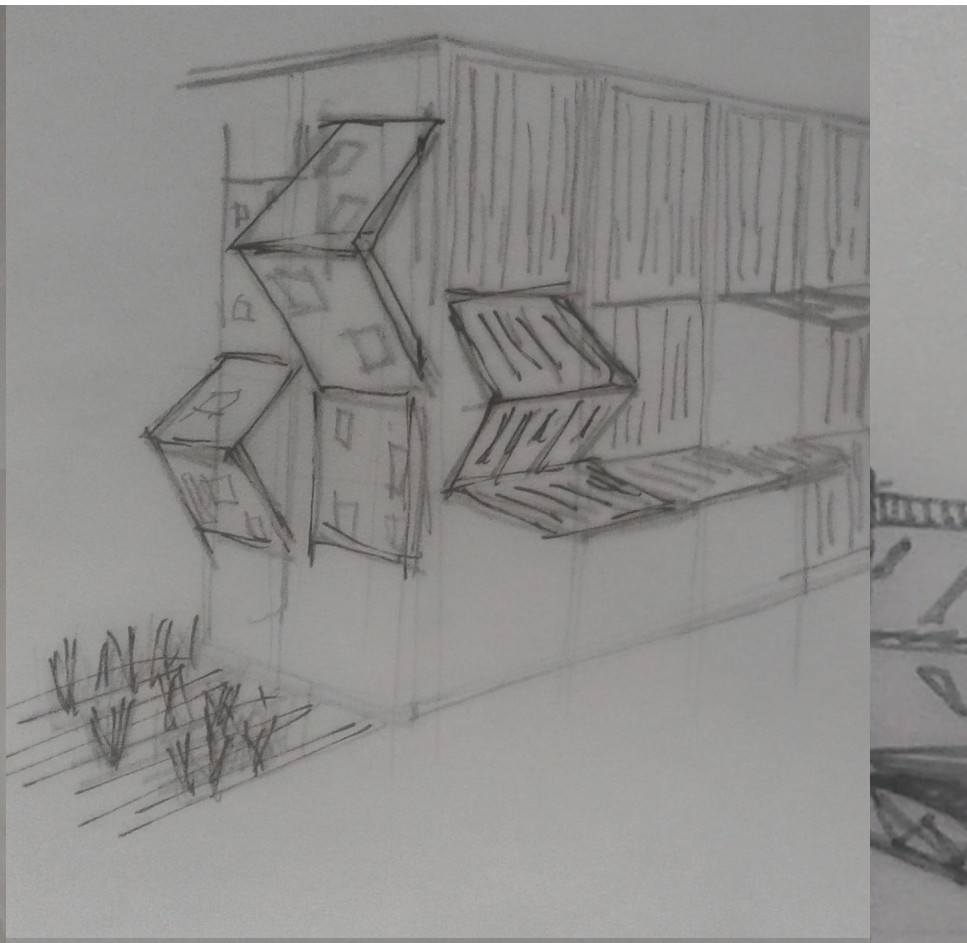
What follows is a range of sketches illustrating some of the exploration through drawing in the search of an acceptable design solution.

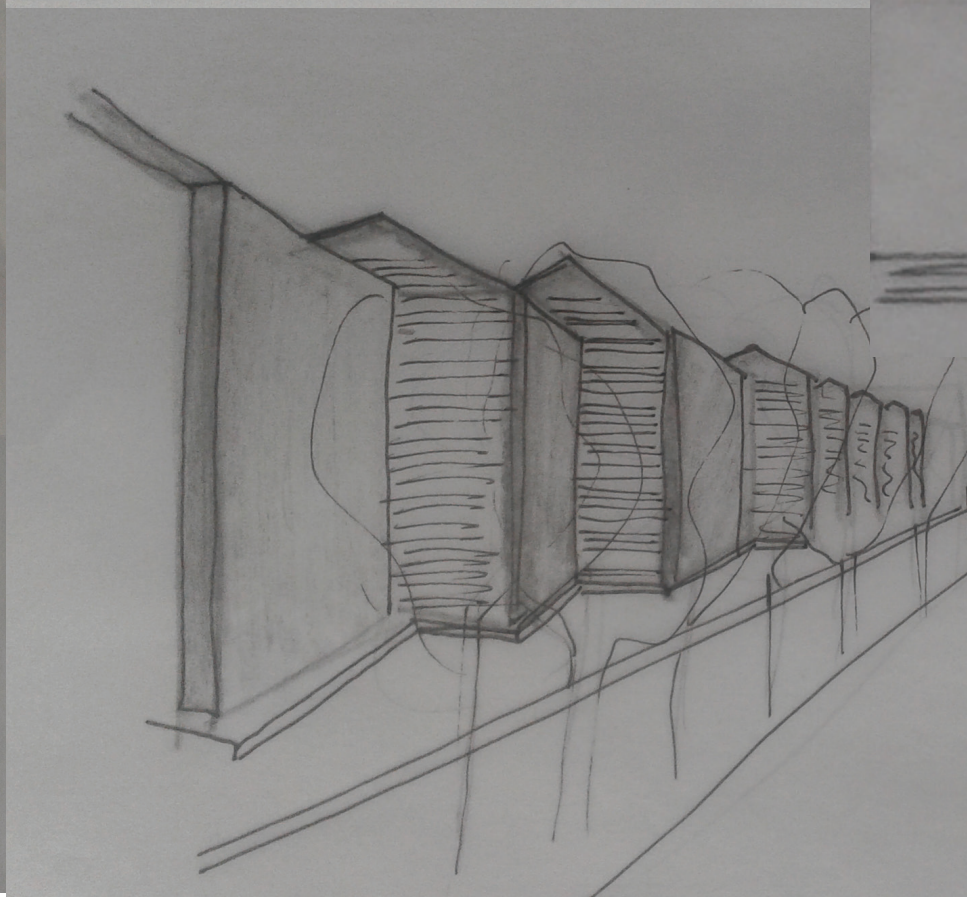


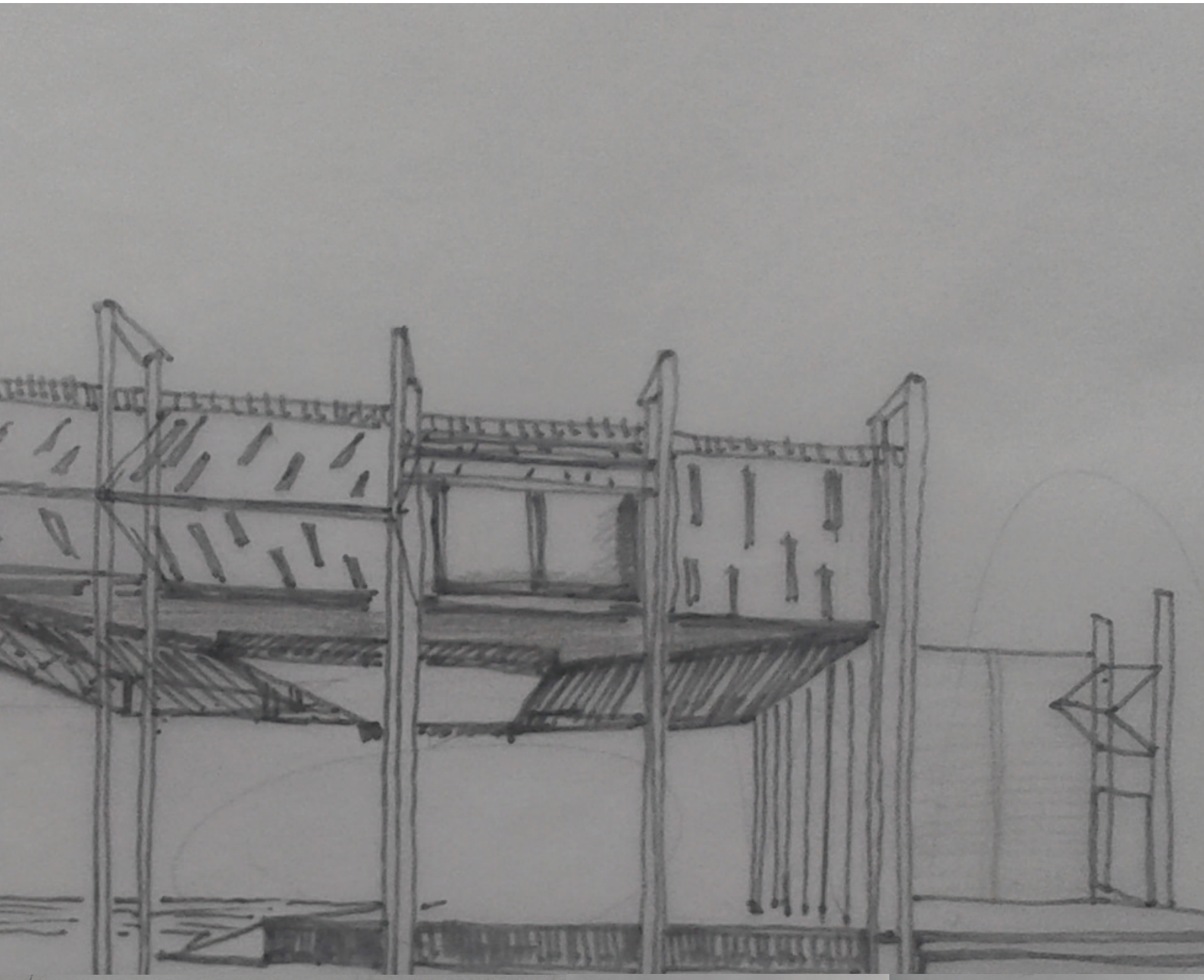



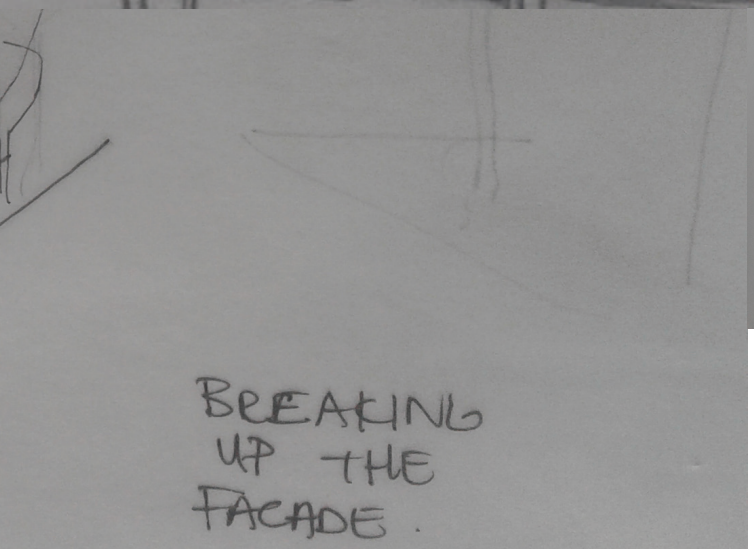



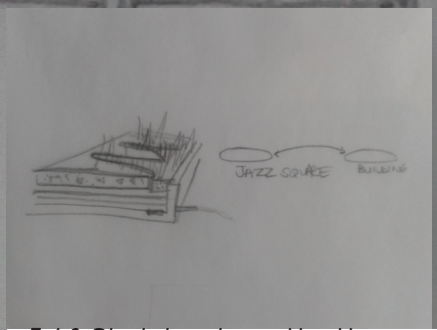



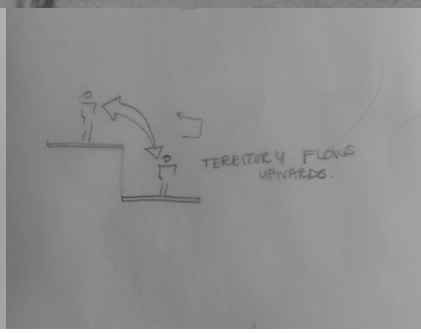





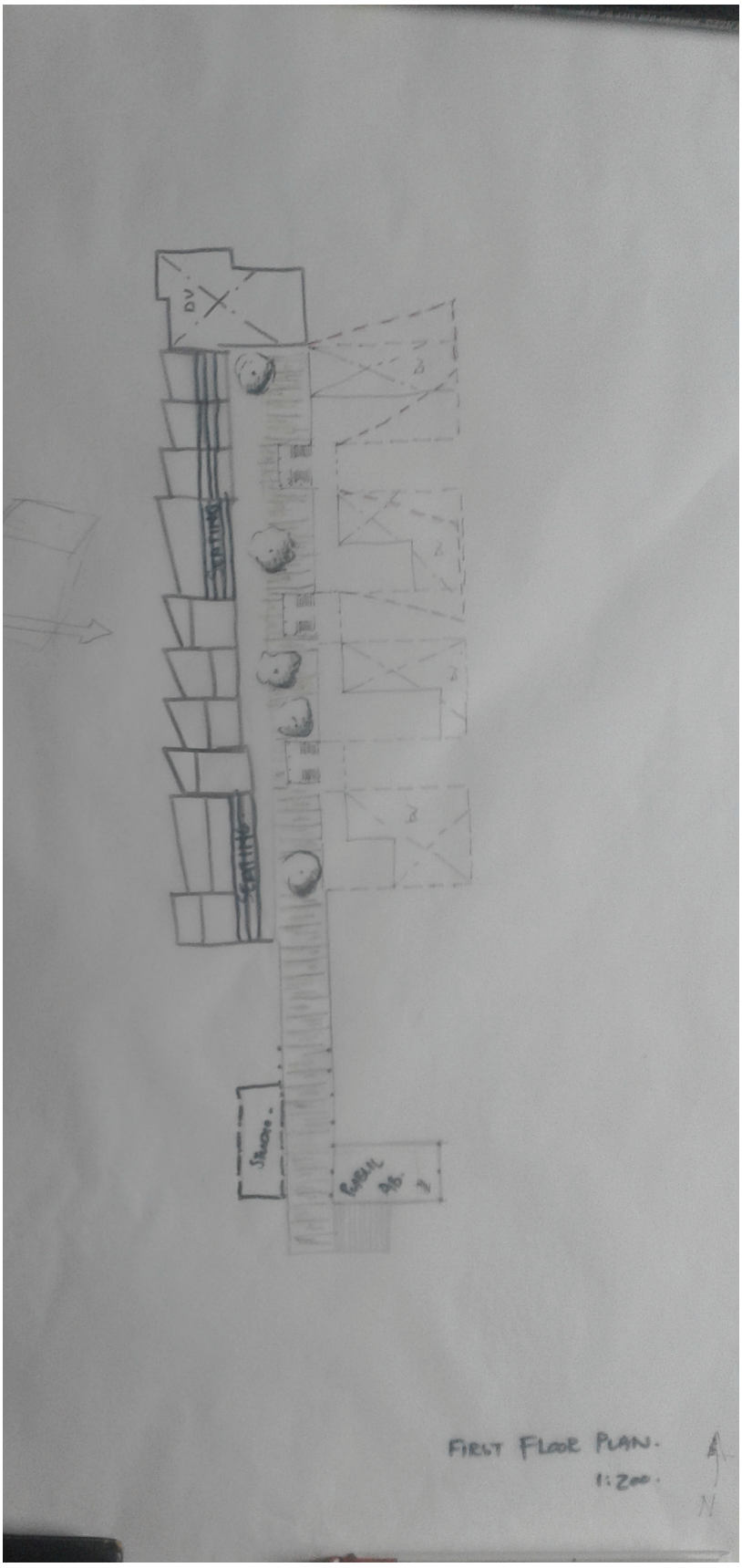


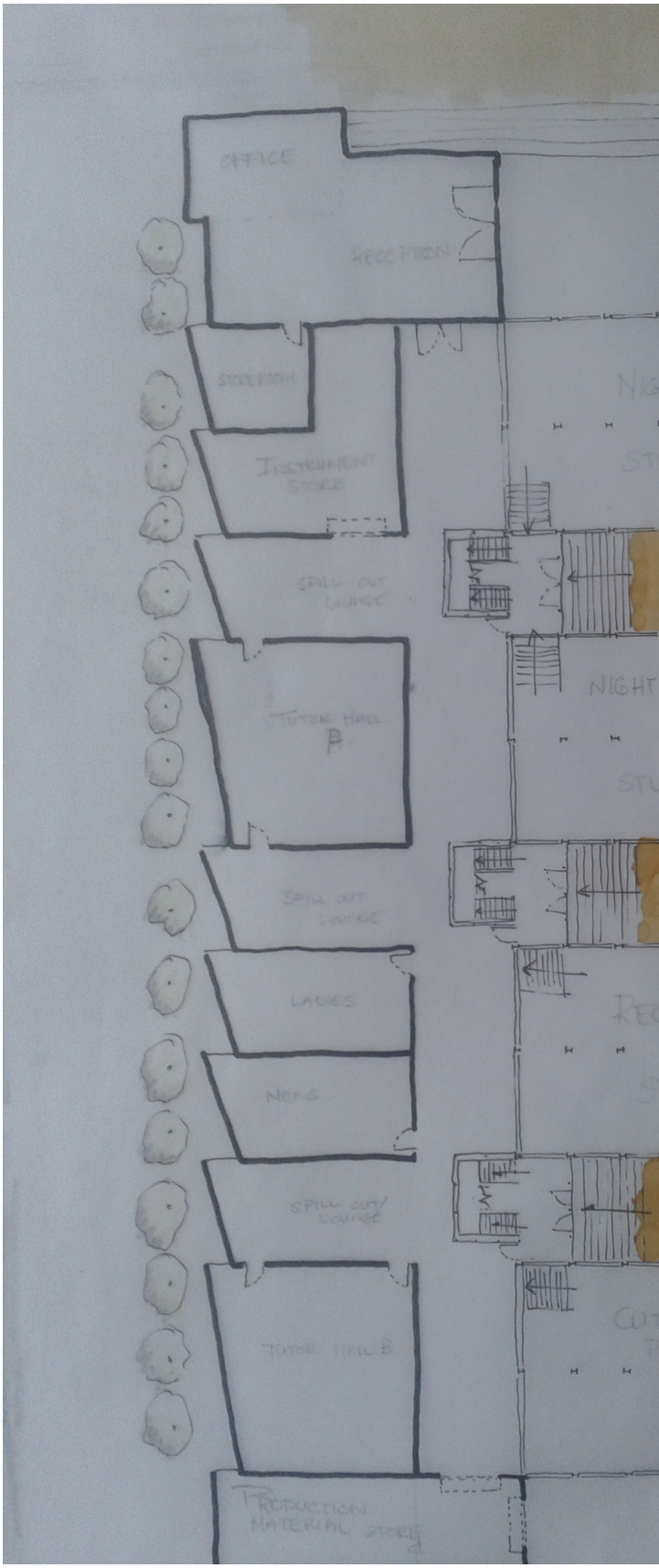


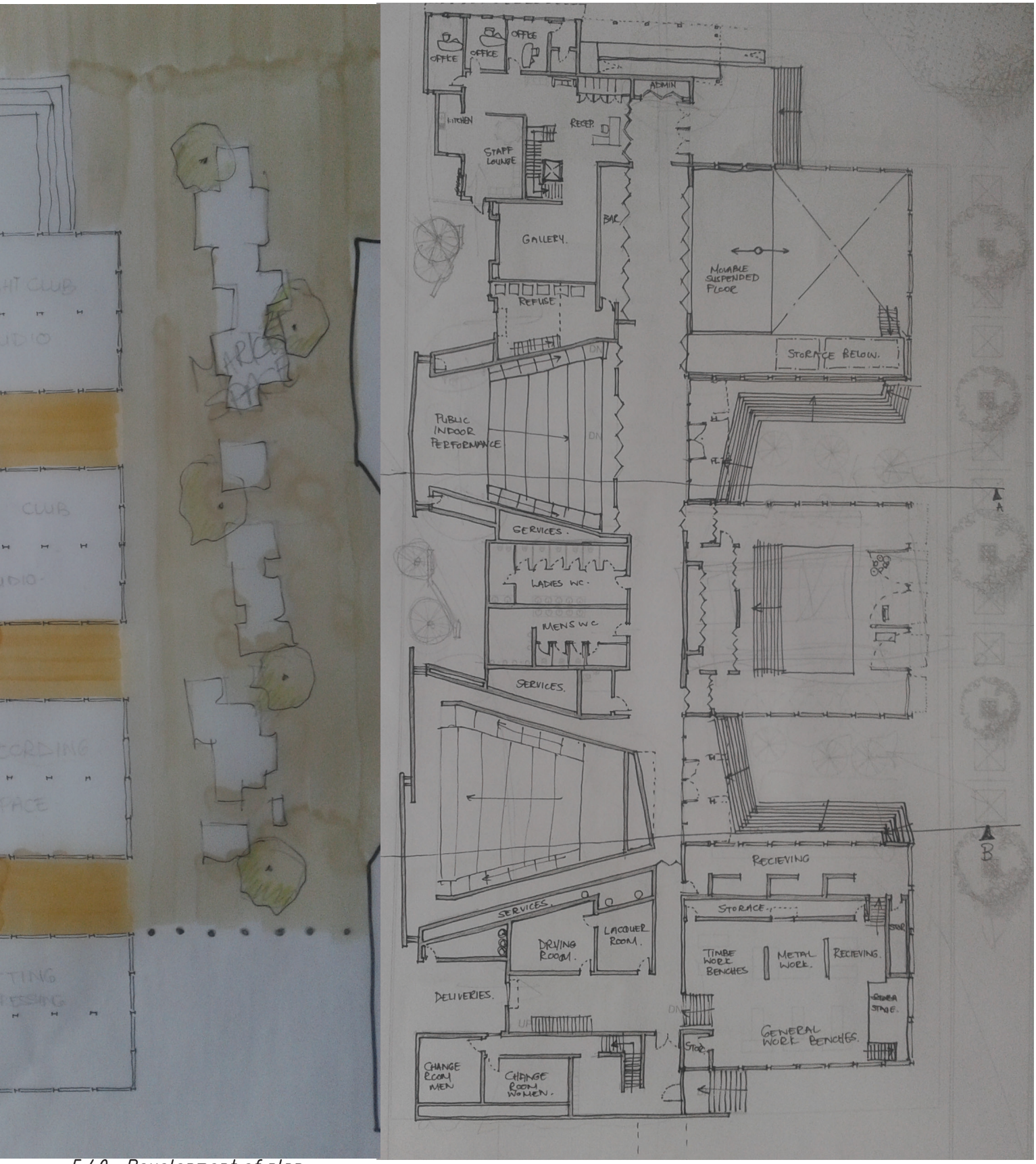



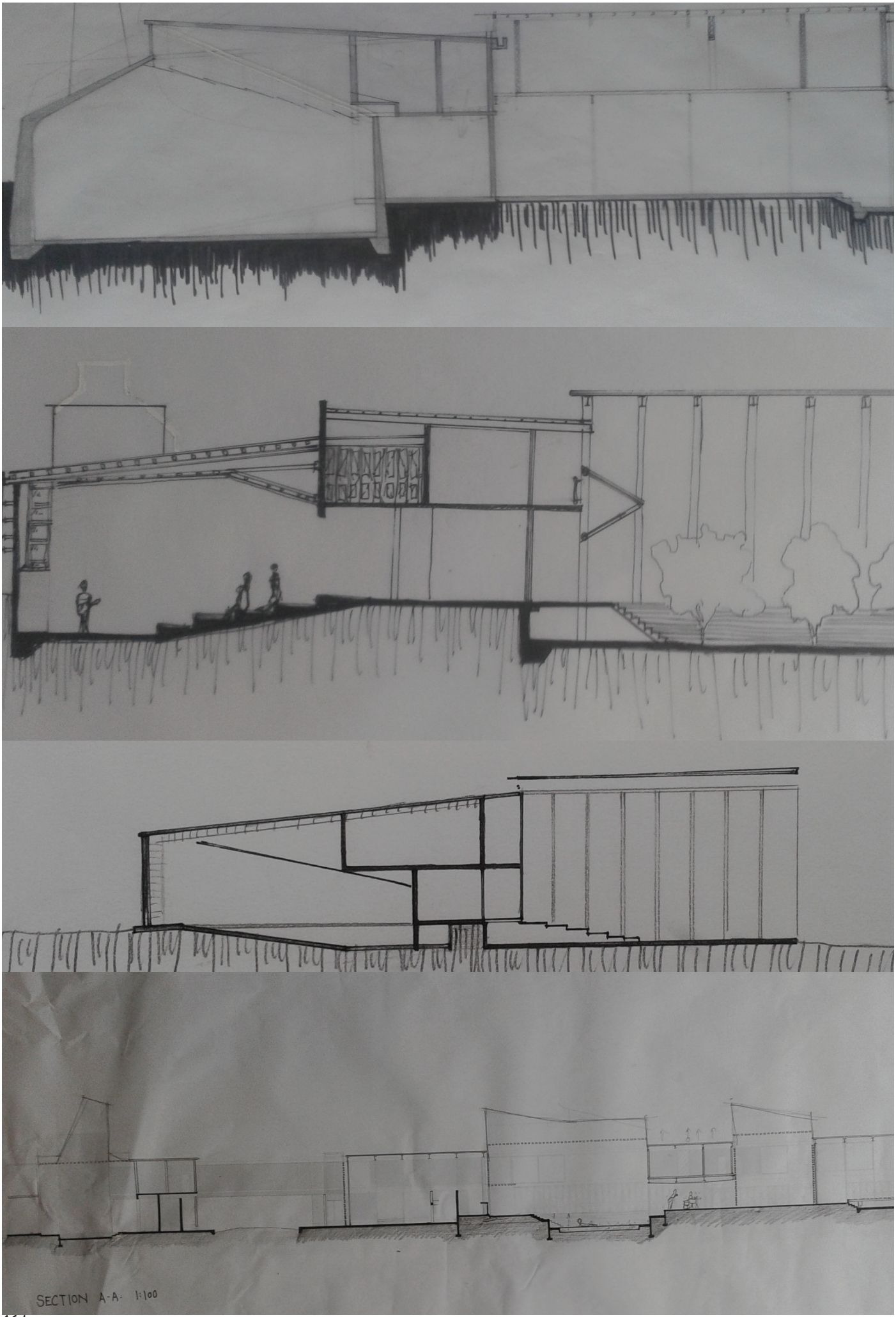

*5.40 Sketches investigating form and space.*



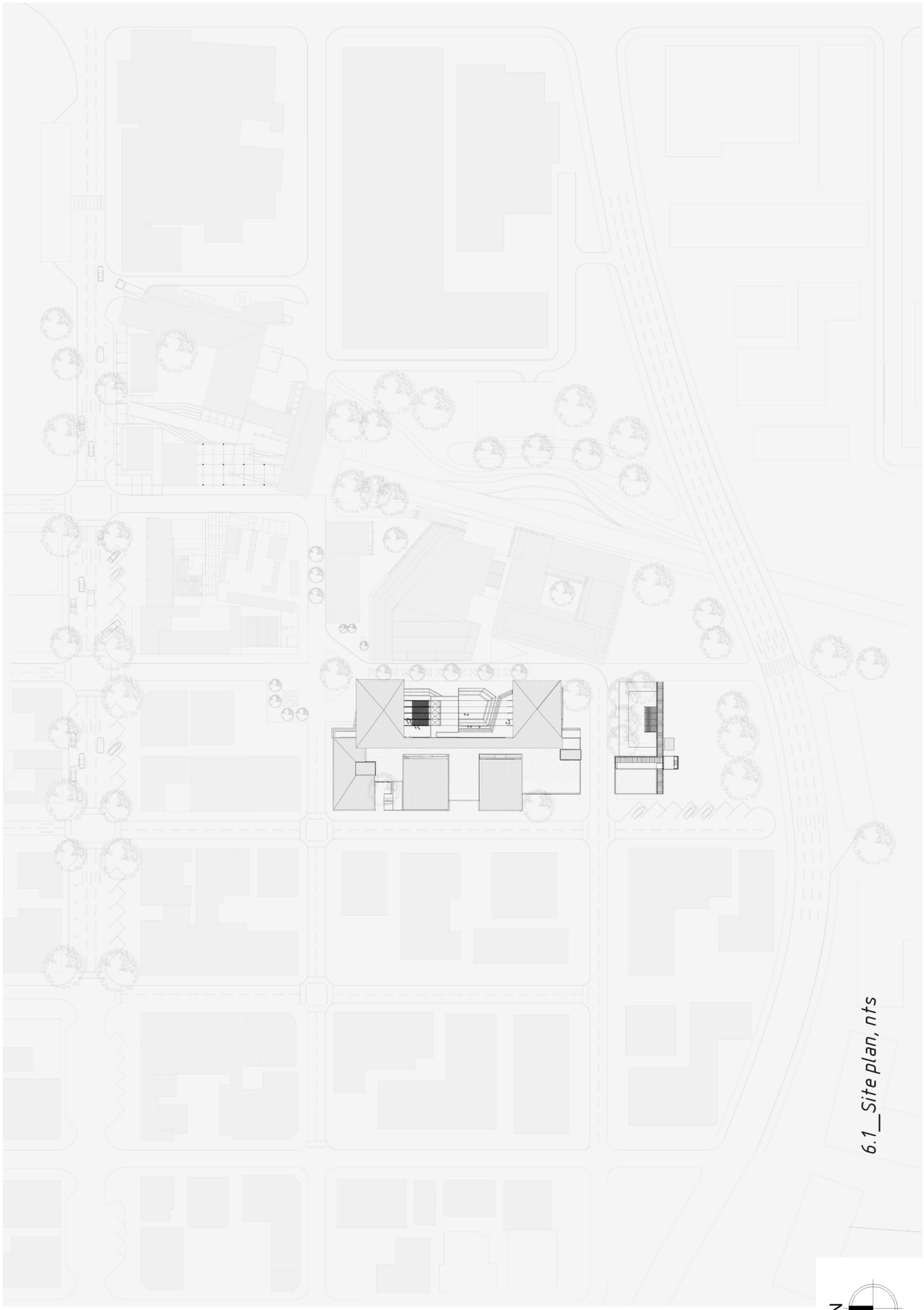



*5.40_ Development of plan*

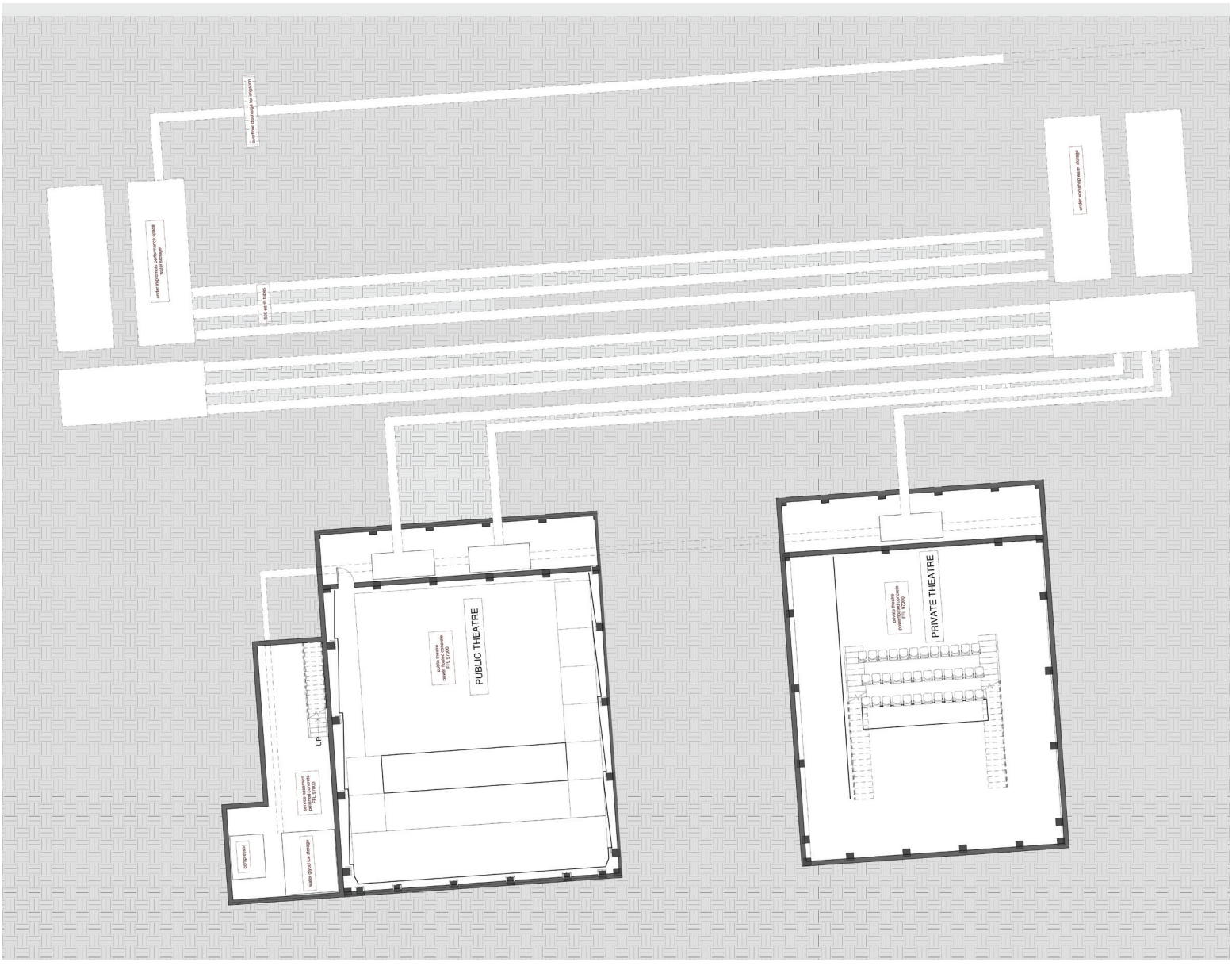



# Chapter Six
# Design and Techne

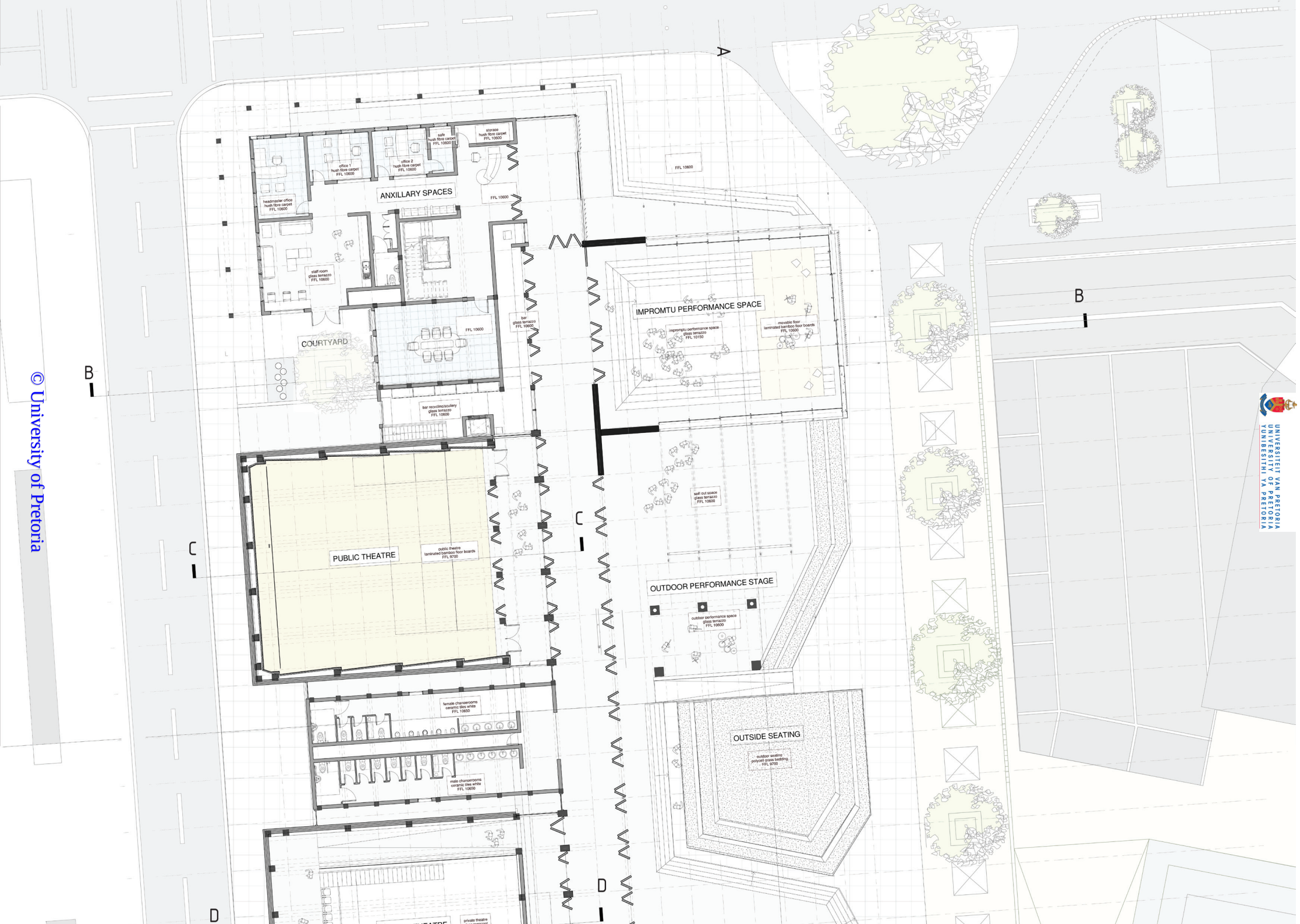
This chapter presents the design at its current stage. It is acknowledged that this is not the final presentation of the design but rather an insight into how the structure functions, quality of spaces and the technological resolution of the building.



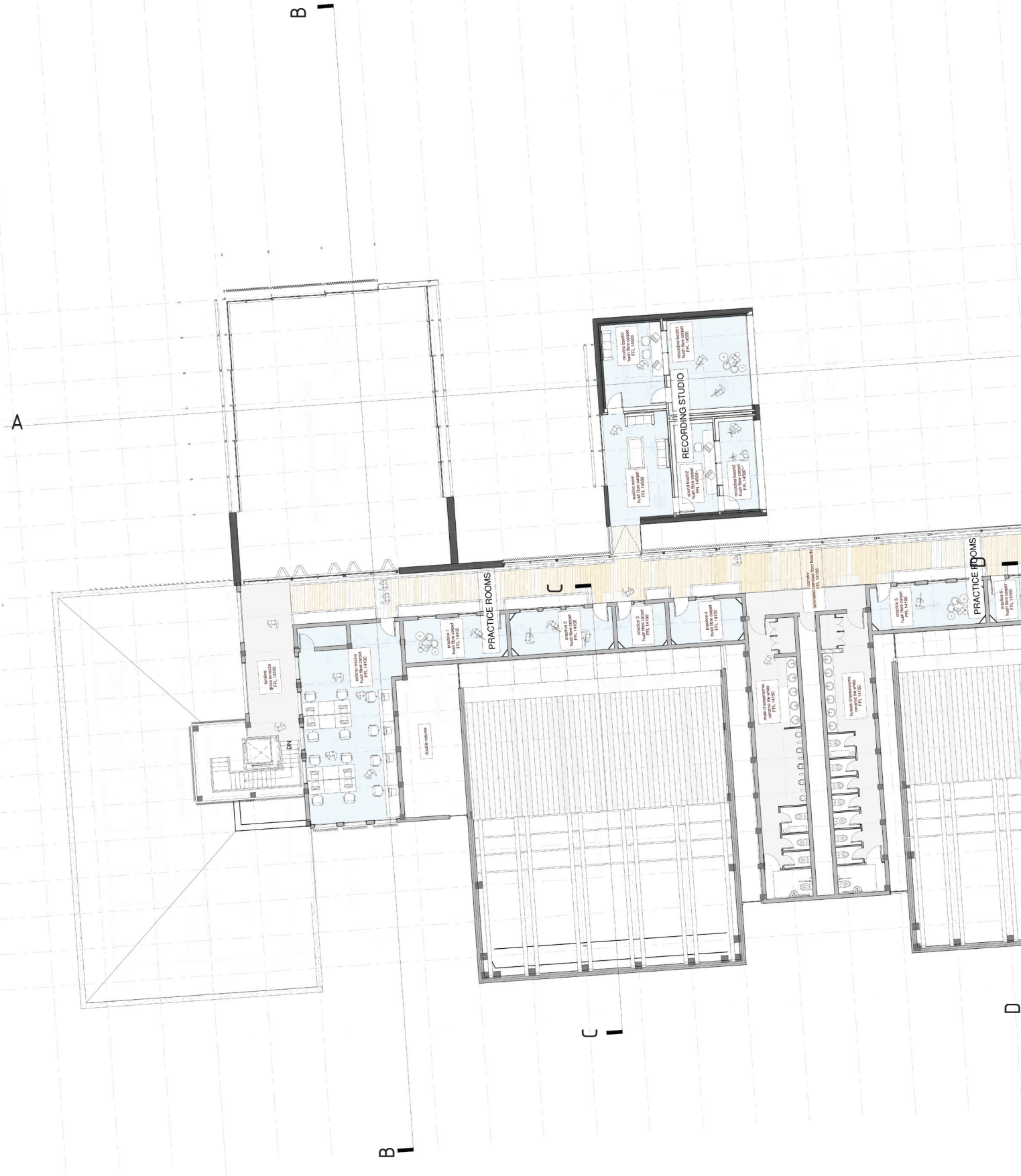

*6.1_Site plan, nts*




6.1.2_basement plan, nts




6.2_Ground floor plan, nts




*6.3_First floor plan, nts*

N

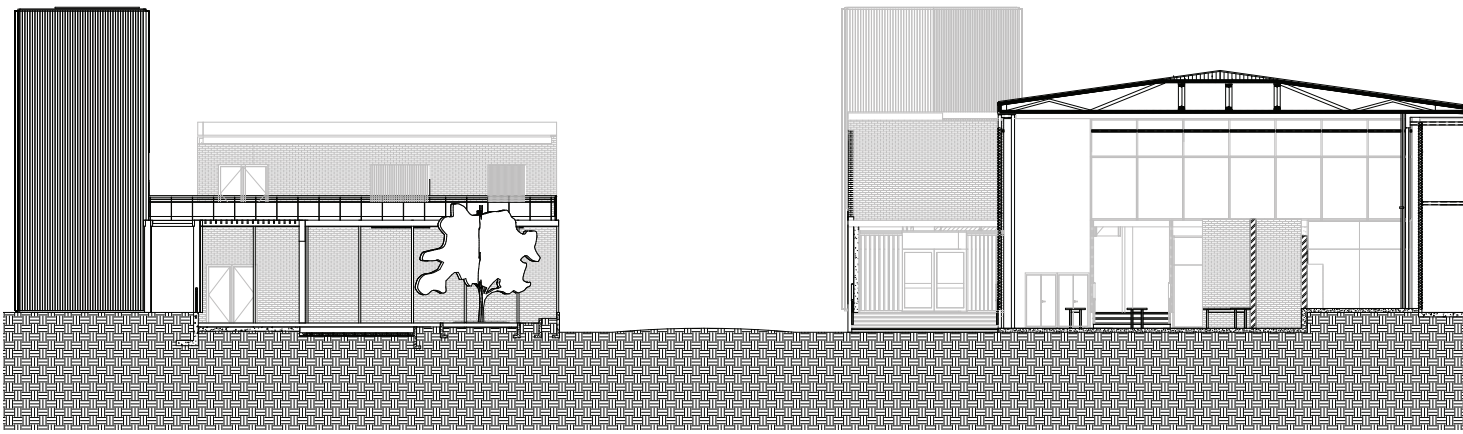
6.1.1.

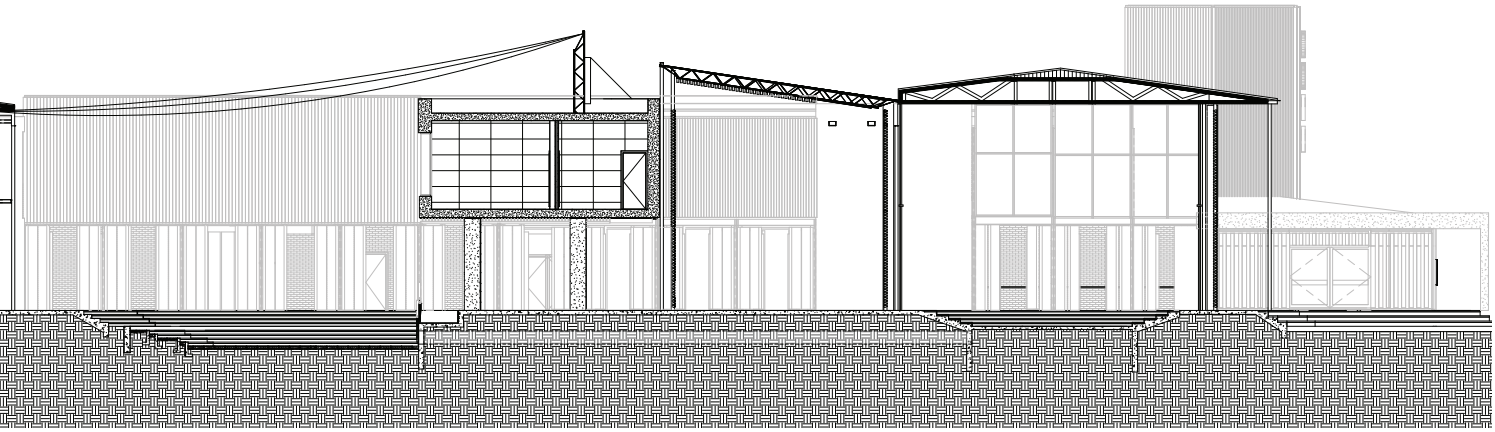
## UNPACKING THE DESIGN

From the initial excursion to Marabastad to the final departure, the demarcation of varying territories were evident. The historical territory, characterized by the ruins of buildings, the contemporary territory, demonstrated by the hustle and bustle, and the future territories, depicted in the development of the area.

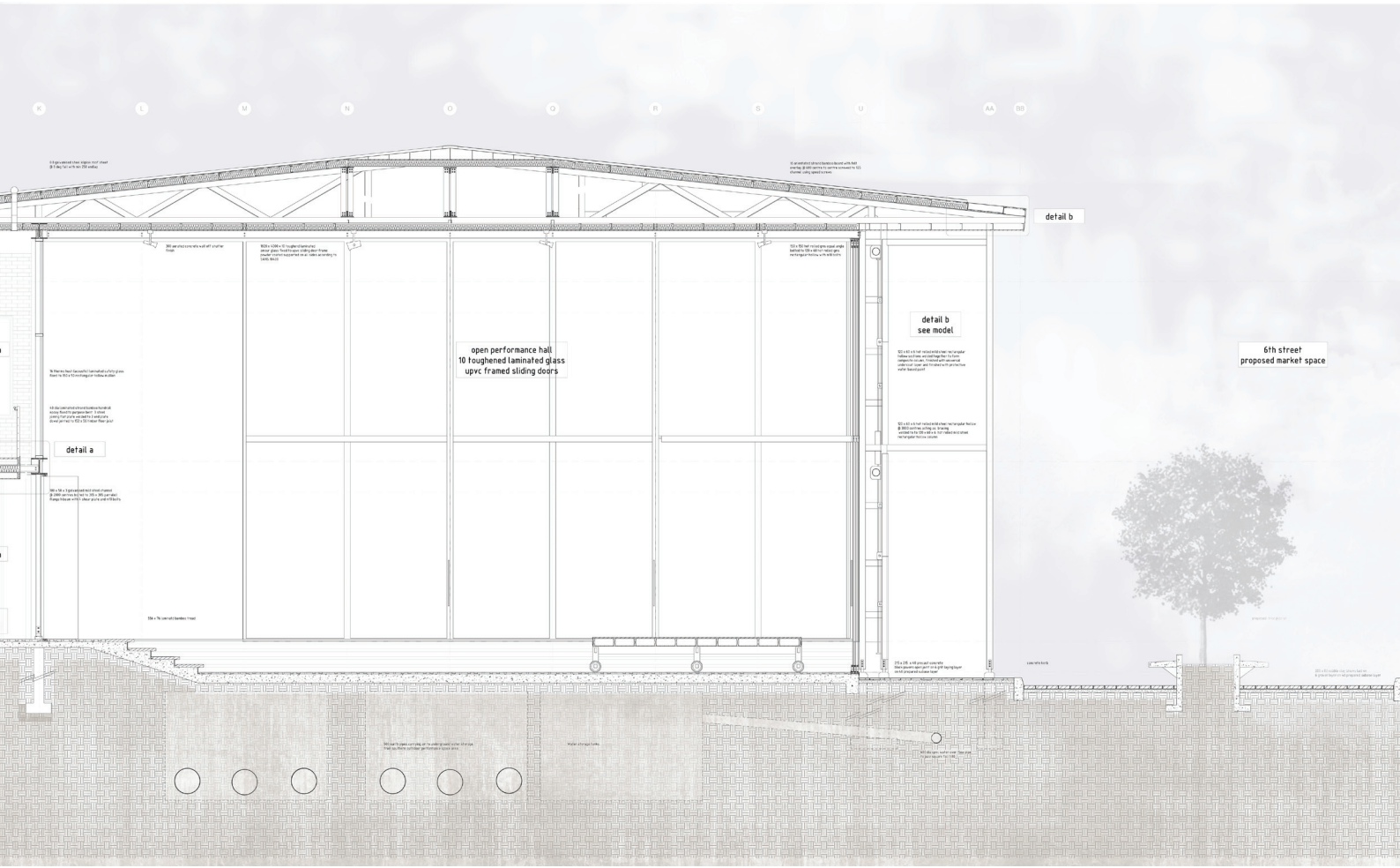
The aim of the design was to encapsulate these territories into spaces which would allow for artists, and audience to engage with the building on different levels.

The outcome is a design which engages extensively with the public on one edge, juxtaposed with a the opposite edge which insulated the user from the outside.

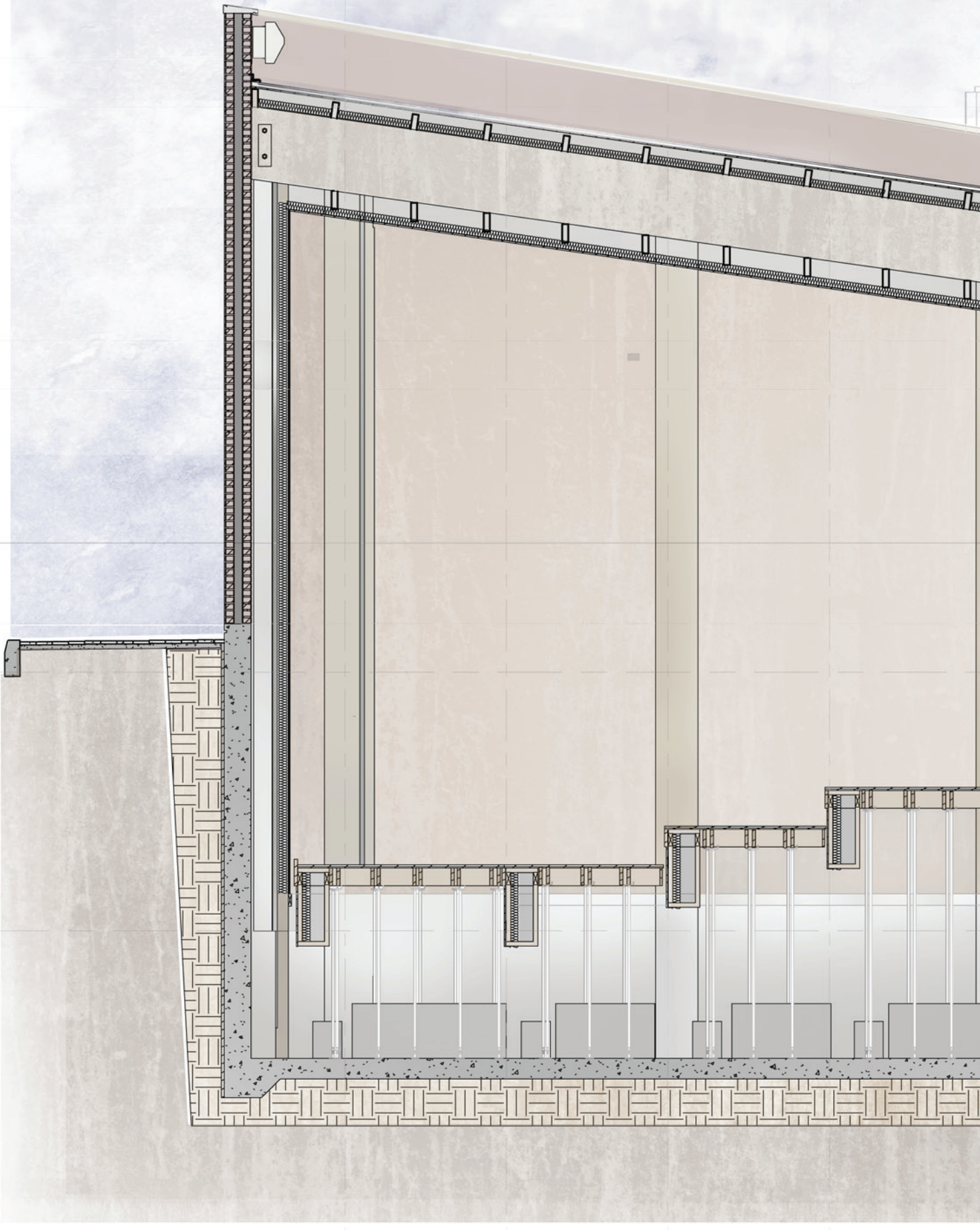


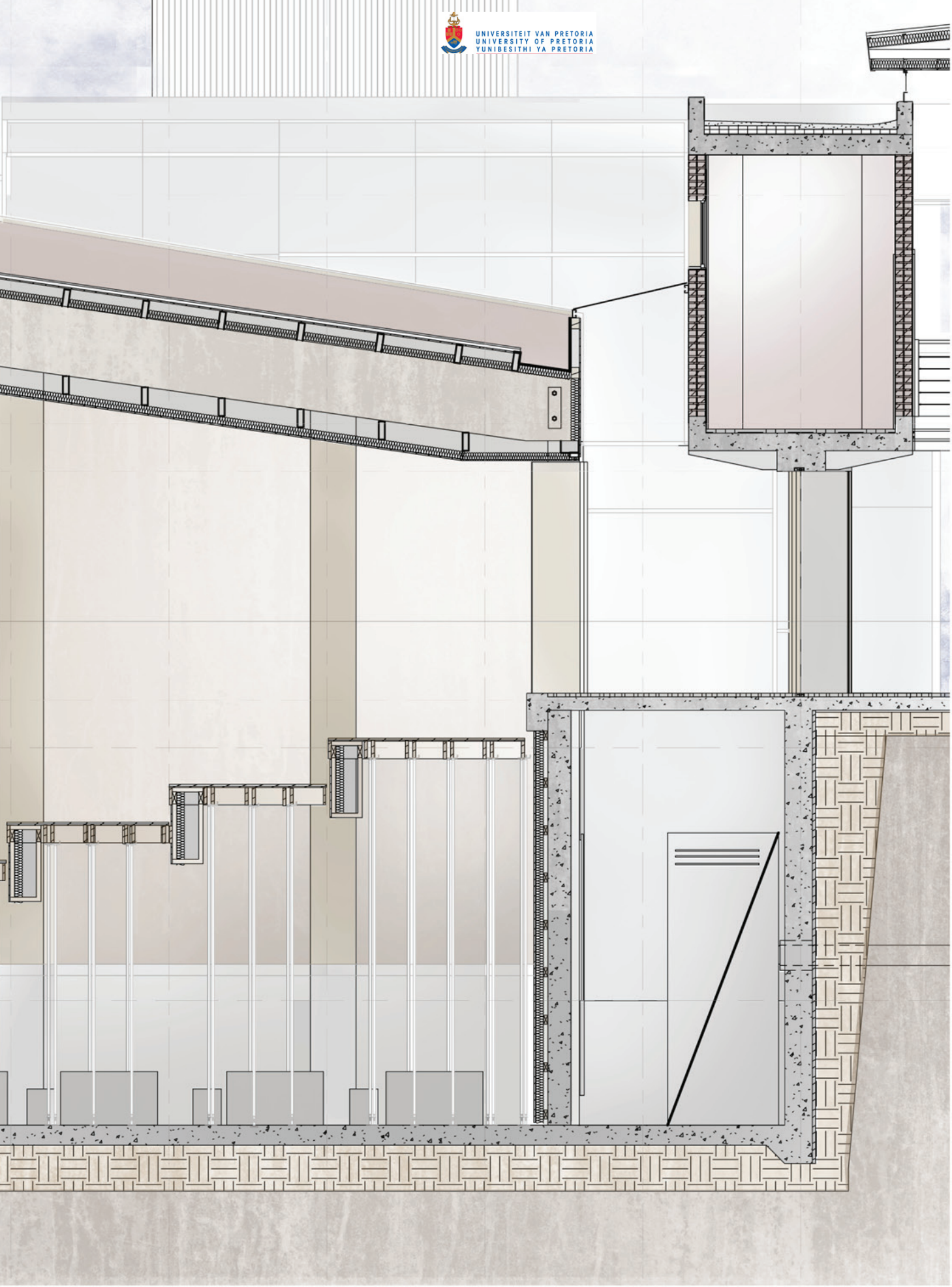


*6.4__ Section a-a, nts*

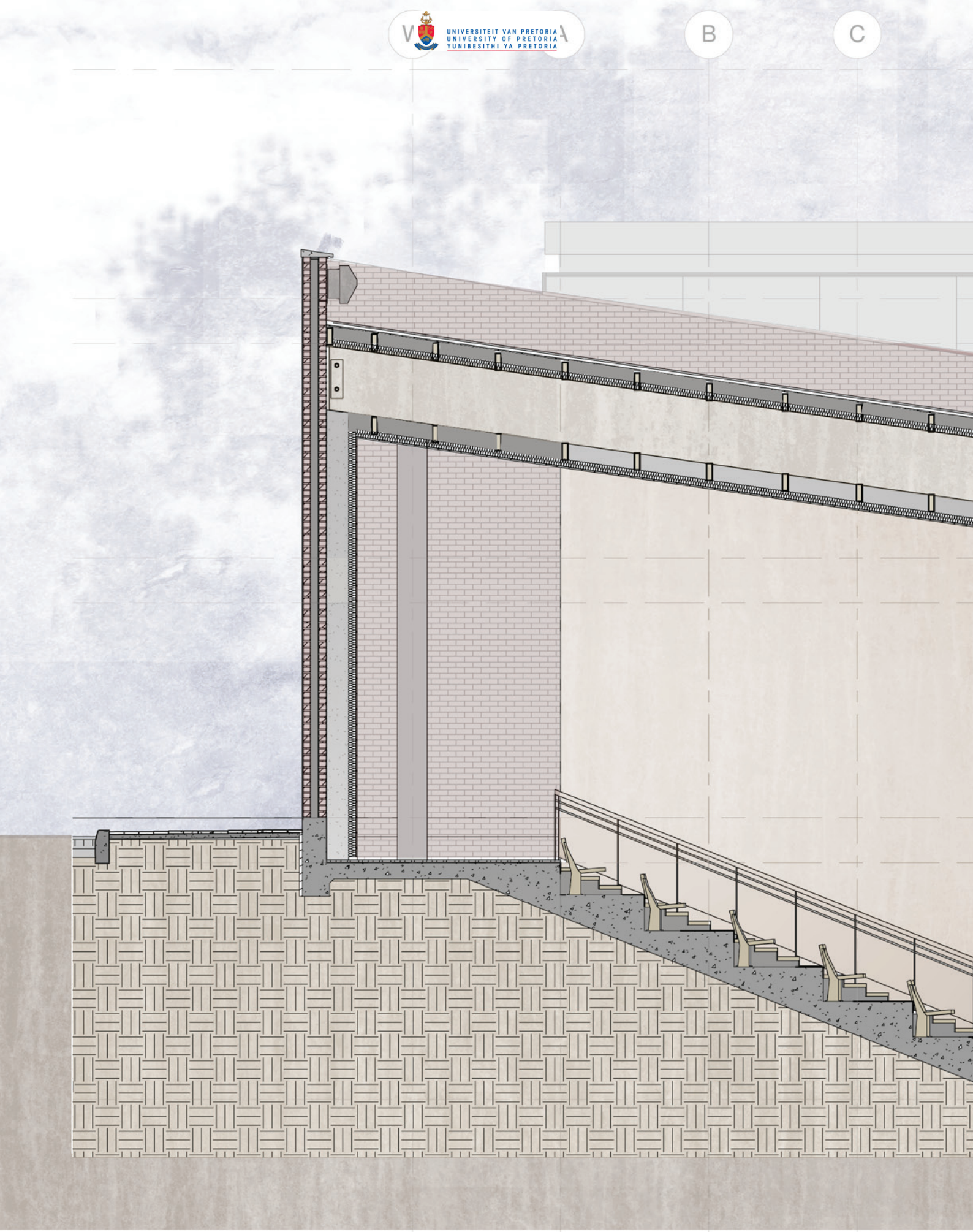


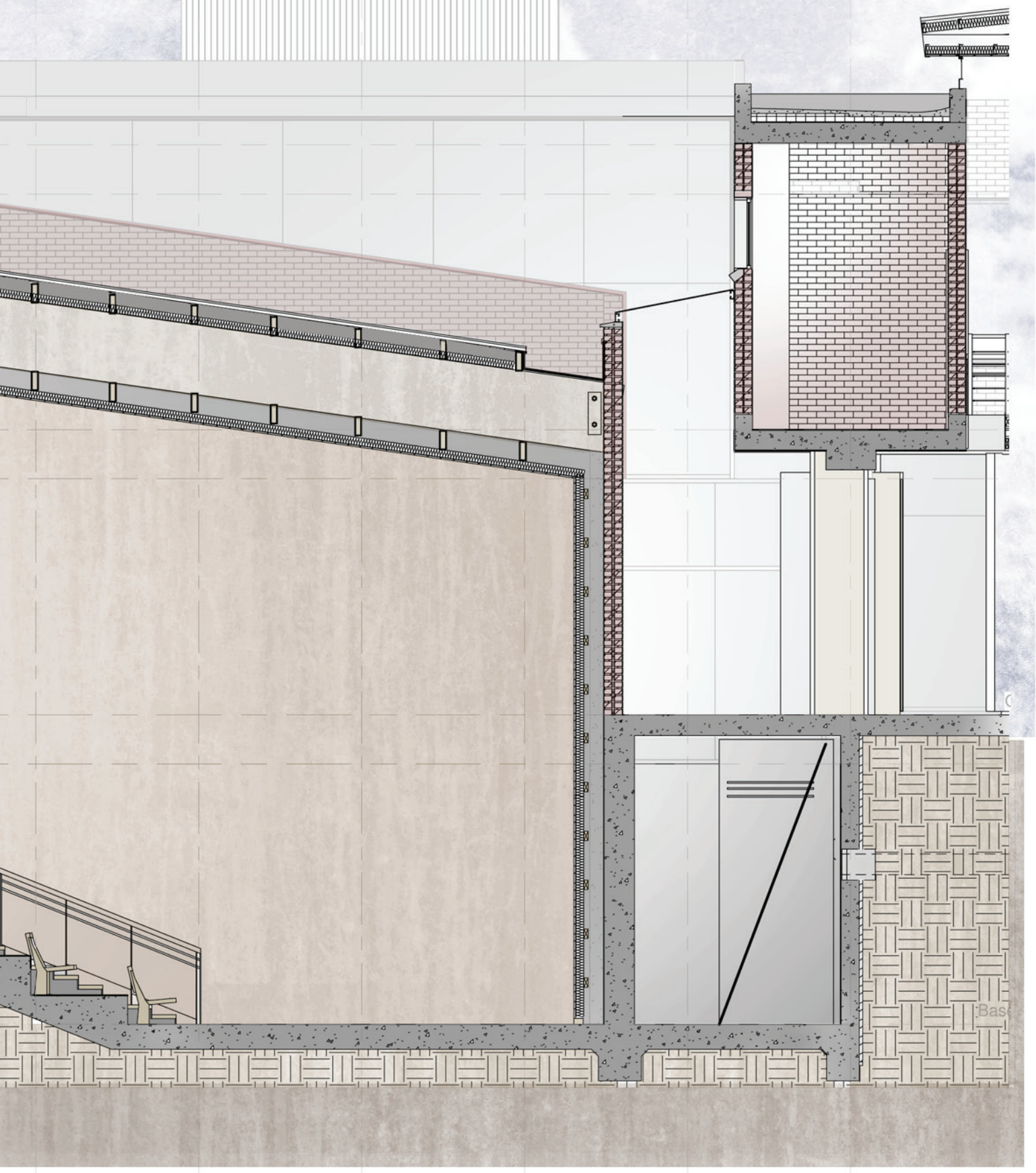

*6.5__ Section b-b, nts*



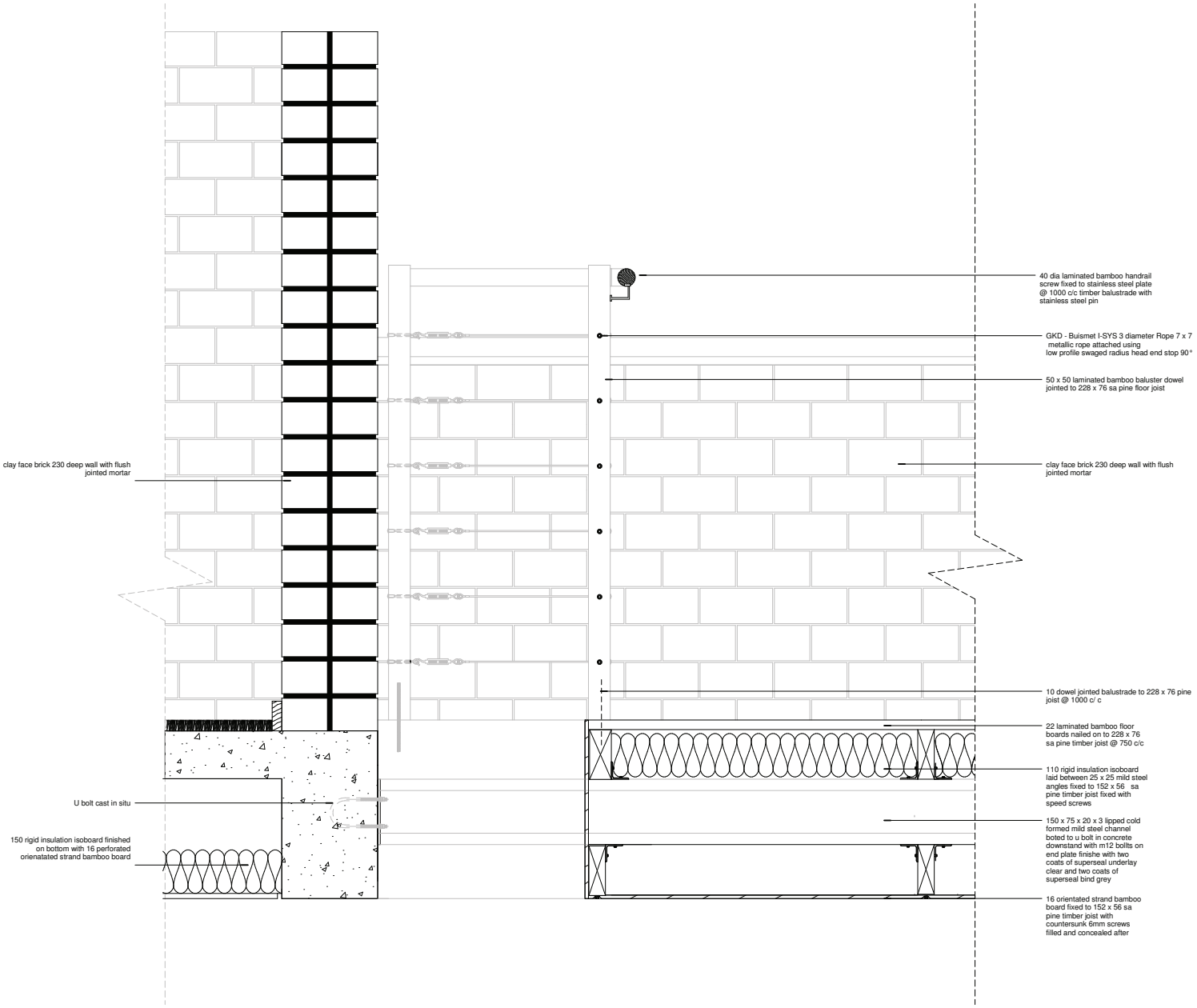


6.6_Section c-c, nts

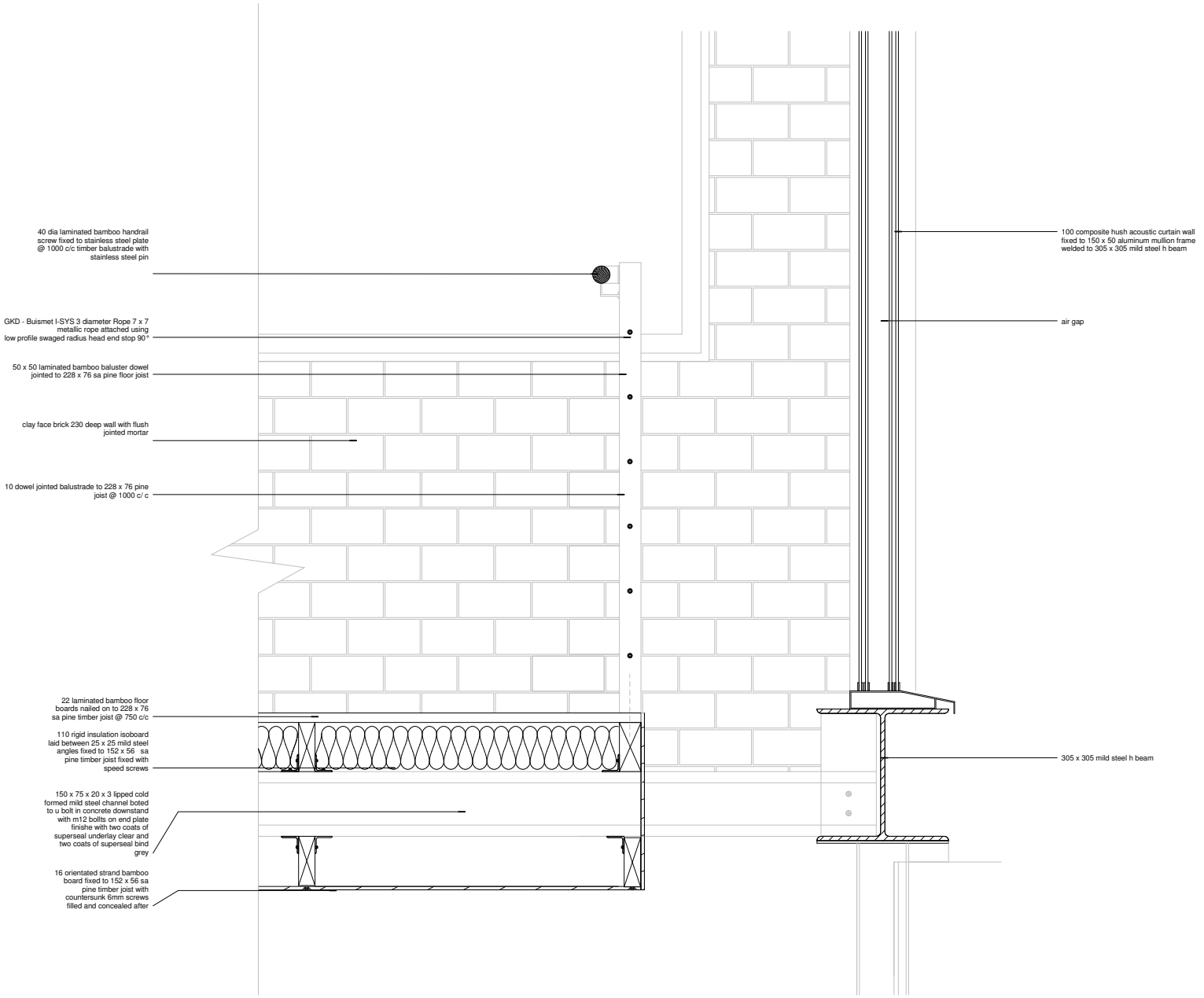




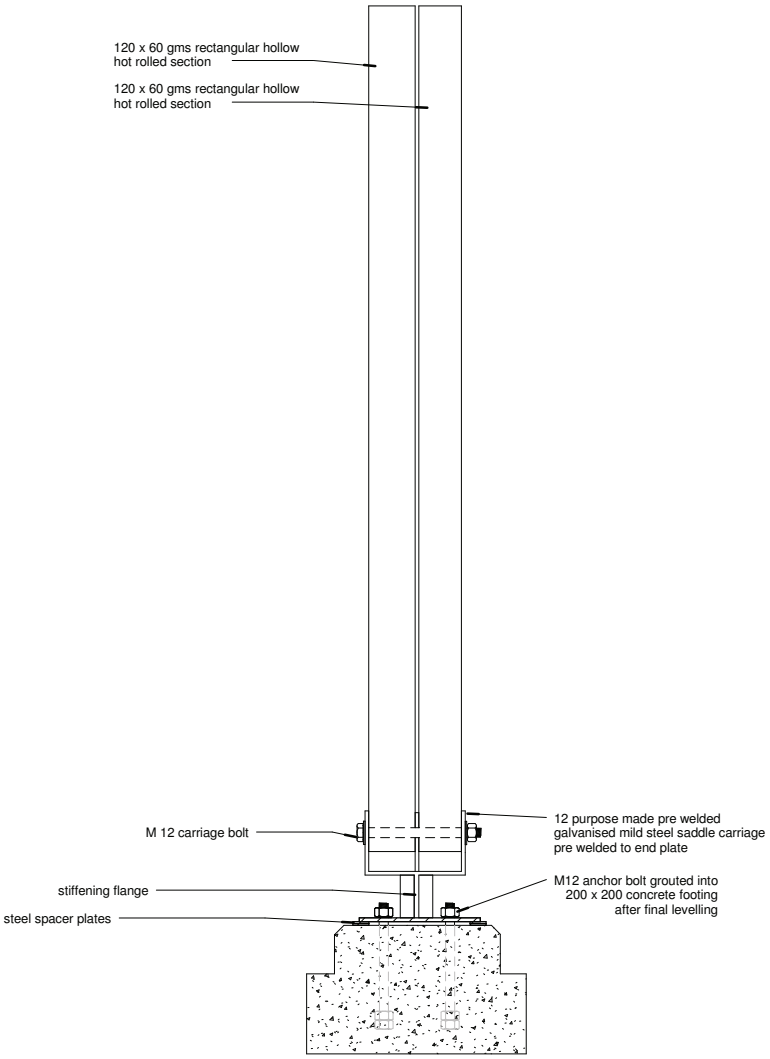
6.7_Section d-d nts




*6.8_Detail a, nts*

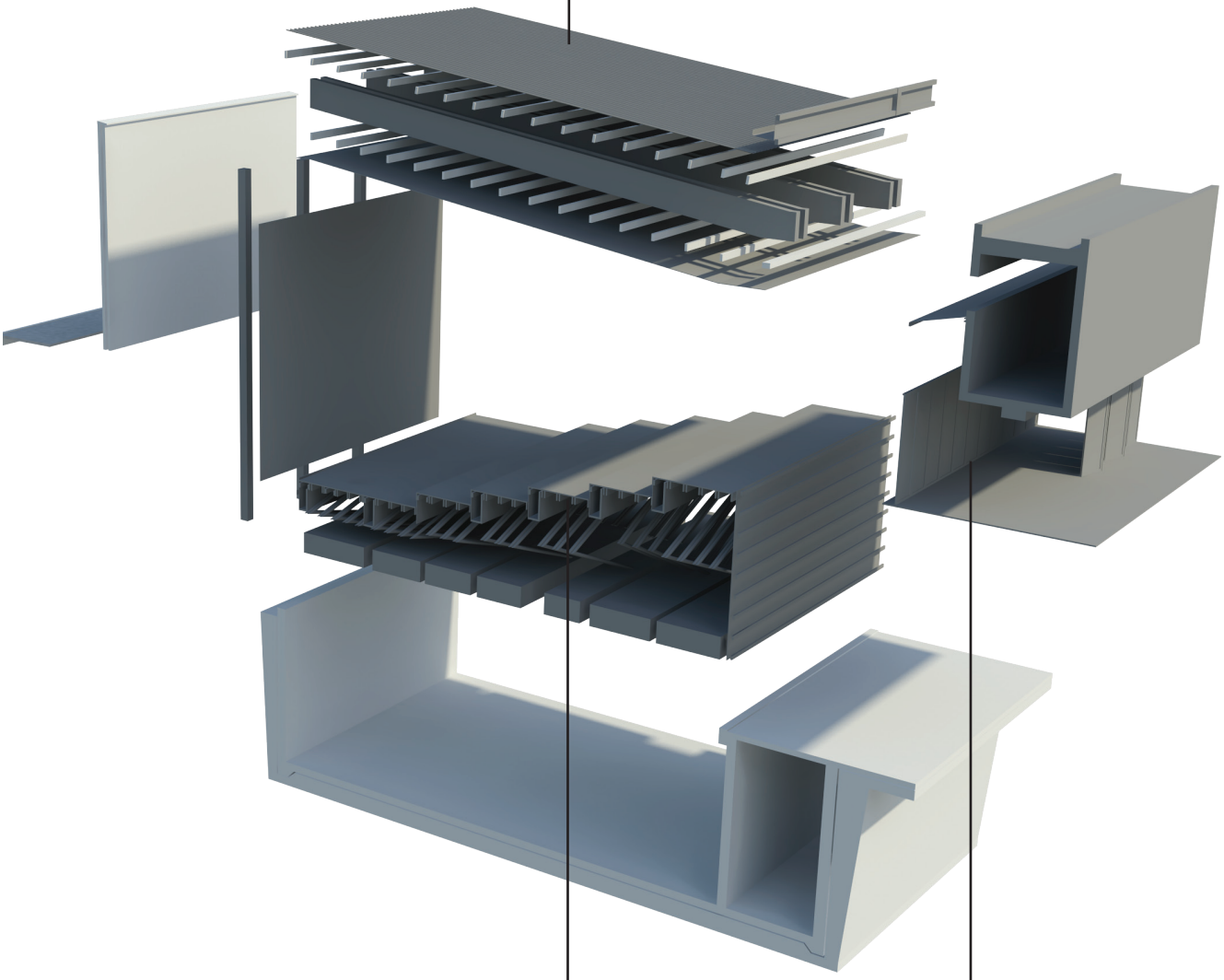



*6.9_Detail b_nts*




6.10_Detail c,nts

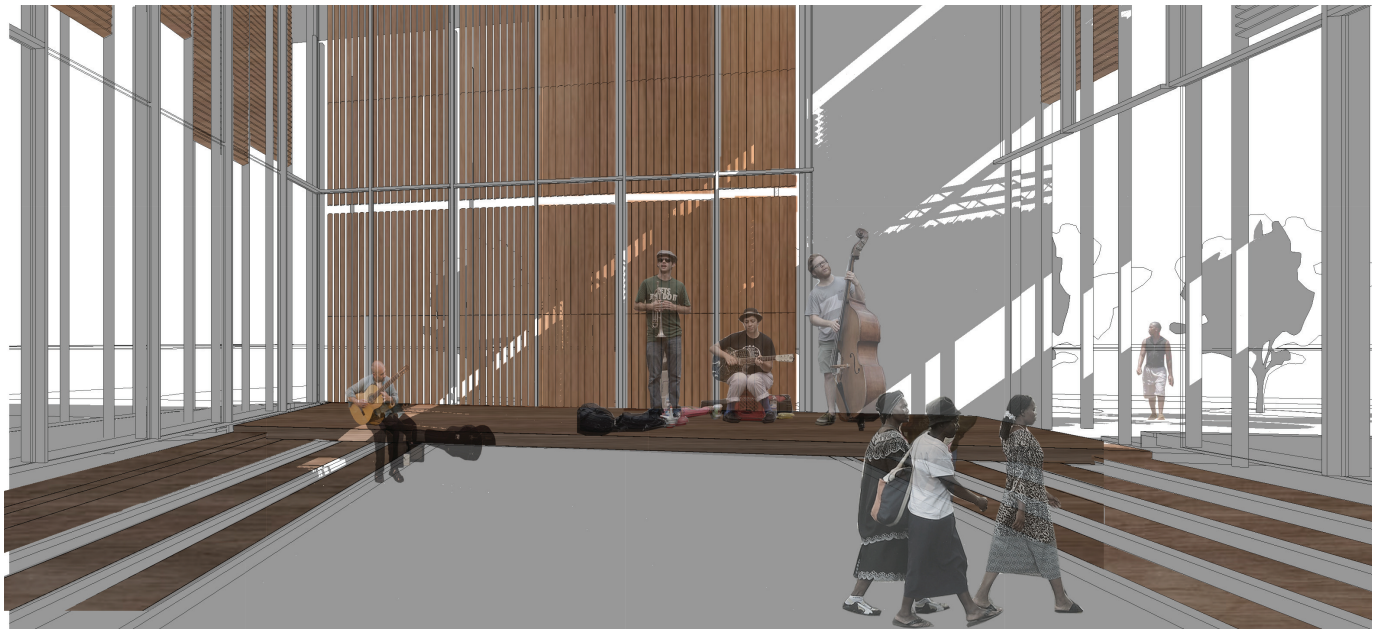
RHEINZINK² DOUBLE STANDING SEAM WITH 500MM COVER WIDTH, ,8MM THICK AND SINGLE PANEL LENGTH OF 1.2M WITH A ROOF PITCH OF 8° FIXED TO SUBROOF WITH CONCEALED RHEINZINK² CLIPS. SUBROOF TO BE 21MM THICK MARINE PLY WITH VAPOZINC². VENTILATED CLEARANCE UNDERNEATH SUB-ROOF OF 80MM. FLASHINGS TO BE DONE IN RHEINZINK² IN ACCORDANCE TO MANUFACTURER`S INSTRUCTIONS. VENTILATION IN AND OUTLETS AT EAVES AND RIDGES TO BE PROTECTED WITH RHEINZINK² INSECT MESH. ALL IN ACCORDANCE WITH THE MANUFACTURER`S RECOMMENDATIONS.



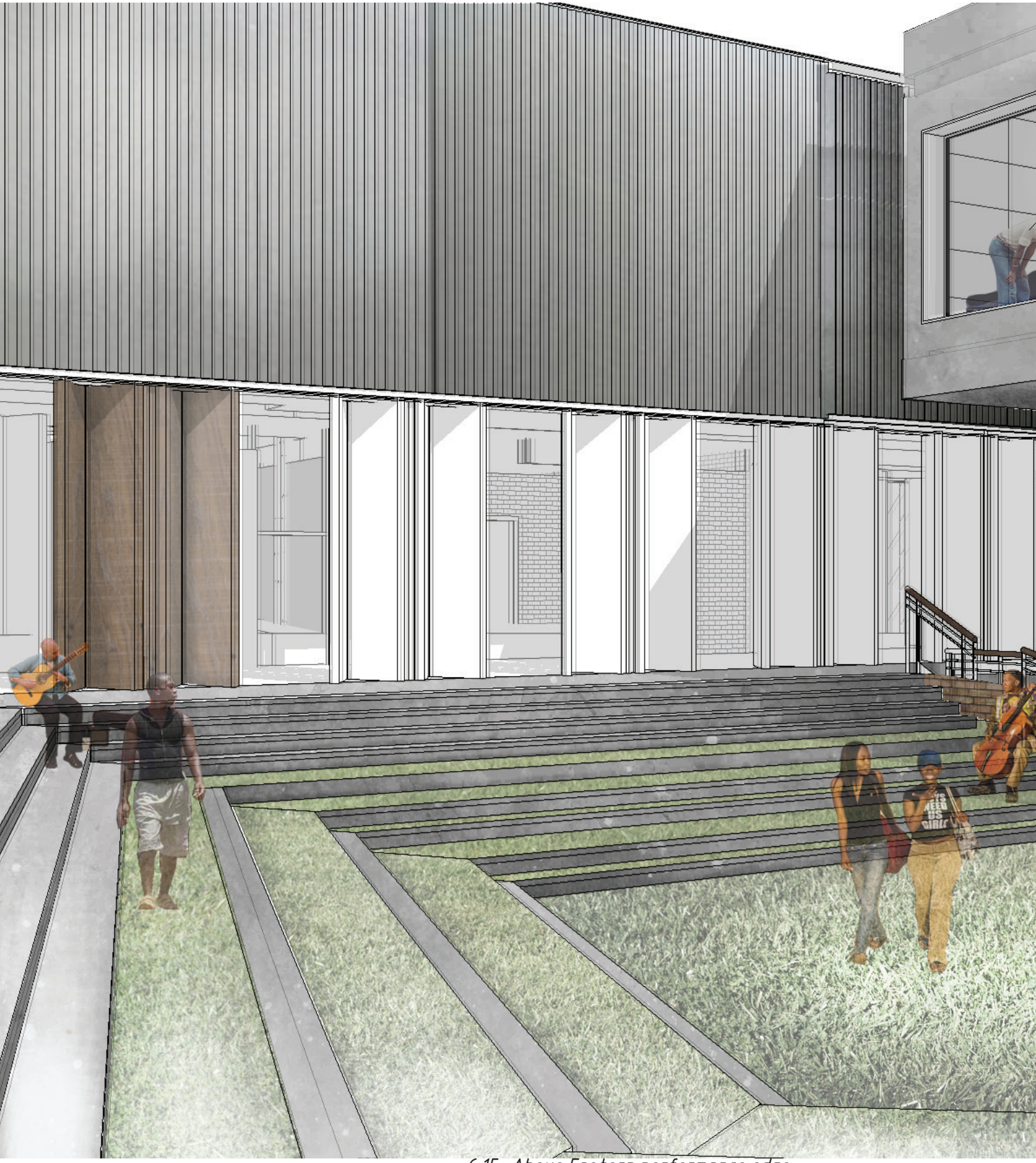
M-FLOORS 2 YEAR GUARANTEE (AC3/CLASS 31) MULTI-LAYER HIGH PRESSURE LAMINATE BAMBOO FLOORING IN PLANKS SIZE 1380 X 193 X 7MM THICK IN MISTY MAPLE FINISH (CODE: MFMD7.MM), FIXED FLOATING WITH EXPRESS CLIC SYTEM LOCK™ CLICK-MECHANISM ON COMBI UNDERLAY COMPRISING 80 MICRON PLASTIC ADHERED TO A 2MM HDPE AEROTHENE FOAM MOISTURE BARRIER WITH 200MM OVERLAPS INCLUDING 40MM TURN-UP AT WALLS INCLUDING EXPANSION JOINTS. EXPANSION GAPS OF 10MM FROM WALLS AND ANY VERTICAL STRUCTURES TO BE MAINTAINED DURING INSTALLATION. ALL EXPANSION GAPS TO BE CONCEALED USING PEDROSS PROFILES

PRIMADOR VISTA FOLD NATURAL ANODISED ALUMINIUM RIGHT OPENING TWO PANEL SLIDING FOLDING DOOR, SIZE 2390 X 2390MM HIGH (CODE: SFDV2424) COMPLYING WITH SANS 1263 FIXED TO BRICKWORK OR CONCRETE, IN ACCORDANCE WITH AAAMSA SELECTION GUIDE FOR GLAZED ALUMINIUM ARCHITECTURAL ALUMINIUM PRODUCTS - JUNE 2008.

*6.11_Detail d,nts*

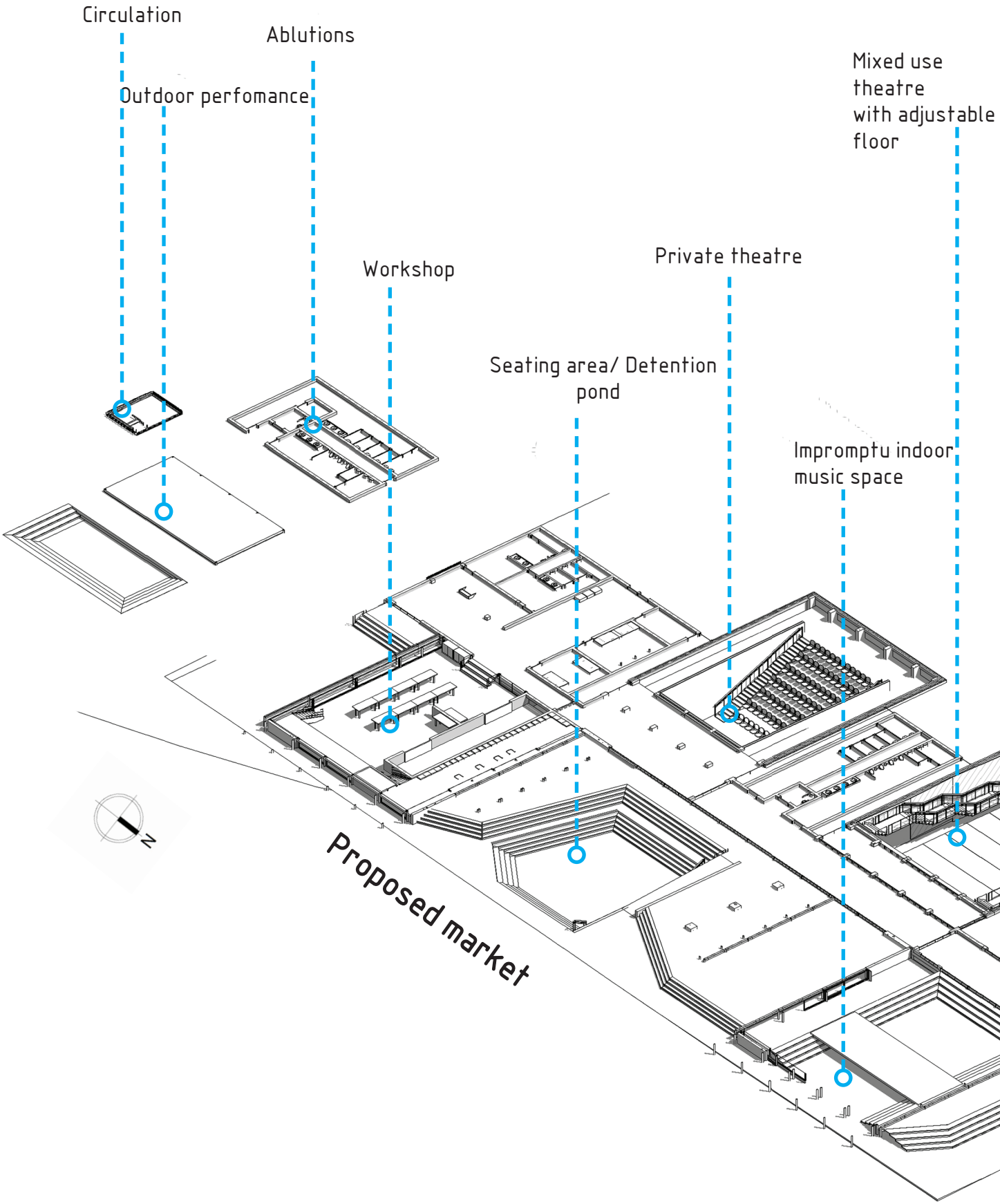


*6.12_Above impromtu performnace space closed*
*6.13_Below impromtu performnace space open*
*6.14_New jazz square*



*6.15_Above Eastern performance edge*

*6.16_Next page eastern approach*



6.1.2.

# TERRITORIES

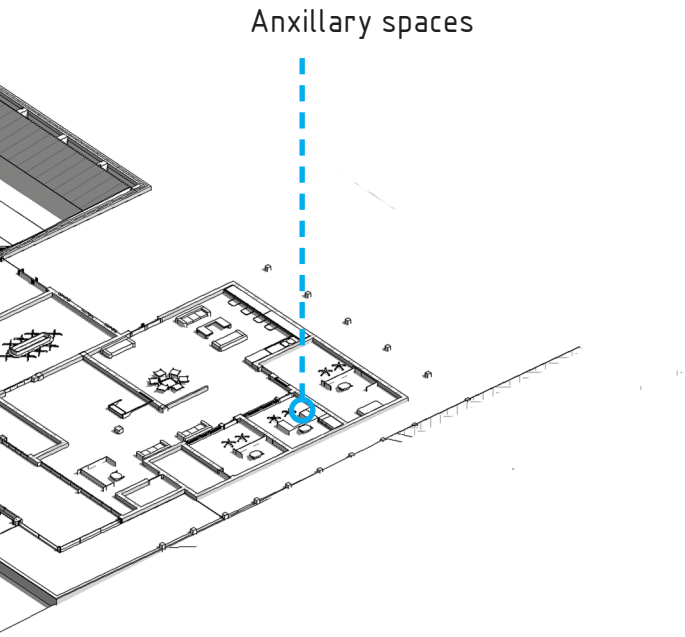
*"Life is uncharted territory. It reveals its story one moment at a time."*

*Leo F Basgulia,Living Loving and Learning, 1985.*

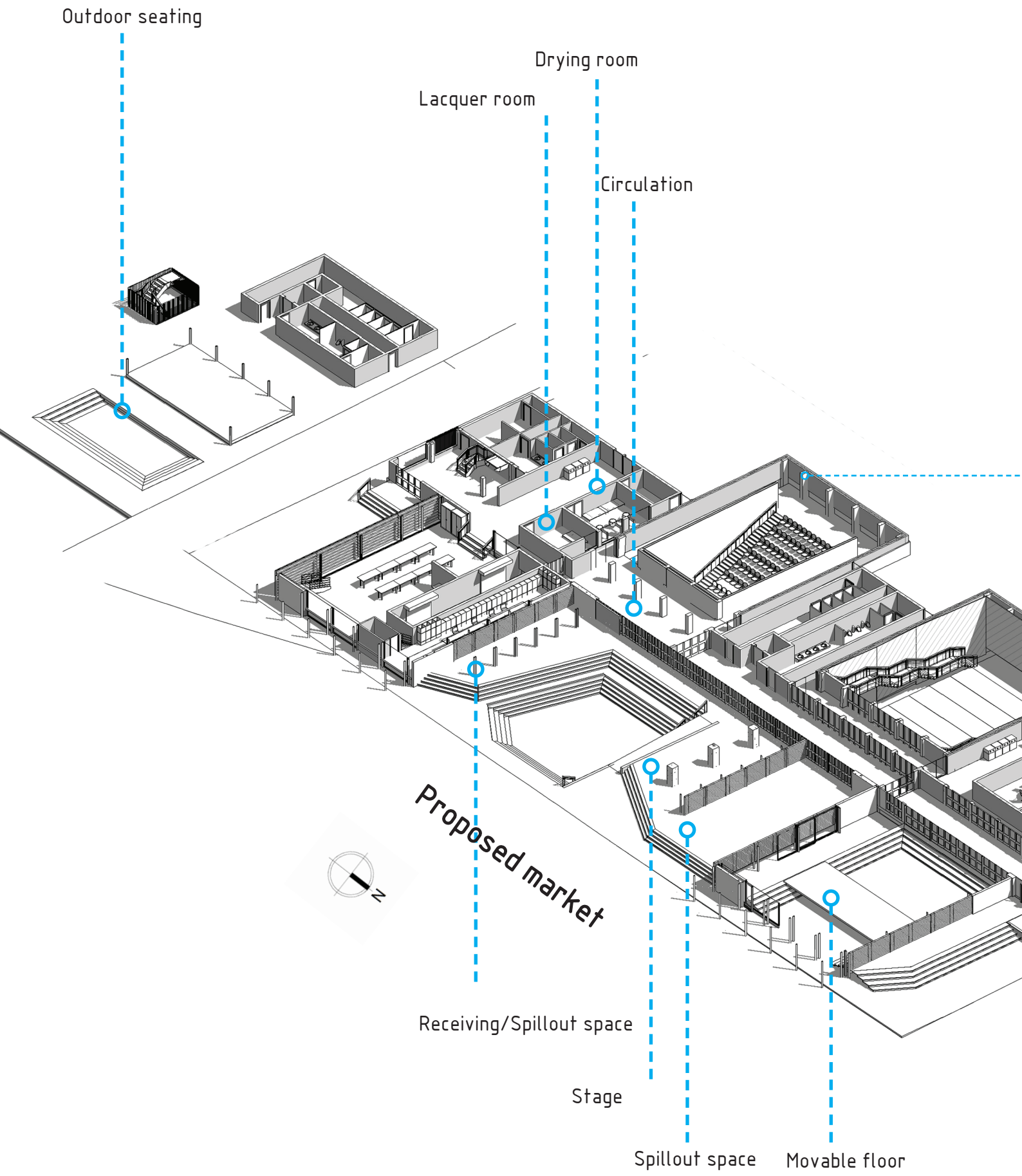
The seperation of territories according to the interactions between users and music played a large role in the development of the design. Due to this seperation of spaces the movement through the building became important as these in between spaces, became in essence a territory on thier own.

The movement, alike to the territories, has to be adaptable. As the territory changes in a space, so too does its accessibility have to adapt. As a result the building edges are predominantly composed of movable, folding or liftable components.

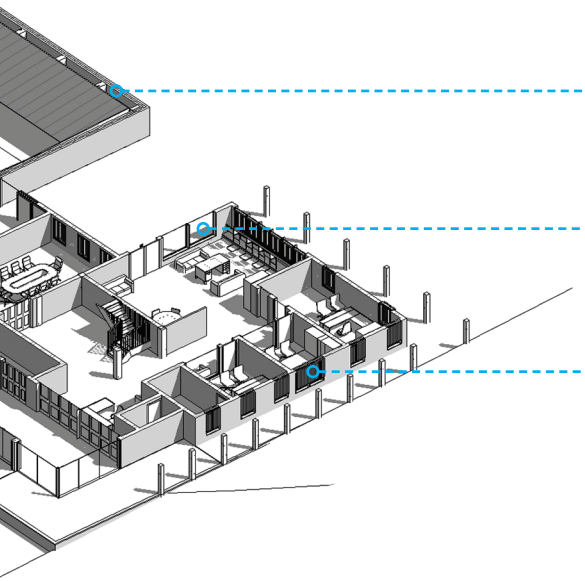
The arrangment of spaces was done to allow for the inevitable hybridization between adjoining territories.




*6.17_Ground level*



300 square conrete column,
primary structure

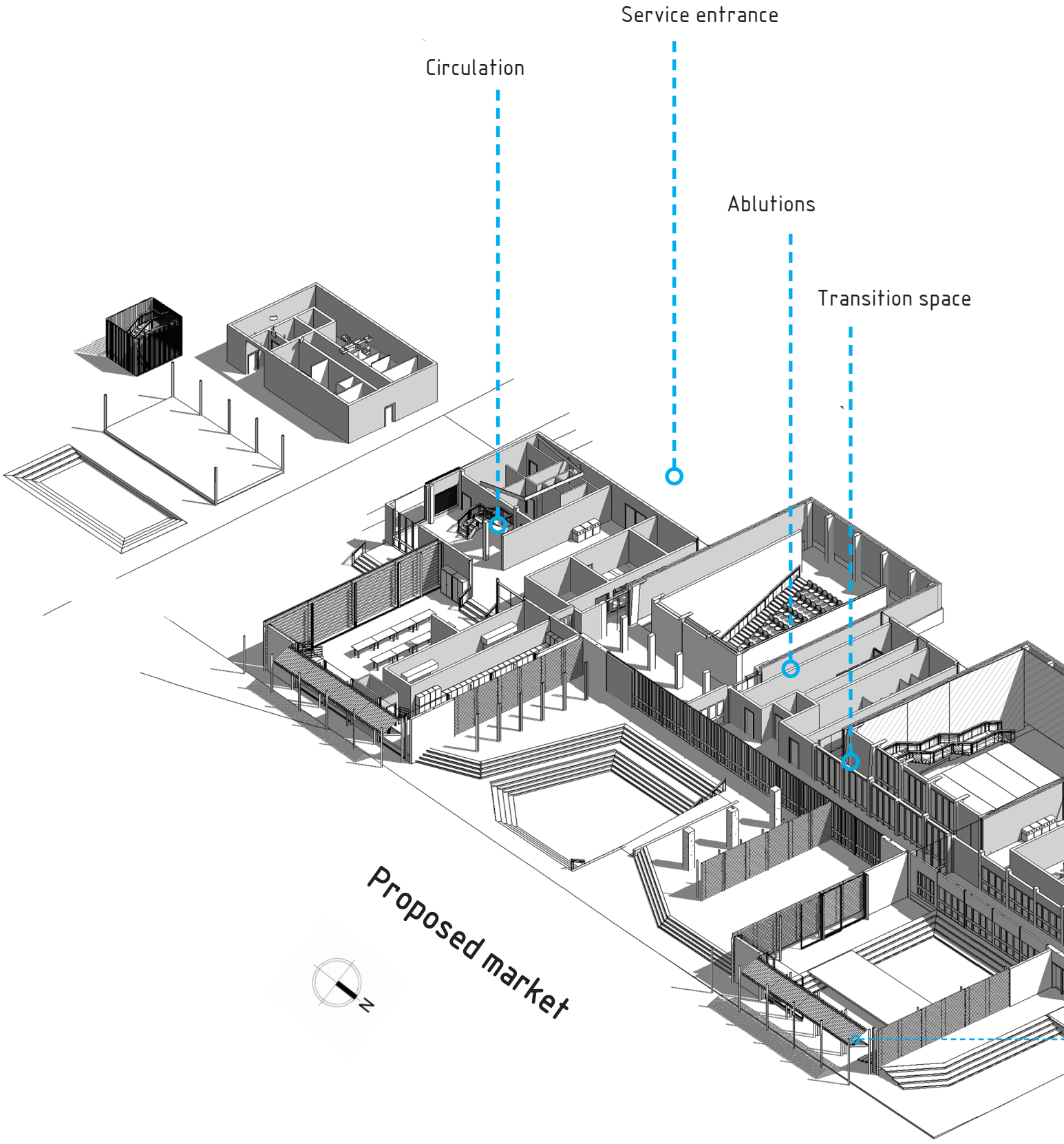


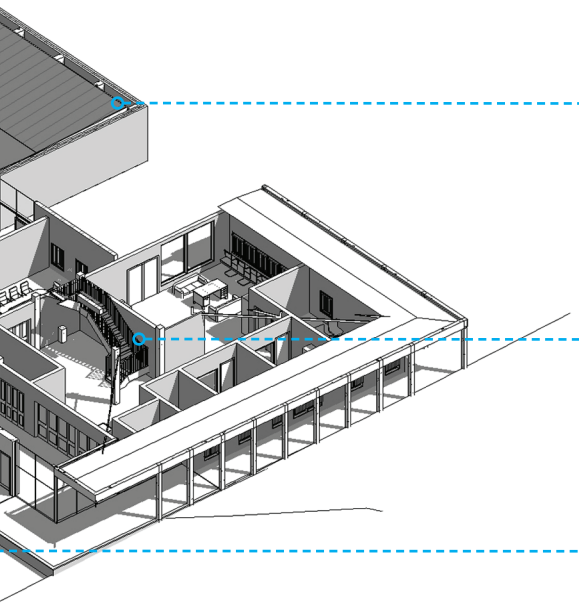
masonry exterior wall
whitewash plastered

6 clear glazed window in
extruded upvc frame

custom laminated bam-
boo louvred screen,
cladded with
.06 aliminium, powder
coated

*6.18__ground level territories*



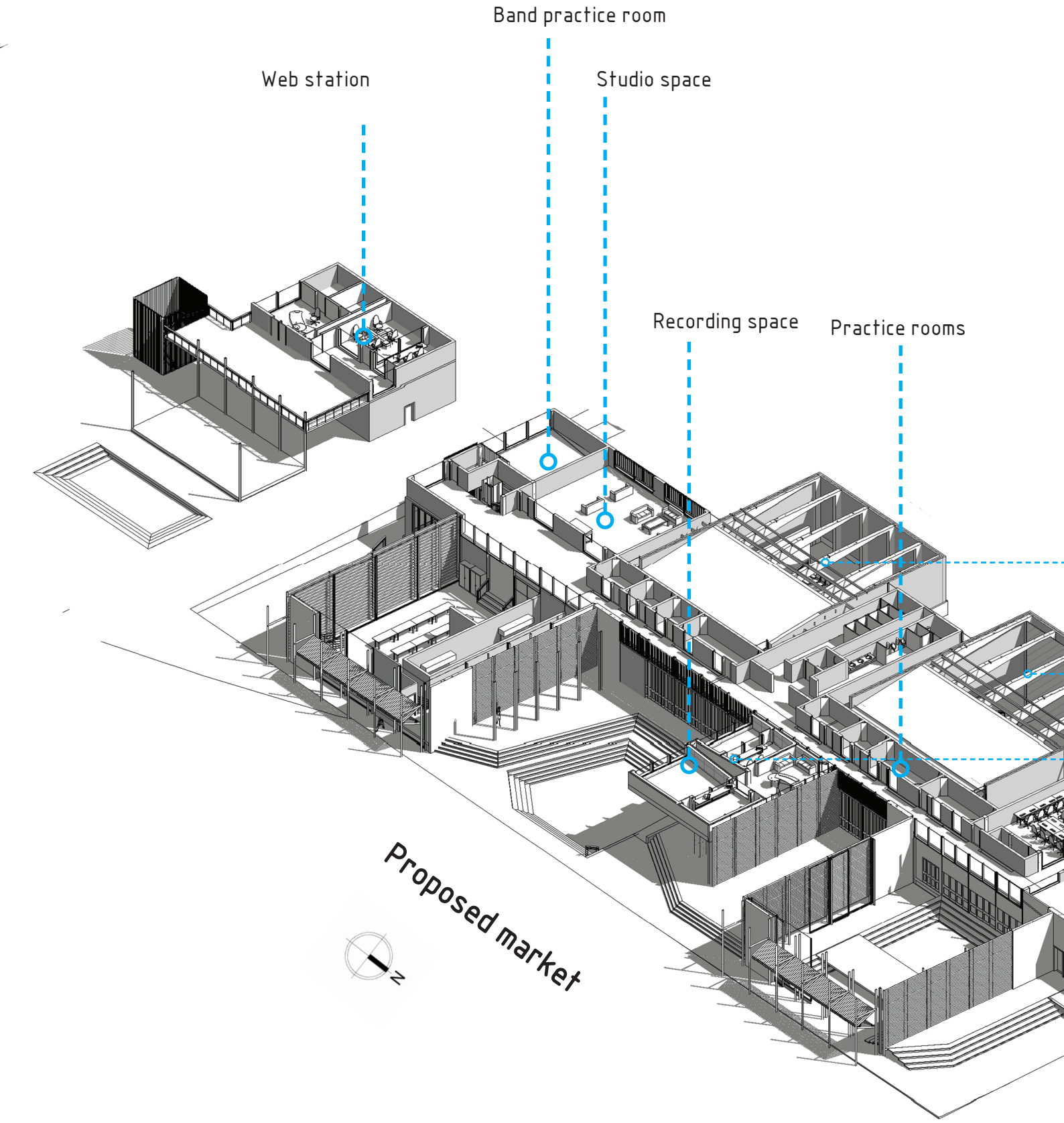


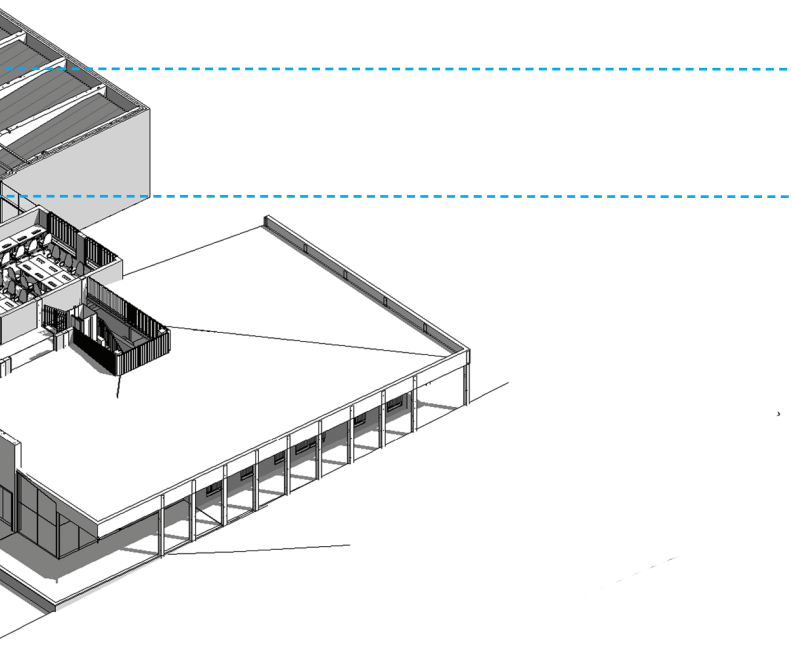
16 orientated strand board, laminated bamboo veneer fixed to columns with side hung joining plate and Epoxy.

180 diameter circular bamboo handrailing

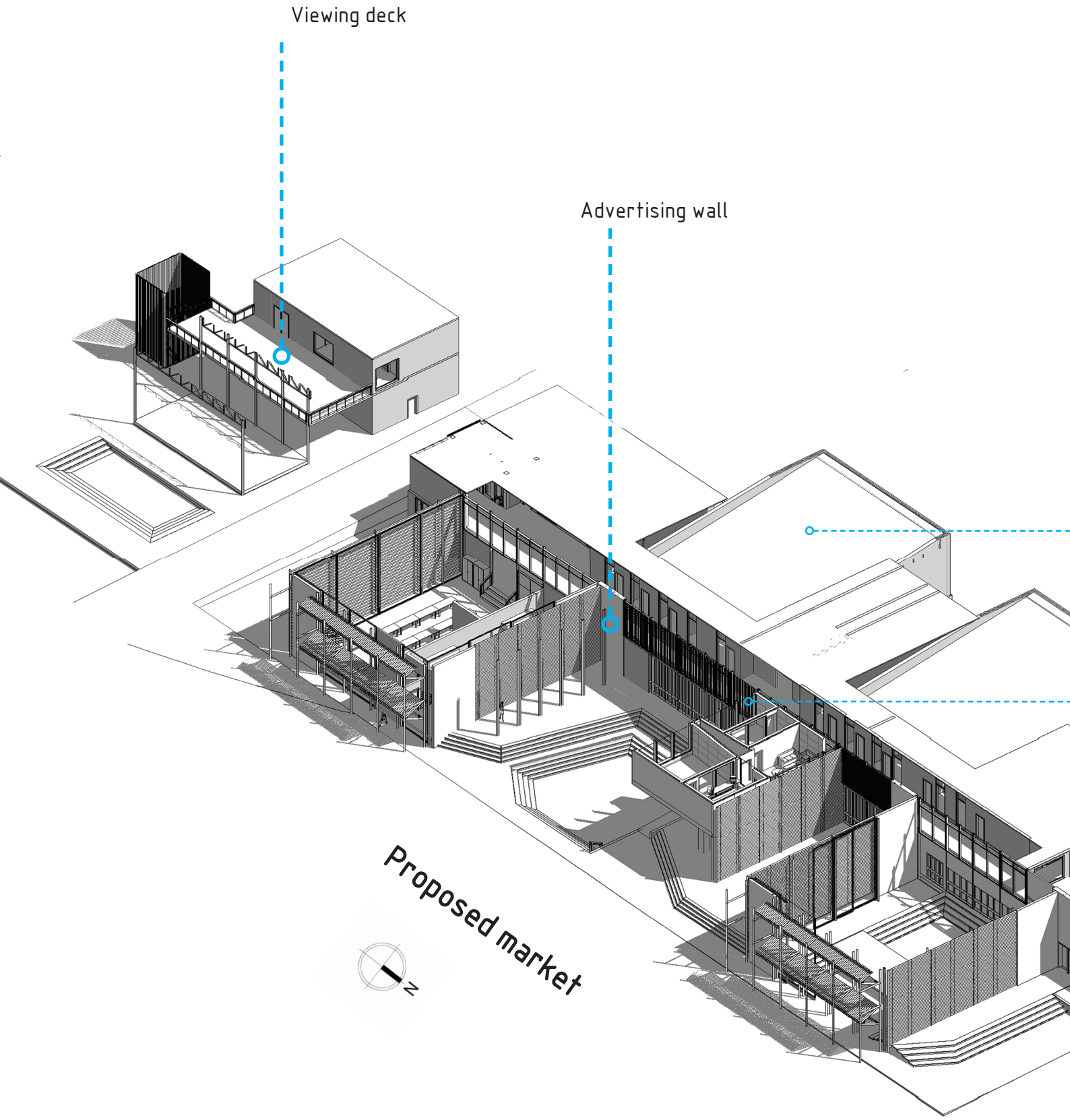
120 x 60 x 3 mild steel rectangular section

*6.19 Ground level territories*



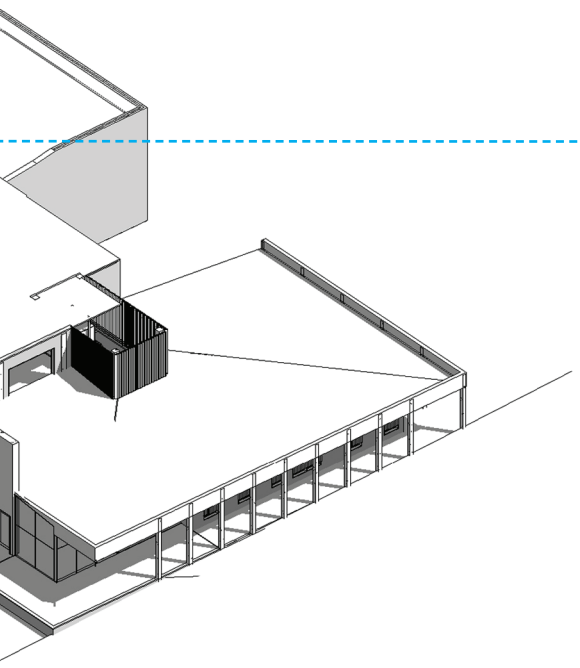



*6.20__ First floor territories*

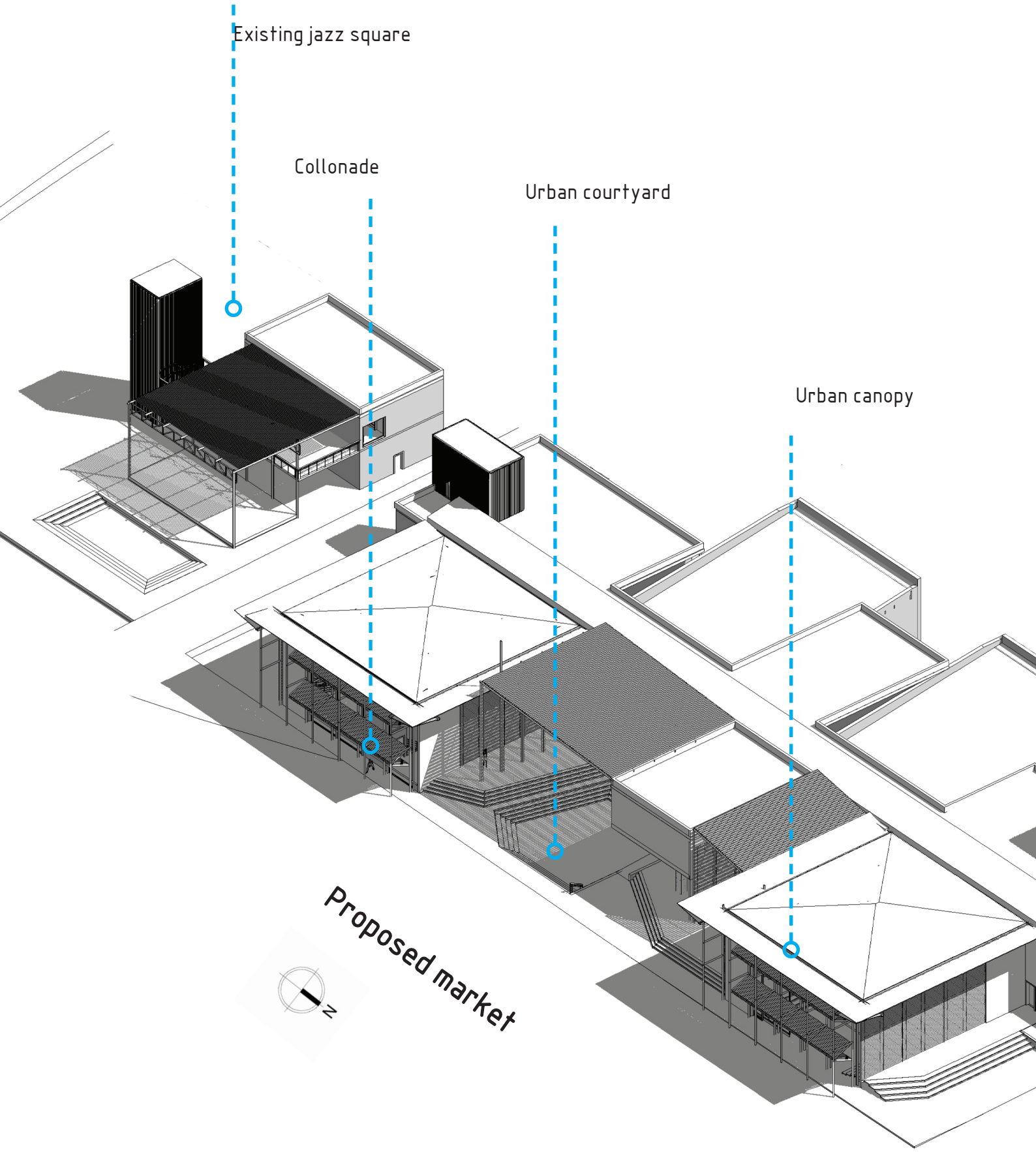


0.6 galvanised steel up-stand seam kliplok roof sheeting, fixed to joists

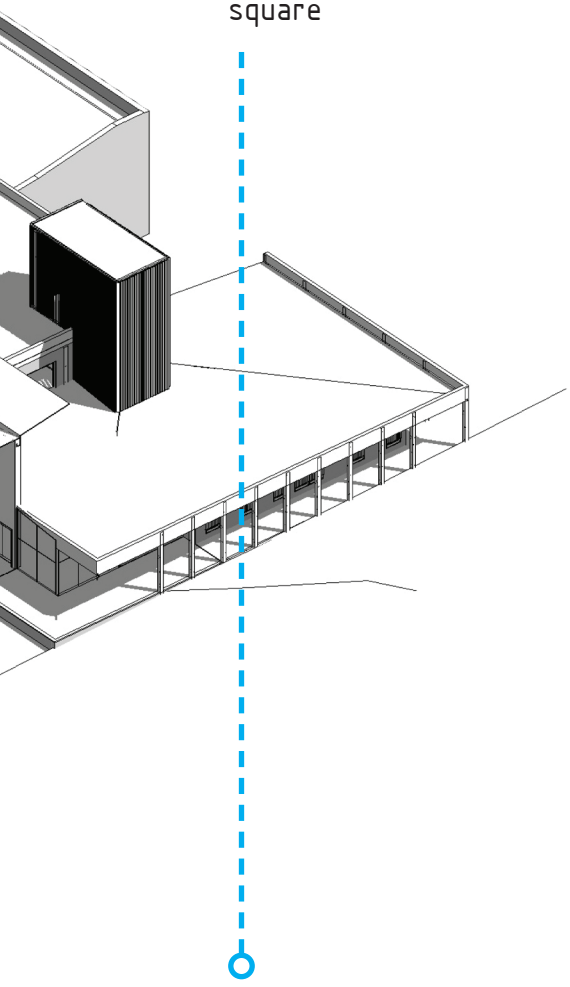
22 suspended bamboo timber floor fixed to 25 x 114 timber joist @ 800 centres

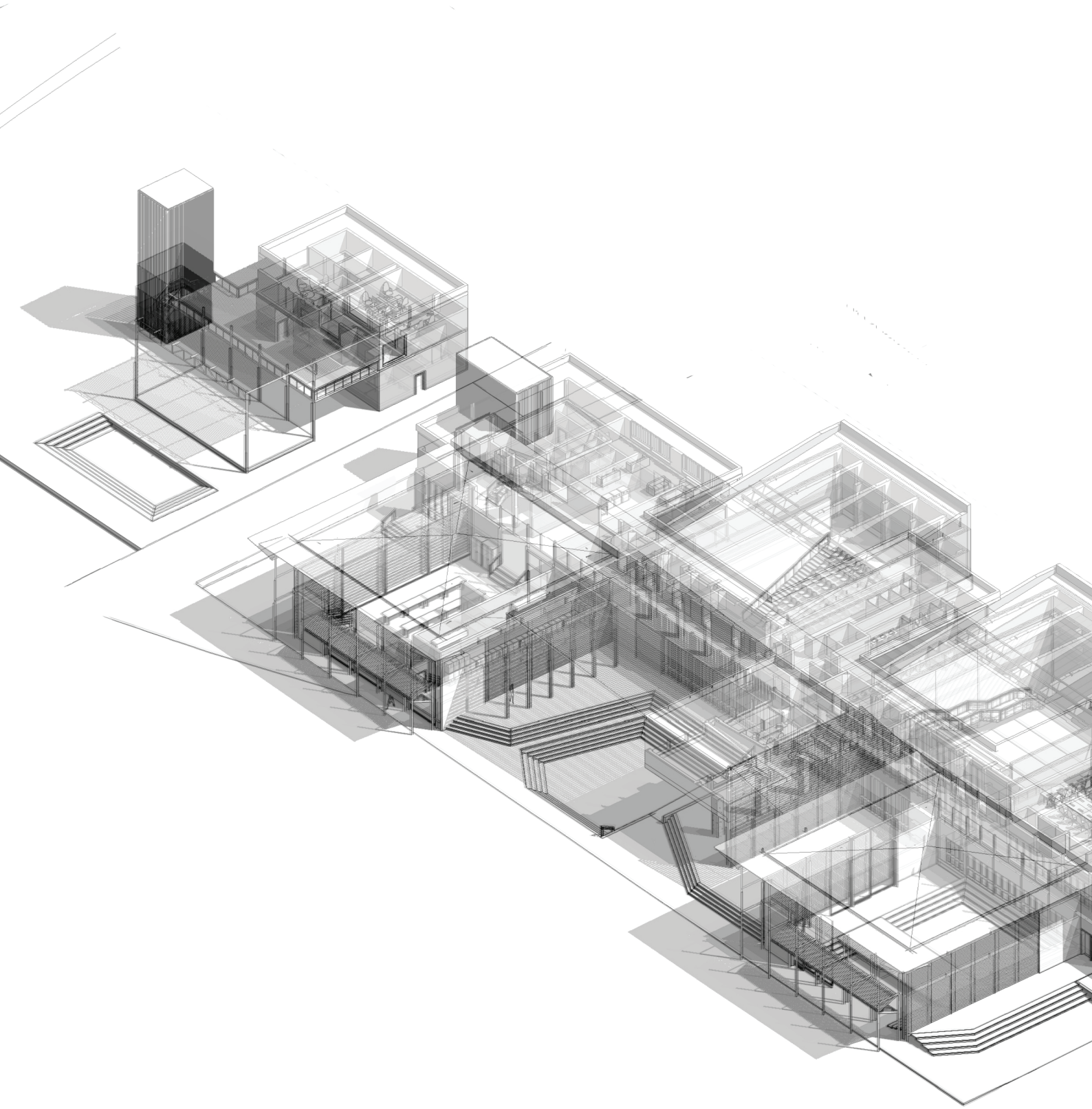


*6.21_First floor territories*



Proposed performance square





*6.15_Technical concept showing protected territories darker as a result of the heavier, stereotomic, materials.*

6.2.

# TECHNIFICATION

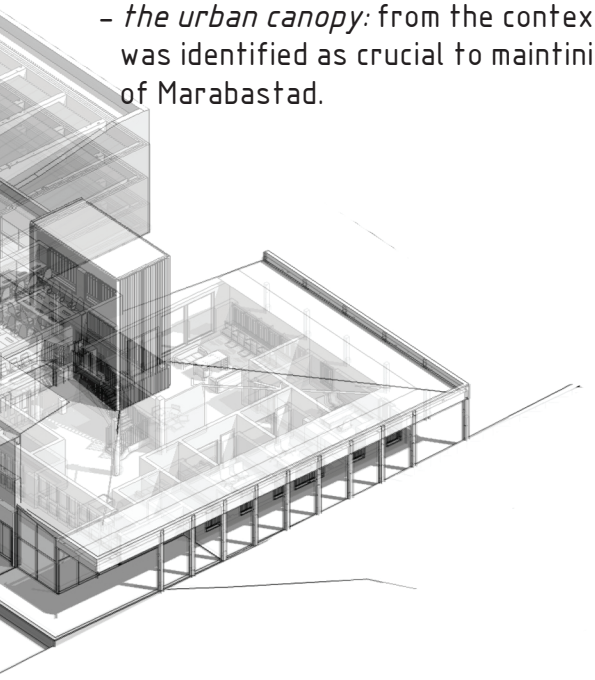
Through the exploration and design process it became evident that the techical resolution of the building had to reinforce four major design decision in relation to territories.

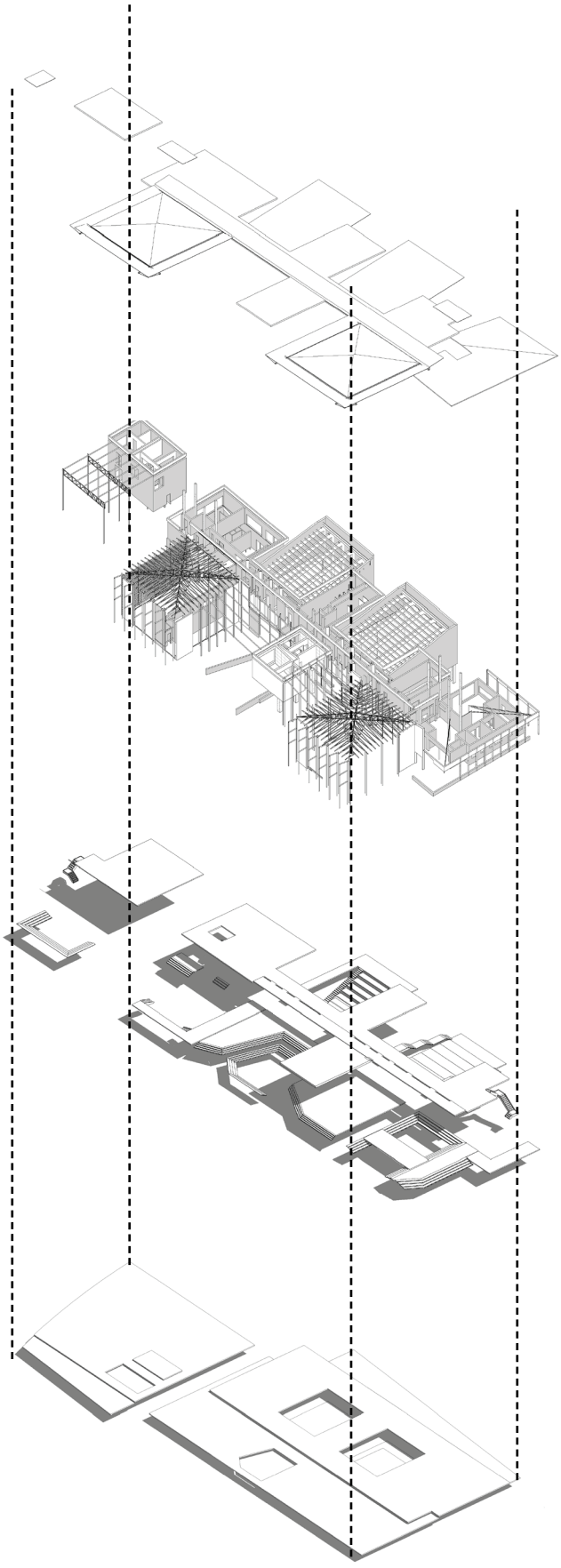
- *the demarcation :* through the use of level changes it was important to locate certain territories close to the public realm and others away.

- *the threshold :* due to the use of level changes as a means to demarcate the space between onel level and another becomes a space of interchange, exchange. The stairs and circulation become a crucial space.

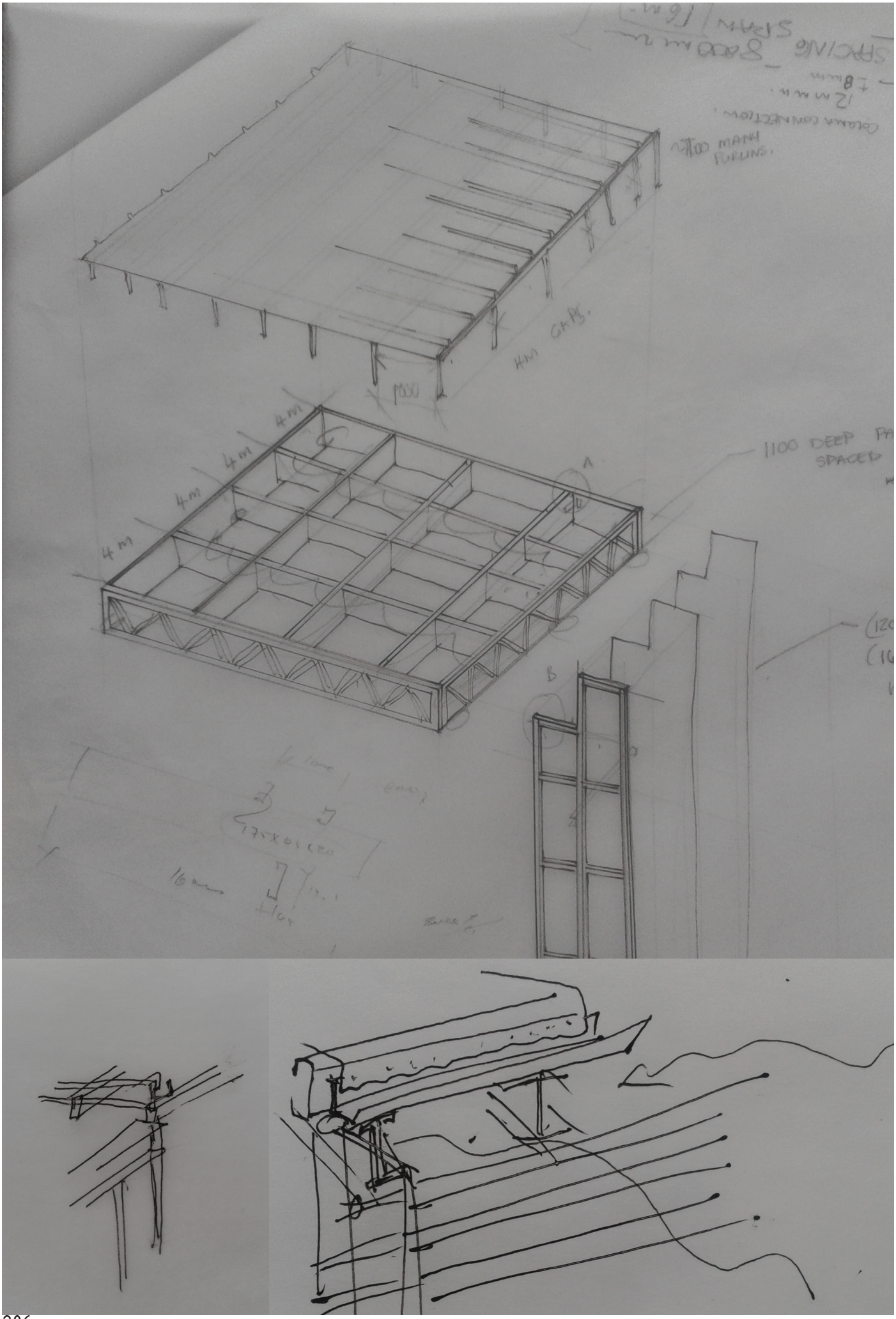
- *the hybrid :* identified in the theory, the synth has made it possible for a multitude of instruments to be created from one device, therefore a static space is no longer adequate. To adress this the structure should be adaptable to allow adaptable territories.

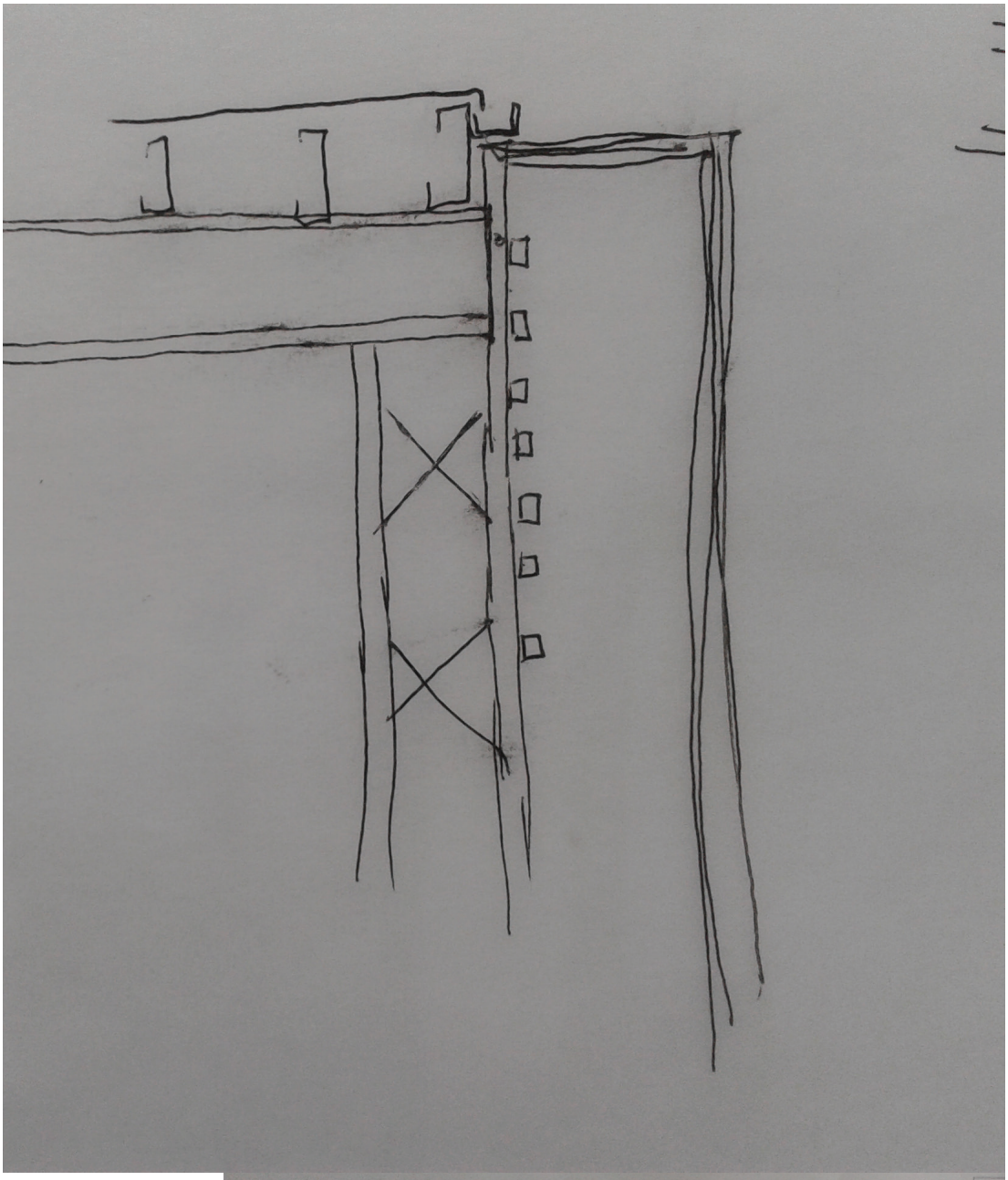
- *the urban canopy:* from the context, the street edge was identified as crucial to maintining the character of Marabastad.

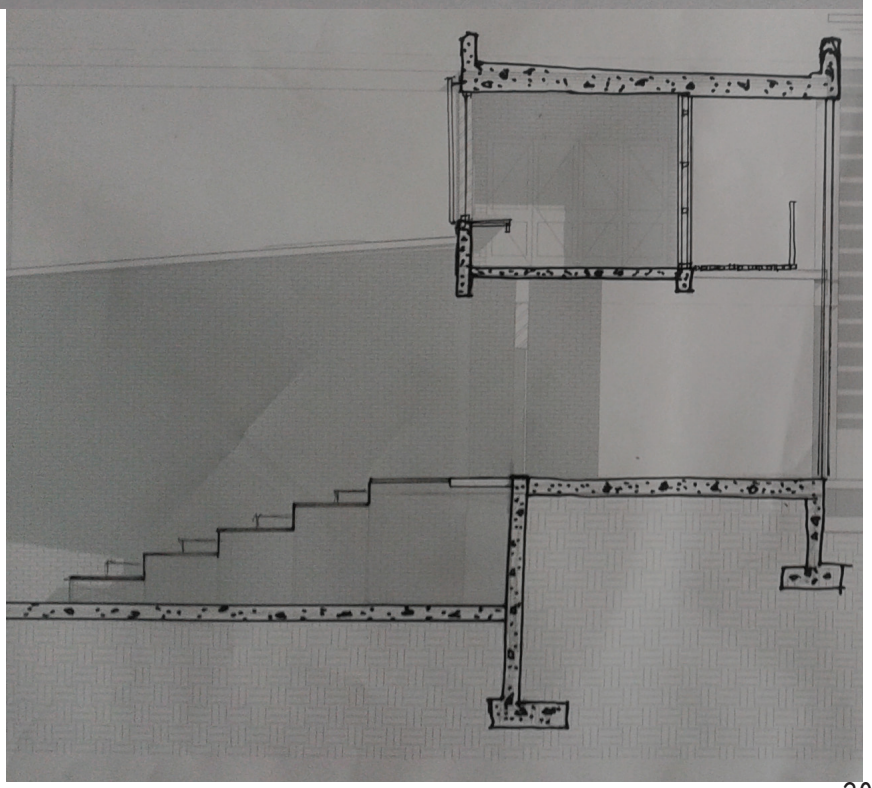




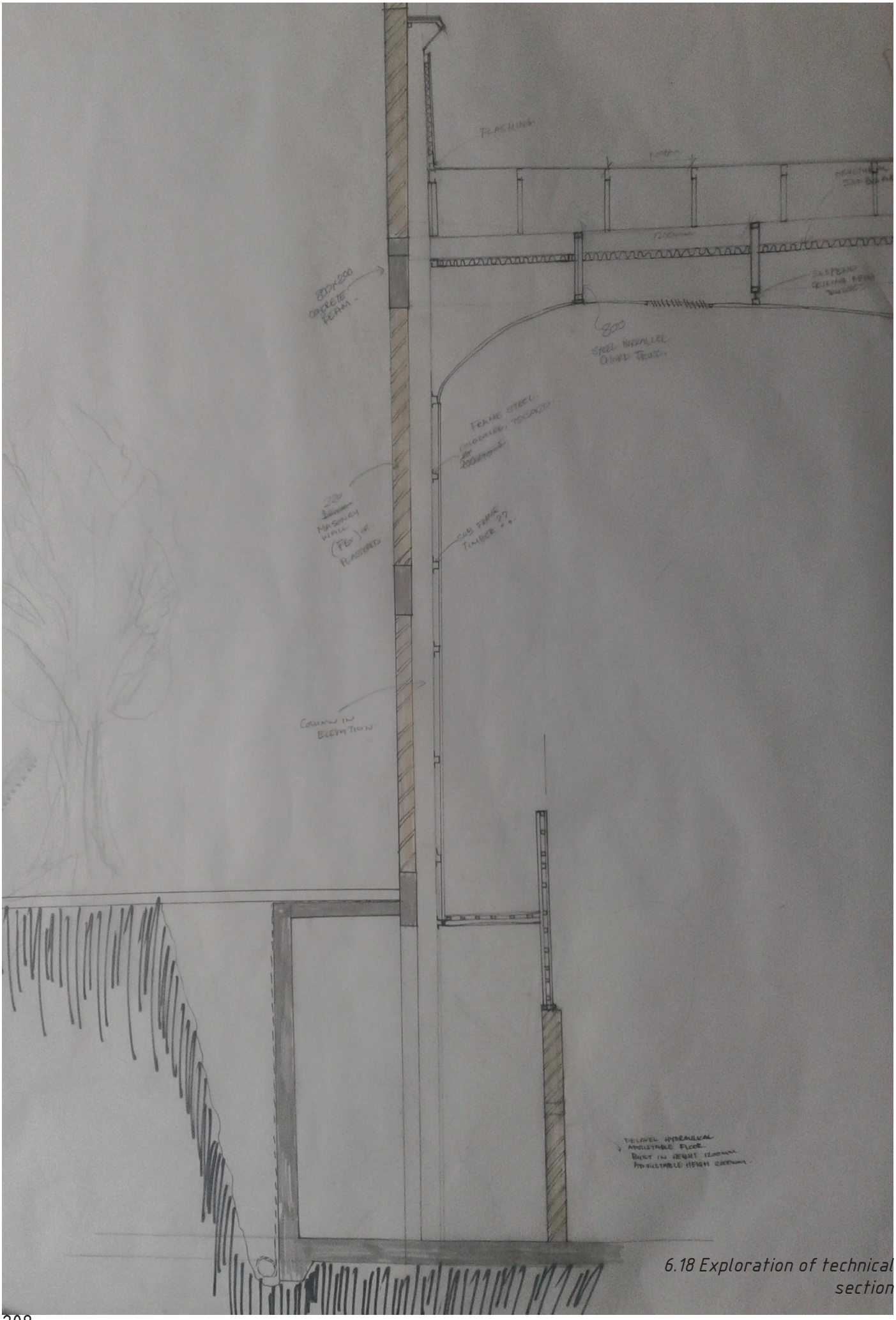
*6.23_Revisting concept*



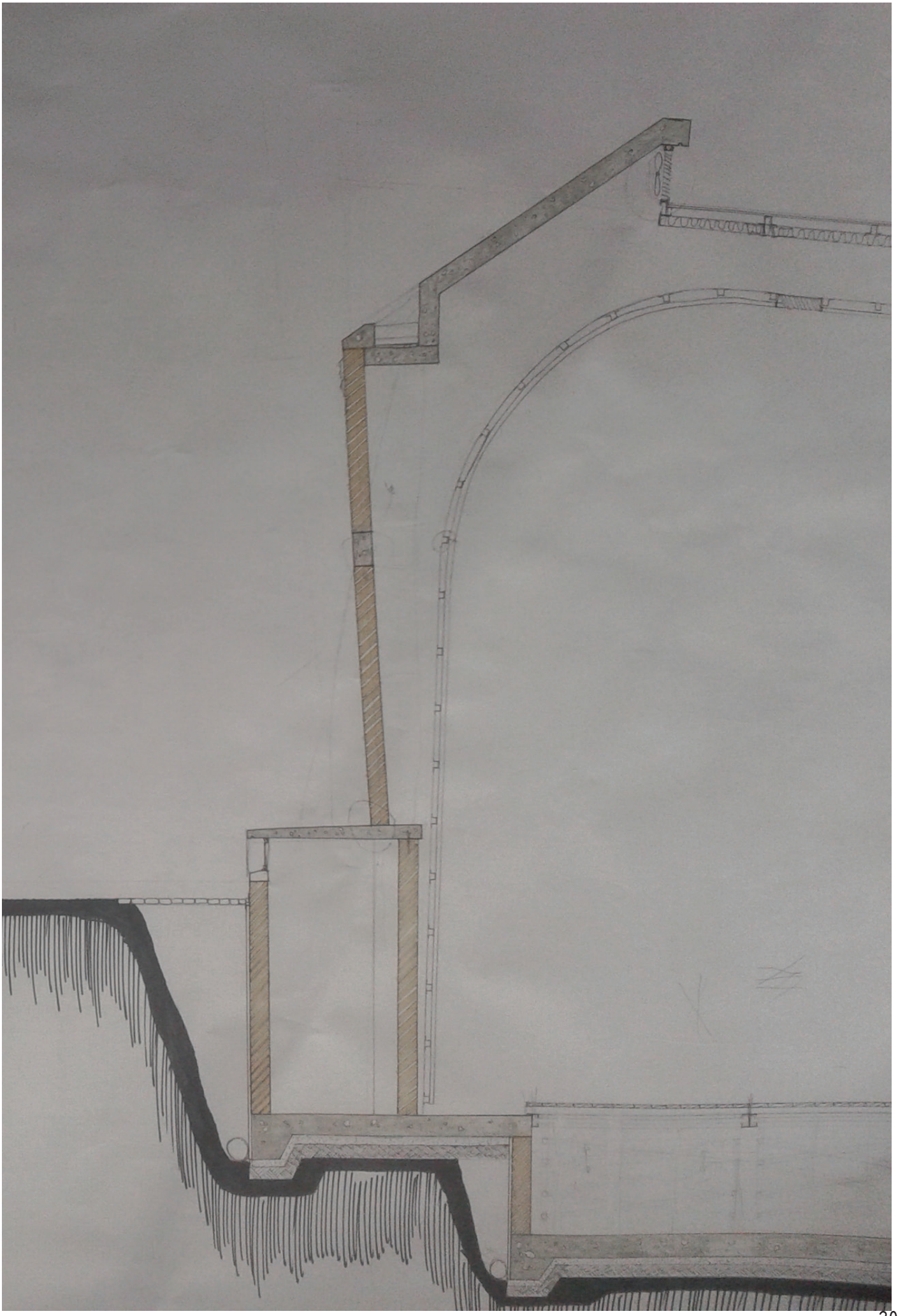




*6.24 Sketches of technical exploration.*




*6.18 Exploration of technical section*



6.2.2.

# TECHNE CONCEPT

Throughout the process of exploration the author has interpreted the ideal of territories within the creative realm, specifically music, as spaces which are driven by a certain set of circumstances. Theses circumstances arise from a range of interelated neccessities, source of electricity, available space, need for isolation or need for an audience.

The reinforcement of these territories within technology has resulted in an investigation of perceptions. The perceptions of a certain territory and the interactions that take place within that space dictate the general perception of that territory to the user.

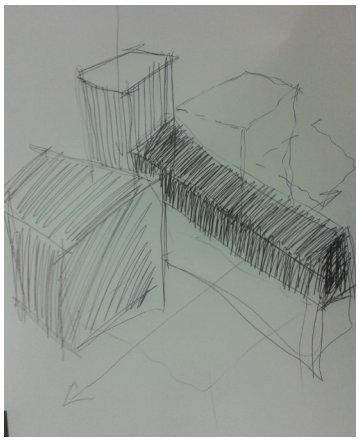
A traditional church, for example, is grounded, insulative, calm, static and vertically exaggerated. The presence and perception of the interior space is that of sacredness and calm.

Simirlarly within Marabastad religious buildings such as the mosque and Mirriamen temple take ownership of their interior spaces by clearly defining the boundary between inside and outside.

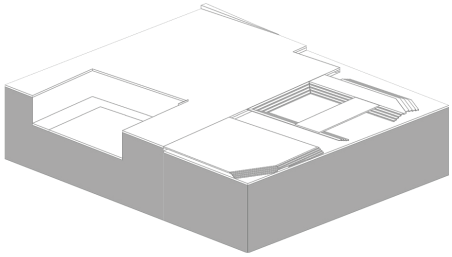
This translation of perception and its attachment to the experiences within a structure formed the basis of the technical concept.

The utilization of construction methods, and materials, which are perceived as stereotomic in nature should be utilized to reinforce a protected or formal territory. Inversely the utilization of tectonic, or lightweight construction methods and materials delineate the open or undefined territories.

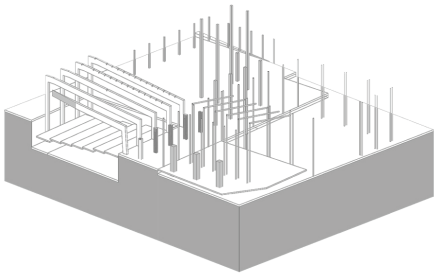
The progression of the construction methods and materials should the naturally follow the territorial layout of the building. As the site is segregated in the middle by the circulation and the practice rooms, it becomes a transistional space where the lightweight construction from the eastern edge is joined to the heavy construction from the western edge.



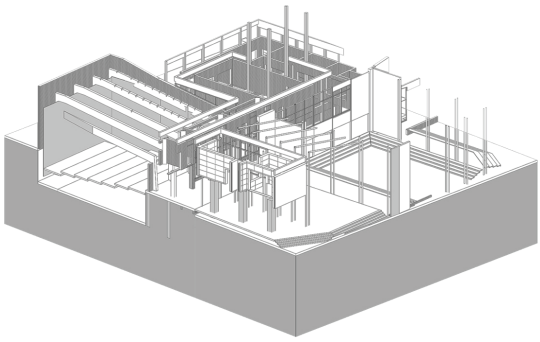
Earth work



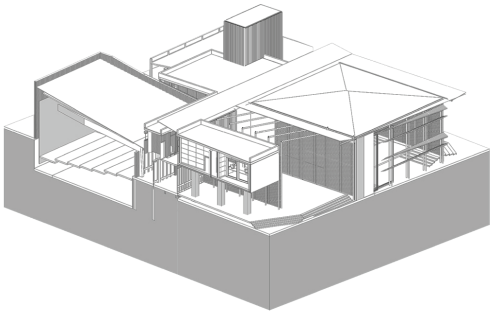
Primary structure



Secondary structure



Tertiary Structure



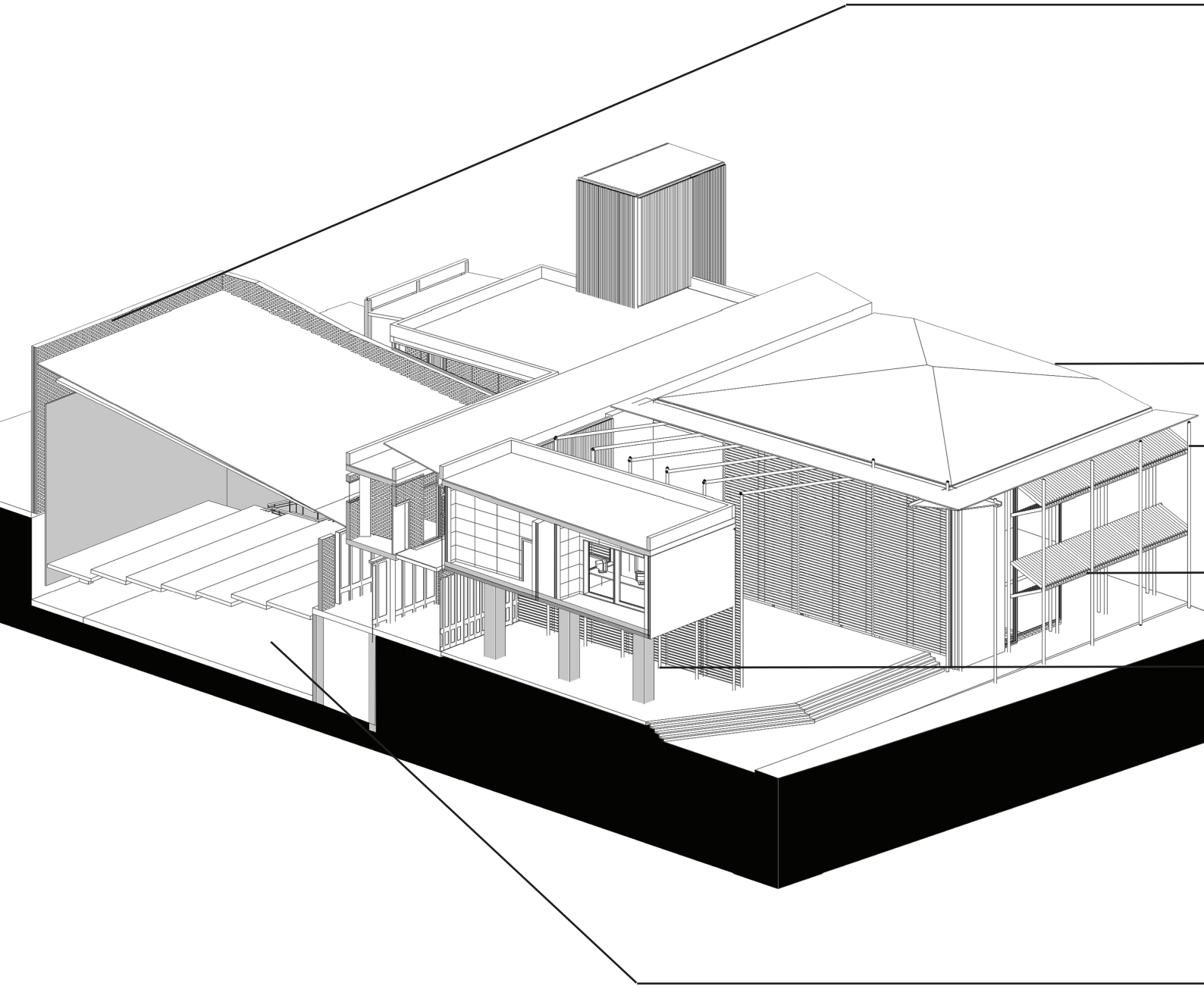
*6.25__ concept sketch of materials being heavy, stereotomic, to communicate a protected territory and tectonic, light, to communicate an open territory*

*6.26__ Diagram illustrating the primary, secondary and tertiary structure of the building*

6.2.3.

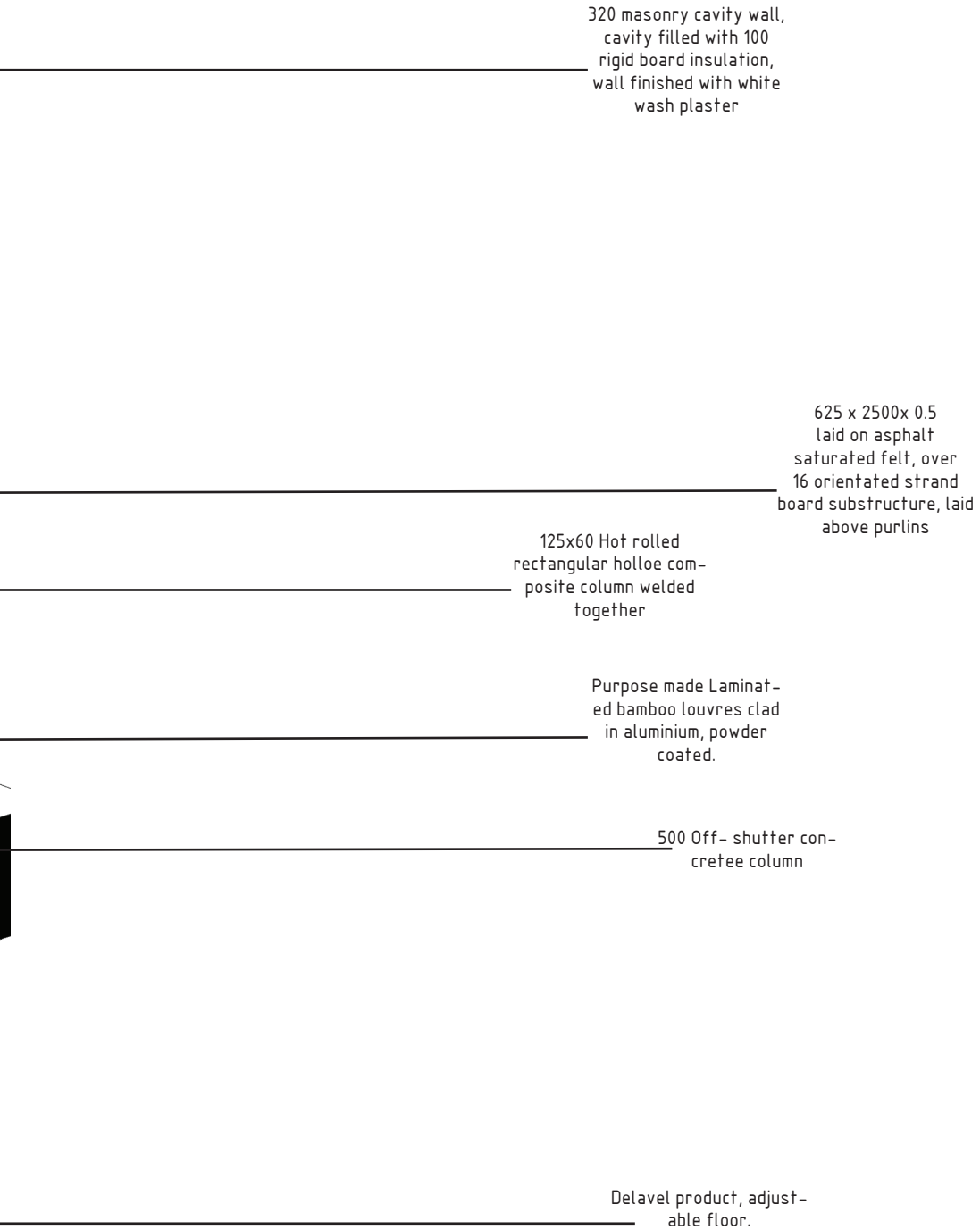
## STRUCTURAL SYSTEM

Illustrated beneath is the translation of the tecnical concept into a design response. The primary structure is made of two seperate structural approaches. The lighter steel eastern edge is constructed from a compostion column made from 120x 60 hot-rolled rectangular profiles, galvanized mild steel welded together. The juxtaposing structure is composed of a combination of load bearing 220 masonry walls and 300 square off shutter concrete columns.



*6.27 Strutural systems*

The steel substructure is braced together by a 120 x 60 hot rolled rectangular profile galvanized mild steel welded to elements. Laminated bamboo beams form the substructure on the stereotomic edge. Below is a section showing the structural systems



6.2.4.

## THE EASTERN FACADE

The street edge of Marabastad is characterised by its colonade. The colonade forms an interactive threshold before entering the main structure. It is in a sense a boulevard of multi-trade of both sides. The recreation of this boulevard was envisioned through a facade edge which could transform from being closed to being open.

According to the technical concept the structure had to be experienced as light and open, however this condition should be transformable to allow for the changing of territories when needed.

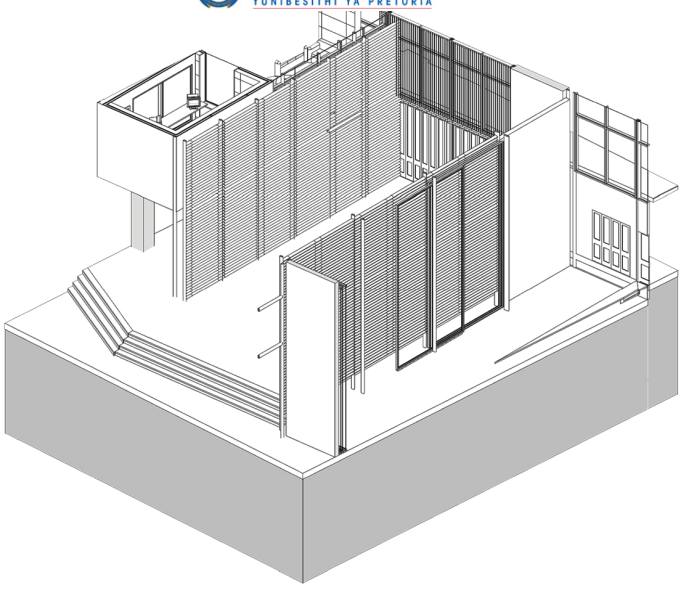
The primary structure consists of columns made up of three 120x 60x4 rectangular hollow mild steel profiles which are welded together. These columns are joined with 120x 60 x 4 also welded toghether. This forms the primary structure for the facade.

The secondary structure is composed of a 10mm shear plate, custom made which is welded to the column. This plate houses a 12 mm hollow mild steel shaft, which forms the substructure for the movable panels. These panels are are connect to this shaft via 4 mm pivot hinges.

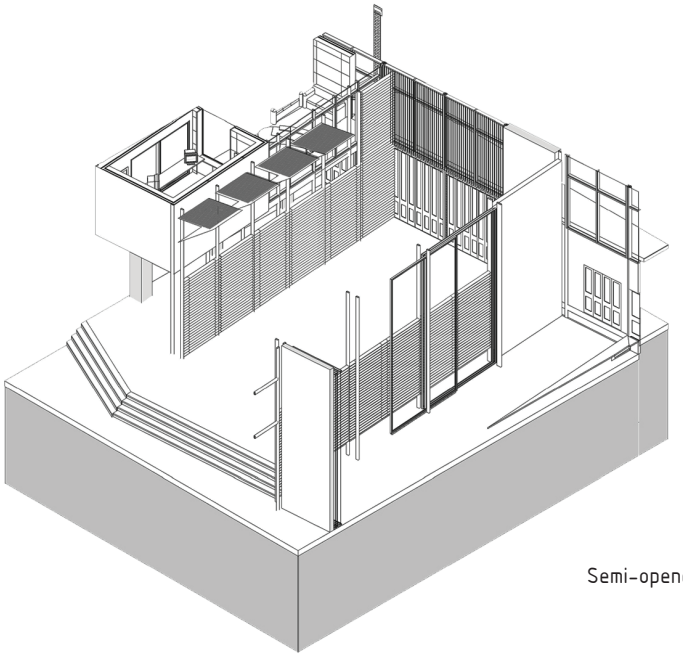
The teriary structure is composed of steel flat bars, welded together which then allow the panels components to be attached. Each panel consists of louvres, orientated horizontally on the northern facade, or vertically on the eastern facade.

The louvres are made up of a laminated bamboo structure, exsposed to the interior spaces, and semi-cladded with aliminium, exsposed to the exterior. The exploration of this system is demonstrated within the building of a 1:20 sectional model. Images of this model demonstrating the basis for these systems follow.

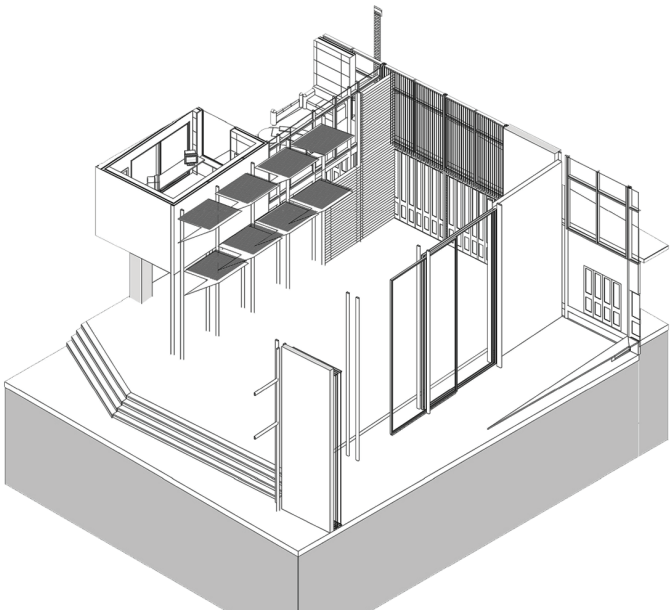
The variance in materials is envisioned as a means to reinforce the difference between inside and ooutside, thereby demarcating the beginning and end of the territory. The facade opens in such a way that an observer can only observe the bamboo in its entirety when the facade is closed and they are within the interior of the structure. When the facade is lifted the cladded exterior of the panel is rotated downwards and a person passing under it will experience the aluminium, and as the facade is open the interior territories boundary becomes undefined, therefore the aluminium becomes the tactile experience.



Closed facade

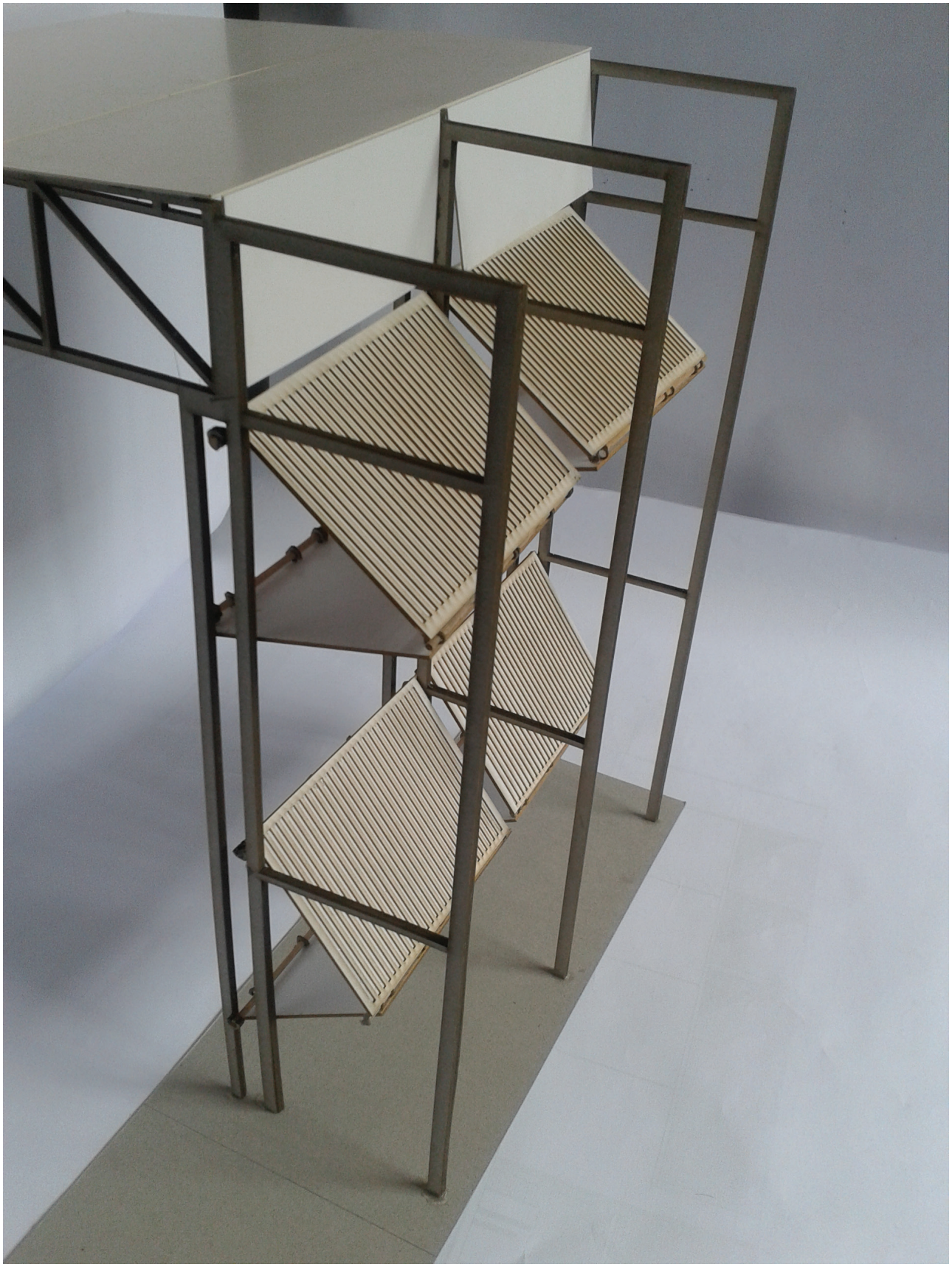


Semi-opened facade



Open facade.

*6.28 Movable facade*

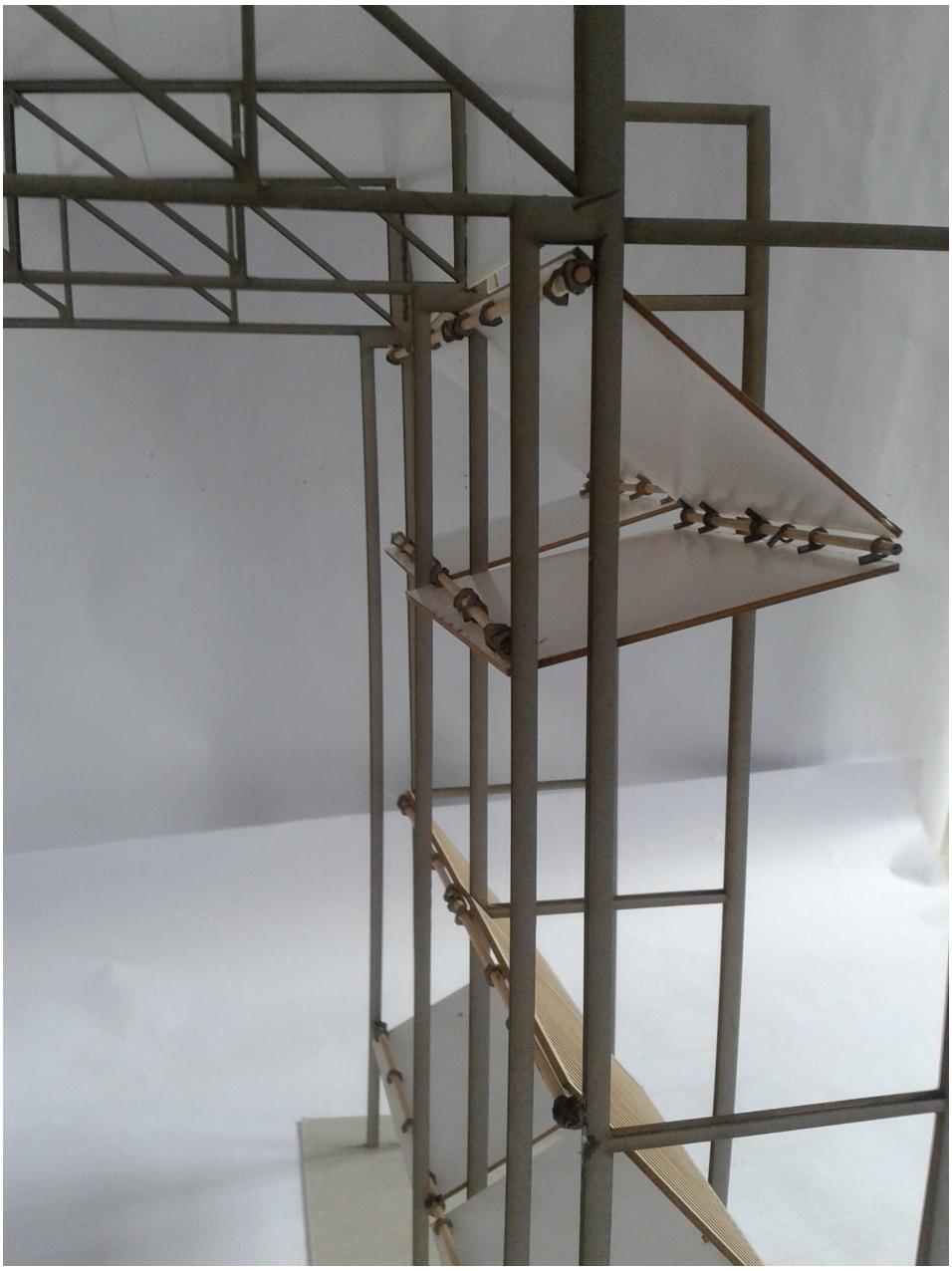


*6.29 1:20 sectional model of facade*

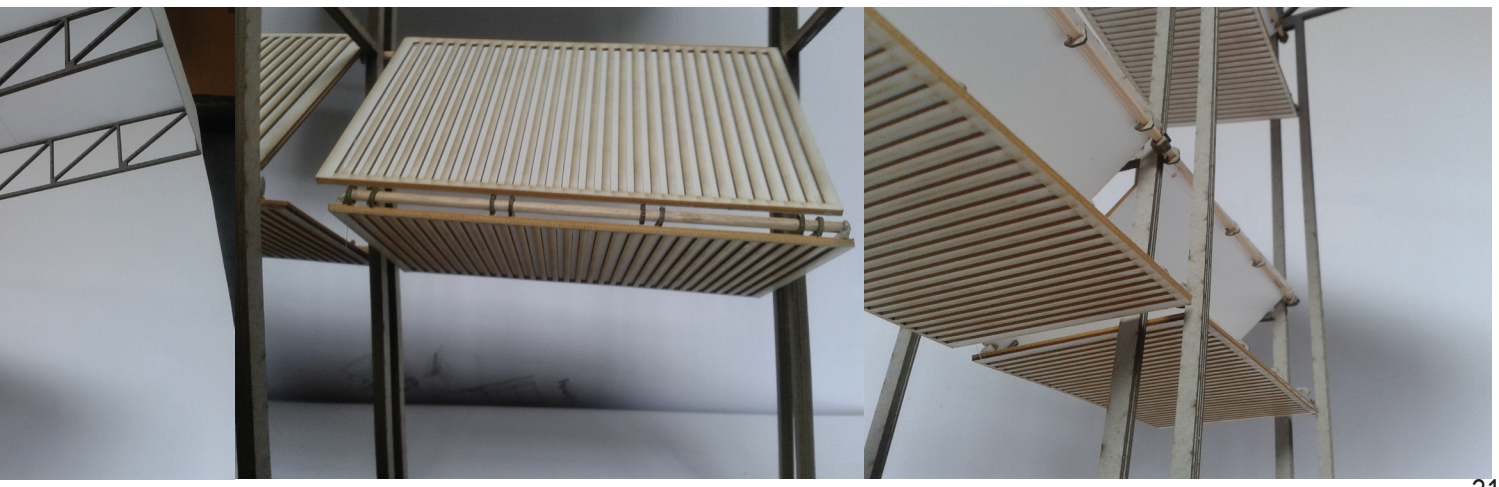
*6.30 Movable facade semi open*

*6.32progression of facade from closed to open*

*6.33 Various photos of facade element*



*6.31 Movable faced view from top*



6.2.5.

## ADJUSTABLE FLOOR LEVELS

The adjustabel floor is envisioned as a means to allow the hybridization of varying territories. By raising or lowering the floor the level of the space changes and thereby creates an alternative connection to the adjoining space.

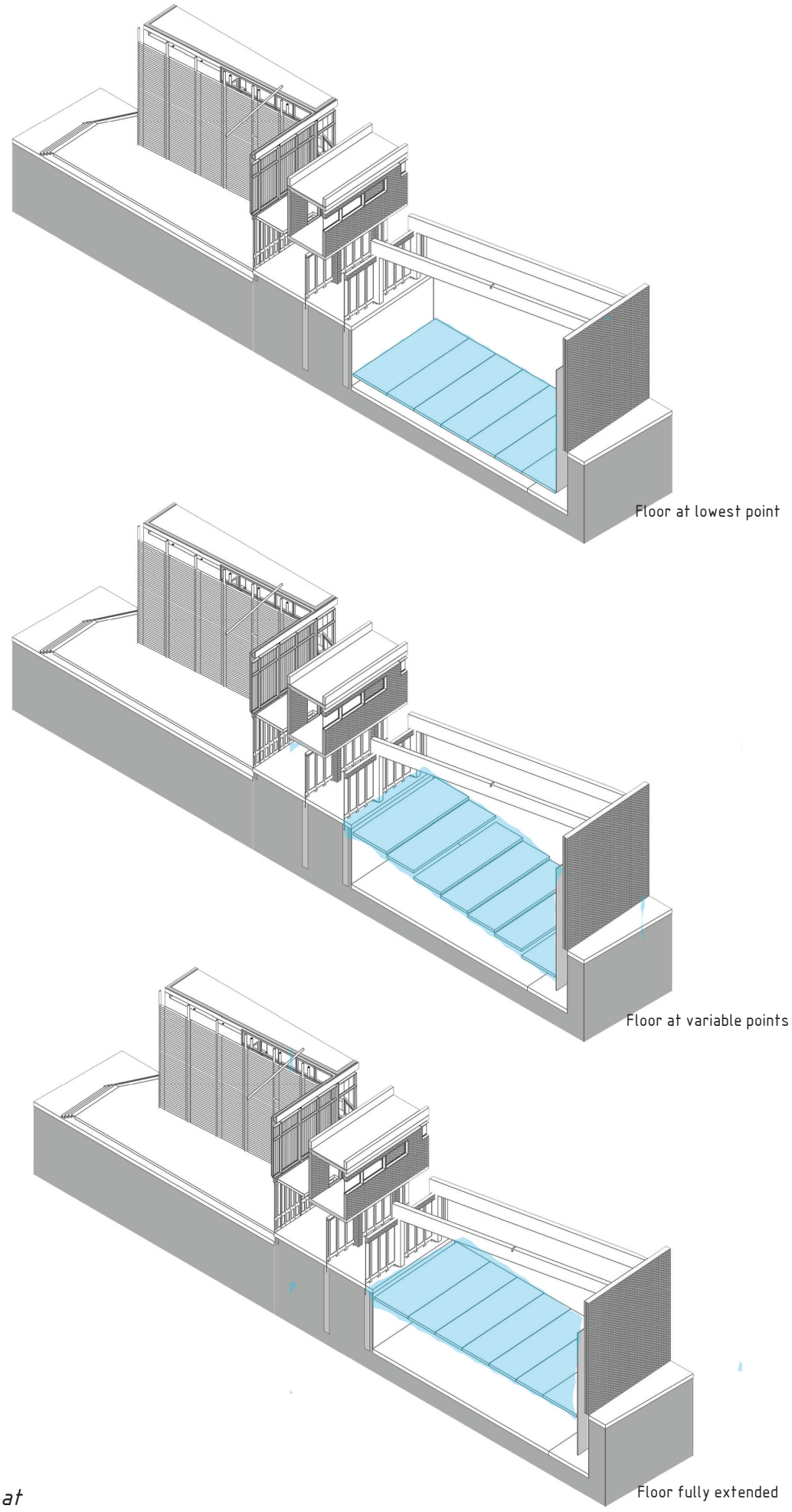
Changing the level consequently reinforces the seperation between the thetre space or nullifies it. This allows the space in to be malleable in definition. The variance in definition subsequently allows for the cross-pollination of adjoining territories to accomodate the user by forming the desired territory.

The floor system is custom built and is produced by a company caled DeLaval. It has the ability to adjust to any desired height with the restriction of depth below the floor. In other words if the floor have an adjustable variance of 3000 meters, a depth of 800 is required below the floor  depending on the system installed.

After the primary structure is installed the substructure can be composed of the desired substructure and material. The substructure is to be composed on 25x152 SA pine timber beams @ 2000 centres connected to the primary DeLaval floor system.

The tertiary structure is to be composed of 25 x 114 SA pine timber joists @  800 centres. The tertiary structure is to be composed of 22 mm orientated strand board to act as support for the 22 lipped timber floor boards laid above.

The varying conditions of the floor are illustrated right.




*6.34 Adjustable floor at various positions*

6.2.6.
# MATERIALITY

From the visits to Marabastad it became clear that the predominant composition of materials which remained where those that were massive, or heavy. This is probably due to the fact that those which where not were easily removed when people were relocated, or evicted. The remaining structures are characterised by the use of masonry load bearing plastered walls, adorned by a concealed lean to roof behind a parapet wall.

The ground plane alike is composed majorly of heavy materials such as concrete or masonry pavers. The resilience of these structures to have survived the socio-political adversities within the area are testemant to their character.

The concept dictates the use of materials to convey the inert nature of the territory which is composed within the space. The following materials were considered:

__*Glass Terrazzo*

Glass terrazzo combines post-industrial glass waste and other recycled glass added to concrete to create a hard, enduring surface. As a major part of the design features high traffic areas which need to be enduring, as well as massive, to absorb both sound and wear and tear Glass Terrazzo can be used.

__ *Galvanised mild steel*

Galvanised mild steel is rectangular hollow sections allow for the use of slender elements within the structure. By welding these elements together to create a composite steel column allows for the element to remain slendder and appear light.

__*Aerated concrete*

Aerated concrete juxtaposes the appearnce of being heavy with the reality of being lighter than concrete. This is advantageous in places where mass is to be implied.

__*Laminated bamboo*

Laminated bamboo because of itsmaterial properties, requires it to be made up of thicker elements in comparison to steel. This can add the perception of mass to a space. The grainy texture of the laminate allows the material to be a good absorber within an acoustic space as the structure vibrates absorbing sound energy.

__*Anechoic foam*

Anechoic foam is an Insulative material which allows one territory to be insulated acoustically from another.

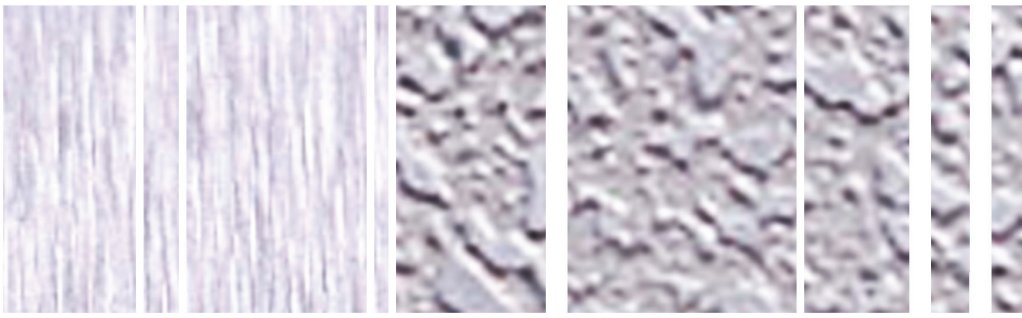
*6.35 Existing materials in Marabastad*

Time

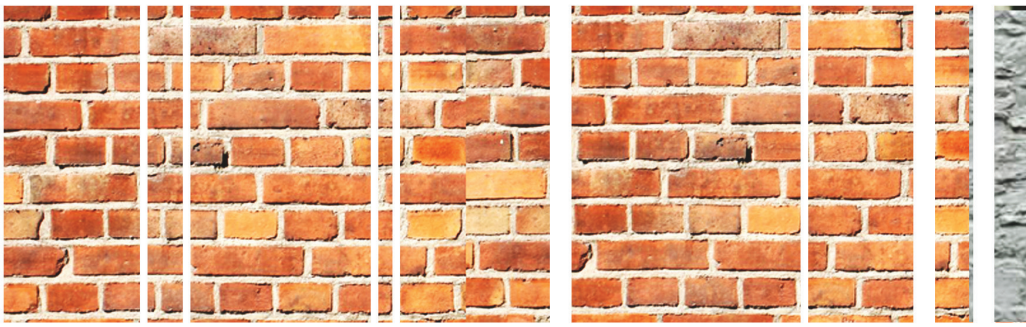
Installation

__Glass Terrazzo

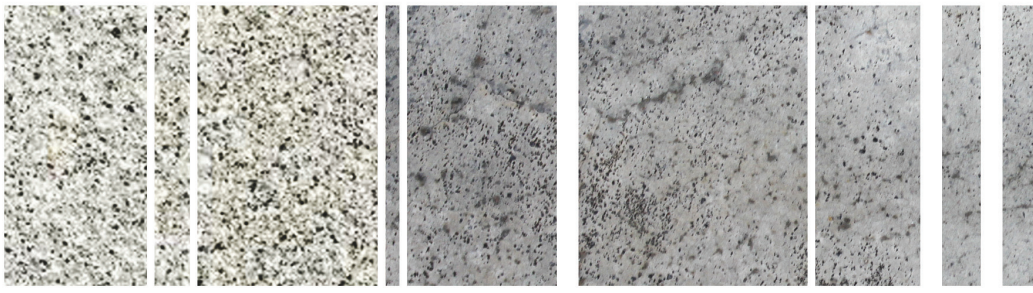
__ Galvanised mild steel



__Brick and whitewash plaster

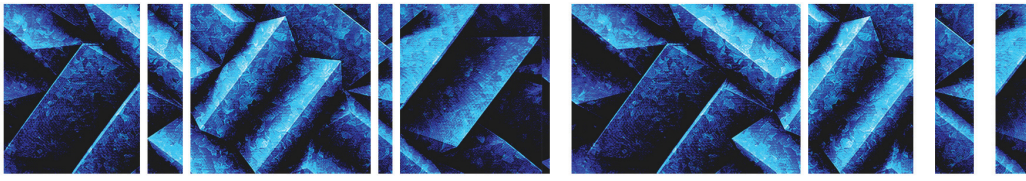


__Aerated concrete

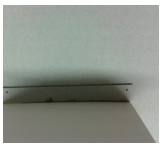


__Laminated bamboo

__Anechoic foam

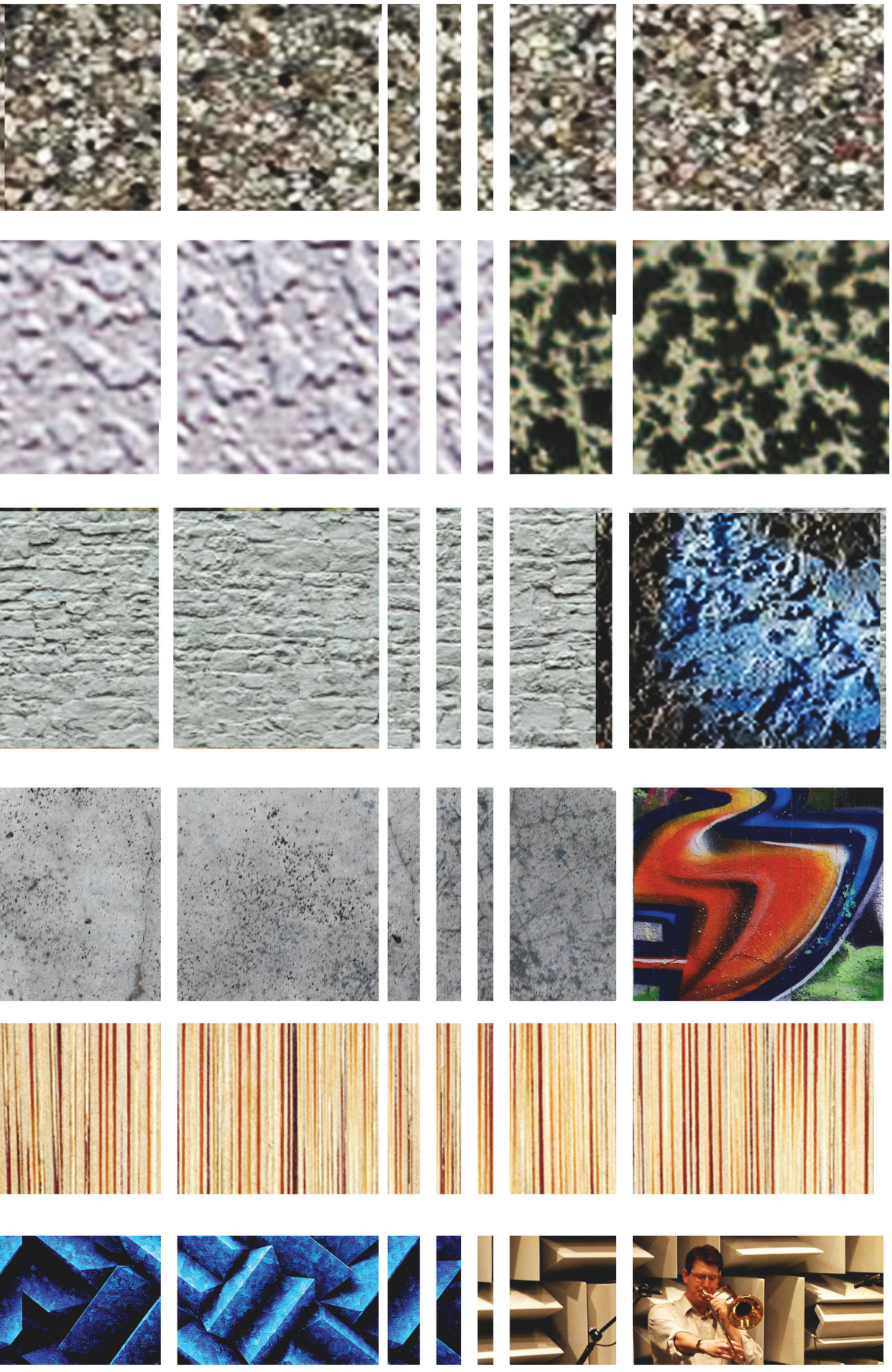


Appropriation

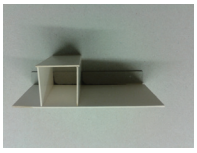


Territory

Everywhere



Definitive



*6.36 Adjustable floor at various positions*

6.3.1.

# ACOUSTICS

Acoustics were considered from the onset of the design. One of the major concerns was the influence of digitization on the validity of tradtional acoustic spaces. As explained the synthesizer saw the birth of the true multi-instrumentalist.

As a result certain contemporary spaces have to accomodate varying instrumental sounds and performances. Musical genres are optimally enjoyed in varying acoustical spaces, with varying qualities, with varying reverberation times.

The consequences of this is that spaces are either restricted to only accomodating a single type of musical genre or accomodating any genre regardless of optimal acoustic conditions.

The result was to approach acoustics with a sense of adaptability. Material choice allows for control of acoustics to an extent. However to achieve varying acoustic reverberation times in a single space it would be impractical to change the material for every performance. To adress this the volume of the room should be adaptable.

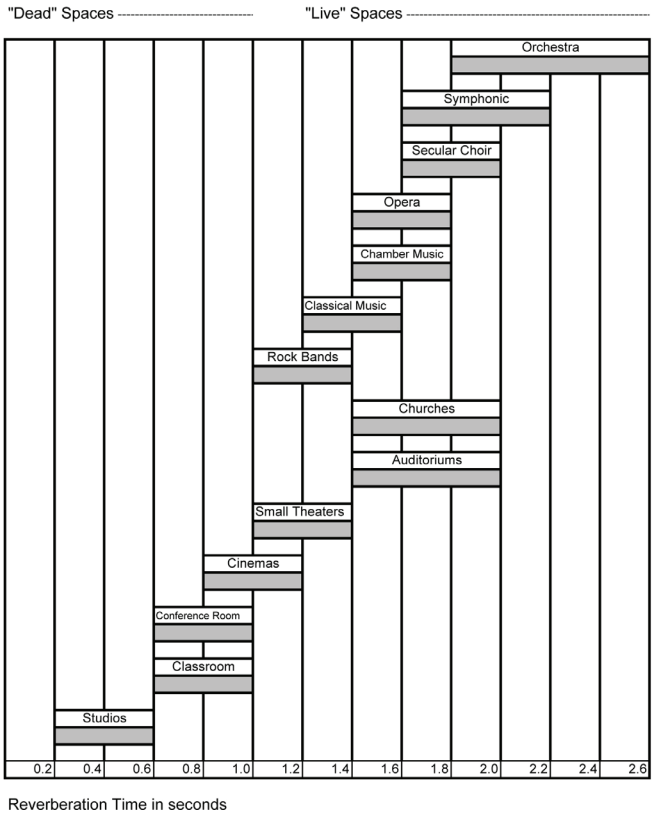
With the use of an adjustable floor the reverberation time can be controlled to a larger extent. Allowing for a wider range of genres, and effectively a hybridisation of territories between genres in a single space.

Calculations illustrating the varying reverberation times were done and are illustrated below.

*Reverberation time RT60 = k · V / A = 0.161 · V / A*
*(V and A in meters)*

*with the factor k = (24 × ln 10) / c20 = 0.161 (meters)*

*RT60 = reverberation time in s (reverb time)*
*V = room volume in m3*
*A = α × S = equivalent absorption surface or area in m2*
*α = absorption coefficient or attenuation coefficient*
*The terms "attenuation coefficient" and "absorption coefficient" are used interchangeably*
*S = absorbing surface area in m2*
*A = α1 × S1 + α2 × S2 + α3 × S3 + ...*
*c20 = speed of sound is 343 m/s at 20°C*



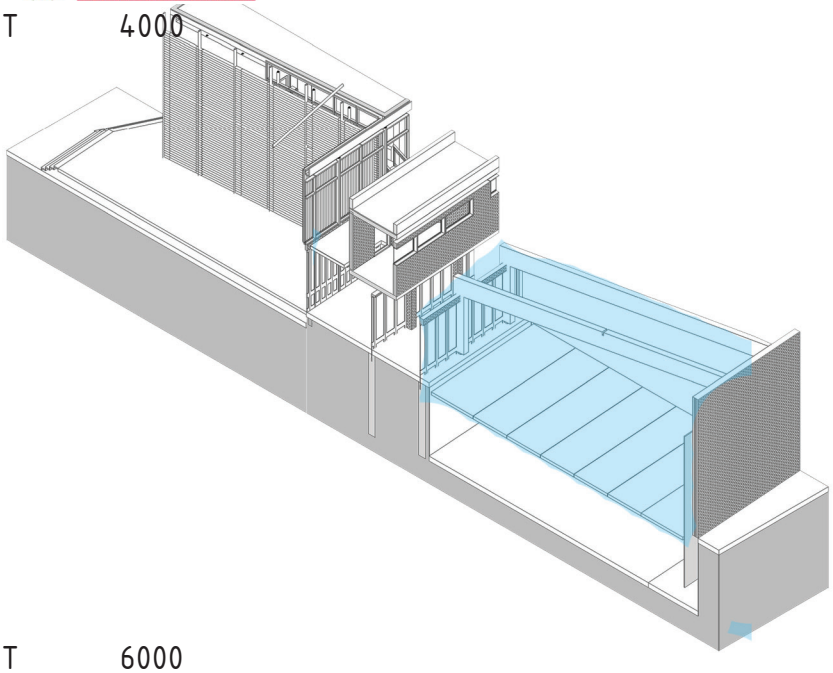

*6.37 Desired reverberation times*

LENGTH 16000 WIDTH 16000 HEIGHT 4000

REVERB TIME SECONDS

FREQUENCY HZ

| | |
|---|---|
| 125 | 0.90 |
| 250 | 0.91 |
| 500 | 0.89 |
| 1000 | 0.98 |
| 2000 | 0.86 |
| 4000 | 0.89 |

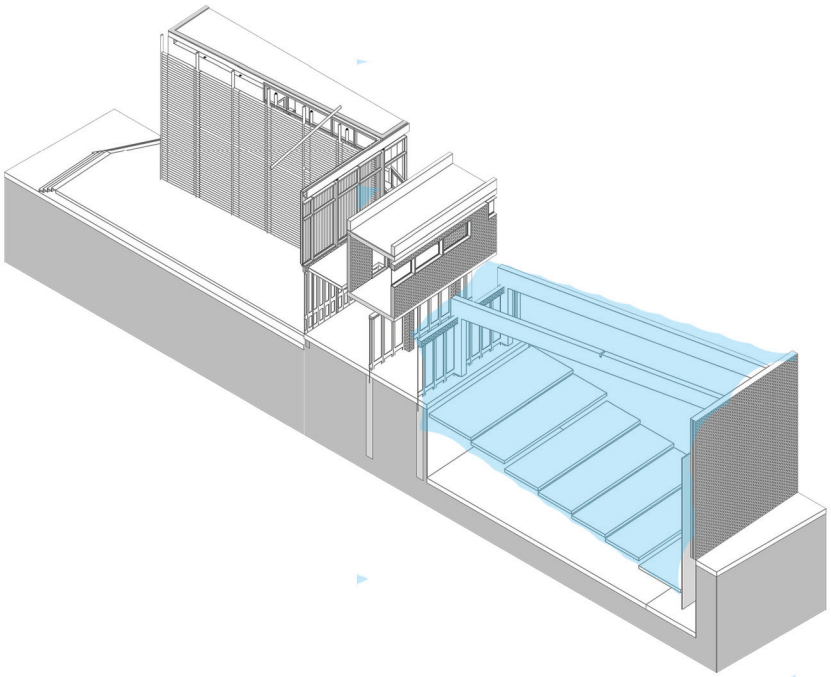


LENGTH 16000 WIDTH 16000 HEIGHT 6000

REVERB TIME SECONDS

FREQUENCY HZ

| | |
|---|---|
| 125 | 1.25 |
| 250 | 1.24 |
| 500 | 1.23 |
| 1000 | 1.30 |
| 2000 | 1.28 |
| 4000 | 1.29 |

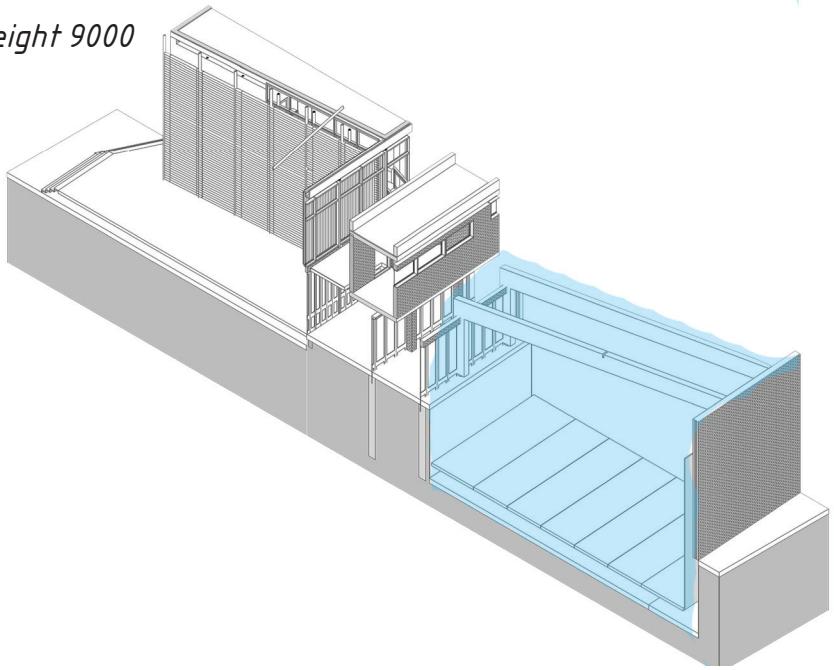


*Length 16000 Width 16000 Height 9000*

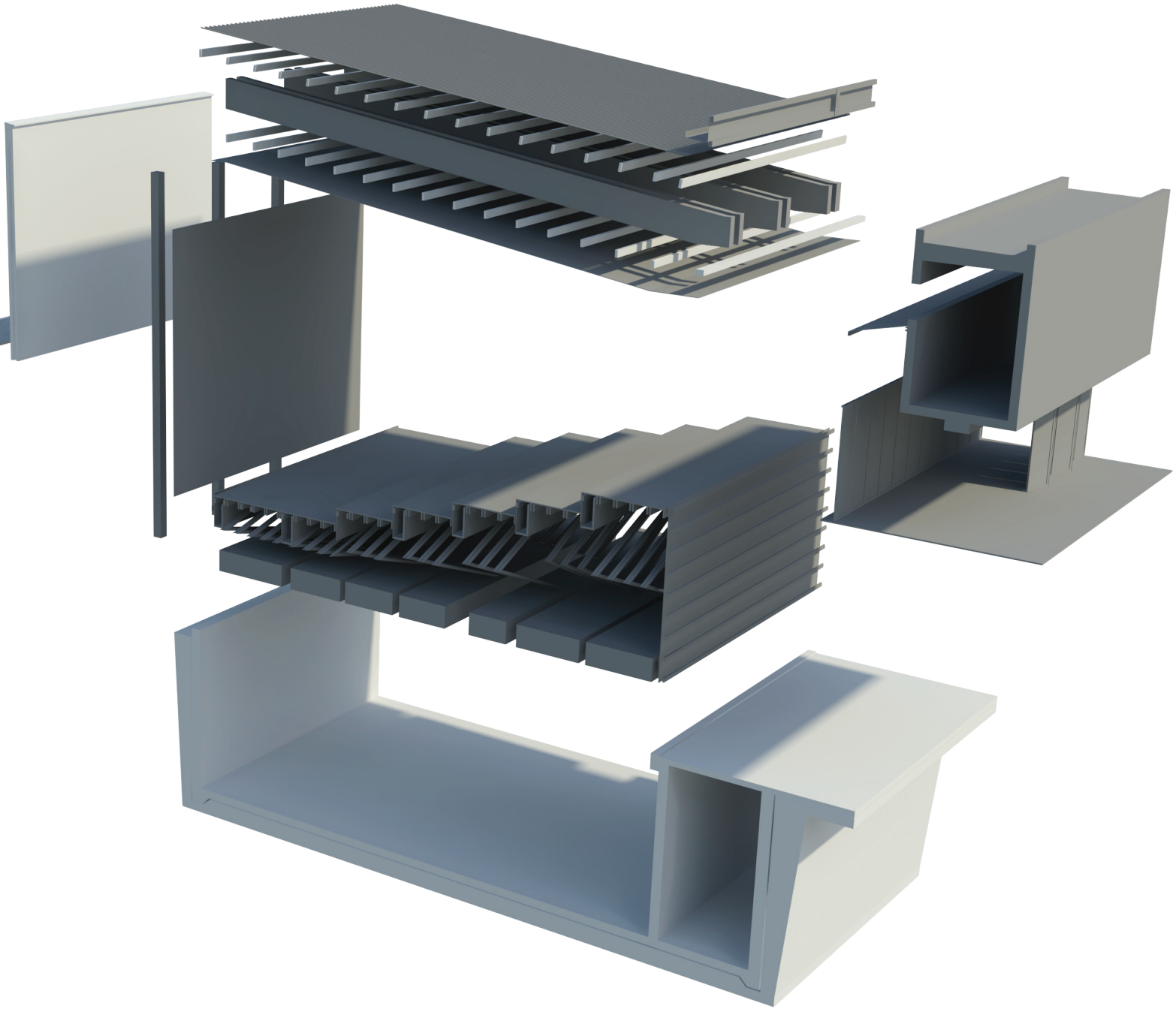
*Reverb time seconds*

*Frequency HZ*

| | |
|---|---|
| *125* | *1.61* |
| *250* | *1.59* |
| *500* | *1.53* |
| *1000* | *1.72* |
| *2000* | *1.70* |
| *4000* | *1.71* |



*6.38 Varying volumes of spaces with reverberation time calulations*



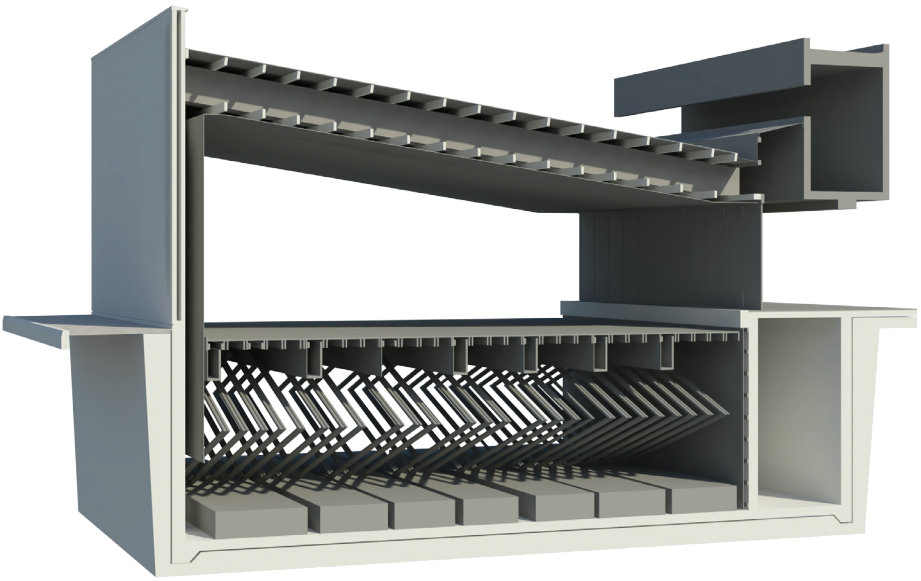
*6.39 Varying volumes of spaces with reverberation time calulations*

LENGTH 16000 WIDTH 16000 HEIGHT 4000

REVERB TIME SECONDS

FREQUENCY HZ

| | |
|---|---|
| 125 | 0.90 |
| 250 | 0.91 |
| 500 | 0.89 |
| 1000 | 0.98 |
| 2000 | 0.86 |
| 4000 | 0.89 |

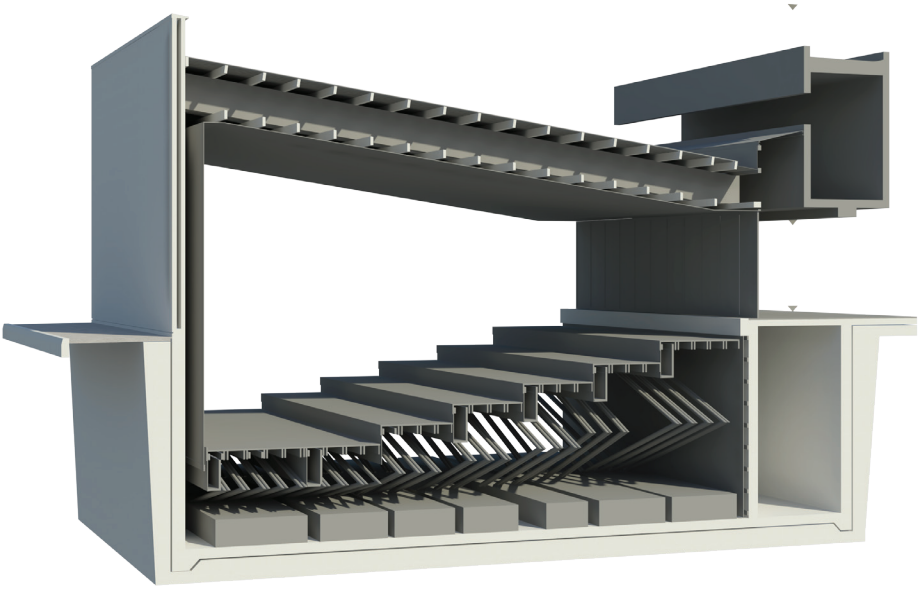


LENGTH 16000 WIDTH 16000 HEIGHT 6000

REVERB TIME SECONDS

FREQUENCY HZ

| | |
|---|---|
| 125 | 1.25 |
| 250 | 1.24 |
| 500 | 1.23 |
| 1000 | 1.30 |
| 2000 | 1.28 |
| 4000 | 1.29 |

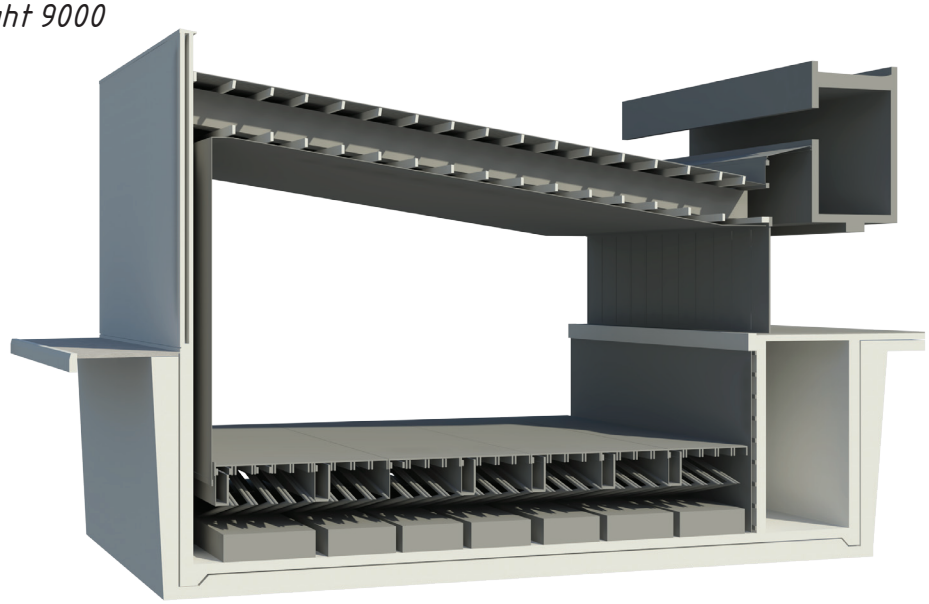


*Length 16000 Width 16000 Height 9000*

*Reverb time seconds*

*Frequency HZ*

| | |
|---|---|
| *125* | *1.61* |
| *250* | *1.59* |
| *500* | *1.53* |
| *1000* | *1.72* |
| *2000* | *1.70* |
| *4000* | *1.71* |



6.3.2.

## WATER

The preservation of water within South Africa is of utmost imporatance. The condition of the Steenhoven spruit, on site, is evidence of the abuse which is bestowed upon the river systems.

Part of the cause of this problem is the use of potable water for tasks such as irrigation, flushing toilets and washing.

The proposed urban vision for the group dictates a large number of green spaces to be located around the precinct for development, included in these is the jazz square.

As part of the maintenance of these spaces irrigation is arguably the most important. As part of the strategy to alleviate the reliance on potable water to fullfill this task, a system which harvests water and stores it to be used for irrigation is proposed within the building.

Rain water is harvested from the roof, chanelled via the gutters to downpipes, which run through to a filter. After the water is filtered it is stored under the two indicated floor slabs in underground storage tanks. These tanks do not need to be accessible if they are pressure tested before they are closed. As the water is needed for irrigation it is pumped.

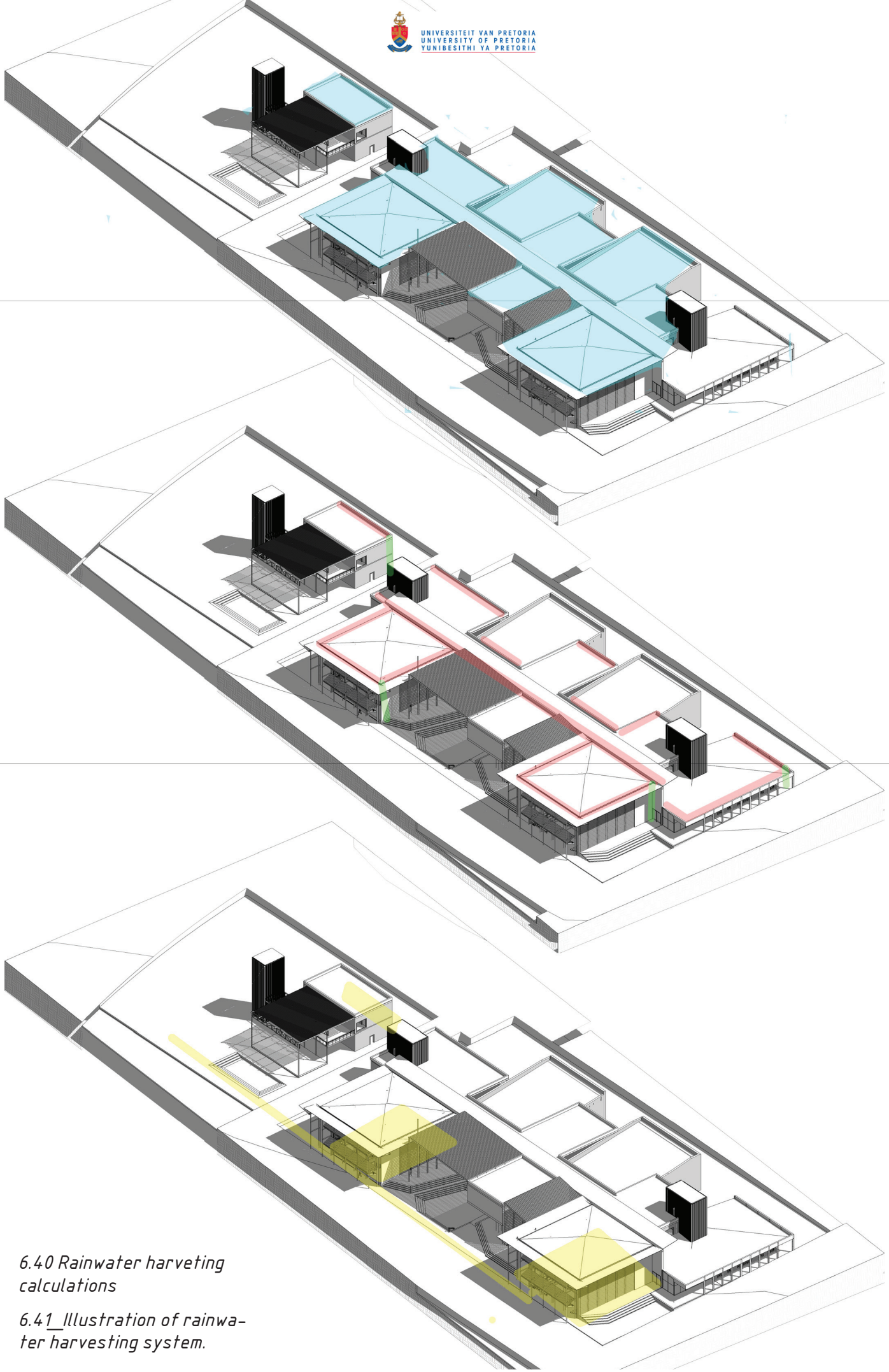
To determine the size of the tanks calculations were done (right) and it was determined that it would not be feasible to irrigate the jazz square entirely from harvested rainwater, however it would make a significant difference in the required water usage.

| Month | Highest Temperature | Average Daily Maximum Temperature | Average Daily Minimum Temperature | Lowest Recorded Temperature | Average Monthly Rain (mm) | Number of Rain Days | Highest 24 Hour Rainfall |
|---|---|---|---|---|---|---|---|
| January | 36 | 29 | 18 | 8 | 136 | 14 | 160 |
| February | 36 | 28 | 17 | 11 | 75 | 11 | 95 |
| March | 35 | 27 | 16 | 6 | 82 | 10 | 84 |
| April | 33 | 24 | 12 | 3 | 51 | 7 | 72 |
| May | 29 | 22 | 8 | -1 | 13 | 3 | 40 |
| June | 25 | 19 | 5 | -6 | 7 | 1 | 32 |
| July | 26 | 20 | 5 | -4 | 3 | 1 | 18 |
| August | 31 | 22 | 8 | -1 | 6 | 2 | 15 |
| September | 34 | 26 | 12 | 2 | 22 | 3 | 43 |
| October | 36 | 27 | 14 | 4 | 71 | 9 | 108 |
| November | 36 | 27 | 16 | 7 | 98 | 12 | 67 |
| December | 35 | 28 | 17 | 7 | 110 | 15 | 50 |
| Year | 36 | 25 | 12 | -6 | 647 | 87 | 160 |

| | | |
|---|---|---|
| Roof Catcment area in m2 | 1800 | |
| Efficiency | 0.8 | |
| Effective catchment area | 1440 | m2 |

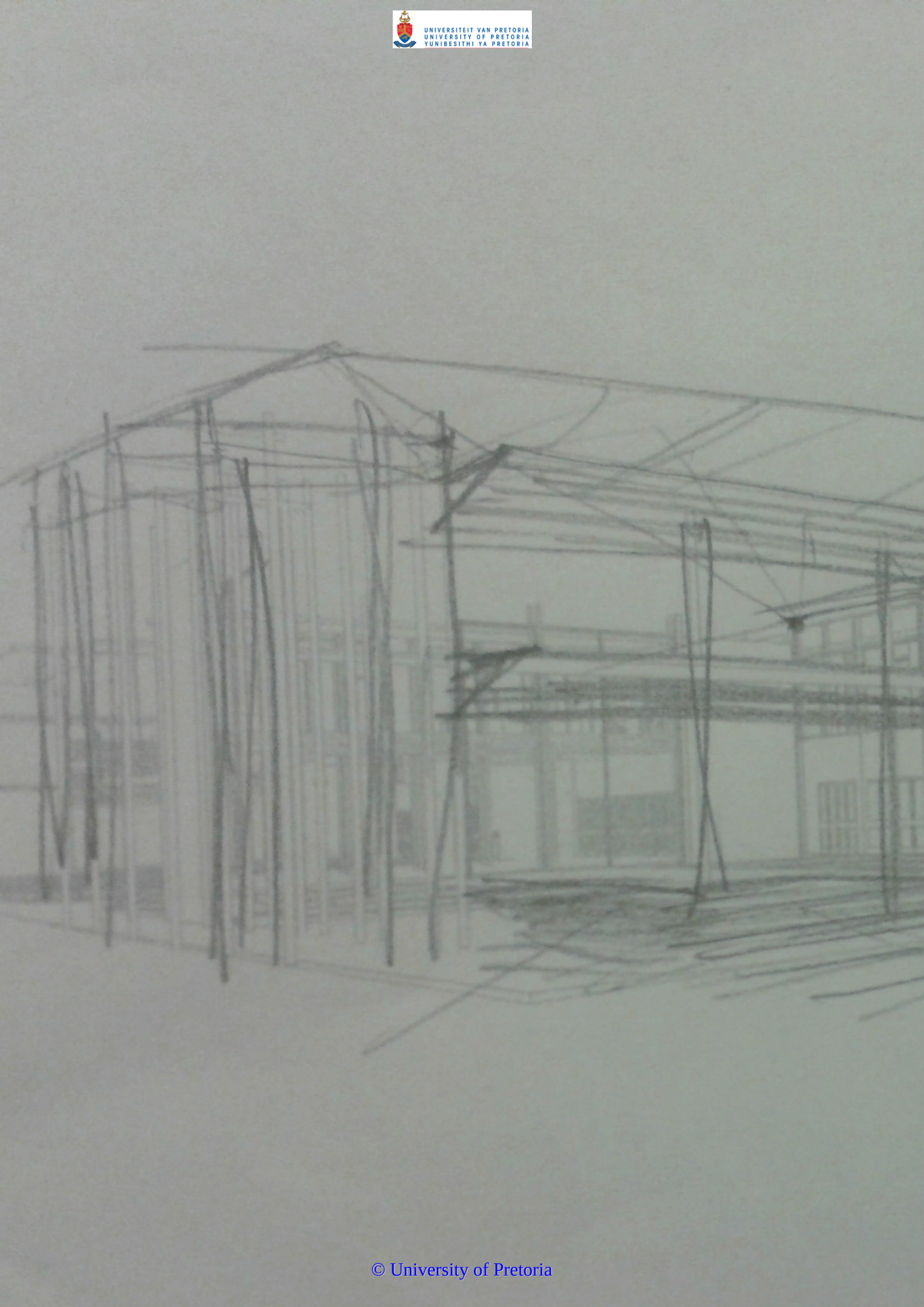
| Month | Rainfall | Harvestable | Tank m3 | Usage m3 |
|---|---|---|---|---|
| January | 136 | 195.84 | 0 | 100.625 |
| February | 75 | 108 | 95.215 | 100.625 |
| March | 82 | 118.08 | 7.375 | 100.625 |
| April | 51 | 73.44 | 17.455 | 100.625 |
| May | 13 | 18.72 | -27.185 | 100.625 |
| June | 7 | 10.08 | -81.905 | 100.625 |
| July | 3 | 4.32 | -90.545 | 100.625 |
| August | 6 | 8.64 | -96.305 | 100.625 |
| September | 22 | 31.68 | -91.985 | 100.625 |
| October | 71 | 102.24 | -68.945 | 100.625 |
| November | 98 | 141.12 | 1.615 | 100.625 |
| December | 110 | 158.4 | 40.495 | 100.625 |
| Year | 647 | 0 | 57.775 | 100.625 |

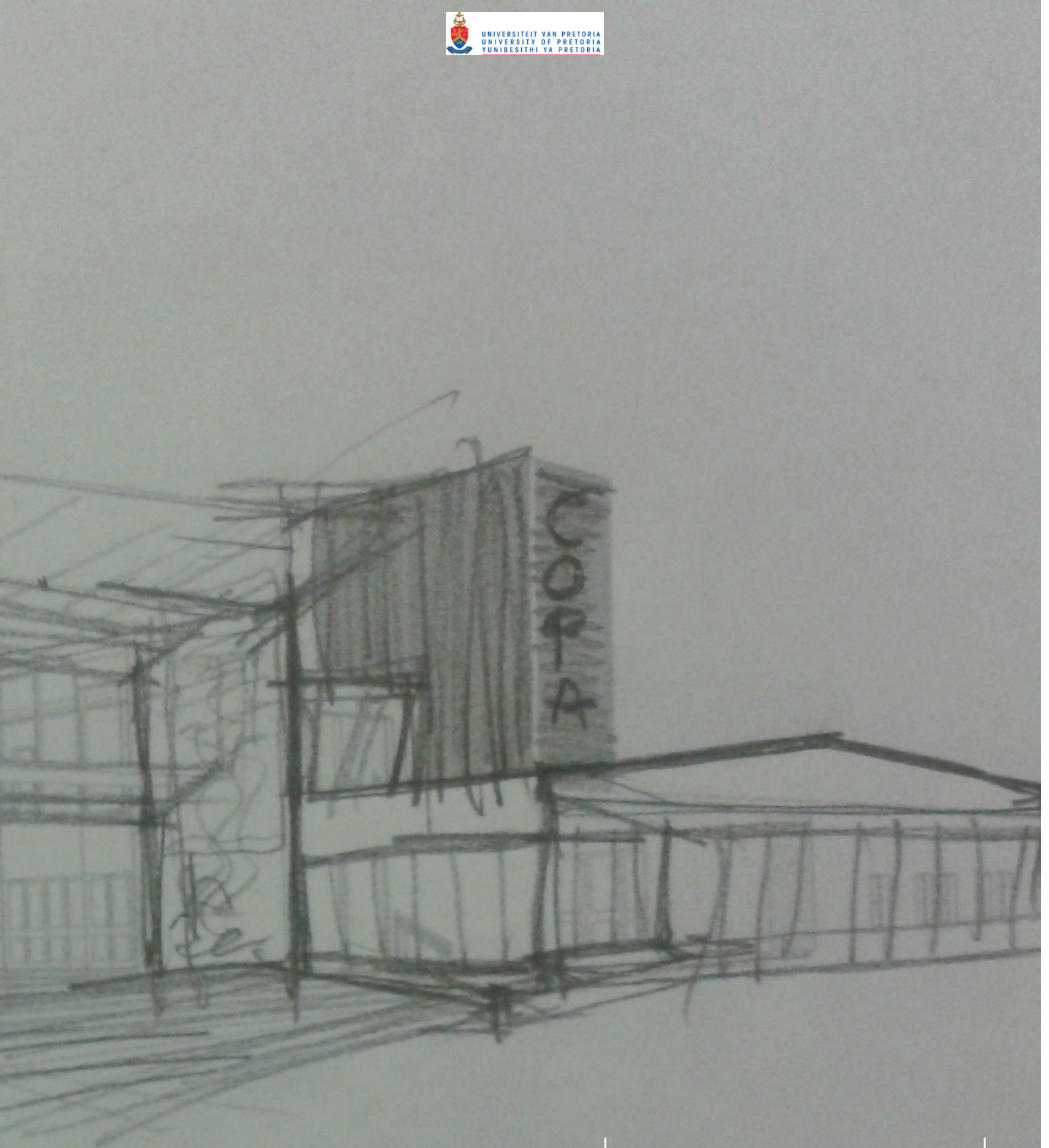
| Month | Rainfall | Harvestable | Tank m3 | Usage m3 |
|---|---|---|---|---|
| January | 136 | 195.84 | 57.775 | 100.625 |
| February | 75 | 108 | 152.99 | 100.625 |
| March | 82 | 118.08 | 160.365 | 100.625 |
| April | 51 | 73.44 | 177.82 | 100.625 |
| May | 13 | 18.72 | 150.635 | 100.625 |
| June | 7 | 10.08 | 68.73 | 100.625 |
| July | 3 | 4.32 | -21.815 | 100.625 |
| August | 6 | 8.64 | -118.12 | 100.625 |
| September | 22 | 31.68 | -210.105 | 100.625 |
| October | 71 | 102.24 | -279.05 | 100.625 |
| November | 98 | 141.12 | -277.435 | 100.625 |
| December | 110 | 158.4 | -236.94 | 100.625 |
| Year | 647 | 931.68 | -179.165 | 100.625 |



*6.40 Rainwater harveting calculations*

*6.41_Illustration of rainwater harvesting system.*






# Chapter Seven
# Conclusion

# CONCLUSION

The aim of the dissertation was the to explore the concept of music and the influence it has on space. Throught the completion of the project it has become possible to explore the production of music as a mapping tool. The project allowed for a unique and challenging approach to architecture and the design process which allowed for the exploration of music as a design driver.

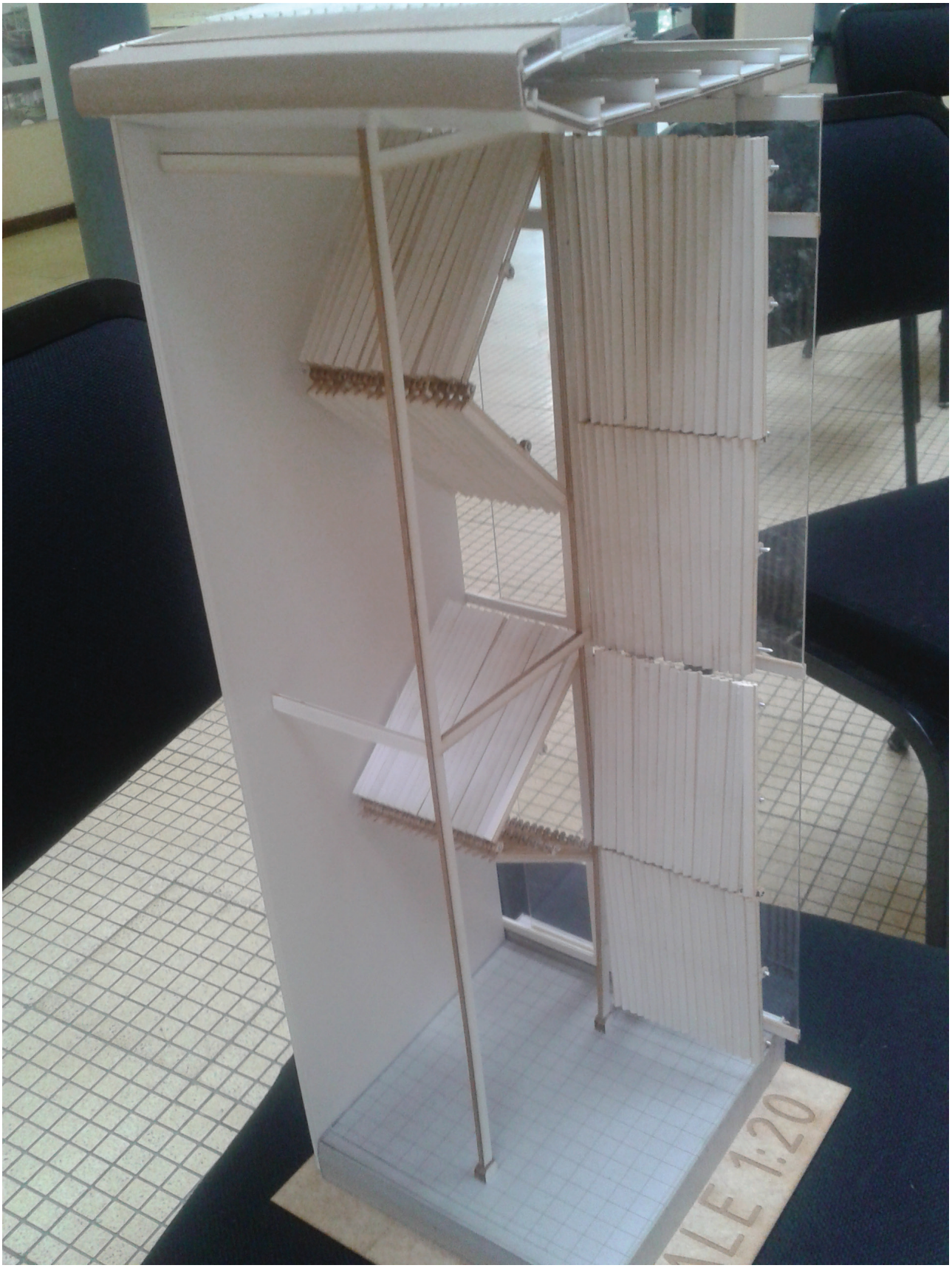
This exploration created circumstances where engaging with music was made possible through architecture. This exchange between architecture and music allowed for the investigation of interactions between artist, listener and instrument.

As was identified in the theory chapter the influence of the synthesizer on music has been compelling and alike it has had a tremendous influence on the spaces associated with music. This exchange allowed for a unique interpretation of Marabastads typologies into design tools for a language.

*7.1_ Final model in context*


*7.2_Final model in context*

*7.3_ Right investigation of tectonics through models*

*7.4_Movable facade panel*

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# LIST OF FIGURES

*NOTE UNLESS OTHERWISE STATED FIGURES BY AUTHOR*